



Full wwPDB X-ray Structure Validation Report ⓘ

Feb 1, 2016 – 09:56 PM GMT

PDB ID : 4V7T
Title : Crystal structure of the E. coli ribosome bound to chloramphenicol.
Authors : Dunkle, J.A.; Xiong, L.; Mankin, A.S.; Cate, J.H.D.
Deposited on : 2010-08-14
Resolution : 3.19 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<http://wwpdb.org/validation/2016/XrayValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.7 (RC4), CSD as536be (2015)
Xtriage (Phenix) : 1.9-1692
EDS : rb-20026688
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Refmac : 5.8.0135
CCP4 : 6.5.0
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : trunk26865

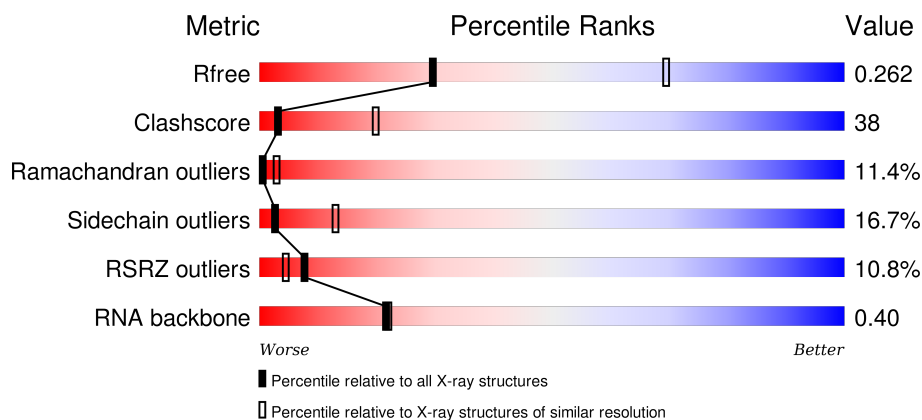
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.19 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	91344	1124 (3.24-3.16)
Clashscore	102246	1024 (3.22-3.18)
Ramachandran outliers	100387	1004 (3.22-3.18)
Sidechain outliers	100360	1003 (3.22-3.18)
RSRZ outliers	91569	1129 (3.24-3.16)
RNA backbone	2183	1079 (3.70-2.70)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	1533	<div> <div>24%</div> <div>44%</div> <div>16%</div> <div>17%</div> </div>
2	AB	218	<div> <div>33%</div> <div>25%</div> <div>54%</div> <div>18%</div> <div>•</div> </div>
2	CB	218	<div> <div>20%</div> <div>30%</div> <div>54%</div> <div>14%</div> <div>•</div> </div>
3	AC	206	<div> <div>6%</div> <div>36%</div> <div>52%</div> <div>10%</div> <div>•</div> </div>

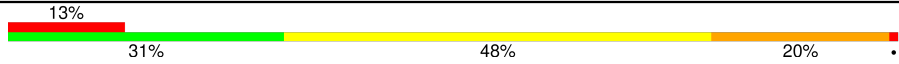

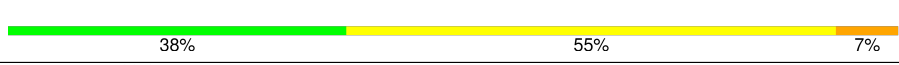
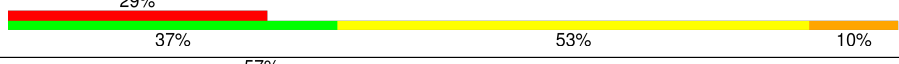

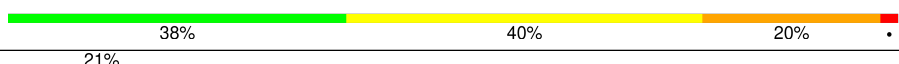
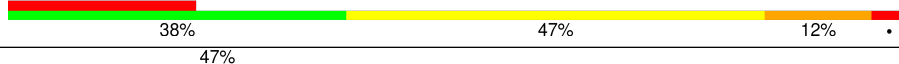
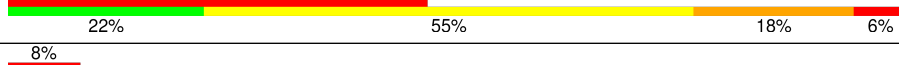
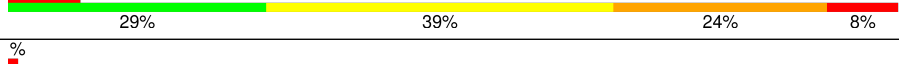
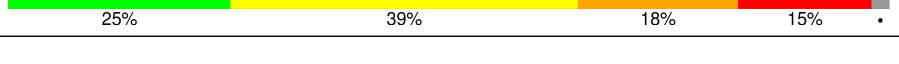
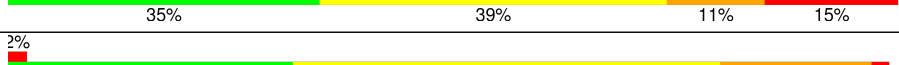
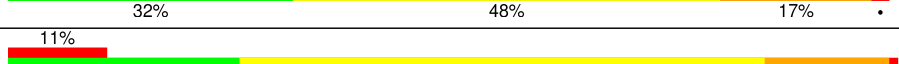
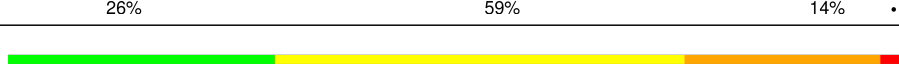
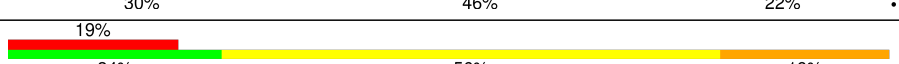
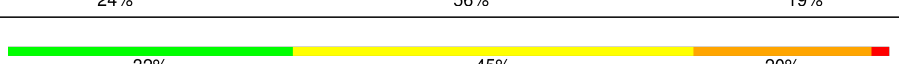
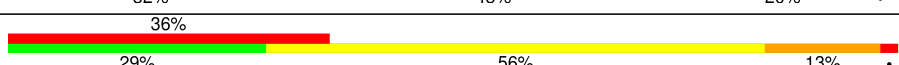
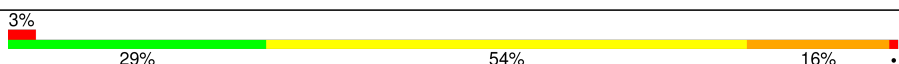
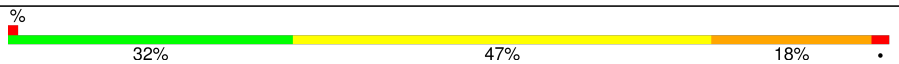
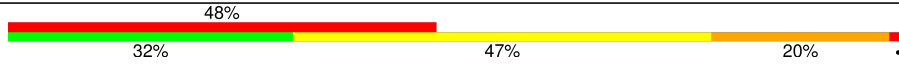
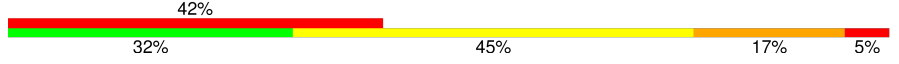



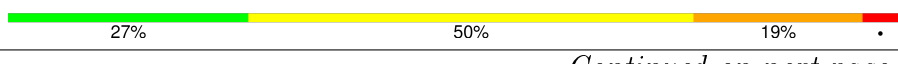

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	CC	206	
4	AD	205	
4	CD	205	
5	AE	150	
5	CE	150	
6	AF	100	
6	CF	100	
7	AG	151	
8	AH	129	
8	CH	129	
9	AI	127	
9	CI	127	
10	AJ	98	
10	CJ	98	
11	AK	117	
11	CK	117	
12	AL	123	
12	CL	123	
13	AM	114	
14	AN	100	
14	CN	100	
15	AO	88	
15	CO	88	
16	AP	82	
17	AQ	80	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
17	CQ	80	
18	AR	55	
18	CR	55	
19	AS	79	
19	CS	79	
20	AT	85	
20	CT	85	
21	AU	51	
21	CU	51	
22	BA	2903	
23	BB	118	
24	BC	271	
24	DC	271	
25	BD	209	
25	DD	209	
26	BE	201	
26	DE	201	
27	BF	177	
28	BG	176	
28	DG	176	
29	BH	149	
29	DH	149	
30	BI	141	
30	DI	141	
31	BJ	142	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
31	DJ	142	
32	BK	122	
32	DK	122	
33	BL	143	
33	DL	143	
34	BM	136	
34	DM	136	
35	BN	120	
35	DN	120	
36	BO	116	
36	DO	116	
37	BP	114	
37	DP	114	
38	BQ	117	
38	DQ	117	
39	BR	103	
39	DR	103	
40	BS	110	
40	DS	110	
41	BT	93	
41	DT	93	
42	BU	102	
42	DU	102	
43	BV	94	
43	DV	94	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
44	BW	79	
44	DW	79	
45	BX	77	
45	DX	77	
46	BY	63	
46	DY	63	
47	BZ	58	
47	DZ	58	
48	B0	56	
48	D0	56	
49	B1	50	
49	D1	50	
50	B2	46	
50	D2	46	
51	B3	64	
51	D3	64	
52	B4	38	
52	D4	38	
53	CA	1530	
54	CG	150	
55	CM	113	
56	CP	80	
57	DA	2904	
58	DB	117	
59	DF	178	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
60	MG	AA	1640	-	-	-	X
60	MG	BA	3013	-	-	-	X
60	MG	BA	3026	-	-	-	X
60	MG	BA	3039	-	-	-	X
60	MG	BA	3069	-	-	-	X
60	MG	BA	3082	-	-	-	X
60	MG	BA	3096	-	-	-	X
60	MG	BA	3100	-	-	-	X
60	MG	BA	3103	-	-	-	X
60	MG	BA	3104	-	-	-	X
60	MG	BA	3107	-	-	-	X
60	MG	BA	3115	-	-	-	X
60	MG	BA	3123	-	-	-	X
60	MG	BA	3130	-	-	-	X
60	MG	BA	3135	-	-	-	X
60	MG	CA	1628	-	-	-	X
60	MG	CA	1640	-	-	-	X
60	MG	DA	3002	-	-	-	X
60	MG	DA	3059	-	-	-	X
60	MG	DA	3074	-	-	-	X
60	MG	DA	3105	-	-	-	X
60	MG	DA	3114	-	-	-	X
60	MG	DA	3129	-	-	-	X

2 Entry composition

There are 63 unique types of molecules in this entry. The entry contains 284499 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 16S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1533	Total	C	N	O	P	0	0	0
			32895	14671	6036	10655	1533			

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	218	Total	C	N	O	S	0	0	0
			1705	1081	305	312	7			
2	CB	218	Total	C	N	O	S	0	0	0
			1705	1081	305	312	7			

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	206	Total	C	N	O	S	0	0	0
			1625	1028	305	289	3			
3	CC	206	Total	C	N	O	S	0	0	0
			1625	1028	305	289	3			

- Molecule 4 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AD	205	Total	C	N	O	S	0	0	0
			1643	1026	315	298	4			
4	CD	205	Total	C	N	O	S	0	0	0
			1643	1026	315	298	4			

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	150	Total	C	N	O	S	0	0	0
			1106	687	211	202	6			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	CE	150	Total	C	N	O	S	0	0	0
			1106	687	211	202	6			

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	100	Total	C	N	O	S	0	0	0
			818	515	148	149	6			
6	CF	100	Total	C	N	O	S	0	0	0
			818	515	148	149	6			

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	151	Total	C	N	O	S	0	0	0
			1182	735	227	216	4			

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	129	Total	C	N	O	S	0	0	0
			979	616	173	184	6			
8	CH	129	Total	C	N	O	S	0	0	0
			979	616	173	184	6			

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	S	0	0	0
			1022	634	206	179	3			
9	CI	127	Total	C	N	O	S	0	0	0
			1022	634	206	179	3			

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	98	Total	C	N	O	S	0	0	0
			787	493	150	143	1			
10	CJ	98	Total	C	N	O	S	0	0	0
			787	493	150	143	1			

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	117	Total	C	N	O	S	0	0	0
			877	540	174	160	3			
11	CK	117	Total	C	N	O	S	0	0	0
			877	540	174	160	3			

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	123	Total	C	N	O	S	0	0	0
			955	590	196	165	4			
12	CL	123	Total	C	N	O	S	0	0	0
			955	590	196	165	4			

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	114	Total	C	N	O	S	0	0	0
			884	546	178	157	3			

- Molecule 14 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	96	Total	C	N	O	S	0	0	0
			774	483	160	128	3			
14	CN	95	Total	C	N	O	S	0	0	0
			769	480	159	127	3			

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			714	439	144	130	1			
15	CO	88	Total	C	N	O	S	0	0	0
			714	439	144	130	1			

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	82	Total	C	N	O	S	0	0	0
			649	406	128	114	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	80	Total	C	N	O	S	0	0	0
			649	411	121	114	3			
17	CQ	80	Total	C	N	O	S	0	0	0
			649	411	121	114	3			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	AR	55	Total	C	N	O		0	0	0
			456	288	86	82				
18	CR	55	Total	C	N	O		0	0	0
			456	288	86	82				

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	0
			638	408	120	108	2			
19	CS	79	Total	C	N	O	S	0	0	0
			638	408	120	108	2			

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	85	Total	C	N	O	S	0	0	0
			665	411	137	114	3			
20	CT	85	Total	C	N	O	S	0	0	0
			665	411	137	114	3			

- Molecule 21 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	AU	51	Total	C	N	O	S	0	0	0
			426	265	86	74	1			
21	CU	51	Total	C	N	O	S	0	0	0
			426	265	86	74	1			

- Molecule 22 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	BA	2854	Total	C	N	O	P	0	0	0
			61274	27334	11279	19807	2854			

- Molecule 23 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	BB	118	Total	C	N	O	P	0	0	0
			2529	1126	464	821	118			

- Molecule 24 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	BC	271	Total	C	N	O	S	0	0	0
			2083	1288	423	365	7			
24	DC	271	Total	C	N	O	S	0	0	0
			2083	1288	423	365	7			

- Molecule 25 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BD	209	Total	C	N	O	S	0	0	0
			1565	979	288	294	4			
25	DD	209	Total	C	N	O	S	0	0	0
			1565	979	288	294	4			

- Molecule 26 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BE	201	Total	C	N	O	S	0	0	0
			1552	974	283	290	5			
26	DE	201	Total	C	N	O	S	0	0	0
			1552	974	283	290	5			

- Molecule 27 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BF	177	Total	C	N	O	S	0	0	0
			1411	899	249	257	6			

- Molecule 28 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	BG	176	Total	C	N	O	S	0	0	0
			1323	832	243	246	2			
28	DG	176	Total	C	N	O	S	0	0	0
			1323	832	243	246	2			

- Molecule 29 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BH	149	Total	C	N	O	S	0	0	0
			1111	699	197	214	1			
29	DH	149	Total	C	N	O	S	0	0	0
			1111	699	197	214	1			

- Molecule 30 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BI	141	Total	C	N	O	S	0	0	0
			1032	651	179	196	6			
30	DI	141	Total	C	N	O	S	0	0	0
			1032	651	179	196	6			

- Molecule 31 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BJ	142	Total	C	N	O	S	0	0	0
			1129	714	212	199	4			
31	DJ	142	Total	C	N	O	S	0	0	0
			1129	714	212	199	4			

- Molecule 32 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BK	122	Total	C	N	O	S	0	0	0
			939	587	180	166	6			
32	DK	122	Total	C	N	O	S	0	0	0
			939	587	180	166	6			

- Molecule 33 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BL	143	Total	C	N	O	S	0	0	0
			1045	649	206	189	1			
33	DL	143	Total	C	N	O	S	0	0	0
			1045	649	206	189	1			

- Molecule 34 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BM	136	Total	C	N	O	S	0	0	0
			1074	686	205	177	6			
34	DM	136	Total	C	N	O	S	0	0	0
			1074	686	205	177	6			

- Molecule 35 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BN	120	Total	C	N	O	S	0	0	0
			961	593	196	167	5			
35	DN	120	Total	C	N	O	S	0	0	0
			961	593	196	167	5			

- Molecule 36 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
36	BO	116	Total	C	N	O	0	0	0
			892	552	178	162			
36	DO	116	Total	C	N	O	0	0	0
			892	552	178	162			

- Molecule 37 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BP	114	Total	C	N	O	S	0	0	0
			917	574	179	163	1			
37	DP	114	Total	C	N	O	S	0	0	0
			917	574	179	163	1			

- Molecule 38 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
38	BQ	117	Total	C	N	O	0	0	0
			947	604	192	151			
38	DQ	117	Total	C	N	O	0	0	0
			947	604	192	151			

- Molecule 39 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BR	103	Total	C	N	O	S	0	0	0
			816	516	153	145	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	DR	103	Total	C	N	O	S	0	0	0
			816	516	153	145	2			

- Molecule 40 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BS	110	Total	C	N	O	S	0	0	0
			857	532	166	156	3			
40	DS	110	Total	C	N	O	S	0	0	0
			857	532	166	156	3			

- Molecule 41 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BT	93	Total	C	N	O	S	0	0	0
			739	466	139	132	2			
41	DT	93	Total	C	N	O	S	0	0	0
			739	466	139	132	2			

- Molecule 42 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
42	BU	102	Total	C	N	O	0	0	0
			780	492	146	142			
42	DU	102	Total	C	N	O	0	0	0
			780	492	146	142			

- Molecule 43 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BV	94	Total	C	N	O	S	0	0	0
			753	479	137	134	3			
43	DV	94	Total	C	N	O	S	0	0	0
			753	479	137	134	3			

- Molecule 44 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BW	79	Total	C	N	O	S	0	0	0
			596	367	120	108	1			
44	DW	79	Total	C	N	O	S	0	0	0
			596	367	120	108	1			

- Molecule 45 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BX	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			
45	DX	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			

- Molecule 46 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BY	63	Total	C	N	O	S	0	0	0
			509	313	99	95	2			
46	DY	63	Total	C	N	O	S	0	0	0
			509	313	99	95	2			

- Molecule 47 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BZ	58	Total	C	N	O	S	0	0	0
			449	281	87	79	2			
47	DZ	58	Total	C	N	O	S	0	0	0
			449	281	87	79	2			

- Molecule 48 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B0	56	Total	C	N	O	S	0	0	0
			444	269	94	80	1			
48	D0	56	Total	C	N	O	S	0	0	0
			444	269	94	80	1			

- Molecule 49 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	B1	50	Total	C	N	O	0	0	0
			410	263	75	72			
49	D1	50	Total	C	N	O	0	0	0
			410	263	75	72			

- Molecule 50 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B2	46	Total	C	N	O	S	0	0	0
			377	228	90	57	2			
50	D2	46	Total	C	N	O	S	0	0	0
			377	228	90	57	2			

- Molecule 51 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B3	64	Total	C	N	O	S	0	0	0
			504	323	105	74	2			
51	D3	64	Total	C	N	O	S	0	0	0
			504	323	105	74	2			

- Molecule 52 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B4	38	Total	C	N	O	S	0	0	0
			302	185	65	48	4			
52	D4	38	Total	C	N	O	S	0	0	0
			302	185	65	48	4			

- Molecule 53 is a RNA chain called 16S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	CA	1530	Total	C	N	O	P	0	0	0
			32831	14642	6024	10635	1530			

- Molecule 54 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	CG	150	Total	C	N	O	S	0	0	0
			1175	730	226	215	4			

- Molecule 55 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	CM	113	Total	C	N	O	S	0	0	0
			877	541	177	156	3			

- Molecule 56 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	CP	80	Total	C	N	O	S	0	0	0
			639	400	126	112	1			

- Molecule 57 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	DA	2841	Total	C	N	O	P	0	0	0
			60995	27210	11229	19715	2841			

- Molecule 58 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	DB	117	Total	C	N	O	P	0	0	0
			2507	1116	459	815	117			

- Molecule 59 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	DF	178	Total	C	N	O	S	0	0	0
			1420	905	251	258	6			

- Molecule 60 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

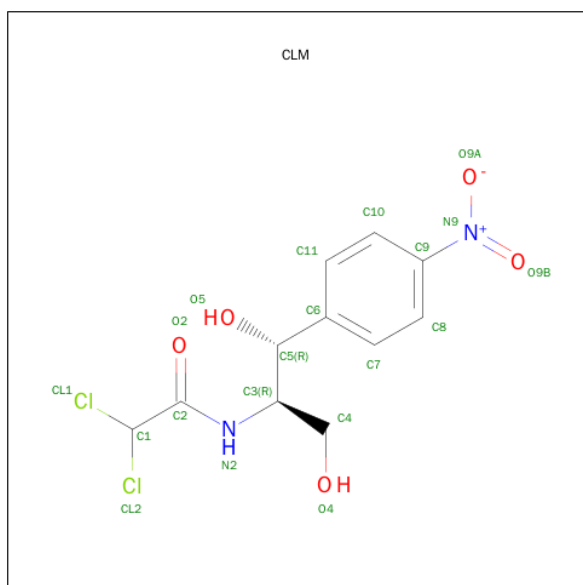
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	BB	4	Total	Mg	0	0
			4	4		
60	DE	1	Total	Mg	0	0
			1	1		
60	BA	135	Total	Mg	0	0
			135	135		
60	CA	42	Total	Mg	0	0
			42	42		
60	DJ	1	Total	Mg	0	0
			1	1		
60	BL	1	Total	Mg	0	0
			1	1		
60	DA	133	Total	Mg	0	0
			133	133		
60	AA	42	Total	Mg	0	0
			42	42		
60	AN	1	Total	Mg	0	0
			1	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	DC	1	Total	Mg	0	0
			1	1		
60	DB	1	Total	Mg	0	0
			1	1		

- Molecule 61 is CHLORAMPHENICOL (three-letter code: CLM) (formula: $C_{11}H_{12}Cl_2N_2O_5$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
61	BA	1	Total	C	Cl	N	O	0	0
			20	11	2	2	5		

- Molecule 62 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
62	B4	1	Total	Zn	0	0
			1	1		
62	D4	1	Total	Zn	0	0
			1	1		

- Molecule 63 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
63	AA	197	Total	O	0	0
			197	197		
63	AL	2	Total	O	0	0
			2	2		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
63	AN	6	Total 6	O 6	0	0
63	AT	2	Total 2	O 2	0	0
63	AU	1	Total 1	O 1	0	0
63	BA	608	Total 608	O 608	0	0
63	BB	19	Total 19	O 19	0	0
63	BC	8	Total 8	O 8	0	0
63	BD	2	Total 2	O 2	0	0
63	BE	1	Total 1	O 1	0	0
63	BL	4	Total 4	O 4	0	0
63	BN	2	Total 2	O 2	0	0
63	BQ	1	Total 1	O 1	0	0
63	BT	2	Total 2	O 2	0	0
63	BV	1	Total 1	O 1	0	0
63	B2	2	Total 2	O 2	0	0
63	B3	2	Total 2	O 2	0	0
63	B4	2	Total 2	O 2	0	0
63	CA	195	Total 195	O 195	0	0
63	CE	3	Total 3	O 3	0	0
63	CI	1	Total 1	O 1	0	0
63	CL	1	Total 1	O 1	0	0
63	CN	3	Total 3	O 3	0	0

Continued on next page...

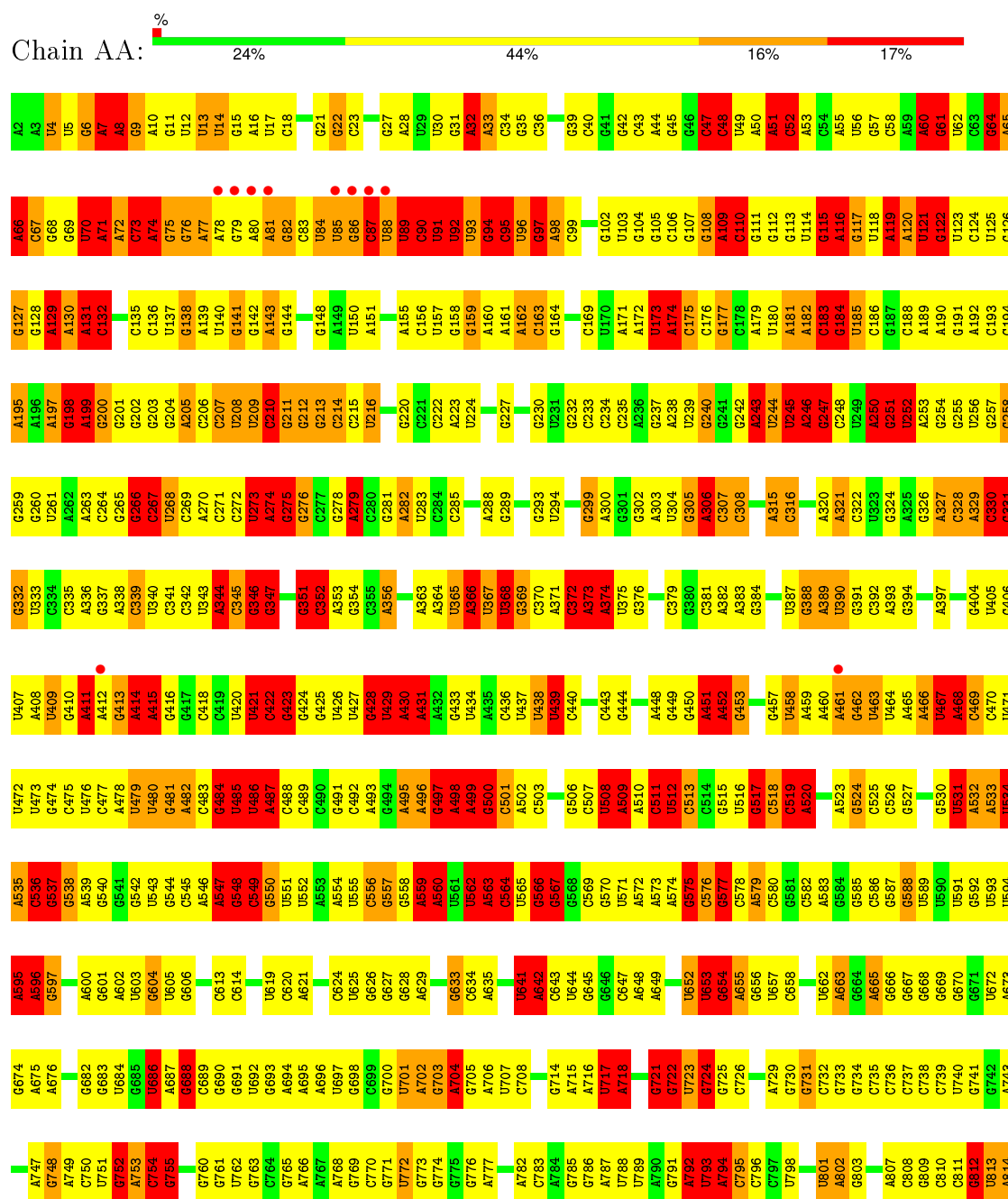
Continued from previous page...

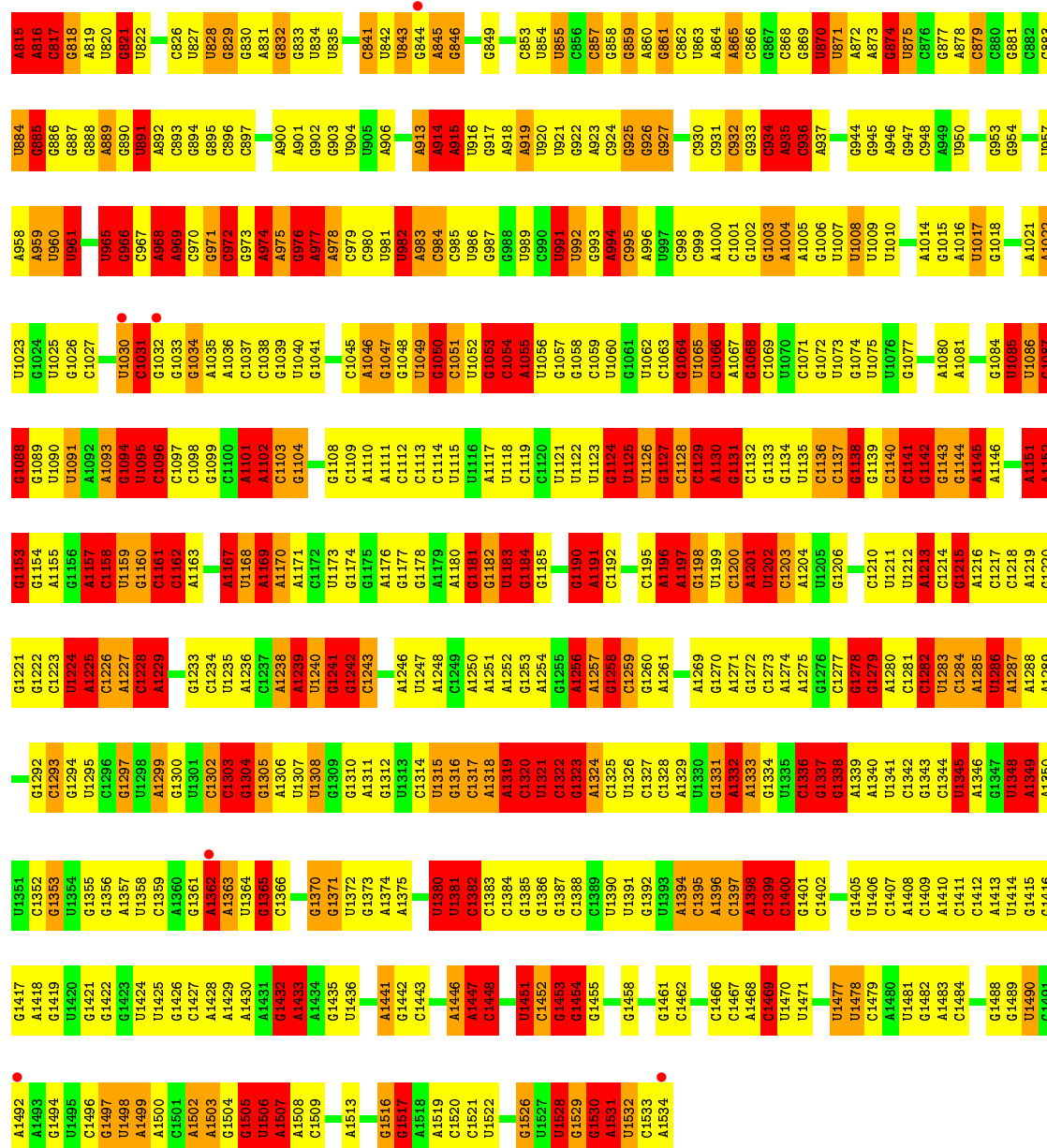
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
63	CT	2	Total 2	O 2	0	0
63	CU	2	Total 2	O 2	0	0
63	DA	603	Total 603	O 603	0	0
63	DB	4	Total 4	O 4	0	0
63	DC	10	Total 10	O 10	0	0
63	DD	1	Total 1	O 1	0	0
63	DE	3	Total 3	O 3	0	0
63	DJ	4	Total 4	O 4	0	0
63	DL	5	Total 5	O 5	0	0
63	DN	2	Total 2	O 2	0	0
63	DT	2	Total 2	O 2	0	0
63	DU	2	Total 2	O 2	0	0
63	DV	1	Total 1	O 1	0	0
63	D2	1	Total 1	O 1	0	0
63	D3	1	Total 1	O 1	0	0
63	D4	4	Total 4	O 4	0	0

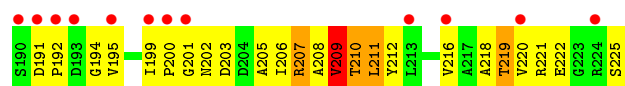
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

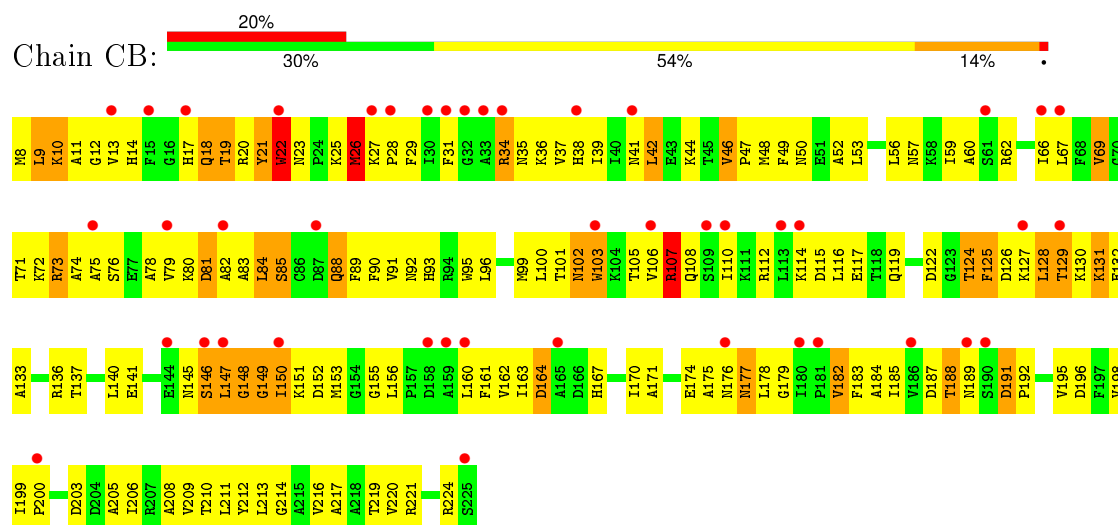
• Molecule 1: 16S rRNA



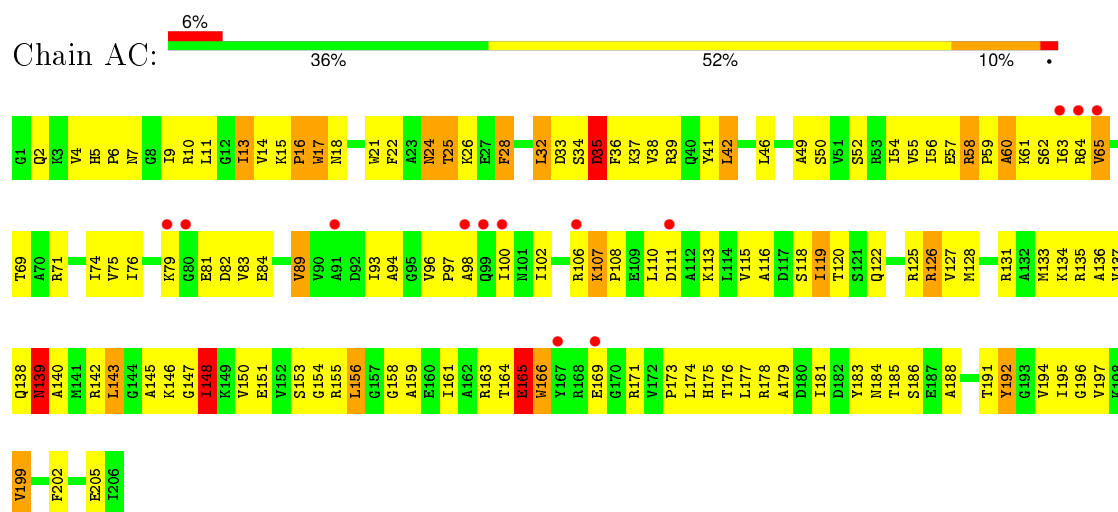




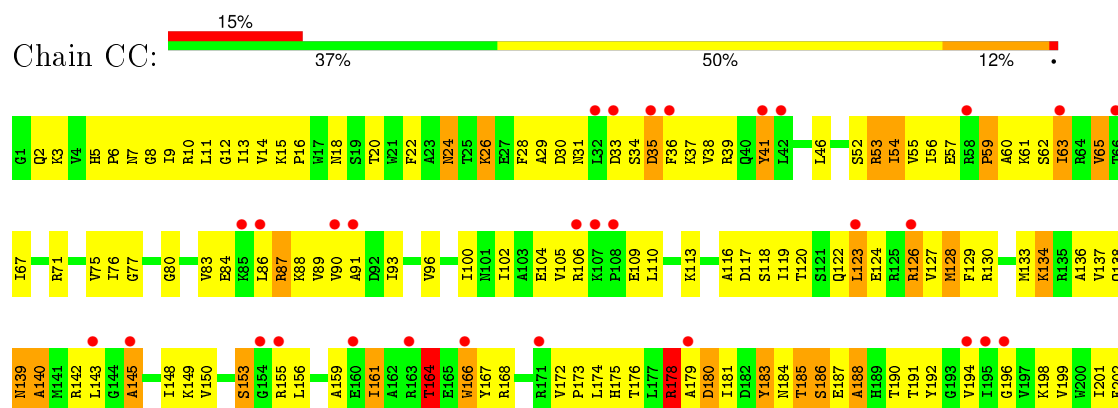
• Molecule 2: 30S ribosomal protein S2



• Molecule 3: 30S ribosomal protein S3



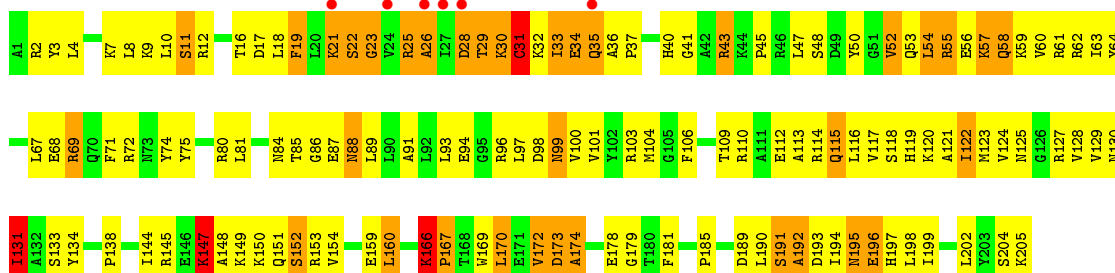
• Molecule 3: 30S ribosomal protein S3



K203
E204
E205
I206

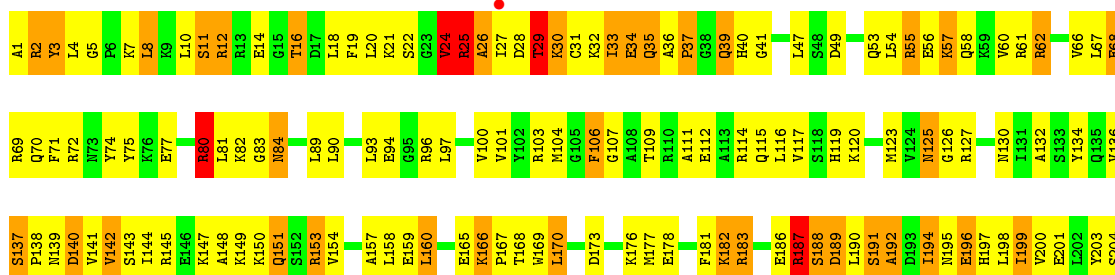
• Molecule 4: 30S ribosomal protein S4

Chain AD:  3% 34% 47% 17%



• Molecule 4: 30S ribosomal protein S4

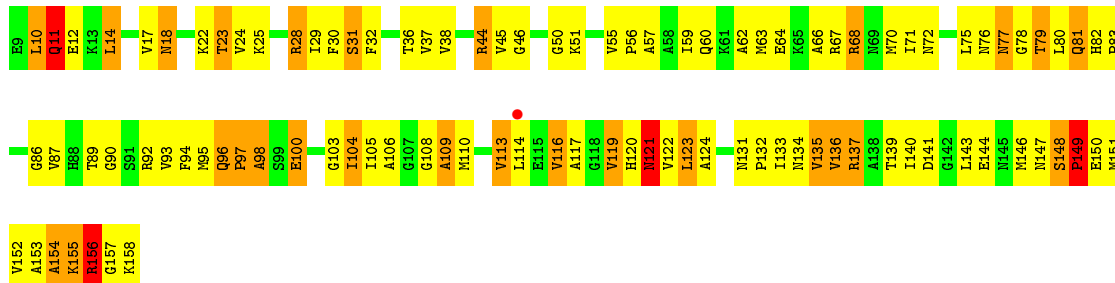
Chain CD:  32% 48% 18%



K205

• Molecule 5: 30S ribosomal protein S5

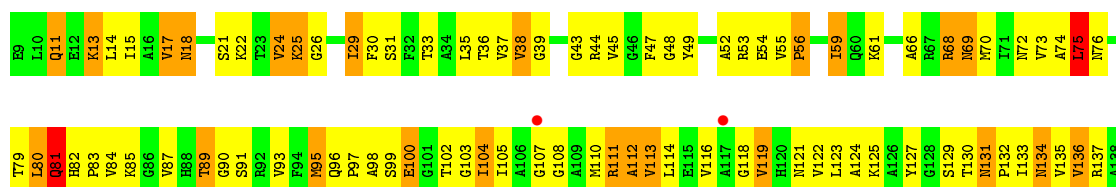
Chain AE:  33% 46% 18%



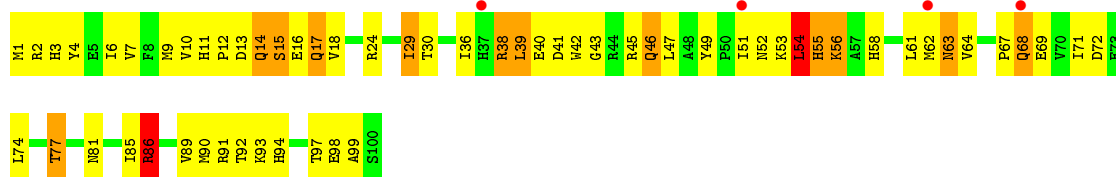
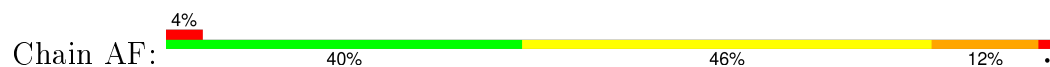
• Molecule 5: 30S ribosomal protein S5

Chain CE:  2% 34% 48% 17%

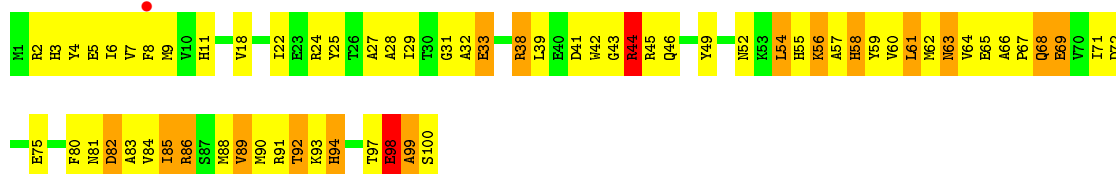




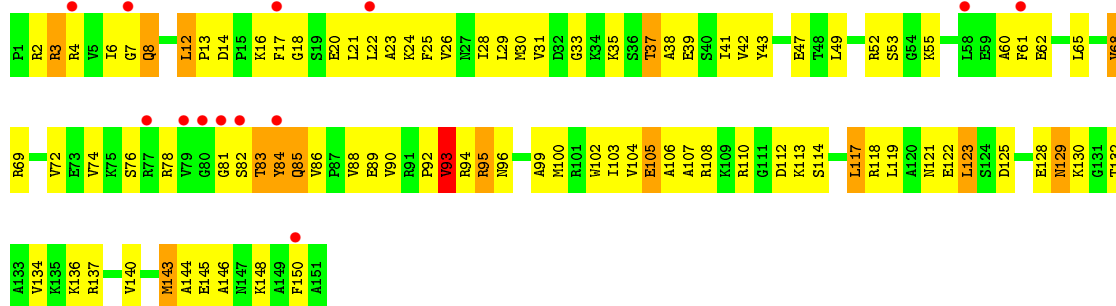
• Molecule 6: 30S ribosomal protein S6



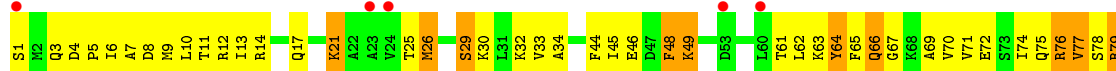
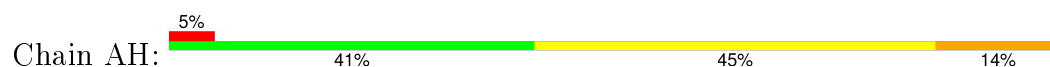
• Molecule 6: 30S ribosomal protein S6

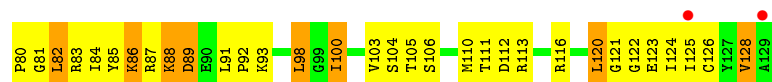


• Molecule 7: 30S ribosomal protein S7

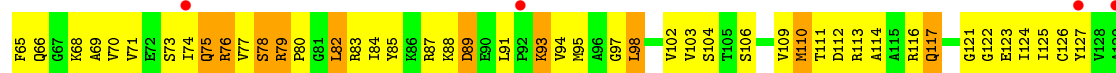


• Molecule 8: 30S ribosomal protein S8

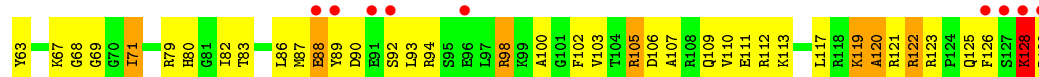
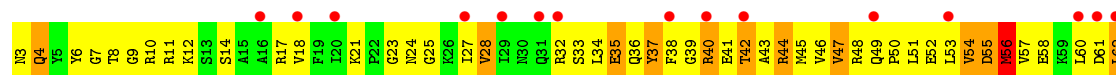




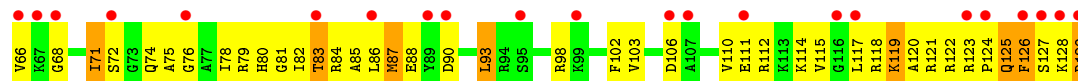
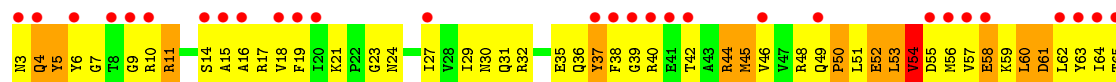
• Molecule 8: 30S ribosomal protein S8



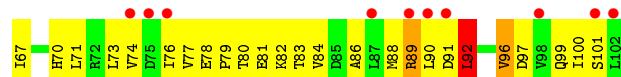
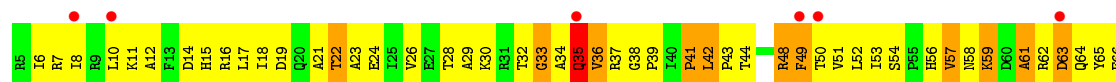
• Molecule 9: 30S ribosomal protein S9



• Molecule 9: 30S ribosomal protein S9

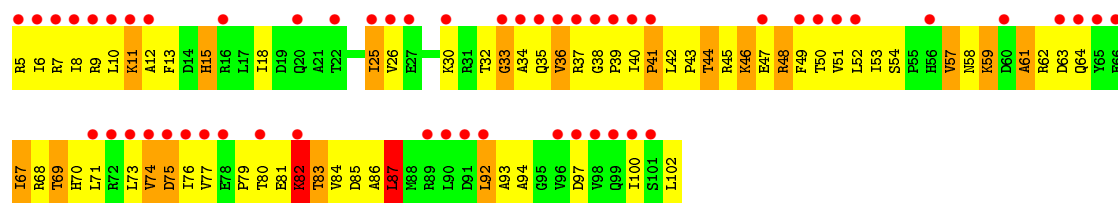


• Molecule 10: 30S ribosomal protein S10

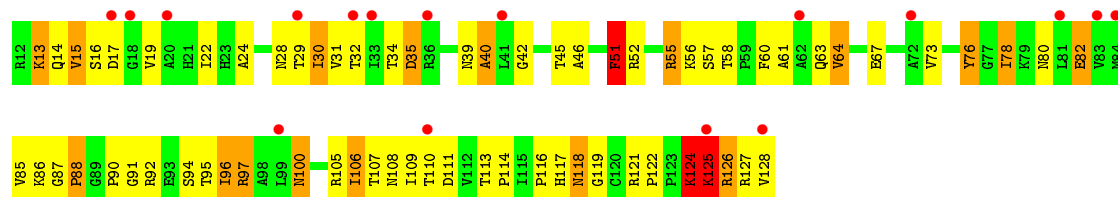
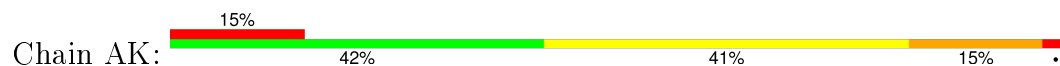


• Molecule 10: 30S ribosomal protein S10

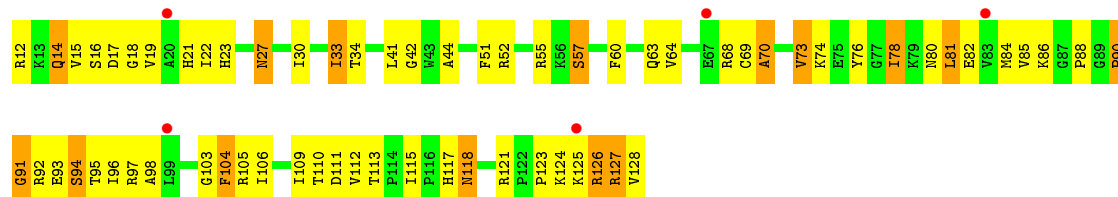
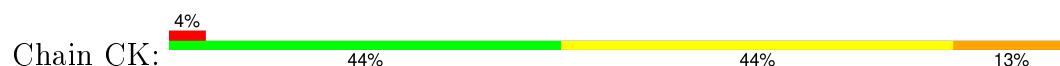




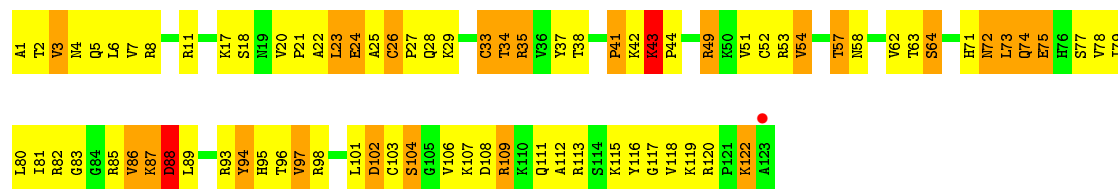
• Molecule 11: 30S ribosomal protein S11



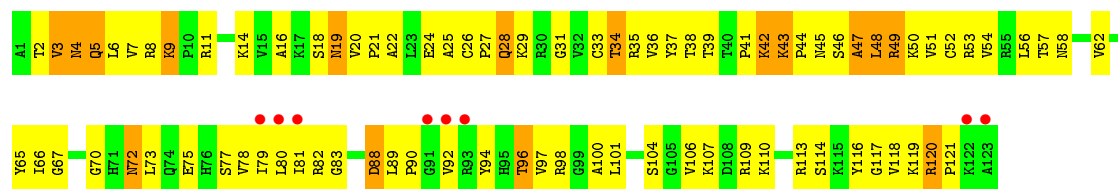
• Molecule 11: 30S ribosomal protein S11



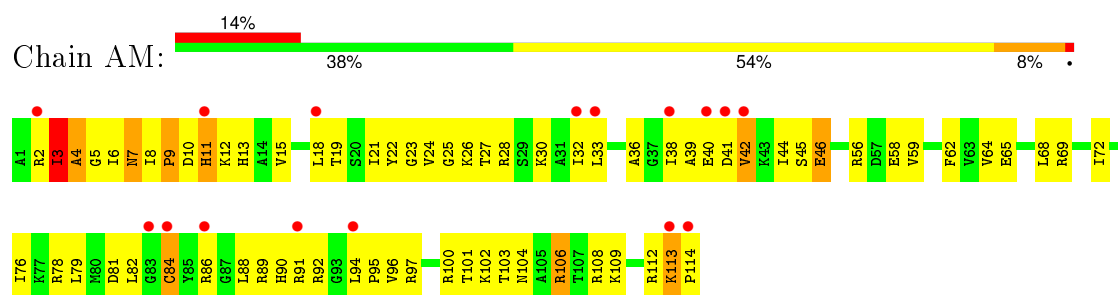
• Molecule 12: 30S ribosomal protein S12



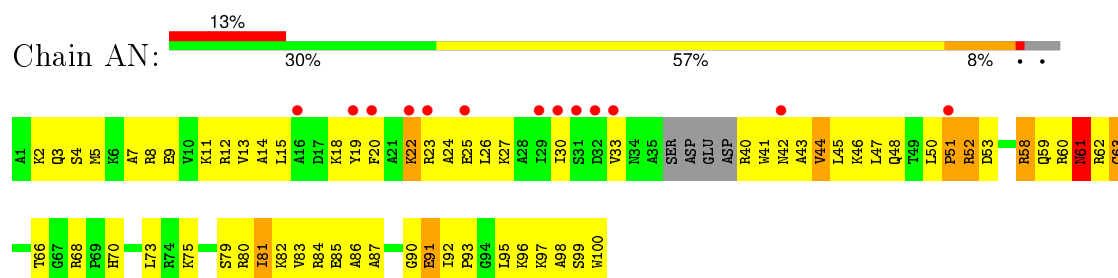
• Molecule 12: 30S ribosomal protein S12



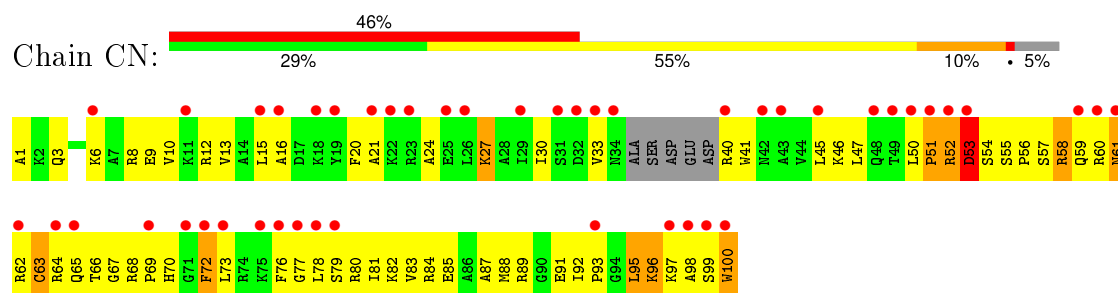
• Molecule 13: 30S ribosomal protein S13



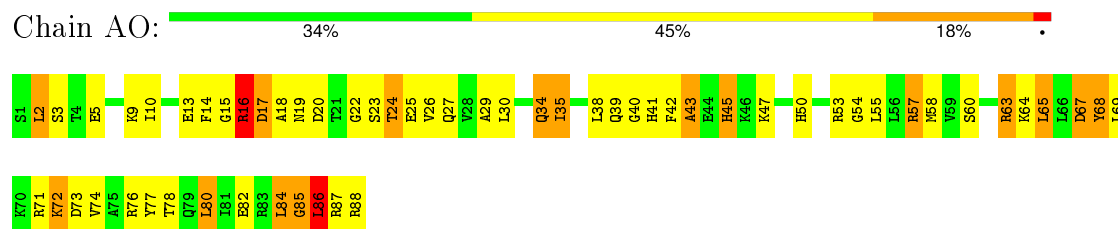
- Molecule 14: 30S ribosomal protein S14



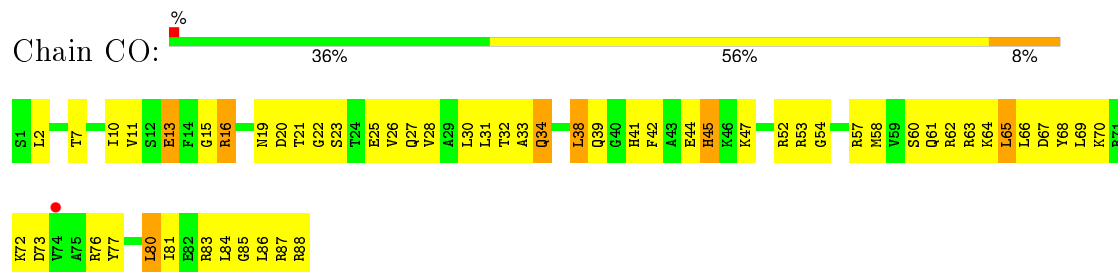
- Molecule 14: 30S ribosomal protein S14



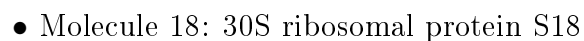
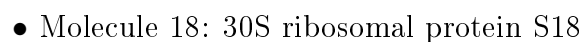
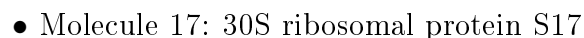
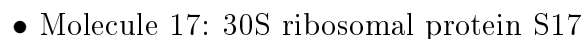
- Molecule 15: 30S ribosomal protein S15



- Molecule 15: 30S ribosomal protein S15

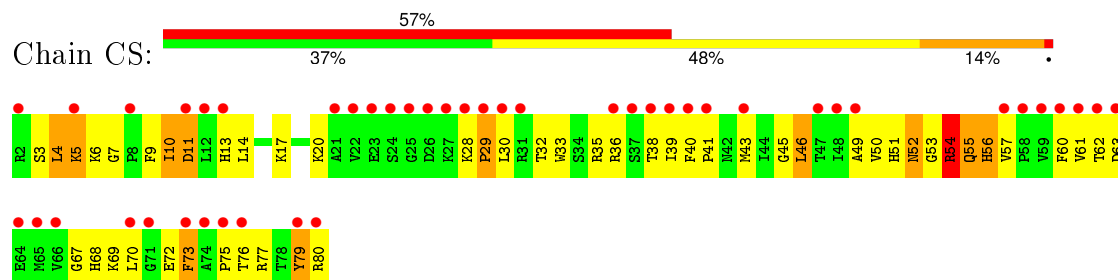


- Molecule 16: 30S ribosomal protein S16

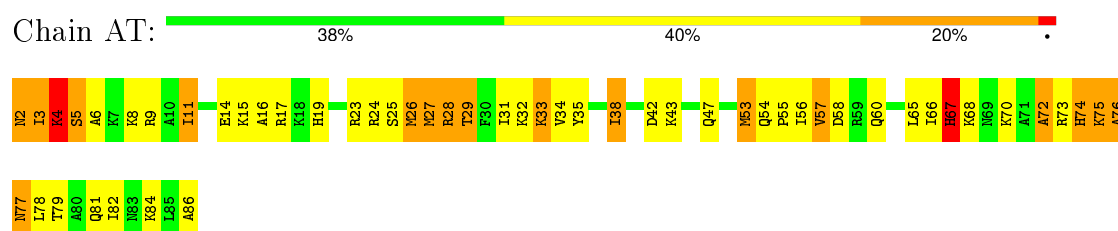




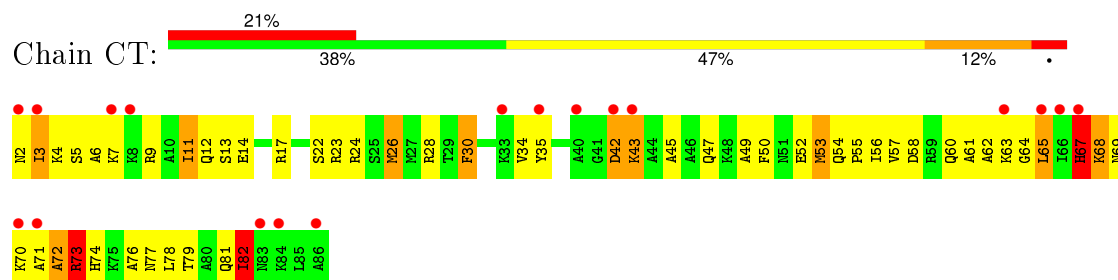
- Molecule 19: 30S ribosomal protein S19



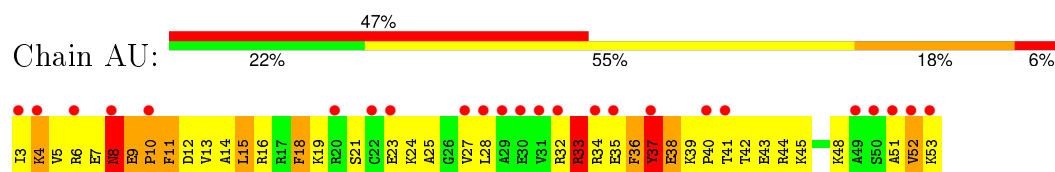
- Molecule 20: 30S ribosomal protein S20



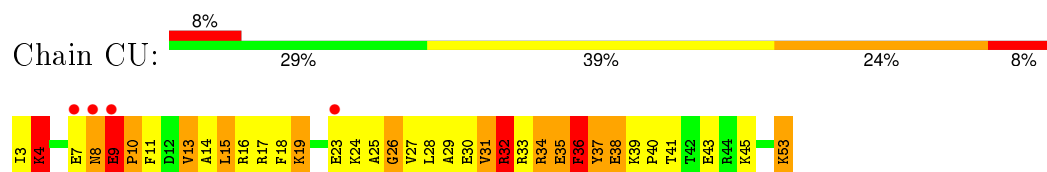
- Molecule 20: 30S ribosomal protein S20



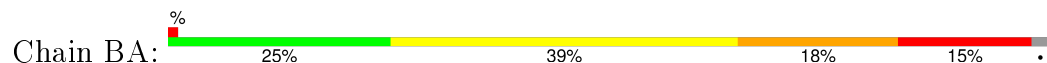
- Molecule 21: 30S ribosomal protein S21



- Molecule 21: 30S ribosomal protein S21

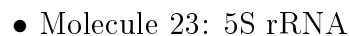


- Molecule 22: 23S rRNA



G1024	G1025	G1026	G1027	A1028	G1031	A1032	U1033	G1034	U1035	G1036	A1039	G1040	A1041	G1042	A1043	G1044	C1045	A1046	G1047	A1048	C1049	A1050	G1055	G1056	A1057	G1058	A1059	C1060	U1060	U1061	G1062	A1063	C1064	U1065	U1066	A1067	A1068	A1069	C1070	G1071	C1072	A1073	G1074	C1075	C1076	A1077	U1078	C1079	U1080	U1081	U1082	U1083	A1084	A1085	G1086	U1087	A1088																																																																																																																																																																																																																																																																																										
G964	G965	G966	G967	G968	G969	U970	G971	A972	A973	G974	A975	G976	G977	G978	A979	A980	A981	C982	A983	A984	G985	G986	G987	G988	A989	C990	G991	A992	G993	A994	C995	A996	G997	A998	U999	A1000	A1001	G1002	G1003	A1004	C1005	C1006	C1007	A1008	A1009	A1010	C1011	U1012	C1013	A1014	U1015	G1016	G1017	U1018	U1019	A1020	G1021	G1022	U1023																																																																																																																																																																																																																																																																																								
U827	U828	A829	G830	A831	U832	A833	G834	U839	U842	G843	A844	A845	U846	U847	U848	U849	C850	A851	C854	G855	A856	G857	C858	G859	U860	A861	G862	C865	A866	C867	U868	G869	U870	U871	U872	G875	C876	C877	U878	U879	C880	U881	U882	U883	U884	C885	A	U	C	C	C	A892	C893	U894	U895																																																																																																																																																																																																																																																																																												
A896	C897	A898	A899	A900	C901	A904	A905	U906	G907	C908	A909	A910	U913	C914	C915	C916	A917	A918	U919	A920	C921	C922	G923	G924	C925	U926	A927	C928	A929	C930	U931	U932	A933	U934	C935	A936	C937	A938	A939	A940	A941	A942	A943	A944	A945	A946	A947	C948	C949	C950	C951	A954	U955	U956	U957	U958	A959	A960	C961	U962	U963																																																																																																																																																																																																																																																																																						
U763	A764	U765	U766	U767	U768	U769	G770	G774	G775	G776	G777	G778	U779	U780	U781	A782	A783	U784	U785	U786	A787	U788	A789	U790	A791	A792	A793	A794	C795	G799	A800	G801	A802	U803	A804	G805	U806	U807	G808	G809	U810	U811	C812	U813	C814	C815	C816	C817	G818	A819	A820	A821	G822	C823	U824	A825	U826																																																																																																																																																																																																																																																																																										
U694	U695	U696	U697	U698	U699	U703	G704	A705	A706	G707	G708	U709	U710	U711	U712	A713	U714	A715	A716	C717	U718	U719	U720	U721	U722	C723	U724	U725	U726	U727	A728	U729	A730	G733	A734	A735	C736	C737	G738	A739	C740	U741	A742	U743	U744	U745	U746	U747	U748	A749	A750	A751	A752	A753	U754	U755	U756	A757	U758	A759	U760	U761	U762																																																																																																																																																																																																																																																																																				
G564	C565	U566	U567	U568	U569	U570	U571	A572	U573	A574	A575	U576	U577	U578	U579	U580	C581	A582	U583	U584	U585	A586	U587	U588	A589	A590	U591	A592	U593	U594	C595	U596	U597	U598	A599	G600	C601	A602	A603	U604	U605	U606	U607	U608	A609	C610	C611	U612	A613	A614	U615	A616	U617	U618	U619	U620	A621	U622	C623																																																																																																																																																																																																																																																																																								
C624	U625	A626	U627	U628	A629	A630	A631	A632	A633	C634	C635	G636	A637	G638	U639	U640	U641	U642	A643	A644	C645	U646	U647	U648	U649	U650	U651	U652	U653	U654	U655	U656	U657	U658	U659	U660	U661	U662	U663	U664	U665	U666	U667	U668	U669	U670	C671	C672	C673	U674	A675	U676	U677	U678	U679	U680	U681	U682	U683	U684	U685	U686	U687	U688	U689	A693																																																																																																																																																																																																																																																																																	
G494	U495	A496	U497	U498	U499	A500	A501	A502	U503	U504	U505	U506	U507	U508	U509	U510	U511	U512	U513	U514	U515	U516	U517	U518	U519	U520	U521	U522	U523	U524	U525	U526	U527	U528	U529	U530	U531	U532	U533	U534	U535	U536	U537	U538	U539	U540	U541	U542	U543	U544	U545	U546	U547	U548	U549	U550	U551	U552	U553	U554	U555	U556	U557	U558	U559	U560	U561	U562	U563																																																																																																																																																																																																																																																																														
A423	U424	A425	U426	U427	U428	U429	U430	U431	U432	U433	U434	U435	U436	U437	U438	U439	U440	U441	U442	U443	U444	U445	U446	U447	U448	U449	U450	U451	U452	U453	U454	U455	U456	U457	U458	U459	U460	U461	U462	U463	U464	U465	U466	U467	U468	U469	U470	U471	U472	U473	U474	U475	U476	U477	U478	U479	U480	U481	U482	U483	U484	U485	U486	U487	U488	U489	U490	U491	U492	U493	U494	U495	U496	U497	U498	U499	U500	U501	U502	U503	U504	U505	U506	U507	U508	U509	U510	U511	U512	U513	U514	U515	U516	U517	U518	U519	U520	U521	U522	U523	U524	U525	U526	U527	U528	U529	U530	U531	U532	U533	U534	U535	U536	U537	U538	U539	U540	U541	U542	U543	U544	U545	U546	U547	U548	U549	U550	U551	U552	U553	U554	U555	U556	U557	U558	U559	U560	U561	U562	U563	U564	U565	U566	U567	U568	U569	U570	U571	U572	U573	U574	U575	U576	U577	U578	U579	U580	U581	U582	U583	U584	U585	U586	U587	U588	U589	U590	U591	U592	U593	U594	U595	U596	U597	U598	U599	U600	U601	U602	U603	U604	U605	U606	U607	U608	U609	U610	U611	U612	U613	U614	U615	U616	U617	U618	U619	U620	U621	U622	U623	U624	U625	U626	U627	U628	U629	U630	U631	U632	U633	U634	U635	U636	U637	U638	U639	U640	U641	U642	U643	U644	U645	U646	U647	U648	U649	U650	U651	U652	U653	U654	U655	U656	U657	U658	U659	U660	U661	U662	U663	U664	U665	U666	U667	U668	U669	U670	U671	U672	U673	U674	U675	U676	U677	U678	U679	U680	U681	U682	U683	U684	U685	U686	U687	U688	U689	U690	U691	U692	U693	U694	U695	U696	U697	U698	U699	U700	U701	U702	U703	U704	U705	U706	U707	U708	U709	U710	U711	U712	U713	U714	U715	U716	U717	U718	U719	U720	U721	U722	U723	U724	U725	U726	U727	U728	U729	U730	U731	U732	U733	U734	U735	U736	U737	U738	U739	U740	U741	U742	U743	U744	U745	U746	U747	U748	U749	U750	U751	U752	U753	U754	U755	U756	U757	U758	U759	U760	U761	U762

G2025	U1956	G1884	A1815	U1747	G1680	A1614	A1551	G1482	C1414	U1344	G1281	G1220	G1154	A1089
U2026	C1957	A1885	C1816	C1748	U1681	C1615	A1552	G1483	U1415	A1347	U1282	C1221	A1155	A1090
G2027	G1958	A1886	U1817	G1753	G1682	A1616	U1553	G1484	C1416	A1348	G1283	U1222	A1156	G1091
U2028	G1959	A1887	U1818	G1754	U1683	A1618	U1554	U1485	C1417	G1349	G1284	U1223	G1157	C1092
G2029	A1960	A1889	A1919	U1755	G1684	G1619	G1555	U1486	A1418	C1350	A1287	U1224	U1159	G1093
A2030	G1961	A1891	U1820	C1756	C1685	G1622	C1557	U1487	A1420	C1351	G1288	A1225	U1159	U1094
A2031	G1962	A1892	A1821	A1757	U1688	G1623	C1558	C1488	G1421	U1352	G1289	A1226	G1160	A1095
G2032	G1963	U1898	G1822	A1758	U1689	G1624	U1559	C1489	G1422	A1353	G1290	G1227	C1161	A1096
A2033	A1964	A1899	G1823	A1759	A1689	U1624	G1560	A1490	G1423	A1354	C1291	G1228	G1162	U1097
U2034	G1965	A1900	U1824	A1760	C1625	G1625	G1561	G1491	G1423	G1355	G1292	A1230	G1163	A1098
G2035	A1966	A1901	U1825	C1760	G1626	U1626	U1562	G1492	G1426	G1356	G1293	U1231	G1165	G1099
G2036	G1967	C1902	G1826	C1761	U1693	A1826	U1563	G1493	A1427	G1357	U1294	G1232	A1165	A1103
A2037	U1827	G1762	U1827	A1762	G1694	G1627	U1564	C1494	C1428	G1358	C1295	C1233	C1167	C1104
G2038	A1969	G1763	G1828	G1695	U1629	G1628	C1564	A1495	C1429	G1359	G1296	U1234	G1168	U1105
U2039	G1970	U1764	A1829	G1696	G1697	A1630	U1566	A1496	G1430	G1360	C1297	U1235	G1169	G1106
G2040	U1971	U1765	G1830	G1697	G1698	G1631	U1567	U1497	A1431	G1361	C1298	G1236	C1170	G1107
A2042	G1972	G1766	C1832	A1699	U1766	G1631	U1568	G1498	G1432	G1362	G1299	G1237	G1171	U1108
G2043	U1973	U1767	U1833	G1699	U1769	A1634	A1569	C1499	A1433	A1365	G1300	G1238	C1172	C1109
C2044	U1976	G1770	A1835	A1701	A1635	A1635	G1500	G1500	A1434	A1366	A1301	G1239	G1175	G1110
G2045	A1912	A1773	C1836	A1702	A1636	A1636	G1501	G1501	G1435	A1367	A1302	U1240	A1176	A1111
U2046	A1913	C1774	A1837	C1706	A1637	A1637	G1502	A1502	G1436	G1370	G1303	G1243	U1177	G1112
G2047	C1914	C1775	C1838	G1707	A1638	A1638	A1503	A1503	C1437	G1371	A1304	C1244	G1178	U1113
G2048	U1915	U1775	G1839	C1708	A1639	A1639	A1504	A1504	U1438	G1372	C1305	A1245	G1179	G1114
G2049	A1916	G1776	G1840	U1709	A1640	A1640	U1505	A1505	A1439	U1372	G1309	A1246	U1180	G1115
G2050	U1917	U1777	U1841	U1777	A1641	A1641	U1506	U1506	U1440	A1373	G1310	A1247	U1181	G1117
A2051	A1918	U1778	G1842	U1778	G1642	G1642	C1507	C1507	G1441	G1374	G1311	A1248	U1182	G1118
A2052	A1919	U1779	C1843	A1713	G1643	A1643	A1508	A1508	U1442	U1375	G1312	U1249	U1183	A1127
G2053	G1920	U1780	C1844	U1714	C1644	C1644	G1581	A1509	U1443	G1376	U1313	G1250	U1184	G1120
A2054	U1921	U1781	G1845	G1715	G1645	G1645	G1582	G1510	G1444	G1377	U1314	G1251	G1185	C1121
G2055	G1922	U1782	C1846	U1716	C1646	C1646	G1583	G1511	G1445	A1378	G1315	G1252	G1186	G1122
U2056	U1923	A1783	A1847	A1717	U1647	U1647	U1584	C1512	G1446	U1379	G1316	G1253	G1187	G1125
G2057	C1923	U1784	G1848	A1784	U1648	U1648	C1585	U1513	G1447	G1380	G1317	A1254	U1188	A1126
A2058	C1924	A1785	A1849	U1720	A1650	A1650	G1586	A1514	G1450	G1381	G1318	U1255	A1189	A1260
U2059	G1925	U1786	G1850	G1721	A1651	A1651	G1587	A1515	C1451	G1382	C1319	G1256	G1190	A1127
A2060	U1926	A1787	U1851	A1722	G1652	G1652	U1588	A1516	G1452	A1384	G1320	G1257	G1191	G1128
G2061	C1927	U1788	U1852	G1723	G1653	G1653	U1589	A1522	G1453	A1385	A1321	U1258	G1192	A1129
A2062	A1928	C1788	U1853	G1724	G1654	G1654	A1590	U1523	G1454	A1386	A1322	G1259	G1193	U1130
G2063	G1929	U1789	U1854	U1725	A1654	A1654	A1591	G1524	G1455	G1387	G1323	A1260	A1194	U1131
C2064	U1930	C1790	U1855	C1726	A1655	A1655	C1592	G1524	U1456	A1387	G1324	G1261	G1199	A1133
G2065	U1931	A1791	U1856	A1791	G1656	G1656	A1593	A1525	U1457	G1392	G1325	A1262	G1200	A1134
A2066	A1932	G1795	G1857	C1727	C1657	C1657	U1594	G1526	U1458	A1392	U1326	A1263	G1185	G1135
G2067	C1933	U1794	A1858	C1728	U1657	U1657	U1595	G1527	G1459	A1393	U1327	A1264	G1186	G1136
U2068	G1934	C1795	U1859	U1729	C1658	C1658	A1597	A1528	U1460	U1394	A1328	A1265	U1203	U1137
G2069	U1935	U1796	G1860	G1730	G1659	G1659	A1598	G1529	C1461	A1395	A1329	A1266	A1204	G1138
A2070	A1936	G1797	G1861	G1731	G1660	G1660	U1599	G1533	U1462	U1396	U1329	G1267	A1205	G1139
C2071	A1937	U1798	U1862	C1732	A1664	A1664	C1600	U1534	G1463	U1397	G1330	A1268	G1206	G1140
G2072	A1938	G1799	G1863	G1733	A1665	A1665	G1601	U1535	U1464	U1398	G1331	A1269	G1207	U1141
U2073	C1941	A1801	U1864	A1735	G1666	G1666	U1602	A1536	G1465	C1399	G1332	G1270	G1208	U1142
A2074	A1802	U1736	G1865	U1736	G1667	G1667	A1603	C1536	U1466	A1403	G1334	G1271	U1209	A1143
G2075	G1806	C1737	U1866	G1738	A1668	A1668	C1604	G1537	A1469	C1404	C1335	A1272	G1215	C1150
A2076	U1943	U1738	G1867	U1739	A1669	A1669	C1605	G1538	U1470	U1405	A1336	U1273	G1216	A1151
G2077	G1807	A1739	U1868	C1740	C1670	U1539	G1606	U1539	G1471	U1406	G1337	A1274	U1217	G1152
U2078	U1944	G1807	G1869	U1740	C1671	G1540	C1607	G1540	G1471	U1406	G1338	G1275	G1218	U1217
G2079	G1945	A1808	U1870	G1740	U1671	G1540	C1608	U1541	U1474	U1409	G1339	A1276	G1219	C1153
A2080	U1946	U1809	G1871	A1672	A1608	C1541	U1542	U1542	U1475	G1410	U1340	G1277	G1215	G1150
G2081	C1947	U1742	A1872	U1742	A1609	U1542	U1542	U1542	U1476	U1411	G1341	G1278	G1216	A1151
A2082	U1810	G1743	G1873	G1743	G1673	G1673	A1610	A1548	U1477	U1411	G1342	G1279	G1217	G1152
G2083	A1852	U1811	G1874	G1744	A1674	A1674	C1611	A1549	U1478	U1412	G1343	G1280	G1218	C1153
U2084	G1953	U1812	G1875	A1744	C1675	C1675	C1612	A1549	U1479	U1413	G1344	G1281	G1219	G1153
G2085	A1954	G1813	G1876	A1745	A1676	A1676	C1613	U1550	G1478	G1413	G1345	G1282	G1220	G1154
U2086	U1955	A1814	A1876	A1746	A1677	A1677	G1613	G1550	G1478	G1413	G1345	G1282	G1220	G1154

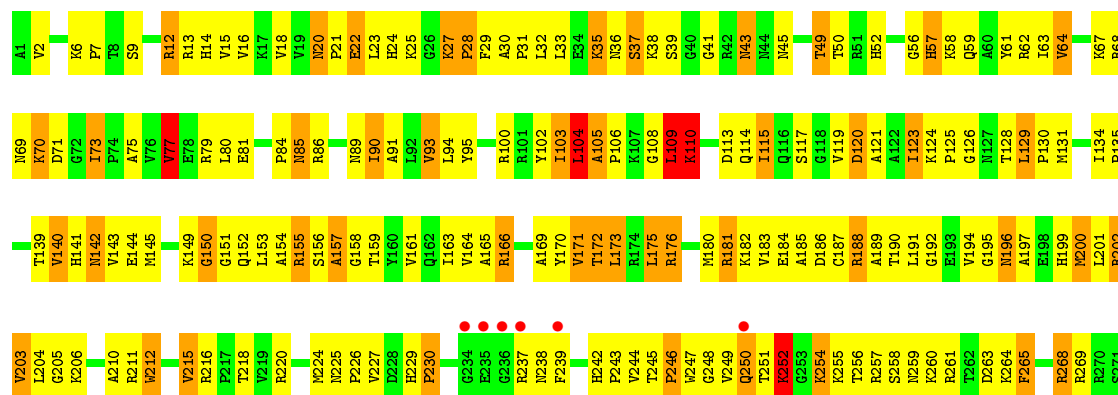


Response Category	Percentage
Strongly agree	35%
Agree	39%
Disagree	11%
Strongly disagree	15%

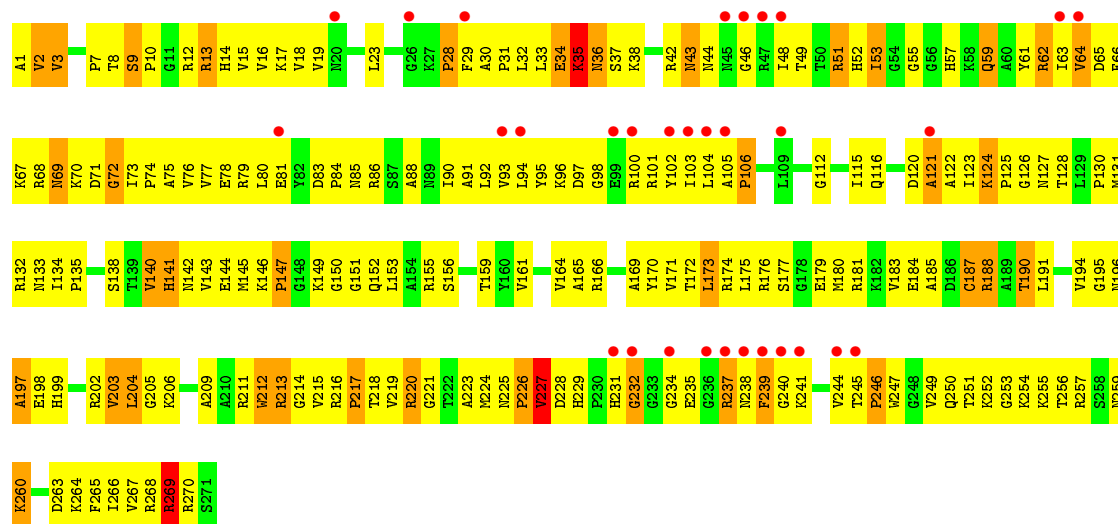




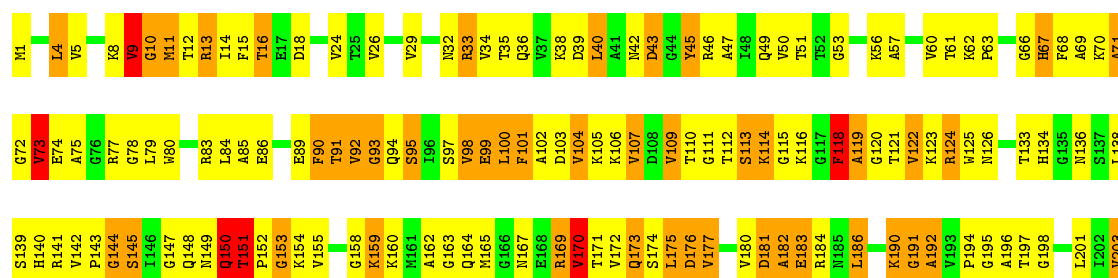
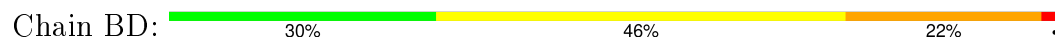
• Molecule 24: 50S ribosomal protein L2



• Molecule 24: 50S ribosomal protein L2

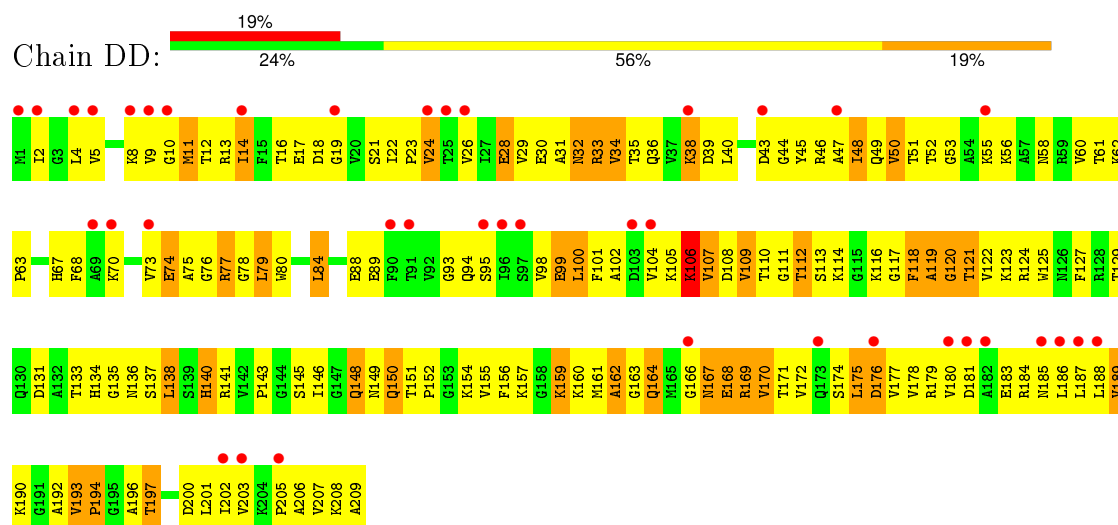


• Molecule 25: 50S ribosomal protein L3

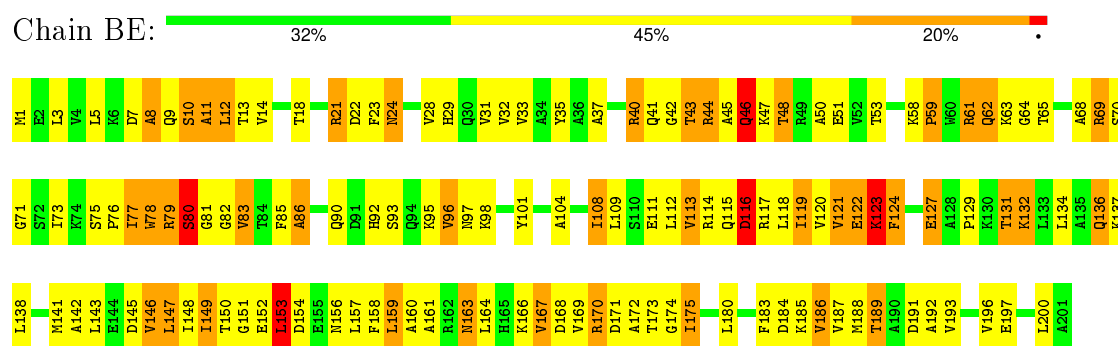




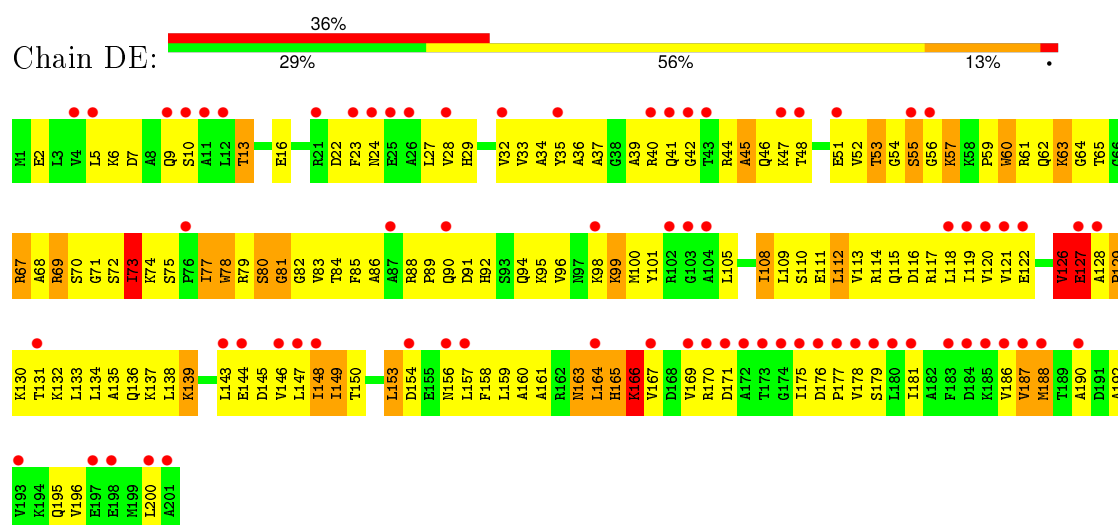
• Molecule 25: 50S ribosomal protein L3



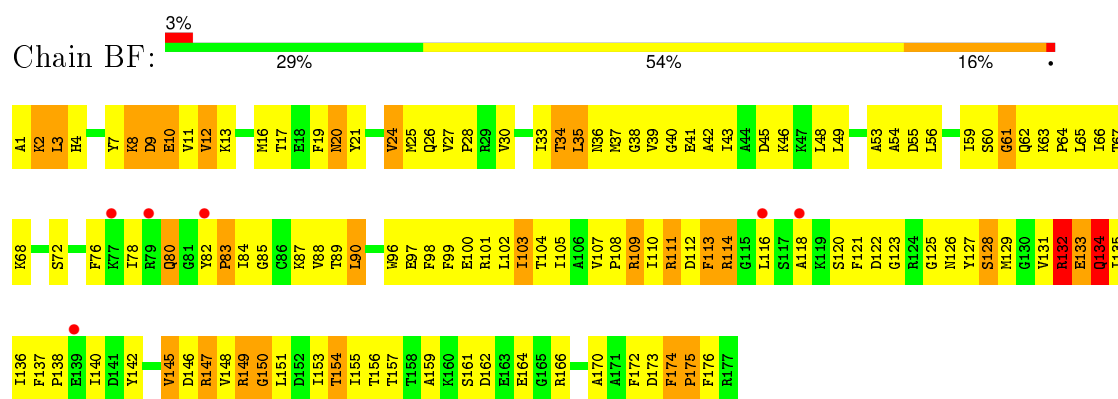
• Molecule 26: 50S ribosomal protein L4



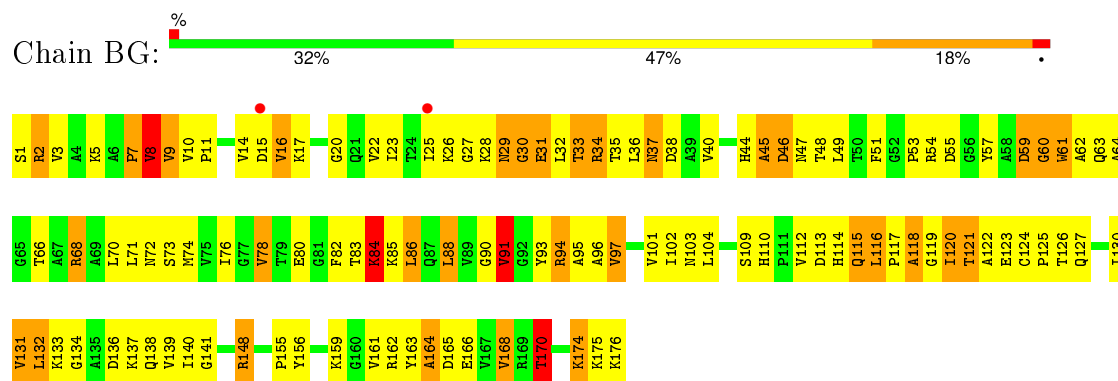
• Molecule 26: 50S ribosomal protein L4



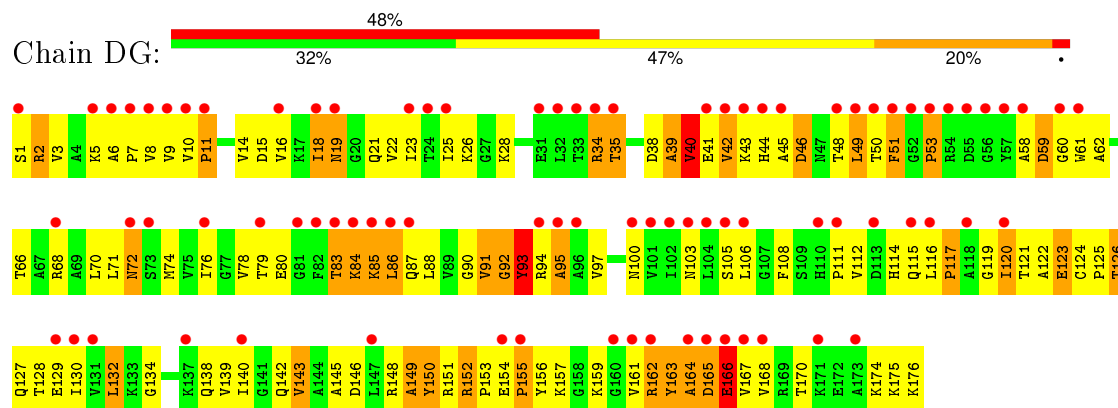
• Molecule 27: 50S ribosomal protein L5



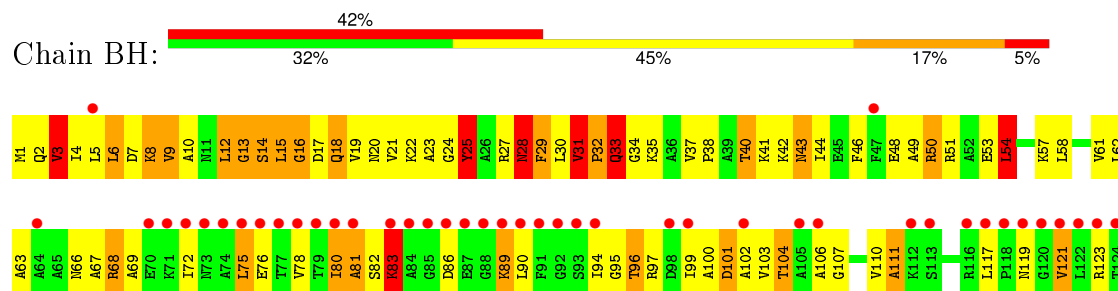
• Molecule 28: 50S ribosomal protein L6

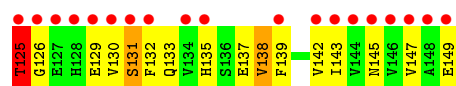


• Molecule 28: 50S ribosomal protein L6

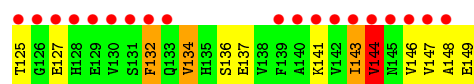
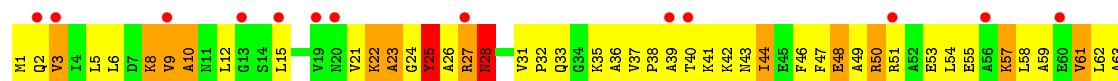


• Molecule 29: 50S ribosomal protein L9

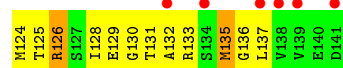
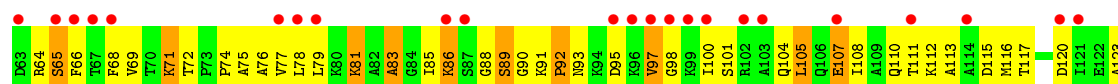
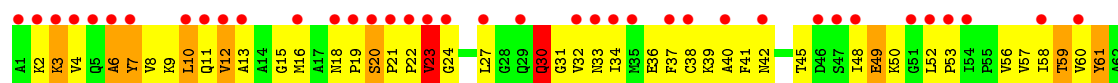




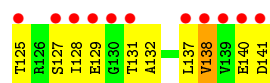
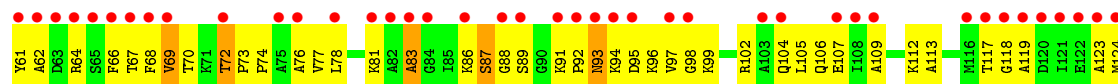
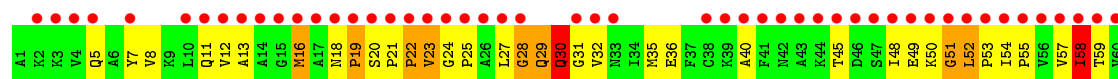
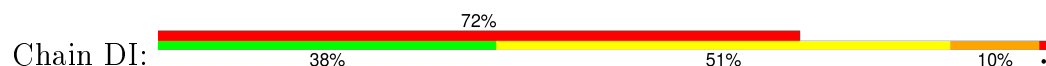
- Molecule 29: 50S ribosomal protein L9



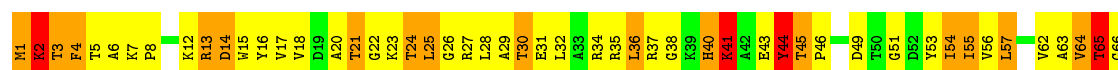
- Molecule 30: 50S ribosomal protein L11

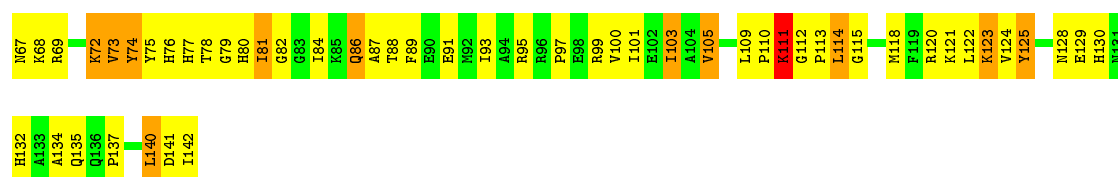


- Molecule 30: 50S ribosomal protein L11

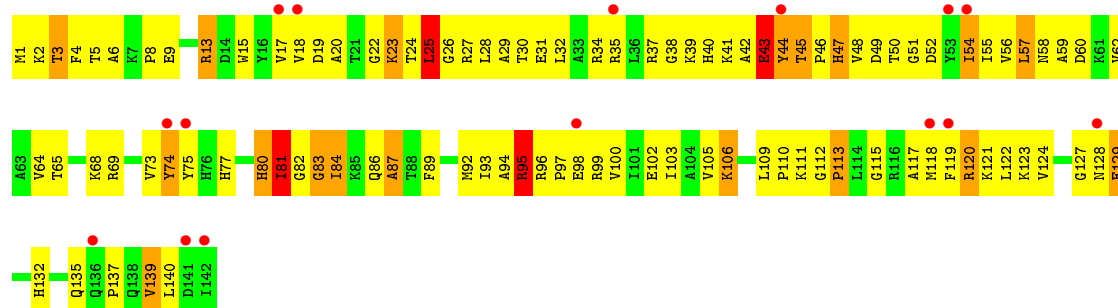


- Molecule 31: 50S ribosomal protein L13

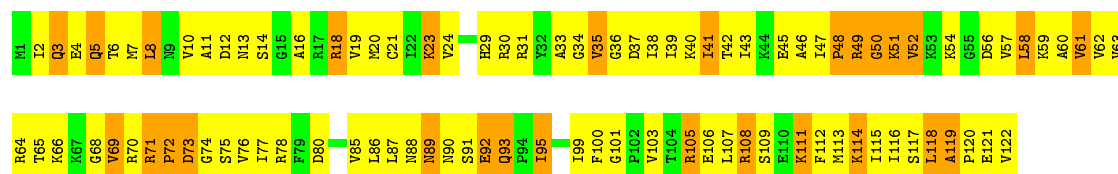




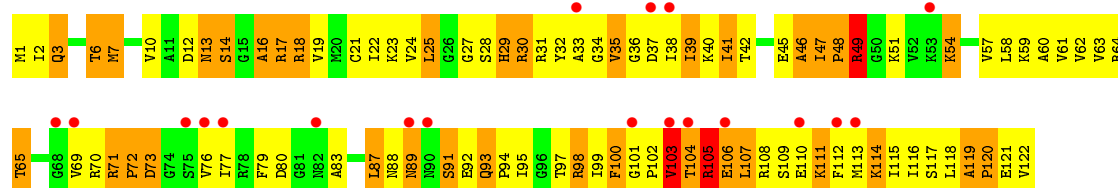
• Molecule 31: 50S ribosomal protein L13



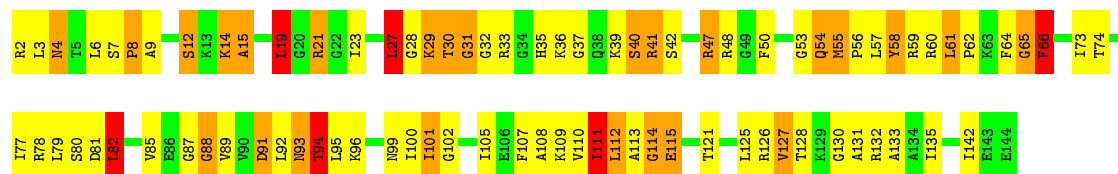
• Molecule 32: 50S ribosomal protein L14



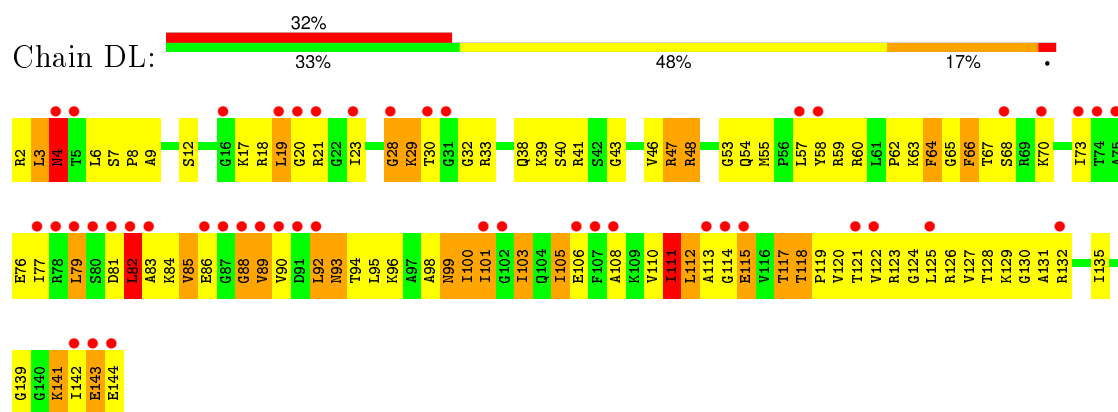
• Molecule 32: 50S ribosomal protein L14



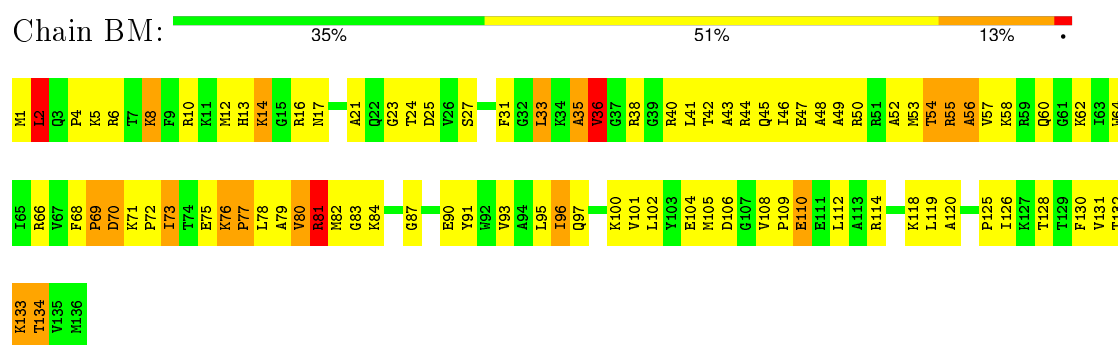
• Molecule 33: 50S ribosomal protein L15



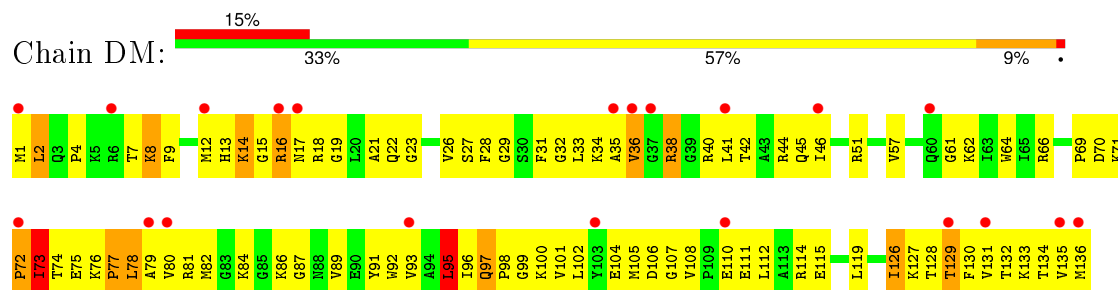
• Molecule 33: 50S ribosomal protein L15



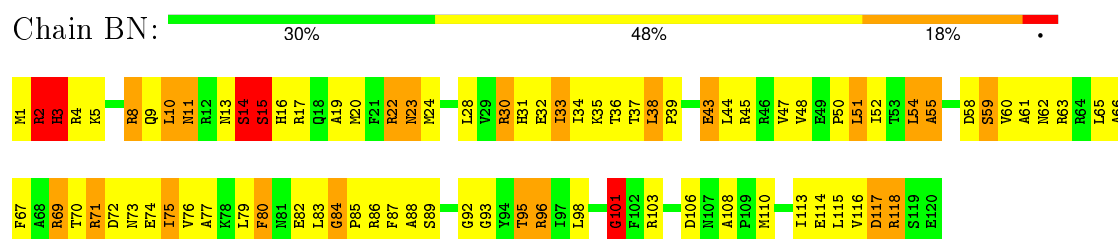
- Molecule 34: 50S ribosomal protein L16



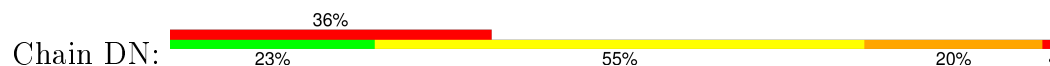
- Molecule 34: 50S ribosomal protein L16

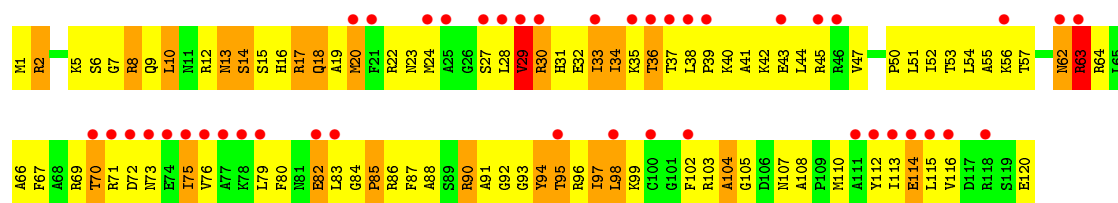


- Molecule 35: 50S ribosomal protein L17



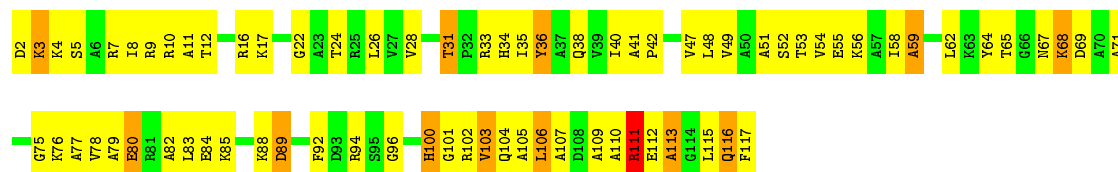
- Molecule 35: 50S ribosomal protein L17





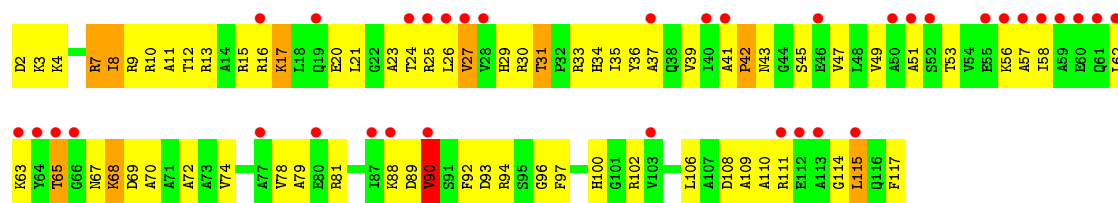
• Molecule 36: 50S ribosomal protein L18

Chain BO: 36% 53% 10% .



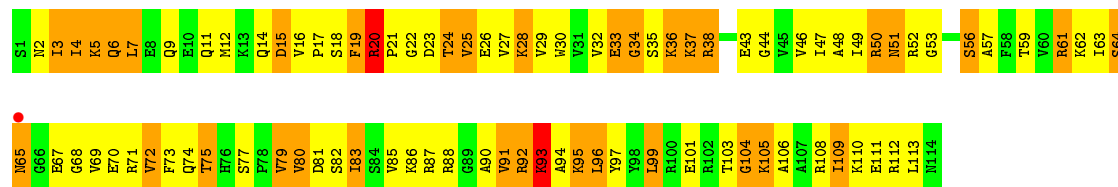
• Molecule 36: 50S ribosomal protein L18

Chain DO: 31% 40% 52% 8% .



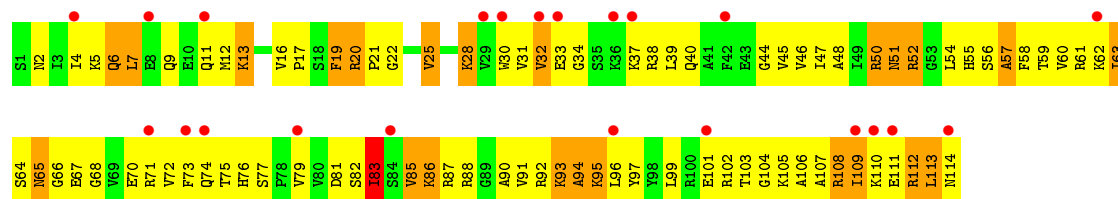
• Molecule 37: 50S ribosomal protein L19

Chain BP: 21% 47% 30% .



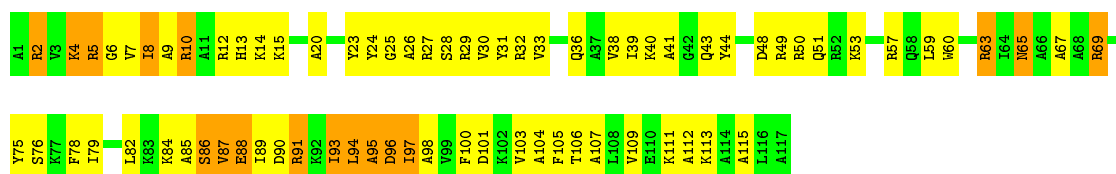
• Molecule 37: 50S ribosomal protein L19

Chain DP: 19% 23% 56% 20% .

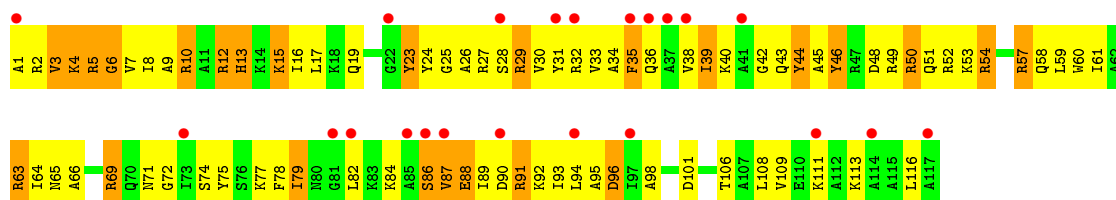


• Molecule 38: 50S ribosomal protein L20

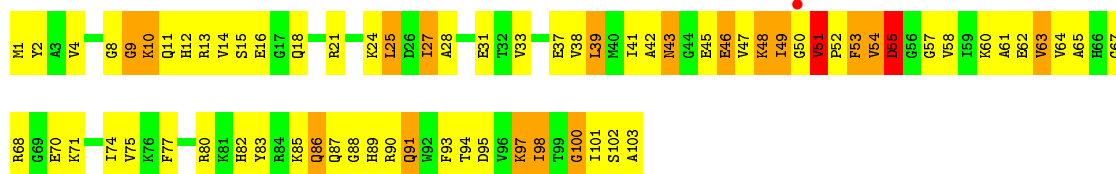
Chain BQ: 37% 49% 15% .



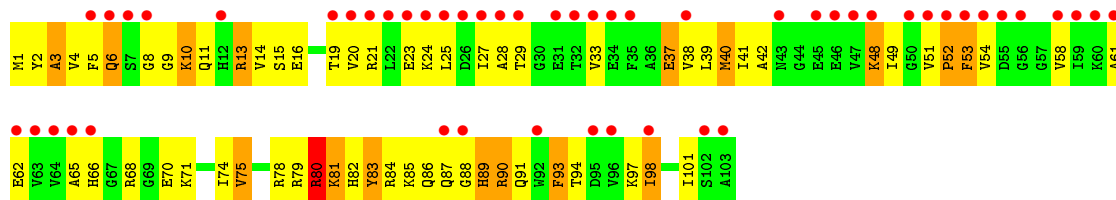
• Molecule 38: 50S ribosomal protein L20



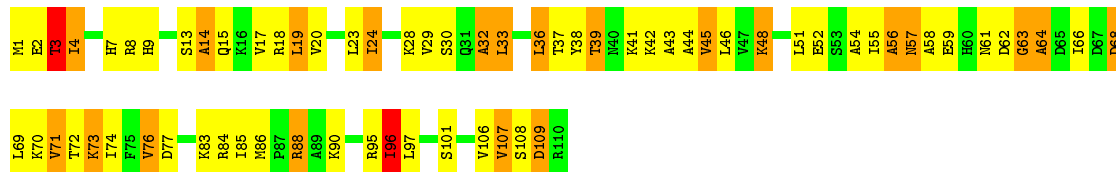
• Molecule 39: 50S ribosomal protein L21



• Molecule 39: 50S ribosomal protein L21

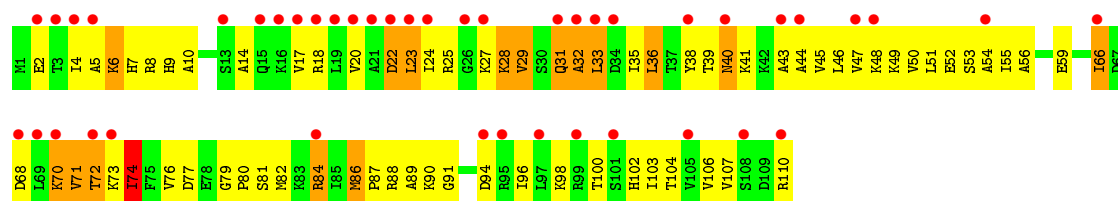


• Molecule 40: 50S ribosomal protein L22

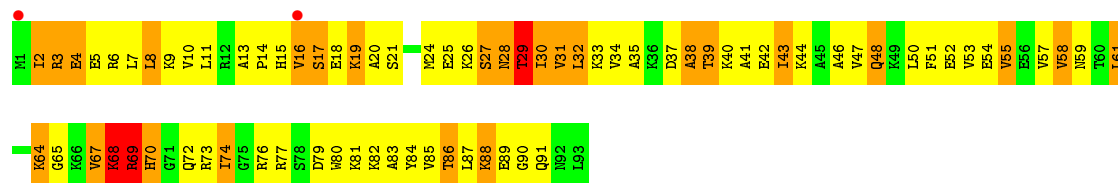
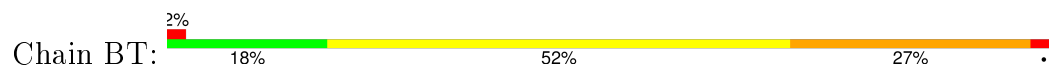


• Molecule 40: 50S ribosomal protein L22

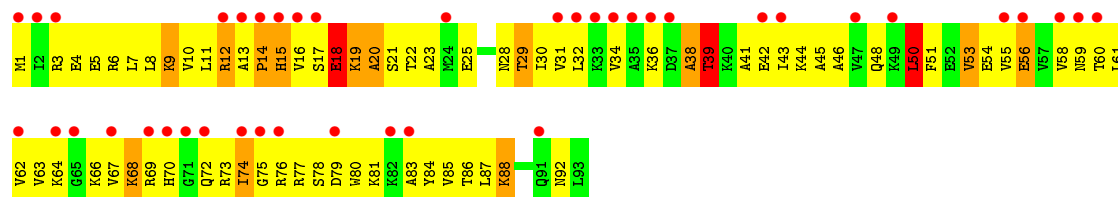




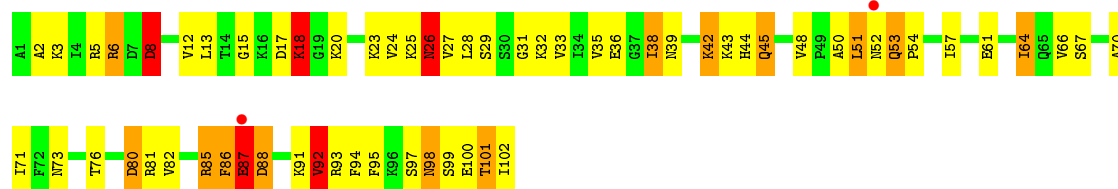
- Molecule 41: 50S ribosomal protein L23



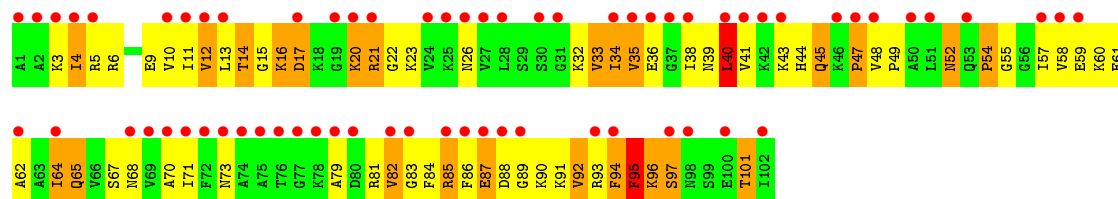
- Molecule 41: 50S ribosomal protein L23



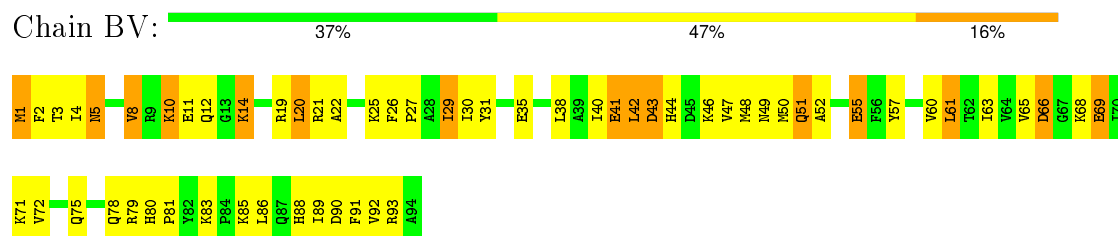
- Molecule 42: 50S ribosomal protein L24



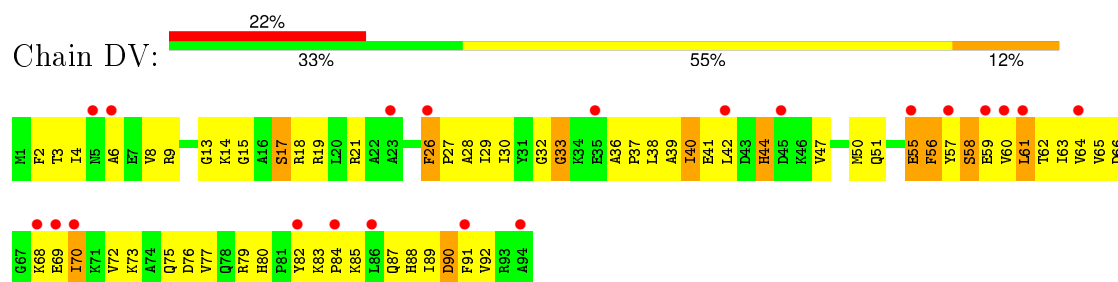
- Molecule 42: 50S ribosomal protein L24



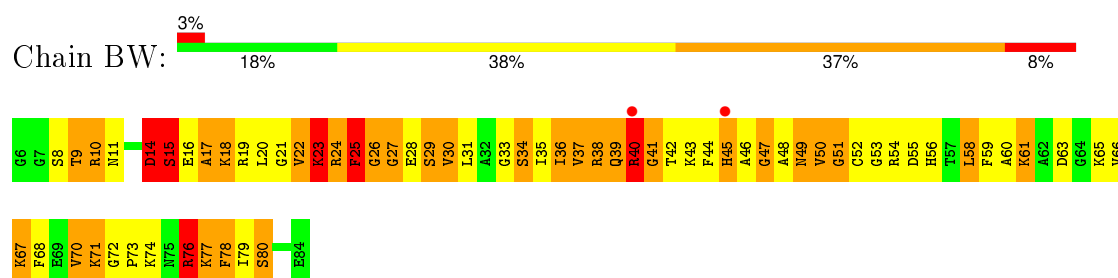
- Molecule 43: 50S ribosomal protein L25



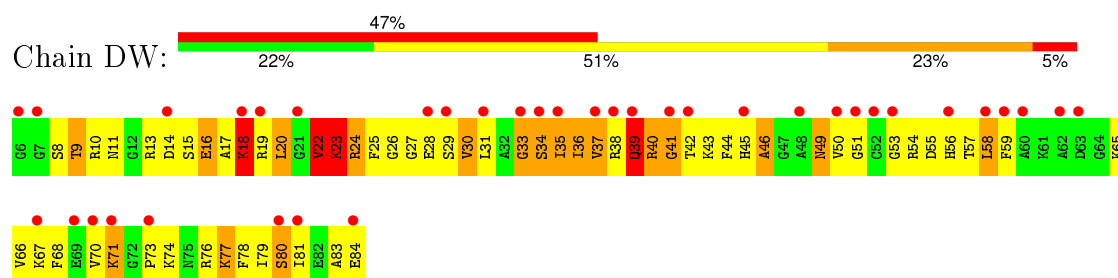
- Molecule 43: 50S ribosomal protein L25



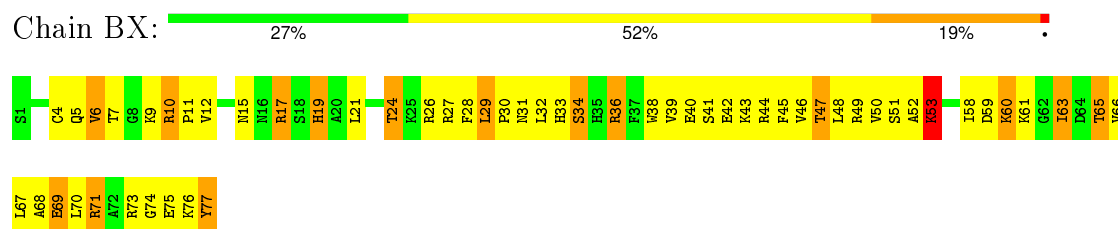
- Molecule 44: 50S ribosomal protein L27



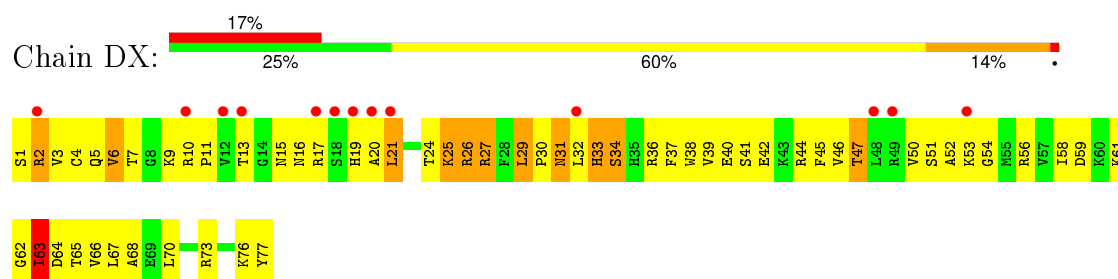
- Molecule 44: 50S ribosomal protein L27



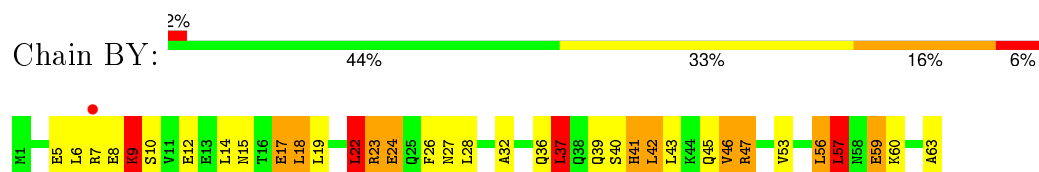
- Molecule 45: 50S ribosomal protein L28



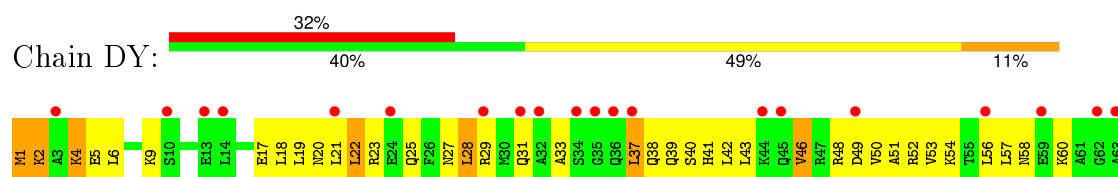
- Molecule 45: 50S ribosomal protein L28



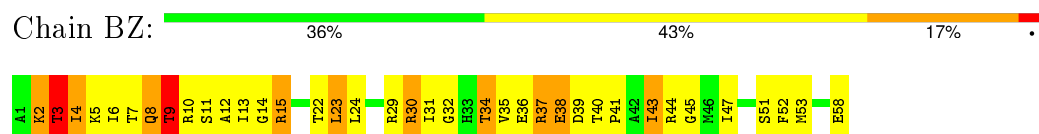
- Molecule 46: 50S ribosomal protein L29



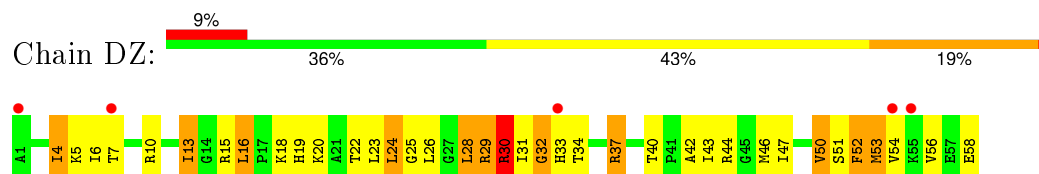
- Molecule 46: 50S ribosomal protein L29



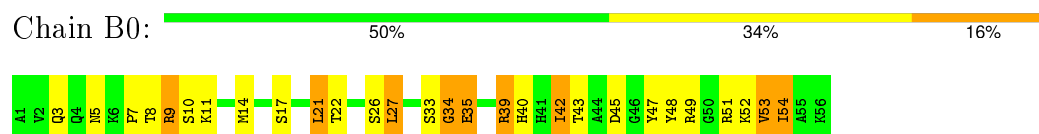
- Molecule 47: 50S ribosomal protein L30



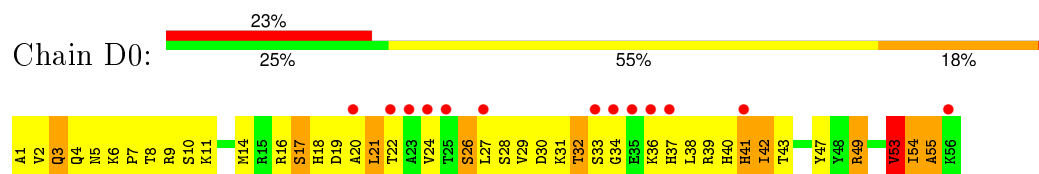
- Molecule 47: 50S ribosomal protein L30



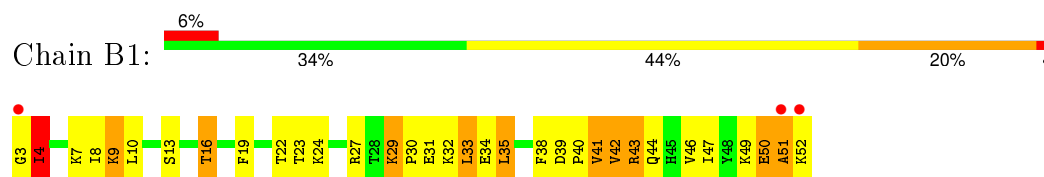
- Molecule 48: 50S ribosomal protein L32



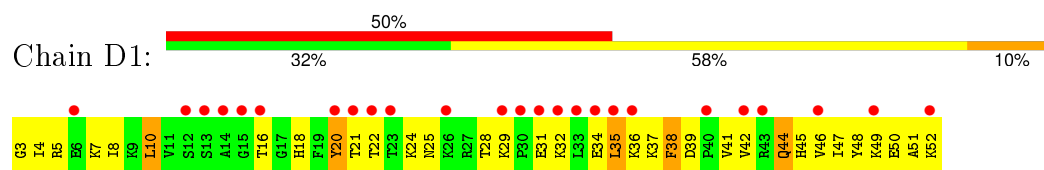
- Molecule 48: 50S ribosomal protein L32



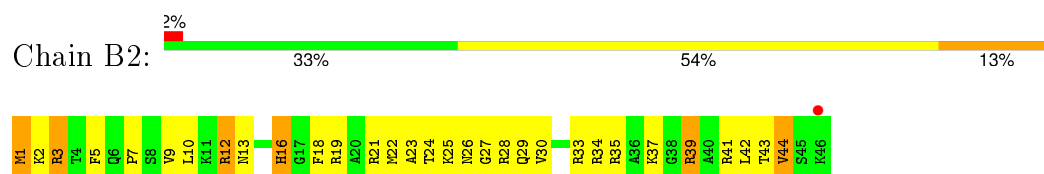
- Molecule 49: 50S ribosomal protein L33



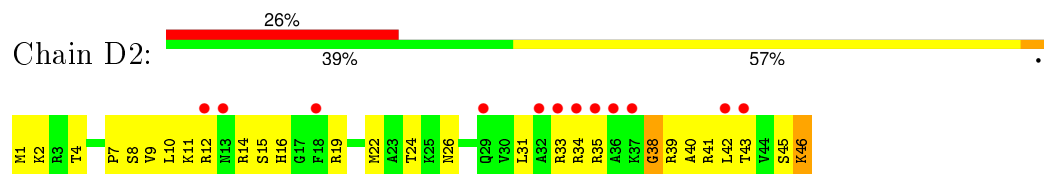
- Molecule 49: 50S ribosomal protein L33



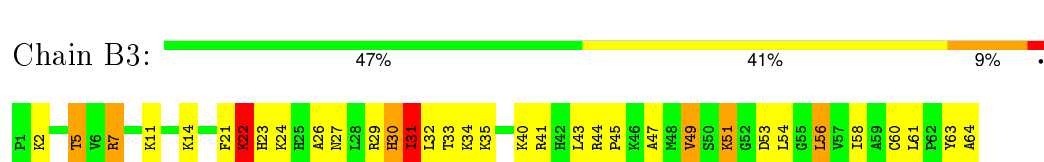
- Molecule 50: 50S ribosomal protein L34



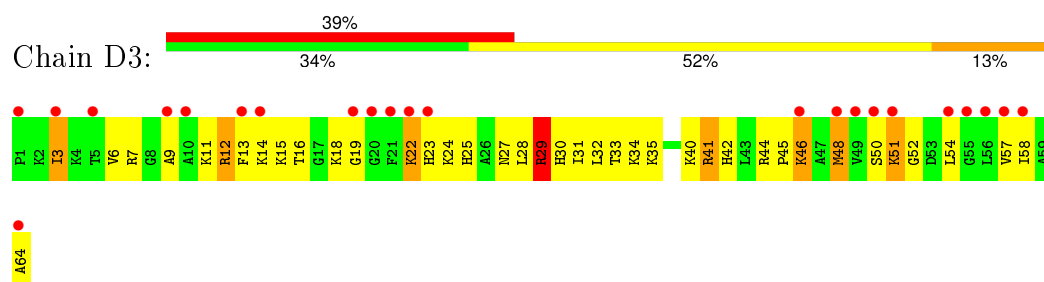
- Molecule 50: 50S ribosomal protein L34



- Molecule 51: 50S ribosomal protein L35



- Molecule 51: 50S ribosomal protein L35

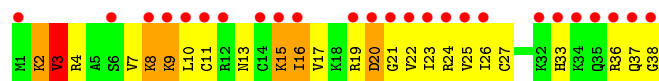


- Molecule 52: 50S ribosomal protein L36

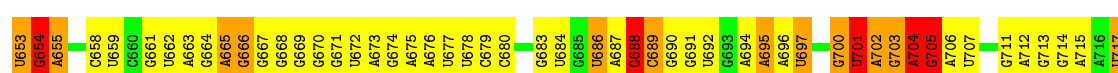
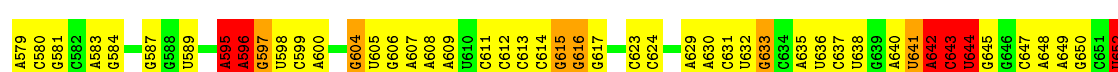
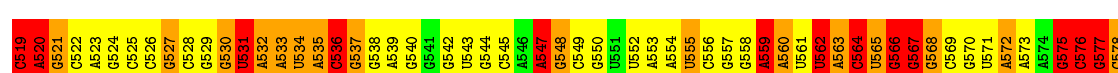
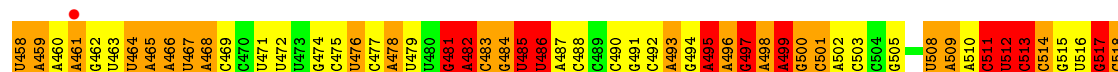
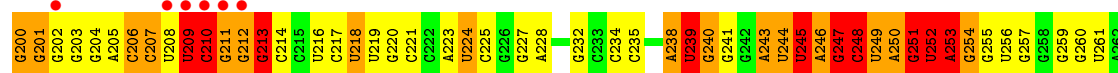
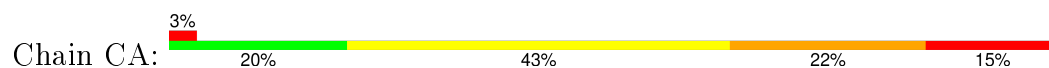


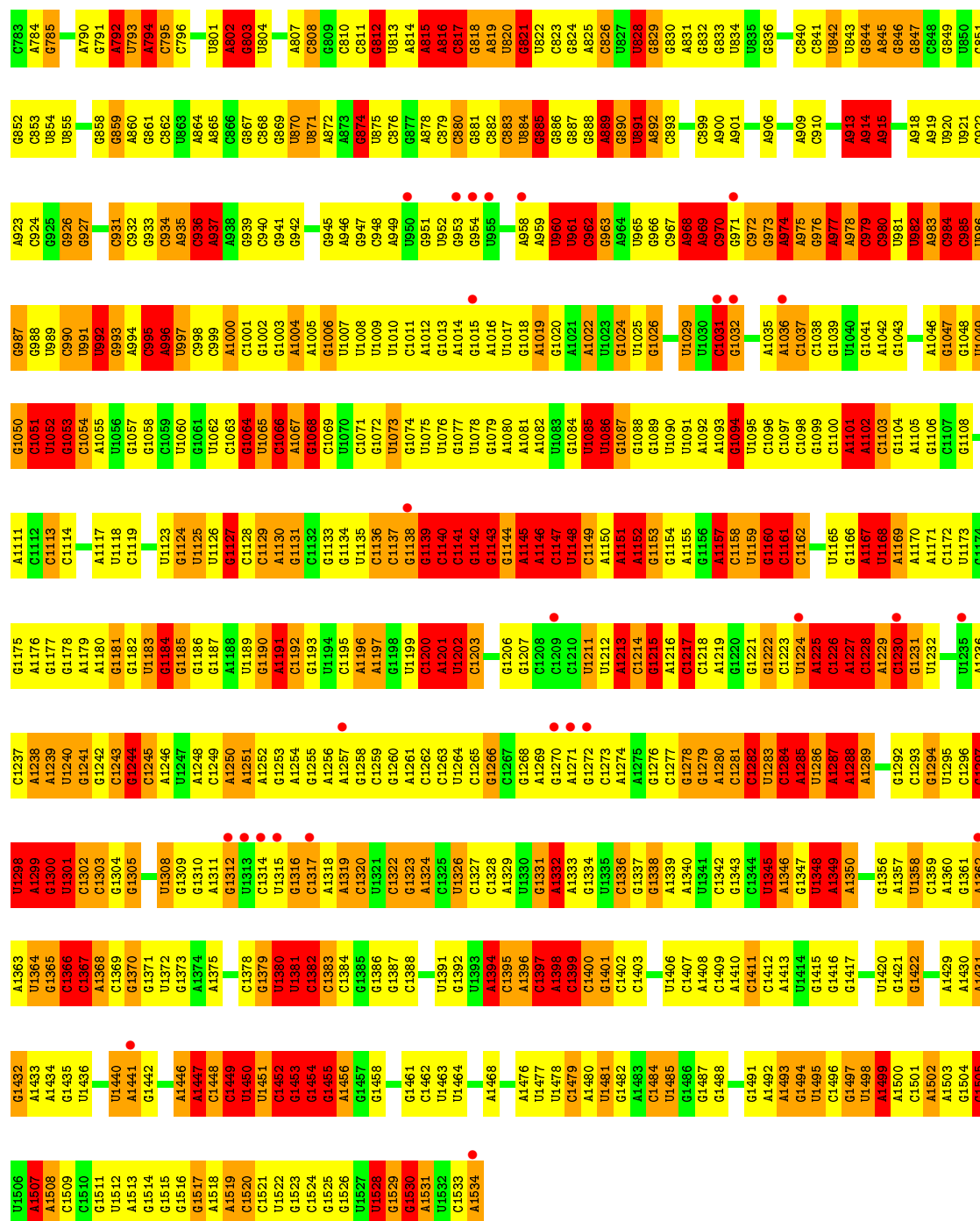


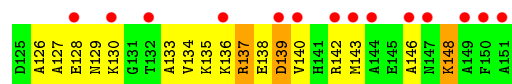
- Molecule 52: 50S ribosomal protein L36



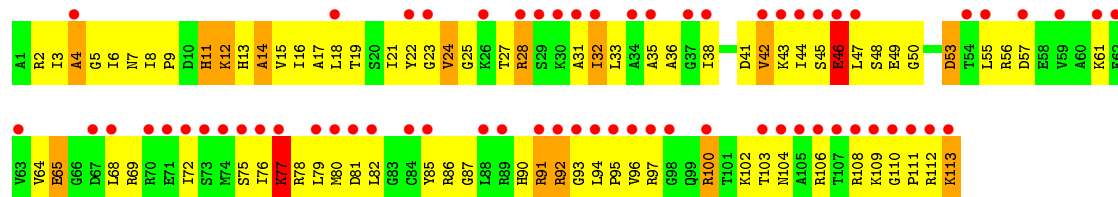
- Molecule 53: 16S rRNA



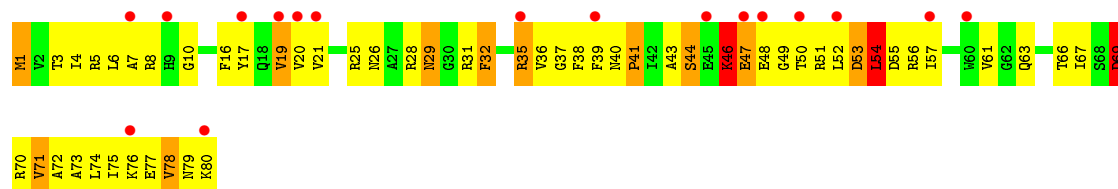




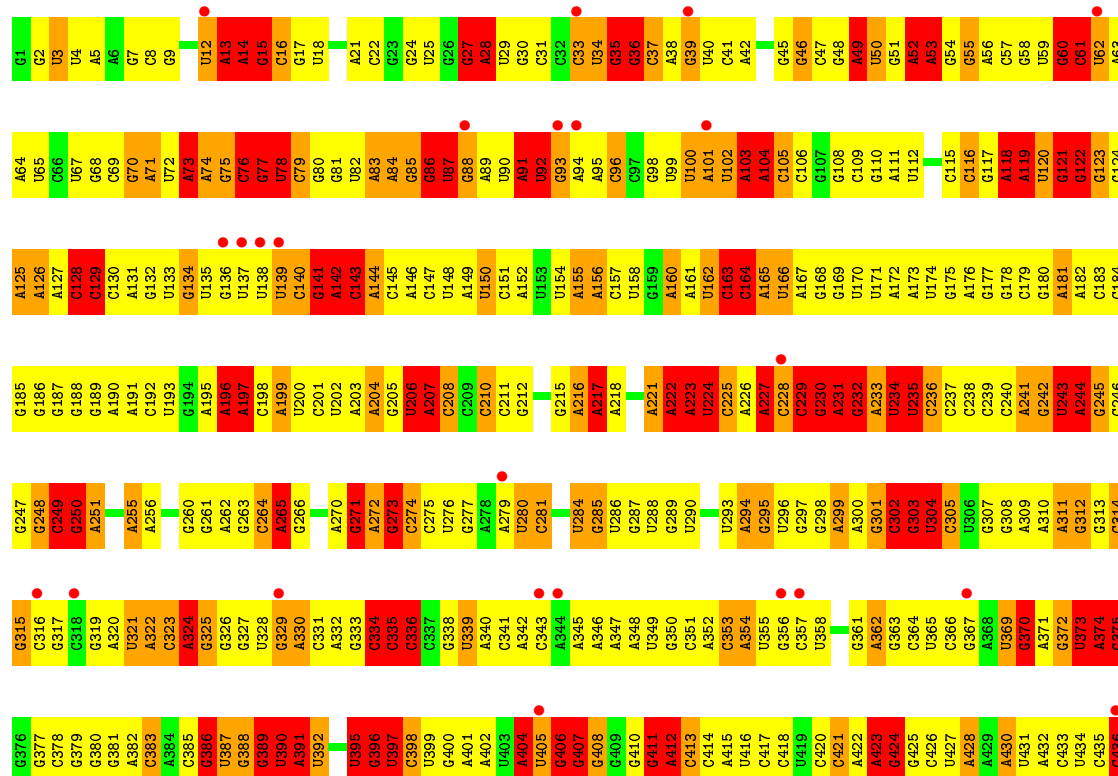
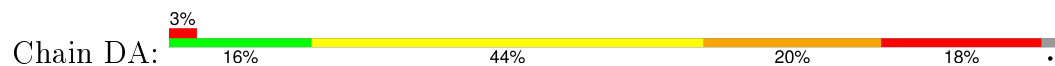
- Molecule 55: 30S ribosomal protein S13



- Molecule 56: 30S ribosomal protein S16

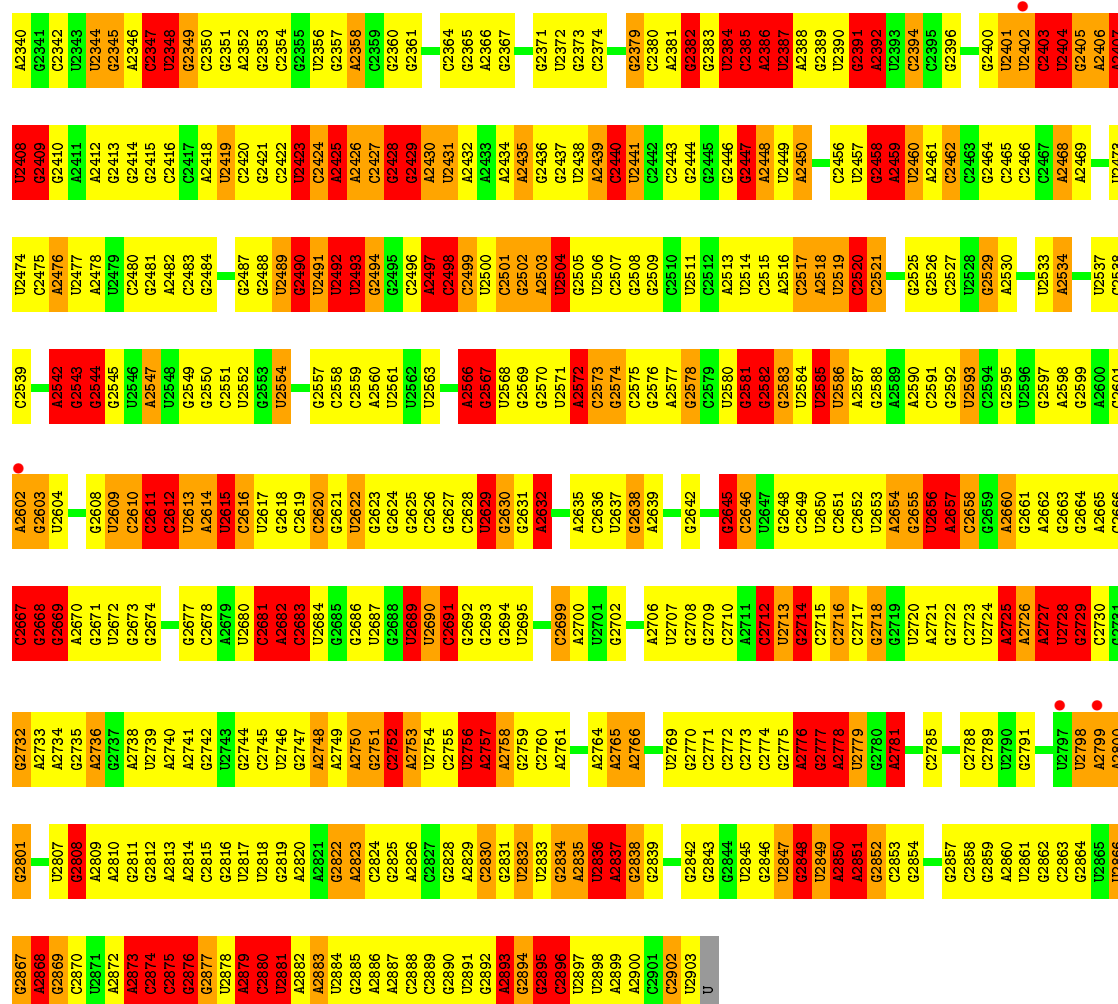


- Molecule 57: 23S rRNA

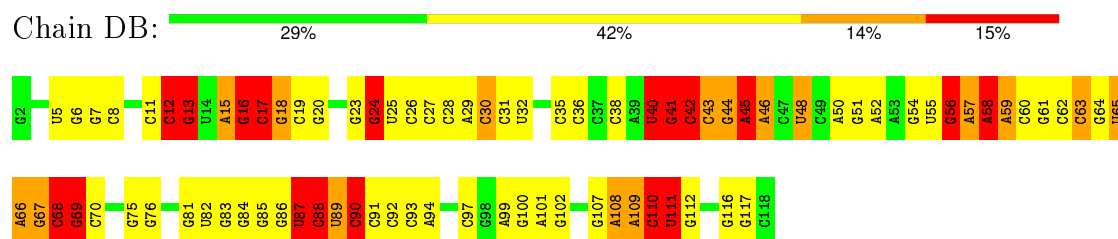


C1323	U1263	G1202	U1141	G1076	G1013	G949	A819	U755	G695	G629	U569	A497	U437
G1324	A1264	U1203	A1142	A1077	A1014	G950	A820	A756	G696	G630	G570	G498	G438
U1325	A1204	A1205	A1143	U1078	U1015	G951	A821	G757	G696	A631	A571	U499	U439
U1326	G1265	A1205	A1144	U1079	G1016	G952	G822	G622	G697	A632	A572	G440	G440
A1327	U1267	G1206	C1145	A1080	U1019	G953	C823	U762	A699	G633	U573	A502	U441
A1328	A1268	C1207	C1146	U1081	A1020	G956	C824	G763	G700	C634	A574	A503	G442
A1269	C1208	U1209	U1147	U1082	A1021	C957	A825	G764	G701	C635	A575	A504	A443
C1330	U1210	U1148	U1148	U1083	G1022	C958	U826	C765	U702	G636	U576	A505	C444
G1331	C1211	G1211	U1149	A1084	U1023	C959	A827	C766	U703	A637	G578	G506	C445
G1332	C1212	G1212	G1152	A1085	U1024	A960	A828	C767	G704	G638	G579	A507	C446
G1333	G1213	A1213	C1153	G1087	G1025	C961	A829	C768	G705	U639	G579	A508	A447
G1334	A1214	G1214	G1154	U1088	G1026	G962	G830	G770	A706	C640	U580	C509	U448
C1335	G1215	G1215	A1155	A1089	A1027	G963	G831	C771	G707	G641	C581	C510	A449
A1336	G1216	G1216	A1156	U1090	A1028	C964	U832	C772	G708	U642	A582	U511	G450
G1337	U1217	U1217	G1157	G1091	G1031	C965	A833	U773	U709	U643	G583	G512	U451
G1338	G1218	G1218	C1158	C1092	U1032	G966	G834	U774	U710	G644	C584	A513	G452
G1339	U1219	U1219	U1159	G1093	A1033	G969	C835	G775	G711	C645	A585	A514	A453
U1340	G1220	G1220	G1160	U1097	U1033	U970	C836	G776	G712	U646	A586	A515	A454
G1341	C1221	C1221	C1161	A1098	G1034	G971	C837	G777	G713	G647	C587	C516	C455
A1342	U1222	U1222	U1162	U1099	U1035	G972	C838	U778	U714	G648	U588	C517	C456
G1343	G1223	G1223	G1163	G1099	G1036	A973	C839	U779	U715	U649	U590	G518	A457
C1345	C1224	C1224	C1164	C1100	G1037	A974	C840	G780	A716	C650	A591	U519	G458
A1286	A1226	A1226	A1165	U1101	G1038	G974	G843	G781	G717	G651	U781	G524	U459
A1287	G1227	G1227	G1166	C1102	A1039	A975	A844	A782	A718	U652	U592	U525	A460
G1288	G1228	G1228	C1167	A1103	G1040	G976	A845	G783	A719	U653	U593	C461	C461
C1289	C1229	C1229	G1168	G1107	G1042	G977	U846	G784	U720	A655	U594	A526	G463
C1350	A1230	A1230	A1169	U1108	G1043	G978	U847	G785	A721	G656	C595	C527	G463
C1351	U1231	U1231	G1170	C1109	C1044	A980	C848	G786	A722	U657	U596	A527	U464
G1292	G1232	G1232	G1171	U1109	G1045	A981	A849	C787	C723	U658	C597	A529	G465
C1353	C1233	C1233	C1172	G1110	A1046	C982	U850	A788	U724	U659	U598	G530	A466
A1294	U1234	U1234	U1173	A1111	G1047	A983	C851	A789	G725	G659	A599	C531	A467
C1295	G1235	G1235	U1174	U1112	A1048	A984	C852	U790	G726	G660	G600	A532	G468
G1355	U1236	U1236	A1175	C1113	C1049	C985	U853	A791	A727	A661	C501	G533	G469
G1356	A1237	A1237	U1176	U1114	A1050	G985	C854	A792	G728	G662	A602	U534	A470
G1358	G1238	G1238	G1177	G1115	G1051	A988	C855	A794	A730	G664	A603	G535	A471
G1299	U1240	U1240	G1178	G1116	G1052	G989	C856	C795	C731	U665	G604	A538	A472
A1300	A1241	A1241	G1179	C1117	C1053	A990	C857	C796	C732	A666	G605	G473	G473
A1301	U1242	U1242	U1180	C1118	A1054	C991	G858	C797	G733	G667	U607	C544	C475
A1302	G1243	G1243	U1181	U1119	G1055	C992	G859	C798	G734	A668	A608	U545	G476
G1303	A1244	A1244	U1182	G1120	G1056	G993	U860	C799	A735	G669	A609	U546	A477
A1304	G1245	G1245	U1183	G1121	A1057	C994	A861	A800	C736	A670	C610	U547	A478
C1305	U1246	U1246	G1184	G1122	U1058	C995	C862	G801	C737	C671	C611	G548	A479
G1306	A1247	A1247	G1185	U1125	G1059	A996	C863	A802	G738	C672	G612	G549	A480
A1307	G1248	G1248	G1186	A1126	U1060	C997	U864	U803	A739	G673	A613	C550	G481
A1308	U1249	U1249	U1187	A1127	U1061	G998	C865	A804	C740	G674	A614	G551	G482
G1309	G1250	G1250	U1188	C1128	G1062	U999	A866	G805	U741	A675	U615	G552	A483
C1310	A1251	A1251	A1189	G1129	G1063	A1000	C867	C806	A742	A676	A616	G553	C484
G1311	U1302	U1302	G1190	U1130	G1064	A1001	U868	C807	A743	A677	G617	U554	C485
U1312	G1252	G1252	G1191	U1131	U1065	G1002	C869	G808	U744	C678	G618	G555	C486
U1313	A1253	A1253	G1192	G1132	U1066	C995	U870	G809	G745	C679	G619	U558	C487
G1314	U1254	U1254	G1193	U1133	A1067	A996	U871	U810	U746	G682	G620	U558	G488
C1315	U1255	U1255	A1194	A1133	G1068	U1004	U872	U811	U747	U683	A621	G489	G489
U1316	G1256	G1256	G1195	A1134	A1069	C1006	C873	C812	G748	U684	G622	U562	C490
G1317	C1257	C1257	G1196	G1135	A1070	U1007	C874	C813	A749	G685	C623	A563	G491
U1318	U1258	U1258	G1197	C1136	G1071	C944	C875	C814	A750	A686	C624	C564	A492
G1319	G1259	G1259	U1198	G1137	G1072	A1008	C876	C815	A751	U686	G625	C565	G493
C1320	A1260	A1260	U1199	G1138	A1073	A1009	A877	C816	A752	C687	A526	U566	G494
A1321	G1261	G1261	C1200	G1139	A1074	C946	A878	C817	A753	U688	A527	U567	G495
A1322	A1262	A1262	U1201	C1140	C1075	C948	G	G818	U754	A689	G628	U568	G496

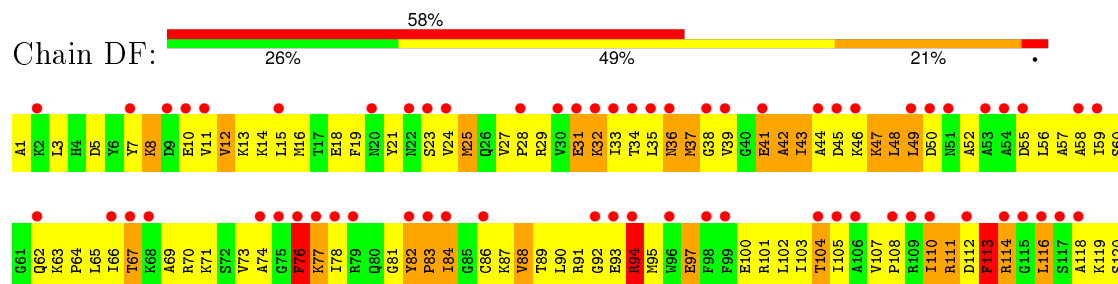
G2277	G2278	G2279	G2280	G2281	G2282	G2283	G2284	G2285	G2286	G2287	G2288	G2289	G2290	G2291	G2292	G2293	G2294	G2295	G2296	G2297	G2298	G2299	G2300	G2301	G2302	G2303	G2304	G2305	G2306	G2307	G2308	G2309	G2310	G2311	G2312	G2313	G2314	G2315	G2316	G2317	G2318	G2319	G2320	G2321	G2322	G2323	G2324	G2325	G2326	G2327	G2328	G2329	G2330	G2331	G2332	G2333	G2334	G2335	G2336	G2337	G2338	G2339										
A2031	G2032	A2033	G2034	G2035	G2036	A2037	G2038	G2039	G2040	G2041	G2042	G2043	G2044	G2045	G2046	G2047	G2048	G2049	G2050	A2051	A2052	G2053	A2054	G2055	G2056	G2057	A2058	G2059	A2060	G2061	A2062	G2063	G2064	G2065	G2066	G2067	G2068	G2069	A2070	G2071	G2072	G2073	G2074	G2075	G2076	G2077	G2078	G2079	A2080	G2081	A2082	G2083	G2084	G2085	A2086	G2087	A2088	G2089	A2090	G2091												
U2092	G2093	A2094	A2095	G2096	A2097	U2098	G2099	G2100	A2101	G2102	G2103	G2104	U2105	U2106	G2107	G2108	A2109	U2110	G2111	U2112	G2113	G2114	G2115	G2116	G2117	G2118	G2119	G2120	G2121	G2122	G2123	G2124	G2125	G2126	G2127	G2128	G2129	G2130	G2131	G2132	G2133	G2134	G2135	G2136	G2137	G2138	G2139	G2140	G2141	G2142	G2143	G2144	G2145	G2146	G2147	G2148	G2149	G2150	G2151													
G2152	G2153	A2154	U2155	G2156	G2157	A2158	G2159	G2160	G2161	G2162	G2163	G2164	G2165	G2166	G2167	G2168	G2169	G2170	G2171	G2172	G2173	G2174	G2175	G2176	G2177	G2178	G2179	G2180	G2181	G2182	G2183	G2184	G2185	G2186	G2187	G2188	G2189	G2190	G2191	G2192	G2193	G2194	G2195	G2196	G2197	G2198	G2199	G2200	G2201	G2202	G2203	G2204	G2205	G2206	G2207	G2208	G2209	G2210	G2211	G2212	G2213											
G2214	G2215	G2216	G2217	G2218	G2219	G2220	G2221	G2222	G2223	G2224	G2225	G2226	G2227	G2228	G2229	G2230	G2231	G2232	G2233	G2234	G2235	G2236	G2237	G2238	G2239	G2240	G2241	G2242	G2243	G2244	G2245	G2246	G2247	G2248	G2249	G2250	G2251	G2252	G2253	G2254	G2255	G2256	G2257	G2258	G2259	G2260	G2261	G2262	G2263	G2264	G2265	G2266	G2267	G2268	G2269	G2270	G2271	G2272	G2273	G2274	G2275	G2276										
C1967	G1968	A1969	G1970	G1971	G1972	G1973	G1974	G1975	G1976	G1977	G1978	G1979	G1980	G1981	G1982	G1983	G1984	G1985	G1986	G1987	G1988	G1989	G1990	G1991	G1992	G1993	G1994	G1995	G1996	G1997	G1998	G1999	G2000	G2001	G2002	G2003	G2004	G2005	G2006	G2007	G2008	G2009	G2010	G2011	G2012	G2013	G2014	G2015	G2016	G2017	G2018	G2019	G2020	G2021	G2022	G2023	G2024	G2025	G2026	G2027	G2028	G2029	A2030									
A1900	A1901	G1902	G1903	G1904	G1905	G1906	G1907	G1908	G1909	G1910	G1911	G1912	G1913	G1914	G1915	G1916	G1917	G1918	G1919	G1920	G1921	G1922	G1923	G1924	G1925	G1926	G1927	G1928	G1929	G1930	G1931	G1932	G1933	G1934	G1935	G1936	G1937	G1938	G1939	G1940	G1941	G1942	G1943	G1944	G1945	G1946	G1947	G1948	G1949	G1950	G1951	G1952	G1953	G1954	G1955	G1956	G1957	G1958	G1959	G1960	G1961	G1962	G1963	G1964	G1965	A1966						
A1828	G1829	G1830	G1831	G1832	G1833	G1834	G1835	G1836	G1837	G1838	G1839	G1840	G1841	G1842	G1843	G1844	G1845	G1846	G1847	G1848	G1849	G1850	G1851	G1852	G1853	G1854	G1855	G1856	G1857	G1858	G1859	G1860	G1861	G1862	G1863	G1864	G1865	G1866	G1867	G1868	G1869	G1870	G1871	G1872	G1873	G1874	G1875	G1876	G1877	G1878	G1879	G1880	G1881	G1882	G1883	G1884	G1885	G1886	G1887	G1888	G1889	G1890	G1891	G1892	G1893	G1894	G1895	G1896	G1897	G1898	G1899	A1900
G1702	G1703	G1704	G1705	G1706	G1707	G1708	G1709	G1710	G1711	G1712	G1713	G1714	G1715	G1716	G1717	G1718	G1719	G1720	G1721	G1722	G1723	G1724	G1725	G1726	G1727	G1728	G1729	G1730	G1731	G1732	G1733	G1734	G1735	G1736	G1737	G1738	G1739	G1740	G1741	G1742	G1743	G1744	G1745	G1746	G1747	G1748	G1749	G1750	G1751	G1752	G1753	G1754	G1755	G1756	G1757	G1758	G1759	G1760	G1761	G1762	G1763	G1764	G1765	G1766								
G1767	G1768	G1769	G1770	G1771	G1772	G1773	G1774	G1775	G1776	G1777	G1778	G1779	G1780	G1781	G1782	G1783	G1784	G1785	G1786	G1787	G1788	G1789	G1790	G1791	G1792	G1793	G1794	G1795	G1796	G1797	G1798	G1799	G1800	G1801	G1802	G1803	G1804	G1805	G1806	G1807	G1808	G1809	G1810	G1811	G1812	G1813	G1814	G1815	G1816	G1817	G1818	G1819	G1820	G1821	G1822	G1823	G1824	G1825	G1826	G1827	G1828											
A1634	A1635	A1636	A1637	A1638	A1639	A1640	A1641	A1642	A1643	A1644	A1645	A1646	A1647	A1648	A1649	A1650	A1651	A1652	A1653	A1654	A1655	A1656	A1657	A1658	A1659	A1660	A1661	A1662	A1663	A1664	A1665	A1666	A1667	A1668	A1669	A1670	A1671	A1672	A1673	A1674	A1675	A1676	A1677	A1678	A1679	A1680	A1681	A1682	A1683	A1684	A1685	A1686	A1687	A1688	A1689	A1690	A1691	A1692	A1693	A1694	A1695	A1696	A1697	A1698	A1699	A1700	A1701					
G1573	G1574	G1575	G1576	G1577	G1578	G1579	G1580	G1581	G1582	G1583	G1584	G1585	G1586	G1587	G1588	G1589	G1590	G1591	G1592	G1593	G1594	G1595	G1596	G1597	G1598	G1599	G1600	G1601	G1602	G1603	G1604	G1605	G1606	G1607	G1608	G1609	G1610	G1611	G1612	G1613	G1614	G1615	G1616	G1617	G1618	G1619	G1620	G1621	G1622	G1623	G1624	G1625	G1626	G1627	G1628	G1629	G1630	G1631	G1632	G1633												
G1511	G1512	G1513	G1514	G1515	G1516	G1517	G1518	G1519	G1520	G1521	G1522	G1523	G1524	G1525	G1526	G1527	G1528	G1529	G1530	G1531	G1532	G1533	G1534	G1535	G1536	G1537	G1538	G1539	G1540	G1541	G1542	G1543	G1544	G1545	G1546	G1547	G1548	G1549	G1550	G1551	G1552	G1553	G1554	G1555	G1556	G1557	G1558	G1559	G1560	G1561	G1562	G1563	G1564	G1565	G1566	G1567	G1568	G1569	G1570	G1571	G1572											
G1447	G1448	G1449	G1450	G1451	G1452	G1453	G1454	G1455	G1456	G1457	G1458	G1459	G1460	G1461	G1462	G1463	G1464	G1465	G1466	G1467	G1468	G1469	G1470	G1471	G1472	G1473	G1474	G1475	G1476	G1477	G1478	G1479	G1480	G1481	G1482	G1483	G1484	G1485	G1486	G1487	G1488	G1489	G1490	G1491	G1492	G1493	G1494	G1495	G1496	G1497	G1498	G1499	G1500	G1501	G1502	G1503	G1504	G1505	G1506	G1507	G1508	G1509	G1510									
A1383	A1384	A1385	A1386	A1387	A1388	A1389	U1390	U1391	A1392	A1393	U1394	A1395	U1396	U1397	U1398	U1399	U1400	U1401	U1402	U1403	U1404	U1405	U1406	G1407	G1408	U1409	G1410	G1411	U1412	U1413	U1414	U1415	G1416	G1417	G1418	G1419	G1420	G1421	G1422	G1423	G1424	G1425	G1426	G1427	G1428	G1429	G1430	A1431	G1432	G1433	A1434	G1435	G1436	G1437	U1438	U1439	U1440	U1441	U1442													

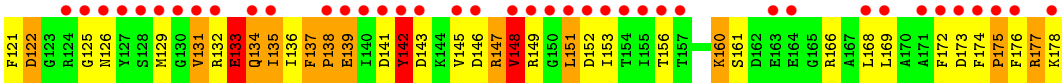


• Molecule 58: 5S rRNA



• Molecule 59: 50S ribosomal protein L5





4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	211.46Å 434.08Å 621.23Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	82.15 – 3.19 82.15 – 3.19	Depositor EDS
% Data completeness (in resolution range)	75.8 (82.15-3.19) 75.8 (82.15-3.19)	Depositor EDS
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.61 (at 3.19Å)	Xtriage
Refinement program	PHENIX (phenix.refine)	Depositor
R, R_{free}	0.191 , 0.252 0.204 , 0.262	Depositor DCC
R_{free} test set	15290 reflections (2.20%)	DCC
Wilson B-factor (Å ²)	62.8	Xtriage
Anisotropy	0.366	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.23 , 85.7	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.30$	Xtriage
Outliers	0 of 759111 reflections	Xtriage
F_o, F_c correlation	0.93	EDS
Total number of atoms	284499	wwPDB-VP
Average B, all atoms (Å ²)	113.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.14% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.375 respectively for untwinned datasets, and 0.333, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: CLM, ZN, MG

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	AA	0.50	6/36834 (0.0%)	1.27	532/57462 (0.9%)
2	AB	0.40	2/1736 (0.1%)	0.57	4/2338 (0.2%)
2	CB	0.37	2/1736 (0.1%)	0.54	4/2338 (0.2%)
3	AC	0.26	0/1652	0.50	0/2225
3	CC	0.23	0/1652	0.44	0/2225
4	AD	0.29	0/1665	0.52	0/2227
4	CD	0.34	0/1665	0.57	0/2227
5	AE	0.37	1/1119 (0.1%)	0.59	0/1504
5	CE	0.31	0/1119	0.55	0/1504
6	AF	0.28	0/836	0.49	0/1128
6	CF	0.27	0/836	0.50	0/1128
7	AG	0.23	0/1196	0.46	0/1602
8	AH	0.29	0/989	0.54	0/1326
8	CH	0.26	0/989	0.49	0/1326
9	AI	0.23	0/1034	0.47	0/1375
9	CI	0.22	0/1034	0.42	0/1375
10	AJ	0.24	0/797	0.49	0/1077
10	CJ	0.22	0/797	0.47	0/1077
11	AK	0.27	0/893	0.52	0/1205
11	CK	0.25	0/893	0.51	0/1205
12	AL	0.36	0/969	0.67	0/1300
12	CL	0.40	1/969 (0.1%)	0.56	0/1300
13	AM	0.22	0/893	0.47	0/1193
14	AN	0.25	0/785	0.49	0/1043
14	CN	0.21	0/780	0.39	0/1036
15	AO	0.27	0/722	0.47	0/964
15	CO	0.25	0/722	0.45	0/964
16	AP	0.28	0/659	0.49	0/884
17	AQ	0.35	0/658	0.56	0/881
17	CQ	0.27	0/658	0.51	0/881
18	AR	0.28	0/463	0.50	0/621
18	CR	0.28	0/463	0.46	0/621

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
19	AS	0.23	0/653	0.47	0/877
19	CS	0.21	0/653	0.42	0/877
20	AT	0.30	0/671	0.57	0/888
20	CT	0.25	0/671	0.50	0/888
21	AU	0.28	0/431	0.49	0/570
21	CU	0.31	0/431	0.60	0/570
22	BA	0.71	8/68626 (0.0%)	1.50	1274/107056 (1.2%)
23	BB	0.64	0/2828	1.43	38/4410 (0.9%)
24	BC	0.41	0/2122	0.69	1/2852 (0.0%)
24	DC	0.29	0/2122	0.53	0/2852
25	BD	0.48	0/1586	0.76	2/2134 (0.1%)
25	DD	0.28	0/1586	0.57	0/2134
26	BE	0.40	0/1571	0.66	1/2113 (0.0%)
26	DE	0.25	0/1571	0.47	0/2113
27	BF	0.31	0/1435	0.54	0/1926
28	BG	0.33	0/1343	0.60	0/1816
28	DG	0.22	0/1343	0.46	0/1816
29	BH	0.30	0/1122	0.50	0/1515
29	DH	0.34	1/1122 (0.1%)	0.50	0/1515
30	BI	0.23	0/1046	0.47	0/1410
30	DI	0.21	0/1046	0.43	0/1410
31	BJ	0.51	0/1152	0.75	0/1551
31	DJ	0.26	0/1152	0.57	1/1551 (0.1%)
32	BK	0.46	0/948	0.78	0/1268
32	DK	0.29	0/948	0.55	0/1268
33	BL	0.42	0/1054	0.75	1/1403 (0.1%)
33	DL	0.24	0/1054	0.51	0/1403
34	BM	0.44	0/1093	0.67	0/1460
34	DM	0.27	0/1093	0.48	0/1460
35	BN	0.45	0/974	0.70	1/1301 (0.1%)
35	DN	0.27	0/974	0.51	0/1301
36	BO	0.38	0/902	0.60	0/1209
36	DO	0.22	0/902	0.42	0/1209
37	BP	0.43	0/929	0.71	0/1242
37	DP	0.28	0/929	0.49	0/1242
38	BQ	0.52	0/960	0.76	0/1278
38	DQ	0.26	0/960	0.44	0/1278
39	BR	0.54	0/829	0.77	1/1107 (0.1%)
39	DR	0.25	0/829	0.48	0/1107
40	BS	0.50	0/864	0.73	0/1156
40	DS	0.27	0/864	0.51	0/1156
41	BT	0.43	0/745	0.71	0/994
41	DT	0.22	0/745	0.48	0/994

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
42	BU	0.39	0/788	0.70	0/1051
42	DU	0.23	0/788	0.46	0/1051
43	BV	0.39	0/766	0.61	0/1025
43	DV	0.23	0/766	0.43	0/1025
44	BW	0.53	0/603	0.82	0/797
44	DW	0.25	0/603	0.49	0/797
45	BX	0.37	0/635	0.66	0/848
45	DX	0.27	0/635	0.56	0/848
46	BY	0.33	0/510	0.62	0/677
46	DY	0.21	0/510	0.43	0/677
47	BZ	0.45	0/453	0.80	0/605
47	DZ	0.25	0/453	0.50	0/605
48	B0	0.43	0/450	0.71	0/599
48	D0	0.26	0/450	0.50	0/599
49	B1	0.31	0/417	0.57	0/554
49	D1	0.24	0/417	0.45	0/554
50	B2	0.41	0/380	0.71	0/498
50	D2	0.26	0/380	0.51	0/498
51	B3	0.43	0/513	0.66	0/676
51	D3	0.27	0/513	0.52	0/676
52	B4	0.39	0/303	0.69	0/397
52	D4	0.43	0/303	0.54	0/397
53	CA	0.47	6/36762 (0.0%)	1.24	525/57350 (0.9%)
54	CG	0.22	0/1188	0.44	0/1591
55	CM	0.19	0/885	0.41	0/1181
56	CP	0.28	0/649	0.52	0/870
57	DA	0.46	0/68314	1.28	1097/106569 (1.0%)
58	DB	0.51	1/2803 (0.0%)	1.21	38/4371 (0.9%)
59	DF	0.23	0/1444	0.48	0/1937
All	All	0.50	28/306773 (0.0%)	1.19	3520/458565 (0.8%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	CB	0	1
25	BD	0	1
35	BN	0	1
All	All	0	3

All (28) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	DB	69	G	O3'-P	-16.79	1.41	1.61
1	AA	1047	G	O3'-P	-14.49	1.43	1.61
2	AB	107	ARG	C-N	11.33	1.60	1.34
53	CA	1396	A	O3'-P	-11.26	1.47	1.61
2	CB	146	SER	C-N	10.14	1.57	1.34
1	AA	1390	U	O3'-P	9.48	1.72	1.61
53	CA	562	U	O3'-P	-9.38	1.49	1.61
53	CA	26	A	O3'-P	-8.83	1.50	1.61
53	CA	8	A	O3'-P	-8.69	1.50	1.61
12	CL	21	PRO	C-N	8.56	1.53	1.34
22	BA	901	C	O3'-P	-7.63	1.51	1.61
1	AA	557	G	O3'-P	-7.45	1.52	1.61
53	CA	1047	G	O3'-P	7.32	1.70	1.61
29	DH	48	GLU	C-N	7.26	1.50	1.34
22	BA	1905	C	O3'-P	-7.20	1.52	1.61
2	AB	146	SER	C-N	6.53	1.49	1.34
2	CB	107	ARG	C-N	6.44	1.48	1.34
22	BA	1142	A	N9-C4	-5.88	1.34	1.37
1	AA	566	G	O3'-P	5.81	1.68	1.61
1	AA	925	G	O3'-P	5.78	1.68	1.61
5	AE	149	PRO	C-N	-5.67	1.21	1.34
22	BA	2092	U	O3'-P	-5.63	1.54	1.61
1	AA	8	A	O3'-P	-5.48	1.54	1.61
22	BA	572	A	C6-N1	-5.35	1.31	1.35
22	BA	1654	A	N3-C4	-5.34	1.31	1.34
22	BA	528	A	N9-C4	-5.15	1.34	1.37
53	CA	1495	U	O3'-P	-5.13	1.54	1.61
22	BA	2448	A	N9-C4	-5.07	1.34	1.37

All (3520) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	1396	A	P-O3'-C3'	16.36	139.33	119.70
57	DA	2586	U	N1-C1'-C2'	-15.75	93.52	114.00
22	BA	2283	C	N1-C1'-C2'	-15.29	94.12	114.00
57	DA	1997	C	N1-C1'-C2'	-14.86	94.69	114.00
23	BB	90	C	N1-C1'-C2'	-14.66	94.94	114.00
22	BA	1330	C	N1-C1'-C2'	-14.51	95.13	114.00
57	DA	740	C	N1-C1'-C2'	-14.50	95.15	114.00
22	BA	995	C	O4'-C1'-N1	-14.43	96.66	108.20
22	BA	627	A	P-O3'-C3'	14.34	136.91	119.70
22	BA	1013	C	N1-C1'-C2'	-14.22	95.51	114.00
57	DA	304	U	N1-C1'-C2'	-14.18	95.57	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	52	C	N1-C1'-C2'	-14.16	95.59	114.00
22	BA	531	C	P-O3'-C3'	14.14	136.67	119.70
22	BA	1603	A	P-O3'-C3'	-14.04	102.85	119.70
22	BA	2425	A	P-O3'-C3'	14.00	136.50	119.70
53	CA	66	A	P-O3'-C3'	-13.97	102.93	119.70
53	CA	328	C	P-O3'-C3'	13.96	136.45	119.70
22	BA	2447	G	P-O3'-C3'	13.93	136.41	119.70
22	BA	1647	U	O4'-C1'-N1	13.76	119.21	108.20
53	CA	132	C	N1-C1'-C2'	-13.73	96.16	114.00
1	AA	1202	U	N1-C1'-C2'	-13.63	96.28	114.00
22	BA	2036	C	N1-C1'-C2'	-13.59	96.33	114.00
57	DA	2283	C	N1-C1'-C2'	-13.56	96.38	114.00
22	BA	728	G	P-O3'-C3'	13.53	135.94	119.70
22	BA	302	C	N1-C1'-C2'	-13.46	96.50	114.00
53	CA	891	U	N1-C1'-C2'	-13.43	96.55	114.00
22	BA	704	G	P-O3'-C3'	13.38	135.76	119.70
22	BA	249	C	P-O3'-C3'	13.38	135.75	119.70
22	BA	1967	C	N1-C1'-C2'	-13.31	96.69	114.00
53	CA	245	U	N1-C1'-C2'	-13.28	96.74	114.00
57	DA	2504	U	N1-C1'-C2'	-13.26	96.76	114.00
22	BA	1012	U	O4'-C1'-N1	13.22	118.77	108.20
22	BA	1247	A	P-O3'-C3'	13.21	135.56	119.70
22	BA	2385	C	N1-C1'-C2'	-13.09	96.98	114.00
22	BA	1461	C	N1-C1'-C2'	-13.04	97.05	114.00
58	DB	69	G	O3'-P-O5'	-13.04	79.23	104.00
57	DA	2137	U	N1-C1'-C2'	-13.03	97.06	114.00
57	DA	1023	U	N1-C1'-C2'	-12.97	97.14	114.00
22	BA	961	C	O4'-C1'-N1	12.95	118.56	108.20
57	DA	87	U	N1-C1'-C2'	-12.90	97.23	114.00
57	DA	741	U	N1-C1'-C2'	-12.89	97.24	114.00
53	CA	915	A	P-O3'-C3'	-12.76	104.39	119.70
57	DA	2214	C	N1-C1'-C2'	-12.73	97.44	114.00
57	DA	961	C	P-O3'-C3'	12.63	134.86	119.70
22	BA	249	C	N1-C1'-C2'	12.62	130.41	114.00
22	BA	2424	C	N1-C1'-C2'	-12.60	97.62	114.00
1	AA	972	C	N1-C1'-C2'	-12.58	97.65	114.00
53	CA	352	C	N1-C1'-C2'	-12.55	97.69	114.00
22	BA	1997	C	N1-C1'-C2'	-12.53	97.71	114.00
1	AA	1283	U	N1-C1'-C2'	-12.51	97.74	114.00
57	DA	1512	C	N1-C1'-C2'	-12.39	97.89	114.00
57	DA	2339	C	N1-C1'-C2'	-12.39	97.89	114.00
22	BA	865	C	P-O3'-C3'	12.38	134.56	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	805	G	P-O3'-C3'	12.38	134.56	119.70
22	BA	390	U	P-O3'-C3'	12.35	134.52	119.70
22	BA	2727	A	P-O3'-C3'	-12.34	104.89	119.70
22	BA	2023	C	N1-C1'-C2'	-12.30	98.01	114.00
57	DA	206	U	N1-C1'-C2'	-12.27	98.05	114.00
58	DB	17	C	O4'-C1'-N1	12.27	118.02	108.20
1	AA	1162	C	N1-C1'-C2'	-12.26	98.06	114.00
22	BA	2689	U	O4'-C1'-N1	12.24	117.99	108.20
22	BA	2214	C	N1-C1'-C2'	-12.20	98.14	114.00
57	DA	235	U	N1-C1'-C2'	-12.18	98.17	114.00
57	DA	1967	C	N1-C1'-C2'	-12.15	98.20	114.00
53	CA	14	U	N1-C1'-C2'	-12.15	98.21	114.00
57	DA	1968	G	P-O3'-C3'	-12.14	105.13	119.70
22	BA	2712	C	P-O3'-C3'	12.13	134.25	119.70
22	BA	858	G	P-O3'-C3'	12.12	134.24	119.70
57	DA	2646	C	N1-C1'-C2'	-12.12	98.25	114.00
22	BA	2319	G	P-O3'-C3'	12.10	134.22	119.70
22	BA	2629	U	P-O3'-C3'	12.09	134.21	119.70
57	DA	1267	U	N1-C1'-C2'	-12.09	98.28	114.00
57	DA	1956	U	N1-C1'-C2'	-12.09	98.28	114.00
57	DA	2615	U	N1-C1'-C2'	-12.08	98.29	114.00
58	DB	110	C	N1-C1'-C2'	-12.08	98.30	114.00
53	CA	330	C	N1-C1'-C2'	-12.07	98.31	114.00
1	AA	512	U	N1-C1'-C2'	-12.03	98.36	114.00
22	BA	531	C	O4'-C1'-N1	-12.02	98.59	108.20
22	BA	2137	U	N1-C1'-C2'	-11.97	98.44	114.00
22	BA	2424	C	P-O3'-C3'	-11.97	105.34	119.70
1	AA	1228	C	N1-C1'-C2'	-11.93	98.49	114.00
57	DA	859	G	P-O3'-C3'	11.93	134.02	119.70
22	BA	2848	G	P-O3'-C3'	11.92	134.00	119.70
22	BA	2068	U	N1-C1'-C2'	-11.91	98.51	114.00
22	BA	2321	U	N1-C1'-C2'	-11.90	98.53	114.00
22	BA	2645	G	P-O3'-C3'	11.90	133.98	119.70
22	BA	49	A	P-O3'-C3'	11.89	133.97	119.70
22	BA	1941	C	N1-C1'-C2'	-11.86	98.58	114.00
22	BA	2092	U	OP2-P-O3'	11.85	131.28	105.20
57	DA	533	G	P-O3'-C3'	-11.85	105.48	119.70
22	BA	1210	G	P-O3'-C3'	11.84	133.90	119.70
57	DA	2225	A	P-O3'-C3'	11.83	133.90	119.70
22	BA	373	U	N1-C1'-C2'	-11.83	98.62	114.00
22	BA	1993	U	N1-C1'-C2'	-11.81	98.65	114.00
22	BA	2286	G	P-O3'-C3'	11.80	133.86	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	92	U	N1-C1'-C2'	-11.80	98.66	114.00
22	BA	1023	U	N1-C1'-C2'	-11.76	98.71	114.00
22	BA	2573	C	P-O3'-C3'	-11.75	105.60	119.70
22	BA	2035	G	P-O3'-C3'	11.68	133.72	119.70
58	DB	68	C	N1-C1'-C2'	-11.65	98.86	114.00
22	BA	588	U	N1-C1'-C2'	-11.64	98.86	114.00
1	AA	1399	C	P-O3'-C3'	11.62	133.64	119.70
53	CA	65	A	P-O3'-C3'	11.60	133.62	119.70
1	AA	1047	G	P-O3'-C3'	-11.54	105.85	119.70
57	DA	1782	U	P-O3'-C3'	-11.54	105.85	119.70
58	DB	69	G	P-O3'-C3'	11.54	133.55	119.70
22	BA	1963	U	N1-C1'-C2'	-11.52	99.03	114.00
53	CA	1086	U	N1-C1'-C2'	-11.52	99.03	114.00
22	BA	1653	G	P-O3'-C3'	11.51	133.51	119.70
23	BB	40	U	P-O3'-C3'	11.51	133.51	119.70
22	BA	196	A	P-O3'-C3'	11.49	133.49	119.70
22	BA	2752	C	N1-C1'-C2'	-11.48	99.08	114.00
22	BA	667	U	P-O3'-C3'	11.46	133.46	119.70
1	AA	330	C	N1-C1'-C2'	-11.45	99.11	114.00
22	BA	1324	G	P-O3'-C3'	11.44	133.42	119.70
22	BA	2347	C	N1-C1'-C2'	-11.43	99.15	114.00
1	AA	422	C	P-O3'-C3'	11.41	133.39	119.70
58	DB	107	G	O3'-P-O5'	-11.37	82.40	104.00
22	BA	200	U	N1-C1'-C2'	-11.37	99.23	114.00
1	AA	352	C	N1-C1'-C2'	-11.34	99.25	114.00
57	DA	1013	C	N1-C1'-C2'	-11.34	99.25	114.00
57	DA	1158	C	N1-C1'-C2'	-11.34	99.25	114.00
1	AA	1303	C	N1-C1'-C2'	-11.34	99.26	114.00
1	AA	1141	C	N1-C1'-C2'	-11.33	99.27	114.00
1	AA	267	C	N1-C1'-C2'	-11.33	99.27	114.00
22	BA	2566	A	P-O3'-C3'	11.32	133.28	119.70
57	DA	1536	C	P-O3'-C3'	11.32	133.28	119.70
53	CA	1502	A	P-O3'-C3'	11.31	133.27	119.70
53	CA	643	C	N1-C1'-C2'	-11.29	99.32	114.00
22	BA	2611	C	N1-C1'-C2'	-11.29	99.32	114.00
57	DA	2037	A	P-O3'-C3'	-11.29	106.15	119.70
53	CA	1230	C	N1-C1'-C2'	-11.28	99.34	114.00
22	BA	2893	A	P-O3'-C3'	11.25	133.20	119.70
1	AA	913	A	P-O3'-C3'	11.24	133.19	119.70
22	BA	783	A	P-O3'-C3'	-11.24	106.21	119.70
57	DA	1667	G	P-O3'-C3'	11.24	133.18	119.70
57	DA	726	G	P-O3'-C3'	11.21	133.16	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	336	C	N1-C1'-C2'	-11.21	99.42	114.00
22	BA	1326	U	N1-C1'-C2'	-11.21	99.43	114.00
57	DA	2645	G	P-O3'-C3'	11.19	133.12	119.70
57	DA	1816	C	N1-C1'-C2'	-11.18	99.46	114.00
22	BA	671	C	N1-C1'-C2'	-11.18	99.47	114.00
22	BA	1265	A	P-O3'-C3'	11.18	133.11	119.70
22	BA	1648	U	N1-C1'-C2'	-11.16	99.49	114.00
22	BA	1008	A	P-O3'-C3'	11.15	133.08	119.70
53	CA	512	U	N1-C1'-C2'	-11.14	99.52	114.00
22	BA	2284	A	P-O3'-C3'	-11.13	106.34	119.70
57	DA	2137	U	P-O3'-C3'	-11.12	106.36	119.70
22	BA	2051	A	P-O3'-C3'	11.12	133.04	119.70
22	BA	957	C	P-O3'-C3'	11.11	133.04	119.70
57	DA	946	C	N1-C1'-C2'	-11.10	99.57	114.00
1	AA	431	A	P-O3'-C3'	-11.10	106.38	119.70
57	DA	991	C	N1-C1'-C2'	-11.10	99.57	114.00
22	BA	2776	A	P-O3'-C3'	11.07	132.98	119.70
1	AA	119	A	P-O3'-C3'	11.06	132.97	119.70
53	CA	992	U	P-O3'-C3'	11.05	132.97	119.70
1	AA	641	U	P-O3'-C3'	11.04	132.95	119.70
22	BA	2585	U	O4'-C1'-N1	11.03	117.03	108.20
22	BA	2613	U	O4'-C1'-N1	11.00	117.00	108.20
1	AA	1345	U	O4'-C1'-N1	10.97	116.97	108.20
22	BA	1556	C	P-O3'-C3'	-10.95	106.56	119.70
57	DA	2348	U	N1-C1'-C2'	-10.95	99.77	114.00
57	DA	765	C	N1-C1'-C2'	-10.94	99.78	114.00
22	BA	229	C	N1-C1'-C2'	-10.93	99.79	114.00
57	DA	2896	C	N1-C1'-C2'	-10.93	99.79	114.00
53	CA	1148	U	N1-C1'-C2'	-10.93	99.79	114.00
22	BA	812	C	N1-C1'-C2'	-10.93	99.80	114.00
22	BA	227	A	P-O3'-C3'	10.92	132.80	119.70
22	BA	506	G	P-O3'-C3'	10.91	132.79	119.70
1	AA	891	U	N1-C1'-C2'	-10.90	99.82	114.00
1	AA	1348	U	N1-C1'-C2'	-10.89	99.84	114.00
22	BA	1144	A	P-O3'-C3'	-10.87	106.66	119.70
57	DA	1417	C	N1-C1'-C2'	-10.85	99.90	114.00
1	AA	547	A	P-O3'-C3'	10.83	132.69	119.70
22	BA	2835	A	P-O3'-C3'	10.82	132.68	119.70
22	BA	685	A	P-O3'-C3'	10.82	132.68	119.70
53	CA	1381	U	N1-C1'-C2'	-10.82	99.94	114.00
57	DA	335	C	N1-C1'-C2'	-10.80	99.95	114.00
22	BA	1498	C	N1-C1'-C2'	-10.80	99.96	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1815	A	P-O3'-C3'	10.80	132.66	119.70
22	BA	2646	C	N1-C1'-C2'	-10.80	99.96	114.00
22	BA	2068	U	P-O3'-C3'	-10.78	106.76	119.70
22	BA	784	G	P-O3'-C3'	10.78	132.63	119.70
22	BA	915	C	N1-C1'-C2'	-10.77	99.99	114.00
22	BA	2321	U	P-O3'-C3'	-10.77	106.78	119.70
22	BA	1971	U	N1-C1'-C2'	-10.77	100.00	114.00
22	BA	404	A	P-O3'-C3'	10.75	132.60	119.70
53	CA	1401	G	P-O3'-C3'	-10.74	106.81	119.70
53	CA	1283	U	N1-C1'-C2'	-10.73	100.06	114.00
53	CA	1298	U	P-O3'-C3'	10.70	132.54	119.70
53	CA	248	C	N1-C1'-C2'	-10.70	100.09	114.00
22	BA	2498	C	N1-C1'-C2'	-10.68	100.11	114.00
57	DA	2880	C	N1-C1'-C2'	-10.67	100.13	114.00
53	CA	821	G	P-O3'-C3'	-10.66	106.91	119.70
57	DA	2881	U	N1-C1'-C2'	-10.62	100.20	114.00
22	BA	1859	U	N1-C1'-C2'	-10.61	100.20	114.00
53	CA	513	C	N1-C1'-C2'	-10.60	100.22	114.00
22	BA	2808	G	P-O3'-C3'	10.58	132.40	119.70
57	DA	1776	G	P-O3'-C3'	-10.58	107.00	119.70
57	DA	1982	U	N1-C1'-C2'	-10.57	100.25	114.00
22	BA	1236	G	P-O3'-C3'	10.55	132.36	119.70
22	BA	669	G	P-O3'-C3'	10.53	132.34	119.70
1	AA	961	U	N1-C1'-C2'	-10.53	100.31	114.00
53	CA	116	A	P-O3'-C3'	-10.52	107.08	119.70
57	DA	1565	C	P-O3'-C3'	10.52	132.32	119.70
57	DA	2458	G	P-O3'-C3'	10.52	132.32	119.70
53	CA	1068	G	P-O3'-C3'	-10.49	107.11	119.70
57	DA	1119	U	O4'-C1'-N1	10.49	116.59	108.20
57	DA	915	C	N1-C1'-C2'	-10.48	100.37	114.00
1	AA	132	C	N1-C1'-C2'	-10.48	100.38	114.00
57	DA	2498	C	N1-C1'-C2'	-10.44	100.42	114.00
58	DB	17	C	N1-C1'-C2'	-10.44	100.43	114.00
57	DA	2429	G	P-O3'-C3'	-10.43	107.19	119.70
53	CA	520	A	P-O3'-C3'	-10.42	107.20	119.70
22	BA	571	U	O4'-C1'-N1	10.42	116.53	108.20
57	DA	2249	U	P-O3'-C3'	10.42	132.20	119.70
22	BA	2572	A	P-O3'-C3'	10.41	132.19	119.70
53	CA	344	A	P-O3'-C3'	10.40	132.18	119.70
22	BA	164	C	N1-C1'-C2'	-10.40	100.48	114.00
57	DA	1064	C	N1-C1'-C2'	-10.40	100.48	114.00
58	DB	90	C	N1-C1'-C2'	-10.39	100.49	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	484	C	N1-C1'-C2'	-10.39	100.50	114.00
22	BA	1332	G	P-O3'-C3'	10.38	132.16	119.70
53	CA	1367	C	N1-C1'-C2'	-10.36	100.53	114.00
53	CA	73	C	N1-C1'-C2'	-10.36	100.54	114.00
57	DA	1145	C	N1-C1'-C2'	-10.36	100.54	114.00
57	DA	1611	C	N1-C1'-C2'	-10.34	100.55	114.00
57	DA	61	C	N1-C1'-C2'	-10.32	100.59	114.00
53	CA	1147	C	N1-C1'-C2'	-10.30	100.61	114.00
57	DA	243	U	N1-C1'-C2'	-10.30	100.61	114.00
57	DA	1613	G	P-O3'-C3'	-10.29	107.35	119.70
22	BA	995	C	P-O3'-C3'	10.29	132.05	119.70
57	DA	92	U	N1-C1'-C2'	-10.29	100.62	114.00
57	DA	375	G	P-O3'-C3'	-10.29	107.36	119.70
57	DA	2492	U	N1-C1'-C2'	-10.29	100.63	114.00
22	BA	301	G	P-O3'-C3'	10.28	132.04	119.70
22	BA	1963	U	P-O3'-C3'	-10.28	107.36	119.70
57	DA	1941	C	N1-C1'-C2'	-10.28	100.64	114.00
22	BA	1522	A	P-O3'-C3'	10.27	132.03	119.70
1	AA	173	U	O4'-C1'-N1	10.27	116.42	108.20
1	AA	1320	C	N1-C1'-C2'	-10.27	100.65	114.00
22	BA	1240	U	O4'-C1'-N1	-10.27	99.98	108.20
22	BA	2312	U	N1-C1'-C2'	-10.27	100.65	114.00
57	DA	1289	C	N1-C1'-C2'	-10.26	100.66	114.00
22	BA	1779	U	C5-C6-N1	-10.25	117.58	122.70
22	BA	403	U	P-O3'-C3'	10.24	131.99	119.70
1	AA	87	C	N1-C1'-C2'	-10.24	100.68	114.00
22	BA	1045	C	P-O3'-C3'	10.22	131.97	119.70
22	BA	143	C	N1-C1'-C2'	-10.20	100.74	114.00
22	BA	1417	C	N1-C1'-C2'	-10.20	100.75	114.00
58	DB	88	C	P-O3'-C3'	10.20	131.93	119.70
53	CA	721	G	P-O3'-C3'	10.19	131.93	119.70
1	AA	1095	U	N1-C1'-C2'	-10.17	100.78	114.00
53	CA	1449	C	N1-C1'-C2'	-10.16	100.79	114.00
22	BA	1635	A	P-O3'-C3'	-10.15	107.52	119.70
57	DA	224	U	N1-C1'-C2'	-10.14	100.82	114.00
57	DA	445	C	N1-C1'-C2'	-10.14	100.82	114.00
57	DA	2752	C	N1-C1'-C2'	-10.13	100.83	114.00
22	BA	61	C	P-O3'-C3'	-10.13	107.55	119.70
22	BA	2333	A	P-O3'-C3'	10.12	131.84	119.70
57	DA	2440	C	N1-C1'-C2'	-10.10	100.88	114.00
57	DA	1498	C	N1-C1'-C2'	-10.09	100.88	114.00
57	DA	1786	A	P-O3'-C3'	10.09	131.81	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	687	C	N1-C1'-C2'	-10.08	100.90	114.00
22	BA	233	A	P-O3'-C3'	-10.07	107.61	119.70
22	BA	2725	A	P-O3'-C3'	10.07	131.78	119.70
57	DA	1675	C	N1-C1'-C2'	-10.07	100.91	114.00
57	DA	2068	U	N1-C1'-C2'	-10.05	100.94	114.00
1	AA	984	C	N1-C1'-C2'	-10.05	100.94	114.00
53	CA	109	A	P-O3'-C3'	10.04	131.75	119.70
22	BA	2200	C	N1-C1'-C2'	-10.04	100.95	114.00
53	CA	1052	U	N1-C1'-C2'	-10.01	100.99	114.00
1	AA	1336	C	P-O3'-C3'	10.01	131.71	119.70
22	BA	790	U	P-O3'-C3'	-10.00	107.70	119.70
22	BA	1021	A	P-O3'-C3'	-9.99	107.71	119.70
57	DA	451	U	O4'-C1'-N1	9.99	116.19	108.20
57	DA	1902	C	N1-C1'-C2'	-9.99	101.02	112.00
1	AA	724	G	P-O3'-C3'	-9.98	107.72	119.70
1	AA	279	A	P-O3'-C3'	9.98	131.68	119.70
57	DA	1920	C	N1-C1'-C2'	-9.98	101.02	112.00
22	BA	241	A	P-O3'-C3'	9.97	131.67	119.70
22	BA	435	C	N1-C1'-C2'	-9.97	101.03	112.00
22	BA	2733	A	P-O3'-C3'	-9.97	107.74	119.70
57	DA	2259	U	N1-C1'-C2'	-9.97	101.04	112.00
53	CA	1217	C	N1-C1'-C2'	-9.96	101.05	112.00
1	AA	1381	U	N1-C1'-C2'	-9.95	101.05	112.00
22	BA	2613	U	P-O3'-C3'	9.95	131.64	119.70
1	AA	430	A	P-O3'-C3'	-9.94	107.77	119.70
22	BA	482	A	P-O3'-C3'	-9.94	107.78	119.70
57	DA	2052	A	P-O3'-C3'	-9.94	107.78	119.70
22	BA	2880	C	N1-C1'-C2'	-9.93	101.08	112.00
22	BA	1654	A	N9-C1'-C2'	-9.92	101.08	112.00
22	BA	2266	A	P-O3'-C3'	9.92	131.60	119.70
22	BA	2691	C	N1-C1'-C2'	-9.92	101.09	112.00
22	BA	449	A	P-O3'-C3'	-9.91	107.80	119.70
57	DA	1249	U	N1-C1'-C2'	-9.91	101.10	112.00
57	DA	2611	C	N1-C1'-C2'	-9.90	101.11	112.00
22	BA	1324	G	O4'-C1'-N9	9.89	116.11	108.20
22	BA	481	G	P-O3'-C3'	9.89	131.57	119.70
57	DA	2492	U	P-O3'-C3'	-9.88	107.85	119.70
53	CA	1161	C	N1-C1'-C2'	-9.88	101.14	112.00
57	DA	222	A	P-O3'-C3'	9.87	131.55	119.70
22	BA	1329	U	P-O3'-C3'	9.87	131.54	119.70
1	AA	536	C	N1-C1'-C2'	-9.86	101.15	112.00
1	AA	7	A	P-O3'-C3'	9.86	131.53	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	92	U	N1-C1'-C2'	-9.86	101.16	112.00
22	BA	2609	U	O4'-C1'-N1	9.86	116.09	108.20
22	BA	2781	A	P-O3'-C3'	-9.85	107.89	119.70
22	BA	614	A	P-O3'-C3'	9.84	131.51	119.70
22	BA	2691	C	P-O3'-C3'	-9.84	107.89	119.70
22	BA	2879	A	P-O3'-C3'	9.84	131.51	119.70
22	BA	531	C	N1-C1'-C2'	9.84	126.79	114.00
22	BA	1667	G	P-O3'-C3'	9.83	131.50	119.70
53	CA	96	U	N1-C1'-C2'	-9.83	101.19	112.00
57	DA	2023	C	O4'-C1'-N1	9.83	116.06	108.20
23	BB	57	A	P-O3'-C3'	-9.83	107.91	119.70
58	DB	68	C	O4'-C1'-N1	9.81	116.05	108.20
57	DA	576	U	N1-C1'-C2'	-9.80	101.22	112.00
57	DA	1275	A	P-O3'-C3'	9.80	131.47	119.70
1	AA	889	A	P-O3'-C3'	9.80	131.46	119.70
57	DA	1918	A	P-O3'-C3'	9.79	131.45	119.70
22	BA	2542	A	P-O3'-C3'	9.79	131.44	119.70
22	BA	1033	U	P-O3'-C3'	9.78	131.44	119.70
57	DA	2023	C	N1-C1'-C2'	-9.78	101.24	112.00
53	CA	173	U	O4'-C1'-N1	9.77	116.02	108.20
53	CA	316	C	N1-C1'-C2'	-9.77	101.25	112.00
57	DA	812	C	P-O3'-C3'	-9.76	107.98	119.70
57	DA	1612	C	N1-C1'-C2'	-9.76	101.26	112.00
1	AA	812	G	P-O3'-C3'	9.76	131.41	119.70
22	BA	2517	C	O4'-C1'-N1	9.75	116.00	108.20
57	DA	1815	A	P-O3'-C3'	9.75	131.40	119.70
1	AA	14	U	N1-C1'-C2'	-9.74	101.28	112.00
22	BA	2581	G	P-O3'-C3'	9.74	131.39	119.70
57	DA	860	U	N1-C1'-C2'	-9.73	101.30	112.00
1	AA	1088	G	P-O3'-C3'	-9.70	108.06	119.70
22	BA	2800	A	P-O3'-C3'	9.70	131.34	119.70
53	CA	1383	C	N1-C1'-C2'	-9.70	101.33	112.00
57	DA	76	C	N1-C1'-C2'	-9.70	101.33	112.00
53	CA	372	C	O4'-C1'-N1	9.69	115.95	108.20
57	DA	829	A	P-O3'-C3'	9.69	131.32	119.70
57	DA	1782	U	N1-C1'-C2'	-9.66	101.37	112.00
57	DA	2299	U	N1-C1'-C2'	-9.66	101.38	112.00
57	DA	444	C	O4'-C1'-N1	9.65	115.92	108.20
22	BA	934	U	P-O3'-C3'	-9.65	108.12	119.70
57	DA	2520	C	N1-C1'-C2'	-9.65	101.39	112.00
22	BA	604	G	P-O3'-C3'	-9.64	108.13	119.70
1	AA	132	C	P-O3'-C3'	-9.63	108.14	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2210	U	P-O3'-C3'	9.61	131.24	119.70
22	BA	2258	C	P-O3'-C3'	9.61	131.23	119.70
57	DA	1963	U	N1-C1'-C2'	-9.61	101.43	112.00
22	BA	1965	C	N1-C1'-C2'	-9.60	101.44	112.00
22	BA	961	C	P-O3'-C3'	9.60	131.22	119.70
57	DA	1902	C	P-O3'-C3'	-9.59	108.19	119.70
57	DA	2875	C	N1-C1'-C2'	-9.59	101.46	112.00
1	AA	115	G	P-O3'-C3'	9.58	131.19	119.70
1	AA	1282	C	N1-C1'-C2'	-9.57	101.47	112.00
22	BA	2681	C	P-O3'-C3'	9.56	131.18	119.70
57	DA	1557	C	N1-C1'-C2'	-9.56	101.48	112.00
22	BA	2226	C	N1-C1'-C2'	-9.56	101.48	112.00
1	AA	66	A	P-O3'-C3'	-9.56	108.23	119.70
22	BA	164	C	P-O3'-C3'	-9.56	108.23	119.70
22	BA	2729	G	P-O3'-C3'	-9.56	108.23	119.70
1	AA	315	A	P-O3'-C3'	9.55	131.16	119.70
57	DA	831	G	P-O3'-C3'	-9.54	108.25	119.70
53	CA	110	C	P-O3'-C3'	-9.54	108.26	119.70
53	CA	1065	U	O4'-C1'-N1	9.54	115.83	108.20
57	DA	2347	C	N1-C1'-C2'	-9.53	101.51	112.00
1	AA	642	A	P-O3'-C3'	-9.53	108.26	119.70
1	AA	969	A	P-O3'-C3'	-9.52	108.28	119.70
57	DA	2458	G	O4'-C1'-N9	9.52	115.82	108.20
57	DA	1802	A	P-O3'-C3'	-9.52	108.28	119.70
22	BA	2425	A	O4'-C1'-N9	9.51	115.81	108.20
22	BA	34	U	P-O3'-C3'	9.51	131.11	119.70
57	DA	196	A	P-O3'-C3'	9.49	131.08	119.70
57	DA	2404	U	N1-C1'-C2'	-9.46	101.60	112.00
53	CA	979	C	N1-C1'-C2'	-9.45	101.60	112.00
22	BA	946	C	N1-C1'-C2'	-9.45	101.61	112.00
57	DA	623	C	N1-C1'-C2'	-9.45	101.61	112.00
57	DA	2226	C	N1-C1'-C2'	-9.44	101.61	112.00
22	BA	765	C	N1-C1'-C2'	-9.44	101.61	112.00
53	CA	566	G	P-O3'-C3'	9.44	131.02	119.70
57	DA	1682	G	P-O3'-C3'	-9.44	108.38	119.70
22	BA	2449	U	O4'-C1'-N1	-9.44	100.65	108.20
22	BA	2458	G	P-O3'-C3'	9.43	131.02	119.70
53	CA	252	U	N1-C1'-C2'	-9.42	101.63	112.00
53	CA	985	C	N1-C1'-C2'	-9.42	101.63	112.00
22	BA	1126	A	P-O3'-C3'	9.42	131.00	119.70
53	CA	792	A	P-O3'-C3'	9.42	131.00	119.70
57	DA	976	G	P-O3'-C3'	-9.40	108.42	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1228	C	P-O3'-C3'	-9.39	108.43	119.70
22	BA	2335	A	P-O3'-C3'	-9.39	108.43	119.70
57	DA	2876	G	P-O3'-C3'	-9.39	108.43	119.70
1	AA	1053	G	P-O3'-C3'	9.38	130.96	119.70
22	BA	2296	U	P-O3'-C3'	9.36	130.93	119.70
57	DA	1804	C	N1-C1'-C2'	-9.36	101.70	112.00
1	AA	1157	A	P-O3'-C3'	9.35	130.92	119.70
57	DA	2581	G	P-O3'-C3'	9.34	130.91	119.70
57	DA	1962	C	P-O3'-C3'	9.34	130.91	119.70
22	BA	2259	U	N1-C1'-C2'	-9.34	101.73	112.00
22	BA	2613	U	O3'-P-O5'	-9.34	86.26	104.00
22	BA	687	C	P-O3'-C3'	-9.33	108.51	119.70
1	AA	1224	U	O4'-C1'-N1	9.32	115.66	108.20
22	BA	1417	C	P-O3'-C3'	-9.32	108.52	119.70
1	AA	960	U	P-O3'-C3'	9.32	130.88	119.70
1	AA	415	A	P-O3'-C3'	-9.30	108.54	119.70
1	AA	1432	G	P-O3'-C3'	9.30	130.87	119.70
22	BA	2021	C	O4'-C1'-N1	9.30	115.64	108.20
57	DA	957	C	P-O3'-C3'	9.30	130.86	119.70
53	CA	73	C	O4'-C1'-N1	9.30	115.64	108.20
57	DA	386	G	P-O3'-C3'	9.29	130.85	119.70
1	AA	1167	A	P-O3'-C3'	9.29	130.84	119.70
22	BA	451	U	O4'-C1'-N1	9.29	115.63	108.20
1	AA	1382	C	N1-C1'-C2'	-9.28	101.79	112.00
23	BB	44	G	P-O3'-C3'	9.27	130.82	119.70
22	BA	1786	A	O4'-C1'-N9	9.26	115.61	108.20
22	BA	954	G	P-O3'-C3'	9.26	130.81	119.70
53	CA	331	G	P-O3'-C3'	-9.26	108.59	119.70
53	CA	388	G	P-O3'-C3'	9.26	130.81	119.70
1	AA	109	A	P-O3'-C3'	9.25	130.80	119.70
22	BA	829	A	P-O3'-C3'	9.24	130.79	119.70
53	CA	936	C	O4'-C1'-N1	9.24	115.59	108.20
1	AA	1224	U	P-O3'-C3'	9.23	130.77	119.70
22	BA	1300	G	P-O3'-C3'	9.23	130.78	119.70
22	BA	934	U	N1-C1'-C2'	-9.22	101.86	112.00
57	DA	1267	U	O4'-C1'-N1	9.22	115.58	108.20
53	CA	519	C	N1-C1'-C2'	-9.22	101.86	112.00
57	DA	1255	U	N1-C1'-C2'	-9.19	101.89	112.00
53	CA	95	C	N1-C1'-C2'	-9.19	101.89	112.00
1	AA	874	G	P-O3'-C3'	-9.18	108.68	119.70
57	DA	812	C	N1-C1'-C2'	-9.18	101.91	112.00
22	BA	505	A	P-O3'-C3'	-9.17	108.69	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2573	C	N1-C1'-C2'	-9.16	101.92	112.00
57	DA	687	C	N1-C1'-C2'	-9.16	101.92	112.00
1	AA	915	A	P-O3'-C3'	-9.15	108.72	119.70
22	BA	2312	U	P-O3'-C3'	-9.14	108.73	119.70
57	DA	534	U	N1-C1'-C2'	-9.14	101.94	112.00
57	DA	2850	A	P-O3'-C3'	-9.14	108.73	119.70
57	DA	1818	U	O4'-C1'-N1	9.13	115.50	108.20
57	DA	2691	C	N1-C1'-C2'	-9.13	101.96	112.00
53	CA	85	U	P-O3'-C3'	9.12	130.64	119.70
53	CA	183	C	O4'-C1'-N1	9.12	115.50	108.20
22	BA	2756	U	P-O3'-C3'	9.12	130.64	119.70
23	BB	108	A	P-O3'-C3'	9.11	130.63	119.70
53	CA	1348	U	N1-C1'-C2'	-9.11	101.98	112.00
1	AA	1398	A	P-O3'-C3'	-9.10	108.78	119.70
57	DA	917	A	P-O3'-C3'	-9.10	108.78	119.70
23	BB	87	U	O4'-C1'-N1	9.10	115.48	108.20
57	DA	234	U	N1-C1'-C2'	-9.09	102.00	112.00
22	BA	1427	A	P-O3'-C3'	9.09	130.60	119.70
22	BA	475	C	N1-C1'-C2'	-9.08	102.01	112.00
53	CA	1200	C	P-O3'-C3'	9.08	130.59	119.70
53	CA	1224	U	P-O3'-C3'	9.07	130.59	119.70
57	DA	1418	G	P-O3'-C3'	-9.07	108.81	119.70
53	CA	1202	U	N1-C1'-C2'	-9.07	102.03	112.00
1	AA	1528	U	P-O3'-C3'	9.05	130.56	119.70
22	BA	163	C	O4'-C1'-N1	9.05	115.44	108.20
22	BA	740	C	N1-C1'-C2'	-9.05	102.04	112.00
22	BA	865	C	O4'-C1'-N1	9.05	115.44	108.20
22	BA	1634	A	P-O3'-C3'	9.04	130.55	119.70
22	BA	1564	C	P-O3'-C3'	9.04	130.55	119.70
1	AA	305	G	P-O3'-C3'	9.03	130.54	119.70
1	AA	1095	U	O4'-C1'-N1	9.03	115.42	108.20
22	BA	1379	U	N1-C1'-C2'	-9.02	102.08	112.00
22	BA	1556	C	N1-C1'-C2'	-9.02	102.08	112.00
57	DA	1606	C	P-O3'-C3'	9.00	130.50	119.70
1	AA	577	G	P-O3'-C3'	-9.00	108.90	119.70
1	AA	792	A	O4'-C1'-N9	9.00	115.40	108.20
22	BA	1931	U	N1-C1'-C2'	-8.99	102.11	112.00
22	BA	1954	G	P-O3'-C3'	8.98	130.47	119.70
22	BA	686	U	O4'-C1'-N1	8.98	115.38	108.20
22	BA	811	U	P-O3'-C3'	8.98	130.47	119.70
57	DA	531	C	P-O3'-C3'	8.97	130.47	119.70
22	BA	2497	A	P-O3'-C3'	8.97	130.47	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	428	G	P-O3'-C3'	8.97	130.46	119.70
57	DA	164	C	N1-C1'-C2'	-8.97	102.14	112.00
57	DA	2095	A	P-O3'-C3'	-8.97	108.94	119.70
22	BA	1971	U	P-O3'-C3'	-8.95	108.95	119.70
57	DA	1954	G	P-O3'-C3'	8.95	130.44	119.70
53	CA	753	A	P-O3'-C3'	8.94	130.43	119.70
22	BA	981	A	O3'-P-O5'	-8.94	87.02	104.00
57	DA	1428	C	O4'-C1'-N1	8.94	115.35	108.20
22	BA	2575	C	O4'-C1'-N1	8.93	115.35	108.20
22	BA	27	G	P-O3'-C3'	8.93	130.42	119.70
1	AA	1506	U	P-O3'-C3'	8.93	130.41	119.70
22	BA	421	C	P-O3'-C3'	8.90	130.38	119.70
22	BA	2638	G	P-O3'-C3'	8.89	130.37	119.70
22	BA	906	U	O4'-C1'-N1	8.88	115.31	108.20
53	CA	1528	U	P-O3'-C3'	8.88	130.35	119.70
57	DA	60	G	P-O3'-C3'	8.88	130.35	119.70
57	DA	1512	C	O4'-C1'-N1	8.88	115.30	108.20
53	CA	576	C	O4'-C1'-N1	-8.87	101.10	108.20
57	DA	1389	G	P-O3'-C3'	-8.87	109.05	119.70
1	AA	813	U	P-O3'-C3'	-8.87	109.06	119.70
22	BA	144	A	P-O3'-C3'	-8.86	109.06	119.70
22	BA	1141	U	P-O3'-C3'	8.86	130.33	119.70
57	DA	229	C	N1-C1'-C2'	-8.86	102.26	112.00
57	DA	749	A	P-O3'-C3'	-8.86	109.07	119.70
57	DA	606	U	N1-C1'-C2'	-8.85	102.26	112.00
22	BA	323	C	O4'-C1'-N1	8.85	115.28	108.20
57	DA	2043	C	O4'-C1'-N1	-8.85	101.12	108.20
53	CA	1051	C	N1-C1'-C2'	-8.84	102.27	112.00
22	BA	2801	G	P-O5'-C5'	-8.84	106.76	120.90
22	BA	646	U	N1-C1'-C2'	-8.84	102.28	112.00
22	BA	1920	C	N1-C1'-C2'	-8.83	102.29	112.00
53	CA	564	C	N1-C1'-C2'	-8.83	102.29	112.00
53	CA	577	G	P-O3'-C3'	-8.83	109.10	119.70
1	AA	1201	A	P-O3'-C3'	8.82	130.29	119.70
53	CA	701	U	P-O3'-C3'	8.82	130.28	119.70
57	DA	304	U	P-O3'-C3'	-8.81	109.13	119.70
23	BB	52	A	P-O3'-C3'	8.80	130.27	119.70
57	DA	2629	U	P-O3'-C3'	8.80	130.26	119.70
53	CA	547	A	P-O3'-C3'	8.80	130.26	119.70
53	CA	486	U	P-O3'-C3'	-8.79	109.15	119.70
53	CA	89	U	N1-C1'-C2'	-8.78	102.34	112.00
53	CA	547	A	O4'-C1'-N9	8.77	115.22	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1829	A	P-O3'-C3'	-8.77	109.18	119.70
57	DA	1207	C	N1-C1'-C2'	-8.76	102.36	112.00
57	DA	53	A	P-O3'-C3'	-8.76	109.19	119.70
58	DB	87	U	P-O3'-C3'	8.76	130.21	119.70
22	BA	1867	G	P-O3'-C3'	-8.75	109.20	119.70
57	DA	2586	U	P-O3'-C3'	-8.74	109.21	119.70
1	AA	1258	G	P-O3'-C3'	-8.74	109.21	119.70
57	DA	217	A	P-O3'-C3'	-8.74	109.21	119.70
1	AA	717	U	P-O3'-C3'	8.74	130.19	119.70
57	DA	827	U	P-O3'-C3'	8.73	130.17	119.70
22	BA	1082	U	O4'-C1'-N1	8.73	115.18	108.20
1	AA	1229	A	P-O3'-C3'	-8.72	109.23	119.70
22	BA	386	G	P-O3'-C3'	8.72	130.17	119.70
53	CA	1399	C	P-O3'-C3'	8.72	130.16	119.70
2	CB	146	SER	O-C-N	-8.71	108.76	122.70
22	BA	2225	A	P-O3'-C3'	8.71	130.15	119.70
1	AA	974	A	P-O3'-C3'	8.70	130.15	119.70
1	AA	32	A	P-O3'-C3'	-8.69	109.27	119.70
57	DA	867	C	N1-C1'-C2'	-8.70	102.44	112.00
22	BA	243	U	N1-C1'-C2'	-8.69	102.44	112.00
22	BA	727	A	P-O3'-C3'	-8.69	109.27	119.70
57	DA	2874	C	P-O3'-C3'	-8.69	109.27	119.70
22	BA	2030	A	P-O3'-C3'	8.69	130.12	119.70
22	BA	1267	U	N1-C1'-C2'	-8.69	102.45	112.00
1	AA	1064	G	P-O3'-C3'	8.68	130.11	119.70
22	BA	782	A	P-O3'-C3'	8.67	130.11	119.70
1	AA	486	U	P-O5'-C5'	-8.67	107.03	120.90
53	CA	643	C	O4'-C1'-N1	8.66	115.13	108.20
57	DA	2656	U	N1-C1'-C2'	-8.65	102.49	112.00
57	DA	162	U	P-O3'-C3'	8.65	130.08	119.70
57	DA	2063	C	N1-C1'-C2'	-8.64	102.49	112.00
57	DA	2440	C	O4'-C1'-N1	8.64	115.11	108.20
57	DA	933	A	P-O3'-C3'	-8.64	109.34	119.70
57	DA	2848	G	P-O3'-C3'	8.63	130.06	119.70
22	BA	119	A	P-O3'-C3'	8.63	130.05	119.70
53	CA	32	A	P-O3'-C3'	-8.62	109.35	119.70
57	DA	2447	G	P-O3'-C3'	8.62	130.05	119.70
22	BA	527	C	P-O3'-C3'	8.62	130.05	119.70
22	BA	2874	C	N1-C1'-C2'	-8.62	102.51	112.00
57	DA	235	U	P-O3'-C3'	-8.62	109.35	119.70
22	BA	1013	C	P-O3'-C3'	-8.61	109.36	119.70
57	DA	1699	G	P-O3'-C3'	8.61	130.03	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	512	G	O4'-C1'-N9	8.61	115.08	108.20
22	BA	454	A	P-O3'-C3'	8.60	130.02	119.70
53	CA	1499	A	P-O3'-C3'	-8.60	109.38	119.70
22	BA	1997	C	P-O3'-C3'	-8.59	109.39	119.70
22	BA	2611	C	P-O3'-C3'	-8.59	109.39	119.70
22	BA	914	G	P-O3'-C3'	-8.59	109.40	119.70
22	BA	1859	U	P-O3'-C3'	-8.59	109.40	119.70
22	BA	1681	G	P-O3'-C3'	8.58	130.00	119.70
22	BA	84	A	P-O3'-C3'	8.58	129.99	119.70
1	AA	870	U	P-O3'-C3'	8.57	129.98	119.70
1	AA	1190	G	P-O3'-C3'	8.57	129.99	119.70
22	BA	2250	G	O4'-C1'-N9	-8.57	101.34	108.20
22	BA	178	G	P-O3'-C3'	-8.56	109.43	119.70
57	DA	964	C	N1-C1'-C2'	-8.56	102.59	112.00
22	BA	1816	C	P-O3'-C3'	-8.55	109.44	119.70
22	BA	507	A	P-O3'-C3'	-8.55	109.44	119.70
22	BA	1476	U	N1-C1'-C2'	-8.55	102.60	112.00
53	CA	1152	A	P-O3'-C3'	-8.54	109.45	119.70
1	AA	1196	A	P-O3'-C3'	8.53	129.94	119.70
57	DA	527	C	P-O3'-C3'	8.53	129.94	119.70
57	DA	1276	A	P-O3'-C3'	-8.53	109.46	119.70
57	DA	2752	C	O4'-C1'-N1	8.53	115.02	108.20
22	BA	2492	U	N1-C1'-C2'	-8.53	102.62	112.00
53	CA	936	C	N1-C1'-C2'	-8.53	102.62	112.00
57	DA	2034	U	P-O3'-C3'	-8.52	109.47	119.70
22	BA	1809	A	P-O3'-C3'	-8.52	109.47	119.70
22	BA	221	A	P-O3'-C3'	8.52	129.92	119.70
22	BA	1313	U	P-O3'-C3'	-8.52	109.48	119.70
22	BA	783	A	N9-C1'-C2'	-8.51	102.64	112.00
53	CA	962	C	O4'-C1'-N1	8.50	115.00	108.20
57	DA	1803	A	P-O3'-C3'	-8.50	109.50	119.70
57	DA	1539	U	N1-C1'-C2'	-8.50	102.65	112.00
22	BA	2325	G	P-O3'-C3'	-8.49	109.51	119.70
57	DA	672	C	N1-C1'-C2'	-8.49	102.66	112.00
22	BA	1286	A	P-O3'-C3'	8.49	129.88	119.70
1	AA	991	U	P-O3'-C3'	8.49	129.88	119.70
57	DA	444	C	N1-C1'-C2'	-8.49	102.67	112.00
57	DA	1512	C	P-O3'-C3'	-8.48	109.52	119.70
57	DA	510	C	N1-C1'-C2'	-8.48	102.67	112.00
57	DA	730	A	P-O3'-C3'	-8.48	109.52	119.70
1	AA	1153	G	P-O3'-C3'	-8.48	109.53	119.70
1	AA	968	A	P-O3'-C3'	8.47	129.87	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	2334	U	P-O3'-C3'	8.47	129.87	119.70
57	DA	790	U	O4'-C1'-N1	8.47	114.98	108.20
53	CA	424	G	P-O3'-C3'	-8.47	109.54	119.70
57	DA	164	C	P-O3'-C3'	-8.47	109.54	119.70
57	DA	1050	A	P-O3'-C3'	-8.46	109.55	119.70
22	BA	2832	U	P-O3'-C3'	8.46	129.85	119.70
57	DA	530	G	P-O3'-C3'	-8.45	109.56	119.70
57	DA	784	G	O4'-C1'-N9	8.45	114.96	108.20
57	DA	1386	C	O4'-C1'-N1	8.45	114.96	108.20
57	DA	1522	A	P-O3'-C3'	8.45	129.83	119.70
57	DA	15	G	P-O3'-C3'	-8.44	109.57	119.70
1	AA	512	U	P-O3'-C3'	-8.44	109.57	119.70
22	BA	138	U	N1-C1'-C2'	-8.44	102.72	112.00
1	AA	1125	U	P-O3'-C3'	8.44	129.82	119.70
58	DB	69	G	OP1-P-O3'	8.44	123.76	105.20
22	BA	1732	C	P-O3'-C3'	8.43	129.82	119.70
53	CA	962	C	N1-C1'-C2'	-8.43	102.72	112.00
1	AA	388	G	P-O3'-C3'	8.43	129.81	119.70
57	DA	1648	U	N1-C1'-C2'	-8.42	102.73	112.00
57	DA	1674	G	P-O3'-C3'	8.42	129.80	119.70
57	DA	2024	G	P-O3'-C3'	-8.42	109.60	119.70
22	BA	2385	C	P-O3'-C3'	-8.41	109.60	119.70
57	DA	1072	C	O4'-C1'-N1	8.41	114.93	108.20
57	DA	1144	A	P-O3'-C3'	-8.41	109.60	119.70
57	DA	1615	C	P-O3'-C3'	8.41	129.80	119.70
23	BB	87	U	P-O3'-C3'	8.41	129.79	119.70
22	BA	385	C	O4'-C1'-N1	-8.41	101.47	108.20
22	BA	1698	A	P-O3'-C3'	8.41	129.79	119.70
57	DA	150	U	O4'-C1'-N1	8.40	114.92	108.20
22	BA	985	C	N1-C1'-C2'	-8.40	102.76	112.00
23	BB	15	A	P-O3'-C3'	8.40	129.78	119.70
22	BA	406	G	P-O3'-C3'	-8.40	109.62	119.70
57	DA	2339	C	O4'-C1'-N1	8.39	114.91	108.20
22	BA	1784	A	P-O3'-C3'	8.39	129.77	119.70
22	BA	2894	G	P-O3'-C3'	-8.39	109.64	119.70
22	BA	1204	A	P-O3'-C3'	8.38	129.76	119.70
57	DA	1816	C	O4'-C1'-N1	8.38	114.90	108.20
57	DA	2061	G	P-O3'-C3'	8.38	129.75	119.70
22	BA	2689	U	N1-C1'-C2'	8.38	124.89	114.00
53	CA	1528	U	O4'-C1'-N1	8.37	114.90	108.20
57	DA	2669	G	P-O3'-C3'	-8.38	109.65	119.70
23	BB	25	U	P-O3'-C3'	-8.36	109.67	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	2757	A	P-O3'-C3'	-8.36	109.67	119.70
57	DA	1636	U	P-O3'-C3'	-8.35	109.68	119.70
1	AA	1322	C	P-O3'-C3'	8.35	129.72	119.70
53	CA	717	U	N1-C1'-C2'	8.34	124.84	114.00
22	BA	2682	A	P-O5'-C5'	-8.33	107.57	120.90
53	CA	132	C	O4'-C1'-N1	8.33	114.86	108.20
22	BA	1611	C	P-O3'-C3'	-8.33	109.71	119.70
22	BA	1351	C	O4'-C1'-N1	8.32	114.86	108.20
1	AA	316	C	P-O3'-C3'	-8.32	109.72	119.70
57	DA	1780	A	P-O3'-C3'	8.31	129.68	119.70
57	DA	868	U	N1-C1'-C2'	-8.30	102.87	112.00
53	CA	60	A	P-O3'-C3'	8.30	129.66	119.70
53	CA	1345	U	O4'-C1'-N1	8.29	114.83	108.20
57	DA	1900	A	P-O3'-C3'	8.29	129.65	119.70
57	DA	2238	G	P-O3'-C3'	8.29	129.64	119.70
57	DA	128	C	N1-C1'-C2'	-8.28	102.89	112.00
1	AA	245	U	P-O3'-C3'	-8.28	109.77	119.70
1	AA	595	A	P-O3'-C3'	8.28	129.63	119.70
53	CA	495	A	P-O3'-C3'	8.28	129.63	119.70
22	BA	1493	C	P-O3'-C3'	8.28	129.63	119.70
57	DA	104	A	P-O3'-C3'	-8.27	109.78	119.70
1	AA	1152	A	P-O3'-C3'	-8.26	109.79	119.70
1	AA	13	U	P-O3'-C3'	8.25	129.60	119.70
1	AA	1332	A	P-O3'-C3'	-8.25	109.80	119.70
22	BA	1606	C	P-O3'-C3'	8.25	129.60	119.70
57	DA	2063	C	P-O3'-C3'	-8.25	109.80	119.70
57	DA	1647	U	P-O3'-C3'	8.24	129.59	119.70
22	BA	1063	G	P-O3'-C3'	-8.24	109.81	119.70
53	CA	439	U	N1-C1'-C2'	-8.24	102.94	112.00
57	DA	2497	A	P-O3'-C3'	8.23	129.58	119.70
57	DA	2085	U	O4'-C1'-N1	8.23	114.79	108.20
22	BA	996	A	P-O3'-C3'	-8.23	109.82	119.70
53	CA	430	A	P-O3'-C3'	-8.23	109.83	119.70
57	DA	1386	C	N1-C1'-C2'	-8.23	102.95	112.00
1	AA	531	U	P-O3'-C3'	8.21	129.55	119.70
22	BA	705	A	P-O3'-C3'	-8.21	109.85	119.70
22	BA	1273	U	P-O5'-C5'	-8.20	107.78	120.90
57	DA	1476	U	O4'-C1'-N1	8.20	114.76	108.20
57	DA	2490	G	P-O3'-C3'	8.20	129.53	119.70
22	BA	2543	G	P-O3'-C3'	-8.19	109.87	119.70
22	BA	250	G	P-O3'-C3'	-8.19	109.87	119.70
1	AA	1382	C	P-O3'-C3'	-8.19	109.88	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1565	C	N1-C1'-C2'	8.19	124.64	114.00
22	BA	1626	A	P-O3'-C3'	8.18	129.51	119.70
57	DA	2493	U	P-O3'-C3'	-8.18	109.89	119.70
22	BA	1675	C	N1-C1'-C2'	-8.18	103.01	112.00
57	DA	2034	U	N1-C1'-C2'	-8.17	103.01	112.00
22	BA	491	G	P-O3'-C3'	-8.17	109.90	119.70
22	BA	1398	C	N1-C1'-C2'	-8.16	103.03	112.00
53	CA	1455	G	P-O3'-C3'	-8.16	109.91	119.70
57	DA	985	C	N1-C1'-C2'	-8.15	103.03	112.00
53	CA	374	A	P-O3'-C3'	-8.14	109.93	119.70
57	DA	2338	C	O4'-C1'-N1	8.13	114.71	108.20
53	CA	253	A	P-O3'-C3'	-8.13	109.95	119.70
1	AA	815	A	P-O3'-C3'	8.12	129.45	119.70
22	BA	1866	A	P-O3'-C3'	-8.12	109.96	119.70
57	DA	1558	C	P-O3'-C3'	8.12	129.44	119.70
22	BA	1045	C	O4'-C1'-N1	8.12	114.69	108.20
57	DA	2150	C	N1-C1'-C2'	-8.12	103.07	112.00
57	DA	739	A	P-O3'-C3'	8.11	129.44	119.70
22	BA	1980	G	P-O3'-C3'	8.11	129.43	119.70
1	AA	1380	U	P-O3'-C3'	8.11	129.43	119.70
23	BB	67	G	P-O3'-C3'	-8.11	109.97	119.70
57	DA	704	G	P-O3'-C3'	8.11	129.43	119.70
22	BA	866	A	P-O3'-C3'	-8.10	109.98	119.70
57	DA	481	G	O4'-C1'-N9	8.10	114.68	108.20
53	CA	1447	A	P-O3'-C3'	8.10	129.42	119.70
22	BA	821	A	P-O3'-C3'	8.09	129.41	119.70
53	CA	1498	U	P-O3'-C3'	8.08	129.40	119.70
57	DA	1019	U	O4'-C1'-N1	8.08	114.67	108.20
22	BA	2250	G	C5-N7-C8	-8.08	100.26	104.30
22	BA	2250	G	C4-C5-N7	8.08	114.03	110.80
57	DA	271	G	P-O3'-C3'	8.06	129.37	119.70
57	DA	669	G	P-O3'-C3'	8.06	129.37	119.70
22	BA	242	G	P-O3'-C3'	8.05	129.36	119.70
22	BA	620	G	P-O3'-C3'	8.05	129.36	119.70
53	CA	115	G	P-O3'-C3'	8.05	129.36	119.70
22	BA	1962	C	P-O3'-C3'	8.05	129.36	119.70
57	DA	807	U	O4'-C1'-N1	8.05	114.64	108.20
57	DA	1145	C	O4'-C1'-N1	8.04	114.63	108.20
22	BA	1394	U	P-O3'-C3'	8.03	129.34	119.70
1	AA	373	A	P-O3'-C3'	-8.03	110.06	119.70
22	BA	33	C	P-O3'-C3'	8.03	129.33	119.70
22	BA	1273	U	N1-C1'-C2'	-8.02	103.17	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	336	C	P-O3'-C3'	-8.02	110.07	119.70
57	DA	2136	G	P-O3'-C3'	-8.02	110.08	119.70
23	BB	66	A	P-O3'-C3'	8.01	129.32	119.70
57	DA	2875	C	O4'-C1'-N1	8.01	114.61	108.20
53	CA	213	G	P-O3'-C3'	-8.01	110.09	119.70
1	AA	282	A	P-O3'-C3'	-8.01	110.09	119.70
22	BA	791	C	O4'-C1'-N1	8.01	114.61	108.20
57	DA	2314	A	P-O3'-C3'	-8.00	110.10	119.70
1	AA	537	G	P-O3'-C3'	-8.00	110.11	119.70
57	DA	1832	C	O4'-C1'-N1	7.99	114.59	108.20
57	DA	2036	C	N1-C1'-C2'	-7.99	103.22	112.00
1	AA	451	A	P-O3'-C3'	7.98	129.28	119.70
22	BA	310	A	P-O3'-C3'	7.97	129.27	119.70
22	BA	616	A	P-O3'-C3'	-7.97	110.14	119.70
57	DA	2836	U	N1-C1'-C2'	-7.97	103.23	112.00
1	AA	1162	C	P-O3'-C3'	-7.96	110.14	119.70
22	BA	2732	G	P-O3'-C3'	7.96	129.26	119.70
22	BA	1900	A	P-O3'-C3'	7.96	129.25	119.70
53	CA	481	G	P-O3'-C3'	7.95	129.24	119.70
53	CA	961	U	N1-C1'-C2'	-7.94	103.26	112.00
22	BA	2603	G	P-O3'-C3'	-7.94	110.17	119.70
57	DA	2143	C	P-O3'-C3'	7.94	129.23	119.70
57	DA	1136	G	P-O3'-C3'	-7.94	110.18	119.70
22	BA	1249	U	O4'-C1'-N1	-7.93	101.86	108.20
22	BA	1865	U	N1-C1'-C2'	7.93	124.30	114.00
22	BA	2800	A	O3'-P-O5'	-7.92	88.94	104.00
57	DA	2267	A	P-O3'-C3'	-7.92	110.19	119.70
1	AA	935	A	P-O3'-C3'	-7.92	110.20	119.70
22	BA	1965	C	P-O3'-C3'	-7.92	110.20	119.70
1	AA	884	U	P-O3'-C3'	7.91	129.19	119.70
57	DA	867	C	O4'-C1'-N1	7.91	114.53	108.20
57	DA	1416	G	P-O3'-C3'	7.91	129.19	119.70
1	AA	1448	C	N1-C1'-C2'	-7.91	103.30	112.00
22	BA	2520	C	P-O3'-C3'	-7.91	110.21	119.70
22	BA	2468	A	P-O3'-C3'	7.91	129.19	119.70
22	BA	1839	G	P-O3'-C3'	-7.91	110.21	119.70
53	CA	277	C	P-O3'-C3'	-7.90	110.22	119.70
22	BA	2490	G	P-O3'-C3'	7.90	129.18	119.70
57	DA	2334	U	N1-C1'-C2'	7.89	124.26	114.00
57	DA	606	U	O4'-C1'-N1	7.89	114.51	108.20
22	BA	1458	U	P-O3'-C3'	7.88	129.16	119.70
53	CA	1301	U	P-O3'-C3'	-7.88	110.24	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1347	A	P-O3'-C3'	-7.88	110.24	119.70
1	AA	821	G	P-O3'-C3'	-7.88	110.25	119.70
57	DA	224	U	P-O3'-C3'	-7.88	110.25	119.70
57	DA	1972	G	P-O3'-C3'	-7.88	110.25	119.70
57	DA	1636	U	N1-C1'-C2'	-7.88	103.34	112.00
57	DA	973	A	P-O3'-C3'	7.87	129.14	119.70
22	BA	764	A	O4'-C1'-N9	7.87	114.49	108.20
22	BA	1555	G	P-O3'-C3'	-7.86	110.26	119.70
57	DA	1998	A	P-O3'-C3'	-7.86	110.27	119.70
53	CA	13	U	P-O3'-C3'	7.86	129.13	119.70
1	AA	500	G	P-O3'-C3'	-7.86	110.27	119.70
22	BA	858	G	O4'-C1'-N9	7.86	114.49	108.20
1	AA	85	U	P-O3'-C3'	7.86	129.13	119.70
57	DA	1915	U	N1-C1'-C2'	-7.86	103.36	112.00
22	BA	1266	G	P-O3'-C3'	7.85	129.12	119.70
22	BA	774	G	P-O3'-C3'	7.85	129.12	119.70
22	BA	2543	G	P-O5'-C5'	-7.85	108.34	120.90
57	DA	1821	A	P-O3'-C3'	-7.85	110.28	119.70
1	AA	9	G	P-O3'-C3'	-7.84	110.29	119.70
22	BA	1942	C	P-O3'-C3'	-7.84	110.29	119.70
57	DA	775	G	P-O3'-C3'	7.83	129.09	119.70
1	AA	95	C	P-O3'-C3'	-7.83	110.31	119.70
1	AA	480	U	O4'-C1'-N1	7.83	114.46	108.20
22	BA	2581	G	O4'-C1'-N9	7.82	114.46	108.20
53	CA	596	A	P-O3'-C3'	-7.82	110.31	119.70
53	CA	889	A	P-O3'-C3'	7.82	129.09	119.70
22	BA	812	C	P-O3'-C3'	-7.82	110.32	119.70
22	BA	1782	U	N1-C1'-C2'	-7.82	103.40	112.00
1	AA	1320	C	P-O3'-C3'	-7.81	110.32	119.70
22	BA	52	A	P-O3'-C3'	-7.81	110.32	119.70
22	BA	1706	C	O4'-C1'-N1	7.81	114.45	108.20
57	DA	1970	A	P-O3'-C3'	7.81	129.07	119.70
57	DA	1941	C	P-O3'-C3'	-7.80	110.33	119.70
57	DA	484	C	O4'-C1'-N1	7.80	114.44	108.20
53	CA	734	G	P-O3'-C3'	-7.80	110.34	119.70
57	DA	1971	U	O4'-C1'-N1	7.80	114.44	108.20
22	BA	2517	C	P-O3'-C3'	7.79	129.05	119.70
57	DA	370	G	P-O3'-C3'	7.79	129.05	119.70
53	CA	559	A	P-O3'-C3'	7.79	129.05	119.70
1	AA	374	A	P-O3'-C3'	-7.79	110.35	119.70
1	AA	1124	G	P-O3'-C3'	7.79	129.04	119.70
1	AA	972	C	O4'-C1'-N1	7.79	114.43	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1804	C	P-O3'-C3'	-7.79	110.36	119.70
53	CA	110	C	N1-C1'-C2'	-7.78	103.44	112.00
53	CA	1141	C	N1-C1'-C2'	-7.78	103.44	112.00
57	DA	2286	G	P-O3'-C3'	7.78	129.03	119.70
57	DA	304	U	O4'-C1'-N1	7.77	114.41	108.20
22	BA	1058	U	O4'-C1'-N1	7.76	114.41	108.20
22	BA	126	A	P-O3'-C3'	-7.76	110.39	119.70
2	AB	146	SER	O-C-N	-7.75	110.29	122.70
57	DA	623	C	O4'-C1'-N1	7.75	114.40	108.20
1	AA	1362	A	O4'-C1'-N9	7.75	114.40	108.20
22	BA	1782	U	P-O3'-C3'	-7.75	110.41	119.70
57	DA	2582	G	P-O3'-C3'	-7.75	110.41	119.70
22	BA	459	U	N1-C1'-C2'	-7.74	103.48	112.00
22	BA	1802	A	P-O3'-C3'	-7.74	110.41	119.70
57	DA	121	G	P-O3'-C3'	-7.74	110.41	119.70
1	AA	1502	A	P-O3'-C3'	7.74	128.99	119.70
53	CA	348	G	P-O3'-C3'	-7.74	110.42	119.70
57	DA	1272	A	P-O3'-C3'	7.73	128.98	119.70
57	DA	1405	U	O4'-C1'-N1	7.73	114.39	108.20
22	BA	2238	G	P-O3'-C3'	7.73	128.98	119.70
22	BA	1541	C	P-O3'-C3'	-7.73	110.42	119.70
57	DA	794	A	P-O3'-C3'	-7.72	110.43	119.70
1	AA	816	A	P-O3'-C3'	-7.72	110.43	119.70
57	DA	1931	U	N1-C1'-C2'	-7.72	103.51	112.00
57	DA	774	G	P-O3'-C3'	7.71	128.96	119.70
1	AA	486	U	N1-C1'-C2'	-7.71	103.53	112.00
22	BA	790	U	O4'-C1'-N1	7.71	114.36	108.20
22	BA	613	A	P-O3'-C3'	7.70	128.94	119.70
57	DA	1304	A	P-O3'-C3'	-7.70	110.46	119.70
57	DA	990	A	P-O3'-C3'	-7.69	110.47	119.70
22	BA	1716	U	N1-C1'-C2'	-7.69	103.54	112.00
22	BA	2324	U	N1-C1'-C2'	7.69	124.00	114.00
57	DA	1265	A	P-O3'-C3'	7.69	128.93	119.70
22	BA	396	G	P-O3'-C3'	-7.69	110.47	119.70
58	DB	107	G	OP1-P-O3'	7.68	122.10	105.20
57	DA	1991	U	O4'-C1'-N1	-7.68	102.06	108.20
53	CA	575	G	P-O3'-C3'	7.68	128.92	119.70
53	CA	1332	A	P-O3'-C3'	-7.68	110.48	119.70
57	DA	1013	C	P-O3'-C3'	-7.67	110.49	119.70
22	BA	1695	G	P-O3'-C3'	-7.67	110.50	119.70
57	DA	534	U	P-O3'-C3'	-7.67	110.49	119.70
57	DA	2251	G	P-O3'-C3'	-7.67	110.50	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	216	U	P-O3'-C3'	-7.66	110.50	119.70
53	CA	247	G	P-O3'-C3'	-7.66	110.51	119.70
22	BA	62	U	P-O3'-C3'	7.65	128.88	119.70
22	BA	1499	C	P-O3'-C3'	-7.65	110.52	119.70
23	BB	25	U	N1-C1'-C2'	-7.65	103.59	112.00
53	CA	486	U	P-O5'-C5'	-7.64	108.67	120.90
1	AA	439	U	P-O3'-C3'	-7.64	110.53	119.70
22	BA	1884	G	O4'-C1'-N9	7.64	114.31	108.20
22	BA	984	A	C2-N3-C4	-7.64	106.78	110.60
53	CA	381	C	P-O3'-C3'	7.64	128.87	119.70
22	BA	215	G	P-O3'-C3'	7.63	128.86	119.70
22	BA	2673	G	P-O3'-C3'	-7.63	110.54	119.70
22	BA	587	C	N1-C1'-C2'	7.63	123.92	114.00
57	DA	1931	U	P-O3'-C3'	-7.63	110.54	119.70
23	BB	42	C	N1-C1'-C2'	-7.63	103.61	112.00
53	CA	184	G	P-O3'-C3'	-7.63	110.55	119.70
1	AA	1161	C	N1-C1'-C2'	-7.63	103.61	112.00
57	DA	1126	A	P-O3'-C3'	7.63	128.85	119.70
22	BA	2093	G	N9-C1'-C2'	-7.62	103.61	112.00
53	CA	238	A	P-O3'-C3'	7.62	128.85	119.70
22	BA	996	A	O5'-P-OP2	-7.62	98.84	105.70
1	AA	1256	A	P-O3'-C3'	7.62	128.84	119.70
22	BA	575	A	P-O3'-C3'	-7.62	110.56	119.70
53	CA	1282	C	P-O3'-C3'	-7.62	110.56	119.70
22	BA	121	G	P-O3'-C3'	-7.61	110.56	119.70
22	BA	2503	A	P-O3'-C3'	7.61	128.84	119.70
53	CA	68	G	P-O3'-C3'	-7.61	110.56	119.70
1	AA	94	G	P-O3'-C3'	7.60	128.82	119.70
57	DA	865	C	P-O3'-C3'	7.60	128.82	119.70
22	BA	741	U	P-O5'-C5'	-7.60	108.74	120.90
57	DA	2612	C	O4'-C1'-N1	7.60	114.28	108.20
57	DA	1965	C	N1-C1'-C2'	-7.60	103.64	112.00
23	BB	14	U	P-O3'-C3'	7.59	128.81	119.70
23	BB	12	C	P-O3'-C3'	7.59	128.81	119.70
22	BA	2645	G	O4'-C1'-N9	7.59	114.27	108.20
22	BA	1689	A	P-O3'-C3'	7.59	128.80	119.70
53	CA	793	U	P-O3'-C3'	-7.58	110.60	119.70
53	CA	802	A	P-O3'-C3'	7.58	128.80	119.70
53	CA	52	C	N1-C1'-C2'	-7.58	103.67	112.00
57	DA	2542	A	P-O3'-C3'	7.57	128.78	119.70
22	BA	2866	U	O4'-C1'-N1	7.57	114.25	108.20
1	AA	960	U	N1-C1'-C2'	7.56	123.83	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1416	G	P-O3'-C3'	7.56	128.77	119.70
57	DA	1483	G	P-O3'-C3'	-7.56	110.63	119.70
57	DA	913	U	P-O3'-C3'	7.55	128.76	119.70
58	DB	90	C	P-O3'-C3'	-7.55	110.64	119.70
57	DA	946	C	O4'-C1'-N1	7.55	114.24	108.20
1	AA	575	G	P-O3'-C3'	7.55	128.76	119.70
1	AA	174	A	P-O3'-C3'	-7.55	110.64	119.70
57	DA	2667	C	N1-C1'-C2'	-7.55	103.70	112.00
22	BA	1627	G	P-O3'-C3'	-7.55	110.64	119.70
53	CA	508	U	P-O3'-C3'	7.55	128.76	119.70
57	DA	763	G	P-O3'-C3'	-7.55	110.64	119.70
57	DA	1079	C	N1-C1'-C2'	-7.54	103.70	112.00
57	DA	2683	C	N1-C1'-C2'	-7.54	103.71	112.00
53	CA	218	U	O4'-C1'-N1	7.54	114.23	108.20
1	AA	347	G	P-O3'-C3'	-7.53	110.66	119.70
22	BA	2092	U	OP1-P-O3'	-7.53	88.63	105.20
57	DA	1247	A	P-O3'-C3'	7.53	128.74	119.70
57	DA	1427	A	P-O3'-C3'	7.53	128.74	119.70
57	DA	2609	U	P-O3'-C3'	7.53	128.74	119.70
58	DB	107	G	P-O3'-C3'	7.53	128.74	119.70
22	BA	739	A	P-O3'-C3'	7.53	128.74	119.70
57	DA	411	G	P-O3'-C3'	7.53	128.73	119.70
22	BA	1821	A	P-O3'-C3'	-7.52	110.67	119.70
57	DA	334	C	O4'-C1'-N1	7.52	114.22	108.20
1	AA	564	C	N1-C1'-C2'	-7.52	103.73	112.00
53	CA	641	U	P-O3'-C3'	7.52	128.72	119.70
22	BA	1956	U	N1-C1'-C2'	-7.51	103.74	112.00
57	DA	622	G	P-O3'-C3'	-7.51	110.69	119.70
22	BA	2336	A	P-O3'-C3'	7.51	128.71	119.70
22	BA	1181	U	O4'-C1'-N1	7.50	114.20	108.20
1	AA	1087	G	P-O3'-C3'	-7.50	110.70	119.70
1	AA	1200	C	P-O3'-C3'	7.50	128.70	119.70
22	BA	2200	C	P-O3'-C3'	-7.50	110.70	119.70
57	DA	2240	U	O4'-C1'-N1	7.50	114.20	108.20
22	BA	2654	A	P-O3'-C3'	7.49	128.69	119.70
53	CA	122	G	P-O3'-C3'	-7.49	110.71	119.70
57	DA	2312	U	P-O3'-C3'	-7.49	110.71	119.70
57	DA	1080	A	P-O3'-C3'	-7.49	110.71	119.70
22	BA	1615	C	P-O3'-C3'	7.49	128.69	119.70
22	BA	811	U	O4'-C1'-N1	7.49	114.19	108.20
57	DA	2217	G	P-O3'-C3'	-7.49	110.72	119.70
53	CA	1201	A	P-O3'-C3'	7.48	128.68	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	248	C	O4'-C1'-N1	7.48	114.19	108.20
1	AA	91	U	N1-C1'-C2'	-7.48	103.77	112.00
53	CA	86	G	P-O3'-C3'	7.48	128.68	119.70
22	BA	1181	U	N1-C1'-C2'	-7.48	103.77	112.00
57	DA	1291	C	N1-C1'-C2'	-7.48	103.77	112.00
53	CA	96	U	P-O3'-C3'	-7.47	110.73	119.70
22	BA	206	U	N1-C1'-C2'	-7.47	103.78	112.00
57	DA	1560	G	P-O3'-C3'	-7.47	110.73	119.70
53	CA	70	U	O4'-C1'-N1	7.47	114.18	108.20
1	AA	1433	A	P-O3'-C3'	-7.47	110.74	119.70
1	AA	275	G	P-O3'-C3'	-7.47	110.74	119.70
22	BA	1020	A	P-O3'-C3'	7.46	128.65	119.70
57	DA	2283	C	P-O3'-C3'	-7.46	110.75	119.70
57	DA	2896	C	P-O3'-C3'	-7.46	110.75	119.70
53	CA	1227	A	P-O3'-C3'	7.45	128.64	119.70
1	AA	511	C	P-O3'-C3'	7.45	128.64	119.70
22	BA	373	U	P-O3'-C3'	-7.45	110.76	119.70
57	DA	1779	U	O4'-C1'-N1	7.45	114.16	108.20
57	DA	2895	G	P-O3'-C3'	-7.45	110.76	119.70
53	CA	1167	A	P-O3'-C3'	7.45	128.64	119.70
22	BA	1185	G	P-O3'-C3'	-7.45	110.77	119.70
22	BA	2383	G	P-O3'-C3'	-7.44	110.77	119.70
53	CA	1380	U	P-O3'-C3'	7.44	128.63	119.70
22	BA	1809	A	P-O5'-C5'	-7.44	108.99	120.90
53	CA	1397	C	N1-C1'-C2'	-7.44	103.82	112.00
53	CA	486	U	N1-C1'-C2'	-7.44	103.82	112.00
53	CA	382	A	P-O3'-C3'	7.43	128.62	119.70
22	BA	1331	G	P-O3'-C3'	-7.43	110.78	119.70
22	BA	2629	U	O4'-C1'-N1	-7.43	102.26	108.20
22	BA	854	C	N1-C1'-C2'	-7.42	103.83	112.00
57	DA	1286	A	P-O3'-C3'	7.42	128.61	119.70
57	DA	1291	C	O4'-C1'-N1	7.42	114.14	108.20
1	AA	534	U	N1-C1'-C2'	-7.42	103.84	112.00
1	AA	1336	C	O4'-C1'-N1	7.42	114.13	108.20
58	DB	40	U	P-O3'-C3'	7.41	128.59	119.70
1	AA	1345	U	P-O3'-C3'	7.41	128.59	119.70
22	BA	1919	A	N9-C1'-C2'	-7.41	103.85	112.00
1	AA	1183	U	N1-C1'-C2'	-7.41	103.85	112.00
22	BA	2226	C	P-O3'-C3'	-7.41	110.81	119.70
57	DA	2392	A	P-O3'-C3'	-7.41	110.81	119.70
57	DA	2585	U	P-O3'-C3'	7.41	128.59	119.70
2	AB	107	ARG	O-C-N	-7.41	110.85	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	428	G	O4'-C1'-N9	7.40	114.12	108.20
22	BA	671	C	O4'-C1'-N1	7.40	114.12	108.20
22	BA	2504	U	N1-C1'-C2'	-7.40	103.86	112.00
22	BA	385	C	P-O3'-C3'	7.40	128.58	119.70
57	DA	2881	U	P-O3'-C3'	-7.39	110.83	119.70
1	AA	754	C	N1-C1'-C2'	-7.39	103.87	112.00
22	BA	2797	U	N1-C1'-C2'	7.39	123.61	114.00
22	BA	165	A	P-O3'-C3'	-7.39	110.84	119.70
22	BA	266	G	P-O3'-C3'	-7.38	110.84	119.70
22	BA	1249	U	N1-C1'-C2'	-7.38	103.88	112.00
22	BA	2282	G	P-O3'-C3'	7.38	128.56	119.70
57	DA	2689	U	O4'-C1'-N1	7.38	114.10	108.20
1	AA	1181	G	P-O3'-C3'	7.38	128.55	119.70
22	BA	2426	A	P-O3'-C3'	7.38	128.55	119.70
22	BA	1865	U	P-O3'-C3'	7.37	128.55	119.70
22	BA	2423	U	P-O3'-C3'	7.37	128.54	119.70
57	DA	1047	G	P-O3'-C3'	7.37	128.54	119.70
22	BA	916	G	P-O3'-C3'	-7.37	110.86	119.70
57	DA	801	G	P-O3'-C3'	7.37	128.54	119.70
22	BA	1386	C	N1-C1'-C2'	-7.36	103.90	112.00
22	BA	790	U	N1-C1'-C2'	-7.36	103.90	112.00
22	BA	1675	C	P-O3'-C3'	-7.36	110.87	119.70
57	DA	964	C	O4'-C1'-N1	7.36	114.09	108.20
22	BA	333	G	P-O3'-C3'	-7.36	110.87	119.70
22	BA	2447	G	O4'-C1'-N9	7.36	114.09	108.20
53	CA	87	C	N1-C1'-C2'	-7.36	103.91	112.00
1	AA	245	U	N1-C1'-C2'	-7.35	103.91	112.00
57	DA	606	U	P-O3'-C3'	-7.35	110.88	119.70
1	AA	1505	G	P-O3'-C3'	-7.34	110.89	119.70
53	CA	717	U	P-O3'-C3'	7.34	128.51	119.70
1	AA	1101	A	P-O3'-C3'	7.34	128.51	119.70
57	DA	1255	U	O4'-C1'-N1	7.33	114.07	108.20
22	BA	204	A	P-O3'-C3'	7.33	128.50	119.70
22	BA	1885	A	P-O3'-C3'	-7.33	110.90	119.70
22	BA	2013	A	P-O3'-C3'	-7.33	110.90	119.70
53	CA	1143	G	P-O3'-C3'	-7.32	110.91	119.70
22	BA	1333	G	P-O3'-C3'	-7.32	110.92	119.70
22	BA	2199	A	P-O3'-C3'	-7.32	110.92	119.70
22	BA	2542	A	O4'-C1'-N9	7.32	114.05	108.20
22	BA	2629	U	N1-C1'-C2'	7.32	123.51	114.00
22	BA	2053	G	O3'-P-O5'	-7.31	90.10	104.00
1	AA	722	G	P-O3'-C3'	-7.31	110.93	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	528	A	C5-N7-C8	-7.31	100.25	103.90
22	BA	382	A	P-O3'-C3'	-7.31	110.93	119.70
22	BA	1682	G	P-O3'-C3'	-7.31	110.93	119.70
57	DA	459	U	N1-C1'-C2'	-7.31	103.96	112.00
22	BA	1706	C	P-O3'-C3'	7.30	128.47	119.70
53	CA	979	C	P-O3'-C3'	-7.30	110.93	119.70
53	CA	1142	G	P-O3'-C3'	-7.30	110.94	119.70
22	BA	1654	A	C3'-C2'-C1'	7.30	107.34	101.50
53	CA	517	G	P-O3'-C3'	7.29	128.45	119.70
57	DA	916	G	P-O3'-C3'	-7.29	110.95	119.70
57	DA	2384	U	N1-C1'-C2'	7.29	123.48	114.00
57	DA	404	A	P-O3'-C3'	7.29	128.45	119.70
22	BA	1942	C	P-O5'-C5'	-7.29	109.24	120.90
57	DA	1397	U	N1-C1'-C2'	7.29	123.48	114.00
22	BA	2067	G	P-O3'-C3'	7.29	128.45	119.70
1	AA	1054	C	P-O3'-C3'	7.29	128.44	119.70
22	BA	1942	C	N1-C1'-C2'	-7.29	103.98	112.00
57	DA	961	C	N1-C1'-C2'	7.29	123.47	114.00
22	BA	1272	A	P-O3'-C3'	7.28	128.44	119.70
57	DA	2881	U	O4'-C1'-N1	7.28	114.03	108.20
53	CA	1383	C	P-O3'-C3'	-7.28	110.97	119.70
57	DA	2830	C	O4'-C1'-N1	7.28	114.02	108.20
57	DA	143	C	N1-C1'-C2'	-7.28	104.00	112.00
22	BA	2322	A	P-O3'-C3'	-7.27	110.97	119.70
22	BA	2202	U	O4'-C1'-N1	7.27	114.02	108.20
22	BA	434	U	P-O3'-C3'	7.27	128.42	119.70
22	BA	479	A	P-O3'-C3'	7.27	128.42	119.70
53	CA	1381	U	P-O3'-C3'	-7.26	110.98	119.70
53	CA	497	G	P-O3'-C3'	-7.26	110.99	119.70
22	BA	1273	U	P-O3'-C3'	-7.26	110.99	119.70
53	CA	209	U	P-O3'-C3'	7.26	128.41	119.70
57	DA	2210	U	P-O3'-C3'	7.25	128.40	119.70
1	AA	686	U	P-O3'-C3'	7.25	128.40	119.70
53	CA	173	U	P-O3'-C3'	7.25	128.40	119.70
53	CA	453	G	P-O3'-C3'	-7.24	111.01	119.70
57	DA	868	U	P-O3'-C3'	-7.24	111.01	119.70
22	BA	566	U	P-O5'-C5'	-7.24	109.32	120.90
53	CA	92	U	P-O3'-C3'	-7.24	111.01	119.70
53	CA	1383	C	O4'-C1'-N1	7.23	113.99	108.20
57	DA	991	C	P-O3'-C3'	-7.23	111.02	119.70
1	AA	1085	U	P-O3'-C3'	7.23	128.38	119.70
57	DA	573	U	O4'-C1'-N1	7.23	113.99	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1558	C	P-O3'-C3'	7.23	128.38	119.70
22	BA	2047	C	O4'-C1'-N1	-7.23	102.42	108.20
1	AA	934	C	O4'-C1'-N1	7.23	113.98	108.20
53	CA	536	C	P-O3'-C3'	-7.22	111.03	119.70
22	BA	1759	A	P-O3'-C3'	-7.22	111.03	119.70
22	BA	163	C	N1-C1'-C2'	-7.22	104.06	112.00
57	DA	1460	U	P-O3'-C3'	7.22	128.36	119.70
22	BA	1026	G	P-O3'-C3'	-7.21	111.05	119.70
53	CA	1140	C	N1-C1'-C2'	-7.21	104.07	112.00
22	BA	1538	G	P-O3'-C3'	-7.20	111.06	119.70
57	DA	2728	U	O4'-C1'-N1	7.20	113.96	108.20
1	AA	485	U	P-O3'-C3'	7.20	128.34	119.70
1	AA	519	C	N1-C1'-C2'	-7.20	104.08	112.00
53	CA	1398	A	P-O3'-C3'	-7.20	111.06	119.70
1	AA	1068	G	P-O3'-C3'	-7.20	111.07	119.70
58	DB	111	U	N1-C1'-C2'	-7.19	104.09	112.00
22	BA	474	G	P-O3'-C3'	7.19	128.33	119.70
53	CA	513	C	O4'-C1'-N1	7.19	113.95	108.20
22	BA	1700	A	P-O3'-C3'	-7.19	111.07	119.70
1	AA	73	C	N1-C1'-C2'	-7.19	104.09	112.00
57	DA	637	A	P-O3'-C3'	7.19	128.33	119.70
53	CA	132	C	P-O3'-C3'	-7.19	111.08	119.70
1	AA	467	U	O4'-C1'-N1	7.18	113.95	108.20
57	DA	1569	A	P-O3'-C3'	-7.18	111.08	119.70
1	AA	122	G	P-O3'-C3'	-7.18	111.08	119.70
22	BA	1380	G	P-O3'-C3'	-7.18	111.08	119.70
22	BA	1714	U	O4'-C1'-N1	-7.18	102.46	108.20
57	DA	2611	C	P-O3'-C3'	-7.18	111.08	119.70
1	AA	1394	A	P-O3'-C3'	7.17	128.31	119.70
57	DA	1064	C	P-O3'-C3'	-7.17	111.09	119.70
57	DA	2874	C	N1-C1'-C2'	-7.17	104.11	112.00
22	BA	1386	C	P-O3'-C3'	-7.17	111.10	119.70
22	BA	177	G	P-O3'-C3'	7.17	128.30	119.70
53	CA	248	C	P-O3'-C3'	-7.16	111.11	119.70
57	DA	2498	C	P-O3'-C3'	-7.16	111.11	119.70
53	CA	654	G	P-O3'-C3'	-7.15	111.12	119.70
22	BA	958	U	P-O5'-C5'	-7.15	109.46	120.90
53	CA	421	U	P-O3'-C3'	7.15	128.28	119.70
57	DA	2501	C	O4'-C1'-N1	7.15	113.92	108.20
57	DA	1998	A	N9-C1'-C2'	-7.15	104.14	112.00
22	BA	137	U	O4'-C1'-N1	-7.14	102.49	108.20
57	DA	1475	G	P-O3'-C3'	7.14	128.27	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1497	U	P-O3'-C3'	7.14	128.27	119.70
1	AA	173	U	P-O3'-C3'	7.14	128.26	119.70
22	BA	61	C	N1-C1'-C2'	-7.14	104.15	112.00
57	DA	846	U	O4'-C1'-N1	7.13	113.91	108.20
1	AA	961	U	P-O3'-C3'	-7.13	111.14	119.70
22	BA	1146	C	O4'-C1'-N1	7.13	113.91	108.20
57	DA	1982	U	P-O3'-C3'	-7.13	111.15	119.70
22	BA	1732	C	N1-C1'-C2'	7.12	123.26	114.00
22	BA	2836	U	N1-C1'-C2'	-7.12	104.17	112.00
1	AA	247	G	N9-C1'-C2'	-7.12	104.17	112.00
22	BA	1901	A	P-O3'-C3'	-7.12	111.16	119.70
57	DA	762	U	P-O3'-C3'	7.11	128.24	119.70
57	DA	2149	U	O4'-C1'-N1	7.11	113.89	108.20
57	DA	623	C	P-O3'-C3'	-7.11	111.17	119.70
57	DA	702	U	O4'-C1'-N1	7.10	113.88	108.20
1	AA	934	C	P-O3'-C3'	7.09	128.22	119.70
57	DA	2387	U	N1-C1'-C2'	-7.09	104.20	112.00
57	DA	2289	G	P-O3'-C3'	-7.09	111.19	119.70
57	DA	2299	U	P-O3'-C3'	-7.09	111.19	119.70
22	BA	958	U	N1-C1'-C2'	-7.09	104.20	112.00
1	AA	422	C	N1-C1'-C2'	7.09	123.21	114.00
22	BA	1918	A	P-O3'-C3'	7.09	128.20	119.70
53	CA	1064	G	P-O3'-C3'	7.08	128.20	119.70
22	BA	1734	G	P-O3'-C3'	-7.08	111.21	119.70
57	DA	2299	U	O4'-C1'-N1	7.08	113.86	108.20
53	CA	70	U	P-O3'-C3'	7.07	128.19	119.70
23	BB	88	C	O4'-C1'-N1	-7.07	102.54	108.20
53	CA	174	A	P-O3'-C3'	-7.07	111.22	119.70
22	BA	1967	C	P-O3'-C3'	-7.07	111.22	119.70
22	BA	2149	U	N1-C1'-C2'	-7.07	104.23	112.00
53	CA	1230	C	P-O3'-C3'	-7.07	111.22	119.70
23	BB	67	G	P-O5'-C5'	-7.06	109.60	120.90
25	BD	151	THR	C-N-CD	7.06	143.23	128.40
22	BA	980	A	P-O3'-C3'	-7.06	111.23	119.70
22	BA	2034	U	N1-C1'-C2'	-7.06	104.24	112.00
1	AA	439	U	N1-C1'-C2'	-7.05	104.24	112.00
22	BA	746	U	P-O3'-C3'	7.05	128.16	119.70
22	BA	498	G	P-O5'-C5'	-7.05	109.62	120.90
22	BA	2384	U	P-O3'-C3'	7.05	128.16	119.70
22	BA	2239	G	P-O5'-C5'	-7.04	109.63	120.90
22	BA	528	A	N1-C6-N6	7.04	122.83	118.60
22	BA	1330	C	P-O3'-C3'	-7.04	111.25	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	1053	G	P-O3'-C3'	7.04	128.15	119.70
57	DA	1378	A	P-O3'-C3'	7.04	128.15	119.70
57	DA	1920	C	P-O3'-C3'	-7.04	111.25	119.70
53	CA	705	G	P-O3'-C3'	-7.04	111.25	119.70
57	DA	235	U	O4'-C1'-N1	7.03	113.83	108.20
22	BA	2752	C	P-O3'-C3'	-7.03	111.26	119.70
22	BA	2824	C	N3-C4-C5	-7.03	119.09	121.90
57	DA	2425	A	P-O3'-C3'	7.03	128.13	119.70
57	DA	2450	A	P-O3'-C3'	-7.03	111.27	119.70
22	BA	1603	A	P-O5'-C5'	-7.02	109.66	120.90
57	DA	1717	A	P-O3'-C3'	-7.02	111.28	119.70
57	DA	1739	A	P-O3'-C3'	-7.02	111.28	119.70
22	BA	1812	U	O4'-C1'-N1	7.01	113.81	108.20
53	CA	15	G	P-O3'-C3'	-7.01	111.29	119.70
57	DA	2150	C	O4'-C1'-N1	7.01	113.81	108.20
57	DA	1615	C	N1-C1'-C2'	7.01	123.11	114.00
57	DA	1626	A	P-O3'-C3'	7.01	128.11	119.70
1	AA	372	C	P-O3'-C3'	7.00	128.10	119.70
22	BA	1110	G	P-O3'-C3'	7.00	128.10	119.70
53	CA	240	G	P-O3'-C3'	-7.00	111.30	119.70
53	CA	1367	C	O4'-C1'-N1	7.00	113.80	108.20
57	DA	421	C	P-O3'-C3'	6.99	128.09	119.70
22	BA	528	A	P-O3'-C3'	-6.99	111.31	119.70
57	DA	1206	G	P-O3'-C3'	-6.99	111.31	119.70
1	AA	267	C	P-O5'-C5'	-6.99	109.72	120.90
53	CA	67	C	O4'-C1'-N1	6.98	113.79	108.20
53	CA	245	U	P-O3'-C3'	-6.98	111.33	119.70
57	DA	353	C	P-O3'-C3'	6.98	128.07	119.70
53	CA	1147	C	P-O3'-C3'	-6.97	111.34	119.70
22	BA	788	A	P-O3'-C3'	6.96	128.06	119.70
22	BA	1461	C	O4'-C1'-N1	6.96	113.77	108.20
53	CA	643	C	P-O3'-C3'	-6.96	111.34	119.70
22	BA	1838	C	P-O3'-C3'	6.96	128.05	119.70
53	CA	686	U	O4'-C1'-N1	6.96	113.76	108.20
22	BA	1898	U	O4'-C1'-N1	6.95	113.76	108.20
53	CA	817	C	P-O3'-C3'	6.95	128.04	119.70
1	AA	452	A	P-O3'-C3'	-6.95	111.36	119.70
1	AA	704	A	P-O3'-C3'	-6.95	111.36	119.70
57	DA	1207	C	P-O3'-C3'	-6.95	111.36	119.70
57	DA	741	U	O4'-C1'-N1	6.95	113.76	108.20
57	DA	915	C	P-O3'-C3'	-6.95	111.36	119.70
57	DA	1141	U	P-O3'-C3'	6.94	128.03	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	963	U	O4'-C1'-N1	6.94	113.75	108.20
22	BA	1206	G	P-O3'-C3'	-6.93	111.38	119.70
22	BA	2791	G	P-O3'-C3'	-6.93	111.38	119.70
22	BA	1311	G	P-O3'-C3'	6.93	128.02	119.70
22	BA	1112	G	P-O3'-C3'	-6.93	111.39	119.70
1	AA	14	U	P-O5'-C5'	-6.92	109.83	120.90
1	AA	1094	G	P-O3'-C3'	6.92	128.00	119.70
53	CA	315	A	P-O3'-C3'	6.92	128.00	119.70
57	DA	2609	U	N1-C1'-C2'	6.92	122.99	114.00
53	CA	1282	C	N1-C1'-C2'	-6.92	104.39	112.00
22	BA	1250	G	O4'-C1'-N9	-6.91	102.67	108.20
1	AA	535	A	P-O3'-C3'	6.91	127.99	119.70
22	BA	866	A	N9-C1'-C2'	-6.91	104.40	112.00
23	BB	90	C	P-O5'-C5'	-6.91	109.85	120.90
22	BA	2063	C	P-O3'-C3'	-6.90	111.42	119.70
1	AA	1297	G	P-O3'-C3'	6.90	127.98	119.70
22	BA	968	C	N1-C1'-C2'	-6.90	104.41	112.00
22	BA	2307	G	P-O3'-C3'	6.90	127.98	119.70
53	CA	792	A	O4'-C1'-N9	6.90	113.72	108.20
57	DA	784	G	P-O3'-C3'	6.90	127.98	119.70
57	DA	2408	U	O4'-C1'-N1	6.90	113.72	108.20
57	DA	3	U	O4'-C1'-N1	6.90	113.72	108.20
57	DA	1010	A	P-O3'-C3'	-6.90	111.42	119.70
1	AA	1131	G	P-O3'-C3'	-6.90	111.42	119.70
22	BA	2324	U	P-O3'-C3'	6.90	127.98	119.70
22	BA	2684	U	O5'-P-OP2	-6.90	99.49	105.70
57	DA	2419	U	O4'-C1'-N1	6.90	113.72	108.20
1	AA	1055	A	P-O3'-C3'	-6.90	111.42	119.70
57	DA	1135	C	N1-C1'-C2'	-6.89	104.42	112.00
57	DA	2348	U	O4'-C1'-N1	6.89	113.71	108.20
1	AA	110	C	N1-C1'-C2'	-6.89	104.42	112.00
22	BA	486	C	P-O3'-C3'	-6.89	111.44	119.70
22	BA	1071	G	P-O3'-C3'	6.88	127.96	119.70
22	BA	1034	G	P-O3'-C3'	-6.88	111.45	119.70
53	CA	914	A	P-O3'-C3'	-6.88	111.45	119.70
1	AA	1145	A	P-O3'-C3'	6.88	127.95	119.70
23	BB	15	A	P-O5'-C5'	-6.88	109.90	120.90
57	DA	1236	G	P-O3'-C3'	6.88	127.95	119.70
1	AA	519	C	P-O3'-C3'	-6.87	111.45	119.70
1	AA	216	U	N1-C1'-C2'	-6.87	104.44	112.00
57	DA	2712	C	O4'-C1'-N1	6.87	113.70	108.20
53	CA	1215	G	P-O3'-C3'	-6.87	111.46	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	129	C	N1-C1'-C2'	-6.87	104.44	112.00
57	DA	1655	A	P-O3'-C3'	-6.87	111.46	119.70
57	DA	1838	C	P-O3'-C3'	6.87	127.94	119.70
53	CA	349	A	P-O3'-C3'	-6.86	111.47	119.70
53	CA	1366	C	O4'-C1'-N1	6.86	113.69	108.20
22	BA	2812	G	P-O3'-C3'	-6.86	111.47	119.70
22	BA	2326	C	P-O3'-C3'	6.85	127.92	119.70
57	DA	407	G	P-O3'-C3'	-6.85	111.48	119.70
22	BA	972	A	P-O3'-C3'	6.85	127.92	119.70
22	BA	2656	U	P-O3'-C3'	-6.85	111.48	119.70
53	CA	1217	C	O4'-C1'-N1	6.85	113.68	108.20
22	BA	1265	A	O5'-P-OP2	-6.85	99.54	105.70
22	BA	1728	C	O4'-C1'-N1	6.84	113.67	108.20
53	CA	974	A	P-O3'-C3'	6.84	127.91	119.70
57	DA	2622	U	O4'-C1'-N1	6.84	113.67	108.20
22	BA	2289	G	P-O3'-C3'	-6.83	111.50	119.70
57	DA	2875	C	P-O3'-C3'	-6.83	111.50	119.70
22	BA	640	C	P-O3'-C3'	6.83	127.90	119.70
22	BA	2777	G	O4'-C1'-N9	-6.83	102.74	108.20
22	BA	931	U	P-O3'-C3'	6.83	127.89	119.70
22	BA	1693	U	O4'-C1'-N1	6.83	113.66	108.20
22	BA	2682	A	P-O3'-C3'	-6.82	111.51	119.70
22	BA	2850	A	P-O3'-C3'	-6.82	111.51	119.70
1	AA	1184	G	P-O3'-C3'	-6.82	111.52	119.70
22	BA	1966	A	P-O3'-C3'	6.82	127.88	119.70
22	BA	763	G	P-O3'-C3'	-6.82	111.52	119.70
57	DA	1942	C	P-O3'-C3'	-6.81	111.53	119.70
57	DA	2566	A	P-O3'-C3'	6.81	127.87	119.70
53	CA	512	U	P-O3'-C3'	-6.81	111.53	119.70
22	BA	1033	U	O4'-C1'-N1	6.80	113.64	108.20
22	BA	1799	G	P-O3'-C3'	6.80	127.86	119.70
1	AA	266	G	P-O3'-C3'	6.80	127.86	119.70
22	BA	1238	G	N9-C1'-C2'	-6.80	104.52	112.00
22	BA	2849	U	O4'-C1'-N1	-6.79	102.77	108.20
22	BA	1653	G	O3'-P-O5'	6.79	116.90	104.00
22	BA	2035	G	O4'-C1'-N9	6.79	113.63	108.20
57	DA	1738	G	P-O3'-C3'	6.79	127.85	119.70
1	AA	1202	U	O4'-C1'-N1	6.79	113.63	108.20
57	DA	1681	G	P-O3'-C3'	6.79	127.84	119.70
22	BA	2407	A	P-O3'-C3'	-6.79	111.56	119.70
53	CA	1349	A	P-O3'-C3'	-6.78	111.56	119.70
53	CA	451	A	P-O3'-C3'	6.78	127.84	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	792	A	P-O3'-C3'	6.78	127.84	119.70
22	BA	1512	C	P-O3'-C3'	-6.78	111.56	119.70
22	BA	2561	U	O4'-C1'-N1	6.78	113.62	108.20
57	DA	945	A	O4'-C1'-N9	6.78	113.62	108.20
22	BA	577	G	OP2-P-O3'	6.78	120.11	105.20
57	DA	424	G	P-O3'-C3'	-6.78	111.57	119.70
57	DA	2620	C	O4'-C1'-N1	-6.78	102.78	108.20
57	DA	1993	U	N1-C1'-C2'	-6.77	104.55	112.00
1	AA	509	A	P-O3'-C3'	-6.77	111.58	119.70
22	BA	503	A	P-O3'-C3'	6.77	127.82	119.70
22	BA	1766	G	P-O5'-C5'	-6.77	110.07	120.90
57	DA	1498	C	P-O3'-C3'	-6.77	111.58	119.70
1	AA	566	G	P-O3'-C3'	6.77	127.82	119.70
53	CA	534	U	N1-C1'-C2'	-6.76	104.56	112.00
57	DA	1398	C	P-O3'-C3'	-6.76	111.59	119.70
57	DA	1554	U	P-O3'-C3'	6.76	127.81	119.70
22	BA	1178	C	O4'-C1'-N1	6.76	113.61	108.20
57	DA	685	A	P-O5'-C5'	-6.76	110.09	120.90
57	DA	783	A	N9-C1'-C2'	-6.75	104.57	112.00
22	BA	2880	C	P-O5'-C5'	-6.75	110.10	120.90
22	BA	2615	U	P-O3'-C3'	-6.75	111.60	119.70
57	DA	2267	A	N9-C1'-C2'	-6.74	104.58	112.00
22	BA	2821	A	N9-C1'-C2'	-6.74	104.58	112.00
57	DA	1971	U	N1-C1'-C2'	-6.74	104.58	112.00
1	AA	1337	G	P-O3'-C3'	-6.74	111.61	119.70
53	CA	116	A	N9-C1'-C2'	-6.74	104.58	112.00
57	DA	2406	A	P-O3'-C3'	6.74	127.79	119.70
22	BA	2874	C	P-O5'-C5'	-6.74	110.12	120.90
1	AA	116	A	P-O3'-C3'	-6.74	111.62	119.70
22	BA	995	C	N1-C1'-C2'	6.73	122.75	114.00
57	DA	1758	U	P-O3'-C3'	6.73	127.78	119.70
1	AA	411	A	P-O3'-C3'	6.73	127.78	119.70
22	BA	2273	A	P-O3'-C3'	6.73	127.77	119.70
57	DA	805	G	P-O3'-C3'	6.73	127.77	119.70
22	BA	2772	C	O4'-C1'-N1	-6.72	102.82	108.20
57	DA	2039	U	O4'-C1'-N1	6.72	113.58	108.20
22	BA	2714	G	P-O3'-C3'	-6.72	111.64	119.70
57	DA	2468	A	P-O3'-C3'	6.72	127.76	119.70
57	DA	52	A	P-O3'-C3'	-6.72	111.64	119.70
53	CA	1228	C	N1-C1'-C2'	-6.71	104.61	112.00
22	BA	1858	A	P-O3'-C3'	-6.71	111.65	119.70
22	BA	1707	G	P-O3'-C3'	-6.71	111.65	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	2216	G	P-O3'-C3'	-6.71	111.65	119.70
22	BA	2239	G	P-O3'-C3'	-6.71	111.65	119.70
22	BA	2582	G	P-O3'-C3'	-6.71	111.65	119.70
53	CA	1367	C	P-O3'-C3'	-6.71	111.65	119.70
53	CA	1285	A	P-O3'-C3'	6.70	127.75	119.70
57	DA	1020	A	P-O3'-C3'	6.70	127.75	119.70
1	AA	131	A	P-O3'-C3'	-6.70	111.66	119.70
22	BA	1326	U	C3'-C2'-C1'	6.70	106.86	101.50
1	AA	1399	C	O4'-C1'-N1	6.70	113.56	108.20
22	BA	2756	U	N1-C1'-C2'	6.70	122.71	114.00
53	CA	331	G	N9-C1'-C2'	-6.70	104.63	112.00
57	DA	162	U	O4'-C1'-N1	6.70	113.56	108.20
1	AA	1140	C	O4'-C1'-N1	6.70	113.56	108.20
57	DA	1759	A	P-O3'-C3'	-6.70	111.66	119.70
22	BA	1009	A	P-O5'-C5'	-6.70	110.19	120.90
22	BA	1329	U	N1-C1'-C2'	6.69	122.70	114.00
53	CA	794	A	P-O3'-C3'	-6.69	111.67	119.70
57	DA	335	C	O4'-C1'-N1	6.69	113.55	108.20
22	BA	1980	G	O4'-C1'-N9	6.69	113.55	108.20
22	BA	1385	A	P-O3'-C3'	6.68	127.72	119.70
22	BA	1944	U	P-O5'-C5'	-6.68	110.20	120.90
22	BA	1340	U	P-O3'-C3'	6.68	127.72	119.70
22	BA	2457	U	O4'-C1'-N1	6.68	113.55	108.20
53	CA	1211	U	P-O3'-C3'	6.68	127.72	119.70
57	DA	1305	C	O4'-C1'-N1	6.68	113.55	108.20
53	CA	996	A	P-O3'-C3'	-6.68	111.69	119.70
57	DA	1327	A	C3'-C2'-C1'	6.68	106.84	101.50
22	BA	434	U	O4'-C1'-N1	6.67	113.54	108.20
53	CA	94	G	P-O3'-C3'	6.67	127.71	119.70
22	BA	1023	U	C3'-C2'-C1'	6.67	106.83	101.50
57	DA	2214	C	P-O3'-C3'	-6.67	111.70	119.70
57	DA	1603	A	P-O3'-C3'	-6.67	111.70	119.70
57	DA	1320	C	P-O3'-C3'	6.66	127.70	119.70
1	AA	1395	C	P-O5'-C5'	-6.66	110.24	120.90
22	BA	2757	A	P-O3'-C3'	-6.66	111.71	119.70
1	AA	688	G	N9-C1'-C2'	-6.66	104.67	112.00
22	BA	2092	U	N1-C1'-C2'	6.66	122.66	114.00
57	DA	302	C	N1-C1'-C2'	-6.66	104.67	112.00
22	BA	786	C	C6-N1-C2	6.66	122.96	120.30
1	AA	1162	C	O4'-C1'-N1	6.65	113.52	108.20
57	DA	1113	U	O4'-C1'-N1	6.65	113.52	108.20
57	DA	1558	C	N1-C1'-C2'	6.65	122.65	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1735	A	P-O3'-C3'	-6.65	111.72	119.70
57	DA	980	A	P-O3'-C3'	6.65	127.68	119.70
57	DA	1563	U	O4'-C1'-N1	6.65	113.52	108.20
53	CA	1160	G	N9-C1'-C2'	-6.64	104.69	112.00
22	BA	783	A	C5-N7-C8	-6.64	100.58	103.90
57	DA	917	A	N9-C1'-C2'	-6.64	104.69	112.00
57	DA	1967	C	P-O3'-C3'	-6.64	111.73	119.70
22	BA	2458	G	O3'-P-O5'	-6.64	91.38	104.00
53	CA	885	G	P-O3'-C3'	-6.64	111.73	119.70
57	DA	1839	G	P-O3'-C3'	-6.64	111.73	119.70
53	CA	1297	G	P-O3'-C3'	6.64	127.67	119.70
53	CA	1288	A	P-O3'-C3'	-6.64	111.73	119.70
1	AA	306	A	P-O3'-C3'	-6.64	111.74	119.70
22	BA	1635	A	P-O5'-C5'	-6.63	110.29	120.90
1	AA	653	U	O4'-C1'-N1	6.63	113.51	108.20
22	BA	1555	G	P-O5'-C5'	-6.63	110.29	120.90
57	DA	2147	A	P-O3'-C3'	-6.63	111.74	119.70
22	BA	2474	U	O4'-C1'-N1	6.63	113.50	108.20
22	BA	196	A	O4'-C1'-N9	6.63	113.50	108.20
22	BA	2552	U	O4'-C1'-N1	-6.62	102.90	108.20
57	DA	1602	U	P-O3'-C3'	6.62	127.65	119.70
57	DA	1213	A	P-O3'-C3'	-6.62	111.75	119.70
57	DA	627	A	P-O3'-C3'	6.62	127.65	119.70
57	DA	2385	C	N1-C1'-C2'	-6.62	104.72	112.00
1	AA	344	A	P-O3'-C3'	6.62	127.64	119.70
22	BA	2874	C	P-O3'-C3'	-6.61	111.76	119.70
53	CA	931	C	O4'-C1'-N1	6.61	113.49	108.20
57	DA	1996	C	P-O3'-C3'	6.61	127.63	119.70
53	CA	95	C	P-O3'-C3'	-6.60	111.78	119.70
22	BA	2150	C	O4'-C1'-N1	6.60	113.48	108.20
57	DA	1027	A	P-O3'-C3'	-6.60	111.78	119.70
53	CA	595	A	P-O3'-C3'	6.60	127.62	119.70
58	DB	45	A	P-O3'-C3'	-6.60	111.78	119.70
1	AA	1507	A	P-O3'-C3'	-6.59	111.79	119.70
22	BA	2311	A	P-O3'-C3'	6.59	127.61	119.70
23	BB	48	U	P-O5'-C5'	-6.59	110.35	120.90
53	CA	14	U	P-O3'-C3'	-6.59	111.79	119.70
1	AA	653	U	P-O3'-C3'	6.59	127.61	119.70
22	BA	1159	U	O4'-C1'-N1	6.59	113.47	108.20
22	BA	572	A	C3'-C2'-C1'	6.59	106.77	101.50
1	AA	1530	G	N9-C1'-C2'	-6.59	104.75	112.00
1	AA	351	G	O4'-C1'-N9	6.58	113.47	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	803	G	P-O3'-C3'	-6.58	111.80	119.70
57	DA	1535	A	P-O3'-C3'	6.58	127.60	119.70
1	AA	1401	G	P-O3'-C3'	-6.58	111.80	119.70
22	BA	633	A	P-O3'-C3'	6.58	127.60	119.70
57	DA	91	A	P-O3'-C3'	6.58	127.60	119.70
1	AA	243	A	P-O3'-C3'	6.58	127.59	119.70
1	AA	755	G	P-O3'-C3'	-6.58	111.81	119.70
1	AA	14	U	P-O3'-C3'	-6.58	111.81	119.70
22	BA	2052	A	P-O3'-C3'	-6.58	111.81	119.70
53	CA	1495	U	P-O3'-C3'	6.58	127.59	119.70
57	DA	1275	A	C3'-C2'-C1'	6.58	106.76	101.50
57	DA	2656	U	P-O3'-C3'	-6.58	111.81	119.70
22	BA	2848	G	O4'-C1'-N9	6.57	113.46	108.20
22	BA	1378	A	P-O3'-C3'	6.57	127.58	119.70
57	DA	577	G	P-O3'-C3'	6.57	127.58	119.70
57	DA	375	G	N9-C1'-C2'	-6.57	104.78	112.00
57	DA	390	U	N1-C1'-C2'	6.57	122.54	114.00
57	DA	958	U	P-O3'-C3'	-6.56	111.82	119.70
1	AA	74	A	P-O3'-C3'	-6.56	111.82	119.70
22	BA	1009	A	P-O3'-C3'	-6.56	111.83	119.70
22	BA	855	G	P-O3'-C3'	-6.56	111.83	119.70
53	CA	1226	C	P-O3'-C3'	6.56	127.57	119.70
22	BA	92	U	P-O3'-C3'	-6.56	111.83	119.70
39	BR	9	GLY	N-CA-C	-6.55	96.72	113.10
22	BA	784	G	O4'-C1'-N9	-6.55	102.96	108.20
57	DA	222	A	O4'-C1'-N9	6.55	113.44	108.20
22	BA	681	G	P-O5'-C5'	-6.55	110.42	120.90
53	CA	251	G	P-O3'-C3'	6.55	127.56	119.70
1	AA	984	C	P-O3'-C3'	-6.55	111.84	119.70
57	DA	802	A	P-O3'-C3'	-6.55	111.84	119.70
22	BA	2689	U	C2-N1-C1'	-6.54	109.85	117.70
57	DA	1329	U	P-O3'-C3'	6.54	127.55	119.70
1	AA	252	U	N1-C1'-C2'	-6.54	104.80	112.00
22	BA	962	G	P-O5'-C5'	-6.54	110.43	120.90
22	BA	1848	A	P-O3'-C3'	-6.54	111.85	119.70
53	CA	531	U	O4'-C1'-N1	6.54	113.44	108.20
53	CA	381	C	N1-C1'-C2'	6.54	122.50	114.00
22	BA	628	G	P-O5'-C5'	-6.54	110.44	120.90
57	DA	589	U	O4'-C1'-N1	6.54	113.43	108.20
58	DB	40	U	N1-C1'-C2'	6.54	122.50	114.00
57	DA	2440	C	C3'-C2'-C1'	6.53	106.73	101.50
22	BA	653	U	P-O3'-C3'	6.53	127.53	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1968	G	N9-C1'-C2'	-6.52	104.83	112.00
1	AA	184	G	P-O3'-C3'	-6.52	111.88	119.70
1	AA	552	U	P-O3'-C3'	-6.52	111.88	119.70
57	DA	752	A	O4'-C1'-N9	6.51	113.41	108.20
57	DA	1980	G	P-O3'-C3'	6.51	127.52	119.70
57	DA	2023	C	P-O3'-C3'	-6.51	111.89	119.70
53	CA	486	U	O4'-C1'-N1	-6.51	102.99	108.20
57	DA	1491	G	P-O3'-C3'	-6.50	111.89	119.70
57	DA	2409	G	P-O3'-C3'	-6.50	111.89	119.70
57	DA	73	A	P-O3'-C3'	-6.50	111.90	119.70
1	AA	1213	A	P-O3'-C3'	6.50	127.50	119.70
1	AA	1447	A	P-O3'-C3'	6.50	127.50	119.70
22	BA	1325	U	O4'-C1'-N1	6.50	113.40	108.20
1	AA	801	U	O4'-C1'-N1	6.50	113.40	108.20
53	CA	72	A	P-O3'-C3'	-6.50	111.91	119.70
22	BA	1249	U	P-O3'-C3'	-6.49	111.91	119.70
57	DA	1707	G	P-O3'-C3'	-6.49	111.91	119.70
1	AA	70	U	P-O3'-C3'	6.49	127.49	119.70
22	BA	399	U	P-O3'-C3'	6.49	127.49	119.70
22	BA	1222	U	O4'-C1'-N1	6.49	113.39	108.20
57	DA	1333	G	P-O3'-C3'	-6.49	111.91	119.70
57	DA	1838	C	O4'-C1'-N1	6.49	113.39	108.20
22	BA	1213	A	P-O5'-C5'	-6.49	110.52	120.90
53	CA	575	G	C4-N9-C1'	-6.49	118.07	126.50
22	BA	729	G	P-O3'-C3'	-6.48	111.92	119.70
22	BA	2866	U	P-O3'-C3'	6.48	127.48	119.70
57	DA	1063	G	P-O3'-C3'	-6.48	111.92	119.70
22	BA	2250	G	C6-C5-N7	-6.48	126.51	130.40
22	BA	1619	G	P-O3'-C3'	-6.48	111.92	119.70
57	DA	445	C	P-O3'-C3'	-6.48	111.92	119.70
57	DA	2817	U	O4'-C1'-N1	6.48	113.38	108.20
1	AA	1066	C	N1-C1'-C2'	-6.48	104.88	112.00
57	DA	1919	A	P-O3'-C3'	-6.48	111.93	119.70
1	AA	60	A	P-O3'-C3'	6.47	127.47	119.70
22	BA	271	G	P-O3'-C3'	6.47	127.47	119.70
57	DA	1963	U	P-O3'-C3'	-6.47	111.93	119.70
22	BA	977	G	P-O3'-C3'	-6.47	111.94	119.70
22	BA	2036	C	C3'-C2'-C1'	6.47	106.67	101.50
57	DA	1114	C	O4'-C1'-N1	6.47	113.38	108.20
58	DB	56	G	P-O3'-C3'	6.47	127.46	119.70
22	BA	2447	G	O3'-P-O5'	-6.47	91.71	104.00
1	AA	1239	A	P-O3'-C3'	6.46	127.45	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	937	A	P-O3'-C3'	-6.46	111.94	119.70
57	DA	964	C	C3'-C2'-C1'	6.46	106.67	101.50
1	AA	85	U	N1-C1'-C2'	6.46	122.40	114.00
57	DA	1456	G	P-O3'-C3'	-6.46	111.95	119.70
58	DB	58	A	C3'-C2'-C1'	6.46	106.67	101.50
57	DA	87	U	O4'-C1'-N1	6.46	113.37	108.20
57	DA	776	G	C4-N9-C1'	6.46	134.90	126.50
57	DA	2667	C	P-O3'-C3'	-6.46	111.95	119.70
1	AA	891	U	P-O3'-C3'	-6.45	111.96	119.70
22	BA	1459	G	P-O3'-C3'	-6.45	111.96	119.70
57	DA	227	A	P-O3'-C3'	6.45	127.44	119.70
57	DA	2195	U	O4'-C1'-N1	6.45	113.36	108.20
22	BA	1497	U	N1-C1'-C2'	6.45	122.38	114.00
57	DA	77	G	P-O3'-C3'	-6.45	111.97	119.70
22	BA	2689	U	P-O3'-C3'	6.44	127.43	119.70
57	DA	1785	A	P-O3'-C3'	-6.44	111.97	119.70
22	BA	2356	U	O4'-C1'-N1	6.44	113.35	108.20
22	BA	1941	C	O4'-C1'-N1	-6.44	103.05	108.20
22	BA	479	A	O4'-C1'-N9	6.44	113.35	108.20
1	AA	1478	U	P-O5'-C5'	-6.43	110.61	120.90
22	BA	1265	A	OP1-P-O3'	6.43	119.35	105.20
22	BA	390	U	N1-C1'-C2'	6.43	122.36	114.00
22	BA	2249	U	P-O3'-C3'	6.43	127.42	119.70
53	CA	239	U	N1-C1'-C2'	-6.43	104.93	112.00
22	BA	2309	A	P-O3'-C3'	-6.43	111.99	119.70
22	BA	1560	G	N9-C1'-C2'	-6.42	104.93	112.00
57	DA	2069	G	N9-C1'-C2'	-6.42	104.93	112.00
53	CA	436	C	O4'-C1'-N1	-6.42	103.06	108.20
57	DA	782	A	P-O3'-C3'	6.42	127.41	119.70
1	AA	48	C	O4'-C1'-N1	6.42	113.33	108.20
2	CB	107	ARG	O-C-N	-6.42	112.43	122.70
57	DA	1856	U	O4'-C1'-N1	6.42	113.33	108.20
22	BA	975	A	N9-C1'-C2'	-6.42	104.94	112.00
22	BA	1637	A	P-O5'-C5'	-6.42	110.64	120.90
53	CA	440	C	O4'-C1'-N1	6.42	113.33	108.20
57	DA	2873	A	P-O3'-C3'	6.42	127.40	119.70
22	BA	1674	G	P-O3'-C3'	6.41	127.39	119.70
57	DA	2259	U	P-O3'-C3'	-6.41	112.01	119.70
57	DA	446	G	C3'-C2'-C1'	6.40	106.62	101.50
1	AA	331	G	P-O3'-C3'	-6.40	112.02	119.70
22	BA	2214	C	P-O3'-C3'	-6.40	112.02	119.70
57	DA	775	G	O4'-C1'-N9	6.40	113.32	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	438	U	P-O3'-C3'	6.40	127.38	119.70
1	AA	1129	C	N1-C1'-C2'	6.40	122.32	114.00
22	BA	556	A	P-O3'-C3'	-6.40	112.02	119.70
57	DA	671	C	N1-C1'-C2'	-6.40	104.96	112.00
57	DA	129	C	P-O3'-C3'	-6.39	112.03	119.70
57	DA	2226	C	C3'-C2'-C1'	6.39	106.62	101.50
57	DA	947	A	C3'-C2'-C1'	6.39	106.61	101.50
57	DA	2339	C	P-O3'-C3'	-6.39	112.03	119.70
57	DA	620	G	P-O3'-C3'	6.39	127.37	119.70
1	AA	547	A	O4'-C1'-N9	6.39	113.31	108.20
57	DA	302	C	O4'-C1'-N1	6.39	113.31	108.20
22	BA	1611	C	P-O5'-C5'	-6.38	110.69	120.90
57	DA	1400	U	N1-C1'-C2'	-6.38	104.98	112.00
53	CA	485	U	O4'-C1'-N1	-6.38	103.10	108.20
53	CA	564	C	P-O3'-C3'	-6.38	112.05	119.70
57	DA	575	A	P-O3'-C3'	-6.38	112.05	119.70
22	BA	1025	G	P-O3'-C3'	6.38	127.35	119.70
57	DA	397	U	O4'-C1'-N1	6.38	113.30	108.20
57	DA	1993	U	C3'-C2'-C1'	6.38	106.60	101.50
57	DA	1415	U	P-O3'-C3'	6.37	127.34	119.70
22	BA	763	G	C3'-C2'-C1'	6.37	106.60	101.50
57	DA	1023	U	P-O3'-C3'	-6.37	112.06	119.70
22	BA	1008	A	O3'-P-O5'	6.37	116.10	104.00
57	DA	670	A	O4'-C1'-N9	-6.37	103.11	108.20
22	BA	1568	G	P-O3'-C3'	-6.36	112.07	119.70
1	AA	428	G	P-O3'-C3'	6.36	127.33	119.70
57	DA	777	G	N9-C1'-C2'	-6.36	105.00	112.00
53	CA	995	C	N1-C1'-C2'	-6.36	105.01	112.00
57	DA	963	U	N1-C1'-C2'	-6.36	105.01	112.00
57	DA	1699	G	C3'-C2'-C1'	-6.36	96.42	101.50
22	BA	489	G	P-O3'-C3'	6.35	127.33	119.70
57	DA	1733	G	P-O3'-C3'	-6.35	112.08	119.70
1	AA	1095	U	C3'-C2'-C1'	6.35	106.58	101.50
53	CA	328	C	O4'-C1'-N1	-6.35	103.12	108.20
57	DA	1552	A	O4'-C1'-N9	6.35	113.28	108.20
57	DA	1617	C	O4'-C1'-N1	6.35	113.28	108.20
22	BA	2459	A	P-O3'-C3'	-6.35	112.08	119.70
57	DA	2572	A	P-O3'-C3'	6.35	127.32	119.70
22	BA	2137	U	P-O3'-C3'	-6.35	112.08	119.70
53	CA	68	G	N9-C1'-C2'	-6.35	105.02	112.00
22	BA	321	U	P-O3'-C3'	6.34	127.31	119.70
22	BA	2873	A	P-O3'-C3'	6.34	127.31	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	247	G	N9-C1'-C2'	-6.34	105.03	112.00
57	DA	2493	U	N1-C1'-C2'	-6.34	105.02	112.00
57	DA	2800	A	C3'-C2'-C1'	6.34	106.57	101.50
22	BA	846	U	P-O3'-C3'	6.34	127.31	119.70
1	AA	686	U	N1-C1'-C2'	6.34	122.24	114.00
22	BA	2615	U	N1-C1'-C2'	-6.33	105.03	112.00
22	BA	783	A	N1-C6-N6	6.33	122.40	118.60
57	DA	1937	A	P-O3'-C3'	6.33	127.30	119.70
1	AA	47	C	P-O3'-C3'	6.33	127.30	119.70
22	BA	2063	C	N1-C1'-C2'	-6.33	105.03	112.00
22	BA	957	C	O4'-C1'-N1	6.33	113.26	108.20
22	BA	73	A	P-O3'-C3'	-6.33	112.11	119.70
22	BA	920	A	P-O3'-C3'	-6.33	112.11	119.70
22	BA	2151	U	O4'-C1'-N1	6.33	113.26	108.20
57	DA	2520	C	C3'-C2'-C1'	6.33	106.56	101.50
57	DA	1110	G	P-O3'-C3'	6.33	127.29	119.70
22	BA	2609	U	P-O3'-C3'	6.33	127.29	119.70
57	DA	1325	U	P-O3'-C3'	6.32	127.29	119.70
57	DA	1493	C	N1-C1'-C2'	6.32	122.22	114.00
57	DA	2438	U	O4'-C1'-N1	6.32	113.26	108.20
22	BA	914	G	N9-C1'-C2'	-6.32	105.05	112.00
22	BA	2820	A	P-O3'-C3'	6.32	127.29	119.70
1	AA	688	G	P-O3'-C3'	-6.32	112.12	119.70
22	BA	197	A	P-O3'-C3'	-6.32	112.12	119.70
22	BA	1769	U	O4'-C1'-N1	6.31	113.25	108.20
1	AA	1068	G	N9-C1'-C2'	-6.31	105.06	112.00
22	BA	1627	G	C8-N9-C4	-6.31	103.88	106.40
57	DA	244	A	C3'-C2'-C1'	6.31	106.55	101.50
57	DA	230	G	P-O3'-C3'	-6.31	112.13	119.70
57	DA	2094	A	C3'-C2'-C1'	6.31	106.55	101.50
22	BA	763	G	C4-N9-C1'	6.31	134.70	126.50
22	BA	1872	A	C3'-C2'-C1'	6.31	106.55	101.50
57	DA	1458	U	P-O3'-C3'	6.31	127.27	119.70
1	AA	982	U	P-O3'-C3'	6.30	127.27	119.70
1	AA	1202	U	C3'-C2'-C1'	6.30	106.54	101.50
22	BA	588	U	C3'-C2'-C1'	6.30	106.54	101.50
22	BA	1494	A	P-O3'-C3'	-6.30	112.14	119.70
1	AA	1131	G	N9-C1'-C2'	-6.30	105.07	112.00
22	BA	1157	G	P-O3'-C3'	-6.30	112.14	119.70
22	BA	1250	G	N9-C1'-C2'	6.30	122.19	114.00
57	DA	813	U	O4'-C1'-N1	6.30	113.24	108.20
22	BA	1533	C	O4'-C1'-N1	-6.30	103.16	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	729	G	C3'-C2'-C1'	6.30	106.54	101.50
22	BA	2215	C	N1-C1'-C2'	-6.30	105.07	112.00
22	BA	2215	C	P-O3'-C3'	-6.29	112.15	119.70
22	BA	1476	U	C3'-C2'-C1'	6.29	106.53	101.50
22	BA	442	G	P-O3'-C3'	6.29	127.25	119.70
22	BA	1350	C	P-O3'-C3'	-6.29	112.15	119.70
53	CA	697	U	O4'-C1'-N1	6.29	113.23	108.20
22	BA	1034	G	P-O5'-C5'	-6.29	110.84	120.90
1	AA	977	A	P-O3'-C3'	-6.29	112.16	119.70
1	AA	1349	A	P-O3'-C3'	-6.29	112.16	119.70
22	BA	645	C	P-O5'-C5'	-6.29	110.84	120.90
22	BA	831	G	P-O3'-C3'	-6.29	112.16	119.70
22	BA	1707	G	C3'-C2'-C1'	6.29	106.53	101.50
57	DA	163	C	N1-C1'-C2'	-6.29	105.08	112.00
1	AA	90	C	O4'-C1'-N1	6.28	113.23	108.20
1	AA	721	G	P-O3'-C3'	6.28	127.24	119.70
22	BA	166	U	P-O3'-C3'	-6.28	112.16	119.70
22	BA	2498	C	P-O3'-C3'	-6.28	112.16	119.70
53	CA	316	C	O4'-C1'-N1	6.28	113.23	108.20
57	DA	1077	A	P-O3'-C3'	-6.28	112.16	119.70
1	AA	1282	C	P-O3'-C3'	-6.28	112.16	119.70
23	BB	45	A	N9-C1'-C2'	-6.28	105.09	112.00
23	BB	53	A	P-O3'-C3'	-6.28	112.17	119.70
53	CA	452	A	P-O3'-C3'	-6.28	112.17	119.70
57	DA	2392	A	N9-C1'-C2'	-6.28	105.09	112.00
57	DA	741	U	P-O3'-C3'	-6.28	112.17	119.70
22	BA	1429	G	N9-C1'-C2'	-6.27	105.10	112.00
53	CA	509	A	P-O3'-C3'	-6.27	112.17	119.70
57	DA	1290	C	O4'-C1'-N1	6.27	113.22	108.20
57	DA	76	C	O4'-C1'-N1	6.27	113.22	108.20
57	DA	788	A	P-O3'-C3'	6.27	127.22	119.70
1	AA	344	A	O4'-C1'-N9	6.26	113.21	108.20
22	BA	2517	C	C6-N1-C2	6.26	122.81	120.30
57	DA	546	U	O4'-C1'-N1	6.26	113.21	108.20
53	CA	421	U	O4'-C1'-N1	6.26	113.21	108.20
57	DA	1942	C	N1-C1'-C2'	-6.26	105.11	112.00
22	BA	2552	U	P-O3'-C3'	-6.26	112.19	119.70
22	BA	75	G	P-O3'-C3'	-6.26	112.19	119.70
57	DA	2339	C	C3'-C2'-C1'	6.26	106.50	101.50
57	DA	2868	A	C3'-C2'-C1'	6.26	106.50	101.50
53	CA	1151	A	P-O3'-C3'	6.25	127.20	119.70
1	AA	368	U	N1-C1'-C2'	-6.25	105.12	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1451	U	N1-C1'-C2'	6.25	122.13	114.00
53	CA	129	A	P-O3'-C3'	6.25	127.20	119.70
53	CA	1336	C	P-O3'-C3'	6.25	127.20	119.70
57	DA	374	A	C3'-C2'-C1'	6.25	106.50	101.50
57	DA	1612	C	C3'-C2'-C1'	6.25	106.50	101.50
1	AA	1046	A	O4'-C1'-N9	6.25	113.20	108.20
22	BA	1499	C	O4'-C1'-N1	6.25	113.20	108.20
22	BA	533	G	P-O3'-C3'	-6.24	112.21	119.70
57	DA	130	C	O4'-C1'-N1	6.24	113.19	108.20
53	CA	1161	C	P-O3'-C3'	-6.24	112.22	119.70
57	DA	959	A	C3'-C2'-C1'	6.24	106.49	101.50
53	CA	1449	C	O4'-C1'-N1	6.24	113.19	108.20
57	DA	122	G	P-O3'-C3'	-6.24	112.22	119.70
53	CA	1196	A	P-O3'-C3'	6.23	127.18	119.70
1	AA	1200	C	N1-C1'-C2'	6.23	122.10	114.00
57	DA	335	C	P-O3'-C3'	-6.23	112.22	119.70
22	BA	2847	U	P-O3'-C3'	6.23	127.18	119.70
22	BA	1129	A	C3'-C2'-C1'	6.23	106.48	101.50
53	CA	81	A	P-O3'-C3'	6.23	127.17	119.70
1	AA	1319	A	P-O3'-C3'	6.22	127.17	119.70
57	DA	959	A	P-O3'-C3'	-6.22	112.23	119.70
22	BA	120	U	P-O3'-C3'	6.22	127.17	119.70
22	BA	2880	C	P-O3'-C3'	-6.22	112.23	119.70
23	BB	13	G	P-O5'-C5'	-6.22	110.94	120.90
22	BA	395	U	N1-C1'-C2'	6.22	122.09	114.00
1	AA	120	A	O4'-C1'-N9	-6.22	103.22	108.20
53	CA	1127	G	P-O3'-C3'	-6.22	112.24	119.70
57	DA	1268	A	C3'-C2'-C1'	6.22	106.48	101.50
1	AA	559	A	P-O3'-C3'	6.21	127.16	119.70
57	DA	740	C	C3'-C2'-C1'	6.21	106.47	101.50
57	DA	2776	A	P-O3'-C3'	6.21	127.15	119.70
1	AA	81	A	P-O3'-C3'	6.21	127.15	119.70
1	AA	965	U	P-O3'-C3'	6.21	127.15	119.70
57	DA	250	G	P-O3'-C3'	-6.21	112.25	119.70
57	DA	628	G	C3'-C2'-C1'	6.21	106.47	101.50
53	CA	1160	G	P-O3'-C3'	-6.20	112.25	119.70
1	AA	1283	U	P-O3'-C3'	-6.20	112.26	119.70
22	BA	2609	U	C6-N1-C2	6.20	124.72	121.00
57	DA	765	C	C3'-C2'-C1'	6.20	106.46	101.50
57	DA	2581	G	O4'-C1'-N9	6.20	113.16	108.20
53	CA	1530	G	P-O3'-C3'	-6.20	112.26	119.70
22	BA	2427	C	P-O5'-C5'	-6.20	110.98	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	884	U	O4'-C1'-N1	6.20	113.16	108.20
57	DA	436	C	O4'-C1'-N1	6.20	113.16	108.20
57	DA	2391	G	P-O3'-C3'	6.20	127.14	119.70
22	BA	933	A	C3'-C2'-C1'	6.20	106.46	101.50
57	DA	1839	G	N9-C1'-C2'	-6.20	105.18	112.00
22	BA	451	U	P-O3'-C3'	6.20	127.13	119.70
22	BA	1135	C	C3'-C2'-C1'	6.19	106.45	101.50
1	AA	1498	U	P-O3'-C3'	6.19	127.13	119.70
22	BA	740	C	O5'-P-OP2	-6.19	100.13	105.70
1	AA	1127	G	P-O3'-C3'	-6.19	112.27	119.70
22	BA	125	A	P-O3'-C3'	6.19	127.12	119.70
22	BA	740	C	P-O5'-C5'	-6.19	111.00	120.90
22	BA	1693	U	P-O3'-C3'	6.19	127.12	119.70
1	AA	1064	G	O4'-C1'-N9	6.18	113.15	108.20
22	BA	1498	C	P-O3'-C3'	-6.18	112.28	119.70
22	BA	1993	U	C3'-C2'-C1'	6.18	106.45	101.50
57	DA	49	A	P-O3'-C3'	6.18	127.12	119.70
1	AA	365	U	C5-C6-N1	-6.18	119.61	122.70
53	CA	83	C	O4'-C1'-N1	6.18	113.14	108.20
53	CA	499	A	P-O3'-C3'	6.18	127.11	119.70
57	DA	2716	C	O4'-C1'-N1	6.18	113.14	108.20
1	AA	1129	C	P-O3'-C3'	6.17	127.11	119.70
23	BB	45	A	C3'-C2'-C1'	6.17	106.44	101.50
1	AA	914	A	C3'-C2'-C1'	6.17	106.44	101.50
22	BA	1602	U	P-O3'-C3'	6.17	127.10	119.70
53	CA	914	A	C3'-C2'-C1'	6.17	106.44	101.50
53	CA	1308	U	O4'-C1'-N1	6.17	113.14	108.20
22	BA	2454	G	P-O5'-C5'	-6.16	111.04	120.90
22	BA	2640	G	P-O5'-C5'	-6.16	111.04	120.90
57	DA	116	C	O4'-C1'-N1	6.16	113.13	108.20
58	DB	41	G	P-O3'-C3'	-6.16	112.31	119.70
22	BA	2249	U	N1-C1'-C2'	6.16	122.01	114.00
22	BA	637	A	P-O3'-C3'	6.16	127.09	119.70
57	DA	28	A	C3'-C2'-C1'	6.16	106.43	101.50
57	DA	1674	G	C4-N9-C1'	6.16	134.51	126.50
53	CA	414	A	P-O3'-C3'	-6.16	112.31	119.70
57	DA	1247	A	O4'-C1'-N9	6.16	113.13	108.20
22	BA	61	C	P-O5'-C5'	-6.16	111.05	120.90
57	DA	391	A	C3'-C2'-C1'	6.16	106.42	101.50
1	AA	1141	C	O4'-C1'-N1	6.15	113.12	108.20
22	BA	406	G	N9-C1'-C2'	-6.15	105.23	112.00
22	BA	1944	U	O5'-P-OP2	-6.15	100.16	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1682	G	N9-C1'-C2'	-6.15	105.23	112.00
22	BA	628	G	P-O3'-C3'	-6.15	112.32	119.70
22	BA	321	U	O4'-C1'-N1	6.15	113.12	108.20
1	AA	971	G	O4'-C1'-N9	6.15	113.12	108.20
22	BA	1237	A	P-O3'-C3'	6.15	127.08	119.70
22	BA	747	U	N1-C1'-C2'	-6.14	105.24	112.00
22	BA	2284	A	P-O5'-C5'	-6.14	111.07	120.90
1	AA	91	U	C3'-C2'-C1'	6.14	106.41	101.50
1	AA	169	C	O4'-C1'-N1	6.14	113.11	108.20
22	BA	475	C	C3'-C2'-C1'	6.14	106.41	101.50
57	DA	2879	A	P-O3'-C3'	6.14	127.07	119.70
22	BA	1920	C	P-O3'-C3'	-6.14	112.33	119.70
22	BA	2250	G	N7-C8-N9	6.14	116.17	113.10
22	BA	2047	C	P-O5'-C5'	-6.14	111.08	120.90
57	DA	687	C	C3'-C2'-C1'	6.13	106.41	101.50
57	DA	531	C	N1-C1'-C2'	6.13	121.97	114.00
22	BA	2393	U	O4'-C1'-N1	6.13	113.11	108.20
53	CA	995	C	P-O3'-C3'	-6.13	112.34	119.70
22	BA	2891	U	O4'-C1'-N1	-6.13	103.30	108.20
53	CA	1094	G	P-O3'-C3'	6.13	127.06	119.70
57	DA	412	A	C3'-C2'-C1'	6.13	106.40	101.50
57	DA	1803	A	C3'-C2'-C1'	6.13	106.40	101.50
1	AA	1302	C	N1-C1'-C2'	-6.12	105.26	112.00
57	DA	335	C	C3'-C2'-C1'	6.12	106.40	101.50
22	BA	13	A	P-O3'-C3'	6.12	127.05	119.70
1	AA	97	G	C3'-C2'-C1'	6.12	106.40	101.50
22	BA	1255	U	P-O3'-C3'	6.12	127.04	119.70
22	BA	435	C	C3'-C2'-C1'	6.12	106.39	101.50
22	BA	762	U	P-O3'-C3'	6.12	127.04	119.70
22	BA	1429	G	C3'-C2'-C1'	6.12	106.39	101.50
23	BB	90	C	P-O3'-C3'	-6.12	112.36	119.70
57	DA	858	G	P-O3'-C3'	6.12	127.04	119.70
57	DA	1089	A	P-O3'-C3'	6.12	127.04	119.70
57	DA	1401	G	P-O3'-C3'	-6.12	112.36	119.70
57	DA	611	C	O4'-C1'-N1	6.12	113.09	108.20
57	DA	1993	U	P-O3'-C3'	-6.12	112.36	119.70
57	DA	2498	C	C3'-C2'-C1'	6.12	106.39	101.50
22	BA	206	U	P-O3'-C3'	-6.11	112.36	119.70
53	CA	356	A	O4'-C1'-N9	6.11	113.09	108.20
53	CA	875	U	O4'-C1'-N1	6.11	113.09	108.20
57	DA	605	G	C3'-C2'-C1'	6.11	106.39	101.50
57	DA	2036	C	P-O3'-C3'	-6.11	112.36	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1794	A	O4'-C1'-N9	6.11	113.09	108.20
53	CA	982	U	P-O3'-C3'	6.11	127.03	119.70
57	DA	974	G	P-O3'-C3'	6.11	127.03	119.70
1	AA	198	G	C3'-C2'-C1'	6.10	106.38	101.50
57	DA	449	A	C3'-C2'-C1'	6.10	106.38	101.50
57	DA	1455	G	P-O3'-C3'	-6.10	112.38	119.70
57	DA	1008	A	P-O3'-C3'	6.10	127.02	119.70
57	DA	2021	C	N1-C1'-C2'	6.10	121.93	114.00
22	BA	116	C	P-O3'-C3'	6.09	127.01	119.70
22	BA	2086	U	O4'-C1'-N1	6.09	113.08	108.20
53	CA	765	G	P-O3'-C3'	-6.09	112.39	119.70
22	BA	527	C	N1-C1'-C2'	6.09	121.92	114.00
22	BA	962	G	P-O3'-C3'	-6.09	112.39	119.70
53	CA	555	U	P-O3'-C3'	-6.09	112.39	119.70
53	CA	960	U	P-O3'-C3'	6.09	127.01	119.70
57	DA	477	A	C3'-C2'-C1'	6.09	106.37	101.50
57	DA	2727	A	P-O3'-C3'	-6.09	112.39	119.70
1	AA	559	A	O4'-C1'-N9	6.09	113.07	108.20
53	CA	1507	A	P-O3'-C3'	-6.09	112.39	119.70
53	CA	1184	G	C3'-C2'-C1'	6.09	106.37	101.50
57	DA	1158	C	P-O3'-C3'	-6.09	112.40	119.70
57	DA	2069	G	P-O3'-C3'	-6.09	112.40	119.70
57	DA	2384	U	P-O3'-C3'	6.09	127.00	119.70
1	AA	479	U	O4'-C1'-N1	6.08	113.07	108.20
22	BA	557	C	P-O5'-C5'	-6.08	111.16	120.90
57	DA	60	G	C4-N9-C1'	-6.08	118.59	126.50
22	BA	1130	U	N1-C1'-C2'	6.08	121.90	114.00
22	BA	1524	G	N9-C1'-C2'	-6.08	105.32	112.00
22	BA	2656	U	N1-C1'-C2'	-6.08	105.32	112.00
53	CA	1244	G	C3'-C2'-C1'	6.08	106.36	101.50
57	DA	2311	A	P-O3'-C3'	6.08	126.99	119.70
57	DA	1396	U	P-O3'-C3'	6.07	126.99	119.70
57	DA	1919	A	N9-C1'-C2'	-6.07	105.32	112.00
22	BA	2384	U	N1-C1'-C2'	6.07	121.89	114.00
53	CA	704	A	C3'-C2'-C1'	6.07	106.36	101.50
57	DA	1817	G	P-O3'-C3'	-6.07	112.42	119.70
1	AA	279	A	O4'-C1'-N9	-6.07	103.34	108.20
53	CA	1202	U	P-O3'-C3'	-6.07	112.42	119.70
57	DA	1822	C	O4'-C1'-N1	6.07	113.06	108.20
22	BA	2250	G	N1-C6-O6	6.07	123.54	119.90
53	CA	985	C	O4'-C1'-N1	6.07	113.05	108.20
1	AA	429	U	P-O3'-C3'	6.07	126.98	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1142	G	P-O3'-C3'	-6.07	112.42	119.70
1	AA	1320	C	O4'-C1'-N1	6.07	113.05	108.20
57	DA	638	G	P-O3'-C3'	-6.07	112.42	119.70
22	BA	913	U	P-O3'-C3'	6.06	126.98	119.70
22	BA	2001	C	O5'-P-OP2	-6.06	100.24	105.70
57	DA	61	C	C3'-C2'-C1'	6.06	106.35	101.50
57	DA	1399	C	N1-C1'-C2'	-6.06	105.33	112.00
1	AA	508	U	P-O3'-C3'	6.06	126.97	119.70
22	BA	1062	G	C3'-C2'-C1'	6.06	106.35	101.50
22	BA	1396	U	O3'-P-O5'	-6.06	92.48	104.00
22	BA	1734	G	C3'-C2'-C1'	6.06	106.35	101.50
1	AA	884	U	O4'-C1'-N1	6.06	113.05	108.20
1	AA	1506	U	O4'-C1'-N1	6.06	113.05	108.20
57	DA	2225	A	O4'-C1'-N9	6.06	113.05	108.20
53	CA	438	U	P-O3'-C3'	6.06	126.97	119.70
22	BA	946	C	C3'-C2'-C1'	6.05	106.34	101.50
22	BA	2759	G	P-O5'-C5'	-6.05	111.21	120.90
53	CA	170	U	O4'-C1'-N1	6.05	113.04	108.20
53	CA	1217	C	C3'-C2'-C1'	6.05	106.34	101.50
53	CA	1319	A	P-O3'-C3'	6.05	126.97	119.70
57	DA	2060	A	P-O3'-C3'	6.05	126.97	119.70
22	BA	1858	A	C3'-C2'-C1'	6.05	106.34	101.50
22	BA	1784	A	N1-C6-N6	6.05	122.23	118.60
57	DA	1902	C	O4'-C1'-N1	6.05	113.04	108.20
53	CA	63	C	O4'-C1'-N1	6.05	113.04	108.20
1	AA	1365	G	P-O3'-C3'	-6.05	112.44	119.70
22	BA	554	U	O4'-C1'-N1	6.05	113.04	108.20
22	BA	1394	U	O4'-C1'-N1	-6.05	103.36	108.20
22	BA	1524	G	P-O3'-C3'	-6.05	112.44	119.70
53	CA	239	U	P-O3'-C3'	-6.05	112.44	119.70
1	AA	935	A	C3'-C2'-C1'	6.04	106.34	101.50
57	DA	2386	A	P-O3'-C3'	-6.04	112.44	119.70
57	DA	273	G	C3'-C2'-C1'	6.04	106.34	101.50
22	BA	2043	C	O4'-C1'-N1	-6.04	103.37	108.20
22	BA	2343	U	O4'-C1'-N1	-6.04	103.37	108.20
1	AA	95	C	N1-C1'-C2'	-6.04	105.36	112.00
57	DA	1024	G	C3'-C2'-C1'	6.04	106.33	101.50
22	BA	1118	C	P-O5'-C5'	-6.04	111.24	120.90
1	AA	654	G	C3'-C2'-C1'	6.04	106.33	101.50
22	BA	1310	G	P-O5'-C5'	-6.04	111.24	120.90
22	BA	1490	A	P-O3'-C3'	6.04	126.94	119.70
22	BA	2483	C	C6-N1-C2	6.04	122.71	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	52	C	P-O3'-C3'	-6.03	112.46	119.70
53	CA	71	A	C3'-C2'-C1'	6.03	106.33	101.50
53	CA	428	G	C4-N9-C1'	-6.03	118.66	126.50
58	DB	111	U	P-O3'-C3'	-6.03	112.47	119.70
22	BA	794	A	P-O3'-C3'	-6.03	112.47	119.70
53	CA	654	G	C3'-C2'-C1'	6.03	106.32	101.50
53	CA	1345	U	P-O3'-C3'	6.03	126.93	119.70
57	DA	1568	G	P-O3'-C3'	-6.03	112.47	119.70
22	BA	386	G	O4'-C1'-N9	6.03	113.02	108.20
22	BA	562	U	O4'-C1'-N1	-6.03	103.38	108.20
22	BA	1330	C	C3'-C2'-C1'	6.03	106.32	101.50
22	BA	2034	U	P-O3'-C3'	-6.03	112.47	119.70
22	BA	2307	G	O4'-C1'-N9	6.03	113.02	108.20
23	BB	12	C	N1-C1'-C2'	6.03	121.83	114.00
57	DA	1304	A	C3'-C2'-C1'	6.03	106.32	101.50
1	AA	794	A	P-O3'-C3'	-6.02	112.47	119.70
22	BA	2427	C	C3'-C2'-C1'	6.02	106.32	101.50
57	DA	103	A	C3'-C2'-C1'	6.02	106.32	101.50
22	BA	412	A	N9-C1'-C2'	-6.02	105.38	112.00
57	DA	14	A	C3'-C2'-C1'	6.02	106.31	101.50
57	DA	576	U	C3'-C2'-C1'	6.02	106.32	101.50
57	DA	1916	A	P-O3'-C3'	-6.02	112.48	119.70
57	DA	2239	G	C3'-C2'-C1'	6.02	106.32	101.50
22	BA	144	A	N9-C1'-C2'	-6.02	105.38	112.00
23	BB	24	G	P-O3'-C3'	6.02	126.92	119.70
57	DA	1458	U	O4'-C1'-N1	6.02	113.01	108.20
1	AA	184	G	C3'-C2'-C1'	6.01	106.31	101.50
53	CA	210	C	N1-C1'-C2'	6.01	121.82	114.00
57	DA	2712	C	P-O3'-C3'	6.01	126.92	119.70
22	BA	208	C	C6-N1-C2	6.01	122.70	120.30
53	CA	513	C	C3'-C2'-C1'	6.01	106.31	101.50
1	AA	976	G	C3'-C2'-C1'	6.01	106.31	101.50
57	DA	13	A	P-O3'-C3'	6.01	126.91	119.70
57	DA	1539	U	C3'-C2'-C1'	6.01	106.31	101.50
22	BA	556	A	P-O5'-C5'	-6.01	111.28	120.90
23	BB	40	U	O4'-C1'-N1	6.01	113.01	108.20
22	BA	1009	A	O5'-P-OP2	-6.01	100.29	105.70
57	DA	2593	U	P-O3'-C3'	-6.01	112.49	119.70
1	AA	816	A	C3'-C2'-C1'	6.00	106.30	101.50
22	BA	2423	U	O4'-C1'-N1	-6.00	103.40	108.20
1	AA	654	G	P-O3'-C3'	-6.00	112.50	119.70
22	BA	324	A	N9-C1'-C2'	-6.00	105.39	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	2239	G	P-O3'-C3'	-6.00	112.50	119.70
22	BA	1022	G	P-O3'-C3'	6.00	126.90	119.70
57	DA	234	U	C3'-C2'-C1'	6.00	106.30	101.50
1	AA	500	G	N9-C1'-C2'	-6.00	105.40	112.00
22	BA	1250	G	P-O3'-C3'	6.00	126.90	119.70
57	DA	1828	G	P-O3'-C3'	6.00	126.89	119.70
57	DA	2657	A	C3'-C2'-C1'	6.00	106.30	101.50
57	DA	2851	A	C3'-C2'-C1'	6.00	106.30	101.50
1	AA	520	A	P-O3'-C3'	-6.00	112.51	119.70
22	BA	1933	G	P-O3'-C3'	5.99	126.89	119.70
57	DA	484	C	P-O3'-C3'	-5.99	112.51	119.70
1	AA	199	A	C3'-C2'-C1'	5.99	106.29	101.50
22	BA	2297	A	P-O3'-C3'	-5.99	112.51	119.70
53	CA	1160	G	C3'-C2'-C1'	5.99	106.29	101.50
57	DA	1654	A	C3'-C2'-C1'	5.99	106.29	101.50
1	AA	1323	G	C3'-C2'-C1'	5.99	106.29	101.50
57	DA	1733	G	N9-C1'-C2'	-5.99	105.41	112.00
1	AA	517	G	P-O3'-C3'	5.99	126.89	119.70
57	DA	588	U	O4'-C1'-N1	-5.99	103.41	108.20
57	DA	1693	U	N1-C1'-C2'	5.99	121.78	114.00
57	DA	2866	U	O4'-C1'-N1	5.99	112.99	108.20
1	AA	1282	C	C3'-C2'-C1'	5.99	106.29	101.50
22	BA	671	C	C3'-C2'-C1'	5.99	106.29	101.50
22	BA	951	C	N3-C2-O2	5.99	126.09	121.90
53	CA	277	C	N1-C1'-C2'	-5.99	105.42	112.00
53	CA	643	C	C3'-C2'-C1'	5.99	106.29	101.50
57	DA	2364	C	O4'-C1'-N1	5.99	112.99	108.20
22	BA	1072	C	N1-C1'-C2'	-5.98	105.42	112.00
53	CA	885	G	C3'-C2'-C1'	5.98	106.29	101.50
57	DA	2143	C	O4'-C1'-N1	5.98	112.99	108.20
22	BA	2635	A	P-O5'-C5'	-5.98	111.33	120.90
53	CA	996	A	C3'-C2'-C1'	5.98	106.28	101.50
57	DA	2250	G	O4'-C1'-N9	-5.98	103.42	108.20
22	BA	1289	C	N1-C1'-C2'	-5.98	105.42	112.00
1	AA	966	G	P-O3'-C3'	-5.98	112.53	119.70
57	DA	2051	A	P-O3'-C3'	5.98	126.87	119.70
1	AA	793	U	P-O3'-C3'	-5.98	112.53	119.70
1	AA	1380	U	O4'-C1'-N1	5.97	112.98	108.20
22	BA	2368	C	P-O3'-C3'	-5.97	112.53	119.70
57	DA	2272	U	O4'-C1'-N1	-5.97	103.42	108.20
57	DA	2496	C	O4'-C1'-N1	5.97	112.98	108.20
57	DA	265	A	O4'-C1'-N9	5.97	112.98	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1451	C	N1-C1'-C2'	5.97	121.76	114.00
1	AA	423	G	C3'-C2'-C1'	5.97	106.27	101.50
53	CA	615	G	O4'-C1'-N9	5.97	112.97	108.20
22	BA	802	A	P-O3'-C3'	-5.97	112.54	119.70
22	BA	1654	A	P-O3'-C3'	-5.97	112.54	119.70
57	DA	1901	A	C3'-C2'-C1'	5.97	106.27	101.50
1	AA	1169	A	C3'-C2'-C1'	5.96	106.27	101.50
22	BA	273	G	C3'-C2'-C1'	5.96	106.27	101.50
22	BA	528	A	N9-C1'-C2'	-5.96	105.44	112.00
22	BA	1707	G	N9-C1'-C2'	-5.96	105.44	112.00
22	BA	142	A	C3'-C2'-C1'	5.96	106.27	101.50
57	DA	2462	C	O4'-C1'-N1	5.96	112.97	108.20
53	CA	122	G	N9-C1'-C2'	-5.96	105.44	112.00
23	BB	42	C	C3'-C2'-C1'	5.96	106.27	101.50
53	CA	1052	U	P-O3'-C3'	-5.96	112.55	119.70
1	AA	1091	U	O4'-C1'-N1	5.96	112.97	108.20
22	BA	528	A	C6-C5-N7	-5.95	128.13	132.30
22	BA	2808	G	O5'-P-OP2	-5.95	100.34	105.70
57	DA	2052	A	N9-C1'-C2'	-5.95	105.45	112.00
1	AA	1453	G	P-O3'-C3'	-5.95	112.56	119.70
57	DA	1717	A	C3'-C2'-C1'	5.95	106.26	101.50
1	AA	330	C	P-O3'-C3'	-5.95	112.56	119.70
57	DA	1021	A	C3'-C2'-C1'	5.95	106.26	101.50
57	DA	1034	G	C3'-C2'-C1'	5.95	106.26	101.50
1	AA	794	A	C3'-C2'-C1'	5.95	106.26	101.50
22	BA	208	C	N3-C2-O2	5.95	126.06	121.90
22	BA	1091	G	O4'-C1'-N9	5.95	112.96	108.20
1	AA	596	A	C3'-C2'-C1'	5.95	106.26	101.50
22	BA	1181	U	C3'-C2'-C1'	5.95	106.26	101.50
57	DA	2777	G	C3'-C2'-C1'	5.95	106.26	101.50
31	DJ	25	LEU	CA-CB-CG	5.95	128.98	115.30
53	CA	199	A	C3'-C2'-C1'	5.94	106.25	101.50
57	DA	861	A	C3'-C2'-C1'	5.94	106.25	101.50
57	DA	1523	U	O4'-C1'-N1	5.94	112.95	108.20
57	DA	2682	A	C3'-C2'-C1'	5.94	106.25	101.50
1	AA	162	A	P-O3'-C3'	5.93	126.82	119.70
22	BA	1828	G	P-O3'-C3'	5.93	126.82	119.70
57	DA	369	U	O4'-C1'-N1	5.93	112.95	108.20
57	DA	2603	G	P-O3'-C3'	-5.93	112.58	119.70
22	BA	18	U	P-O5'-C5'	-5.93	111.41	120.90
22	BA	528	A	N7-C8-N9	5.93	116.77	113.80
22	BA	2797	U	P-O3'-C3'	5.93	126.82	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	1288	A	C3'-C2'-C1'	5.93	106.25	101.50
57	DA	2808	G	P-O3'-C3'	5.93	126.82	119.70
1	AA	497	G	C3'-C2'-C1'	5.93	106.24	101.50
1	AA	718	A	P-O3'-C3'	-5.93	112.58	119.70
22	BA	1476	U	O4'-C1'-N1	5.93	112.94	108.20
22	BA	74	A	P-O3'-C3'	5.93	126.81	119.70
22	BA	2211	A	O4'-C1'-N9	5.93	112.94	108.20
1	AA	121	U	N1-C1'-C2'	-5.93	105.48	112.00
1	AA	372	C	O4'-C1'-N1	5.93	112.94	108.20
22	BA	1779	U	P-O5'-C5'	-5.92	111.42	120.90
53	CA	575	G	C8-N9-C1'	5.92	134.70	127.00
1	AA	1323	G	P-O3'-C3'	-5.92	112.59	119.70
22	BA	579	G	P-O3'-C3'	5.92	126.81	119.70
57	DA	231	A	P-O3'-C3'	-5.92	112.60	119.70
22	BA	1963	U	C3'-C2'-C1'	5.92	106.23	101.50
22	BA	2547	A	P-O3'-C3'	5.92	126.80	119.70
53	CA	1299	A	P-O3'-C3'	-5.92	112.60	119.70
57	DA	1396	U	O4'-C1'-N1	5.92	112.94	108.20
57	DA	1695	G	C3'-C2'-C1'	5.92	106.23	101.50
57	DA	2893	A	P-O3'-C3'	5.92	126.80	119.70
53	CA	519	C	C3'-C2'-C1'	5.92	106.23	101.50
57	DA	2214	C	C3'-C2'-C1'	5.92	106.23	101.50
53	CA	131	A	P-O3'-C3'	-5.91	112.60	119.70
1	AA	213	G	P-O3'-C3'	5.91	126.79	119.70
22	BA	2297	A	O4'-C1'-N9	-5.91	103.47	108.20
1	AA	1151	A	P-O3'-C3'	5.91	126.79	119.70
22	BA	1742	U	P-O3'-C3'	5.91	126.79	119.70
22	BA	2149	U	C3'-C2'-C1'	5.91	106.23	101.50
57	DA	2150	C	C3'-C2'-C1'	5.91	106.23	101.50
57	DA	87	U	C3'-C2'-C1'	5.91	106.22	101.50
57	DA	1929	G	OP1-P-O3'	5.91	118.19	105.20
57	DA	1997	C	C3'-C2'-C1'	5.90	106.22	101.50
1	AA	1381	U	C3'-C2'-C1'	5.90	106.22	101.50
57	DA	1839	G	C3'-C2'-C1'	5.90	106.22	101.50
53	CA	291	U	O4'-C1'-N1	5.90	112.92	108.20
22	BA	1497	U	O4'-C1'-N1	5.90	112.92	108.20
1	AA	468	A	P-O3'-C3'	-5.90	112.62	119.70
22	BA	2012	G	O5'-P-OP2	-5.89	100.39	105.70
57	DA	1451	C	P-O3'-C3'	5.89	126.77	119.70
57	DA	2578	G	P-O3'-C3'	-5.89	112.63	119.70
53	CA	884	U	P-O3'-C3'	5.89	126.77	119.70
53	CA	1381	U	C3'-C2'-C1'	5.89	106.21	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	77	G	C3'-C2'-C1'	5.89	106.21	101.50
53	CA	331	G	C3'-C2'-C1'	5.89	106.21	101.50
57	DA	1079	C	P-O3'-C3'	-5.89	112.63	119.70
22	BA	919	U	O4'-C1'-N1	-5.89	103.49	108.20
22	BA	1254	A	C3'-C2'-C1'	5.89	106.21	101.50
53	CA	1127	G	C3'-C2'-C1'	5.89	106.21	101.50
22	BA	391	A	P-O3'-C3'	-5.89	112.64	119.70
57	DA	1669	A	C3'-C2'-C1'	5.89	106.21	101.50
22	BA	748	G	O4'-C1'-N9	5.88	112.91	108.20
53	CA	816	A	C3'-C2'-C1'	5.88	106.21	101.50
22	BA	671	C	P-O3'-C3'	-5.88	112.64	119.70
1	AA	1241	G	C3'-C2'-C1'	5.88	106.20	101.50
22	BA	1451	C	P-O3'-C3'	5.88	126.76	119.70
53	CA	47	C	P-O3'-C3'	5.88	126.76	119.70
57	DA	60	G	C8-N9-C1'	5.88	134.64	127.00
22	BA	1234	U	O4'-C1'-N1	5.88	112.90	108.20
22	BA	2504	U	P-O3'-C3'	-5.88	112.65	119.70
57	DA	916	G	C3'-C2'-C1'	5.88	106.20	101.50
57	DA	1400	U	C3'-C2'-C1'	5.88	106.20	101.50
22	BA	1379	U	C3'-C2'-C1'	5.88	106.20	101.50
22	BA	1658	C	O4'-C1'-N1	-5.88	103.50	108.20
57	DA	1206	G	C3'-C2'-C1'	5.88	106.20	101.50
22	BA	1287	A	C3'-C2'-C1'	5.87	106.20	101.50
57	DA	1722	A	P-O3'-C3'	-5.87	112.65	119.70
57	DA	2615	U	C3'-C2'-C1'	5.87	106.20	101.50
1	AA	89	U	O4'-C1'-N1	5.87	112.89	108.20
22	BA	1565	C	P-O3'-C3'	5.87	126.74	119.70
57	DA	231	A	C3'-C2'-C1'	5.87	106.19	101.50
57	DA	1735	A	C3'-C2'-C1'	5.87	106.19	101.50
57	DA	1157	G	P-O3'-C3'	-5.87	112.66	119.70
22	BA	2148	G	C3'-C2'-C1'	5.86	106.19	101.50
57	DA	1956	U	C3'-C2'-C1'	5.86	106.19	101.50
53	CA	448	A	O4'-C1'-N9	5.86	112.89	108.20
57	DA	142	A	P-O3'-C3'	5.86	126.73	119.70
57	DA	1430	G	C3'-C2'-C1'	5.86	106.19	101.50
22	BA	2440	C	C3'-C2'-C1'	5.86	106.19	101.50
53	CA	247	G	C3'-C2'-C1'	5.86	106.19	101.50
53	CA	253	A	C3'-C2'-C1'	5.86	106.19	101.50
53	CA	1395	C	P-O3'-C3'	-5.86	112.67	119.70
57	DA	2150	C	P-O3'-C3'	-5.86	112.67	119.70
22	BA	91	A	P-O3'-C3'	5.86	126.73	119.70
22	BA	485	C	P-O3'-C3'	-5.86	112.67	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	70	G	P-O3'-C3'	5.85	126.72	119.70
57	DA	217	A	C3'-C2'-C1'	5.85	106.18	101.50
22	BA	1303	G	P-O3'-C3'	-5.85	112.68	119.70
53	CA	1449	C	C3'-C2'-C1'	5.85	106.18	101.50
22	BA	2774	C	P-O5'-C5'	-5.85	111.54	120.90
53	CA	1202	U	C3'-C2'-C1'	5.85	106.18	101.50
57	DA	1217	U	O4'-C1'-N1	5.85	112.88	108.20
53	CA	567	G	C3'-C2'-C1'	5.85	106.18	101.50
1	AA	972	C	P-O3'-C3'	-5.85	112.69	119.70
57	DA	571	U	P-O3'-C3'	5.85	126.72	119.70
57	DA	2409	G	C3'-C2'-C1'	5.85	106.18	101.50
1	AA	1087	G	C3'-C2'-C1'	5.84	106.17	101.50
1	AA	1158	C	N1-C1'-C2'	-5.84	105.57	112.00
1	AA	1531	A	P-O3'-C3'	-5.84	112.69	119.70
57	DA	2266	A	P-O3'-C3'	5.84	126.72	119.70
1	AA	368	U	C3'-C2'-C1'	5.84	106.17	101.50
22	BA	243	U	P-O3'-C3'	-5.84	112.69	119.70
1	AA	567	G	C3'-C2'-C1'	5.84	106.17	101.50
22	BA	2267	A	C3'-C2'-C1'	5.84	106.17	101.50
57	DA	492	A	P-O3'-C3'	-5.84	112.69	119.70
57	DA	604	G	C3'-C2'-C1'	5.84	106.17	101.50
22	BA	2021	C	O3'-P-O5'	-5.84	92.91	104.00
53	CA	423	G	C3'-C2'-C1'	5.84	106.17	101.50
2	CB	146	SER	C-N-CA	5.84	136.29	121.70
57	DA	1576	U	O4'-C1'-N1	5.83	112.87	108.20
1	AA	132	C	O4'-C1'-N1	5.83	112.87	108.20
1	AA	414	A	C3'-C2'-C1'	5.83	106.17	101.50
1	AA	972	C	C3'-C2'-C1'	5.83	106.17	101.50
22	BA	35	G	C3'-C2'-C1'	5.83	106.17	101.50
53	CA	652	U	P-O3'-C3'	5.83	126.70	119.70
53	CA	885	G	N9-C1'-C2'	-5.83	105.59	112.00
57	DA	861	A	P-O3'-C3'	-5.83	112.70	119.70
22	BA	655	A	P-O3'-C3'	5.83	126.70	119.70
53	CA	733	G	P-O3'-C3'	5.83	126.69	119.70
53	CA	1505	G	C3'-C2'-C1'	5.83	106.16	101.50
22	BA	781	A	P-O3'-C3'	5.83	126.69	119.70
22	BA	1289	C	C3'-C2'-C1'	5.83	106.16	101.50
22	BA	807	U	P-O5'-C5'	-5.83	111.58	120.90
22	BA	1537	G	C3'-C2'-C1'	5.83	106.16	101.50
57	DA	492	A	C3'-C2'-C1'	5.83	106.16	101.50
57	DA	2573	C	N1-C1'-C2'	-5.83	105.59	112.00
1	AA	90	C	N1-C1'-C2'	-5.82	105.59	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	549	C	C3'-C2'-C1'	5.82	106.16	101.50
22	BA	1733	G	P-O3'-C3'	-5.82	112.71	119.70
53	CA	969	A	P-O3'-C3'	-5.82	112.71	119.70
1	AA	857	C	O4'-C1'-N1	5.82	112.86	108.20
57	DA	995	C	P-O3'-C3'	5.82	126.69	119.70
1	AA	51	A	P-O3'-C3'	5.82	126.69	119.70
22	BA	302	C	P-O3'-C3'	-5.82	112.72	119.70
57	DA	2348	U	C3'-C2'-C1'	5.82	106.16	101.50
57	DA	397	U	C3'-C2'-C1'	5.82	106.16	101.50
22	BA	2267	A	P-O3'-C3'	-5.82	112.72	119.70
53	CA	500	G	N9-C1'-C2'	-5.82	105.60	112.00
1	AA	366	A	P-O3'-C3'	5.82	126.68	119.70
22	BA	553	G	P-O3'-C3'	-5.82	112.72	119.70
22	BA	2836	U	P-O3'-C3'	-5.82	112.72	119.70
22	BA	1992	G	C4-N9-C1'	-5.81	118.94	126.50
22	BA	2136	G	C3'-C2'-C1'	5.81	106.15	101.50
22	BA	2615	U	C3'-C2'-C1'	5.81	106.15	101.50
57	DA	230	G	C3'-C2'-C1'	5.81	106.15	101.50
57	DA	1649	G	P-O3'-C3'	-5.81	112.72	119.70
57	DA	1734	G	C3'-C2'-C1'	5.81	106.15	101.50
22	BA	268	C	P-O3'-C3'	-5.81	112.73	119.70
1	AA	247	G	P-O3'-C3'	-5.81	112.73	119.70
1	AA	1469	C	P-O5'-C5'	-5.81	111.61	120.90
22	BA	2630	G	P-O3'-C3'	-5.81	112.73	119.70
53	CA	353	A	O4'-C1'-N9	5.81	112.85	108.20
53	CA	497	G	C3'-C2'-C1'	5.81	106.15	101.50
22	BA	2327	A	C3'-C2'-C1'	5.81	106.15	101.50
57	DA	1649	G	C3'-C2'-C1'	5.81	106.15	101.50
57	DA	1653	G	P-O3'-C3'	5.81	126.67	119.70
22	BA	346	A	P-O3'-C3'	-5.80	112.73	119.70
22	BA	570	G	P-O5'-C5'	-5.80	111.61	120.90
53	CA	821	G	N9-C1'-C2'	-5.80	105.62	112.00
53	CA	1148	U	C3'-C2'-C1'	5.80	106.14	101.50
53	CA	891	U	C3'-C2'-C1'	5.80	106.14	101.50
53	CA	1367	C	C3'-C2'-C1'	5.80	106.14	101.50
22	BA	482	A	C3'-C2'-C1'	5.80	106.14	101.50
58	DB	17	C	P-O3'-C3'	-5.80	112.74	119.70
22	BA	410	G	P-O3'-C3'	5.80	126.66	119.70
22	BA	229	C	C3'-C2'-C1'	5.80	106.14	101.50
1	AA	950	U	O4'-C1'-N1	5.79	112.84	108.20
57	DA	1555	G	N9-C1'-C2'	-5.79	105.63	112.00
22	BA	2570	G	P-O3'-C3'	-5.79	112.75	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	248	C	C3'-C2'-C1'	5.79	106.13	101.50
57	DA	1961	C	O4'-C1'-N1	5.79	112.83	108.20
22	BA	1694	C	P-O3'-C3'	5.79	126.64	119.70
22	BA	2470	G	P-O3'-C3'	5.79	126.64	119.70
53	CA	1244	G	P-O3'-C3'	-5.79	112.76	119.70
57	DA	670	A	P-O3'-C3'	5.79	126.64	119.70
22	BA	436	C	O4'-C1'-N1	5.78	112.83	108.20
53	CA	452	A	C3'-C2'-C1'	5.78	106.12	101.50
22	BA	2062	A	N9-C1'-C2'	-5.78	105.64	112.00
53	CA	870	U	N1-C1'-C2'	5.78	121.51	114.00
1	AA	13	U	O4'-C1'-N1	5.78	112.82	108.20
1	AA	210	C	P-O3'-C3'	5.78	126.63	119.70
22	BA	1929	G	P-O3'-C3'	5.78	126.63	119.70
57	DA	777	G	P-O3'-C3'	-5.78	112.77	119.70
1	AA	1365	G	N9-C1'-C2'	-5.78	105.65	112.00
53	CA	1452	C	P-O3'-C3'	5.78	126.63	119.70
57	DA	303	G	C3'-C2'-C1'	5.78	106.12	101.50
57	DA	353	C	O4'-C1'-N1	-5.78	103.58	108.20
57	DA	2458	G	C4-N9-C1'	5.78	134.01	126.50
57	DA	2459	A	C3'-C2'-C1'	5.78	106.12	101.50
22	BA	1493	C	O4'-C1'-N1	5.77	112.82	108.20
22	BA	2385	C	C3'-C2'-C1'	5.77	106.12	101.50
23	BB	45	A	P-O3'-C3'	-5.77	112.77	119.70
2	CB	146	SER	CA-C-N	5.77	129.90	117.20
57	DA	143	C	C3'-C2'-C1'	5.77	106.12	101.50
57	DA	1386	C	P-O3'-C3'	-5.77	112.77	119.70
53	CA	1031	C	P-O3'-C3'	5.77	126.62	119.70
53	CA	1168	U	C3'-C2'-C1'	5.77	106.12	101.50
57	DA	638	G	C3'-C2'-C1'	5.77	106.11	101.50
1	AA	116	A	N9-C1'-C2'	-5.77	105.66	112.00
1	AA	266	G	O3'-P-O5'	5.77	114.96	104.00
22	BA	1250	G	P-O5'-C5'	-5.77	111.67	120.90
53	CA	439	U	P-O5'-C5'	-5.77	111.67	120.90
57	DA	1010	A	C3'-C2'-C1'	5.77	106.11	101.50
22	BA	456	C	O4'-C1'-N1	-5.76	103.59	108.20
22	BA	1615	C	O3'-P-O5'	-5.76	93.05	104.00
22	BA	1022	G	N9-C4-C5	5.76	107.70	105.40
58	DB	110	C	P-O3'-C3'	-5.76	112.78	119.70
1	AA	652	U	P-O3'-C3'	5.76	126.61	119.70
53	CA	210	C	P-O3'-C3'	5.76	126.61	119.70
57	DA	1388	G	C3'-C2'-C1'	5.76	106.11	101.50
22	BA	346	A	N9-C1'-C2'	-5.76	105.67	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	562	U	O4'-C1'-N1	-5.76	103.59	108.20
57	DA	2136	G	C3'-C2'-C1'	5.76	106.11	101.50
22	BA	96	C	C6-N1-C2	5.76	122.60	120.30
22	BA	1062	G	P-O3'-C3'	-5.76	112.79	119.70
57	DA	1274	A	C3'-C2'-C1'	5.76	106.11	101.50
22	BA	1538	G	C3'-C2'-C1'	5.75	106.10	101.50
22	BA	763	G	C8-N9-C1'	-5.75	119.52	127.00
22	BA	783	A	C4-C5-N7	5.75	113.58	110.70
22	BA	329	G	P-O3'-C3'	5.75	126.60	119.70
22	BA	1119	U	P-O3'-C3'	-5.75	112.80	119.70
53	CA	82	G	C3'-C2'-C1'	5.75	106.10	101.50
53	CA	1366	C	N1-C1'-C2'	-5.75	105.67	112.00
57	DA	92	U	C3'-C2'-C1'	5.75	106.10	101.50
22	BA	728	G	O4'-C1'-N9	5.75	112.80	108.20
22	BA	2062	A	C3'-C2'-C1'	5.75	106.10	101.50
53	CA	686	U	P-O3'-C3'	5.75	126.60	119.70
57	DA	510	C	C3'-C2'-C1'	5.75	106.10	101.50
57	DA	1821	A	C3'-C2'-C1'	5.75	106.10	101.50
1	AA	1047	G	OP2-P-O3'	5.75	117.84	105.20
22	BA	2417	C	P-O5'-C5'	-5.75	111.71	120.90
22	BA	2492	U	C3'-C2'-C1'	5.75	106.10	101.50
57	DA	945	A	P-O3'-C3'	5.75	126.59	119.70
57	DA	860	U	P-O3'-C3'	-5.75	112.81	119.70
57	DA	1274	A	P-O3'-C3'	-5.75	112.81	119.70
22	BA	1276	A	P-O3'-C3'	-5.74	112.81	119.70
53	CA	984	C	O4'-C1'-N1	5.74	112.79	108.20
53	CA	1217	C	P-O3'-C3'	-5.74	112.81	119.70
57	DA	2683	C	C3'-C2'-C1'	5.74	106.09	101.50
1	AA	74	A	N9-C1'-C2'	-5.74	105.68	112.00
57	DA	1077	A	C3'-C2'-C1'	5.74	106.09	101.50
1	AA	251	G	O4'-C1'-N9	-5.74	103.61	108.20
22	BA	1060	U	P-O3'-C3'	5.74	126.59	119.70
53	CA	536	C	N1-C1'-C2'	-5.74	105.69	112.00
57	DA	1274	A	N9-C1'-C2'	-5.74	105.69	112.00
57	DA	2756	U	P-O3'-C3'	5.74	126.59	119.70
53	CA	1139	G	P-O3'-C3'	5.74	126.59	119.70
57	DA	2880	C	C3'-C2'-C1'	5.74	106.09	101.50
57	DA	2896	C	O4'-C1'-N1	5.74	112.79	108.20
22	BA	390	U	O4'-C1'-N1	-5.74	103.61	108.20
22	BA	1993	U	P-O3'-C3'	-5.74	112.81	119.70
57	DA	1340	U	P-O3'-C3'	5.74	126.58	119.70
1	AA	1424	U	O4'-C1'-N1	5.73	112.79	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1145	C	P-O3'-C3'	-5.73	112.82	119.70
22	BA	919	U	C5-C6-N1	5.73	125.57	122.70
22	BA	1696	G	P-O3'-C3'	-5.73	112.82	119.70
53	CA	224	U	O4'-C1'-N1	5.73	112.78	108.20
22	BA	1885	A	C3'-C2'-C1'	5.73	106.08	101.50
57	DA	527	C	N1-C1'-C2'	5.73	121.45	114.00
53	CA	686	U	N1-C1'-C2'	5.73	121.45	114.00
1	AA	1141	C	C3'-C2'-C1'	5.73	106.08	101.50
53	CA	509	A	C3'-C2'-C1'	5.73	106.08	101.50
57	DA	1158	C	C3'-C2'-C1'	5.73	106.08	101.50
58	DB	16	G	C3'-C2'-C1'	5.73	106.08	101.50
1	AA	1055	A	N9-C1'-C2'	-5.73	105.70	112.00
22	BA	1931	U	P-O3'-C3'	-5.73	112.83	119.70
1	AA	984	C	C3'-C2'-C1'	5.72	106.08	101.50
1	AA	1066	C	P-O3'-C3'	-5.72	112.83	119.70
22	BA	1499	C	C3'-C2'-C1'	5.72	106.08	101.50
57	DA	1204	A	P-O3'-C3'	5.72	126.57	119.70
57	DA	1492	G	C3'-C2'-C1'	5.72	106.08	101.50
22	BA	571	U	P-O3'-C3'	5.72	126.56	119.70
22	BA	2836	U	P-O5'-C5'	-5.72	111.75	120.90
57	DA	1025	G	P-O3'-C3'	5.72	126.56	119.70
22	BA	2405	G	P-O3'-C3'	5.72	126.56	119.70
23	BB	57	A	P-O5'-C5'	-5.72	111.75	120.90
53	CA	914	A	N9-C1'-C2'	-5.72	105.71	112.00
23	BB	16	G	P-O3'-C3'	-5.72	112.84	119.70
57	DA	229	C	O4'-C1'-N1	5.72	112.77	108.20
57	DA	442	G	P-O3'-C3'	5.72	126.56	119.70
1	AA	914	A	P-O3'-C3'	-5.71	112.84	119.70
22	BA	1130	U	P-O3'-C3'	5.71	126.56	119.70
57	DA	639	U	C3'-C2'-C1'	5.71	106.07	101.50
57	DA	2603	G	N9-C1'-C2'	-5.71	105.71	112.00
22	BA	944	C	O4'-C1'-N1	5.71	112.77	108.20
22	BA	1013	C	C3'-C2'-C1'	5.71	106.07	101.50
53	CA	316	C	C3'-C2'-C1'	5.71	106.07	101.50
57	DA	406	G	P-O3'-C3'	-5.71	112.84	119.70
57	DA	491	G	C3'-C2'-C1'	5.71	106.07	101.50
57	DA	1157	G	C3'-C2'-C1'	5.71	106.07	101.50
22	BA	1648	U	P-O3'-C3'	-5.71	112.85	119.70
57	DA	1633	G	P-O3'-C3'	5.71	126.55	119.70
57	DA	1557	C	C3'-C2'-C1'	5.71	106.07	101.50
57	DA	1997	C	P-O3'-C3'	-5.71	112.85	119.70
57	DA	2459	A	P-O3'-C3'	-5.71	112.85	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	2756	U	N1-C1'-C2'	5.71	121.42	114.00
22	BA	1494	A	C3'-C2'-C1'	5.71	106.06	101.50
57	DA	2063	C	C3'-C2'-C1'	5.71	106.07	101.50
1	AA	92	U	P-O3'-C3'	-5.71	112.85	119.70
22	BA	120	U	P-O5'-C5'	-5.71	111.77	120.90
22	BA	746	U	N1-C1'-C2'	5.71	121.42	114.00
57	DA	2386	A	C3'-C2'-C1'	5.71	106.06	101.50
22	BA	1045	C	N1-C1'-C2'	5.70	121.41	114.00
53	CA	347	G	C3'-C2'-C1'	5.70	106.06	101.50
53	CA	688	G	N9-C1'-C2'	-5.70	105.72	112.00
57	DA	575	A	C3'-C2'-C1'	5.70	106.06	101.50
1	AA	9	G	N9-C1'-C2'	-5.70	105.73	112.00
1	AA	1283	U	O4'-C1'-N1	5.70	112.76	108.20
57	DA	618	G	P-O3'-C3'	-5.70	112.86	119.70
22	BA	2440	C	P-O3'-C3'	-5.70	112.86	119.70
53	CA	353	A	C3'-C2'-C1'	5.70	106.06	101.50
57	DA	1132	U	O4'-C1'-N1	-5.70	103.64	108.20
1	AA	486	U	P-O3'-C3'	-5.70	112.86	119.70
57	DA	229	C	P-O3'-C3'	-5.70	112.86	119.70
22	BA	1647	U	P-O3'-C3'	5.70	126.53	119.70
57	DA	1635	A	N9-C1'-C2'	-5.70	105.74	112.00
57	DA	2333	A	P-O3'-C3'	5.70	126.53	119.70
1	AA	1184	G	N9-C1'-C2'	-5.69	105.74	112.00
22	BA	672	C	O5'-P-OP2	-5.69	100.58	105.70
22	BA	2631	G	P-O5'-C5'	-5.69	111.80	120.90
33	BL	82	LEU	CA-CB-CG	5.69	128.39	115.30
57	DA	459	U	C3'-C2'-C1'	5.69	106.05	101.50
57	DA	1385	A	P-O3'-C3'	5.69	126.53	119.70
57	DA	2216	G	C3'-C2'-C1'	5.69	106.05	101.50
57	DA	2699	C	O4'-C1'-N1	5.69	112.75	108.20
53	CA	577	G	C3'-C2'-C1'	5.69	106.05	101.50
57	DA	484	C	C3'-C2'-C1'	5.69	106.05	101.50
57	DA	2382	G	P-O3'-C3'	5.69	126.53	119.70
1	AA	1283	U	C3'-C2'-C1'	5.69	106.05	101.50
22	BA	621	A	P-O5'-C5'	-5.69	111.80	120.90
22	BA	1785	A	C3'-C2'-C1'	5.69	106.05	101.50
22	BA	1027	A	P-O3'-C3'	-5.69	112.88	119.70
22	BA	1499	C	N1-C1'-C2'	-5.68	105.75	112.00
53	CA	92	U	C3'-C2'-C1'	5.68	106.05	101.50
1	AA	564	C	P-O3'-C3'	-5.68	112.88	119.70
22	BA	2752	C	C3'-C2'-C1'	5.68	106.05	101.50
1	AA	772	U	P-O3'-C3'	-5.68	112.89	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	1326	U	O4'-C1'-N1	5.68	112.74	108.20
57	DA	141	G	P-O3'-C3'	5.68	126.52	119.70
1	AA	468	A	C3'-C2'-C1'	5.68	106.04	101.50
53	CA	816	A	P-O3'-C3'	-5.68	112.89	119.70
1	AA	686	U	O4'-C1'-N1	5.68	112.74	108.20
22	BA	1181	U	P-O3'-C3'	-5.68	112.89	119.70
53	CA	366	A	P-O3'-C3'	5.68	126.51	119.70
1	AA	1095	U	P-O3'-C3'	-5.67	112.89	119.70
57	DA	2492	U	C3'-C2'-C1'	5.67	106.04	101.50
1	AA	865	A	P-O3'-C3'	5.67	126.51	119.70
57	DA	1510	G	C3'-C2'-C1'	5.67	106.04	101.50
57	DA	1784	A	P-O3'-C3'	5.67	126.51	119.70
22	BA	379	G	P-O5'-C5'	-5.67	111.83	120.90
57	DA	424	G	N9-C1'-C2'	-5.67	105.76	112.00
57	DA	2611	C	C3'-C2'-C1'	5.67	106.04	101.50
22	BA	369	U	N1-C1'-C2'	5.67	121.37	114.00
57	DA	1060	U	N1-C1'-C2'	5.67	121.37	114.00
57	DA	1009	A	C3'-C2'-C1'	5.67	106.03	101.50
57	DA	1114	C	N1-C1'-C2'	-5.67	105.77	112.00
22	BA	1986	C	P-O3'-C3'	-5.66	112.90	119.70
53	CA	1146	A	C3'-C2'-C1'	5.66	106.03	101.50
53	CA	1161	C	O4'-C1'-N1	5.66	112.73	108.20
57	DA	1027	A	C3'-C2'-C1'	5.66	106.03	101.50
57	DA	1857	G	P-O3'-C3'	5.66	126.50	119.70
53	CA	642	A	P-O3'-C3'	-5.66	112.91	119.70
57	DA	407	G	C3'-C2'-C1'	5.66	106.03	101.50
22	BA	1313	U	O4'-C1'-N1	5.66	112.73	108.20
53	CA	199	A	P-O3'-C3'	-5.66	112.91	119.70
57	DA	105	C	O4'-C1'-N1	5.66	112.73	108.20
22	BA	1249	U	C3'-C2'-C1'	5.66	106.03	101.50
57	DA	490	C	O4'-C1'-N1	-5.66	103.67	108.20
57	DA	1739	A	C3'-C2'-C1'	5.66	106.03	101.50
57	DA	2199	A	P-O3'-C3'	-5.66	112.91	119.70
22	BA	1821	A	P-O5'-C5'	-5.65	111.85	120.90
1	AA	915	A	O4'-C1'-N9	5.65	112.72	108.20
22	BA	1919	A	C3'-C2'-C1'	5.65	106.02	101.50
57	DA	1291	C	C3'-C2'-C1'	5.65	106.02	101.50
57	DA	1457	U	O4'-C1'-N1	5.65	112.72	108.20
53	CA	1349	A	C3'-C2'-C1'	5.65	106.02	101.50
57	DA	783	A	C3'-C2'-C1'	5.65	106.02	101.50
58	DB	68	C	P-O3'-C3'	-5.65	112.92	119.70
1	AA	267	C	C3'-C2'-C1'	5.65	106.02	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1073	A	C3'-C2'-C1'	5.65	106.02	101.50
22	BA	1288	G	O5'-P-OP2	-5.65	100.62	105.70
57	DA	206	U	P-O3'-C3'	-5.65	112.92	119.70
22	BA	2086	U	P-O3'-C3'	5.65	126.47	119.70
57	DA	2217	G	N9-C1'-C2'	-5.65	105.79	112.00
22	BA	2849	U	P-O5'-C5'	-5.64	111.87	120.90
53	CA	915	A	N9-C1'-C2'	-5.64	105.79	112.00
57	DA	1682	G	C3'-C2'-C1'	5.64	106.02	101.50
1	AA	817	C	N1-C1'-C2'	5.64	121.33	114.00
22	BA	1866	A	C3'-C2'-C1'	5.64	106.01	101.50
53	CA	1332	A	N9-C1'-C2'	-5.64	105.79	112.00
57	DA	727	A	C3'-C2'-C1'	5.64	106.01	101.50
57	DA	1415	U	O4'-C1'-N1	5.64	112.71	108.20
22	BA	593	U	O4'-C1'-N1	5.64	112.71	108.20
23	BB	42	C	P-O3'-C3'	-5.64	112.93	119.70
53	CA	965	U	P-O3'-C3'	5.64	126.47	119.70
22	BA	958	U	C3'-C2'-C1'	5.64	106.01	101.50
22	BA	2504	U	P-O5'-C5'	-5.64	111.88	120.90
57	DA	2543	G	P-O3'-C3'	-5.64	112.93	119.70
53	CA	66	A	O4'-C1'-N9	-5.64	103.69	108.20
1	AA	813	U	N1-C1'-C2'	-5.64	105.80	112.00
22	BA	763	G	N9-C1'-C2'	-5.64	105.80	112.00
53	CA	6	G	P-O3'-C3'	-5.64	112.94	119.70
53	CA	37	U	O4'-C1'-N1	5.64	112.71	108.20
53	CA	87	C	O4'-C1'-N1	5.63	112.71	108.20
53	CA	1145	A	P-O3'-C3'	5.63	126.46	119.70
57	DA	2683	C	O4'-C1'-N1	5.63	112.71	108.20
58	DB	68	C	C3'-C2'-C1'	5.63	106.01	101.50
58	DB	110	C	C3'-C2'-C1'	5.63	106.01	101.50
22	BA	1926	U	P-O3'-C3'	-5.63	112.94	119.70
1	AA	1383	C	C6-N1-C2	5.63	122.55	120.30
22	BA	412	A	C3'-C2'-C1'	5.63	106.00	101.50
22	BA	1459	G	C3'-C2'-C1'	5.63	106.01	101.50
53	CA	520	A	C3'-C2'-C1'	5.63	106.00	101.50
57	DA	656	G	C3'-C2'-C1'	5.63	106.01	101.50
1	AA	439	U	C3'-C2'-C1'	5.63	106.00	101.50
22	BA	387	U	P-O5'-C5'	-5.63	111.89	120.90
53	CA	429	U	P-O3'-C3'	5.63	126.45	119.70
57	DA	1114	C	C3'-C2'-C1'	5.63	106.00	101.50
57	DA	1401	G	C3'-C2'-C1'	5.63	106.00	101.50
22	BA	2424	C	C5-C6-N1	-5.63	118.19	121.00
22	BA	656	G	C8-N9-C4	-5.63	104.15	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1367	A	P-O3'-C3'	5.63	126.45	119.70
1	AA	198	G	P-O3'-C3'	-5.62	112.95	119.70
1	AA	436	C	O4'-C1'-N1	5.62	112.70	108.20
1	AA	509	A	C3'-C2'-C1'	5.62	106.00	101.50
22	BA	1491	G	P-O3'-C3'	-5.62	112.95	119.70
57	DA	389	G	C3'-C2'-C1'	5.62	106.00	101.50
57	DA	475	C	O4'-C1'-N1	-5.62	103.70	108.20
57	DA	1491	G	C3'-C2'-C1'	5.62	106.00	101.50
53	CA	184	G	C3'-C2'-C1'	5.62	106.00	101.50
53	CA	1450	U	O4'-C1'-N1	5.62	112.70	108.20
1	AA	173	U	N1-C1'-C2'	5.62	121.30	114.00
22	BA	906	U	P-O5'-C5'	-5.62	111.91	120.90
57	DA	2299	U	C3'-C2'-C1'	5.62	105.99	101.50
1	AA	487	A	P-O3'-C3'	-5.62	112.96	119.70
22	BA	687	C	P-O5'-C5'	-5.62	111.91	120.90
57	DA	35	G	C3'-C2'-C1'	5.62	105.99	101.50
1	AA	498	A	C3'-C2'-C1'	5.61	105.99	101.50
1	AA	998	C	O4'-C1'-N1	5.61	112.69	108.20
1	AA	1477	U	P-O5'-C5'	-5.61	111.92	120.90
53	CA	414	A	C3'-C2'-C1'	5.61	105.99	101.50
57	DA	479	A	P-O3'-C3'	5.61	126.44	119.70
57	DA	1680	U	O4'-C1'-N1	5.61	112.69	108.20
22	BA	1510	G	P-O3'-C3'	-5.61	112.97	119.70
22	BA	2512	C	O4'-C1'-N1	5.61	112.69	108.20
57	DA	1144	A	C3'-C2'-C1'	5.61	105.99	101.50
57	DA	1333	G	C3'-C2'-C1'	5.61	105.99	101.50
57	DA	1825	U	P-O3'-C3'	-5.61	112.97	119.70
53	CA	821	G	C3'-C2'-C1'	5.61	105.99	101.50
57	DA	2729	G	C3'-C2'-C1'	5.61	105.99	101.50
22	BA	2309	A	C3'-C2'-C1'	5.61	105.99	101.50
57	DA	1996	C	N1-C1'-C2'	5.61	121.29	114.00
57	DA	2450	A	C3'-C2'-C1'	5.61	105.98	101.50
22	BA	2846	G	P-O5'-C5'	-5.61	111.93	120.90
53	CA	119	A	P-O3'-C3'	5.61	126.43	119.70
1	AA	1168	U	O4'-C1'-N1	5.60	112.68	108.20
22	BA	16	C	P-O3'-C3'	-5.60	112.98	119.70
53	CA	1245	C	O4'-C1'-N1	5.60	112.68	108.20
57	DA	1034	G	P-O3'-C3'	-5.60	112.98	119.70
22	BA	528	A	C4-C5-N7	5.60	113.50	110.70
22	BA	2319	G	O4'-C1'-N9	5.60	112.68	108.20
22	BA	2297	A	N9-C1'-C2'	-5.60	105.84	112.00
22	BA	2430	A	O4'-C1'-N9	5.60	112.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1561	C	C3'-C2'-C1'	5.60	105.98	101.50
57	DA	2259	U	C3'-C2'-C1'	5.60	105.98	101.50
58	DB	12	C	P-O3'-C3'	5.60	126.42	119.70
22	BA	814	C	O5'-P-OP2	-5.60	100.66	105.70
22	BA	1981	A	P-O3'-C3'	-5.60	112.98	119.70
57	DA	811	U	P-O3'-C3'	5.60	126.42	119.70
57	DA	2036	C	C3'-C2'-C1'	5.60	105.98	101.50
57	DA	104	A	C3'-C2'-C1'	5.59	105.98	101.50
57	DA	2459	A	N9-C1'-C2'	-5.59	105.85	112.00
22	BA	182	A	P-O5'-C5'	-5.59	111.95	120.90
53	CA	1300	G	P-O3'-C3'	-5.59	112.99	119.70
57	DA	73	A	C3'-C2'-C1'	5.59	105.97	101.50
1	AA	316	C	P-O5'-C5'	-5.59	111.95	120.90
22	BA	621	A	C3'-C2'-C1'	5.59	105.97	101.50
22	BA	1374	G	O4'-C1'-N9	-5.59	103.73	108.20
22	BA	2044	C	P-O5'-C5'	-5.59	111.95	120.90
53	CA	688	G	P-O3'-C3'	-5.59	112.99	119.70
57	DA	207	A	C3'-C2'-C1'	5.59	105.97	101.50
57	DA	1829	A	N9-C1'-C2'	-5.59	105.85	112.00
22	BA	324	A	C3'-C2'-C1'	5.59	105.97	101.50
22	BA	459	U	C3'-C2'-C1'	5.59	105.97	101.50
22	BA	1437	C	P-O5'-C5'	-5.59	111.95	120.90
22	BA	2001	C	P-O3'-C3'	-5.59	112.99	119.70
53	CA	1283	U	P-O3'-C3'	-5.59	112.99	119.70
57	DA	1256	G	C3'-C2'-C1'	5.59	105.97	101.50
1	AA	519	C	C3'-C2'-C1'	5.59	105.97	101.50
1	AA	1088	G	N9-C1'-C2'	-5.59	105.85	112.00
53	CA	508	U	O4'-C1'-N1	5.59	112.67	108.20
22	BA	117	G	P-O5'-C5'	-5.59	111.96	120.90
22	BA	192	C	P-O5'-C5'	-5.59	111.96	120.90
53	CA	132	C	C3'-C2'-C1'	5.59	105.97	101.50
57	DA	671	C	C2-N1-C1'	5.59	124.95	118.80
57	DA	2874	C	C3'-C2'-C1'	5.59	105.97	101.50
1	AA	110	C	C3'-C2'-C1'	5.58	105.97	101.50
22	BA	645	C	P-O3'-C3'	5.58	126.40	119.70
53	CA	511	C	N1-C1'-C2'	5.58	121.26	114.00
1	AA	718	A	C3'-C2'-C1'	5.58	105.97	101.50
1	AA	1031	C	P-O3'-C3'	5.58	126.40	119.70
22	BA	1260	A	P-O3'-C3'	5.58	126.40	119.70
22	BA	1386	C	C3'-C2'-C1'	5.58	105.97	101.50
53	CA	276	G	C3'-C2'-C1'	5.58	105.97	101.50
57	DA	2337	G	C3'-C2'-C1'	5.58	105.97	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	512	U	C3'-C2'-C1'	5.58	105.96	101.50
53	CA	96	U	C3'-C2'-C1'	5.58	105.97	101.50
57	DA	230	G	N9-C1'-C2'	-5.58	105.86	112.00
1	AA	497	G	P-O3'-C3'	-5.58	113.00	119.70
22	BA	948	C	P-O5'-C5'	-5.58	111.98	120.90
22	BA	1967	C	C3'-C2'-C1'	5.58	105.96	101.50
53	CA	1499	A	N9-C1'-C2'	-5.58	105.86	112.00
57	DA	1758	U	N1-C1'-C2'	5.58	121.25	114.00
1	AA	1215	G	P-O3'-C3'	-5.58	113.01	119.70
53	CA	14	U	C3'-C2'-C1'	5.58	105.96	101.50
57	DA	1108	U	O4'-C1'-N1	5.58	112.66	108.20
53	CA	1440	U	P-O3'-C3'	5.57	126.39	119.70
57	DA	2876	G	C3'-C2'-C1'	5.57	105.96	101.50
22	BA	513	A	C3'-C2'-C1'	5.57	105.96	101.50
22	BA	747	U	C3'-C2'-C1'	5.57	105.96	101.50
53	CA	6	G	C3'-C2'-C1'	5.57	105.96	101.50
57	DA	976	G	C3'-C2'-C1'	5.57	105.96	101.50
57	DA	1888	G	O4'-C1'-N9	5.57	112.66	108.20
22	BA	386	G	O3'-P-O5'	-5.57	93.42	104.00
22	BA	2071	A	P-O3'-C3'	5.57	126.38	119.70
22	BA	2821	A	P-O3'-C3'	-5.57	113.02	119.70
23	BB	51	G	P-O3'-C3'	5.57	126.38	119.70
53	CA	1484	C	O4'-C1'-N1	5.57	112.66	108.20
57	DA	2314	A	C3'-C2'-C1'	5.57	105.95	101.50
22	BA	638	G	P-O3'-C3'	-5.57	113.02	119.70
53	CA	131	A	C3'-C2'-C1'	5.57	105.95	101.50
53	CA	1284	C	P-O3'-C3'	5.56	126.38	119.70
1	AA	704	A	C3'-C2'-C1'	5.56	105.95	101.50
22	BA	1200	C	C6-N1-C2	5.56	122.53	120.30
53	CA	734	G	C3'-C2'-C1'	5.56	105.95	101.50
57	DA	1636	U	C3'-C2'-C1'	5.56	105.95	101.50
24	BC	109	LEU	CA-CB-CG	5.56	128.09	115.30
57	DA	995	C	N1-C1'-C2'	5.56	121.23	114.00
22	BA	951	C	C6-N1-C2	5.56	122.52	120.30
22	BA	2543	G	C8-N9-C4	-5.56	104.18	106.40
57	DA	122	G	C3'-C2'-C1'	5.56	105.95	101.50
1	AA	379	C	O4'-C1'-N1	5.56	112.64	108.20
1	AA	1054	C	P-O5'-C5'	-5.56	112.01	120.90
1	AA	1395	C	C3'-C2'-C1'	5.56	105.95	101.50
22	BA	388	G	P-O5'-C5'	-5.56	112.01	120.90
22	BA	904	G	P-O3'-C3'	-5.56	113.03	119.70
22	BA	1912	A	O4'-C1'-N9	5.56	112.65	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2757	A	N9-C1'-C2'	-5.56	105.89	112.00
53	CA	1485	U	O4'-C1'-N1	5.56	112.65	108.20
22	BA	2311	A	P-O5'-C5'	-5.56	112.01	120.90
1	AA	971	G	C4-N9-C1'	-5.55	119.28	126.50
22	BA	1943	U	P-O3'-C3'	5.55	126.37	119.70
22	BA	1976	U	O4'-C1'-N1	-5.55	103.76	108.20
53	CA	1449	C	P-O3'-C3'	-5.55	113.03	119.70
57	DA	2276	G	C3'-C2'-C1'	5.55	105.94	101.50
57	DA	2781	A	C3'-C2'-C1'	5.55	105.94	101.50
53	CA	368	U	N1-C1'-C2'	-5.55	105.89	112.00
57	DA	1167	C	O4'-C1'-N1	5.55	112.64	108.20
22	BA	783	A	N7-C8-N9	5.55	116.58	113.80
57	DA	1812	U	O4'-C1'-N1	5.55	112.64	108.20
1	AA	1348	U	P-O3'-C3'	-5.55	113.04	119.70
22	BA	2335	A	C3'-C2'-C1'	5.55	105.94	101.50
1	AA	61	G	C3'-C2'-C1'	5.54	105.94	101.50
22	BA	162	U	P-O3'-C3'	5.54	126.35	119.70
22	BA	2346	A	P-O3'-C3'	5.54	126.36	119.70
53	CA	15	G	C3'-C2'-C1'	5.54	105.94	101.50
1	AA	641	U	N1-C1'-C2'	5.54	121.21	114.00
22	BA	2024	G	P-O5'-C5'	-5.54	112.03	120.90
57	DA	1346	G	P-O3'-C3'	-5.54	113.05	119.70
57	DA	1945	G	C3'-C2'-C1'	5.54	105.93	101.50
57	DA	2646	C	P-O3'-C3'	-5.54	113.05	119.70
57	DA	2868	A	P-O3'-C3'	-5.54	113.05	119.70
22	BA	388	G	C3'-C2'-C1'	5.54	105.93	101.50
22	BA	1905	C	O4'-C1'-N1	5.54	112.63	108.20
22	BA	2888	C	P-O3'-C3'	-5.54	113.05	119.70
57	DA	1398	C	N1-C1'-C2'	-5.54	105.90	112.00
22	BA	1184	U	O4'-C1'-N1	-5.54	103.77	108.20
53	CA	1191	A	C3'-C2'-C1'	5.54	105.93	101.50
57	DA	1456	G	C3'-C2'-C1'	5.54	105.93	101.50
57	DA	2313	C	N1-C1'-C2'	-5.54	105.91	112.00
57	DA	2725	A	P-O3'-C3'	5.54	126.35	119.70
1	AA	537	G	N9-C1'-C2'	-5.54	105.91	112.00
1	AA	1242	G	P-O3'-C3'	-5.54	113.06	119.70
22	BA	1524	G	P-O5'-C5'	-5.54	112.04	120.90
57	DA	2404	U	C3'-C2'-C1'	5.54	105.93	101.50
1	AA	1152	A	C3'-C2'-C1'	5.53	105.93	101.50
22	BA	1447	C	N1-C1'-C2'	-5.53	105.91	112.00
53	CA	1051	C	O4'-C1'-N1	5.53	112.63	108.20
22	BA	2296	U	N1-C1'-C2'	5.53	121.19	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2359	C	O4'-C1'-N1	5.53	112.62	108.20
57	DA	2407	A	C3'-C2'-C1'	5.53	105.93	101.50
22	BA	942	G	OP1-P-O3'	5.53	117.37	105.20
57	DA	273	G	P-O3'-C3'	-5.53	113.06	119.70
57	DA	2567	G	P-O3'-C3'	-5.53	113.06	119.70
22	BA	1157	G	C3'-C2'-C1'	5.53	105.92	101.50
22	BA	2210	U	N1-C1'-C2'	5.53	121.19	114.00
22	BA	2840	C	O5'-P-OP2	-5.53	100.72	105.70
57	DA	336	C	O4'-C1'-N1	5.53	112.62	108.20
57	DA	828	U	C3'-C2'-C1'	5.53	105.92	101.50
57	DA	2387	U	C3'-C2'-C1'	5.53	105.92	101.50
57	DA	2638	G	P-O3'-C3'	5.53	126.33	119.70
58	DB	24	G	P-O3'-C3'	5.53	126.33	119.70
1	AA	1349	A	C3'-C2'-C1'	5.53	105.92	101.50
1	AA	1365	G	C3'-C2'-C1'	5.53	105.92	101.50
22	BA	1912	A	P-O3'-C3'	5.53	126.33	119.70
57	DA	2493	U	C3'-C2'-C1'	5.53	105.92	101.50
22	BA	2063	C	C3'-C2'-C1'	5.52	105.92	101.50
1	AA	1530	G	P-O3'-C3'	-5.52	113.07	119.70
57	DA	915	C	C3'-C2'-C1'	5.52	105.92	101.50
57	DA	1026	G	C3'-C2'-C1'	5.52	105.92	101.50
25	BD	10	GLY	N-CA-C	5.52	126.90	113.10
1	AA	339	C	O4'-C1'-N1	5.52	112.62	108.20
57	DA	1255	U	C2-N1-C1'	5.52	124.32	117.70
1	AA	275	G	N9-C1'-C2'	-5.52	105.93	112.00
53	CA	511	C	P-O3'-C3'	5.52	126.32	119.70
57	DA	324	A	P-O3'-C3'	-5.52	113.08	119.70
57	DA	1722	A	C3'-C2'-C1'	5.52	105.91	101.50
57	DA	1782	U	C3'-C2'-C1'	5.52	105.92	101.50
53	CA	722	G	C3'-C2'-C1'	5.52	105.91	101.50
1	AA	1228	C	C3'-C2'-C1'	5.51	105.91	101.50
22	BA	590	A	P-O5'-C5'	-5.51	112.08	120.90
22	BA	2751	G	P-O5'-C5'	-5.51	112.08	120.90
53	CA	1396	A	OP2-P-O3'	5.51	117.33	105.20
22	BA	959	A	P-O3'-C3'	-5.51	113.08	119.70
57	DA	2282	G	P-O3'-C3'	5.51	126.31	119.70
57	DA	2428	G	P-O3'-C3'	-5.51	113.08	119.70
22	BA	507	A	N9-C1'-C2'	-5.51	105.94	112.00
22	BA	1941	C	C3'-C2'-C1'	5.51	105.91	101.50
57	DA	621	A	C3'-C2'-C1'	5.51	105.91	101.50
1	AA	870	U	N1-C1'-C2'	5.51	121.16	114.00
57	DA	78	U	O4'-C1'-N1	5.51	112.61	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	324	A	C3'-C2'-C1'	5.51	105.91	101.50
1	AA	306	A	C3'-C2'-C1'	5.51	105.91	101.50
53	CA	1395	C	C3'-C2'-C1'	5.51	105.91	101.50
57	DA	746	U	N1-C1'-C2'	5.51	121.16	114.00
22	BA	1282	U	P-O5'-C5'	-5.51	112.09	120.90
22	BA	1901	A	C3'-C2'-C1'	5.51	105.91	101.50
53	CA	832	G	O4'-C1'-N9	5.51	112.61	108.20
57	DA	1557	C	P-O3'-C3'	-5.51	113.09	119.70
57	DA	1675	C	C3'-C2'-C1'	5.51	105.91	101.50
22	BA	1392	A	P-O3'-C3'	5.50	126.31	119.70
22	BA	1535	A	O4'-C1'-N9	5.50	112.60	108.20
57	DA	2428	G	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	660	C	P-O3'-C3'	-5.50	113.10	119.70
57	DA	424	G	C3'-C2'-C1'	5.50	105.90	101.50
1	AA	534	U	C3'-C2'-C1'	5.50	105.90	101.50
1	AA	1258	G	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	2734	A	P-O3'-C3'	-5.50	113.10	119.70
22	BA	2800	A	N9-C1'-C2'	-5.50	105.95	112.00
53	CA	1066	C	N1-C1'-C2'	-5.50	105.95	112.00
57	DA	505	A	C3'-C2'-C1'	5.50	105.90	101.50
57	DA	1700	A	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	443	A	P-O5'-C5'	-5.50	112.10	120.90
22	BA	572	A	O4'-C1'-N9	-5.50	103.80	108.20
53	CA	1499	A	P-O5'-C5'	-5.50	112.10	120.90
57	DA	615	U	N1-C1'-C2'	5.50	121.15	114.00
57	DA	617	G	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	783	A	C6-C5-N7	-5.50	128.45	132.30
22	BA	1301	A	P-O5'-C5'	-5.50	112.11	120.90
22	BA	1461	C	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	1396	U	P-O3'-C3'	5.49	126.29	119.70
53	CA	389	A	C3'-C2'-C1'	5.49	105.90	101.50
57	DA	1112	G	C3'-C2'-C1'	5.49	105.89	101.50
57	DA	53	A	N9-C1'-C2'	-5.49	105.96	112.00
57	DA	390	U	P-O3'-C3'	5.49	126.29	119.70
1	AA	110	C	P-O3'-C3'	-5.49	113.11	119.70
22	BA	1322	A	P-O3'-C3'	5.49	126.29	119.70
22	BA	2337	G	P-O3'-C3'	-5.49	113.11	119.70
58	DB	13	G	C3'-C2'-C1'	5.49	105.89	101.50
1	AA	131	A	C3'-C2'-C1'	5.49	105.89	101.50
57	DA	1181	U	O4'-C1'-N1	5.49	112.59	108.20
22	BA	1343	G	C3'-C2'-C1'	5.49	105.89	101.50
22	BA	1996	C	P-O3'-C3'	5.49	126.28	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	369	G	C3'-C2'-C1'	5.49	105.89	101.50
57	DA	128	C	P-O3'-C3'	-5.49	113.12	119.70
57	DA	1554	U	N1-C1'-C2'	5.49	121.13	114.00
57	DA	2405	G	P-O3'-C3'	5.49	126.28	119.70
1	AA	1338	G	P-O3'-C3'	-5.48	113.12	119.70
53	CA	1184	G	P-O3'-C3'	-5.48	113.12	119.70
1	AA	724	G	N9-C1'-C2'	-5.48	105.97	112.00
22	BA	2873	A	O4'-C1'-N9	5.48	112.58	108.20
53	CA	252	U	C3'-C2'-C1'	5.48	105.88	101.50
57	DA	1972	G	N9-C1'-C2'	-5.48	105.97	112.00
57	DA	2832	U	O4'-C1'-N1	5.48	112.58	108.20
1	AA	250	A	P-O3'-C3'	5.48	126.27	119.70
22	BA	601	C	P-O3'-C3'	-5.48	113.12	119.70
53	CA	365	U	P-O3'-C3'	5.48	126.28	119.70
57	DA	958	U	N1-C1'-C2'	-5.48	105.97	112.00
22	BA	312	G	C3'-C2'-C1'	5.48	105.88	101.50
22	BA	765	C	C3'-C2'-C1'	5.48	105.88	101.50
53	CA	316	C	P-O3'-C3'	-5.48	113.13	119.70
57	DA	1314	C	C3'-C2'-C1'	5.48	105.88	101.50
1	AA	74	A	C3'-C2'-C1'	5.48	105.88	101.50
53	CA	276	G	N9-C1'-C2'	-5.48	105.98	112.00
1	AA	752	G	P-O3'-C3'	5.47	126.27	119.70
22	BA	100	U	P-O3'-C3'	5.47	126.27	119.70
22	BA	443	A	C3'-C2'-C1'	5.47	105.88	101.50
22	BA	669	G	P-O5'-C5'	5.47	129.66	120.90
22	BA	1856	U	O4'-C1'-N1	5.47	112.58	108.20
53	CA	352	C	C3'-C2'-C1'	5.47	105.88	101.50
57	DA	36	G	C3'-C2'-C1'	5.47	105.88	101.50
57	DA	1080	A	C3'-C2'-C1'	5.47	105.88	101.50
22	BA	528	A	C2-N3-C4	-5.47	107.87	110.60
22	BA	572	A	C4-C5-C6	5.47	119.73	117.00
57	DA	1613	G	N9-C1'-C2'	-5.47	105.98	112.00
57	DA	2836	U	C3'-C2'-C1'	5.47	105.88	101.50
22	BA	422	A	P-O3'-C3'	-5.47	113.14	119.70
53	CA	962	C	P-O3'-C3'	-5.47	113.14	119.70
1	AA	549	C	N1-C1'-C2'	-5.47	105.99	112.00
22	BA	1135	C	N1-C1'-C2'	-5.47	105.99	112.00
57	DA	1695	G	P-O3'-C3'	-5.47	113.14	119.70
57	DA	1945	G	P-O3'-C3'	-5.47	113.14	119.70
22	BA	1398	C	C3'-C2'-C1'	5.46	105.87	101.50
57	DA	946	C	C3'-C2'-C1'	5.46	105.87	101.50
57	DA	1023	U	C3'-C2'-C1'	5.46	105.87	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1555	G	C3'-C2'-C1'	5.46	105.87	101.50
22	BA	2211	A	P-O3'-C3'	5.46	126.26	119.70
53	CA	979	C	C3'-C2'-C1'	5.46	105.87	101.50
1	AA	1169	A	P-O3'-C3'	-5.46	113.15	119.70
22	BA	302	C	C3'-C2'-C1'	5.46	105.87	101.50
22	BA	1455	G	P-O3'-C3'	-5.46	113.15	119.70
1	AA	414	A	P-O3'-C3'	-5.46	113.15	119.70
1	AA	1530	G	C3'-C2'-C1'	5.46	105.86	101.50
22	BA	1222	U	P-O3'-C3'	-5.46	113.15	119.70
22	BA	2383	G	C3'-C2'-C1'	5.46	105.86	101.50
57	DA	199	A	O4'-C1'-N9	5.46	112.56	108.20
1	AA	64	G	P-O3'-C3'	5.45	126.24	119.70
22	BA	480	A	C3'-C2'-C1'	5.45	105.86	101.50
22	BA	1765	U	P-O5'-C5'	-5.45	112.18	120.90
57	DA	128	C	C3'-C2'-C1'	5.45	105.86	101.50
1	AA	92	U	C3'-C2'-C1'	5.45	105.86	101.50
22	BA	1837	C	O4'-C1'-N1	5.45	112.56	108.20
22	BA	2195	U	O4'-C1'-N1	5.45	112.56	108.20
57	DA	606	U	C3'-C2'-C1'	5.45	105.86	101.50
1	AA	87	C	C3'-C2'-C1'	5.45	105.86	101.50
1	AA	1243	C	O4'-C1'-N1	5.45	112.56	108.20
22	BA	2347	C	C3'-C2'-C1'	5.45	105.86	101.50
57	DA	119	A	P-O3'-C3'	5.45	126.24	119.70
57	DA	1942	C	C3'-C2'-C1'	5.45	105.86	101.50
57	DA	774	G	C8-N9-C1'	5.45	134.08	127.00
53	CA	1161	C	C3'-C2'-C1'	5.45	105.86	101.50
1	AA	755	G	C3'-C2'-C1'	5.44	105.86	101.50
53	CA	828	U	O4'-C1'-N1	5.44	112.56	108.20
57	DA	2489	U	O4'-C1'-N1	5.44	112.56	108.20
53	CA	1157	A	P-O3'-C3'	5.44	126.23	119.70
57	DA	2585	U	N1-C1'-C2'	5.44	121.08	114.00
22	BA	1379	U	O5'-P-OP2	-5.44	100.81	105.70
1	AA	499	A	P-O3'-C3'	5.44	126.22	119.70
1	AA	1454	G	C3'-C2'-C1'	5.44	105.85	101.50
22	BA	1992	G	C8-N9-C1'	5.44	134.07	127.00
22	BA	1816	C	C3'-C2'-C1'	5.43	105.85	101.50
57	DA	373	U	N1-C1'-C2'	-5.43	106.02	112.00
57	DA	443	A	C3'-C2'-C1'	5.43	105.85	101.50
57	DA	2447	G	O4'-C1'-N9	5.43	112.55	108.20
57	DA	2866	U	P-O3'-C3'	5.43	126.22	119.70
58	DB	45	A	C3'-C2'-C1'	5.43	105.84	101.50
22	BA	238	C	P-O3'-C3'	-5.43	113.19	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	346	A	C3'-C2'-C1'	5.43	105.84	101.50
22	BA	2011	U	P-O3'-C3'	-5.43	113.19	119.70
57	DA	118	A	P-O3'-C3'	5.43	126.21	119.70
57	DA	989	G	P-O3'-C3'	5.43	126.21	119.70
57	DA	1213	A	N9-C1'-C2'	-5.43	106.03	112.00
22	BA	2712	C	N1-C1'-C2'	5.43	121.05	114.00
57	DA	1207	C	C3'-C2'-C1'	5.43	105.84	101.50
57	DA	1919	A	C3'-C2'-C1'	5.43	105.84	101.50
1	AA	982	U	N1-C1'-C2'	5.42	121.05	114.00
1	AA	1241	G	N9-C1'-C2'	-5.42	106.03	112.00
22	BA	2449	U	C5-C6-N1	-5.42	119.99	122.70
22	BA	2603	G	C3'-C2'-C1'	5.42	105.84	101.50
57	DA	336	C	C3'-C2'-C1'	5.42	105.84	101.50
57	DA	991	C	C3'-C2'-C1'	5.42	105.84	101.50
57	DA	991	C	O4'-C1'-N1	5.42	112.54	108.20
57	DA	1498	C	C3'-C2'-C1'	5.42	105.84	101.50
57	DA	1915	U	C3'-C2'-C1'	5.42	105.84	101.50
57	DA	2024	G	C3'-C2'-C1'	5.42	105.84	101.50
22	BA	1111	A	P-O3'-C3'	5.42	126.21	119.70
22	BA	1867	G	N9-C1'-C2'	-5.42	106.03	112.00
1	AA	1142	G	C3'-C2'-C1'	5.42	105.84	101.50
57	DA	1865	U	N1-C1'-C2'	5.42	121.05	114.00
57	DA	2298	A	C3'-C2'-C1'	5.42	105.84	101.50
57	DA	1455	G	C3'-C2'-C1'	5.42	105.84	101.50
22	BA	1714	U	C3'-C2'-C1'	5.42	105.84	101.50
1	AA	52	C	C3'-C2'-C1'	5.42	105.83	101.50
1	AA	274	A	O4'-C1'-N9	5.42	112.53	108.20
22	BA	1336	A	P-O3'-C3'	-5.42	113.20	119.70
53	CA	84	U	O4'-C1'-N1	5.42	112.53	108.20
53	CA	1283	U	C3'-C2'-C1'	5.42	105.83	101.50
57	DA	811	U	O4'-C1'-N1	5.42	112.53	108.20
1	AA	116	A	C3'-C2'-C1'	5.42	105.83	101.50
22	BA	2587	A	P-O5'-C5'	-5.42	112.24	120.90
22	BA	951	C	N1-C2-O2	-5.41	115.65	118.90
22	BA	1655	A	O5'-P-OP2	-5.41	100.83	105.70
22	BA	2609	U	C5-C6-N1	-5.41	119.99	122.70
1	AA	1304	G	C3'-C2'-C1'	5.41	105.83	101.50
1	AA	1381	U	P-O3'-C3'	-5.41	113.20	119.70
1	AA	1451	U	P-O3'-C3'	5.41	126.19	119.70
22	BA	2275	C	N1-C1'-C2'	5.41	121.03	114.00
57	DA	741	U	C3'-C2'-C1'	5.41	105.83	101.50
57	DA	2543	G	C3'-C2'-C1'	5.41	105.83	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	805	G	O4'-C1'-N9	5.41	112.53	108.20
57	DA	2504	U	C3'-C2'-C1'	5.41	105.83	101.50
22	BA	532	A	N7-C8-N9	5.40	116.50	113.80
57	DA	2646	C	P-O5'-C5'	-5.40	112.25	120.90
22	BA	174	U	P-O3'-C3'	-5.40	113.22	119.70
22	BA	446	G	P-O3'-C3'	5.40	126.18	119.70
22	BA	2437	G	O5'-P-OP2	-5.40	100.84	105.70
57	DA	395	U	O4'-C1'-N1	5.40	112.52	108.20
57	DA	491	G	P-O3'-C3'	-5.40	113.22	119.70
53	CA	985	C	C3'-C2'-C1'	5.40	105.82	101.50
57	DA	1716	U	N1-C1'-C2'	-5.40	106.06	112.00
1	AA	365	U	O4'-C1'-N1	5.40	112.52	108.20
22	BA	1156	A	P-O3'-C3'	5.40	126.18	119.70
22	BA	1839	G	C3'-C2'-C1'	5.40	105.82	101.50
57	DA	1288	G	P-O3'-C3'	5.40	126.18	119.70
1	AA	1348	U	C3'-C2'-C1'	5.40	105.82	101.50
22	BA	2044	C	P-O3'-C3'	-5.39	113.23	119.70
57	DA	2567	G	C3'-C2'-C1'	5.39	105.82	101.50
57	DA	86	G	P-O3'-C3'	-5.39	113.23	119.70
57	DA	1050	A	C3'-C2'-C1'	5.39	105.81	101.50
57	DA	2079	U	P-O3'-C3'	5.39	126.17	119.70
1	AA	885	G	C3'-C2'-C1'	5.39	105.81	101.50
1	AA	994	A	C3'-C2'-C1'	5.39	105.81	101.50
53	CA	718	A	P-O3'-C3'	-5.39	113.23	119.70
22	BA	915	C	C3'-C2'-C1'	5.39	105.81	101.50
22	BA	1260	A	OP2-P-O3'	5.39	117.06	105.20
57	DA	249	C	P-O3'-C3'	5.39	126.17	119.70
57	DA	1810	A	C3'-C2'-C1'	5.39	105.81	101.50
57	DA	1944	U	O4'-C1'-N1	5.39	112.51	108.20
26	BE	46	GLN	N-CA-C	5.39	125.55	111.00
1	AA	1303	C	C3'-C2'-C1'	5.39	105.81	101.50
22	BA	727	A	C3'-C2'-C1'	5.39	105.81	101.50
22	BA	813	U	P-O3'-C3'	-5.38	113.24	119.70
53	CA	194	C	O4'-C1'-N1	-5.38	103.89	108.20
57	DA	572	A	C3'-C2'-C1'	5.38	105.81	101.50
57	DA	2778	A	P-O3'-C3'	5.38	126.16	119.70
22	BA	480	A	O5'-P-OP2	-5.38	100.86	105.70
53	CA	1453	G	C3'-C2'-C1'	5.38	105.81	101.50
57	DA	2632	A	P-O3'-C3'	5.38	126.16	119.70
22	BA	1272	A	P-O5'-C5'	-5.38	112.29	120.90
22	BA	1330	C	O4'-C1'-N1	5.38	112.50	108.20
57	DA	1388	G	P-O3'-C3'	-5.38	113.24	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1455	G	P-O5'-C5'	-5.38	112.29	120.90
53	CA	68	G	C3'-C2'-C1'	5.38	105.80	101.50
22	BA	243	U	C3'-C2'-C1'	5.38	105.80	101.50
22	BA	1932	A	P-O3'-C3'	-5.38	113.25	119.70
22	BA	2199	A	P-O5'-C5'	-5.38	112.30	120.90
22	BA	400	G	P-O3'-C3'	5.38	126.15	119.70
22	BA	2497	A	P-O5'-C5'	5.38	129.50	120.90
22	BA	1786	A	P-O3'-C3'	5.37	126.15	119.70
57	DA	1663	G	P-O3'-C3'	5.37	126.15	119.70
57	DA	1916	A	C3'-C2'-C1'	5.37	105.80	101.50
22	BA	2398	U	P-O3'-C3'	5.37	126.15	119.70
22	BA	2695	U	P-O3'-C3'	5.37	126.14	119.70
57	DA	1674	G	C8-N9-C1'	-5.37	120.02	127.00
22	BA	2136	G	P-O3'-C3'	-5.37	113.26	119.70
22	BA	2498	C	P-O5'-C5'	-5.37	112.31	120.90
57	DA	2876	G	N9-C1'-C2'	-5.37	106.10	112.00
22	BA	1664	A	O3'-P-O5'	-5.37	93.81	104.00
53	CA	1129	C	P-O3'-C3'	5.37	126.14	119.70
53	CA	1366	C	P-O3'-C3'	-5.37	113.26	119.70
57	DA	2727	A	C3'-C2'-C1'	5.37	105.79	101.50
22	BA	251	A	O3'-P-O5'	-5.36	93.81	104.00
22	BA	860	U	C3'-C2'-C1'	5.36	105.79	101.50
22	BA	1498	C	C3'-C2'-C1'	5.36	105.79	101.50
22	BA	1508	A	P-O3'-C3'	5.36	126.14	119.70
22	BA	1956	U	C3'-C2'-C1'	5.36	105.79	101.50
22	BA	2820	A	O3'-P-O5'	-5.36	93.81	104.00
53	CA	1481	U	O4'-C1'-N1	5.36	112.49	108.20
57	DA	860	U	C3'-C2'-C1'	5.36	105.79	101.50
57	DA	985	C	P-O3'-C3'	-5.36	113.27	119.70
57	DA	1785	A	C3'-C2'-C1'	5.36	105.79	101.50
57	DA	2275	C	P-O3'-C3'	5.36	126.14	119.70
53	CA	705	G	C3'-C2'-C1'	5.36	105.79	101.50
57	DA	53	A	C3'-C2'-C1'	5.36	105.79	101.50
57	DA	510	C	P-O3'-C3'	-5.36	113.27	119.70
58	DB	111	U	C3'-C2'-C1'	5.36	105.79	101.50
22	BA	2060	A	O4'-C1'-N9	5.36	112.49	108.20
53	CA	327	A	P-O3'-C3'	5.36	126.13	119.70
22	BA	223	A	C3'-C2'-C1'	5.36	105.78	101.50
57	DA	1345	C	N1-C1'-C2'	-5.36	106.11	112.00
53	CA	428	G	C8-N9-C1'	5.35	133.96	127.00
22	BA	1036	G	P-O5'-C5'	-5.35	112.34	120.90
22	BA	2613	U	OP2-P-O3'	5.35	116.98	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	275	G	C3'-C2'-C1'	5.35	105.78	101.50
53	CA	1317	C	O4'-C1'-N1	5.35	112.48	108.20
57	DA	1267	U	C3'-C2'-C1'	5.35	105.78	101.50
57	DA	1324	G	O4'-C1'-N9	5.35	112.48	108.20
57	DA	1569	A	C3'-C2'-C1'	5.35	105.78	101.50
22	BA	2344	U	O4'-C1'-N1	-5.35	103.92	108.20
57	DA	2847	U	P-O3'-C3'	5.35	126.12	119.70
22	BA	1992	G	N3-C4-N9	-5.35	122.79	126.00
53	CA	309	A	P-O3'-C3'	-5.35	113.28	119.70
57	DA	61	C	O4'-C1'-N1	5.35	112.48	108.20
22	BA	1021	A	C3'-C2'-C1'	5.35	105.78	101.50
1	AA	1130	A	P-O3'-C3'	-5.34	113.29	119.70
22	BA	989	G	P-O3'-C3'	5.34	126.11	119.70
53	CA	939	G	O4'-C1'-N9	5.34	112.47	108.20
22	BA	2708	G	P-O3'-C3'	-5.34	113.29	119.70
22	BA	305	C	P-O5'-C5'	-5.34	112.36	120.90
22	BA	805	G	O4'-C1'-N9	-5.34	103.93	108.20
22	BA	1695	G	C3'-C2'-C1'	5.34	105.77	101.50
57	DA	2683	C	P-O3'-C3'	-5.34	113.29	119.70
1	AA	411	A	O4'-C1'-N9	5.34	112.47	108.20
22	BA	484	C	O4'-C1'-N1	-5.34	103.93	108.20
22	BA	2791	G	N9-C1'-C2'	-5.34	106.13	112.00
57	DA	1136	G	N9-C1'-C2'	-5.34	106.13	112.00
57	DA	406	G	C3'-C2'-C1'	5.34	105.77	101.50
57	DA	1713	A	P-O3'-C3'	5.34	126.11	119.70
57	DA	2836	U	P-O3'-C3'	-5.34	113.30	119.70
22	BA	2591	C	P-O5'-C5'	-5.34	112.36	120.90
57	DA	223	A	C3'-C2'-C1'	5.34	105.77	101.50
57	DA	1312	U	P-O3'-C3'	5.34	126.10	119.70
22	BA	2569	G	P-O3'-C3'	5.33	126.10	119.70
57	DA	1769	U	O4'-C1'-N1	5.33	112.47	108.20
1	AA	885	G	N9-C1'-C2'	-5.33	106.13	112.00
22	BA	1716	U	C3'-C2'-C1'	5.33	105.77	101.50
22	BA	2431	U	P-O5'-C5'	-5.33	112.37	120.90
22	BA	2582	G	N3-C4-C5	-5.33	125.93	128.60
57	DA	2423	U	P-O3'-C3'	5.33	126.10	119.70
22	BA	948	C	O4'-C1'-N1	-5.33	103.94	108.20
22	BA	1060	U	N1-C1'-C2'	5.33	120.93	114.00
22	BA	1943	U	N1-C1'-C2'	5.33	120.93	114.00
53	CA	81	A	O4'-C1'-N9	5.33	112.46	108.20
57	DA	1511	G	P-O3'-C3'	-5.33	113.31	119.70
57	DA	1648	U	C3'-C2'-C1'	5.33	105.76	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1158	C	C3'-C2'-C1'	5.33	105.76	101.50
22	BA	200	U	P-O5'-C5'	-5.33	112.38	120.90
22	BA	600	G	P-O5'-C5'	-5.33	112.38	120.90
22	BA	1221	C	P-O3'-C3'	-5.33	113.31	119.70
1	AA	891	U	P-O5'-C5'	-5.33	112.38	120.90
53	CA	239	U	C5-C6-N1	5.33	125.36	122.70
57	DA	2895	G	C3'-C2'-C1'	5.33	105.76	101.50
22	BA	1759	A	P-O5'-C5'	-5.32	112.38	120.90
22	BA	2868	A	P-O5'-C5'	-5.32	112.38	120.90
53	CA	765	G	C4-N9-C1'	5.32	133.42	126.50
57	DA	1303	G	C3'-C2'-C1'	5.32	105.76	101.50
22	BA	60	G	P-O3'-C3'	5.32	126.09	119.70
22	BA	685	A	P-O5'-C5'	-5.32	112.38	120.90
1	AA	919	A	P-O3'-C3'	5.32	126.08	119.70
22	BA	509	C	C6-N1-C2	-5.32	118.17	120.30
22	BA	2424	C	N3-C4-N4	-5.32	114.28	118.00
57	DA	224	U	C3'-C2'-C1'	5.32	105.76	101.50
57	DA	604	G	N9-C1'-C2'	-5.32	106.15	112.00
22	BA	1317	G	P-O3'-C3'	-5.32	113.32	119.70
53	CA	439	U	P-O3'-C3'	-5.32	113.32	119.70
57	DA	1076	C	O4'-C1'-N1	5.32	112.45	108.20
57	DA	1733	G	C3'-C2'-C1'	5.32	105.75	101.50
1	AA	421	U	P-O3'-C3'	5.32	126.08	119.70
1	AA	1303	C	P-O3'-C3'	-5.32	113.32	119.70
57	DA	2714	G	N9-C1'-C2'	-5.32	106.15	112.00
22	BA	266	G	N9-C1'-C2'	-5.32	106.15	112.00
22	BA	1370	C	P-O3'-C3'	5.32	126.08	119.70
22	BA	1651	G	O3'-P-O5'	-5.32	93.90	104.00
22	BA	2730	C	P-O3'-C3'	-5.32	113.32	119.70
57	DA	480	A	C3'-C2'-C1'	5.32	105.75	101.50
57	DA	618	G	C3'-C2'-C1'	5.32	105.75	101.50
57	DA	1329	U	N1-C1'-C2'	5.32	120.91	114.00
57	DA	2752	C	C3'-C2'-C1'	5.31	105.75	101.50
1	AA	1153	G	C3'-C2'-C1'	5.31	105.75	101.50
22	BA	1328	A	P-O3'-C3'	5.31	126.08	119.70
22	BA	1927	A	P-O3'-C3'	5.31	126.08	119.70
53	CA	26	A	P-O3'-C3'	5.31	126.07	119.70
57	DA	765	C	P-O3'-C3'	-5.31	113.33	119.70
57	DA	1399	C	C3'-C2'-C1'	5.31	105.75	101.50
57	DA	2572	A	O4'-C1'-N9	5.31	112.45	108.20
22	BA	807	U	P-O3'-C3'	5.31	126.07	119.70
53	CA	169	C	O4'-C1'-N1	5.31	112.45	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	2215	C	P-O3'-C3'	-5.31	113.33	119.70
1	AA	977	A	C3'-C2'-C1'	5.31	105.75	101.50
22	BA	764	A	P-O3'-C3'	5.31	126.07	119.70
22	BA	2342	C	P-O5'-C5'	-5.31	112.41	120.90
22	BA	2419	U	N1-C1'-C2'	-5.31	106.16	112.00
22	BA	2540	C	P-O5'-C5'	-5.31	112.41	120.90
1	AA	816	A	N9-C1'-C2'	-5.31	106.16	112.00
22	BA	1986	C	P-O5'-C5'	-5.31	112.41	120.90
1	AA	430	A	C3'-C2'-C1'	5.30	105.74	101.50
22	BA	1956	U	P-O3'-C3'	-5.30	113.33	119.70
22	BA	2440	C	N1-C1'-C2'	-5.30	106.17	112.00
57	DA	396	G	N9-C1'-C2'	-5.30	106.17	112.00
58	DB	42	C	P-O3'-C3'	-5.30	113.33	119.70
22	BA	517	C	P-O3'-C3'	-5.30	113.34	119.70
22	BA	583	G	P-O3'-C3'	-5.30	113.34	119.70
22	BA	833	A	P-O3'-C3'	-5.30	113.34	119.70
53	CA	1358	U	O4'-C1'-N1	5.30	112.44	108.20
57	DA	1515	A	O4'-C1'-N9	5.30	112.44	108.20
1	AA	61	G	P-O3'-C3'	-5.30	113.34	119.70
2	AB	146	SER	CA-C-N	5.30	128.86	117.20
22	BA	639	U	N1-C1'-C2'	5.30	120.89	114.00
53	CA	534	U	C3'-C2'-C1'	5.30	105.74	101.50
53	CA	1102	A	N9-C1'-C2'	-5.30	106.17	112.00
57	DA	1817	G	C3'-C2'-C1'	5.30	105.74	101.50
1	AA	1337	G	C3'-C2'-C1'	5.30	105.74	101.50
53	CA	794	A	C3'-C2'-C1'	5.30	105.74	101.50
57	DA	2289	G	C3'-C2'-C1'	5.30	105.74	101.50
22	BA	607	U	N1-C1'-C2'	-5.29	106.17	112.00
1	AA	1478	U	O4'-C1'-N1	-5.29	103.97	108.20
22	BA	2052	A	O5'-P-OP2	-5.29	100.94	105.70
22	BA	739	A	C4'-C3'-C2'	5.29	107.89	102.60
53	CA	389	A	N9-C1'-C2'	-5.29	106.18	112.00
53	CA	534	U	P-O3'-C3'	-5.29	113.35	119.70
1	AA	452	A	C3'-C2'-C1'	5.29	105.73	101.50
22	BA	637	A	O4'-C1'-N9	5.29	112.43	108.20
53	CA	32	A	C3'-C2'-C1'	5.29	105.73	101.50
57	DA	423	A	P-O3'-C3'	5.29	126.05	119.70
1	AA	438	U	O4'-C1'-N1	5.29	112.43	108.20
22	BA	361	G	P-O3'-C3'	5.29	126.05	119.70
53	CA	689	C	O4'-C1'-N1	-5.29	103.97	108.20
53	CA	883	C	N1-C1'-C2'	5.29	120.87	114.00
1	AA	246	A	P-O3'-C3'	5.29	126.04	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2519	U	O4'-C1'-N1	5.29	112.43	108.20
57	DA	2544	G	C3'-C2'-C1'	5.29	105.73	101.50
22	BA	802	A	C3'-C2'-C1'	5.28	105.73	101.50
53	CA	282	A	C3'-C2'-C1'	5.28	105.73	101.50
53	CA	1479	C	O4'-C1'-N1	5.28	112.43	108.20
57	DA	975	A	P-O3'-C3'	-5.28	113.36	119.70
57	DA	2148	G	P-O3'-C3'	-5.28	113.36	119.70
22	BA	52	A	C3'-C2'-C1'	5.28	105.72	101.50
22	BA	2682	A	C8-N9-C4	-5.28	103.69	105.80
57	DA	639	U	N1-C1'-C2'	-5.28	106.19	112.00
53	CA	1052	U	P-O5'-C5'	5.28	129.35	120.90
57	DA	445	C	O4'-C1'-N1	5.28	112.42	108.20
1	AA	53	A	O5'-P-OP2	-5.28	100.95	105.70
1	AA	874	G	C3'-C2'-C1'	5.28	105.72	101.50
1	AA	1286	U	N1-C1'-C2'	5.28	120.86	114.00
1	AA	1318	A	P-O3'-C3'	5.28	126.03	119.70
57	DA	1901	A	P-O3'-C3'	-5.28	113.37	119.70
22	BA	809	G	N3-C4-C5	-5.28	125.96	128.60
22	BA	1848	A	C3'-C2'-C1'	5.28	105.72	101.50
35	BN	101	GLY	N-CA-C	5.28	126.29	113.10
22	BA	2824	C	P-O3'-C3'	5.27	126.03	119.70
53	CA	803	G	C3'-C2'-C1'	5.27	105.72	101.50
1	AA	537	G	C3'-C2'-C1'	5.27	105.72	101.50
53	CA	174	A	C3'-C2'-C1'	5.27	105.72	101.50
53	CA	388	G	O3'-P-O5'	-5.27	93.98	104.00
53	CA	913	A	P-O3'-C3'	5.27	126.03	119.70
53	CA	960	U	O4'-C1'-N1	5.27	112.42	108.20
57	DA	603	A	P-O3'-C3'	5.27	126.03	119.70
58	DB	12	C	O4'-C1'-N1	-5.27	103.98	108.20
57	DA	2037	A	N9-C1'-C2'	-5.27	106.20	112.00
57	DA	2429	G	C3'-C2'-C1'	5.27	105.72	101.50
1	AA	717	U	N1-C1'-C2'	5.27	120.85	114.00
1	AA	1321	U	P-O3'-C3'	-5.27	113.38	119.70
1	AA	352	C	C3'-C2'-C1'	5.27	105.71	101.50
57	DA	1820	U	O4'-C1'-N1	-5.27	103.99	108.20
1	AA	351	G	C4-N9-C1'	5.26	133.34	126.50
1	AA	467	U	N1-C1'-C2'	-5.26	106.21	112.00
22	BA	509	C	P-O3'-C3'	-5.26	113.38	119.70
53	CA	1085	U	P-O3'-C3'	5.26	126.02	119.70
1	AA	267	C	P-O3'-C3'	-5.26	113.39	119.70
1	AA	500	G	C3'-C2'-C1'	5.26	105.71	101.50
22	BA	127	A	P-O3'-C3'	5.26	126.02	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	439	U	C3'-C2'-C1'	5.26	105.71	101.50
1	AA	129	A	P-O3'-C3'	5.26	126.01	119.70
22	BA	1654	A	C1'-O4'-C4'	5.26	114.11	109.90
53	CA	276	G	P-O3'-C3'	-5.26	113.39	119.70
22	BA	265	A	P-O3'-C3'	5.26	126.01	119.70
1	AA	1127	G	C3'-C2'-C1'	5.26	105.71	101.50
1	AA	1225	A	P-O5'-C5'	-5.26	112.49	120.90
53	CA	1301	U	C3'-C2'-C1'	5.26	105.70	101.50
57	DA	622	G	C3'-C2'-C1'	5.26	105.70	101.50
57	DA	1406	U	O4'-C1'-N1	5.26	112.41	108.20
22	BA	1709	U	O4'-C1'-N1	-5.25	104.00	108.20
53	CA	969	A	C3'-C2'-C1'	5.25	105.70	101.50
57	DA	27	G	P-O3'-C3'	5.25	126.01	119.70
22	BA	225	C	O4'-C1'-N1	5.25	112.40	108.20
22	BA	506	G	O4'-C1'-N9	5.25	112.40	108.20
22	BA	645	C	N1-C1'-C2'	5.25	120.83	114.00
22	BA	2630	G	C3'-C2'-C1'	5.25	105.70	101.50
1	AA	174	A	C3'-C2'-C1'	5.25	105.70	101.50
1	AA	1362	A	P-O3'-C3'	5.25	126.00	119.70
57	DA	2207	C	O4'-C1'-N1	5.25	112.40	108.20
53	CA	475	C	P-O3'-C3'	-5.25	113.40	119.70
1	AA	1448	C	C3'-C2'-C1'	5.25	105.70	101.50
22	BA	1779	U	C6-N1-C2	5.25	124.15	121.00
53	CA	1451	U	O4'-C1'-N1	5.25	112.40	108.20
57	DA	1759	A	C3'-C2'-C1'	5.25	105.70	101.50
53	CA	32	A	N9-C1'-C2'	-5.25	106.23	112.00
1	AA	306	A	N9-C1'-C2'	-5.24	106.23	112.00
1	AA	511	C	N1-C1'-C2'	5.24	120.82	114.00
22	BA	223	A	P-O3'-C3'	-5.24	113.41	119.70
22	BA	1324	G	O3'-P-O5'	-5.24	94.04	104.00
22	BA	2276	G	P-O3'-C3'	-5.24	113.41	119.70
22	BA	2382	G	P-O3'-C3'	5.24	125.99	119.70
53	CA	213	G	C3'-C2'-C1'	5.24	105.69	101.50
57	DA	1757	A	P-O3'-C3'	5.24	125.99	119.70
22	BA	996	A	C3'-C2'-C1'	5.24	105.69	101.50
22	BA	2260	C	P-O5'-C5'	-5.24	112.52	120.90
53	CA	277	C	O4'-C1'-N1	5.24	112.39	108.20
1	AA	536	C	C3'-C2'-C1'	5.24	105.69	101.50
53	CA	1086	U	C3'-C2'-C1'	5.24	105.69	101.50
57	DA	1389	G	C3'-C2'-C1'	5.24	105.69	101.50
57	DA	1967	C	C3'-C2'-C1'	5.24	105.69	101.50
22	BA	574	A	P-O3'-C3'	5.24	125.98	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1026	G	C3'-C2'-C1'	5.24	105.69	101.50
53	CA	110	C	O4'-C1'-N1	5.24	112.39	108.20
53	CA	210	C	C2-N1-C1'	5.24	124.56	118.80
22	BA	932	U	N1-C1'-C2'	-5.23	106.24	112.00
22	BA	2194	U	P-O3'-C3'	-5.23	113.42	119.70
57	DA	1291	C	P-O3'-C3'	-5.23	113.42	119.70
22	BA	142	A	P-O3'-C3'	-5.23	113.42	119.70
22	BA	1635	A	C3'-C2'-C1'	5.23	105.69	101.50
57	DA	1417	C	O4'-C1'-N1	5.23	112.39	108.20
22	BA	1931	U	C3'-C2'-C1'	5.23	105.68	101.50
22	BA	456	C	O5'-P-OP2	-5.23	100.99	105.70
22	BA	1320	C	P-O3'-C3'	5.23	125.97	119.70
22	BA	1996	C	C4'-C3'-C2'	5.23	107.83	102.60
1	AA	879	C	N1-C1'-C2'	-5.23	106.25	112.00
1	AA	1400	C	O4'-C1'-N1	-5.23	104.02	108.20
53	CA	392	C	O4'-C1'-N1	5.23	112.38	108.20
53	CA	874	G	C3'-C2'-C1'	5.23	105.68	101.50
53	CA	1282	C	C3'-C2'-C1'	5.23	105.68	101.50
57	DA	477	A	P-O3'-C3'	-5.23	113.43	119.70
57	DA	2403	C	O4'-C1'-N1	5.23	112.38	108.20
53	CA	1141	C	P-O3'-C3'	-5.23	113.43	119.70
57	DA	1275	A	O4'-C1'-N9	5.23	112.38	108.20
57	DA	2307	G	P-O3'-C3'	5.23	125.97	119.70
57	DA	2873	A	O4'-C1'-N9	5.23	112.38	108.20
1	AA	548	G	C3'-C2'-C1'	5.22	105.68	101.50
22	BA	2137	U	C3'-C2'-C1'	5.22	105.68	101.50
22	BA	2264	C	P-O5'-C5'	-5.22	112.54	120.90
53	CA	1507	A	C3'-C2'-C1'	5.22	105.68	101.50
57	DA	396	G	C3'-C2'-C1'	5.22	105.68	101.50
22	BA	980	A	OP1-P-O3'	5.22	116.69	105.20
22	BA	2689	U	C6-N1-C1'	5.22	128.51	121.20
53	CA	874	G	P-O3'-C3'	-5.22	113.43	119.70
57	DA	2324	U	P-O3'-C3'	5.22	125.97	119.70
22	BA	616	A	C3'-C2'-C1'	5.22	105.68	101.50
57	DA	52	A	C3'-C2'-C1'	5.22	105.68	101.50
57	DA	730	A	N9-C1'-C2'	-5.22	106.26	112.00
22	BA	422	A	C3'-C2'-C1'	5.22	105.68	101.50
1	AA	373	A	C3'-C2'-C1'	5.22	105.67	101.50
1	AA	1152	A	N9-C1'-C2'	-5.22	106.26	112.00
53	CA	1401	G	N9-C1'-C2'	-5.22	106.26	112.00
22	BA	831	G	N9-C1'-C2'	-5.21	106.27	112.00
22	BA	2492	U	P-O3'-C3'	-5.21	113.44	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	1078	U	O4'-C1'-N1	5.21	112.37	108.20
57	DA	1992	G	P-O3'-C3'	5.21	125.95	119.70
22	BA	682	G	O4'-C1'-N9	-5.21	104.03	108.20
22	BA	1145	C	P-O3'-C3'	-5.21	113.45	119.70
22	BA	1358	G	P-O5'-C5'	-5.21	112.56	120.90
22	BA	2353	G	P-O5'-C5'	-5.21	112.56	120.90
53	CA	1052	U	C3'-C2'-C1'	5.21	105.67	101.50
57	DA	1397	U	P-O3'-C3'	5.21	125.95	119.70
53	CA	1066	C	P-O3'-C3'	-5.21	113.45	119.70
1	AA	1197	A	P-O3'-C3'	-5.21	113.45	119.70
22	BA	505	A	C8-N9-C4	-5.21	103.72	105.80
22	BA	1677	A	P-O3'-C3'	-5.21	113.45	119.70
57	DA	2347	C	C3'-C2'-C1'	5.21	105.67	101.50
1	AA	936	C	P-O3'-C3'	-5.21	113.45	119.70
22	BA	1326	U	P-O3'-C3'	-5.21	113.45	119.70
57	DA	16	C	O4'-C1'-N1	5.21	112.37	108.20
57	DA	763	G	C3'-C2'-C1'	5.21	105.67	101.50
53	CA	719	C	O4'-C1'-N1	5.21	112.36	108.20
57	DA	617	G	P-O3'-C3'	-5.21	113.45	119.70
57	DA	623	C	C3'-C2'-C1'	5.21	105.66	101.50
22	BA	1971	U	C3'-C2'-C1'	5.20	105.66	101.50
57	DA	1145	C	C3'-C2'-C1'	5.20	105.66	101.50
57	DA	1635	A	P-O5'-C5'	-5.20	112.58	120.90
57	DA	1714	U	O4'-C1'-N1	-5.20	104.04	108.20
1	AA	567	G	P-O5'-C5'	-5.20	112.58	120.90
22	BA	531	C	O3'-P-O5'	-5.20	94.12	104.00
22	BA	2611	C	C3'-C2'-C1'	5.20	105.66	101.50
57	DA	1675	C	P-O5'-C5'	-5.20	112.58	120.90
1	AA	331	G	C3'-C2'-C1'	5.20	105.66	101.50
22	BA	1672	A	P-O5'-C5'	-5.20	112.58	120.90
22	BA	2519	U	O3'-P-O5'	-5.20	94.13	104.00
1	AA	1050	G	N9-C1'-C2'	-5.20	106.29	112.00
22	BA	2500	U	O5'-P-OP1	5.20	116.94	110.70
57	DA	776	G	N3-C4-C5	-5.19	126.00	128.60
57	DA	868	U	C3'-C2'-C1'	5.19	105.66	101.50
57	DA	1135	C	C3'-C2'-C1'	5.19	105.66	101.50
1	AA	267	C	O4'-C1'-N1	5.19	112.36	108.20
22	BA	2880	C	C3'-C2'-C1'	5.19	105.65	101.50
1	AA	552	U	O4'-C1'-N1	5.19	112.35	108.20
22	BA	581	C	P-O3'-C3'	5.19	125.93	119.70
22	BA	2200	C	C3'-C2'-C1'	5.19	105.65	101.50
53	CA	13	U	O4'-C1'-N1	5.19	112.35	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	181	A	P-O3'-C3'	5.19	125.93	119.70
53	CA	596	A	C3'-C2'-C1'	5.19	105.65	101.50
53	CA	1191	A	P-O3'-C3'	-5.19	113.47	119.70
57	DA	2199	A	C3'-C2'-C1'	5.19	105.65	101.50
1	AA	252	U	P-O3'-C3'	-5.19	113.47	119.70
2	AB	146	SER	C-N-CA	5.19	134.67	121.70
22	BA	2518	A	O4'-C1'-N9	-5.19	104.05	108.20
57	DA	374	A	P-O3'-C3'	-5.19	113.47	119.70
57	DA	705	A	P-O3'-C3'	-5.19	113.47	119.70
57	DA	1938	A	P-O3'-C3'	5.19	125.92	119.70
22	BA	544	C	O4'-C1'-N1	-5.19	104.05	108.20
23	BB	67	G	C3'-C2'-C1'	5.19	105.65	101.50
22	BA	1183	U	O3'-P-O5'	-5.18	94.15	104.00
22	BA	2259	U	P-O3'-C3'	-5.18	113.48	119.70
22	BA	1733	G	N9-C1'-C2'	-5.18	106.30	112.00
22	BA	2017	U	O4'-C1'-N1	5.18	112.35	108.20
53	CA	1184	G	N9-C1'-C2'	-5.18	106.30	112.00
22	BA	946	C	P-O3'-C3'	-5.18	113.48	119.70
22	BA	1606	C	P-O5'-C5'	-5.18	112.61	120.90
22	BA	24	G	P-O3'-C3'	5.18	125.91	119.70
57	DA	2148	G	C3'-C2'-C1'	5.18	105.64	101.50
57	DA	2350	C	O4'-C1'-N1	5.18	112.34	108.20
1	AA	346	G	P-O5'-C5'	-5.18	112.62	120.90
22	BA	829	A	C8-N9-C4	5.18	107.87	105.80
22	BA	1560	G	C3'-C2'-C1'	5.18	105.64	101.50
57	DA	615	U	P-O3'-C3'	5.18	125.91	119.70
57	DA	2584	U	O4'-C1'-N1	5.18	112.34	108.20
22	BA	143	C	C3'-C2'-C1'	5.17	105.64	101.50
22	BA	794	A	P-O5'-C5'	-5.17	112.62	120.90
22	BA	1157	G	OP1-P-OP2	5.17	127.36	119.60
22	BA	1669	A	C3'-C2'-C1'	5.17	105.64	101.50
53	CA	374	A	C3'-C2'-C1'	5.17	105.64	101.50
1	AA	330	C	C3'-C2'-C1'	5.17	105.64	101.50
22	BA	2325	G	C3'-C2'-C1'	5.17	105.64	101.50
53	CA	937	A	N9-C1'-C2'	-5.17	106.31	112.00
57	DA	232	G	P-O3'-C3'	5.17	125.91	119.70
57	DA	129	C	O4'-C1'-N1	5.17	112.34	108.20
57	DA	1600	C	O4'-C1'-N1	-5.17	104.06	108.20
57	DA	2851	A	P-O3'-C3'	-5.17	113.50	119.70
22	BA	1357	C	P-O3'-C3'	-5.17	113.50	119.70
53	CA	500	G	P-O3'-C3'	-5.17	113.50	119.70
53	CA	1453	G	P-O3'-C3'	-5.17	113.50	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	236	C	O4'-C1'-N1	5.17	112.33	108.20
1	AA	1321	U	N1-C1'-C2'	-5.17	106.32	112.00
22	BA	1838	C	N1-C1'-C2'	5.17	120.72	114.00
22	BA	2283	C	C3'-C2'-C1'	5.17	105.63	101.50
22	BA	2431	U	O4'-C1'-N1	-5.17	104.07	108.20
53	CA	936	C	P-O3'-C3'	-5.17	113.50	119.70
57	DA	1034	G	N9-C1'-C2'	-5.17	106.32	112.00
57	DA	1625	C	O4'-C1'-N1	5.17	112.33	108.20
1	AA	84	U	N1-C1'-C2'	5.17	120.72	114.00
22	BA	272	A	O4'-C1'-N9	5.17	112.33	108.20
22	BA	35	G	P-O5'-C5'	-5.16	112.64	120.90
57	DA	250	G	C3'-C2'-C1'	5.16	105.63	101.50
22	BA	1558	C	O3'-P-O5'	5.16	113.81	104.00
22	BA	1777	U	P-O5'-C5'	-5.16	112.64	120.90
1	AA	497	G	N9-C1'-C2'	-5.16	106.33	112.00
1	AA	1050	G	C3'-C2'-C1'	5.16	105.63	101.50
22	BA	2487	G	P-O3'-C3'	5.16	125.89	119.70
22	BA	1648	U	C3'-C2'-C1'	5.16	105.62	101.50
22	BA	1941	C	P-O3'-C3'	-5.16	113.51	119.70
22	BA	2391	G	O4'-C1'-N9	5.16	112.33	108.20
22	BA	2423	U	N1-C1'-C2'	5.16	120.70	114.00
53	CA	84	U	N1-C1'-C2'	5.16	120.70	114.00
53	CA	794	A	N9-C1'-C2'	-5.16	106.33	112.00
57	DA	2137	U	O4'-C1'-N1	5.16	112.33	108.20
22	BA	742	A	P-O3'-C3'	-5.16	113.51	119.70
53	CA	1348	U	C3'-C2'-C1'	5.16	105.62	101.50
57	DA	776	G	C8-N9-C1'	-5.16	120.30	127.00
57	DA	990	A	C3'-C2'-C1'	5.16	105.62	101.50
57	DA	1483	G	C3'-C2'-C1'	5.16	105.62	101.50
1	AA	108	G	O4'-C1'-N9	5.15	112.32	108.20
22	BA	1398	C	P-O3'-C3'	-5.15	113.52	119.70
1	AA	1161	C	P-O3'-C3'	-5.15	113.52	119.70
53	CA	1225	A	P-O3'-C3'	5.15	125.88	119.70
1	AA	273	U	P-O3'-C3'	-5.15	113.52	119.70
1	AA	1229	A	C3'-C2'-C1'	5.15	105.62	101.50
22	BA	1185	G	P-O5'-C5'	-5.15	112.66	120.90
23	BB	109	A	N9-C1'-C2'	-5.15	106.33	112.00
53	CA	482	A	P-O3'-C3'	-5.15	113.52	119.70
57	DA	36	G	P-O3'-C3'	-5.15	113.52	119.70
57	DA	1606	C	O4'-C1'-N1	5.15	112.32	108.20
1	AA	1398	A	N9-C1'-C2'	-5.15	106.34	112.00
57	DA	1561	C	N1-C1'-C2'	-5.15	106.34	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	564	C	C3'-C2'-C1'	5.15	105.62	101.50
57	DA	1326	U	N1-C1'-C2'	-5.15	106.34	112.00
57	DA	1613	G	C3'-C2'-C1'	5.15	105.62	101.50
22	BA	70	G	C4'-C3'-C2'	5.14	107.74	102.60
22	BA	509	C	C2-N1-C1'	5.14	124.46	118.80
22	BA	2150	C	N1-C1'-C2'	-5.14	106.34	112.00
1	AA	1184	G	C3'-C2'-C1'	5.14	105.61	101.50
22	BA	854	C	O4'-C1'-N1	5.14	112.31	108.20
22	BA	938	G	P-O3'-C3'	-5.14	113.53	119.70
22	BA	1689	A	P-O5'-C5'	-5.14	112.67	120.90
53	CA	980	C	O4'-C1'-N1	5.14	112.31	108.20
53	CA	1283	U	O4'-C1'-N1	5.14	112.31	108.20
1	AA	1096	C	O4'-C1'-N1	5.14	112.31	108.20
22	BA	1128	G	O5'-P-OP2	-5.14	101.07	105.70
57	DA	164	C	C3'-C2'-C1'	5.14	105.61	101.50
1	AA	1153	G	N9-C1'-C2'	-5.14	106.35	112.00
57	DA	1510	G	P-O3'-C3'	-5.14	113.53	119.70
22	BA	1331	G	N9-C1'-C2'	-5.14	106.35	112.00
1	AA	1505	G	C3'-C2'-C1'	5.14	105.61	101.50
53	CA	718	A	C3'-C2'-C1'	5.14	105.61	101.50
22	BA	782	A	P-O5'-C5'	5.13	129.12	120.90
22	BA	2626	C	C6-N1-C2	5.13	122.35	120.30
53	CA	72	A	C3'-C2'-C1'	5.13	105.61	101.50
53	CA	1454	G	C3'-C2'-C1'	5.13	105.61	101.50
22	BA	1063	G	C3'-C2'-C1'	5.13	105.61	101.50
53	CA	536	C	C3'-C2'-C1'	5.13	105.61	101.50
57	DA	2668	G	P-O3'-C3'	-5.13	113.54	119.70
22	BA	459	U	P-O3'-C3'	-5.13	113.54	119.70
53	CA	401	C	P-O5'-C5'	-5.13	112.69	120.90
1	AA	1102	A	C3'-C2'-C1'	5.13	105.60	101.50
22	BA	398	C	P-O5'-C5'	-5.13	112.69	120.90
53	CA	373	A	N9-C1'-C2'	-5.13	106.36	112.00
57	DA	1276	A	C3'-C2'-C1'	5.13	105.60	101.50
57	DA	2757	A	C3'-C2'-C1'	5.13	105.60	101.50
22	BA	490	C	N1-C1'-C2'	-5.12	106.36	112.00
57	DA	206	U	C3'-C2'-C1'	5.12	105.60	101.50
57	DA	729	G	N9-C4-C5	5.12	107.45	105.40
57	DA	1787	A	C3'-C2'-C1'	5.12	105.60	101.50
1	AA	117	G	O5'-P-OP2	-5.12	101.09	105.70
1	AA	1191	A	C3'-C2'-C1'	5.12	105.60	101.50
22	BA	2227	A	O5'-P-OP2	-5.12	101.09	105.70
57	DA	2837	A	C3'-C2'-C1'	5.12	105.60	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1311	G	N3-C4-C5	5.12	131.16	128.60
22	BA	2214	C	C3'-C2'-C1'	5.12	105.60	101.50
57	DA	2489	U	P-O3'-C3'	5.12	125.84	119.70
1	AA	1453	G	C3'-C2'-C1'	5.12	105.59	101.50
22	BA	1829	A	N9-C1'-C2'	-5.12	106.37	112.00
22	BA	1936	A	C2-N3-C4	-5.12	108.04	110.60
22	BA	2847	U	O4'-C1'-N1	5.12	112.30	108.20
22	BA	272	A	P-O3'-C3'	-5.12	113.56	119.70
22	BA	2750	A	P-O3'-C3'	5.12	125.84	119.70
57	DA	763	G	N9-C1'-C2'	-5.12	106.37	112.00
57	DA	2544	G	P-O3'-C3'	-5.12	113.56	119.70
1	AA	245	U	C3'-C2'-C1'	5.12	105.59	101.50
22	BA	177	G	O4'-C1'-N9	5.12	112.29	108.20
23	BB	89	U	P-O5'-C5'	-5.12	112.71	120.90
53	CA	96	U	O4'-C1'-N1	5.12	112.29	108.20
53	CA	512	U	C3'-C2'-C1'	5.12	105.59	101.50
53	CA	977	A	P-O3'-C3'	-5.12	113.56	119.70
57	DA	2896	C	C3'-C2'-C1'	5.12	105.59	101.50
22	BA	1135	C	O4'-C1'-N1	-5.11	104.11	108.20
22	BA	2633	G	O3'-P-O5'	-5.11	94.28	104.00
22	BA	1866	A	N9-C1'-C2'	-5.11	106.38	112.00
57	DA	1388	G	N9-C1'-C2'	-5.11	106.38	112.00
1	AA	722	G	C3'-C2'-C1'	5.11	105.59	101.50
1	AA	1406	U	P-O3'-C3'	-5.11	113.57	119.70
1	AA	1526	G	P-O5'-C5'	-5.11	112.72	120.90
22	BA	534	U	O5'-P-OP2	-5.11	101.10	105.70
22	BA	2481	G	P-O5'-C5'	-5.11	112.72	120.90
53	CA	812	G	P-O3'-C3'	5.11	125.83	119.70
53	CA	1383	C	C3'-C2'-C1'	5.11	105.59	101.50
57	DA	2068	U	C3'-C2'-C1'	5.11	105.59	101.50
22	BA	1808	A	P-O3'-C3'	5.11	125.83	119.70
53	CA	85	U	N1-C1'-C2'	5.11	120.64	114.00
1	AA	534	U	P-O3'-C3'	-5.11	113.57	119.70
22	BA	2670	A	P-O5'-C5'	-5.11	112.73	120.90
1	AA	51	A	C3'-C2'-C1'	5.11	105.58	101.50
57	DA	407	G	O4'-C1'-N9	5.11	112.28	108.20
57	DA	992	C	O4'-C1'-N1	5.11	112.28	108.20
57	DA	1489	C	P-O3'-C3'	5.11	125.83	119.70
57	DA	2024	G	N9-C1'-C2'	-5.11	106.38	112.00
22	BA	1714	U	P-O3'-C3'	-5.10	113.58	119.70
57	DA	828	U	O4'-C1'-N1	5.10	112.28	108.20
57	DA	2289	G	N9-C1'-C2'	-5.10	106.39	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	183	C	O4'-C1'-N1	5.10	112.28	108.20
1	AA	431	A	P-O5'-C5'	-5.10	112.74	120.90
1	AA	801	U	P-O3'-C3'	-5.10	113.58	119.70
1	AA	817	C	P-O3'-C3'	5.10	125.82	119.70
53	CA	644	U	O4'-C1'-N1	5.10	112.28	108.20
57	DA	764	A	P-O5'-C5'	-5.10	112.73	120.90
57	DA	1777	U	O5'-P-OP2	-5.10	101.11	105.70
57	DA	2656	U	C3'-C2'-C1'	5.10	105.58	101.50
22	BA	2150	C	P-O3'-C3'	-5.10	113.58	119.70
1	AA	891	U	C3'-C2'-C1'	5.10	105.58	101.50
22	BA	919	U	C2-N1-C1'	5.10	123.82	117.70
57	DA	749	A	C3'-C2'-C1'	5.10	105.58	101.50
57	DA	2714	G	P-O3'-C3'	-5.10	113.58	119.70
22	BA	373	U	C3'-C2'-C1'	5.10	105.58	101.50
22	BA	509	C	C5-C6-N1	5.10	123.55	121.00
22	BA	727	A	P-O5'-C5'	-5.10	112.74	120.90
22	BA	2389	G	P-O3'-C3'	5.10	125.82	119.70
57	DA	1063	G	C3'-C2'-C1'	5.10	105.58	101.50
57	DA	1313	U	C3'-C2'-C1'	5.10	105.58	101.50
57	DA	1619	G	N9-C1'-C2'	-5.10	106.39	112.00
1	AA	4	U	C2-N1-C1'	5.10	123.81	117.70
22	BA	705	A	N9-C1'-C2'	-5.10	106.39	112.00
53	CA	1398	A	N9-C1'-C2'	-5.10	106.39	112.00
22	BA	475	C	P-O5'-C5'	-5.09	112.75	120.90
22	BA	1142	A	C2-N3-C4	-5.09	108.05	110.60
57	DA	1048	A	P-O3'-C3'	5.09	125.81	119.70
22	BA	396	G	N9-C1'-C2'	-5.09	106.40	112.00
53	CA	73	C	C3'-C2'-C1'	5.09	105.58	101.50
53	CA	968	A	O4'-C1'-N9	5.09	112.27	108.20
53	CA	1213	A	P-O3'-C3'	5.09	125.81	119.70
57	DA	794	A	C3'-C2'-C1'	5.09	105.58	101.50
22	BA	1288	G	O4'-C1'-N9	5.09	112.27	108.20
22	BA	1634	A	C4'-C3'-C2'	5.09	107.69	102.60
22	BA	2491	U	O5'-P-OP2	-5.09	101.12	105.70
53	CA	1382	C	O4'-C1'-N1	5.09	112.27	108.20
22	BA	1406	U	N1-C1'-C2'	5.09	120.61	114.00
22	BA	2181	U	O4'-C1'-N1	-5.09	104.13	108.20
22	BA	2801	G	P-O3'-C3'	-5.09	113.59	119.70
22	BA	2842	G	N1-C6-O6	5.09	122.95	119.90
57	DA	197	A	C3'-C2'-C1'	5.09	105.57	101.50
57	DA	1207	C	O4'-C1'-N1	5.09	112.27	108.20
1	AA	560	A	P-O3'-C3'	-5.09	113.59	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	585	G	O5'-P-OP2	-5.09	101.12	105.70
22	BA	1151	A	P-O3'-C3'	-5.09	113.60	119.70
22	BA	1616	A	P-O5'-C5'	-5.09	112.76	120.90
22	BA	2025	C	P-O3'-C3'	5.09	125.80	119.70
53	CA	245	U	C3'-C2'-C1'	5.09	105.57	101.50
57	DA	1635	A	P-O3'-C3'	-5.09	113.60	119.70
57	DA	2023	C	C3'-C2'-C1'	5.09	105.57	101.50
22	BA	1971	U	O3'-P-O5'	-5.08	94.34	104.00
22	BA	1273	U	C3'-C2'-C1'	5.08	105.57	101.50
57	DA	1915	U	P-O3'-C3'	-5.08	113.60	119.70
22	BA	1142	A	C5-N7-C8	-5.08	101.36	103.90
22	BA	1263	U	C5-C4-O4	-5.08	122.85	125.90
22	BA	2784	U	P-O5'-C5'	-5.08	112.77	120.90
1	AA	835	U	P-O3'-C3'	-5.08	113.60	119.70
22	BA	75	G	N9-C1'-C2'	-5.08	106.41	112.00
22	BA	143	C	O4'-C1'-N1	5.08	112.26	108.20
53	CA	970	C	O4'-C1'-N1	5.08	112.26	108.20
57	DA	984	A	P-O3'-C3'	5.08	125.79	119.70
22	BA	636	G	P-O3'-C3'	5.08	125.79	119.70
57	DA	1931	U	C3'-C2'-C1'	5.08	105.56	101.50
1	AA	373	A	N9-C1'-C2'	-5.08	106.42	112.00
22	BA	33	C	C6-N1-C2	5.07	122.33	120.30
22	BA	1665	A	P-O5'-C5'	-5.07	112.78	120.90
53	CA	815	A	P-O3'-C3'	5.07	125.79	119.70
57	DA	1882	U	O4'-C1'-N1	5.07	112.26	108.20
57	DA	2615	U	P-O3'-C3'	-5.07	113.61	119.70
22	BA	252	G	O4'-C1'-N9	-5.07	104.14	108.20
22	BA	595	C	O5'-P-OP2	-5.07	101.14	105.70
22	BA	872	U	P-O3'-C3'	-5.07	113.61	119.70
58	DB	90	C	C3'-C2'-C1'	5.07	105.56	101.50
53	CA	808	C	O4'-C1'-N1	5.07	112.25	108.20
22	BA	805	G	P-O5'-C5'	-5.07	112.79	120.90
1	AA	959	A	P-O3'-C3'	5.07	125.78	119.70
22	BA	1555	G	C3'-C2'-C1'	5.07	105.55	101.50
22	BA	2656	U	C3'-C2'-C1'	5.07	105.55	101.50
57	DA	397	U	N1-C1'-C2'	-5.07	106.43	112.00
57	DA	1429	G	C3'-C2'-C1'	5.07	105.55	101.50
57	DA	1647	U	O4'-C1'-N1	5.07	112.25	108.20
57	DA	2021	C	P-O3'-C3'	5.07	125.78	119.70
57	DA	2069	G	C3'-C2'-C1'	5.07	105.55	101.50
57	DA	2149	U	N1-C1'-C2'	-5.07	106.43	112.00
57	DA	2691	C	C3'-C2'-C1'	5.07	105.55	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	642	A	N9-C1'-C2'	-5.06	106.43	112.00
1	AA	1278	G	P-O3'-C3'	5.06	125.77	119.70
57	DA	2850	A	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	984	A	N3-C4-C5	5.06	130.34	126.80
53	CA	977	A	C3'-C2'-C1'	5.06	105.55	101.50
57	DA	528	A	P-O3'-C3'	-5.06	113.63	119.70
1	AA	71	A	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	1144	A	C3'-C2'-C1'	5.06	105.55	101.50
53	CA	1394	A	P-O3'-C3'	5.06	125.77	119.70
57	DA	1982	U	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	435	C	P-O3'-C3'	-5.06	113.63	119.70
22	BA	2714	G	P-O5'-C5'	-5.06	112.81	120.90
22	BA	2892	G	O5'-P-OP1	-5.06	101.15	105.70
53	CA	1073	U	O4'-C1'-N1	5.06	112.25	108.20
57	DA	1655	A	C3'-C2'-C1'	5.06	105.55	101.50
57	DA	2681	C	P-O3'-C3'	5.06	125.77	119.70
53	CA	95	C	C3'-C2'-C1'	5.06	105.55	101.50
57	DA	339	U	O4'-C1'-N1	5.06	112.25	108.20
53	CA	1140	C	P-O3'-C3'	-5.05	113.64	119.70
57	DA	604	G	P-O3'-C3'	-5.05	113.63	119.70
57	DA	1802	A	C3'-C2'-C1'	5.05	105.54	101.50
57	DA	2837	A	P-O3'-C3'	-5.05	113.64	119.70
53	CA	381	C	C2-N1-C1'	5.05	124.36	118.80
53	CA	199	A	N9-C1'-C2'	-5.05	106.44	112.00
57	DA	235	U	C3'-C2'-C1'	5.05	105.54	101.50
1	AA	794	A	N9-C1'-C2'	-5.05	106.44	112.00
1	AA	1517	G	P-O3'-C3'	-5.05	113.64	119.70
53	CA	1101	A	P-O3'-C3'	5.05	125.76	119.70
22	BA	970	U	OP2-P-O3'	5.05	116.30	105.20
22	BA	1152	C	N1-C1'-C2'	-5.04	106.45	112.00
22	BA	1597	A	P-O3'-C3'	5.04	125.75	119.70
22	BA	2312	U	O4'-C1'-N1	5.04	112.23	108.20
53	CA	1287	A	C3'-C2'-C1'	5.04	105.53	101.50
57	DA	774	G	C4-N9-C1'	-5.04	119.94	126.50
57	DA	783	A	C4-N9-C1'	5.04	135.38	126.30
22	BA	216	A	P-O3'-C3'	-5.04	113.65	119.70
22	BA	2199	A	O4'-C1'-N9	-5.04	104.17	108.20
57	DA	616	A	P-O3'-C3'	-5.04	113.65	119.70
57	DA	1078	U	P-O3'-C3'	5.04	125.75	119.70
57	DA	121	G	C3'-C2'-C1'	5.04	105.53	101.50
22	BA	1224	U	N1-C1'-C2'	5.04	120.55	114.00
1	AA	422	C	O4'-C1'-N1	5.04	112.23	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1279	G	P-O3'-C3'	-5.04	113.66	119.70
22	BA	30	G	P-O5'-C5'	-5.04	112.84	120.90
22	BA	137	U	P-O3'-C3'	5.04	125.74	119.70
22	BA	2067	G	O4'-C1'-N9	5.04	112.23	108.20
22	BA	2031	A	C5-C6-N6	-5.03	119.67	123.70
57	DA	730	A	C3'-C2'-C1'	5.03	105.53	101.50
58	DB	88	C	N1-C1'-C2'	5.03	120.54	114.00
22	BA	1281	G	O3'-P-O5'	-5.03	94.44	104.00
22	BA	1560	G	P-O3'-C3'	-5.03	113.66	119.70
53	CA	1399	C	O4'-C1'-N1	5.03	112.22	108.20
22	BA	28	A	C3'-C2'-C1'	5.03	105.52	101.50
22	BA	2258	C	C4'-C3'-C2'	5.03	107.63	102.60
22	BA	533	G	C3'-C2'-C1'	5.03	105.52	101.50
57	DA	476	G	P-O3'-C3'	-5.03	113.67	119.70
1	AA	1516	G	P-O3'-C3'	5.03	125.73	119.70
22	BA	958	U	P-O3'-C3'	-5.03	113.67	119.70
57	DA	2275	C	N1-C1'-C2'	5.03	120.53	114.00
1	AA	484	G	P-O3'-C3'	5.02	125.73	119.70
22	BA	2689	U	C1'-O4'-C4'	-5.02	105.88	109.90
57	DA	1808	A	P-O3'-C3'	5.02	125.73	119.70
1	AA	1168	U	P-O3'-C3'	5.02	125.73	119.70
22	BA	532	A	C8-N9-C4	-5.02	103.79	105.80
22	BA	990	A	P-O3'-C3'	-5.02	113.67	119.70
22	BA	990	A	N9-C1'-C2'	-5.02	106.48	112.00
22	BA	2020	A	O5'-P-OP2	-5.02	101.18	105.70
57	DA	566	U	P-O3'-C3'	-5.02	113.67	119.70
57	DA	1654	A	P-O3'-C3'	-5.02	113.67	119.70
22	BA	265	A	O4'-C1'-N9	5.02	112.22	108.20
22	BA	2250	G	C2-N3-C4	-5.02	109.39	111.90
53	CA	52	C	C3'-C2'-C1'	5.02	105.52	101.50
53	CA	1066	C	C3'-C2'-C1'	5.02	105.52	101.50
53	CA	1146	A	P-O3'-C3'	-5.02	113.68	119.70
1	AA	467	U	P-O3'-C3'	-5.02	113.68	119.70
1	AA	563	A	C3'-C2'-C1'	5.02	105.52	101.50
1	AA	916	U	C2-N1-C1'	5.02	123.72	117.70
22	BA	729	G	P-O5'-C5'	-5.02	112.87	120.90
57	DA	210	C	O4'-C1'-N1	5.02	112.21	108.20
57	DA	1537	G	C3'-C2'-C1'	5.02	105.51	101.50
57	DA	2217	G	C3'-C2'-C1'	5.02	105.51	101.50
22	BA	28	A	N9-C1'-C2'	-5.01	106.48	112.00
22	BA	919	U	C4-C5-C6	-5.01	116.69	119.70
22	BA	2894	G	C3'-C2'-C1'	5.01	105.51	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	DA	92	U	P-O3'-C3'	-5.01	113.68	119.70
57	DA	1965	C	P-O3'-C3'	-5.01	113.68	119.70
1	AA	1138	G	C3'-C2'-C1'	5.01	105.51	101.50
22	BA	673	C	P-O5'-C5'	-5.01	112.88	120.90
22	BA	1209	U	O4'-C1'-N1	5.01	112.21	108.20
53	CA	87	C	C3'-C2'-C1'	5.01	105.51	101.50
53	CA	973	G	P-O3'-C3'	5.01	125.72	119.70
1	AA	1338	G	C3'-C2'-C1'	5.01	105.51	101.50
22	BA	490	C	P-O5'-C5'	-5.01	112.88	120.90
57	DA	163	C	C3'-C2'-C1'	5.01	105.51	101.50
57	DA	1079	C	C3'-C2'-C1'	5.01	105.51	101.50
57	DA	1699	G	O4'-C1'-N9	5.01	112.21	108.20
22	BA	546	U	P-O3'-C3'	5.01	125.71	119.70
22	BA	1668	A	P-O3'-C3'	5.01	125.71	119.70
22	BA	620	G	O4'-C1'-N9	5.00	112.20	108.20
57	DA	831	G	C3'-C2'-C1'	5.00	105.50	101.50
22	BA	1952	A	P-O3'-C3'	5.00	125.70	119.70
22	BA	2871	U	O5'-P-OP2	-5.00	101.20	105.70
22	BA	1992	G	C4'-C3'-C2'	5.00	107.60	102.60
53	CA	500	G	C3'-C2'-C1'	5.00	105.50	101.50
53	CA	559	A	O4'-C1'-N9	5.00	112.20	108.20
53	CA	567	G	P-O3'-C3'	-5.00	113.70	119.70
57	DA	963	U	P-O3'-C3'	-5.00	113.70	119.70

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
25	BD	9	VAL	Peptide
35	BN	101	GLY	Peptide
2	CB	107	ARG	Mainchain

5.2 Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32895	0	16553	1473	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	AB	1705	0	1732	195	0
2	CB	1705	0	1732	176	0
3	AC	1625	0	1699	121	0
3	CC	1625	0	1699	127	0
4	AD	1643	0	1710	166	0
4	CD	1643	0	1710	177	0
5	AE	1106	0	1147	146	0
5	CE	1106	0	1148	123	0
6	AF	818	0	808	76	0
6	CF	818	0	808	74	0
7	AG	1182	0	1240	89	0
8	AH	979	0	1034	102	0
8	CH	979	0	1034	115	0
9	AI	1022	0	1070	91	0
9	CI	1022	0	1070	108	0
10	AJ	787	0	828	83	0
10	CJ	787	0	828	93	0
11	AK	877	0	887	91	0
11	CK	877	0	887	79	0
12	AL	955	0	1019	92	0
12	CL	955	0	1019	100	0
13	AM	884	0	944	70	0
14	AN	774	0	827	81	0
14	CN	769	0	822	85	0
15	AO	714	0	737	59	0
15	CO	714	0	737	58	0
16	AP	649	0	666	62	0
17	AQ	649	0	691	81	0
17	CQ	649	0	691	70	0
18	AR	456	0	478	31	0
18	CR	456	0	478	47	0
19	AS	638	0	665	47	0
19	CS	638	0	665	64	0
20	AT	665	0	714	65	0
20	CT	665	0	714	61	0
21	AU	426	0	449	79	0
21	CU	426	0	449	80	0
22	BA	61274	0	30819	2356	0
23	BB	2529	0	1281	83	0
24	BC	2083	0	2157	223	0
24	DC	2083	0	2157	262	0
25	BD	1565	0	1616	223	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
25	DD	1565	0	1616	197	0
26	BE	1552	0	1619	152	0
26	DE	1552	0	1619	179	0
27	BF	1411	0	1447	140	0
28	BG	1323	0	1374	147	0
28	DG	1323	0	1374	131	0
29	BH	1111	0	1148	107	0
29	DH	1111	0	1148	115	0
30	BI	1032	0	1088	109	0
30	DI	1032	0	1088	76	0
31	BJ	1129	0	1162	171	0
31	DJ	1129	0	1162	133	0
32	BK	939	0	1012	113	0
32	DK	939	0	1012	128	0
33	BL	1045	0	1117	122	0
33	DL	1045	0	1117	117	0
34	BM	1074	0	1157	99	0
34	DM	1074	0	1157	107	0
35	BN	961	0	1000	96	0
35	DN	961	0	1000	134	0
36	BO	892	0	923	75	0
36	DO	892	0	923	71	0
37	BP	917	0	965	139	0
37	DP	917	0	965	130	0
38	BQ	947	0	1022	153	0
38	DQ	947	0	1022	124	0
39	BR	816	0	839	116	0
39	DR	816	0	839	87	0
40	BS	857	0	922	81	0
40	DS	857	0	922	78	0
41	BT	739	0	807	112	0
41	DT	739	0	807	108	0
42	BU	780	0	834	52	0
42	DU	780	0	834	92	0
43	BV	753	0	780	70	0
43	DV	753	0	780	71	0
44	BW	596	0	610	201	0
44	DW	596	0	610	117	0
45	BX	625	0	655	67	0
45	DX	625	0	655	85	0
46	BY	509	0	543	44	0
46	DY	509	0	543	63	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
47	BZ	449	0	491	39	0
47	DZ	449	0	491	42	0
48	B0	444	0	461	33	0
48	D0	444	0	461	64	0
49	B1	410	0	440	38	0
49	D1	410	0	440	38	0
50	B2	377	0	418	37	0
50	D2	377	0	418	31	0
51	B3	504	0	574	46	0
51	D3	504	0	574	56	0
52	B4	302	0	340	39	0
52	D4	302	0	343	36	0
53	CA	32831	0	16521	1811	0
54	CG	1175	0	1230	125	0
55	CM	877	0	937	97	0
56	CP	639	0	656	71	0
57	DA	60995	0	30679	3815	0
58	DB	2507	0	1270	168	0
59	DF	1420	0	1460	194	0
60	AA	42	0	0	0	0
60	AN	1	0	0	0	0
60	BA	135	0	0	0	0
60	BB	4	0	0	0	0
60	BL	1	0	0	0	0
60	CA	42	0	0	0	0
60	DA	133	0	0	0	0
60	DB	1	0	0	0	0
60	DC	1	0	0	0	0
60	DE	1	0	0	0	0
60	DJ	1	0	0	0	0
61	BA	20	0	11	1	0
62	B4	1	0	0	0	0
62	D4	1	0	0	0	0
63	AA	197	0	0	11	0
63	AL	2	0	0	0	0
63	AN	6	0	0	1	0
63	AT	2	0	0	0	0
63	AU	1	0	0	0	0
63	B2	2	0	0	0	0
63	B3	2	0	0	0	0
63	B4	2	0	0	0	0
63	BA	608	0	0	43	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
63	BB	19	0	0	0	0
63	BC	8	0	0	0	0
63	BD	2	0	0	3	0
63	BE	1	0	0	0	0
63	BL	4	0	0	1	0
63	BN	2	0	0	0	0
63	BQ	1	0	0	0	0
63	BT	2	0	0	1	0
63	BV	1	0	0	1	0
63	CA	195	0	0	7	0
63	CE	3	0	0	1	0
63	CI	1	0	0	0	0
63	CL	1	0	0	0	0
63	CN	3	0	0	0	0
63	CT	2	0	0	0	0
63	CU	2	0	0	0	0
63	D2	1	0	0	1	0
63	D3	1	0	0	0	0
63	D4	4	0	0	0	0
63	DA	603	0	0	19	0
63	DB	4	0	0	0	0
63	DC	10	0	0	0	0
63	DD	1	0	0	0	0
63	DE	3	0	0	0	0
63	DJ	4	0	0	0	0
63	DL	5	0	0	0	0
63	DN	2	0	0	0	0
63	DT	2	0	0	0	0
63	DU	2	0	0	0	0
63	DV	1	0	0	0	0
All	All	284499	0	190851	17927	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 38.

All (17927) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2092:U:H1'	57:DA:2093:G:C8	1.52	1.43
38:BQ:63:ARG:NH1	38:BQ:96:ASP:HA	1.44	1.29
57:DA:2092:U:O2'	57:DA:2093:G:H5''	1.08	1.24

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:63:ARG:HH12	38:BQ:96:ASP:CA	1.55	1.20
28:BG:83:THR:HA	28:BG:84:LYS:NZ	1.57	1.19
25:BD:151:THR:HG22	25:BD:152:PRO:HD3	1.22	1.16
37:BP:50:ARG:HB3	37:BP:57:ALA:H	1.09	1.16
39:BR:49:ILE:HD12	39:BR:52:PRO:HA	1.18	1.14
12:AL:49:ARG:HH11	12:AL:49:ARG:HG2	1.06	1.14
22:BA:855:G:H21	44:BW:23:LYS:HG2	1.11	1.13
57:DA:197:A:H62	57:DA:2430:A:H2'	1.11	1.13
9:AI:98:ARG:HG2	9:AI:103:VAL:HG21	1.24	1.13
58:DB:58:A:H2'	58:DB:59:A:H8	1.13	1.13
21:CU:16:ARG:HG3	21:CU:19:LYS:HG2	1.29	1.13
44:BW:9:THR:HG23	44:BW:10:ARG:HD3	1.28	1.13
37:BP:50:ARG:HD3	37:BP:56:SER:HB3	1.20	1.13
57:DA:2216:G:O2'	57:DA:2217:G:H8	1.32	1.12
58:DB:58:A:H2'	58:DB:59:A:C8	1.85	1.12
40:BS:84:ARG:HB2	40:BS:96:ILE:HD11	1.31	1.12
53:CA:254:G:H21	17:CQ:17:GLU:HG3	1.10	1.12
20:AT:43:LYS:HB3	20:AT:86:ALA:HB1	1.31	1.12
57:DA:2092:U:O2'	57:DA:2093:G:C5'	1.98	1.12
53:CA:986:U:H2'	53:CA:987:G:C8	1.84	1.11
50:B2:3:ARG:HH21	50:B2:3:ARG:HG2	1.14	1.11
57:DA:2135:A:H3'	57:DA:2136:G:H5''	1.33	1.11
5:CE:29:ILE:HG23	5:CE:30:PHE:H	1.09	1.11
57:DA:2296:U:H4'	57:DA:2297:A:OP1	1.39	1.11
29:BH:31:VAL:HB	29:BH:32:PRO:HD2	1.31	1.10
44:DW:40:ARG:HG2	44:DW:40:ARG:HH11	1.02	1.10
27:BF:35:LEU:HB3	27:BF:153:ILE:HG22	1.29	1.09
5:AE:80:LEU:HD23	5:AE:122:VAL:HG11	1.27	1.09
32:BK:51:LYS:HG3	32:BK:95:ILE:HD11	1.30	1.09
25:BD:12:THR:HG22	25:BD:13:ARG:H	1.04	1.09
1:AA:1129:C:H5''	9:AI:17:ARG:HH22	1.07	1.09
57:DA:1915:U:H2'	57:DA:1916:A:C8	1.87	1.09
44:BW:39:GLN:HG2	44:BW:41:GLY:H	1.16	1.09
52:D4:16:ILE:HG12	52:D4:25:VAL:HG22	1.32	1.09
6:AF:6:ILE:HG12	6:AF:89:VAL:HG23	1.31	1.09
38:BQ:69:ARG:HB2	38:BQ:69:ARG:HH21	1.12	1.09
57:DA:1024:G:H3'	57:DA:1025:G:H5''	1.33	1.09
57:DA:604:G:O2'	57:DA:605:G:H5'	1.53	1.09
57:DA:2092:U:C1'	57:DA:2093:G:H8	1.65	1.08
53:CA:279:A:H5''	53:CA:280:C:H3'	1.35	1.08
8:CH:11:THR:HG22	8:CH:14:ARG:HH12	1.15	1.08

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:16:GLU:CG	4:CD:191:SER:HB2	1.84	1.08
38:BQ:4:LYS:HG3	38:BQ:5:ARG:H	1.16	1.08
17:AQ:16:MET:HB2	17:AQ:19:SER:HB3	1.28	1.08
37:BP:50:ARG:CB	37:BP:57:ALA:H	1.67	1.07
57:DA:216:A:O2'	57:DA:217:A:H8	1.37	1.07
28:BG:84:LYS:HG3	28:BG:132:LEU:H	1.15	1.07
22:BA:762:U:H4'	22:BA:763:G:O5'	1.52	1.07
33:BL:27:LEU:H	33:BL:27:LEU:HD12	1.16	1.07
21:AU:9:GLU:HG3	21:AU:10:PRO:HD3	1.30	1.07
44:BW:18:LYS:HA	44:BW:36:ILE:HG13	1.25	1.07
33:BL:109:LYS:HG2	33:BL:126:ARG:HB3	1.35	1.06
24:BC:251:THR:HG22	24:BC:252:LYS:H	1.19	1.06
32:BK:18:ARG:HG3	32:BK:18:ARG:HH11	1.17	1.06
32:BK:47:ILE:HG13	32:BK:48:PRO:HD2	1.37	1.06
2:CB:114:LYS:HE3	2:CB:151:LYS:HB2	1.36	1.06
12:CL:43:LYS:HB3	12:CL:44:PRO:HD2	1.10	1.06
57:DA:2092:U:H4'	57:DA:2093:G:OP1	1.29	1.06
44:BW:51:GLY:HA3	44:BW:59:PHE:CE2	1.91	1.05
30:BI:79:LEU:HA	30:BI:83:ALA:HB3	1.34	1.05
22:BA:1060:U:H4'	22:BA:1061:U:H5'	1.37	1.05
31:BJ:44:TYR:HB2	38:BQ:63:ARG:HB3	1.34	1.05
44:DW:37:VAL:HG12	44:DW:55:ASP:HB2	1.37	1.05
57:DA:668:A:H2'	57:DA:670:A:H62	1.20	1.05
28:BG:84:LYS:HG3	28:BG:132:LEU:N	1.70	1.05
53:CA:1213:A:O2'	53:CA:1214:C:H5'	1.55	1.05
53:CA:1067:A:H1'	53:CA:1068:G:C8	1.90	1.05
37:DP:20:ARG:HG2	37:DP:112:ARG:HH12	1.17	1.05
53:CA:1182:G:H4'	53:CA:1183:U:H5'	1.31	1.05
32:DK:71:ARG:HB3	32:DK:72:PRO:HD3	1.38	1.05
6:AF:16:GLU:HG2	4:CD:191:SER:CB	1.87	1.04
53:CA:373:A:O2'	53:CA:374:A:H5'	1.53	1.04
57:DA:2093:G:O6	57:DA:2225:A:H3'	1.58	1.04
57:DA:589:U:O2'	57:DA:590:A:H5'	1.55	1.04
57:DA:1784:A:H4'	57:DA:1785:A:O5'	1.55	1.04
4:CD:2:ARG:HH21	4:CD:114:ARG:HD3	1.20	1.04
1:AA:243:A:H4'	1:AA:244:U:H5''	1.35	1.04
54:CG:22:LEU:HA	54:CG:25:PHE:HB3	1.39	1.04
8:CH:28:SER:HA	8:CH:58:LEU:HD12	1.36	1.03
57:DA:2439:A:H4'	57:DA:2440:C:O5'	1.58	1.03
38:DQ:40:LYS:HD2	38:DQ:44:TYR:HE2	1.21	1.03
12:AL:82:ARG:HH11	12:AL:82:ARG:HG2	1.20	1.02

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1117:C:O2'	57:DA:1118:C:H5'	1.57	1.02
31:BJ:65:THR:HG22	31:BJ:68:LYS:HE3	1.42	1.02
57:DA:33:C:O2'	57:DA:34:U:H5'	1.58	1.02
4:AD:109:THR:HG23	4:AD:112:GLU:H	1.23	1.02
35:DN:35:LYS:HZ2	35:DN:112:TYR:HE1	1.07	1.02
57:DA:2092:U:C1'	57:DA:2093:G:C8	2.38	1.01
10:CJ:84:VAL:HG23	10:CJ:85:ASP:H	1.23	1.01
44:BW:28:GLU:HB3	44:BW:31:LEU:HD21	1.39	1.01
38:DQ:87:VAL:HG21	39:DR:52:PRO:HD3	1.38	1.01
1:AA:1239:A:H62	1:AA:1299:A:N6	1.56	1.01
2:AB:40:ILE:HD13	2:AB:201:GLY:HA2	1.39	1.01
57:DA:1032:A:H1'	52:D4:23:ILE:HD13	1.39	1.01
53:CA:1183:U:H3'	53:CA:1184:G:H5''	1.40	1.01
22:BA:1179:G:H3'	22:BA:1180:U:H4'	1.43	1.01
58:DB:112:G:H21	36:DO:45:SER:HA	1.21	1.01
57:DA:2060:A:H2'	26:DE:63:LYS:HZ2	1.23	1.00
33:BL:93:ASN:HD22	33:BL:94:THR:N	1.58	1.00
34:BM:35:ALA:O	34:BM:36:VAL:HB	1.60	1.00
2:AB:89:PHE:HB3	2:AB:149:GLY:HA2	1.39	1.00
53:CA:407:U:H2'	53:CA:408:A:H8	1.24	1.00
25:DD:8:LYS:HB2	25:DD:201:LEU:HD11	1.43	1.00
53:CA:32:A:H2'	53:CA:33:A:C8	1.96	1.00
1:AA:975:A:H4'	1:AA:976:G:H5''	1.38	1.00
54:CG:74:VAL:HG13	54:CG:140:VAL:HG13	1.42	0.99
22:BA:84:A:H62	22:BA:101:A:H2	1.00	0.99
17:AQ:18:LYS:HA	17:AQ:47:ASP:HB2	1.38	0.99
35:DN:22:ARG:HG3	35:DN:70:THR:HA	1.45	0.99
57:DA:1387:A:HO2'	57:DA:1388:G:H8	1.01	0.99
28:BG:83:THR:HA	28:BG:84:LYS:HZ3	1.28	0.99
22:BA:1993:U:H4'	25:BD:133:THR:HG21	1.43	0.99
52:B4:10:LEU:HD12	52:B4:33:HIS:HD2	1.27	0.99
53:CA:664:G:H22	53:CA:741:G:H1	1.08	0.99
17:AQ:45:VAL:HG21	17:AQ:60:ILE:HD13	1.42	0.99
12:CL:43:LYS:HB3	12:CL:44:PRO:CD	1.93	0.98
10:CJ:15:HIS:HA	10:CJ:18:ILE:HG22	1.44	0.98
57:DA:302:C:O2'	57:DA:303:G:H8	1.45	0.98
9:CI:51:LEU:HG	9:CI:86:LEU:HD22	1.45	0.98
44:DW:9:THR:HG23	44:DW:10:ARG:HG3	1.43	0.98
34:DM:19:GLY:H	34:DM:38:ARG:NH2	1.58	0.98
57:DA:2093:G:C6	57:DA:2225:A:H2'	1.97	0.98
37:BP:4:ILE:HG22	37:BP:5:LYS:H	1.26	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:81:ILE:HG23	31:BJ:82:GLY:H	1.29	0.98
53:CA:764:C:H2'	53:CA:765:G:H5'	1.44	0.98
25:BD:12:THR:HG22	25:BD:13:ARG:N	1.78	0.98
47:DZ:16:LEU:HD22	47:DZ:16:LEU:H	1.27	0.98
1:AA:654:G:H2'	1:AA:655:A:H8	1.27	0.98
22:BA:243:U:OP1	51:B3:5:THR:HG21	1.64	0.97
57:DA:2880:C:H1'	35:DN:93:GLY:H	1.25	0.97
22:BA:265:A:H4'	22:BA:266:G:OP1	1.63	0.97
25:BD:106:LYS:HB3	25:BD:206:ALA:HB3	1.44	0.97
57:DA:647:G:H2'	57:DA:648:G:H8	1.26	0.97
1:AA:1338:G:H2'	1:AA:1339:A:C8	1.99	0.97
57:DA:2321:U:H3'	57:DA:2321:U:O2	1.64	0.97
58:DB:69:G:H3'	58:DB:70:C:H6	1.29	0.97
31:DJ:44:TYR:HB2	38:DQ:63:ARG:CZ	1.95	0.97
34:BM:35:ALA:O	34:BM:128:THR:HA	1.64	0.97
1:AA:204:G:H3'	1:AA:205:A:H5''	1.46	0.97
2:CB:114:LYS:HA	2:CB:117:GLU:HG2	1.46	0.97
29:DH:3:VAL:HG12	29:DH:38:PRO:HA	1.46	0.97
22:BA:2680:U:OP2	25:BD:114:LYS:HE2	1.64	0.97
57:DA:2093:G:C5	57:DA:2225:A:H2'	2.00	0.97
44:BW:24:ARG:HD2	44:BW:25:PHE:N	1.78	0.97
24:BC:246:PRO:HG2	24:BC:247:TRP:CZ3	2.00	0.97
57:DA:2051:A:H4'	57:DA:2052:A:OP1	1.64	0.97
57:DA:2149:U:HO2'	57:DA:2150:C:H6	1.09	0.97
43:BV:80:HIS:HD2	43:BV:83:LYS:H	1.09	0.97
15:AO:63:ARG:HG2	15:AO:87:ARG:HH12	1.30	0.96
1:AA:243:A:H4'	1:AA:244:U:C5'	1.95	0.96
58:DB:110:C:O2'	58:DB:111:U:H5'	1.65	0.96
57:DA:2215:C:HO2'	57:DA:2216:G:H8	1.07	0.96
57:DA:1537:G:H2'	57:DA:1538:G:H4'	1.44	0.96
22:BA:1941:C:H5'	22:BA:1941:C:H6	1.30	0.96
29:DH:115:VAL:HG12	29:DH:132:PHE:HB2	1.45	0.96
57:DA:2092:U:HO2'	57:DA:2093:G:H5''	1.29	0.96
3:AC:166:TRP:H	3:AC:166:TRP:HE3	1.10	0.96
57:DA:674:G:O2'	26:DE:69:ARG:HG2	1.66	0.96
58:DB:24:G:H1'	58:DB:27:C:N4	1.81	0.96
22:BA:728:G:HO2'	22:BA:730:A:H8	1.08	0.96
1:AA:92:U:H2'	1:AA:93:U:C6	2.01	0.96
3:AC:56:ILE:HG12	3:AC:65:VAL:HG22	1.46	0.96
22:BA:2062:A:O2'	22:BA:2063:C:H5'	1.66	0.96
11:CK:74:LYS:HA	11:CK:78:ILE:HD11	1.48	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:16:GLU:HG2	4:CD:191:SER:HB2	0.98	0.96
57:DA:1676:A:C2	57:DA:1993:U:H5'	2.01	0.96
4:CD:25:ARG:HH12	4:CD:30:LYS:HG2	1.29	0.96
57:DA:1079:C:H41	57:DA:1088:A:H5''	1.28	0.96
45:BX:5:GLN:NE2	45:BX:49:ARG:H	1.64	0.96
53:CA:1074:G:H4'	2:CB:102:ASN:HB2	1.47	0.96
54:CG:91:ARG:HG2	54:CG:92:PRO:HD2	1.48	0.96
57:DA:2313:C:HO2'	57:DA:2314:A:H8	0.96	0.96
57:DA:1207:C:HO2'	57:DA:1208:C:H6	1.01	0.95
45:DX:53:LYS:HA	45:DX:56:ARG:HB3	1.48	0.95
57:DA:665:U:H2'	57:DA:666:A:H8	1.31	0.95
34:DM:27:SER:H	34:DM:66:ARG:NH2	1.64	0.95
57:DA:1716:U:O2'	57:DA:1717:A:H8	1.47	0.95
57:DA:61:C:O2'	57:DA:62:U:H5'	1.66	0.95
31:BJ:6:ALA:CB	31:BJ:45:THR:HG21	1.95	0.95
57:DA:2214:C:O2'	57:DA:2215:C:H5'	1.65	0.95
5:CE:29:ILE:HG23	5:CE:30:PHE:N	1.81	0.95
22:BA:1179:G:C5	22:BA:1180:U:H1'	2.01	0.95
57:DA:2060:A:H2'	26:DE:63:LYS:NZ	1.80	0.95
57:DA:1060:U:H4'	57:DA:1061:U:O5'	1.67	0.95
53:CA:560:A:H4'	53:CA:561:U:H5''	1.48	0.95
4:AD:145:ARG:HH11	4:AD:147:LYS:HE3	1.31	0.95
52:B4:9:LYS:H	52:B4:9:LYS:HD3	1.28	0.95
41:BT:67:VAL:HG12	41:BT:76:ARG:HG3	1.47	0.95
25:BD:5:VAL:H	25:BD:32:ASN:HD21	1.10	0.95
53:CA:986:U:H2'	53:CA:987:G:H8	1.22	0.95
22:BA:1509:A:H1'	22:BA:1510:G:H5'	1.46	0.95
53:CA:1143:G:H2'	53:CA:1144:G:H8	1.27	0.95
44:BW:17:ALA:HA	44:BW:35:ILE:HG23	1.49	0.95
57:DA:1676:A:H2	57:DA:1993:U:H5'	1.31	0.95
38:DQ:61:ILE:HD11	38:DQ:92:LYS:HD3	1.44	0.95
57:DA:2847:U:H2'	57:DA:2848:G:H5'	1.48	0.95
53:CA:407:U:H2'	53:CA:408:A:C8	2.01	0.95
53:CA:1228:C:HO2'	53:CA:1229:A:H8	0.96	0.95
1:AA:1123:U:H4'	10:AJ:39:PRO:HD2	1.47	0.95
53:CA:335:C:H2'	53:CA:336:A:C8	2.01	0.95
53:CA:348:G:H2'	53:CA:349:A:H8	1.32	0.95
57:DA:1915:U:H2'	57:DA:1916:A:H8	1.25	0.95
6:AF:3:HIS:H	6:AF:92:THR:HG23	1.31	0.95
57:DA:1313:U:H2'	57:DA:1313:U:O2	1.64	0.95
24:BC:12:ARG:HG2	24:BC:12:ARG:HH11	1.32	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:16:VAL:H	24:BC:203:VAL:HG12	1.31	0.95
4:AD:25:ARG:HH11	4:AD:30:LYS:HE3	1.31	0.95
38:BQ:69:ARG:CB	38:BQ:69:ARG:HH21	1.79	0.94
29:DH:48:GLU:HG2	29:DH:51:ARG:HH21	1.30	0.94
26:DE:130:LYS:HB3	26:DE:133:LEU:HB3	1.49	0.94
57:DA:1401:G:H2'	57:DA:1402:U:C6	2.01	0.94
43:BV:80:HIS:CD2	43:BV:83:LYS:H	1.85	0.94
24:DC:144:GLU:HA	24:DC:151:GLY:HA2	1.49	0.94
38:BQ:63:ARG:HH12	38:BQ:96:ASP:HA	0.79	0.94
22:BA:1073:A:H3'	22:BA:1074:G:H5''	1.45	0.94
57:DA:1387:A:H5'	57:DA:1469:A:H1'	1.50	0.94
4:CD:77:GLU:HG3	4:CD:81:LEU:HD11	1.50	0.94
30:BI:15:GLY:HA2	30:BI:50:LYS:HB3	1.47	0.94
46:BY:47:ARG:HH21	46:BY:47:ARG:HG3	1.28	0.94
57:DA:2385:C:HO2'	57:DA:2386:A:H8	1.13	0.94
1:AA:842:U:H3'	1:AA:843:U:H5''	1.48	0.94
33:BL:29:LYS:HG2	33:BL:30:THR:HG23	1.49	0.94
41:BT:39:THR:HB	41:BT:42:GLU:HB2	1.50	0.94
39:DR:39:LEU:HA	39:DR:49:ILE:HG21	1.47	0.94
5:CE:103:GLY:O	5:CE:104:ILE:HG22	1.65	0.94
8:CH:103:VAL:HG12	8:CH:124:ILE:HA	1.47	0.94
7:AG:12:LEU:H	7:AG:12:LEU:HD22	1.33	0.94
39:BR:51:VAL:HB	39:BR:52:PRO:CD	1.98	0.94
38:BQ:69:ARG:HB2	38:BQ:69:ARG:NH2	1.83	0.94
38:BQ:65:ASN:ND2	38:BQ:69:ARG:HH22	1.64	0.94
57:DA:1021:A:O2'	57:DA:1022:G:H4'	1.68	0.94
24:DC:146:LYS:HB2	24:DC:149:LYS:HB2	1.48	0.94
53:CA:82:G:O2'	53:CA:83:C:H4'	1.65	0.94
57:DA:2544:G:H2'	57:DA:2545:G:H8	1.32	0.94
23:BB:90:C:H6	23:BB:90:C:H5''	1.32	0.94
57:DA:1695:G:C8	24:DC:7:PRO:HB2	2.03	0.94
2:CB:110:ILE:HD13	2:CB:151:LYS:HA	1.50	0.94
43:BV:80:HIS:HD2	43:BV:83:LYS:N	1.64	0.94
53:CA:1299:A:N3	53:CA:1299:A:H2'	1.83	0.94
22:BA:509:C:H5''	22:BA:509:C:H6	1.32	0.94
2:CB:206:ILE:HA	2:CB:209:VAL:HG22	1.50	0.94
1:AA:1238:A:H5'	1:AA:1336:C:H41	1.32	0.94
8:CH:68:LYS:HD3	8:CH:69:ALA:H	1.32	0.93
53:CA:1329:A:H5''	55:CM:25:GLY:H	1.31	0.93
35:DN:37:THR:HG22	35:DN:39:PRO:HD2	1.48	0.93
22:BA:2352:A:C2	44:BW:30:VAL:HG11	2.03	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DJ:99:ARG:HA	31:DJ:102:GLU:HB3	1.49	0.93
57:DA:1429:G:O2'	57:DA:1430:G:H8	1.48	0.93
3:AC:128:MET:HB3	3:AC:131:ARG:HG3	1.50	0.93
1:AA:373:A:O2'	1:AA:374:A:H5'	1.68	0.93
1:AA:6:G:HO2'	1:AA:7:A:H8	0.97	0.93
20:CT:23:ARG:HB3	20:CT:60:GLN:NE2	1.83	0.93
57:DA:2324:U:H5'	57:DA:2325:G:H5''	1.49	0.93
34:DM:19:GLY:H	34:DM:38:ARG:HH21	1.13	0.93
53:CA:519:C:H2'	53:CA:520:A:C8	2.04	0.93
57:DA:1669:A:H2'	57:DA:1669:A:N3	1.80	0.93
11:CK:27:ASN:HD22	11:CK:27:ASN:N	1.66	0.93
53:CA:1168:U:H2'	53:CA:1168:U:O2	1.64	0.93
57:DA:2875:C:O2'	57:DA:2876:G:H8	1.49	0.93
9:AI:23:GLY:H	9:AI:60:LEU:HA	1.34	0.93
22:BA:784:G:C6	24:BC:227:VAL:HG11	2.02	0.93
52:B4:10:LEU:HD12	52:B4:33:HIS:CD2	2.04	0.93
57:DA:508:A:H62	40:DS:9:HIS:CE1	1.85	0.93
57:DA:2725:A:O2'	57:DA:2726:A:H2'	1.69	0.93
21:AU:52:VAL:HG13	21:AU:53:LYS:H	1.34	0.93
25:BD:12:THR:CG2	25:BD:13:ARG:H	1.82	0.93
22:BA:636:G:C6	33:BL:111:ILE:HD11	2.04	0.93
35:BN:23:ASN:H	35:BN:23:ASN:HD22	1.17	0.92
21:CU:24:LYS:HG3	21:CU:25:ALA:H	1.32	0.92
22:BA:1733:G:HO2'	22:BA:1734:G:H8	0.96	0.92
20:CT:73:ARG:HG2	20:CT:73:ARG:HH11	1.34	0.92
1:AA:1441:A:H62	1:AA:1461:G:H21	1.10	0.92
31:BJ:111:LYS:HD3	31:BJ:112:GLY:H	1.34	0.92
31:BJ:2:LYS:H	31:BJ:2:LYS:HD3	1.33	0.92
30:BI:23:VAL:HB	30:BI:27:LEU:HB3	1.49	0.92
57:DA:374:A:H2'	57:DA:375:G:C8	2.03	0.92
6:CF:86:ARG:NH1	18:CR:63:TYR:HB3	1.84	0.92
57:DA:1324:G:H1'	57:DA:1616:A:N6	1.83	0.92
2:AB:69:VAL:HB	2:AB:162:VAL:HG12	1.51	0.92
32:DK:61:VAL:HG11	32:DK:112:PHE:HE2	1.35	0.92
22:BA:1073:A:C3'	22:BA:1074:G:H5''	1.99	0.92
15:AO:63:ARG:HD3	15:AO:87:ARG:HH22	1.35	0.92
8:AH:105:THR:HG21	8:AH:120:LEU:HD13	1.49	0.92
22:BA:1996:C:H4'	22:BA:1997:C:OP1	1.68	0.92
27:BF:134:GLN:HE21	27:BF:134:GLN:H	1.13	0.92
2:AB:9:LEU:HD12	2:AB:42:LEU:HD13	1.52	0.92
21:AU:16:ARG:HH11	21:AU:19:LYS:HG3	1.32	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:2:ASN:N	20:CT:7:LYS:HZ3	1.66	0.92
24:DC:144:GLU:HB3	24:DC:187:CYS:HB2	1.51	0.91
22:BA:1084:A:H2'	22:BA:1085:A:C8	2.04	0.91
45:DX:31:ASN:HD22	45:DX:31:ASN:H	1.18	0.91
5:AE:155:LYS:HA	5:AE:158:LYS:NZ	1.83	0.91
22:BA:1929:G:H4'	22:BA:1930:G:OP1	1.66	0.91
38:BQ:91:ARG:NH2	38:BQ:93:ILE:HD13	1.84	0.91
4:AD:36:ALA:HA	4:AD:41:GLY:HA3	1.52	0.91
53:CA:522:C:H41	12:CL:49:ARG:HH22	1.11	0.91
57:DA:232:G:H4'	57:DA:233:A:OP1	1.68	0.91
44:DW:27:GLY:HA2	44:DW:31:LEU:HD11	1.52	0.91
32:BK:51:LYS:HG3	32:BK:95:ILE:CD1	2.01	0.91
57:DA:1036:G:H2'	57:DA:1037:G:H5'	1.52	0.91
57:DA:1731:G:O2'	57:DA:1732:C:H5''	1.69	0.91
2:AB:108:GLN:H	2:AB:108:GLN:HE21	1.13	0.91
27:BF:35:LEU:HB3	27:BF:153:ILE:CG2	1.99	0.91
22:BA:932:U:H4'	22:BA:933:A:H5''	1.53	0.91
39:DR:27:ILE:HG22	39:DR:28:ALA:H	1.34	0.91
1:AA:94:G:H4'	1:AA:95:C:C5'	1.99	0.91
57:DA:1166:G:H22	57:DA:1184:U:H1'	1.33	0.91
57:DA:2023:C:HO2'	57:DA:2024:G:H8	0.96	0.91
57:DA:297:G:H5''	42:DU:84:PHE:HB2	1.52	0.91
3:AC:156:LEU:H	3:AC:156:LEU:HD12	1.35	0.91
57:DA:2093:G:N2	57:DA:2094:A:N7	2.19	0.91
29:BH:31:VAL:HB	29:BH:32:PRO:CD	2.00	0.91
57:DA:249:C:H5''	57:DA:2394:C:O2'	1.71	0.91
11:AK:22:ILE:HD13	11:AK:95:THR:HG21	1.52	0.91
57:DA:217:A:H2'	57:DA:218:A:C8	2.05	0.91
57:DA:1469:A:H2'	57:DA:1470:A:C8	2.05	0.91
59:DF:74:ALA:HB3	59:DF:78:ILE:HB	1.53	0.91
55:CM:95:PRO:HD3	55:CM:108:ARG:HG2	1.50	0.91
53:CA:6:G:N3	53:CA:6:G:H2'	1.85	0.91
53:CA:876:C:H1'	8:CH:11:THR:HG21	1.51	0.90
57:DA:2401:U:H3'	57:DA:2402:U:H5''	1.53	0.90
22:BA:2269:G:H4'	44:BW:18:LYS:HE2	1.54	0.90
57:DA:1326:U:HO2'	57:DA:1327:A:H8	1.14	0.90
53:CA:94:G:H4'	53:CA:95:C:OP1	1.70	0.90
54:CG:28:ILE:HG21	54:CG:100:MET:HG3	1.53	0.90
10:AJ:57:VAL:HG22	10:AJ:58:ASN:H	1.36	0.90
22:BA:996:A:H4'	38:BQ:91:ARG:HG2	1.53	0.90
54:CG:134:VAL:HB	54:CG:137:ARG:HH21	1.37	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:43:GLN:HE21	39:BR:77:PHE:HB3	1.35	0.90
22:BA:1188:U:O2'	22:BA:1189:A:H5'	1.71	0.90
25:BD:97:SER:O	25:BD:99:GLU:HG2	1.72	0.90
1:AA:566:G:H4'	1:AA:567:G:OP1	1.68	0.90
53:CA:135:C:O2	56:CP:1:MET:HB2	1.70	0.90
45:DX:63:ILE:HD12	45:DX:64:ASP:H	1.34	0.90
1:AA:274:A:O2'	1:AA:275:G:C8	2.24	0.90
22:BA:1885:A:H2'	22:BA:1886:U:C6	2.07	0.90
57:DA:1141:U:H4'	57:DA:1142:A:O5'	1.72	0.90
57:DA:1662:U:H2'	57:DA:1663:G:H5''	1.52	0.90
1:AA:563:A:H2'	1:AA:563:A:N3	1.85	0.90
5:AE:109:ALA:O	5:AE:110:MET:HG2	1.70	0.90
37:DP:91:VAL:HG22	37:DP:109:ILE:HG21	1.54	0.90
31:BJ:77:HIS:HD2	31:BJ:79:GLY:H	1.20	0.90
57:DA:1440:U:H2'	57:DA:1441:G:H8	1.35	0.90
22:BA:859:G:H22	22:BA:916:G:H2'	1.36	0.90
55:CM:33:LEU:HB3	55:CM:38:ILE:HB	1.51	0.90
29:DH:72:ILE:HD11	29:DH:141:LYS:H	1.36	0.90
1:AA:620:C:C2	4:AD:131:ILE:HG21	2.07	0.90
57:DA:2503:A:H4'	57:DA:2504:U:OP1	1.72	0.90
32:DK:38:ILE:HG12	32:DK:61:VAL:HG12	1.54	0.90
53:CA:738:C:H2'	53:CA:739:C:H6	1.33	0.90
57:DA:1565:C:O2'	57:DA:1566:A:H2'	1.70	0.90
57:DA:1307:A:H62	57:DA:1606:C:H6	1.20	0.90
44:BW:9:THR:CG2	44:BW:10:ARG:HD3	2.02	0.89
1:AA:6:G:O6	5:AE:98:ALA:HB1	1.71	0.89
17:CQ:3:LYS:NZ	17:CQ:6:THR:HG21	1.86	0.89
18:CR:72:ARG:H	18:CR:72:ARG:HE	1.17	0.89
14:AN:40:ARG:HH12	14:AN:44:VAL:HG11	1.36	0.89
44:BW:23:LYS:O	44:BW:66:VAL:HB	1.72	0.89
53:CA:1159:U:H5	53:CA:1182:G:HO2'	1.07	0.89
57:DA:1458:U:O3'	57:DA:1459:G:H4'	1.71	0.89
12:AL:49:ARG:NH1	12:AL:49:ARG:HG2	1.80	0.89
6:CF:18:VAL:HG21	6:CF:58:HIS:CD2	2.08	0.89
24:BC:77:VAL:HA	24:BC:93:VAL:HA	1.54	0.89
57:DA:959:A:H2'	57:DA:960:A:C8	2.08	0.89
43:BV:10:LYS:H	43:BV:10:LYS:HD3	1.38	0.89
53:CA:1182:G:C4'	53:CA:1183:U:H5'	2.03	0.89
2:CB:99:MET:HA	2:CB:106:VAL:HG21	1.52	0.89
12:AL:34:THR:HB	12:AL:35:ARG:HG2	1.54	0.89
57:DA:1537:G:C2'	57:DA:1538:G:H4'	2.02	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:834:G:H1'	57:DA:2358:A:N3	1.88	0.89
53:CA:1124:G:H4'	53:CA:1125:U:OP1	1.67	0.89
31:DJ:75:TYR:CD1	31:DJ:84:ILE:HD11	2.07	0.89
57:DA:1026:G:O2'	57:DA:1027:A:H5'	1.72	0.89
32:BK:113:MET:O	32:BK:116:ILE:HG13	1.73	0.89
57:DA:774:G:HO2'	57:DA:775:G:H8	1.21	0.89
53:CA:1268:G:H21	53:CA:1327:C:H1'	1.36	0.89
11:CK:44:ALA:HB3	11:CK:69:CYS:HB2	1.53	0.89
1:AA:877:G:H21	8:AH:1:SER:HB2	1.35	0.89
9:AI:40:ARG:HA	9:AI:44:ARG:HB3	1.53	0.89
10:CJ:57:VAL:HG22	10:CJ:58:ASN:H	1.38	0.88
57:DA:1345:C:HO2'	57:DA:1346:G:H8	0.93	0.88
20:CT:4:LYS:HE3	20:CT:5:SER:H	1.37	0.88
34:DM:35:ALA:HB3	34:DM:99:GLY:H	1.37	0.88
53:CA:982:U:H4'	53:CA:983:A:O5'	1.72	0.88
1:AA:1441:A:N6	1:AA:1461:G:H21	1.71	0.88
9:AI:51:LEU:HB3	9:AI:56:MET:HG2	1.56	0.88
2:CB:163:ILE:HG23	2:CB:185:ILE:HD11	1.54	0.88
1:AA:1007:U:H2'	1:AA:1008:U:H5''	1.53	0.88
22:BA:2790:U:H4'	22:BA:2791:G:OP1	1.73	0.88
2:AB:66:ILE:HB	2:AB:88:GLN:HB3	1.53	0.88
22:BA:232:G:H4'	22:BA:233:A:OP1	1.73	0.88
1:AA:1129:C:H5''	9:AI:17:ARG:NH2	1.87	0.88
54:CG:110:ARG:HG3	54:CG:111:GLY:H	1.37	0.88
59:DF:137:PHE:HB2	59:DF:138:PRO:HD2	1.55	0.88
4:CD:30:LYS:N	4:CD:30:LYS:HD3	1.89	0.88
57:DA:2304:G:H22	57:DA:2312:U:H3	1.18	0.88
53:CA:1143:G:H2'	53:CA:1144:G:C8	2.07	0.88
57:DA:2544:G:H2'	57:DA:2545:G:C8	2.08	0.88
53:CA:16:A:O2'	53:CA:17:U:H5'	1.73	0.88
22:BA:272:A:HO2'	22:BA:273:G:H8	0.94	0.88
39:BR:42:ALA:HA	39:BR:46:GLU:HB2	1.53	0.88
1:AA:1021:A:H2'	1:AA:1022:A:H5''	1.55	0.88
1:AA:202:G:H21	1:AA:466:A:H61	1.20	0.88
8:CH:52:GLY:HA3	8:CH:56:PRO:HA	1.56	0.88
53:CA:1218:C:H2'	53:CA:1219:A:C8	2.09	0.88
53:CA:1365:G:O2'	53:CA:1366:C:H5'	1.73	0.88
1:AA:1241:G:HO2'	1:AA:1242:G:H8	0.92	0.88
31:BJ:2:LYS:HD3	31:BJ:2:LYS:N	1.86	0.88
1:AA:94:G:H4'	1:AA:95:C:O5'	1.72	0.88
25:BD:91:THR:O	25:BD:93:GLY:N	2.04	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1499:C:H2'	22:BA:1500:G:H8	1.37	0.88
57:DA:2346:A:H3'	57:DA:2347:C:H5''	1.53	0.88
53:CA:961:U:HO2'	53:CA:962:C:H6	0.89	0.88
37:DP:88:ARG:HE	37:DP:112:ARG:HH21	1.18	0.88
57:DA:649:G:H2'	57:DA:650:C:H6	1.38	0.88
26:BE:108:ILE:HD11	26:BE:180:LEU:HB3	1.56	0.88
4:CD:109:THR:HG22	4:CD:111:ALA:H	1.38	0.88
34:BM:57:VAL:HA	34:BM:112:LEU:HD21	1.56	0.88
30:DI:91:LYS:HB3	30:DI:94:LYS:HB2	1.56	0.88
57:DA:2728:U:HO2'	57:DA:2729:G:H8	1.19	0.88
53:CA:1458:G:O3'	20:CT:22:SER:HA	1.74	0.88
44:DW:40:ARG:NH1	44:DW:40:ARG:HG2	1.81	0.87
31:BJ:64:VAL:O	31:BJ:65:THR:HB	1.72	0.87
22:BA:1941:C:H5'	22:BA:1941:C:C6	2.09	0.87
28:BG:104:LEU:HB2	28:BG:112:VAL:CG2	2.03	0.87
28:DG:93:TYR:H	28:DG:93:TYR:HD2	1.22	0.87
24:BC:166:ARG:HG3	24:BC:166:ARG:O	1.72	0.87
53:CA:1226:C:H41	55:CM:102:LYS:HA	1.36	0.87
24:BC:68:ARG:HD3	24:BC:103:ILE:HD11	1.56	0.87
53:CA:1054:C:O2'	53:CA:1055:A:H5''	1.73	0.87
57:DA:1290:C:O2'	57:DA:1291:C:H6	1.57	0.87
57:DA:1709:U:H2'	57:DA:1710:G:C8	2.09	0.87
28:BG:97:VAL:HG22	28:BG:102:ILE:HG12	1.54	0.87
2:AB:110:ILE:HD12	2:AB:147:LEU:HD13	1.56	0.87
2:AB:110:ILE:CD1	2:AB:147:LEU:HD13	2.03	0.87
1:AA:511:C:O2'	1:AA:512:U:H5''	1.74	0.87
31:BJ:130:HIS:HD2	31:BJ:132:HIS:H	1.22	0.87
44:DW:17:ALA:O	44:DW:18:LYS:HB3	1.75	0.87
57:DA:616:A:O2'	57:DA:617:G:H8	1.56	0.87
25:BD:107:VAL:H	25:BD:206:ALA:H	1.17	0.87
25:DD:119:ALA:HB3	25:DD:163:GLY:H	1.37	0.87
49:D1:7:LYS:HD3	51:D3:33:THR:HG21	1.56	0.87
22:BA:1084:A:H2'	22:BA:1085:A:H8	1.37	0.87
53:CA:519:C:O2'	53:CA:520:A:H5'	1.74	0.87
51:B3:31:ILE:HD11	51:B3:34:LYS:HD2	1.55	0.87
38:DQ:91:ARG:NH1	39:DR:10:LYS:HB3	1.88	0.87
22:BA:2813:A:H2	22:BA:2887:A:N6	1.72	0.87
33:BL:27:LEU:N	33:BL:27:LEU:HD12	1.88	0.87
5:CE:104:ILE:H	5:CE:122:VAL:H	1.20	0.87
1:AA:1063:C:H2'	1:AA:1064:G:C8	2.09	0.87
46:BY:32:ALA:HB2	46:BY:37:LEU:HD12	1.54	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1508:A:H4'	57:DA:1509:A:OP1	1.73	0.87
57:DA:1951:U:H2'	57:DA:1953:A:OP2	1.73	0.87
57:DA:84:A:H4'	57:DA:85:G:O5'	1.73	0.87
22:BA:855:G:N2	44:BW:23:LYS:HG2	1.90	0.87
57:DA:335:C:HO2'	57:DA:336:C:H6	0.93	0.87
34:DM:41:LEU:HD23	34:DM:46:ILE:HG22	1.56	0.87
53:CA:335:C:H2'	53:CA:336:A:H8	1.38	0.87
57:DA:374:A:H2'	57:DA:375:G:H8	1.40	0.87
22:BA:2389:G:H5''	22:BA:2390:U:H5'	1.55	0.87
15:CO:63:ARG:HH22	57:DA:715:A:C5'	1.86	0.87
1:AA:1398:A:H8	1:AA:1398:A:H5''	1.37	0.87
3:AC:76:ILE:HA	3:AC:83:VAL:HG23	1.56	0.87
21:AU:16:ARG:NH1	21:AU:19:LYS:HG3	1.89	0.86
57:DA:1919:A:O2'	57:DA:1920:C:H5'	1.74	0.86
53:CA:668:G:O2'	15:CO:45:HIS:HB3	1.75	0.86
22:BA:2093:G:O2'	22:BA:2094:A:H5'	1.74	0.86
53:CA:91:U:HO2'	53:CA:92:U:H6	1.18	0.86
29:BH:89:LYS:HG2	29:BH:90:LEU:H	1.39	0.86
4:AD:43:ARG:O	4:AD:45:PRO:HD3	1.75	0.86
37:DP:63:ILE:HA	37:DP:68:GLY:HA2	1.56	0.86
1:AA:439:U:O2'	1:AA:440:C:H5'	1.74	0.86
58:DB:69:G:H3'	58:DB:70:C:C6	2.10	0.86
53:CA:330:C:HO2'	53:CA:331:G:H8	0.92	0.86
23:BB:30:C:H2'	23:BB:31:C:H5'	1.57	0.86
23:BB:45:A:H2'	23:BB:46:A:H8	1.40	0.86
32:BK:21:CYS:HB2	32:BK:39:ILE:HD11	1.57	0.86
22:BA:2136:G:H2'	22:BA:2137:U:H5	1.40	0.86
57:DA:616:A:HO2'	57:DA:617:G:H8	0.92	0.86
22:BA:780:G:H21	22:BA:783:A:H62	1.21	0.86
1:AA:1468:A:C2'	1:AA:1469:C:H5''	2.04	0.86
57:DA:873:C:H4'	34:DM:64:TRP:NE1	1.90	0.86
33:DL:79:LEU:HA	33:DL:82:LEU:HD11	1.56	0.86
1:AA:1328:C:H5''	13:AM:27:THR:HG21	1.54	0.86
10:AJ:51:VAL:HB	14:AN:80:ARG:HB2	1.55	0.86
14:AN:60:ARG:O	14:AN:61:ASN:HB2	1.75	0.86
28:DG:124:CYS:HB3	28:DG:130:ILE:HA	1.58	0.86
33:BL:74:THR:HG22	33:BL:107:PHE:HB2	1.55	0.86
22:BA:655:A:O2'	22:BA:656:G:C8	2.27	0.86
1:AA:1277:C:HO2'	1:AA:1279:G:H8	0.91	0.86
1:AA:560:A:H5'	1:AA:566:G:N2	1.91	0.86
12:AL:33:CYS:HA	12:AL:54:VAL:HA	1.58	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1857:G:H1'	57:DA:1884:G:H22	1.41	0.86
53:CA:32:A:H2'	53:CA:33:A:H8	1.39	0.86
1:AA:1151:A:O2'	1:AA:1152:A:H5''	1.76	0.86
57:DA:143:C:H2'	57:DA:144:A:C8	2.11	0.86
53:CA:801:U:H2'	53:CA:802:A:H8	1.39	0.86
38:BQ:97:ILE:HD11	38:BQ:105:PHE:N	1.91	0.86
4:CD:55:ARG:HH11	4:CD:55:ARG:HA	1.41	0.86
22:BA:2214:C:H6	22:BA:2214:C:H5'	1.40	0.86
57:DA:464:U:H1'	57:DA:686:U:H5	1.39	0.86
25:BD:151:THR:HG22	25:BD:152:PRO:CD	2.05	0.86
57:DA:234:U:O2'	57:DA:235:U:H5'	1.76	0.86
58:DB:17:C:H42	58:DB:68:C:H42	1.21	0.86
57:DA:2800:A:O2'	57:DA:2801:G:H4'	1.75	0.86
22:BA:1780:A:O2'	22:BA:1781:U:C5	2.27	0.86
57:DA:2868:A:H2'	57:DA:2869:G:C8	2.11	0.86
3:CC:109:GLU:HG2	3:CC:139:ASN:HB2	1.57	0.86
57:DA:1038:G:H2'	57:DA:1039:A:H5'	1.56	0.86
44:DW:28:GLU:H	44:DW:31:LEU:HD21	1.38	0.86
38:BQ:65:ASN:HD21	38:BQ:69:ARG:HH22	1.20	0.86
1:AA:16:A:O2'	1:AA:17:U:H5'	1.76	0.86
28:BG:73:SER:HA	28:BG:76:ILE:CG2	2.06	0.86
22:BA:2728:U:O2'	22:BA:2729:G:H5''	1.75	0.86
39:BR:28:ALA:O	39:BR:63:VAL:HG21	1.75	0.86
31:BJ:6:ALA:HB3	31:BJ:45:THR:HG21	1.56	0.85
22:BA:923:G:N3	44:BW:23:LYS:HE2	1.91	0.85
52:B4:9:LYS:H	52:B4:9:LYS:CD	1.89	0.85
58:DB:44:G:H5''	59:DF:91:ARG:CZ	2.06	0.85
2:CB:79:VAL:HA	2:CB:213:LEU:HD21	1.58	0.85
26:BE:112:LEU:HD13	26:BE:186:VAL:HG11	1.57	0.85
53:CA:366:A:O2'	53:CA:394:G:N2	2.09	0.85
32:BK:76:VAL:HB	37:BP:72:VAL:CG2	2.04	0.85
53:CA:694:A:H3'	53:CA:695:A:H5''	1.58	0.85
44:BW:19:ARG:NH2	44:BW:22:VAL:HG21	1.91	0.85
1:AA:826:C:H5'	8:AH:12:ARG:HH21	1.41	0.85
12:AL:62:VAL:HG21	12:AL:94:TYR:CE2	2.11	0.85
12:AL:113:ARG:HB3	12:AL:118:VAL:HB	1.58	0.85
41:DT:39:THR:HG21	41:DT:42:GLU:HB2	1.57	0.85
29:DH:90:LEU:HB2	29:DH:123:ARG:HB3	1.57	0.85
44:DW:39:GLN:HE22	44:DW:58:LEU:HD23	1.39	0.85
22:BA:1179:G:C6	22:BA:1180:U:H1'	2.12	0.85
32:BK:70:ARG:HD3	32:BK:76:VAL:HG22	1.56	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:DI:45:THR:HG23	30:DI:54:ILE:HD13	1.58	0.85
53:CA:977:A:O2'	53:CA:978:A:H5''	1.76	0.85
28:BG:84:LYS:CG	28:BG:132:LEU:H	1.88	0.85
51:B3:22:LYS:HA	51:B3:47:ALA:O	1.76	0.85
49:B1:8:ILE:HG23	49:B1:51:ALA:HA	1.58	0.85
22:BA:2615:U:C2	48:B0:3:GLN:HA	2.12	0.85
16:AP:28:ARG:HE	16:AP:29:ASN:HD21	1.23	0.85
47:DZ:16:LEU:CD2	47:DZ:16:LEU:H	1.88	0.85
25:BD:104:VAL:O	25:BD:177:VAL:HG21	1.77	0.85
57:DA:1931:U:H2'	57:DA:1932:A:H8	1.40	0.85
52:D4:7:VAL:HG13	52:D4:8:LYS:H	1.42	0.85
41:DT:29:THR:HB	41:DT:87:LEU:H	1.40	0.85
24:BC:141:HIS:HB2	24:BC:190:THR:HB	1.59	0.85
53:CA:990:C:H2'	53:CA:991:U:O4'	1.76	0.85
12:CL:43:LYS:CB	12:CL:44:PRO:HD2	2.03	0.85
22:BA:84:A:H4'	22:BA:85:G:O5'	1.76	0.85
57:DA:1654:A:O2'	57:DA:1655:A:H8	1.59	0.85
12:AL:24:GLU:HB2	12:AL:26:CYS:SG	2.17	0.85
24:BC:180:MET:HG3	24:BC:268:ARG:HH11	1.41	0.85
12:CL:3:VAL:HG23	12:CL:4:ASN:H	1.42	0.85
28:DG:112:VAL:HG12	28:DG:114:HIS:H	1.42	0.85
22:BA:1022:G:N2	22:BA:1142:A:C2	2.45	0.84
17:CQ:30:HIS:HE1	17:CQ:32:ILE:HG13	1.42	0.84
4:AD:16:THR:HG22	4:AD:17:ASP:H	1.42	0.84
57:DA:1156:A:H8	57:DA:1156:A:OP1	1.60	0.84
2:AB:148:GLY:HA2	2:AB:151:LYS:HB3	1.58	0.84
57:DA:2699:C:H2'	57:DA:2700:A:C8	2.12	0.84
38:DQ:40:LYS:HD2	38:DQ:44:TYR:CE2	2.12	0.84
29:BH:8:LYS:O	29:BH:9:VAL:HB	1.76	0.84
57:DA:1639:C:H2'	57:DA:1640:A:H5''	1.59	0.84
31:BJ:17:VAL:HG23	31:BJ:137:PRO:HB2	1.59	0.84
50:B2:3:ARG:HG2	50:B2:3:ARG:NH2	1.85	0.84
27:BF:134:GLN:NE2	27:BF:134:GLN:H	1.74	0.84
25:BD:114:LYS:HE3	25:BD:114:LYS:N	1.92	0.84
57:DA:1166:G:N2	57:DA:1184:U:H1'	1.92	0.84
57:DA:118:A:N3	57:DA:178:G:H1'	1.93	0.84
20:AT:66:ILE:HD11	20:AT:70:LYS:HE3	1.59	0.84
57:DA:2776:A:H4'	57:DA:2777:G:O5'	1.77	0.84
22:BA:1779:U:H5	22:BA:1784:A:N7	1.74	0.84
1:AA:1142:G:H2'	1:AA:1143:G:O4'	1.77	0.84
24:DC:62:ARG:HG2	24:DC:62:ARG:HH21	1.42	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BW:46:ALA:HB3	44:BW:79:ILE:O	1.77	0.84
57:DA:2748:A:H1'	28:DG:66:THR:HG22	1.59	0.84
22:BA:100:U:H4'	22:BA:101:A:O5'	1.77	0.84
57:DA:1275:A:H2'	57:DA:1275:A:N3	1.90	0.84
24:BC:12:ARG:HH11	24:BC:12:ARG:CG	1.89	0.84
33:DL:79:LEU:HB2	33:DL:113:ALA:H	1.42	0.84
22:BA:802:A:H2'	22:BA:803:U:C6	2.13	0.84
6:CF:11:HIS:CD2	6:CF:54:LEU:HD21	2.11	0.84
22:BA:1458:U:H4'	22:BA:1459:G:O5'	1.75	0.84
4:CD:143:SER:HB3	4:CD:178:GLU:HG3	1.58	0.84
4:CD:176:LYS:HG3	4:CD:178:GLU:HB2	1.57	0.84
57:DA:802:A:H2'	57:DA:803:U:C6	2.12	0.84
32:BK:19:VAL:HG23	32:BK:43:ILE:HA	1.59	0.84
54:CG:88:VAL:HG22	54:CG:89:GLU:H	1.41	0.84
1:AA:415:A:H2'	1:AA:416:G:C8	2.12	0.84
58:DB:57:A:O2'	58:DB:58:A:H8	1.59	0.84
53:CA:1452:C:H4'	53:CA:1453:G:O5'	1.74	0.84
37:DP:50:ARG:HB3	37:DP:57:ALA:H	1.42	0.84
58:DB:75:G:H1	58:DB:102:G:H22	1.23	0.84
1:AA:539:A:H2'	1:AA:540:G:C8	2.12	0.84
43:BV:44:HIS:HE1	43:BV:86:LEU:H	1.21	0.84
57:DA:197:A:N6	57:DA:2430:A:H2'	1.93	0.84
8:CH:11:THR:HG22	8:CH:14:ARG:NH1	1.92	0.84
53:CA:1157:A:H4'	53:CA:1158:C:O5'	1.77	0.84
8:CH:57:GLU:HG3	8:CH:58:LEU:H	1.41	0.84
6:CF:92:THR:HG22	6:CF:94:HIS:H	1.42	0.84
32:DK:13:ASN:HD21	32:DK:97:THR:H	1.24	0.84
22:BA:571:U:H4'	22:BA:572:A:OP1	1.77	0.84
42:DU:14:THR:HB	42:DU:68:ASN:HB3	1.60	0.84
4:CD:25:ARG:NH1	4:CD:30:LYS:HG2	1.91	0.84
35:DN:62:ASN:O	35:DN:63:ARG:HB2	1.76	0.84
10:CJ:47:GLU:HB2	10:CJ:67:ILE:HG13	1.59	0.84
41:DT:50:LEU:HD23	41:DT:51:PHE:H	1.43	0.84
57:DA:2091:C:N4	57:DA:2092:U:C4	2.46	0.84
57:DA:2092:U:C4'	57:DA:2093:G:OP1	2.21	0.84
57:DA:1913:A:H4'	57:DA:1914:C:OP1	1.77	0.84
53:CA:936:C:HO2'	53:CA:937:A:H8	0.88	0.84
57:DA:127:A:N7	50:D2:46:LYS:HE3	1.93	0.84
24:DC:166:ARG:HB2	24:DC:171:VAL:HG22	1.58	0.84
57:DA:777:G:N7	57:DA:793:A:H2	1.74	0.84
25:BD:120:GLY:HA2	25:BD:162:ALA:CB	2.07	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:71:ILE:HD12	9:CI:72:SER:H	1.41	0.84
36:BO:49:VAL:HG21	36:BO:82:ALA:HA	1.60	0.84
57:DA:2517:C:O2'	57:DA:2518:A:H3'	1.77	0.84
57:DA:2093:G:N2	57:DA:2094:A:C5	2.46	0.84
28:BG:86:LEU:HB3	28:BG:162:ARG:O	1.78	0.84
22:BA:750:A:O2'	22:BA:752:A:OP1	1.96	0.84
1:AA:198:G:HO2'	1:AA:199:A:H8	0.87	0.84
54:CG:45:ALA:HB1	54:CG:120:ALA:HB2	1.60	0.84
36:DO:115:LEU:H	36:DO:115:LEU:HD13	1.39	0.84
15:CO:23:SER:O	15:CO:26:VAL:HB	1.77	0.84
57:DA:2757:A:N1	28:DG:66:THR:HG21	1.93	0.83
57:DA:704:G:H2'	57:DA:726:G:H22	1.40	0.83
12:AL:28:GLN:HB2	12:AL:81:ILE:O	1.78	0.83
52:B4:36:ARG:HG2	52:B4:37:GLN:H	1.42	0.83
22:BA:1967:C:O2'	22:BA:1968:G:H5'	1.76	0.83
33:DL:92:LEU:HD22	33:DL:124:GLY:HA3	1.56	0.83
25:DD:137:SER:HB3	25:DD:138:LEU:HD22	1.60	0.83
53:CA:120:A:C3'	53:CA:121:U:H5''	2.07	0.83
44:DW:23:LYS:HD2	44:DW:24:ARG:N	1.93	0.83
19:CS:40:PHE:HB3	19:CS:41:PRO:HD2	1.58	0.83
31:BJ:111:LYS:HD3	31:BJ:112:GLY:N	1.92	0.83
8:AH:25:THR:O	8:AH:26:MET:HB3	1.77	0.83
38:DQ:10:ARG:HA	38:DQ:13:HIS:HB2	1.60	0.83
57:DA:96:C:H4'	46:DY:41:HIS:CD2	2.13	0.83
22:BA:74:A:H4'	22:BA:75:G:O5'	1.76	0.83
39:BR:49:ILE:O	39:BR:49:ILE:HG13	1.77	0.83
21:CU:24:LYS:CG	21:CU:25:ALA:H	1.90	0.83
6:CF:86:ARG:HD3	18:CR:63:TYR:O	1.77	0.83
53:CA:1458:G:O2'	20:CT:22:SER:HB3	1.76	0.83
57:DA:822:G:O6	57:DA:943:A:H2	1.62	0.83
53:CA:1221:G:H4'	19:CS:35:ARG:NH2	1.93	0.83
12:AL:82:ARG:HG2	12:AL:82:ARG:NH1	1.93	0.83
22:BA:2420:C:OP1	51:B3:33:THR:HB	1.78	0.83
53:CA:330:C:O2'	53:CA:331:G:H8	1.60	0.83
22:BA:2150:C:H2'	22:BA:2151:U:C5	2.13	0.83
21:CU:38:GLU:H	21:CU:40:PRO:HD2	1.42	0.83
32:DK:70:ARG:HB3	32:DK:76:VAL:HG22	1.57	0.83
25:BD:150:GLN:HG3	25:BD:150:GLN:O	1.79	0.83
58:DB:57:A:HO2'	58:DB:58:A:H8	0.84	0.83
57:DA:873:C:H4'	34:DM:64:TRP:CD1	2.14	0.83
29:BH:96:THR:O	29:BH:97:ARG:HG3	1.78	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:822:U:H2'	53:CA:823:C:H6	1.43	0.83
22:BA:2353:G:H1'	44:BW:30:VAL:HG13	1.60	0.83
57:DA:2513:A:H2	25:DD:148:GLN:HE21	1.25	0.83
24:DC:59:GLN:HE21	24:DC:84:PRO:HB2	1.42	0.83
28:DG:120:ILE:HG13	28:DG:140:ILE:HG22	1.60	0.83
25:DD:114:LYS:HD2	25:DD:116:LYS:NZ	1.93	0.83
53:CA:932:C:H5''	54:CG:2:ARG:HD3	1.61	0.83
1:AA:1319:A:H4'	1:AA:1320:C:OP1	1.79	0.83
57:DA:637:A:H4'	57:DA:638:G:O5'	1.78	0.83
34:BM:72:PRO:O	34:BM:91:TYR:O	1.95	0.83
22:BA:869:G:O2'	34:BM:8:LYS:HD3	1.78	0.83
5:AE:106:ALA:HB2	5:AE:124:ALA:HB3	1.59	0.83
37:BP:4:ILE:HG22	37:BP:5:LYS:N	1.93	0.83
24:DC:68:ARG:HH12	24:DC:115:ILE:HD12	1.43	0.83
43:BV:72:VAL:HG12	43:BV:93:ARG:HA	1.59	0.83
33:DL:47:ARG:HG2	33:DL:47:ARG:HH21	1.42	0.83
1:AA:1151:A:O2'	1:AA:1152:A:H8	1.62	0.83
3:CC:110:LEU:HD21	3:CC:203:LYS:HD2	1.60	0.83
1:AA:1138:G:H2'	1:AA:1138:G:N3	1.92	0.83
53:CA:33:A:H2'	53:CA:34:C:H6	1.44	0.83
57:DA:1492:G:H3'	57:DA:1493:C:C5'	2.09	0.83
22:BA:1287:A:H5'	35:BN:103:ARG:HD2	1.61	0.83
28:BG:22:VAL:HG22	28:BG:36:LEU:HD11	1.59	0.83
22:BA:494:G:H21	40:BS:57:ASN:HD21	1.22	0.83
1:AA:887:G:H2'	1:AA:888:G:H5'	1.61	0.83
57:DA:2091:C:N4	57:DA:2092:U:O4	2.12	0.82
28:BG:83:THR:HA	28:BG:84:LYS:HZ2	1.42	0.82
58:DB:16:G:O2'	58:DB:17:C:H5'	1.79	0.82
22:BA:1993:U:H4'	25:BD:133:THR:CG2	2.09	0.82
57:DA:647:G:H2'	57:DA:648:G:C8	2.14	0.82
41:BT:32:LEU:H	41:BT:83:ALA:HB3	1.41	0.82
5:AE:155:LYS:HA	5:AE:158:LYS:HZ1	1.42	0.82
1:AA:198:G:O2'	1:AA:199:A:H8	1.62	0.82
25:BD:46:ARG:HG3	25:BD:84:LEU:HB2	1.59	0.82
58:DB:56:G:H4'	58:DB:57:A:O5'	1.78	0.82
32:BK:71:ARG:HB2	32:BK:72:PRO:HD3	1.60	0.82
53:CA:1067:A:H1'	53:CA:1068:G:H8	1.40	0.82
45:DX:31:ASN:ND2	45:DX:31:ASN:H	1.77	0.82
25:BD:120:GLY:HA2	25:BD:162:ALA:HB1	1.61	0.82
1:AA:747:A:H5'	1:AA:748:G:OP2	1.79	0.82
53:CA:721:G:H4'	53:CA:722:G:O5'	1.77	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1011:G:O2'	22:BA:1013:C:H5'	1.79	0.82
41:DT:14:PRO:O	41:DT:15:HIS:HB2	1.79	0.82
1:AA:531:U:H4'	1:AA:532:A:O5'	1.79	0.82
57:DA:1346:G:HO2'	57:DA:1347:A:H8	1.25	0.82
53:CA:1129:C:H1'	53:CA:1146:A:H61	1.45	0.82
20:CT:73:ARG:CG	20:CT:73:ARG:HH11	1.92	0.82
57:DA:141:G:H3'	57:DA:142:A:O4'	1.79	0.82
24:DC:183:VAL:HG13	24:DC:185:ALA:H	1.44	0.82
57:DA:1490:A:H5'	57:DA:1490:A:N3	1.94	0.82
57:DA:2415:G:H4'	33:DL:66:PHE:HB2	1.60	0.82
57:DA:1799:G:H8	24:DC:179:GLU:OE1	1.60	0.82
24:BC:165:ALA:HB3	24:BC:172:THR:HG23	1.60	0.82
1:AA:1338:G:H2'	1:AA:1339:A:H8	1.42	0.82
11:AK:28:ASN:OD1	11:AK:46:ALA:HB3	1.80	0.82
14:AN:19:TYR:O	14:AN:22:LYS:HB3	1.79	0.82
8:AH:17:GLN:HE21	8:AH:71:VAL:HG23	1.43	0.82
35:BN:71:ARG:CG	35:BN:71:ARG:HH21	1.93	0.82
33:DL:79:LEU:HB3	33:DL:114:GLY:H	1.43	0.82
22:BA:2492:U:O2'	22:BA:2493:U:H5'	1.78	0.82
26:BE:117:ARG:HA	26:BE:185:LYS:HD3	1.62	0.82
53:CA:665:A:H2'	53:CA:725:G:N2	1.94	0.82
22:BA:1429:G:O2'	22:BA:1430:G:H5'	1.80	0.82
22:BA:729:G:N3	22:BA:729:G:H2'	1.95	0.82
50:D2:34:ARG:HB3	50:D2:42:LEU:HD11	1.62	0.82
1:AA:32:A:H2'	1:AA:33:A:C8	2.13	0.82
35:DN:5:LYS:HG2	35:DN:6:SER:H	1.45	0.82
59:DF:49:LEU:H	59:DF:49:LEU:HD22	1.44	0.82
57:DA:2468:A:O2'	57:DA:2469:A:H8	1.61	0.82
53:CA:65:A:H2'	53:CA:382:A:H61	1.43	0.82
1:AA:338:A:N1	1:AA:351:G:O6	2.13	0.82
1:AA:366:A:O2'	1:AA:394:G:N2	2.13	0.82
57:DA:2092:U:C2'	57:DA:2093:G:H8	1.92	0.82
22:BA:2573:C:OP1	63:BA:3715:HOH:O	1.97	0.82
57:DA:1807:G:H2'	57:DA:1808:A:H5'	1.62	0.82
57:DA:1552:A:O2'	57:DA:1553:A:H5'	1.80	0.82
57:DA:95:A:H1'	46:DY:40:SER:HB2	1.61	0.82
7:AG:121:ASN:O	7:AG:125:ASP:HB2	1.80	0.82
18:CR:62:ARG:HB3	18:CR:69:TYR:CE1	2.14	0.82
57:DA:2408:U:O2'	57:DA:2409:G:H8	1.61	0.82
35:BN:79:LEU:O	35:BN:80:PHE:HB2	1.79	0.82
21:AU:13:VAL:HG13	21:AU:15:LEU:HG	1.62	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:116:A:H2'	1:AA:117:G:C8	2.15	0.82
22:BA:1867:G:O2'	22:BA:1868:C:H5'	1.79	0.82
38:DQ:24:TYR:O	38:DQ:27:ARG:HB3	1.79	0.82
58:DB:44:G:H3'	59:DF:91:ARG:HE	1.45	0.82
53:CA:1347:G:N2	53:CA:1373:G:H2'	1.95	0.82
57:DA:2356:U:H4'	44:DW:16:GLU:HG3	1.62	0.82
53:CA:702:A:H8	53:CA:702:A:OP1	1.62	0.82
53:CA:920:U:H2'	53:CA:921:U:C6	2.15	0.82
22:BA:1585:C:H2'	22:BA:1586:A:O4'	1.79	0.82
22:BA:197:A:N6	22:BA:2430:A:H2'	1.95	0.82
36:DO:12:THR:HG23	36:DO:16:ARG:HH11	1.44	0.82
37:BP:50:ARG:CD	37:BP:51:ASN:H	1.93	0.81
25:BD:13:ARG:HH12	37:BP:74:GLN:NE2	1.77	0.81
26:DE:148:ILE:HD13	26:DE:187:VAL:HG21	1.62	0.81
57:DA:1069:A:N6	57:DA:1073:A:H5''	1.94	0.81
9:AI:28:VAL:HB	9:AI:63:TYR:HD2	1.44	0.81
21:CU:24:LYS:HG3	21:CU:25:ALA:N	1.94	0.81
57:DA:533:G:H2'	57:DA:534:U:C6	2.15	0.81
31:DJ:35:ARG:HG2	31:DJ:40:HIS:CD2	2.16	0.81
26:DE:128:ALA:HB1	26:DE:129:PRO:HD2	1.62	0.81
22:BA:2502:G:H5'	22:BA:2503:A:H5''	1.62	0.81
53:CA:374:A:H5''	53:CA:452:A:N1	1.95	0.81
57:DA:1792:G:H5''	24:DC:203:VAL:HG22	1.62	0.81
57:DA:1275:A:O2'	57:DA:1276:A:O4'	1.96	0.81
53:CA:1278:G:H4'	53:CA:1279:G:O5'	1.80	0.81
25:DD:184:ARG:HH22	37:DP:6:GLN:HE21	1.28	0.81
53:CA:1101:A:H4'	53:CA:1102:A:O5'	1.80	0.81
27:BF:34:THR:HG23	27:BF:89:THR:HG23	1.62	0.81
10:CJ:64:GLN:HB2	14:CN:98:ALA:HB3	1.62	0.81
35:DN:71:ARG:HB2	35:DN:71:ARG:HH21	1.43	0.81
29:DH:97:ARG:O	29:DH:98:ASP:HB2	1.80	0.81
57:DA:2875:C:HO2'	57:DA:2876:G:H8	0.87	0.81
32:DK:61:VAL:HG11	32:DK:112:PHE:CE2	2.15	0.81
14:CN:76:PHE:HE2	14:CN:92:ILE:HG21	1.45	0.81
25:BD:172:VAL:O	25:BD:173:GLN:HB2	1.79	0.81
50:B2:43:THR:O	50:B2:44:VAL:HG23	1.81	0.81
24:BC:123:ILE:HG12	24:BC:123:ILE:O	1.79	0.81
57:DA:915:C:H2'	57:DA:916:G:C8	2.15	0.81
25:DD:34:VAL:HG12	25:DD:48:ILE:HD11	1.63	0.81
34:DM:42:THR:HG22	34:DM:44:ARG:H	1.44	0.81
1:AA:451:A:H4'	1:AA:452:A:O5'	1.80	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:170:TYR:CD2	24:BC:184:GLU:HA	2.15	0.81
57:DA:33:C:N4	57:DA:446:G:O2'	2.13	0.81
58:DB:88:C:OP2	58:DB:88:C:H3'	1.81	0.81
58:DB:42:C:H41	59:DF:87:LYS:NZ	1.78	0.81
57:DA:91:A:O2'	57:DA:92:U:H5''	1.80	0.81
53:CA:532:A:C8	3:CC:192:TYR:HE2	1.99	0.81
33:BL:95:LEU:HD13	33:BL:100:ILE:HD11	1.60	0.81
57:DA:861:A:H2'	57:DA:862:G:H8	1.45	0.81
1:AA:109:A:H2'	1:AA:326:G:N2	1.96	0.81
57:DA:528:A:O2'	57:DA:529:A:H5''	1.81	0.81
32:DK:111:LYS:HE3	32:DK:111:LYS:H	1.46	0.81
57:DA:2093:G:O6	57:DA:2225:A:C3'	2.27	0.81
53:CA:254:G:N2	17:CQ:17:GLU:HG3	1.93	0.81
27:BF:132:ARG:O	27:BF:133:GLU:HB3	1.80	0.81
1:AA:96:U:HO2'	1:AA:97:G:H8	1.28	0.81
16:AP:28:ARG:NE	16:AP:29:ASN:HD21	1.79	0.81
35:DN:56:LYS:HA	35:DN:84:GLY:HA2	1.62	0.81
40:DS:14:ALA:O	40:DS:18:ARG:HB2	1.80	0.81
25:BD:169:ARG:O	25:BD:170:VAL:HG13	1.80	0.81
38:BQ:4:LYS:HG3	38:BQ:5:ARG:N	1.95	0.81
34:DM:17:ASN:HB3	34:DM:38:ARG:HH22	1.45	0.81
57:DA:1554:U:H5''	57:DA:1555:G:OP2	1.79	0.81
53:CA:337:G:H2'	53:CA:338:A:C8	2.15	0.81
43:DV:77:VAL:HA	43:DV:89:ILE:HG22	1.62	0.81
57:DA:1586:A:H2'	57:DA:1587:G:H8	1.46	0.81
57:DA:867:C:O2'	57:DA:868:U:H6	1.64	0.81
36:BO:31:THR:HG22	36:BO:34:HIS:H	1.46	0.81
29:BH:32:PRO:HB3	45:BX:38:TRP:HB3	1.61	0.81
22:BA:1073:A:H2'	22:BA:1074:G:H5''	1.60	0.81
57:DA:310:A:HO2'	57:DA:311:A:H8	0.83	0.81
31:DJ:44:TYR:HD1	38:DQ:63:ARG:NH2	1.78	0.81
25:DD:114:LYS:HD2	25:DD:116:LYS:HZ2	1.45	0.81
5:AE:89:THR:HG22	5:AE:90:GLY:N	1.96	0.81
46:DY:20:ASN:HD22	46:DY:50:VAL:HG22	1.45	0.81
11:AK:88:PRO:HD3	21:AU:28:LEU:HD13	1.62	0.81
25:BD:151:THR:CG2	25:BD:152:PRO:HD3	2.09	0.80
22:BA:1941:C:H2'	22:BA:1942:C:C6	2.16	0.80
4:AD:25:ARG:NH1	4:AD:30:LYS:HE3	1.96	0.80
35:DN:38:LEU:HB3	35:DN:39:PRO:HD3	1.61	0.80
57:DA:2190:G:H5'	57:DA:2191:A:OP2	1.81	0.80
22:BA:1416:G:HO2'	22:BA:1417:C:H6	1.26	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:11:MET:HE1	25:DD:192:ALA:HA	1.62	0.80
10:AJ:53:ILE:HG22	10:AJ:61:ALA:HB1	1.63	0.80
22:BA:1073:A:C2'	22:BA:1074:G:H5''	2.11	0.80
57:DA:15:G:OP1	48:D0:20:ALA:HB2	1.82	0.80
25:BD:4:LEU:HD22	25:BD:101:PHE:CE1	2.16	0.80
49:B1:49:LYS:HG2	49:B1:50:GLU:H	1.45	0.80
21:CU:39:LYS:N	21:CU:40:PRO:HD2	1.97	0.80
37:BP:105:LYS:HA	37:BP:108:ARG:HH21	1.46	0.80
22:BA:2801:G:O2'	22:BA:2802:G:H5'	1.80	0.80
31:DJ:57:LEU:HD11	31:DJ:129:GLU:H	1.46	0.80
19:AS:28:LYS:HB3	19:AS:29:PRO:HD2	1.62	0.80
57:DA:142:A:H2'	57:DA:143:C:C6	2.16	0.80
53:CA:245:U:O2'	53:CA:246:A:H5'	1.80	0.80
22:BA:545:U:H2'	22:BA:546:U:H4'	1.62	0.80
22:BA:1199:U:H2'	22:BA:1200:C:C6	2.16	0.80
32:BK:18:ARG:H	32:BK:45:GLU:HB2	1.47	0.80
1:AA:204:G:H3'	1:AA:205:A:C5'	2.11	0.80
1:AA:94:G:H4'	1:AA:95:C:H5''	1.61	0.80
21:CU:38:GLU:HA	21:CU:41:THR:OG1	1.81	0.80
57:DA:861:A:H2'	57:DA:862:G:C8	2.15	0.80
53:CA:338:A:H61	53:CA:351:G:H1	1.29	0.80
57:DA:2716:C:H2'	57:DA:2717:C:H6	1.44	0.80
5:CE:95:MET:HB3	5:CE:124:ALA:HB2	1.63	0.80
39:BR:60:LYS:H	39:BR:100:GLY:HA3	1.45	0.80
57:DA:714:U:H2'	57:DA:716:A:OP2	1.82	0.80
3:CC:18:ASN:HA	3:CC:55:VAL:HG12	1.61	0.80
28:BG:3:VAL:O	28:BG:68:ARG:HG3	1.81	0.80
19:AS:6:LYS:HE2	19:AS:6:LYS:HA	1.64	0.80
3:CC:63:ILE:HG12	3:CC:65:VAL:HG23	1.64	0.80
53:CA:496:A:N3	53:CA:496:A:H2'	1.95	0.80
4:CD:3:TYR:O	4:CD:4:LEU:HB2	1.80	0.80
53:CA:1347:G:H22	53:CA:1373:G:H2'	1.45	0.80
22:BA:2834:G:H2'	22:BA:2879:A:H61	1.47	0.80
13:AM:2:ARG:O	13:AM:3:ILE:HG12	1.82	0.80
1:AA:1256:A:H1'	1:AA:1258:G:C5	2.16	0.80
9:AI:32:ARG:HG2	9:AI:36:GLN:HB3	1.64	0.80
57:DA:1245:G:H4'	26:DE:33:VAL:HG11	1.62	0.80
57:DA:2092:U:O2'	57:DA:2093:G:H8	1.64	0.80
33:BL:77:ILE:CD1	33:BL:108:ALA:HB1	2.12	0.80
57:DA:649:G:H2'	57:DA:650:C:C6	2.15	0.80
41:DT:67:VAL:HG23	41:DT:75:GLY:O	1.81	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:6:LYS:HB2	26:DE:121:VAL:HG12	1.63	0.80
57:DA:1056:G:H1'	57:DA:1103:A:H61	1.45	0.80
57:DA:1126:A:H4'	57:DA:1127:A:O5'	1.81	0.80
28:BG:104:LEU:HB2	28:BG:112:VAL:HG21	1.63	0.80
57:DA:2851:A:H2'	57:DA:2852:G:C8	2.16	0.80
24:BC:180:MET:HG3	24:BC:268:ARG:NH1	1.97	0.80
53:CA:794:A:H2'	53:CA:795:C:C6	2.17	0.80
8:AH:17:GLN:NE2	8:AH:71:VAL:HG23	1.96	0.80
26:BE:79:ARG:HG2	26:BE:80:SER:H	1.47	0.80
24:DC:75:ALA:HB2	24:DC:95:TYR:CD1	2.16	0.80
42:DU:33:VAL:O	42:DU:34:ILE:HG13	1.82	0.80
2:CB:19:THR:HG22	2:CB:37:VAL:HG23	1.63	0.80
57:DA:1012:U:O4	31:DJ:30:THR:HG21	1.80	0.80
27:BF:9:ASP:O	27:BF:10:GLU:HB2	1.80	0.80
22:BA:684:G:OP1	50:B2:16:HIS:HD2	1.64	0.80
4:CD:61:ARG:HH21	4:CD:67:LEU:HA	1.46	0.80
39:BR:4:VAL:HG23	39:BR:39:LEU:HG	1.64	0.80
39:BR:51:VAL:HB	39:BR:52:PRO:HD2	1.62	0.80
57:DA:1359:A:C2	57:DA:1360:G:H1'	2.16	0.80
59:DF:91:ARG:HB3	59:DF:91:ARG:HH21	1.46	0.80
1:AA:977:A:H2'	1:AA:977:A:N3	1.96	0.80
1:AA:982:U:H4'	1:AA:983:A:O5'	1.79	0.80
36:BO:40:ILE:HG12	36:BO:47:VAL:HG12	1.63	0.80
22:BA:2198:A:OP2	22:BA:2198:A:H3'	1.82	0.80
11:CK:111:ASP:H	21:CU:3:ILE:N	1.79	0.80
17:AQ:12:VAL:HG13	17:AQ:13:SER:N	1.97	0.80
1:AA:654:G:H2'	1:AA:655:A:C8	2.17	0.80
22:BA:1190:G:OP1	33:BL:32:GLY:HA2	1.81	0.80
32:DK:60:ALA:HA	32:DK:87:LEU:HD23	1.62	0.80
4:AD:117:VAL:N	4:AD:122:ILE:HD11	1.97	0.80
20:AT:27:MET:HE1	20:AT:57:VAL:HG22	1.63	0.80
29:BH:18:GLN:HE21	29:BH:18:GLN:HA	1.45	0.80
28:DG:1:SER:HB2	28:DG:61:TRP:HB3	1.62	0.80
1:AA:596:A:H2'	1:AA:597:G:H8	1.47	0.80
1:AA:1336:C:O2'	1:AA:1337:G:OP2	2.00	0.80
1:AA:1065:U:H5''	1:AA:1190:G:N2	1.97	0.80
57:DA:922:C:H1'	44:DW:22:VAL:HG21	1.64	0.80
57:DA:397:U:OP1	45:DX:30:PRO:HA	1.81	0.80
25:BD:9:VAL:HG22	25:BD:26:VAL:HB	1.63	0.80
22:BA:1032:A:H1'	52:B4:23:ILE:HD13	1.64	0.80
4:AD:96:ARG:HB3	4:AD:98:ASP:OD1	1.81	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2573:C:H2'	63:BA:3714:HOH:O	1.81	0.79
44:BW:49:ASN:HA	44:BW:61:LYS:HB2	1.61	0.79
57:DA:1388:G:O2'	57:DA:1389:G:H5'	1.81	0.79
5:AE:153:ALA:HA	5:AE:156:ARG:HB2	1.64	0.79
53:CA:15:G:H2'	53:CA:16:A:C8	2.16	0.79
26:BE:119:ILE:HD11	26:BE:187:VAL:HG22	1.63	0.79
59:DF:43:ILE:HG23	59:DF:44:ALA:H	1.48	0.79
4:AD:10:LEU:HD22	4:AD:62:ARG:HG3	1.64	0.79
22:BA:459:U:O2'	22:BA:460:A:H5'	1.81	0.79
9:AI:112:ARG:HH22	10:AJ:64:GLN:HE22	1.28	0.79
22:BA:1050:A:C2	22:BA:2751:G:C5	2.69	0.79
57:DA:2135:A:H8	57:DA:2135:A:OP2	1.66	0.79
44:DW:40:ARG:CG	44:DW:40:ARG:HH11	1.91	0.79
42:DU:95:PHE:H	42:DU:95:PHE:HD1	1.24	0.79
1:AA:1279:G:H1'	1:AA:1282:C:N4	1.96	0.79
1:AA:15:G:O4'	5:AE:28:ARG:NH1	2.15	0.79
11:AK:126:ARG:HB2	21:AU:33:ARG:NH1	1.96	0.79
22:BA:2328:A:H2'	22:BA:2329:U:C6	2.16	0.79
44:BW:30:VAL:HA	44:BW:60:ALA:HB3	1.63	0.79
53:CA:764:C:C2'	53:CA:765:G:H5'	2.13	0.79
22:BA:859:G:N2	22:BA:916:G:H2'	1.97	0.79
57:DA:867:C:HO2'	57:DA:868:U:H6	0.82	0.79
32:DK:35:VAL:HG23	32:DK:36:GLY:H	1.46	0.79
25:DD:106:LYS:HB3	25:DD:206:ALA:HB3	1.64	0.79
10:AJ:49:PHE:HE1	10:AJ:67:ILE:HG13	1.47	0.79
53:CA:1011:C:H2'	53:CA:1012:A:H8	1.46	0.79
1:AA:721:G:H4'	1:AA:722:G:O5'	1.81	0.79
57:DA:575:A:O2'	57:DA:576:U:H5'	1.82	0.79
34:DM:66:ARG:CZ	34:DM:101:VAL:HG11	2.12	0.79
57:DA:95:A:H4'	46:DY:38:GLN:O	1.80	0.79
22:BA:1287:A:O2'	22:BA:1288:G:H5'	1.82	0.79
57:DA:2752:C:H2'	57:DA:2753:A:C8	2.17	0.79
57:DA:1364:G:C5	45:DX:1:SER:HB2	2.18	0.79
57:DA:1352:U:H5	57:DA:1377:G:C6	2.01	0.79
57:DA:1474:U:H2'	57:DA:1475:G:H5'	1.63	0.79
2:AB:163:ILE:HG23	2:AB:164:ASP:H	1.46	0.79
59:DF:177:ARG:NE	59:DF:178:LYS:H	1.79	0.79
1:AA:1157:A:H1'	1:AA:1181:G:N2	1.98	0.79
57:DA:2092:U:O2'	57:DA:2093:G:C8	2.35	0.79
31:BJ:44:TYR:HB2	38:BQ:63:ARG:CB	2.11	0.79
57:DA:2135:A:C3'	57:DA:2136:G:H5''	2.12	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1511:G:HO2'	57:DA:1512:C:H6	1.28	0.79
4:CD:66:VAL:HG22	4:CD:96:ARG:NH1	1.97	0.79
30:BI:53:PRO:HD2	30:BI:77:VAL:HG21	1.64	0.79
11:CK:55:ARG:H	11:CK:55:ARG:HD2	1.47	0.79
40:BS:17:VAL:HG12	40:BS:76:VAL:HG11	1.64	0.79
22:BA:856:G:H1'	44:BW:23:LYS:HB3	1.62	0.79
57:DA:616:A:C2'	57:DA:617:G:H8	1.96	0.79
57:DA:1387:A:N6	57:DA:1401:G:C6	2.50	0.79
53:CA:1245:C:H2'	53:CA:1246:A:H8	1.48	0.79
57:DA:1817:G:O2'	57:DA:1818:U:H5'	1.83	0.79
1:AA:1157:A:H1'	1:AA:1181:G:C2	2.18	0.79
57:DA:2286:G:H4'	57:DA:2287:A:O4'	1.83	0.79
57:DA:2104:C:O2	57:DA:2105:U:H5	1.65	0.79
37:BP:50:ARG:HB3	37:BP:57:ALA:N	1.94	0.79
53:CA:982:U:H1'	53:CA:983:A:N7	1.98	0.79
57:DA:1391:U:H4'	41:DT:19:LYS:HZ1	1.48	0.79
53:CA:1152:A:H2'	53:CA:1153:G:C8	2.18	0.79
31:DJ:5:THR:HA	31:DJ:44:TYR:CD2	2.17	0.79
57:DA:1069:A:O2'	57:DA:1070:A:H5'	1.83	0.79
22:BA:1056:G:H5''	22:BA:1057:A:H5'	1.64	0.79
25:DD:124:ARG:HD3	25:DD:125:TRP:NE1	1.98	0.79
2:AB:137:THR:HA	2:AB:140:LEU:HD13	1.64	0.79
51:D3:41:ARG:HH21	51:D3:41:ARG:HG3	1.48	0.79
57:DA:2214:C:H2'	57:DA:2215:C:C6	2.18	0.79
58:DB:24:G:H1'	58:DB:27:C:H42	1.42	0.79
57:DA:1069:A:H4'	57:DA:1070:A:O5'	1.83	0.79
53:CA:78:A:H2'	53:CA:79:G:C8	2.18	0.79
53:CA:1349:A:H2'	53:CA:1350:A:C8	2.17	0.79
15:CO:63:ARG:HH22	57:DA:715:A:H5'	1.46	0.79
51:B3:21:PHE:HB2	51:B3:49:VAL:CG1	2.13	0.79
1:AA:116:A:H2'	1:AA:117:G:H8	1.46	0.79
24:DC:128:THR:HG22	24:DC:188:ARG:HB3	1.64	0.79
35:BN:24:MET:HG2	35:BN:44:LEU:HD22	1.64	0.79
25:BD:182:ALA:C	25:BD:184:ARG:H	1.85	0.79
4:AD:129:VAL:HG13	4:AD:131:ILE:HD12	1.63	0.79
41:DT:3:ARG:HD2	41:DT:42:GLU:HG2	1.64	0.79
34:BM:73:ILE:HG21	34:BM:91:TYR:CZ	2.17	0.79
57:DA:2319:G:O2'	57:DA:2321:U:O4	2.00	0.79
57:DA:1326:U:O2'	57:DA:1327:A:H8	1.65	0.79
17:CQ:3:LYS:HZ3	17:CQ:6:THR:HG21	1.43	0.79
6:CF:54:LEU:HD12	6:CF:56:LYS:O	1.83	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1237:A:C2	57:DA:1238:G:H1'	2.18	0.79
55:CM:64:VAL:HG12	55:CM:65:GLU:H	1.47	0.79
57:DA:668:A:H2'	57:DA:670:A:N6	1.96	0.78
57:DA:1277:G:H5'	35:DN:20:MET:HE3	1.65	0.78
53:CA:814:A:H5'	53:CA:1511:G:H4'	1.63	0.78
31:DJ:44:TYR:HD1	38:DQ:63:ARG:HH21	1.31	0.78
41:BT:50:LEU:HD12	41:BT:50:LEU:H	1.47	0.78
5:CE:76:ASN:O	5:CE:79:THR:HG22	1.83	0.78
53:CA:801:U:H2'	53:CA:802:A:C8	2.18	0.78
1:AA:1361:G:H2'	1:AA:1362:A:H5'	1.63	0.78
25:BD:186:LEU:HD11	37:BP:3:ILE:HD11	1.62	0.78
30:BI:100:ILE:HG22	30:BI:101:SER:H	1.47	0.78
30:DI:104:GLN:HA	30:DI:107:GLU:HB2	1.65	0.78
57:DA:207:A:H2'	57:DA:208:C:C6	2.18	0.78
22:BA:18:U:O2'	22:BA:19:A:H5'	1.83	0.78
57:DA:2136:G:H2'	57:DA:2137:U:C6	2.19	0.78
57:DA:2542:A:H4'	57:DA:2543:G:C5'	2.12	0.78
57:DA:1038:G:C2'	57:DA:1039:A:H5'	2.13	0.78
30:DI:74:PRO:HB2	30:DI:77:VAL:HG22	1.63	0.78
22:BA:2757:A:N1	28:BG:66:THR:HG21	1.98	0.78
2:AB:163:ILE:O	2:AB:185:ILE:HG12	1.83	0.78
57:DA:2291:U:H2'	57:DA:2292:U:C6	2.17	0.78
57:DA:2612:C:H5''	57:DA:2613:U:OP1	1.83	0.78
53:CA:113:G:H21	53:CA:353:A:H8	1.28	0.78
28:BG:120:ILE:HD11	28:BG:132:LEU:HB2	1.65	0.78
44:DW:27:GLY:CA	44:DW:31:LEU:HD11	2.13	0.78
57:DA:1993:U:H2'	57:DA:1994:C:C6	2.18	0.78
22:BA:1141:U:H4'	22:BA:1142:A:O5'	1.82	0.78
1:AA:842:U:H3'	1:AA:843:U:C5'	2.13	0.78
57:DA:1491:G:O2'	57:DA:1492:G:H5'	1.83	0.78
57:DA:1492:G:H3'	57:DA:1493:C:H5'	1.66	0.78
57:DA:1635:A:O2'	57:DA:1636:U:H5'	1.82	0.78
22:BA:2636:C:H2'	22:BA:2637:U:C6	2.17	0.78
53:CA:948:C:H5''	55:CM:104:ASN:HB3	1.63	0.78
36:DO:53:THR:HB	36:DO:65:THR:HG22	1.65	0.78
29:DH:27:ARG:NH1	45:DX:59:ASP:HA	1.99	0.78
2:AB:100:LEU:HD12	2:AB:178:LEU:HD23	1.64	0.78
1:AA:121:U:H5''	1:AA:121:U:H6	1.47	0.78
57:DA:491:G:H2'	57:DA:492:A:H8	1.48	0.78
37:BP:50:ARG:HG2	37:BP:57:ALA:N	1.99	0.78
58:DB:57:A:C6	59:DF:25:MET:HG2	2.19	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:79:THR:HB	5:AE:121:ASN:ND2	1.99	0.78
53:CA:481:G:H4'	53:CA:482:A:OP1	1.84	0.78
15:AO:63:ARG:HD3	15:AO:87:ARG:NH2	1.96	0.78
41:BT:30:ILE:HG23	41:BT:85:VAL:HB	1.64	0.78
12:CL:2:THR:HB	12:CL:5:GLN:HB2	1.65	0.78
57:DA:915:C:H2'	57:DA:916:G:H8	1.48	0.78
30:BI:33:ASN:HB3	30:BI:36:GLU:HB2	1.66	0.78
53:CA:1430:A:H2'	53:CA:1431:A:O4'	1.83	0.78
3:CC:36:PHE:HE1	14:CN:91:GLU:HB3	1.48	0.78
53:CA:238:A:H2'	53:CA:239:U:H5''	1.64	0.78
22:BA:2355:G:H4'	44:BW:20:LEU:HD13	1.66	0.78
22:BA:1073:A:H3'	22:BA:1074:G:C5'	2.12	0.78
57:DA:762:U:H4'	57:DA:763:G:O5'	1.83	0.78
53:CA:560:A:C5	5:CE:127:TYR:CE2	2.71	0.78
24:BC:14:HIS:O	24:BC:203:VAL:HG11	1.83	0.78
22:BA:1734:G:HO2'	22:BA:1735:A:H8	1.28	0.78
22:BA:1286:A:H4'	22:BA:1287:A:OP1	1.84	0.78
45:DX:30:PRO:HG2	45:DX:32:LEU:HD21	1.65	0.78
58:DB:42:C:H2'	58:DB:43:C:C6	2.18	0.78
28:BG:96:ALA:HB3	28:BG:103:ASN:HB3	1.64	0.78
12:AL:23:LEU:HB2	12:AL:58:ASN:ND2	1.98	0.78
57:DA:2056:G:H21	48:D0:1:ALA:H3	1.30	0.78
57:DA:443:A:H61	26:DE:36:ALA:HB1	1.47	0.78
22:BA:2264:C:H41	44:BW:11:ASN:HD21	1.32	0.78
53:CA:1387:G:H2'	53:CA:1388:C:H6	1.48	0.78
1:AA:1055:A:H1'	3:AC:155:ARG:HH21	1.48	0.78
33:BL:112:LEU:HD12	33:BL:130:GLY:HA3	1.64	0.78
6:AF:71:ILE:HD11	6:AF:89:VAL:HG21	1.63	0.78
22:BA:1060:U:H4'	22:BA:1061:U:C5'	2.14	0.78
57:DA:1789:A:H5''	24:DC:218:THR:O	1.84	0.78
57:DA:1036:G:C2'	57:DA:1037:G:H5'	2.14	0.78
57:DA:310:A:O2'	57:DA:311:A:H8	1.65	0.78
9:CI:17:ARG:HB2	9:CI:65:THR:HB	1.65	0.78
1:AA:587:G:H4'	8:AH:3:GLN:HA	1.66	0.78
24:BC:20:ASN:HD22	24:BC:20:ASN:C	1.86	0.78
57:DA:593:U:H2'	57:DA:594:U:C6	2.18	0.78
53:CA:704:A:H2'	53:CA:705:G:C8	2.19	0.78
53:CA:1125:U:C5	10:CJ:40:ILE:HG12	2.18	0.78
53:CA:1241:G:H2'	53:CA:1242:G:H8	1.48	0.78
53:CA:120:A:C2'	53:CA:121:U:H5''	2.13	0.78
57:DA:2468:A:O2'	57:DA:2469:A:C8	2.37	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BM:132:THR:HG22	34:BM:133:LYS:H	1.47	0.78
22:BA:78:U:H2'	22:BA:79:C:C6	2.17	0.78
28:BG:115:GLN:CD	28:BG:115:GLN:H	1.87	0.78
42:DU:54:PRO:HG2	42:DU:55:GLY:H	1.47	0.78
38:BQ:85:ALA:O	38:BQ:86:SER:C	2.20	0.78
25:BD:101:PHE:HE2	25:BD:203:VAL:HG22	1.47	0.78
22:BA:2388:A:H5'	22:BA:2389:G:OP2	1.84	0.78
3:AC:76:ILE:HD11	3:AC:102:ILE:HG12	1.65	0.78
4:AD:16:THR:HG22	4:AD:17:ASP:N	1.98	0.78
37:DP:50:ARG:HA	37:DP:57:ALA:O	1.82	0.78
11:CK:126:ARG:HB2	21:CU:33:ARG:HD2	1.65	0.78
22:BA:357:C:H2'	22:BA:358:U:C6	2.18	0.78
25:DD:53:GLY:HA3	25:DD:77:ARG:HG3	1.66	0.78
30:BI:3:LYS:HD2	30:BI:4:VAL:HG23	1.66	0.78
22:BA:914:G:H8	22:BA:914:G:H5''	1.48	0.78
57:DA:919:U:H2'	57:DA:920:A:C8	2.18	0.78
57:DA:2149:U:O2'	57:DA:2150:C:H6	1.65	0.77
58:DB:5:U:H2'	58:DB:6:G:C8	2.18	0.77
53:CA:1144:G:H21	53:CA:1146:A:H62	1.31	0.77
26:DE:126:VAL:HG21	26:DE:134:LEU:HD13	1.66	0.77
24:BC:173:LEU:HD22	24:BC:183:VAL:HG21	1.66	0.77
53:CA:1382:C:O2'	53:CA:1383:C:H5'	1.83	0.77
57:DA:2091:C:C4	57:DA:2092:U:C4	2.73	0.77
57:DA:449:A:O2'	57:DA:450:G:H5'	1.84	0.77
10:CJ:11:LYS:HB3	10:CJ:71:LEU:HD13	1.66	0.77
53:CA:77:A:H2'	53:CA:78:A:C8	2.19	0.77
1:AA:259:G:H2'	1:AA:260:G:H8	1.48	0.77
53:CA:495:A:H4'	53:CA:496:A:O5'	1.81	0.77
25:DD:68:PHE:HB3	25:DD:73:VAL:HA	1.64	0.77
1:AA:497:G:O2'	1:AA:498:A:H5'	1.84	0.77
22:BA:513:A:O2'	22:BA:514:A:H5'	1.83	0.77
22:BA:250:G:H2'	22:BA:251:A:C8	2.18	0.77
58:DB:57:A:C4	59:DF:25:MET:HB2	2.19	0.77
57:DA:2384:U:H5''	57:DA:2386:A:OP1	1.83	0.77
57:DA:1024:G:H3'	57:DA:1025:G:C5'	2.14	0.77
57:DA:1117:C:O2'	57:DA:1118:C:C5'	2.33	0.77
57:DA:2143:C:H5'	57:DA:2144:G:OP2	1.83	0.77
57:DA:1097:U:H2'	57:DA:1098:A:O4'	1.85	0.77
57:DA:2232:C:P	45:DX:26:ARG:HH12	2.06	0.77
5:AE:81:GLN:HG2	5:AE:149:PRO:HG3	1.67	0.77
22:BA:276:U:O2'	22:BA:278:A:N7	2.17	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2728:U:O2'	57:DA:2729:G:H8	1.67	0.77
53:CA:120:A:H3'	53:CA:121:U:H5''	1.65	0.77
57:DA:921:C:C2'	57:DA:922:C:H5'	2.14	0.77
27:BF:40:GLY:CA	27:BF:84:ILE:HD11	2.15	0.77
29:DH:80:ILE:HB	29:DH:101:ASP:CB	2.14	0.77
12:CL:79:ILE:HD12	12:CL:96:THR:HG21	1.64	0.77
53:CA:983:A:O2'	53:CA:984:C:H5'	1.83	0.77
17:AQ:51:GLU:HG3	17:AQ:74:LEU:HD21	1.67	0.77
22:BA:1020:A:H4'	22:BA:1021:A:O5'	1.82	0.77
34:DM:17:ASN:HB3	34:DM:38:ARG:NH2	1.98	0.77
22:BA:1784:A:H4'	22:BA:1785:A:O5'	1.81	0.77
21:AU:39:LYS:H	21:AU:40:PRO:HD2	1.49	0.77
1:AA:1218:C:H2'	1:AA:1219:A:C8	2.19	0.77
25:BD:16:THR:HG23	25:BD:18:ASP:OD1	1.83	0.77
37:BP:95:LYS:HG2	37:BP:97:TYR:CZ	2.18	0.77
57:DA:67:U:H2'	57:DA:68:G:H8	1.49	0.77
38:BQ:63:ARG:HH22	38:BQ:96:ASP:N	1.82	0.77
44:BW:8:SER:O	44:BW:9:THR:HG22	1.83	0.77
32:BK:18:ARG:NH1	32:BK:18:ARG:HG3	1.91	0.77
22:BA:2680:U:P	25:BD:114:LYS:HE2	2.23	0.77
37:DP:91:VAL:HG11	37:DP:96:LEU:HD11	1.65	0.77
30:BI:104:GLN:O	30:BI:105:LEU:HB2	1.84	0.77
31:DJ:20:ALA:HA	31:DJ:23:LYS:HG3	1.64	0.77
31:BJ:73:VAL:HG23	31:BJ:74:TYR:H	1.48	0.77
31:DJ:89:PHE:HE2	31:DJ:100:VAL:HG11	1.48	0.77
38:BQ:111:LYS:HE3	39:BR:50:GLY:HA2	1.65	0.77
57:DA:675:A:OP1	26:DE:60:TRP:HZ2	1.67	0.77
11:CK:81:LEU:HD11	11:CK:104:PHE:CD2	2.18	0.77
1:AA:619:U:H3	4:AD:130:ASN:HB3	1.49	0.77
53:CA:239:U:C5'	53:CA:239:U:H6	1.97	0.77
4:AD:172:VAL:HG22	4:AD:173:ASP:H	1.48	0.77
57:DA:1181:U:H2'	57:DA:1182:G:H8	1.49	0.77
53:CA:858:G:N7	63:CA:1822:HOH:O	2.18	0.77
32:DK:54:LYS:H	32:DK:54:LYS:HD2	1.49	0.77
7:AG:26:VAL:HG12	7:AG:42:VAL:HG21	1.65	0.77
52:D4:19:ARG:O	52:D4:20:ASP:HB2	1.85	0.77
22:BA:2502:G:H5'	22:BA:2503:A:C5'	2.14	0.77
57:DA:1049:C:O2'	57:DA:1050:A:H5'	1.85	0.77
2:AB:46:VAL:HB	2:AB:47:PRO:HD3	1.67	0.77
12:AL:43:LYS:HB2	12:AL:44:PRO:CD	2.15	0.77
4:AD:53:GLN:HE21	4:AD:202:LEU:HA	1.49	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AP:22:ALA:HA	16:AP:33:ILE:HG13	1.65	0.77
53:CA:313:A:H2'	53:CA:314:C:C6	2.20	0.77
22:BA:321:U:HO2'	22:BA:340:A:HO2'	1.32	0.77
2:CB:130:LYS:HA	2:CB:133:ALA:HB3	1.65	0.77
58:DB:65:U:H3'	58:DB:108:A:N6	1.99	0.77
2:AB:89:PHE:HB3	2:AB:149:GLY:CA	2.14	0.77
57:DA:320:A:H4'	57:DA:322:A:N7	2.00	0.77
26:DE:149:ILE:O	26:DE:188:MET:HA	1.83	0.77
38:DQ:60:TRP:O	38:DQ:63:ARG:HG2	1.85	0.77
22:BA:973:A:O4'	22:BA:1188:U:C6	2.37	0.77
3:CC:140:ALA:O	3:CC:145:ALA:HB3	1.85	0.77
22:BA:284:U:H2'	22:BA:285:G:H8	1.49	0.77
53:CA:1285:A:H4'	53:CA:1286:U:OP1	1.84	0.77
57:DA:279:A:N6	57:DA:361:G:H1'	2.00	0.77
15:AO:29:ALA:HA	15:AO:84:LEU:HD21	1.66	0.77
53:CA:1391:U:H2'	53:CA:1392:G:C8	2.20	0.77
24:BC:212:TRP:O	24:BC:212:TRP:HD1	1.67	0.77
53:CA:79:G:H2'	53:CA:80:A:H8	1.49	0.77
1:AA:1441:A:H62	1:AA:1461:G:N2	1.83	0.77
57:DA:915:C:O2'	57:DA:916:G:H5'	1.84	0.77
57:DA:1364:G:N7	45:DX:1:SER:HB2	1.99	0.77
57:DA:1967:C:H6	57:DA:1967:C:H5''	1.49	0.77
1:AA:57:G:H2'	1:AA:58:C:C6	2.20	0.77
44:DW:13:ARG:HG3	44:DW:14:ASP:H	1.49	0.77
39:BR:24:LYS:HA	39:BR:94:THR:HG23	1.66	0.77
4:CD:2:ARG:NH2	4:CD:114:ARG:HD3	1.98	0.77
57:DA:2420:C:OP1	51:D3:33:THR:HB	1.85	0.77
57:DA:1346:G:O2'	57:DA:1347:A:H8	1.66	0.77
57:DA:83:A:H61	57:DA:101:A:H5'	1.48	0.77
53:CA:209:U:H5''	53:CA:210:C:OP2	1.85	0.77
8:CH:75:GLN:O	8:CH:126:CYS:HB2	1.85	0.77
28:BG:84:LYS:HD2	28:BG:133:LYS:HG2	1.65	0.76
32:BK:71:ARG:HG3	32:BK:106:GLU:OE2	1.85	0.76
57:DA:1534:U:H6	57:DA:1538:G:H1	1.32	0.76
5:CE:103:GLY:HA3	5:CE:121:ASN:HA	1.68	0.76
45:DX:31:ASN:HD22	45:DX:31:ASN:N	1.80	0.76
2:CB:184:ALA:O	2:CB:199:ILE:HG12	1.86	0.76
57:DA:2752:C:H2'	57:DA:2753:A:H8	1.48	0.76
24:DC:131:MET:HA	24:DC:134:ILE:HG12	1.67	0.76
10:AJ:35:GLN:HG2	10:AJ:77:VAL:HB	1.67	0.76
1:AA:87:C:H2'	1:AA:88:U:H6	1.50	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:667:G:H4'	15:AO:50:HIS:CE1	2.20	0.76
25:BD:110:THR:HG23	25:BD:171:THR:HG22	1.66	0.76
22:BA:1257:C:H5'	26:BE:78:TRP:CZ3	2.19	0.76
9:CI:23:GLY:H	9:CI:60:LEU:HA	1.50	0.76
22:BA:587:C:H42	33:BL:33:ARG:HD3	1.49	0.76
40:DS:8:ARG:O	40:DS:9:HIS:HB2	1.85	0.76
7:AG:110:ARG:NH1	7:AG:122:GLU:HG2	2.01	0.76
47:DZ:30:ARG:NH2	47:DZ:33:HIS:HB2	2.00	0.76
22:BA:1558:C:H4'	22:BA:1559:U:O5'	1.83	0.76
22:BA:946:C:O2'	22:BA:947:A:H5'	1.85	0.76
33:DL:20:GLY:HA2	33:DL:28:GLY:HA2	1.66	0.76
39:BR:16:GLU:HA	39:BR:98:ILE:HG22	1.67	0.76
54:CG:14:ASP:HB3	54:CG:18:GLY:H	1.49	0.76
28:DG:162:ARG:H	28:DG:162:ARG:HD2	1.49	0.76
57:DA:2136:G:H2'	57:DA:2137:U:C5	2.20	0.76
22:BA:1060:U:O4'	22:BA:1062:G:H5''	1.84	0.76
22:BA:1069:A:O2'	22:BA:1070:A:H5''	1.85	0.76
57:DA:1993:U:H2'	57:DA:1994:C:H6	1.50	0.76
57:DA:781:A:H5''	57:DA:782:A:OP1	1.86	0.76
57:DA:2311:A:H3'	57:DA:2312:U:H6	1.50	0.76
57:DA:1027:A:O2'	57:DA:1028:A:C8	2.38	0.76
57:DA:1905:C:O4'	57:DA:1928:A:C2	2.39	0.76
53:CA:792:A:O2'	53:CA:794:A:N7	2.18	0.76
21:CU:39:LYS:H	21:CU:40:PRO:HD2	1.50	0.76
57:DA:379:G:C6	57:DA:396:G:O6	2.39	0.76
41:DT:44:LYS:O	41:DT:48:GLN:HG2	1.85	0.76
2:CB:46:VAL:HG13	2:CB:47:PRO:HD3	1.67	0.76
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.66	0.76
36:DO:23:ALA:O	36:DO:42:PRO:HG3	1.84	0.76
47:BZ:12:ALA:HA	47:BZ:15:ARG:HD3	1.67	0.76
1:AA:270:A:H2'	1:AA:271:C:C6	2.19	0.76
44:BW:18:LYS:HA	44:BW:36:ILE:CG1	2.11	0.76
53:CA:251:G:H4'	53:CA:252:U:C5'	2.15	0.76
53:CA:274:A:O2'	53:CA:275:G:H8	1.68	0.76
53:CA:1081:A:H5'	5:CE:22:LYS:HD2	1.68	0.76
8:CH:68:LYS:HD3	8:CH:69:ALA:N	2.01	0.76
1:AA:923:A:H5''	5:AE:25:LYS:HE2	1.65	0.76
37:DP:57:ALA:HA	37:DP:75:THR:HB	1.64	0.76
57:DA:1490:A:C8	24:DC:73:ILE:HD12	2.20	0.76
2:AB:185:ILE:HA	2:AB:199:ILE:HB	1.68	0.76
24:DC:106:PRO:HB3	24:DC:141:HIS:HE1	1.49	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DB:86:G:H2'	58:DB:87:U:H5''	1.67	0.76
22:BA:2579:C:OP1	63:BA:3541:HOH:O	2.02	0.76
3:AC:143:LEU:HD22	3:AC:143:LEU:H	1.51	0.76
22:BA:767:U:O2'	22:BA:768:G:H5'	1.86	0.76
22:BA:323:C:H2'	26:BE:163:ASN:OD1	1.85	0.76
1:AA:1253:G:H2'	1:AA:1254:A:H8	1.50	0.76
26:DE:170:ARG:HH22	26:DE:176:ASP:HB2	1.50	0.76
40:DS:70:LYS:H	40:DS:70:LYS:HE3	1.51	0.76
22:BA:2352:A:N1	44:BW:30:VAL:HG11	2.01	0.76
44:BW:30:VAL:O	44:BW:30:VAL:HG22	1.84	0.76
40:BS:96:ILE:HG13	40:BS:96:ILE:O	1.85	0.76
15:CO:38:LEU:O	15:CO:41:HIS:HB3	1.86	0.76
47:DZ:16:LEU:HD22	47:DZ:16:LEU:N	2.00	0.76
38:DQ:57:ARG:NH1	38:DQ:92:LYS:HE2	2.00	0.76
14:AN:44:VAL:HG23	14:AN:45:LEU:H	1.51	0.76
2:CB:185:ILE:HG22	2:CB:199:ILE:HG13	1.66	0.76
21:CU:36:PHE:HD1	21:CU:40:PRO:HB3	1.50	0.76
57:DA:206:U:HO2'	57:DA:207:A:H8	1.30	0.76
56:CP:48:GLU:HG3	56:CP:51:ARG:HH21	1.50	0.76
26:BE:44:ARG:HH21	26:BE:44:ARG:HG3	1.50	0.76
1:AA:475:C:H2'	1:AA:476:U:H6	1.50	0.76
22:BA:2585:U:O2'	22:BA:2586:U:H5'	1.85	0.76
30:BI:7:TYR:HB3	30:BI:58:ILE:H	1.50	0.76
54:CG:71:THR:HG23	54:CG:72:VAL:HG23	1.68	0.76
12:CL:19:ASN:H	12:CL:19:ASN:HD22	1.33	0.76
34:BM:66:ARG:NH1	34:BM:101:VAL:HG11	2.01	0.76
9:AI:34:LEU:HD11	9:AI:47:VAL:HG21	1.67	0.76
57:DA:1358:G:H2'	57:DA:1372:U:O4	1.85	0.76
35:DN:24:MET:HG2	35:DN:44:LEU:HD22	1.66	0.76
57:DA:1345:C:O2'	57:DA:1346:G:H8	1.69	0.76
34:DM:96:ILE:HD13	34:DM:102:LEU:HD11	1.67	0.76
25:BD:174:SER:O	25:BD:175:LEU:HB2	1.84	0.76
22:BA:272:A:O2'	22:BA:273:G:H8	1.67	0.76
23:BB:45:A:H2'	23:BB:46:A:C8	2.20	0.76
53:CA:575:G:H4'	53:CA:576:C:O5'	1.85	0.76
57:DA:859:G:O2'	57:DA:860:U:OP2	2.02	0.76
3:CC:36:PHE:CE1	14:CN:91:GLU:HB3	2.20	0.76
38:BQ:109:VAL:HG12	38:BQ:113:LYS:HD2	1.68	0.76
57:DA:1270:C:H2'	57:DA:1648:U:H5''	1.68	0.76
1:AA:519:C:H2'	1:AA:520:A:C8	2.20	0.76
22:BA:996:A:C2	22:BA:997:G:C8	2.73	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:131:ASN:HD22	5:CE:132:PRO:HD2	1.49	0.76
1:AA:1151:A:HO2'	1:AA:1152:A:H8	0.80	0.76
31:BJ:21:THR:HG22	31:BJ:22:GLY:N	2.00	0.76
53:CA:327:A:O2'	53:CA:329:A:H5''	1.84	0.76
28:BG:10:VAL:HG23	28:BG:10:VAL:O	1.84	0.76
18:AR:40:PRO:HB2	18:AR:42:ARG:HG2	1.67	0.76
38:BQ:86:SER:HB2	39:BR:50:GLY:O	1.86	0.76
44:BW:47:GLY:O	44:BW:49:ASN:N	2.18	0.76
44:BW:51:GLY:HA3	44:BW:59:PHE:HE2	1.47	0.76
32:BK:18:ARG:CG	32:BK:18:ARG:HH11	1.97	0.76
56:CP:74:LEU:O	56:CP:78:VAL:HG23	1.85	0.76
24:BC:230:PRO:HD2	24:BC:246:PRO:HA	1.68	0.76
57:DA:510:C:H2'	57:DA:511:U:C6	2.21	0.76
57:DA:2631:G:H2'	57:DA:2632:A:H5''	1.66	0.76
1:AA:486:U:O2'	1:AA:487:A:H5'	1.85	0.76
5:CE:55:VAL:O	5:CE:59:ILE:HG22	1.86	0.76
38:BQ:20:ALA:HA	38:BQ:23:TYR:CE1	2.21	0.76
57:DA:1688:U:O2	57:DA:1700:A:H5'	1.86	0.76
22:BA:1434:A:H2'	22:BA:1435:G:H8	1.51	0.76
22:BA:1347:A:O2'	22:BA:1348:C:H5'	1.86	0.76
24:DC:52:HIS:HA	24:DC:216:ARG:HB2	1.67	0.76
57:DA:1327:A:H2'	57:DA:1328:A:C8	2.21	0.76
57:DA:1430:G:H2'	57:DA:1431:A:C8	2.20	0.76
12:CL:109:ARG:HB2	12:CL:118:VAL:HG21	1.68	0.76
57:DA:2680:U:OP2	25:DD:114:LYS:HD3	1.86	0.76
59:DF:49:LEU:HA	59:DF:52:ALA:HB3	1.68	0.76
4:AD:47:LEU:HD21	4:AD:52:VAL:HG12	1.68	0.76
32:DK:18:ARG:HB2	32:DK:45:GLU:HB2	1.67	0.76
53:CA:624:C:O2'	56:CP:10:GLY:HA2	1.84	0.76
57:DA:794:A:H2'	57:DA:795:C:C6	2.21	0.76
35:DN:63:ARG:O	35:DN:67:PHE:HB2	1.86	0.76
25:DD:10:GLY:O	25:DD:11:MET:HB2	1.86	0.76
38:BQ:48:ASP:HA	38:BQ:51:GLN:HB2	1.68	0.76
57:DA:456:C:O2'	41:DT:73:ARG:HG3	1.85	0.75
4:CD:58:GLN:O	4:CD:62:ARG:HG2	1.86	0.75
57:DA:1051:G:H5'	57:DA:2752:C:H1'	1.66	0.75
53:CA:511:C:O2'	53:CA:512:U:H5''	1.84	0.75
57:DA:976:G:H2'	57:DA:977:G:H8	1.49	0.75
15:CO:47:LYS:HD2	15:CO:47:LYS:H	1.49	0.75
23:BB:7:G:O2'	36:BO:38:GLN:NE2	2.19	0.75
38:BQ:63:ARG:CZ	38:BQ:96:ASP:HA	2.16	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BW:39:GLN:NE2	44:BW:43:LYS:H	1.84	0.75
32:DK:71:ARG:HB3	32:DK:72:PRO:CD	2.13	0.75
57:DA:84:A:C4	57:DA:103:A:N6	2.54	0.75
53:CA:1526:G:OP1	21:CU:38:GLU:HG3	1.86	0.75
35:DN:28:LEU:HD21	35:DN:115:LEU:HD21	1.68	0.75
46:BY:45:GLN:O	46:BY:46:VAL:HB	1.86	0.75
38:BQ:111:LYS:CE	39:BR:50:GLY:HA2	2.17	0.75
57:DA:1327:A:H2'	57:DA:1328:A:H8	1.50	0.75
20:CT:22:SER:O	20:CT:26:MET:HB2	1.85	0.75
57:DA:1038:G:C2	57:DA:1039:A:C8	2.74	0.75
57:DA:1812:U:H2'	57:DA:1813:G:H8	1.51	0.75
22:BA:2148:G:H2'	22:BA:2149:U:O4'	1.86	0.75
22:BA:65:U:H2'	22:BA:66:C:H6	1.50	0.75
57:DA:995:C:O2	31:DJ:3:THR:HG23	1.86	0.75
40:BS:84:ARG:HB2	40:BS:96:ILE:CD1	2.15	0.75
57:DA:1024:G:C3'	57:DA:1025:G:H5''	2.16	0.75
57:DA:1827:U:H4'	57:DA:1970:A:O2'	1.85	0.75
57:DA:1391:U:H4'	41:DT:19:LYS:NZ	2.02	0.75
41:DT:29:THR:H	41:DT:87:LEU:HB2	1.50	0.75
53:CA:1254:A:H2'	53:CA:1255:G:C8	2.21	0.75
53:CA:348:G:H2'	53:CA:349:A:C8	2.18	0.75
57:DA:1490:A:H8	24:DC:73:ILE:HD12	1.51	0.75
57:DA:491:G:H2'	57:DA:492:A:C8	2.21	0.75
38:BQ:26:ALA:HB1	38:BQ:30:VAL:HG23	1.68	0.75
5:AE:11:GLN:HA	5:AE:11:GLN:HE21	1.52	0.75
25:DD:105:LYS:HA	25:DD:177:VAL:HG22	1.68	0.75
47:DZ:4:ILE:HD12	47:DZ:58:GLU:HA	1.66	0.75
24:BC:117:SER:HB2	24:BC:128:THR:HB	1.68	0.75
44:BW:23:LYS:HD2	44:BW:24:ARG:N	2.01	0.75
57:DA:739:A:O2'	57:DA:740:C:C5	2.40	0.75
57:DA:1534:U:H6	57:DA:1538:G:N1	1.84	0.75
57:DA:1929:G:H4'	57:DA:1930:G:OP1	1.87	0.75
24:DC:145:MET:HE2	24:DC:181:ARG:HH22	1.52	0.75
14:AN:22:LYS:HG3	14:AN:23:ARG:H	1.52	0.75
59:DF:41:GLU:HG2	59:DF:42:ALA:H	1.51	0.75
53:CA:532:A:C8	3:CC:192:TYR:CE2	2.75	0.75
22:BA:1927:A:H2'	22:BA:1928:A:C8	2.22	0.75
47:DZ:23:LEU:HD12	47:DZ:28:LEU:HD21	1.68	0.75
57:DA:286:U:H2'	57:DA:287:G:C8	2.22	0.75
57:DA:2210:U:H4'	57:DA:2211:A:O5'	1.84	0.75
53:CA:1493:A:H8	57:DA:1913:A:H61	1.33	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1079:C:N4	22:BA:1088:A:H2	1.84	0.75
53:CA:451:A:H4'	53:CA:452:A:O5'	1.85	0.75
53:CA:1329:A:H5''	55:CM:25:GLY:N	2.00	0.75
21:AU:16:ARG:HH11	21:AU:19:LYS:CG	2.00	0.75
53:CA:936:C:O2'	53:CA:937:A:H8	1.68	0.75
14:AN:40:ARG:NH1	14:AN:44:VAL:HG11	2.01	0.75
24:DC:173:LEU:HD22	24:DC:181:ARG:O	1.87	0.75
42:DU:45:GLN:HE21	42:DU:45:GLN:HA	1.49	0.75
8:CH:1:SER:HB3	8:CH:3:GLN:HG3	1.69	0.75
22:BA:1707:G:H2'	22:BA:1708:C:C6	2.21	0.75
57:DA:2324:U:H5'	57:DA:2325:G:C5'	2.16	0.75
57:DA:656:G:H2'	57:DA:657:U:C6	2.22	0.75
21:AU:9:GLU:CG	21:AU:10:PRO:HD3	2.13	0.75
22:BA:636:G:C5	33:BL:111:ILE:HD11	2.22	0.75
57:DA:1070:A:H5'	57:DA:1071:G:H5''	1.68	0.75
57:DA:2204:G:H5'	24:DC:149:LYS:HG3	1.69	0.75
57:DA:1809:A:O2'	57:DA:1810:A:C8	2.39	0.75
53:CA:969:A:O2'	53:CA:970:C:H5'	1.87	0.75
35:DN:56:LYS:HD3	35:DN:88:ALA:HA	1.67	0.75
29:BH:14:SER:OG	29:BH:17:ASP:HB2	1.87	0.75
5:CE:13:LYS:HA	5:CE:13:LYS:HE2	1.68	0.75
32:DK:7:MET:CE	32:DK:7:MET:HA	2.16	0.75
4:CD:104:MET:O	4:CD:104:MET:HG2	1.86	0.75
57:DA:160:A:N6	57:DA:167:A:H1'	2.01	0.75
22:BA:2602:A:H4'	22:BA:2603:G:OP2	1.85	0.75
22:BA:479:A:O2'	22:BA:481:G:H5'	1.86	0.75
37:BP:50:ARG:CB	37:BP:57:ALA:N	2.48	0.75
53:CA:252:U:H2'	53:CA:253:A:C8	2.22	0.75
53:CA:247:G:O6	53:CA:278:G:C6	2.40	0.75
1:AA:1279:G:N3	1:AA:1279:G:H2'	2.02	0.75
5:CE:98:ALA:HB2	5:CE:123:LEU:HG	1.68	0.75
22:BA:1491:G:O2'	22:BA:1492:G:H5'	1.87	0.75
28:DG:106:LEU:HB2	28:DG:108:PHE:HE1	1.51	0.75
32:DK:25:LEU:HD23	32:DK:25:LEU:H	1.52	0.75
1:AA:792:A:O2'	1:AA:794:A:N7	2.18	0.75
6:CF:25:TYR:O	6:CF:29:ILE:HD13	1.86	0.75
36:BO:41:ALA:HB2	36:BO:48:LEU:HD21	1.67	0.75
47:BZ:35:VAL:HG21	47:BZ:37:ARG:NH1	2.02	0.75
53:CA:33:A:H2'	53:CA:34:C:C6	2.20	0.75
57:DA:1906:G:H8	57:DA:1929:G:H2'	1.50	0.75
52:B4:1:MET:HB3	52:B4:34:LYS:HG2	1.68	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:198:G:HO2'	53:CA:199:A:H8	1.34	0.75
53:CA:920:U:H2'	53:CA:921:U:H6	1.52	0.75
4:CD:66:VAL:HG22	4:CD:96:ARG:HH11	1.52	0.75
51:D3:3:ILE:HG21	51:D3:62:PRO:HG2	1.68	0.75
22:BA:289:G:H2'	22:BA:290:U:O4'	1.87	0.75
50:B2:24:THR:HG23	50:B2:27:GLY:H	1.50	0.75
5:CE:44:ARG:HG2	5:CE:72:ASN:HA	1.68	0.75
36:DO:17:LYS:HE3	36:DO:17:LYS:O	1.86	0.75
2:CB:74:ALA:HB1	2:CB:206:ILE:HD11	1.67	0.74
57:DA:1709:U:H2'	57:DA:1710:G:H8	1.51	0.74
28:DG:112:VAL:HG13	28:DG:150:TYR:HE1	1.51	0.74
36:DO:23:ALA:HB1	36:DO:90:VAL:HG12	1.69	0.74
57:DA:480:A:H3'	57:DA:481:G:C5'	2.17	0.74
53:CA:345:C:H4'	53:CA:346:G:H5''	1.69	0.74
44:BW:39:GLN:HG3	44:BW:42:THR:N	2.01	0.74
57:DA:857:G:H1'	44:DW:19:ARG:NE	2.02	0.74
57:DA:1912:A:N6	57:DA:1917:U:H3	1.85	0.74
10:CJ:15:HIS:CE1	10:CJ:68:ARG:HD3	2.21	0.74
57:DA:1430:G:H2'	57:DA:1431:A:H8	1.53	0.74
22:BA:2747:G:O2'	28:BG:66:THR:HG22	1.87	0.74
42:DU:35:VAL:HB	42:DU:38:ILE:HD13	1.69	0.74
34:DM:7:THR:HG22	34:DM:9:PHE:H	1.51	0.74
1:AA:60:A:H4'	1:AA:61:G:O5'	1.85	0.74
34:BM:40:ARG:HB2	34:BM:93:VAL:HG21	1.69	0.74
58:DB:58:A:C2'	58:DB:59:A:H8	1.99	0.74
27:BF:133:GLU:H	27:BF:150:GLY:CA	1.99	0.74
38:DQ:87:VAL:HG11	39:DR:52:PRO:HG3	1.68	0.74
57:DA:2392:A:C8	57:DA:2429:G:C2	2.75	0.74
58:DB:44:G:H3'	59:DF:91:ARG:NE	2.01	0.74
57:DA:2720:U:H5''	37:DP:52:ARG:NH2	2.02	0.74
42:DU:92:VAL:HB	42:DU:101:THR:CG2	2.17	0.74
53:CA:752:G:H1'	53:CA:754:C:N4	2.02	0.74
22:BA:1499:C:O2'	22:BA:1500:G:H5'	1.87	0.74
49:B1:24:LYS:HE2	49:B1:52:LYS:HB2	1.67	0.74
22:BA:2834:G:H2'	22:BA:2879:A:N6	2.02	0.74
1:AA:61:G:H2'	1:AA:62:U:C6	2.22	0.74
34:BM:43:ALA:HA	34:BM:46:ILE:HG13	1.67	0.74
1:AA:1239:A:H62	1:AA:1299:A:H62	1.35	0.74
53:CA:501:C:H2'	53:CA:502:A:H8	1.50	0.74
57:DA:1429:G:HO2'	57:DA:1430:G:H8	0.78	0.74
53:CA:818:G:O2'	53:CA:819:A:H5''	1.87	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:78:LEU:HD13	30:BI:108:ILE:HG23	1.69	0.74
57:DA:1847:A:O2'	57:DA:1848:A:C8	2.40	0.74
22:BA:2210:U:H4'	22:BA:2211:A:O5'	1.88	0.74
53:CA:181:A:H1'	53:CA:182:A:C2	2.23	0.74
8:AH:88:LYS:HA	8:AH:91:LEU:HD12	1.68	0.74
53:CA:491:G:O2'	53:CA:492:C:H5'	1.86	0.74
30:DI:57:VAL:HG12	30:DI:58:ILE:H	1.51	0.74
30:BI:115:ASP:O	30:BI:116:MET:HG2	1.86	0.74
22:BA:1936:A:H2	22:BA:1943:U:C5	2.05	0.74
27:BF:97:GLU:O	27:BF:101:ARG:HG2	1.85	0.74
1:AA:1129:C:C5'	9:AI:17:ARG:HH22	1.95	0.74
54:CG:59:GLU:OE2	54:CG:63:VAL:HG23	1.86	0.74
33:BL:93:ASN:ND2	33:BL:94:THR:N	2.36	0.74
53:CA:501:C:H2'	53:CA:502:A:C8	2.22	0.74
53:CA:537:G:H5''	12:CL:109:ARG:NH1	2.02	0.74
6:CF:3:HIS:ND1	6:CF:92:THR:HG23	2.02	0.74
6:CF:92:THR:O	6:CF:93:LYS:HG2	1.87	0.74
5:AE:89:THR:HG22	5:AE:90:GLY:H	1.51	0.74
1:AA:1218:C:H2'	1:AA:1219:A:H8	1.53	0.74
1:AA:545:C:H5'	4:AD:68:GLU:HG3	1.67	0.74
57:DA:241:A:H4'	57:DA:242:G:OP1	1.88	0.74
1:AA:601:G:H2'	1:AA:602:A:C8	2.22	0.74
3:CC:39:ARG:HG2	3:CC:54:ILE:HD13	1.69	0.74
53:CA:563:A:N3	53:CA:563:A:H2'	2.02	0.74
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.22	0.74
22:BA:1062:G:H2'	22:BA:1063:G:C8	2.23	0.74
57:DA:1439:A:N7	57:DA:1440:U:C1'	2.51	0.74
57:DA:686:U:O4	50:D2:12:ARG:HG3	1.87	0.74
57:DA:464:U:H1'	57:DA:686:U:C5	2.22	0.74
57:DA:286:U:H2'	57:DA:287:G:H8	1.51	0.74
55:CM:78:ARG:HH21	55:CM:79:LEU:HD23	1.52	0.74
24:DC:33:LEU:O	24:DC:34:GLU:HB3	1.86	0.74
18:CR:21:ASP:HB3	18:CR:23:LYS:HG2	1.69	0.74
2:AB:17:HIS:CD2	2:AB:202:ASN:HD21	2.05	0.74
2:AB:131:LYS:O	2:AB:135:MET:HB2	1.88	0.74
53:CA:1139:G:H4'	53:CA:1140:C:O5'	1.86	0.74
22:BA:1343:G:H2'	22:BA:1344:U:C6	2.21	0.74
57:DA:2321:U:O2	57:DA:2321:U:C3'	2.35	0.74
24:BC:251:THR:HG22	24:BC:252:LYS:N	2.01	0.74
24:DC:52:HIS:NE2	24:DC:218:THR:HG23	2.03	0.74
4:CD:2:ARG:NH2	4:CD:114:ARG:HH11	1.86	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:40:ILE:HG22	10:CJ:42:LEU:HD12	1.69	0.74
53:CA:413:G:N1	4:CD:32:LYS:HE3	2.03	0.74
57:DA:2311:A:H5'	57:DA:2312:U:C6	2.23	0.74
24:DC:67:LYS:HB3	24:DC:150:GLY:HA2	1.70	0.74
53:CA:513:C:O2'	53:CA:514:C:O4'	2.05	0.74
1:AA:1251:A:H2'	1:AA:1252:A:H8	1.51	0.74
1:AA:47:C:H4'	1:AA:48:C:O5'	1.87	0.74
27:BF:43:ILE:HG22	27:BF:82:TYR:CE1	2.23	0.74
56:CP:8:ARG:HB3	56:CP:28:ARG:NH1	2.03	0.74
9:AI:83:THR:HG21	9:AI:102:PHE:HB3	1.70	0.74
42:BU:73:ASN:ND2	42:BU:76:THR:HG23	2.02	0.74
57:DA:1494:A:H2'	57:DA:1495:A:C8	2.22	0.74
59:DF:12:VAL:HA	59:DF:15:LEU:HB2	1.69	0.74
30:BI:79:LEU:HD13	30:BI:135:MET:SD	2.28	0.74
10:CJ:12:ALA:HB3	10:CJ:18:ILE:HB	1.69	0.74
31:BJ:77:HIS:CD2	31:BJ:79:GLY:H	2.04	0.74
11:CK:27:ASN:ND2	11:CK:27:ASN:N	2.36	0.74
57:DA:774:G:O2'	57:DA:775:G:H8	1.70	0.74
53:CA:15:G:H2'	53:CA:16:A:H8	1.52	0.74
57:DA:996:A:H4'	38:DQ:91:ARG:HD2	1.69	0.74
2:AB:148:GLY:O	2:AB:151:LYS:HG2	1.87	0.74
1:AA:601:G:H2'	1:AA:602:A:H8	1.52	0.74
35:BN:1:MET:O	35:BN:2:ARG:HB2	1.86	0.74
57:DA:1574:C:H6	57:DA:1574:C:O5'	1.70	0.74
40:BS:2:GLU:O	40:BS:107:VAL:O	2.05	0.74
57:DA:2771:C:H2'	57:DA:2772:C:H6	1.52	0.74
59:DF:28:PRO:HB2	59:DF:168:LEU:HD21	1.70	0.74
53:CA:1322:C:O2'	53:CA:1323:G:H5'	1.87	0.74
53:CA:1408:A:C2	53:CA:1492:A:N6	2.55	0.74
57:DA:784:G:O2'	57:DA:785:G:H8	1.69	0.74
22:BA:1139:G:O2'	22:BA:1140:C:H5'	1.87	0.74
53:CA:559:A:H4'	53:CA:560:A:O5'	1.86	0.74
1:AA:299:G:H2'	1:AA:300:A:C8	2.22	0.74
57:DA:1654:A:HO2'	57:DA:1655:A:H8	0.80	0.74
21:CU:38:GLU:N	21:CU:40:PRO:HD2	2.03	0.74
46:BY:56:LEU:O	46:BY:57:LEU:HB3	1.86	0.74
44:DW:49:ASN:ND2	44:DW:81:ILE:HG23	2.01	0.74
30:BI:126:ARG:HA	30:BI:129:GLU:HB2	1.69	0.74
1:AA:1130:A:H8	1:AA:1130:A:H5''	1.52	0.74
10:AJ:36:VAL:HG22	10:AJ:76:ILE:HG23	1.69	0.74
44:BW:23:LYS:HG3	44:BW:24:ARG:O	1.88	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:91:ARG:HG3	6:AF:92:THR:H	1.52	0.74
22:BA:1019:U:H3	22:BA:1142:A:H62	1.33	0.74
58:DB:42:C:O2'	58:DB:43:C:H5'	1.87	0.74
41:BT:38:ALA:HB1	41:BT:43:ILE:HG22	1.67	0.74
55:CM:13:HIS:HB3	55:CM:16:ILE:HB	1.68	0.74
11:CK:27:ASN:HD22	11:CK:27:ASN:H	1.32	0.74
28:BG:88:LEU:HD11	28:BG:95:ALA:HB2	1.70	0.74
10:AJ:42:LEU:HB3	10:AJ:43:PRO:HD2	1.70	0.74
25:DD:125:TRP:CD1	25:DD:160:LYS:HB3	2.23	0.74
53:CA:587:G:OP1	8:CH:80:PRO:HB3	1.88	0.74
53:CA:320:A:O2'	53:CA:1435:G:H1'	1.88	0.74
54:CG:117:LEU:HA	54:CG:121:ASN:HB2	1.68	0.74
15:CO:25:GLU:HG2	15:CO:80:LEU:HG	1.69	0.74
30:DI:113:ALA:HB1	30:DI:124:MET:SD	2.28	0.74
10:CJ:35:GLN:HG2	10:CJ:76:ILE:HG23	1.68	0.73
57:DA:320:A:H2'	26:DE:131:THR:OG1	1.87	0.73
54:CG:68:VAL:HG22	54:CG:134:VAL:HG12	1.69	0.73
25:BD:99:GLU:HG3	25:BD:100:LEU:N	2.03	0.73
17:CQ:30:HIS:CE1	17:CQ:32:ILE:HG13	2.23	0.73
53:CA:820:U:H4'	53:CA:821:G:OP2	1.86	0.73
1:AA:181:A:N6	1:AA:195:A:OP2	2.20	0.73
22:BA:1797:G:O3'	24:BC:255:LYS:HA	1.87	0.73
22:BA:1859:U:H2'	22:BA:1860:G:H8	1.53	0.73
57:DA:989:G:H4'	57:DA:990:A:OP1	1.86	0.73
44:DW:18:LYS:HD3	44:DW:19:ARG:N	2.02	0.73
57:DA:616:A:H2'	57:DA:617:G:C8	2.24	0.73
9:CI:51:LEU:HB2	9:CI:56:MET:SD	2.29	0.73
57:DA:1399:C:O2'	57:DA:1400:U:H5'	1.89	0.73
50:D2:31:LEU:HA	50:D2:34:ARG:HB2	1.70	0.73
34:DM:35:ALA:HB3	34:DM:99:GLY:N	2.03	0.73
57:DA:142:A:O2'	57:DA:143:C:H5'	1.88	0.73
1:AA:430:A:OP1	4:AD:8:LEU:HB2	1.88	0.73
57:DA:92:U:H2'	57:DA:93:G:O4'	1.87	0.73
53:CA:47:C:O2'	53:CA:48:C:H5'	1.87	0.73
53:CA:1038:C:H2'	53:CA:1039:G:C8	2.22	0.73
11:AK:15:VAL:HG13	11:AK:78:ILE:HG23	1.68	0.73
24:BC:70:LYS:HE2	24:BC:73:ILE:HG13	1.69	0.73
34:DM:72:PRO:O	34:DM:73:ILE:HB	1.87	0.73
53:CA:1169:A:H2'	53:CA:1170:A:C8	2.24	0.73
6:CF:3:HIS:HD2	6:CF:65:GLU:HG2	1.52	0.73
41:BT:70:HIS:HB2	41:BT:73:ARG:O	1.88	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:503:A:H4'	57:DA:504:A:O5'	1.88	0.73
22:BA:1931:U:H5'	22:BA:1931:U:H6	1.53	0.73
2:CB:49:PHE:HA	2:CB:52:ALA:HB3	1.70	0.73
29:BH:38:PRO:HB2	29:BH:40:THR:HG23	1.69	0.73
1:AA:49:U:O4	1:AA:365:U:H5	1.70	0.73
1:AA:1239:A:N6	1:AA:1299:A:N6	2.35	0.73
1:AA:974:A:H4'	1:AA:975:A:H5'	1.67	0.73
31:BJ:81:ILE:HG23	31:BJ:82:GLY:N	2.03	0.73
32:DK:108:ARG:HA	32:DK:116:ILE:HD13	1.70	0.73
57:DA:963:U:HO2'	57:DA:964:C:H6	1.36	0.73
25:BD:34:VAL:HG22	25:BD:94:GLN:H	1.54	0.73
32:BK:21:CYS:HA	32:BK:41:ILE:HD12	1.70	0.73
57:DA:1352:U:C5	57:DA:1377:G:C6	2.76	0.73
8:AH:103:VAL:HG12	8:AH:124:ILE:HG22	1.69	0.73
32:BK:33:ALA:HB1	32:BK:37:ASP:HB2	1.71	0.73
56:CP:73:ALA:HA	56:CP:76:LYS:HB2	1.70	0.73
1:AA:1225:A:H2'	1:AA:1226:C:C5	2.23	0.73
13:AM:106:ARG:HH12	13:AM:109:LYS:HD3	1.53	0.73
31:BJ:13:ARG:O	31:BJ:14:ASP:HB2	1.88	0.73
57:DA:2135:A:H2'	57:DA:2136:G:O4'	1.89	0.73
22:BA:1085:A:H3'	22:BA:1086:A:C2	2.23	0.73
20:CT:26:MET:HE3	20:CT:56:ILE:HD13	1.69	0.73
57:DA:2707:U:H2'	57:DA:2708:G:C8	2.22	0.73
57:DA:1647:U:H5''	57:DA:1648:U:OP1	1.88	0.73
22:BA:2499:C:OP1	63:BA:3689:HOH:O	2.06	0.73
1:AA:1381:U:O2'	1:AA:1382:C:H5'	1.89	0.73
57:DA:1351:C:H4'	57:DA:1572:A:O4'	1.89	0.73
57:DA:1447:C:H2'	57:DA:1448:G:C8	2.23	0.73
22:BA:2800:A:C2	22:BA:2895:G:H1'	2.24	0.73
26:BE:24:ASN:O	26:BE:28:VAL:HG12	1.87	0.73
46:BY:39:GLN:HB2	46:BY:41:HIS:CD2	2.23	0.73
7:AG:61:PHE:CE1	7:AG:65:LEU:HD22	2.23	0.73
21:AU:48:LYS:HA	21:AU:51:ALA:HB3	1.71	0.73
24:BC:140:VAL:CG1	24:BC:189:ALA:HB1	2.18	0.73
44:BW:28:GLU:OE2	44:BW:28:GLU:HA	1.88	0.73
58:DB:57:A:C5	59:DF:25:MET:HB2	2.24	0.73
57:DA:1827:U:C4'	57:DA:1970:A:O2'	2.35	0.73
57:DA:1996:C:H4'	57:DA:1997:C:OP1	1.87	0.73
53:CA:538:G:H5''	12:CL:110:LYS:HB2	1.68	0.73
57:DA:873:C:H4'	34:DM:64:TRP:HE1	1.52	0.73
26:BE:44:ARG:HH21	26:BE:44:ARG:CG	2.02	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1135:U:H5'	53:CA:1136:C:OP2	1.88	0.73
57:DA:1265:A:H4'	57:DA:1266:G:O5'	1.87	0.73
6:AF:86:ARG:NH1	18:AR:63:TYR:HB3	2.02	0.73
57:DA:2074:U:O2'	57:DA:2075:U:H5'	1.89	0.73
38:BQ:86:SER:O	38:BQ:88:GLU:HB2	1.88	0.73
2:CB:103:TRP:HA	2:CB:106:VAL:HB	1.71	0.73
24:DC:147:PRO:HA	24:DC:187:CYS:HB3	1.68	0.73
41:BT:44:LYS:HG3	41:BT:55:VAL:HG11	1.70	0.73
57:DA:1998:A:H2'	57:DA:1999:C:C6	2.24	0.73
57:DA:1810:A:H3'	57:DA:1811:G:H8	1.54	0.73
1:AA:109:A:H2'	1:AA:326:G:H21	1.54	0.73
57:DA:395:U:HO2'	57:DA:396:G:H8	1.36	0.73
57:DA:2056:G:N2	48:D0:1:ALA:N	2.36	0.73
53:CA:704:A:H2'	53:CA:705:G:H8	1.53	0.73
40:DS:73:LYS:HB2	40:DS:106:VAL:HB	1.68	0.73
39:BR:90:ARG:O	39:BR:91:GLN:HB3	1.86	0.73
40:BS:72:THR:O	40:BS:73:LYS:HD2	1.89	0.73
53:CA:371:A:O2'	53:CA:372:C:H5'	1.88	0.73
57:DA:2881:U:H2'	57:DA:2882:A:H8	1.53	0.73
26:DE:108:ILE:HD11	26:DE:181:ILE:HB	1.71	0.73
1:AA:653:U:O2'	1:AA:654:G:H5'	1.89	0.73
41:BT:13:ALA:O	41:BT:32:LEU:HB2	1.88	0.73
57:DA:1655:A:H2'	57:DA:1656:C:C6	2.23	0.73
53:CA:337:G:H2'	53:CA:338:A:H8	1.52	0.73
57:DA:990:A:O2'	57:DA:991:C:H5''	1.87	0.73
12:CL:98:ARG:HB2	12:CL:116:TYR:HA	1.71	0.73
8:AH:76:ARG:NE	8:AH:78:SER:O	2.22	0.73
57:DA:173:A:H2'	57:DA:174:U:H6	1.54	0.73
22:BA:1791:A:O2'	24:BC:205:GLY:HA2	1.89	0.73
2:AB:127:LYS:HG3	2:AB:128:LEU:H	1.52	0.73
1:AA:8:A:H62	4:AD:204:SER:HB2	1.53	0.73
22:BA:310:A:O2'	22:BA:311:A:H5''	1.89	0.73
28:DG:167:VAL:HG23	28:DG:168:VAL:H	1.54	0.73
22:BA:2353:G:H1'	44:BW:30:VAL:CG1	2.18	0.73
53:CA:269:C:H2'	53:CA:270:A:C8	2.24	0.73
1:AA:1299:A:H2'	1:AA:1299:A:N3	2.03	0.73
2:AB:89:PHE:CZ	2:AB:153:MET:HB2	2.24	0.73
57:DA:2023:C:O2'	57:DA:2024:G:H8	1.69	0.73
57:DA:2345:G:H4'	57:DA:2346:A:H5''	1.70	0.73
58:DB:75:G:H1	58:DB:102:G:N2	1.87	0.73
46:DY:28:LEU:HG	46:DY:42:LEU:HD22	1.71	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:397:U:OP2	45:DX:9:LYS:HE2	1.89	0.73
53:CA:1011:C:H2'	53:CA:1012:A:C8	2.24	0.73
57:DA:1870:C:H5''	57:DA:1871:A:C2	2.24	0.73
53:CA:597:G:H2'	53:CA:598:U:H5'	1.70	0.73
57:DA:1027:A:O2'	57:DA:1028:A:H8	1.70	0.73
22:BA:2198:A:H2'	22:BA:2198:A:P	2.28	0.73
30:BI:33:ASN:HD22	30:BI:64:ARG:NH2	1.85	0.73
43:DV:63:ILE:O	43:DV:70:ILE:HD11	1.87	0.73
7:AG:76:SER:HA	7:AG:85:GLN:HB2	1.71	0.73
29:BH:67:ALA:HA	29:BH:138:VAL:HB	1.71	0.73
53:CA:456:A:H2'	53:CA:457:G:H8	1.54	0.73
1:AA:129:A:O2'	1:AA:130:A:H5''	1.88	0.73
27:BF:68:LYS:HD2	27:BF:68:LYS:H	1.54	0.73
53:CA:260:G:OP1	20:CT:74:HIS:HE1	1.70	0.73
32:DK:101:GLY:O	32:DK:120:PRO:HB3	1.88	0.73
31:BJ:44:TYR:C	31:BJ:44:TYR:HD1	1.92	0.72
57:DA:2385:C:O2'	57:DA:2386:A:H8	1.70	0.72
42:DU:83:GLY:O	42:DU:93:ARG:HA	1.89	0.72
38:BQ:97:ILE:HD11	38:BQ:105:PHE:CA	2.18	0.72
53:CA:1387:G:H2'	53:CA:1388:C:C6	2.23	0.72
22:BA:310:A:HO2'	22:BA:311:A:H5''	1.53	0.72
32:DK:69:VAL:HG11	32:DK:106:GLU:HG2	1.69	0.72
6:AF:29:ILE:HG12	6:AF:64:VAL:HG11	1.70	0.72
38:BQ:8:ILE:C	38:BQ:8:ILE:HD12	2.08	0.72
38:BQ:91:ARG:NH1	39:BR:10:LYS:HB3	2.03	0.72
44:BW:24:ARG:HB2	44:BW:65:LYS:HD3	1.71	0.72
9:CI:18:VAL:HG11	9:CI:82:ILE:HA	1.69	0.72
57:DA:589:U:H2'	57:DA:590:A:H8	1.53	0.72
53:CA:1278:G:H4'	53:CA:1279:G:C5'	2.19	0.72
53:CA:79:G:H2'	53:CA:80:A:C8	2.24	0.72
57:DA:2543:G:H2'	57:DA:2544:G:C8	2.25	0.72
57:DA:100:U:H1'	57:DA:101:A:C5	2.24	0.72
15:CO:63:ARG:HH22	57:DA:715:A:H5''	1.54	0.72
21:AU:35:GLU:O	21:AU:36:PHE:HB2	1.87	0.72
35:BN:98:LEU:HD22	48:B0:42:ILE:HD11	1.69	0.72
22:BA:919:U:C4	22:BA:920:A:N7	2.57	0.72
1:AA:423:G:H2'	1:AA:423:G:N3	2.04	0.72
22:BA:397:U:OP2	45:BX:9:LYS:NZ	2.21	0.72
38:DQ:4:LYS:HZ2	38:DQ:6:GLY:HA3	1.54	0.72
57:DA:1731:G:H4'	57:DA:1732:C:OP1	1.88	0.72
22:BA:2136:G:H2'	22:BA:2137:U:C5	2.25	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:22:LYS:HG3	14:AN:23:ARG:N	2.04	0.72
57:DA:747:U:H2'	57:DA:2613:U:O4	1.89	0.72
56:CP:44:SER:H	56:CP:46:LYS:NZ	1.87	0.72
53:CA:564:C:H6	53:CA:564:C:H5'	1.53	0.72
8:CH:77:VAL:HG12	8:CH:84:ILE:HG13	1.70	0.72
51:B3:54:LEU:O	51:B3:58:ILE:HG13	1.89	0.72
44:BW:37:VAL:HG13	44:BW:55:ASP:O	1.89	0.72
9:AI:6:TYR:HE2	9:AI:17:ARG:HB2	1.55	0.72
53:CA:373:A:HO2'	53:CA:374:A:H5'	1.52	0.72
35:DN:35:LYS:HG2	35:DN:112:TYR:CE1	2.24	0.72
53:CA:547:A:H4'	53:CA:548:G:O5'	1.89	0.72
53:CA:1279:G:H5''	10:CJ:9:ARG:HH22	1.54	0.72
54:CG:137:ARG:CZ	54:CG:138:GLU:HG2	2.18	0.72
57:DA:1998:A:H2'	57:DA:1999:C:H6	1.53	0.72
1:AA:275:G:O2'	1:AA:276:G:H5'	1.89	0.72
53:CA:66:A:H2'	53:CA:66:A:N3	2.04	0.72
57:DA:2287:A:O2'	57:DA:2288:A:H3'	1.89	0.72
57:DA:1965:C:H3'	57:DA:1966:A:C5'	2.20	0.72
18:AR:56:ARG:O	18:AR:60:ARG:HB2	1.88	0.72
1:AA:967:C:H1'	9:AI:129:ARG:HH22	1.55	0.72
1:AA:495:A:H4'	1:AA:496:A:O5'	1.89	0.72
31:BJ:44:TYR:CD1	31:BJ:44:TYR:O	2.42	0.72
19:CS:35:ARG:HH21	19:CS:51:HIS:HD2	1.36	0.72
57:DA:1135:C:N4	57:DA:1139:G:C6	2.57	0.72
1:AA:1239:A:H4'	1:AA:1240:U:C5'	2.20	0.72
21:CU:35:GLU:HG3	21:CU:36:PHE:H	1.54	0.72
21:AU:40:PRO:HA	21:AU:43:GLU:HB2	1.70	0.72
25:BD:186:LEU:HD11	37:BP:3:ILE:CD1	2.19	0.72
13:AM:106:ARG:HH21	13:AM:112:ARG:HB3	1.55	0.72
57:DA:874:G:H5'	57:DA:875:G:OP2	1.89	0.72
20:AT:8:LYS:HA	20:AT:11:ILE:HG23	1.72	0.72
30:DI:55:PRO:HG2	30:DI:70:THR:HG23	1.70	0.72
57:DA:73:A:O5'	57:DA:73:A:H8	1.72	0.72
10:AJ:11:LYS:HG3	10:AJ:97:ASP:HB3	1.71	0.72
44:BW:37:VAL:HG12	44:BW:38:ARG:N	2.03	0.72
57:DA:2215:C:O2'	57:DA:2216:G:H8	1.72	0.72
58:DB:40:U:O2	58:DB:43:C:H2'	1.89	0.72
57:DA:125:A:H4'	57:DA:126:A:OP2	1.90	0.72
22:BA:1494:A:H2'	22:BA:1495:A:C8	2.25	0.72
35:DN:54:LEU:HD11	35:DN:66:ALA:HB2	1.71	0.72
24:DC:65:ASP:OD2	24:DC:68:ARG:HG2	1.89	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DJ:17:VAL:HG23	31:DJ:137:PRO:HB2	1.70	0.72
57:DA:2619:C:H5'	25:DD:157:LYS:HA	1.69	0.72
32:BK:63:VAL:CG1	32:BK:103:VAL:HG12	2.18	0.72
22:BA:1076:C:H2'	22:BA:1077:A:H8	1.54	0.72
6:AF:38:ARG:HG3	6:AF:39:LEU:N	2.03	0.72
53:CA:1249:C:H2'	53:CA:1250:A:H5''	1.70	0.72
57:DA:249:C:H4'	57:DA:250:G:O5'	1.90	0.72
57:DA:247:G:H4'	57:DA:386:G:C5	2.25	0.72
55:CM:12:LYS:HE3	55:CM:12:LYS:HA	1.71	0.72
57:DA:980:A:H5''	57:DA:981:A:OP2	1.90	0.72
57:DA:1127:A:N7	57:DA:2488:G:O2'	2.21	0.72
8:CH:54:THR:O	8:CH:56:PRO:HD3	1.88	0.72
57:DA:1639:C:C2'	57:DA:1640:A:H5''	2.19	0.72
57:DA:1956:U:O2	57:DA:1985:C:H4'	1.89	0.72
27:BF:64:PRO:HA	27:BF:88:VAL:HG23	1.71	0.72
22:BA:528:A:C2	22:BA:2043:C:H4'	2.24	0.72
13:AM:26:LYS:O	13:AM:30:LYS:HG3	1.88	0.72
35:DN:92:GLY:H	35:DN:94:TYR:HE1	1.37	0.72
22:BA:2339:C:H2'	22:BA:2340:A:C8	2.24	0.72
47:BZ:23:LEU:HD21	47:BZ:53:MET:CE	2.20	0.72
53:CA:254:G:H5''	17:CQ:70:LYS:CD	2.20	0.72
33:BL:27:LEU:CD1	33:BL:27:LEU:H	1.91	0.72
22:BA:1070:A:C2	30:BI:9:LYS:HG2	2.24	0.72
53:CA:1118:U:H1'	53:CA:1179:A:C4	2.25	0.72
1:AA:1468:A:C3'	1:AA:1469:C:H5''	2.18	0.72
22:BA:2615:U:O2'	22:BA:2616:C:H5'	1.90	0.72
21:CU:36:PHE:HB3	21:CU:40:PRO:HD3	1.71	0.72
36:BO:53:THR:HB	36:BO:65:THR:HG22	1.72	0.72
57:DA:2267:A:H61	57:DA:2272:U:H3	1.35	0.72
57:DA:7:G:HO2'	31:DJ:15:TRP:HZ2	1.38	0.72
22:BA:387:U:H4'	22:BA:388:G:O5'	1.88	0.72
57:DA:684:G:H5'	50:D2:16:HIS:CE1	2.24	0.72
22:BA:215:G:H4'	22:BA:216:A:OP1	1.88	0.72
57:DA:738:G:H2'	57:DA:739:A:C8	2.25	0.72
57:DA:445:C:O2'	57:DA:446:G:O4'	2.08	0.72
22:BA:933:A:H2'	22:BA:933:A:N3	2.04	0.72
53:CA:794:A:H8	53:CA:794:A:H5''	1.55	0.72
22:BA:1182:G:H2'	22:BA:1183:U:O4'	1.90	0.72
29:DH:93:SER:HB3	29:DH:121:VAL:HG21	1.70	0.72
57:DA:2199:A:H2'	57:DA:2200:C:H6	1.55	0.72
58:DB:42:C:H41	59:DF:87:LYS:HZ3	1.37	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:921:C:H2'	57:DA:922:C:H5'	1.71	0.72
22:BA:2309:A:O2'	22:BA:2310:C:H5'	1.90	0.72
22:BA:1747:U:H2'	22:BA:1748:C:C6	2.25	0.72
34:DM:36:VAL:HG22	43:DV:82:TYR:HB2	1.72	0.72
5:CE:154:ALA:HB1	8:CH:65:PHE:HE2	1.54	0.72
37:BP:21:PRO:HA	37:BP:46:VAL:HG12	1.72	0.72
3:CC:29:ALA:HB1	14:CN:64:ARG:NH1	2.04	0.72
26:BE:73:ILE:HG12	26:BE:73:ILE:O	1.90	0.72
38:BQ:60:TRP:O	38:BQ:63:ARG:HG3	1.90	0.71
17:CQ:18:LYS:HD3	17:CQ:48:GLU:OE2	1.89	0.71
5:CE:29:ILE:CG2	5:CE:30:PHE:N	2.51	0.71
57:DA:2502:G:H5'	57:DA:2503:A:H5''	1.72	0.71
15:AO:73:ASP:CG	15:AO:76:ARG:HG3	2.09	0.71
22:BA:729:G:H2'	22:BA:1775:U:H1'	1.72	0.71
53:CA:198:G:O6	53:CA:220:G:C4	2.43	0.71
30:BI:33:ASN:HD22	30:BI:64:ARG:HH22	1.36	0.71
26:BE:44:ARG:HG3	26:BE:44:ARG:NH2	2.05	0.71
22:BA:481:G:C4	22:BA:507:A:C2	2.78	0.71
46:BY:57:LEU:HA	46:BY:60:LYS:HB3	1.69	0.71
57:DA:876:C:H3'	57:DA:877:A:H8	1.54	0.71
1:AA:686:U:O2'	1:AA:687:A:C8	2.41	0.71
1:AA:684:U:H1'	11:AK:39:ASN:O	1.90	0.71
22:BA:1045:C:C5'	22:BA:1046:A:H5'	2.20	0.71
34:DM:34:LYS:HD3	34:DM:131:VAL:HG21	1.72	0.71
57:DA:5:A:C2	57:DA:2899:A:C2	2.78	0.71
57:DA:2199:A:H2'	57:DA:2200:C:C6	2.24	0.71
22:BA:855:G:H1'	44:BW:23:LYS:HD3	1.72	0.71
53:CA:1014:A:H4'	19:CS:13:HIS:CD2	2.25	0.71
53:CA:1228:C:O2'	53:CA:1229:A:H8	1.71	0.71
57:DA:1616:A:OP1	57:DA:1616:A:H2'	1.90	0.71
5:AE:156:ARG:O	5:AE:158:LYS:N	2.22	0.71
9:AI:51:LEU:HB3	9:AI:56:MET:CG	2.20	0.71
41:DT:4:GLU:HG3	41:DT:6:ARG:HH21	1.55	0.71
28:DG:86:LEU:HA	28:DG:163:TYR:HB3	1.72	0.71
22:BA:2199:A:H5''	22:BA:2199:A:C8	2.25	0.71
4:AD:195:ASN:O	4:AD:196:GLU:HG3	1.89	0.71
53:CA:1284:C:H5''	53:CA:1285:A:OP2	1.90	0.71
57:DA:279:A:H61	57:DA:361:G:H1'	1.55	0.71
5:CE:14:LEU:HD22	5:CE:59:ILE:HD13	1.70	0.71
40:BS:73:LYS:CE	40:BS:73:LYS:HA	2.20	0.71
4:CD:34:GLU:O	4:CD:36:ALA:N	2.22	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BF:134:GLN:HE21	27:BF:134:GLN:N	1.88	0.71
53:CA:876:C:C1'	8:CH:11:THR:HG21	2.20	0.71
57:DA:1346:G:O2'	57:DA:1347:A:C8	2.39	0.71
53:CA:1304:G:H1'	53:CA:1333:A:H61	1.55	0.71
25:BD:101:PHE:CE2	25:BD:203:VAL:HG22	2.24	0.71
32:DK:97:THR:O	32:DK:98:ARG:HB2	1.90	0.71
25:DD:106:LYS:HB3	25:DD:206:ALA:H	1.55	0.71
57:DA:1870:C:H5''	57:DA:1871:A:H2	1.53	0.71
3:CC:166:TRP:O	3:CC:167:TYR:HB2	1.90	0.71
28:BG:11:PRO:O	28:BG:14:VAL:HG22	1.90	0.71
21:CU:16:ARG:CG	21:CU:19:LYS:HG2	2.16	0.71
17:CQ:46:HIS:HB2	17:CQ:70:LYS:HE3	1.72	0.71
19:CS:35:ARG:HA	19:CS:70:LEU:HB2	1.72	0.71
57:DA:2838:G:H1'	35:DN:45:ARG:HH22	1.55	0.71
42:DU:82:VAL:H	42:DU:96:LYS:HZ2	1.38	0.71
33:BL:29:LYS:HG2	33:BL:30:THR:CG2	2.20	0.71
53:CA:1239:A:H1'	53:CA:1241:G:C4	2.25	0.71
55:CM:13:HIS:HB2	55:CM:43:LYS:HE2	1.72	0.71
12:CL:113:ARG:HB3	12:CL:118:VAL:HB	1.70	0.71
3:CC:18:ASN:HD21	3:CC:53:ARG:NH1	1.88	0.71
25:DD:107:VAL:H	25:DD:206:ALA:H	1.36	0.71
53:CA:239:U:H5'	53:CA:239:U:H6	1.55	0.71
42:BU:43:LYS:O	42:BU:57:ILE:HA	1.90	0.71
20:AT:68:LYS:HB2	20:AT:68:LYS:NZ	2.06	0.71
5:AE:14:LEU:O	5:AE:14:LEU:HD13	1.91	0.71
39:DR:1:MET:HG3	39:DR:101:ILE:HD12	1.71	0.71
57:DA:2689:U:H4'	57:DA:2690:U:OP2	1.88	0.71
44:BW:9:THR:HG22	44:BW:10:ARG:HH11	1.55	0.71
57:DA:185:G:H2'	57:DA:186:G:C8	2.25	0.71
6:CF:86:ARG:HH11	18:CR:63:TYR:HB3	1.56	0.71
53:CA:752:G:H1'	53:CA:754:C:H41	1.55	0.71
8:CH:54:THR:HG23	8:CH:55:LYS:H	1.54	0.71
53:CA:665:A:H2'	53:CA:725:G:H22	1.53	0.71
59:DF:39:VAL:HA	59:DF:49:LEU:HG	1.71	0.71
59:DF:42:ALA:HB2	59:DF:49:LEU:HD21	1.71	0.71
53:CA:1383:C:O2'	53:CA:1384:C:H5'	1.89	0.71
1:AA:701:U:O2	1:AA:701:U:H2'	1.88	0.71
57:DA:2466:C:OP1	52:D4:4:ARG:HB3	1.90	0.71
54:CG:64:ALA:HB2	54:CG:126:ALA:HB1	1.73	0.71
41:DT:13:ALA:O	41:DT:32:LEU:HB2	1.90	0.71
22:BA:1310:G:H2'	22:BA:1311:G:H5'	1.71	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:678:C:H2'	57:DA:679:C:C6	2.26	0.71
1:AA:205:A:H4'	1:AA:205:A:OP1	1.91	0.71
57:DA:665:U:H2'	57:DA:666:A:C8	2.22	0.71
53:CA:701:U:H4'	53:CA:702:A:H5''	1.71	0.71
22:BA:475:C:O2'	22:BA:476:G:H5'	1.90	0.71
57:DA:565:C:H2'	57:DA:566:U:O4'	1.89	0.71
1:AA:68:G:C5	1:AA:69:G:H1'	2.25	0.71
40:DS:20:VAL:HG23	40:DS:23:LEU:HD12	1.71	0.71
53:CA:60:A:H4'	53:CA:61:G:O5'	1.89	0.71
25:DD:51:THR:CG2	25:DD:76:GLY:HA3	2.21	0.71
57:DA:2893:A:H4'	57:DA:2894:G:O5'	1.89	0.71
57:DA:249:C:H2'	57:DA:249:C:O2	1.91	0.71
24:BC:16:VAL:H	24:BC:203:VAL:CG1	2.04	0.71
57:DA:1808:A:N7	45:DX:27:ARG:NH1	2.39	0.71
53:CA:1378:C:H3'	53:CA:1379:G:H5''	1.72	0.71
1:AA:559:A:H4'	1:AA:560:A:O5'	1.90	0.71
57:DA:1799:G:H4'	57:DA:1800:C:O5'	1.90	0.71
26:BE:146:VAL:HG23	26:BE:167:VAL:CG2	2.21	0.71
22:BA:2197:U:O3'	22:BA:2198:A:H2'	1.90	0.71
12:CL:19:ASN:H	12:CL:19:ASN:ND2	1.88	0.71
57:DA:1936:A:H2'	57:DA:1945:G:O6	1.90	0.71
40:BS:20:VAL:HA	40:BS:23:LEU:HD12	1.72	0.71
29:BH:82:SER:O	29:BH:83:LYS:HB2	1.91	0.71
22:BA:62:U:H4'	22:BA:63:A:OP1	1.90	0.71
34:DM:8:LYS:HA	34:DM:8:LYS:HE3	1.72	0.71
52:D4:7:VAL:HG13	52:D4:8:LYS:N	2.05	0.71
57:DA:739:A:H4'	57:DA:740:C:OP1	1.89	0.71
58:DB:67:G:HO2'	58:DB:68:C:H6	1.37	0.71
37:BP:4:ILE:CG2	37:BP:5:LYS:H	2.03	0.71
59:DF:64:PRO:HA	59:DF:88:VAL:HG22	1.72	0.71
5:AE:83:PRO:HB3	5:AE:96:GLN:NE2	2.05	0.71
53:CA:6:G:N3	53:CA:6:G:C2'	2.54	0.71
1:AA:563:A:H1'	1:AA:566:G:O2'	1.90	0.71
31:DJ:25:LEU:HB2	31:DJ:62:VAL:HG21	1.72	0.71
53:CA:1005:A:C5	53:CA:1006:G:H1'	2.25	0.71
36:BO:111:ARG:O	36:BO:113:ALA:N	2.24	0.71
57:DA:2379:G:H2'	57:DA:2380:C:H6	1.54	0.71
53:CA:1293:C:H2'	53:CA:1294:G:C8	2.25	0.71
45:BX:38:TRP:HB2	45:BX:45:PHE:CE2	2.26	0.71
2:CB:89:PHE:HE2	2:CB:152:ASP:HB2	1.56	0.71
57:DA:1036:G:C2	57:DA:1037:G:C8	2.79	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:455:C:H3'	57:DA:456:C:H5'	1.71	0.71
57:DA:2815:C:H2'	57:DA:2816:G:C8	2.26	0.71
33:BL:110:VAL:O	33:BL:111:ILE:HB	1.89	0.71
5:AE:105:ILE:HD11	5:AE:123:LEU:HD23	1.71	0.71
50:D2:19:ARG:HB3	50:D2:19:ARG:HH21	1.56	0.71
22:BA:704:G:O2'	22:BA:705:A:OP2	2.09	0.71
24:BC:212:TRP:O	24:BC:212:TRP:CD1	2.44	0.71
22:BA:2211:A:OP2	22:BA:2211:A:H4'	1.90	0.71
1:AA:642:A:H2'	1:AA:643:C:C6	2.26	0.71
4:AD:21:LYS:HD3	4:AD:21:LYS:O	1.91	0.71
31:BJ:18:VAL:HG23	31:BJ:54:ILE:HD13	1.72	0.71
28:DG:115:GLN:HG2	28:DG:116:LEU:N	2.04	0.71
57:DA:1645:G:OP1	57:DA:1646:C:H5'	1.90	0.71
13:AM:88:LEU:HD23	13:AM:91:ARG:HH21	1.56	0.71
1:AA:1447:A:H5''	1:AA:1448:C:H5	1.56	0.71
22:BA:1432:G:O2'	22:BA:1433:A:H5'	1.90	0.71
39:BR:21:ARG:NH2	39:BR:93:PHE:CE1	2.58	0.71
42:BU:97:SER:O	42:BU:98:ASN:HB3	1.91	0.71
20:AT:82:ILE:O	20:AT:86:ALA:HB3	1.91	0.71
26:DE:126:VAL:HG11	26:DE:134:LEU:HD22	1.73	0.71
6:CF:18:VAL:O	6:CF:22:ILE:HG12	1.91	0.71
8:AH:29:SER:HB3	8:AH:32:LYS:HG3	1.72	0.71
31:BJ:73:VAL:HG23	31:BJ:74:TYR:N	2.05	0.71
1:AA:688:G:H8	1:AA:688:G:H5''	1.54	0.71
44:BW:19:ARG:NH1	44:BW:22:VAL:HG11	2.06	0.70
57:DA:2296:U:H5	36:DO:9:ARG:NH2	1.89	0.70
5:AE:120:HIS:O	5:AE:121:ASN:HB3	1.89	0.70
57:DA:781:A:H2'	57:DA:1777:U:H1'	1.73	0.70
57:DA:782:A:N7	24:DC:219:VAL:HG21	2.05	0.70
57:DA:2311:A:H5'	57:DA:2312:U:C5	2.26	0.70
5:AE:155:LYS:HD2	5:AE:156:ARG:H	1.56	0.70
34:DM:42:THR:HB	34:DM:45:GLN:HG3	1.73	0.70
1:AA:110:C:H2'	1:AA:111:G:C8	2.26	0.70
3:CC:76:ILE:HD11	3:CC:102:ILE:HD11	1.72	0.70
57:DA:973:A:OP1	57:DA:973:A:H8	1.74	0.70
6:AF:86:ARG:CZ	18:AR:63:TYR:HB3	2.21	0.70
2:AB:22:TRP:CG	2:AB:22:TRP:O	2.42	0.70
12:AL:86:VAL:O	12:AL:86:VAL:HG12	1.91	0.70
33:BL:9:ALA:O	33:BL:12:SER:HB3	1.90	0.70
29:DH:59:ALA:HA	29:DH:63:ALA:HB3	1.71	0.70
40:DS:86:MET:SD	40:DS:87:PRO:HD2	2.31	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:960:U:H4'	53:CA:961:U:C5'	2.21	0.70
53:CA:765:G:C8	53:CA:812:G:C2	2.79	0.70
1:AA:89:U:O2'	1:AA:90:C:H5''	1.91	0.70
53:CA:1328:C:H5''	55:CM:27:THR:HG21	1.73	0.70
22:BA:752:A:N7	22:BA:1781:U:C1'	2.54	0.70
57:DA:1812:U:H2'	57:DA:1813:G:C8	2.26	0.70
31:DJ:23:LYS:HB3	31:DJ:28:LEU:HD13	1.73	0.70
22:BA:506:G:H4'	22:BA:507:A:H5'	1.73	0.70
22:BA:2485:G:H5''	34:BM:45:GLN:HE21	1.55	0.70
32:BK:10:VAL:HB	32:BK:16:ALA:HB1	1.73	0.70
1:AA:209:U:H5'	1:AA:210:C:OP2	1.92	0.70
11:CK:23:HIS:HB3	11:CK:30:ILE:HB	1.73	0.70
3:CC:126:ARG:HE	3:CC:126:ARG:HA	1.55	0.70
53:CA:1530:G:O2'	53:CA:1531:A:C8	2.44	0.70
32:BK:71:ARG:CB	32:BK:72:PRO:HD3	2.22	0.70
57:DA:727:A:H2'	57:DA:728:G:C8	2.25	0.70
57:DA:1076:C:O2	30:DI:92:PRO:HG2	1.90	0.70
58:DB:45:A:H2'	58:DB:46:A:C8	2.26	0.70
10:AJ:52:LEU:HD23	10:AJ:62:ARG:HG3	1.73	0.70
35:DN:71:ARG:HB2	35:DN:71:ARG:NH2	2.06	0.70
34:BM:40:ARG:HB2	34:BM:93:VAL:CG2	2.21	0.70
22:BA:2310:C:H2'	27:BF:76:PHE:HE1	1.56	0.70
31:BJ:55:ILE:O	31:BJ:55:ILE:HG13	1.88	0.70
22:BA:1870:C:H4'	22:BA:1871:A:OP1	1.91	0.70
41:BT:61:LEU:HA	63:BT:101:HOH:O	1.90	0.70
4:AD:69:ARG:HE	4:AD:69:ARG:HA	1.56	0.70
42:BU:80:ASP:OD1	42:BU:95:PHE:HB3	1.90	0.70
57:DA:2093:G:C2	57:DA:2094:A:N7	2.60	0.70
31:BJ:3:THR:HG21	38:BQ:60:TRP:HE1	1.55	0.70
5:AE:80:LEU:HD12	5:AE:146:MET:SD	2.31	0.70
58:DB:12:C:H4'	58:DB:13:G:OP1	1.90	0.70
53:CA:1129:C:O2'	53:CA:1130:A:C8	2.45	0.70
57:DA:1997:C:O2'	57:DA:1998:A:H5'	1.91	0.70
53:CA:1226:C:N4	55:CM:102:LYS:HA	2.06	0.70
57:DA:923:G:H1'	44:DW:23:LYS:NZ	2.06	0.70
2:AB:101:THR:HG22	2:AB:174:GLU:OE1	1.92	0.70
1:AA:1303:C:H2'	1:AA:1304:G:C8	2.27	0.70
53:CA:1134:G:C6	53:CA:1135:U:H1'	2.26	0.70
1:AA:1227:A:N3	1:AA:1227:A:H2'	2.03	0.70
43:DV:80:HIS:CD2	43:DV:82:TYR:H	2.08	0.70
46:DY:1:MET:HG2	46:DY:4:LYS:HZ1	1.56	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:105:LYS:HA	37:DP:108:ARG:NE	2.07	0.70
2:AB:209:VAL:HG23	2:AB:210:THR:H	1.56	0.70
29:BH:117:LEU:HD11	29:BH:130:VAL:HG11	1.71	0.70
53:CA:268:U:H2'	53:CA:269:C:C6	2.26	0.70
57:DA:2269:G:H2'	57:DA:2270:A:H8	1.56	0.70
17:AQ:11:VAL:HG12	17:AQ:12:VAL:N	2.07	0.70
9:CI:75:ALA:HA	9:CI:78:ILE:HD12	1.73	0.70
10:CJ:84:VAL:HG23	10:CJ:85:ASP:N	2.02	0.70
1:AA:92:U:H2'	1:AA:93:U:H6	1.56	0.70
54:CG:107:ALA:O	54:CG:118:ARG:HB3	1.92	0.70
53:CA:520:A:H2'	53:CA:521:G:O4'	1.92	0.70
45:DX:11:PRO:HB2	45:DX:27:ARG:HH21	1.56	0.70
22:BA:915:C:H6	22:BA:915:C:H5''	1.56	0.70
24:BC:106:PRO:HG3	24:BC:141:HIS:CE1	2.26	0.70
23:BB:30:C:C2'	23:BB:31:C:H5'	2.21	0.70
1:AA:887:G:C2'	1:AA:888:G:H5'	2.21	0.70
25:DD:159:LYS:HE2	25:DD:160:LYS:H	1.57	0.70
22:BA:216:A:H2'	22:BA:217:A:H8	1.56	0.70
36:BO:76:LYS:O	36:BO:80:GLU:HG2	1.92	0.70
24:BC:244:VAL:HG12	24:BC:250:GLN:HA	1.73	0.70
33:DL:73:ILE:O	33:DL:105:ILE:HA	1.91	0.70
57:DA:2657:A:H2'	57:DA:2658:C:C6	2.26	0.70
57:DA:1723:G:H2'	57:DA:1724:G:H8	1.55	0.70
57:DA:1734:G:H2'	57:DA:1735:A:C8	2.26	0.70
39:DR:87:GLN:HG2	39:DR:88:GLY:H	1.55	0.70
44:BW:19:ARG:HH22	44:BW:22:VAL:HG21	1.55	0.70
57:DA:1341:G:O2'	57:DA:1398:C:H5'	1.92	0.70
53:CA:1151:A:O3'	10:CJ:70:HIS:CE1	2.44	0.70
57:DA:1204:A:H4'	57:DA:1205:A:O5'	1.91	0.70
57:DA:339:U:H2'	57:DA:340:A:C8	2.27	0.70
59:DF:76:PHE:H	59:DF:76:PHE:HD2	1.38	0.70
57:DA:1324:G:O2'	57:DA:1616:A:C6	2.44	0.70
57:DA:1440:U:H2'	57:DA:1441:G:C8	2.23	0.70
2:AB:218:ALA:HA	2:AB:221:ARG:HH21	1.56	0.70
57:DA:687:C:H2'	57:DA:688:U:C6	2.26	0.70
29:DH:84:ALA:H	29:DH:148:ALA:HA	1.56	0.70
42:DU:26:ASN:OD1	42:DU:34:ILE:HD12	1.92	0.70
25:DD:106:LYS:HB3	25:DD:206:ALA:CB	2.21	0.70
25:DD:125:TRP:CG	25:DD:160:LYS:HB3	2.26	0.70
42:BU:15:GLY:O	42:BU:17:ASP:N	2.24	0.70
22:BA:1603:A:H5''	22:BA:1604:C:OP2	1.91	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:992:C:H5'	39:DR:87:GLN:HE22	1.55	0.70
29:BH:68:ARG:NH2	29:BH:72:ILE:HG21	2.05	0.70
57:DA:2328:A:H2'	57:DA:2329:U:C6	2.27	0.70
4:CD:8:LEU:CD2	4:CD:21:LYS:HD2	2.21	0.70
53:CA:1239:A:H5''	54:CG:118:ARG:HH12	1.55	0.70
2:CB:209:VAL:O	2:CB:213:LEU:HB2	1.92	0.70
31:DJ:75:TYR:HD1	31:DJ:84:ILE:HD11	1.54	0.70
12:AL:23:LEU:HB2	12:AL:58:ASN:HD22	1.56	0.70
21:AU:36:PHE:HD1	21:AU:39:LYS:HB3	1.56	0.70
57:DA:1511:G:O2'	57:DA:1512:C:H6	1.75	0.70
1:AA:496:A:H2'	1:AA:496:A:N3	2.04	0.70
57:DA:1343:G:H2'	57:DA:1344:U:C5	2.26	0.70
33:BL:65:GLY:O	33:BL:66:PHE:HB3	1.90	0.70
22:BA:2830:C:O2'	22:BA:2831:G:H5'	1.91	0.70
26:DE:35:TYR:CE2	26:DE:177:PRO:HD2	2.27	0.70
57:DA:2210:U:H4'	57:DA:2211:A:C5'	2.21	0.70
6:AF:4:TYR:O	6:AF:63:ASN:HA	1.91	0.70
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.27	0.70
43:BV:80:HIS:CD2	43:BV:83:LYS:HB2	2.27	0.70
53:CA:93:U:H2'	53:CA:95:C:H5	1.56	0.70
22:BA:2813:A:H2	22:BA:2887:A:H61	1.40	0.70
29:BH:5:LEU:HD13	29:BH:13:GLY:HA2	1.74	0.70
22:BA:321:U:O2'	22:BA:340:A:O2'	2.08	0.70
22:BA:1347:A:C2'	22:BA:1348:C:H5'	2.22	0.70
22:BA:1871:A:O2'	22:BA:1872:A:C8	2.43	0.70
22:BA:372:G:H5''	45:BX:60:LYS:HE3	1.73	0.70
22:BA:1714:U:H2'	22:BA:1714:U:O2	1.91	0.70
53:CA:72:A:O2'	53:CA:73:C:H5'	1.90	0.70
23:BB:12:C:H4'	23:BB:13:G:OP1	1.90	0.70
32:DK:2:ILE:HG22	32:DK:3:GLN:N	2.05	0.70
20:CT:30:PHE:HE2	20:CT:52:GLU:HG2	1.57	0.70
57:DA:79:C:H2'	57:DA:80:G:O4'	1.91	0.70
37:BP:96:LEU:HB3	37:BP:99:LEU:HD22	1.74	0.70
57:DA:1539:U:O2'	57:DA:1540:G:O4'	2.10	0.70
5:CE:79:THR:HA	5:CE:121:ASN:OD1	1.91	0.70
53:CA:84:U:O2'	53:CA:85:U:H5'	1.92	0.70
22:BA:1778:U:H2'	22:BA:1784:A:N6	2.07	0.70
4:CD:144:ILE:HD12	4:CD:177:MET:HB3	1.73	0.70
35:BN:71:ARG:HH21	35:BN:71:ARG:HG3	1.55	0.70
57:DA:866:A:HO2'	57:DA:867:C:H6	1.39	0.70
57:DA:2716:C:H2'	57:DA:2717:C:C6	2.27	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DJ:74:TYR:HE2	31:DJ:103:ILE:HD11	1.57	0.70
3:CC:29:ALA:HB1	14:CN:64:ARG:HH12	1.57	0.70
1:AA:214:C:H2'	1:AA:215:C:H6	1.56	0.70
53:CA:518:C:H2'	53:CA:530:G:N7	2.07	0.70
6:CF:42:TRP:HE1	6:CF:61:LEU:HD23	1.57	0.70
42:BU:25:LYS:O	42:BU:26:ASN:HB3	1.91	0.70
43:DV:44:HIS:NE2	43:DV:85:LYS:HB2	2.07	0.70
27:BF:142:TYR:O	27:BF:145:VAL:HG22	1.92	0.70
16:AP:51:ARG:NH2	16:AP:53:ASP:HB2	2.06	0.70
20:AT:47:GLN:HE21	20:AT:82:ILE:HD13	1.56	0.70
5:AE:104:ILE:HG13	5:AE:114:LEU:HD23	1.73	0.70
57:DA:216:A:O2'	57:DA:217:A:C8	2.25	0.70
53:CA:913:A:H4'	53:CA:914:A:O5'	1.92	0.70
58:DB:67:G:O2'	58:DB:68:C:H6	1.75	0.70
10:CJ:38:GLY:O	10:CJ:40:ILE:HD12	1.92	0.70
31:DJ:44:TYR:CD1	38:DQ:63:ARG:NH2	2.59	0.70
41:BT:39:THR:O	41:BT:39:THR:HG22	1.91	0.70
5:AE:148:SER:HB2	5:AE:151:MET:HB2	1.74	0.70
57:DA:2798:U:H5'	57:DA:2800:A:N7	2.07	0.70
20:AT:25:SER:O	20:AT:28:ARG:HG3	1.92	0.70
22:BA:197:A:H62	22:BA:2430:A:H2'	1.56	0.70
57:DA:2056:G:H21	48:D0:1:ALA:N	1.90	0.70
12:CL:66:ILE:HD13	12:CL:73:LEU:HD12	1.74	0.70
57:DA:513:A:H2'	57:DA:514:A:C8	2.27	0.70
1:AA:214:C:H2'	1:AA:215:C:C6	2.27	0.70
53:CA:177:G:O2'	53:CA:1448:C:H5''	1.92	0.70
17:CQ:61:ARG:HG2	17:CQ:75:VAL:HG11	1.73	0.70
57:DA:2389:G:H5''	57:DA:2390:U:H5'	1.74	0.70
3:AC:139:ASN:HA	3:AC:142:ARG:HB2	1.74	0.70
50:B2:3:ARG:HH21	50:B2:3:ARG:CG	1.99	0.69
57:DA:607:U:O4	57:DA:619:G:H2'	1.92	0.69
53:CA:1074:G:C4'	2:CB:102:ASN:HB2	2.22	0.69
53:CA:91:U:O2'	53:CA:92:U:H6	1.75	0.69
22:BA:1734:G:O2'	22:BA:1735:A:H8	1.75	0.69
2:AB:67:LEU:HD21	2:AB:91:VAL:HG23	1.73	0.69
2:AB:108:GLN:HE21	2:AB:108:GLN:N	1.89	0.69
50:D2:19:ARG:HB3	50:D2:19:ARG:NH2	2.06	0.69
1:AA:1160:G:O6	1:AA:1181:G:C6	2.44	0.69
37:BP:3:ILE:O	37:BP:3:ILE:HD13	1.91	0.69
53:CA:1038:C:H2'	53:CA:1039:G:H8	1.57	0.69
40:BS:73:LYS:CB	40:BS:106:VAL:HB	2.22	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:914:A:H2'	1:AA:915:A:H8	1.55	0.69
10:CJ:26:VAL:O	10:CJ:30:LYS:HB3	1.91	0.69
22:BA:2531:A:OP1	28:BG:174:LYS:HG3	1.92	0.69
43:DV:14:LYS:HG3	43:DV:18:ARG:HD2	1.72	0.69
47:BZ:29:ARG:O	47:BZ:30:ARG:HG3	1.92	0.69
22:BA:163:C:OP1	22:BA:163:C:H6	1.75	0.69
44:BW:37:VAL:HG12	44:BW:38:ARG:H	1.57	0.69
5:AE:97:PRO:HA	5:AE:122:VAL:HG12	1.75	0.69
22:BA:1060:U:C4'	22:BA:1061:U:H5'	2.21	0.69
9:CI:10:ARG:HG3	9:CI:14:SER:O	1.91	0.69
53:CA:502:A:H1'	53:CA:550:G:H5'	1.74	0.69
53:CA:1151:A:H2'	53:CA:1152:A:H8	1.57	0.69
54:CG:30:MET:O	54:CG:31:VAL:HB	1.91	0.69
22:BA:789:A:OP1	22:BA:790:U:C5	2.45	0.69
57:DA:1816:C:H2'	24:DC:61:TYR:CZ	2.27	0.69
36:BO:75:GLY:HA3	36:BO:109:ALA:HB3	1.74	0.69
9:AI:112:ARG:HH22	10:AJ:64:GLN:NE2	1.91	0.69
7:AG:114:SER:HB3	7:AG:117:LEU:HG	1.74	0.69
57:DA:965:C:H5''	63:DA:3344:HOH:O	1.92	0.69
3:AC:21:TRP:HB3	3:AC:58:ARG:H	1.56	0.69
27:BF:126:ASN:OD1	27:BF:156:THR:HA	1.91	0.69
22:BA:2311:A:H1'	27:BF:78:ILE:HD13	1.74	0.69
13:AM:10:ASP:CG	13:AM:11:HIS:N	2.46	0.69
5:CE:24:VAL:HG23	5:CE:26:GLY:H	1.57	0.69
22:BA:979:A:H2'	22:BA:982:C:H42	1.57	0.69
57:DA:2076:U:H5''	57:DA:2238:G:H22	1.58	0.69
4:CD:106:PHE:CD1	4:CD:158:LEU:HD21	2.27	0.69
44:BW:23:LYS:CE	44:BW:24:ARG:HG3	2.22	0.69
10:CJ:51:VAL:HB	14:CN:80:ARG:HB2	1.74	0.69
27:BF:134:GLN:HG2	27:BF:135:ILE:N	2.07	0.69
2:CB:114:LYS:CA	2:CB:117:GLU:HG2	2.19	0.69
57:DA:1826:G:OP2	24:DC:220:ARG:HB3	1.91	0.69
39:DR:4:VAL:HG23	39:DR:39:LEU:HG	1.74	0.69
8:CH:102:VAL:HG23	8:CH:125:ILE:HD12	1.74	0.69
22:BA:915:C:O2'	22:BA:916:G:H5'	1.92	0.69
57:DA:84:A:C5	57:DA:103:A:N6	2.60	0.69
42:DU:14:THR:HG23	42:DU:15:GLY:H	1.58	0.69
57:DA:70:G:O2'	57:DA:71:A:C5'	2.40	0.69
1:AA:546:A:P	4:AD:68:GLU:HB2	2.31	0.69
57:DA:2001:C:H4'	57:DA:2689:U:H2'	1.75	0.69
28:BG:59:ASP:HB2	28:BG:63:GLN:HG2	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DJ:18:VAL:HG13	31:DJ:56:VAL:HA	1.73	0.69
57:DA:851:C:H2'	57:DA:852:U:C6	2.27	0.69
6:AF:55:HIS:O	6:AF:56:LYS:HB2	1.91	0.69
22:BA:1673:G:H2'	22:BA:1674:G:H5'	1.74	0.69
22:BA:1671:U:O2	22:BA:1673:G:H8	1.75	0.69
1:AA:788:U:H2'	1:AA:789:U:C6	2.27	0.69
25:BD:69:ALA:HA	25:BD:73:VAL:HG13	1.72	0.69
1:AA:1405:G:O4'	1:AA:1519:A:H4'	1.92	0.69
38:BQ:91:ARG:HB2	38:BQ:94:LEU:HB2	1.73	0.69
30:BI:89:SER:HB3	30:BI:92:PRO:HG3	1.72	0.69
33:BL:91:ASP:H	33:BL:94:THR:HG21	1.57	0.69
57:DA:2847:U:C2'	57:DA:2848:G:H5'	2.21	0.69
57:DA:2408:U:HO2'	57:DA:2409:G:H8	0.78	0.69
57:DA:1799:G:C8	24:DC:179:GLU:OE1	2.46	0.69
25:DD:124:ARG:HD3	25:DD:125:TRP:CD1	2.27	0.69
8:AH:6:ILE:HB	8:AH:76:ARG:HH12	1.56	0.69
22:BA:2472:G:H2'	22:BA:2475:C:H42	1.55	0.69
53:CA:940:C:H5'	54:CG:101:ARG:NH2	2.06	0.69
7:AG:69:ARG:HG3	7:AG:95:ARG:HG2	1.73	0.69
19:CS:54:ARG:HG2	19:CS:55:GLN:H	1.56	0.69
57:DA:1722:A:N6	57:DA:1738:G:H1'	2.08	0.69
30:BI:98:GLY:HA3	30:BI:137:LEU:HD23	1.75	0.69
57:DA:765:C:H2'	57:DA:766:U:H6	1.57	0.69
57:DA:2060:A:O2'	63:DA:3511:HOH:O	2.09	0.69
38:DQ:4:LYS:NZ	38:DQ:6:GLY:HA3	2.07	0.69
53:CA:1071:C:H2'	53:CA:1072:G:C8	2.27	0.69
22:BA:1733:G:O2'	22:BA:1734:G:H8	1.72	0.69
20:CT:4:LYS:HB3	20:CT:6:ALA:H	1.57	0.69
22:BA:802:A:H2'	22:BA:803:U:H6	1.58	0.69
57:DA:95:A:O2'	46:DY:41:HIS:HD2	1.75	0.69
5:AE:106:ALA:CB	5:AE:124:ALA:HB3	2.21	0.69
30:BI:74:PRO:O	30:BI:77:VAL:HG22	1.93	0.69
57:DA:975:A:HO2'	57:DA:976:G:H8	1.41	0.69
57:DA:172:A:H2'	57:DA:173:A:C8	2.27	0.69
34:DM:61:GLY:HA2	34:DM:107:GLY:HA3	1.73	0.69
2:CB:160:LEU:HB2	2:CB:182:VAL:HG12	1.73	0.69
3:AC:146:LYS:HB2	3:AC:202:PHE:CD2	2.28	0.69
23:BB:66:A:H4'	23:BB:67:G:OP1	1.92	0.69
16:AP:4:ILE:HG12	16:AP:21:VAL:HG22	1.74	0.69
57:DA:2353:G:H1'	44:DW:30:VAL:HG13	1.72	0.69
33:BL:19:LEU:HB2	33:BL:27:LEU:HD22	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BL:109:LYS:CG	33:BL:126:ARG:HB3	2.20	0.69
45:DX:63:ILE:CD1	45:DX:64:ASP:H	2.05	0.69
33:DL:124:GLY:H	33:DL:143:GLU:HG3	1.57	0.69
40:BS:19:LEU:O	48:B0:21:LEU:HD12	1.92	0.69
5:CE:38:VAL:HG12	5:CE:39:GLY:N	2.08	0.69
5:CE:154:ALA:HB1	8:CH:65:PHE:CE2	2.27	0.69
57:DA:1734:G:H2'	57:DA:1735:A:H8	1.58	0.69
26:DE:35:TYR:HE2	26:DE:177:PRO:HD2	1.55	0.69
44:BW:72:GLY:N	44:BW:73:PRO:HD2	2.07	0.69
37:BP:28:LYS:HE3	37:BP:28:LYS:H	1.58	0.69
57:DA:1453:A:H4'	57:DA:1454:C:OP2	1.92	0.69
24:BC:52:HIS:NE2	24:BC:218:THR:HG23	2.06	0.69
37:DP:28:LYS:HB2	37:DP:28:LYS:HZ2	1.58	0.69
2:AB:13:VAL:HG22	2:AB:207:ARG:HH22	1.58	0.69
22:BA:529:A:H4'	22:BA:530:G:OP1	1.91	0.69
58:DB:17:C:N4	58:DB:68:C:H42	1.91	0.69
51:D3:28:LEU:HA	51:D3:32:LEU:HD21	1.75	0.69
24:BC:129:LEU:HD23	24:BC:130:PRO:HD2	1.73	0.69
1:AA:1468:A:H2'	1:AA:1469:C:H5''	1.75	0.69
37:DP:50:ARG:HB3	37:DP:57:ALA:N	2.07	0.69
57:DA:1422:G:H4'	57:DA:1493:C:OP1	1.93	0.69
1:AA:111:G:O6	1:AA:330:C:N4	2.26	0.69
57:DA:2285:C:H5	49:D1:5:ARG:NH2	1.91	0.69
57:DA:975:A:O2'	57:DA:976:G:H8	1.76	0.69
8:CH:76:ARG:HD3	8:CH:77:VAL:N	2.07	0.69
29:DH:93:SER:CB	29:DH:121:VAL:HG21	2.23	0.69
41:BT:61:LEU:C	41:BT:61:LEU:HD12	2.13	0.69
57:DA:78:U:O2'	57:DA:79:C:H5'	1.93	0.69
41:DT:5:GLU:HA	41:DT:8:LEU:HD12	1.74	0.69
29:BH:49:ALA:HB3	29:BH:50:ARG:NH2	2.08	0.69
1:AA:473:U:H2'	1:AA:474:G:H8	1.57	0.69
45:DX:58:ILE:HG12	45:DX:66:VAL:HG11	1.74	0.69
22:BA:2873:A:H5''	22:BA:2874:C:OP2	1.91	0.69
19:AS:50:VAL:HG21	19:AS:70:LEU:HB3	1.75	0.69
24:DC:15:VAL:HG22	24:DC:205:GLY:HA3	1.75	0.69
35:BN:38:LEU:O	35:BN:38:LEU:HD12	1.93	0.69
44:BW:45:HIS:HB2	44:BW:50:VAL:HG13	1.75	0.69
27:BF:35:LEU:HD13	27:BF:56:LEU:HD22	1.74	0.69
21:AU:10:PRO:O	21:AU:11:PHE:HB3	1.92	0.69
49:D1:51:ALA:O	49:D1:52:LYS:HB2	1.91	0.69
25:BD:182:ALA:C	25:BD:184:ARG:N	2.43	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:508:A:N6	40:DS:9:HIS:CE1	2.60	0.69
42:DU:92:VAL:HB	42:DU:101:THR:HG21	1.74	0.69
25:BD:99:GLU:CG	25:BD:100:LEU:N	2.55	0.69
32:BK:108:ARG:HH21	37:BP:34:GLY:HA3	1.58	0.69
57:DA:1906:G:C8	57:DA:1929:G:H2'	2.27	0.69
53:CA:794:A:H2'	53:CA:795:C:H6	1.57	0.69
53:CA:822:U:H2'	53:CA:823:C:C6	2.26	0.69
26:BE:79:ARG:HG2	26:BE:80:SER:N	2.07	0.69
26:BE:79:ARG:CG	26:BE:80:SER:H	2.03	0.69
4:CD:58:GLN:OE1	4:CD:58:GLN:HA	1.91	0.69
57:DA:746:U:H5''	57:DA:748:G:H5'	1.75	0.69
39:BR:15:SER:H	39:BR:18:GLN:NE2	1.90	0.69
22:BA:2383:G:H8	22:BA:2383:G:H5''	1.58	0.69
22:BA:1277:G:H5'	35:BN:20:MET:HE1	1.74	0.69
56:CP:57:ILE:O	56:CP:61:VAL:HG23	1.91	0.69
1:AA:731:G:OP1	1:AA:766:A:H1'	1.93	0.69
49:B1:27:ARG:O	49:B1:30:PRO:HD3	1.92	0.69
57:DA:41:C:H2'	57:DA:42:A:C8	2.28	0.69
58:DB:8:C:H5''	36:DO:15:ARG:HH12	1.57	0.69
22:BA:1315:C:OP2	63:BA:3762:HOH:O	2.11	0.69
22:BA:434:U:H4'	22:BA:435:C:OP1	1.92	0.69
57:DA:2275:C:O2'	34:DM:84:LYS:HA	1.92	0.69
15:AO:2:LEU:HD22	15:AO:34:GLN:HG2	1.75	0.69
57:DA:2860:A:H8	57:DA:2860:A:O5'	1.74	0.69
43:BV:40:ILE:HG22	43:BV:41:GLU:N	2.08	0.69
41:BT:2:ILE:HG13	41:BT:3:ARG:CZ	2.23	0.69
31:BJ:3:THR:HB	31:BJ:44:TYR:OH	1.92	0.69
31:BJ:6:ALA:HB2	31:BJ:45:THR:HG21	1.73	0.69
37:BP:51:ASN:O	37:BP:52:ARG:HG2	1.93	0.69
37:DP:87:ARG:NH1	37:DP:111:GLU:HG3	2.08	0.69
57:DA:335:C:O2'	57:DA:336:C:H6	1.72	0.69
4:CD:24:VAL:HG23	4:CD:25:ARG:HB2	1.73	0.69
28:DG:94:ARG:CZ	28:DG:105:SER:HB2	2.23	0.69
57:DA:1258:U:H2'	57:DA:1259:G:C8	2.28	0.69
17:CQ:4:ILE:HG22	17:CQ:5:ARG:H	1.58	0.69
26:DE:75:SER:O	26:DE:78:TRP:HB2	1.91	0.69
57:DA:2666:C:H2'	57:DA:2667:C:H5'	1.75	0.69
1:AA:1409:C:O2'	1:AA:1410:A:H5'	1.93	0.69
39:DR:23:GLU:O	39:DR:25:LEU:HD22	1.93	0.69
1:AA:1095:U:O2'	1:AA:1096:C:O4'	2.10	0.69
53:CA:373:A:H2'	53:CA:374:A:H8	1.58	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1695:G:H8	24:DC:7:PRO:O	1.76	0.69
22:BA:509:C:C5'	22:BA:509:C:H6	2.05	0.69
57:DA:2230:G:H1'	45:DX:31:ASN:HB3	1.74	0.69
54:CG:100:MET:H	54:CG:100:MET:CE	2.05	0.69
4:CD:144:ILE:HG22	4:CD:145:ARG:O	1.93	0.69
57:DA:2056:G:C2	57:DA:2057:G:C8	2.81	0.69
40:DS:49:LYS:HB3	40:DS:49:LYS:NZ	2.08	0.69
57:DA:502:A:H5'	57:DA:503:A:OP2	1.92	0.69
42:BU:73:ASN:HD22	42:BU:76:THR:H	1.41	0.69
47:BZ:23:LEU:HD21	47:BZ:53:MET:HE1	1.74	0.69
1:AA:891:U:O2'	1:AA:892:A:H5'	1.92	0.69
3:AC:137:VAL:HA	3:AC:148:ILE:HD13	1.74	0.69
50:B2:35:ARG:HG2	50:B2:42:LEU:HD11	1.73	0.69
57:DA:2581:G:H1	57:DA:2610:C:HO2'	1.40	0.69
57:DA:644:A:O2'	57:DA:645:C:H5'	1.91	0.69
57:DA:2614:A:H4'	57:DA:2615:U:OP1	1.93	0.69
39:BR:39:LEU:HA	39:BR:49:ILE:HG21	1.74	0.68
53:CA:961:U:O2'	53:CA:962:C:H6	1.69	0.68
22:BA:1062:G:OP1	22:BA:1070:A:H4'	1.93	0.68
57:DA:2837:A:H2'	57:DA:2838:G:C8	2.28	0.68
51:D3:35:LYS:HB2	51:D3:40:LYS:HD3	1.75	0.68
53:CA:499:A:C6	53:CA:547:A:C8	2.81	0.68
54:CG:91:ARG:CG	54:CG:92:PRO:HD2	2.22	0.68
57:DA:1310:G:H2'	57:DA:1311:G:O4'	1.93	0.68
57:DA:960:A:H2'	57:DA:962:G:H5'	1.74	0.68
1:AA:1063:C:H2'	1:AA:1064:G:H8	1.58	0.68
57:DA:1931:U:H2'	57:DA:1932:A:C8	2.27	0.68
22:BA:1011:G:H4'	22:BA:1012:U:OP1	1.93	0.68
53:CA:495:A:C2	53:CA:496:A:C6	2.81	0.68
24:DC:131:MET:HG2	24:DC:134:ILE:HD11	1.74	0.68
1:AA:536:C:H6	1:AA:536:C:H5'	1.58	0.68
57:DA:2771:C:H2'	57:DA:2772:C:C6	2.27	0.68
42:DU:10:VAL:HG12	42:DU:71:ILE:HA	1.75	0.68
57:DA:755:U:O2'	57:DA:756:A:H5'	1.93	0.68
1:AA:1050:G:O2'	1:AA:1051:C:H5'	1.93	0.68
32:BK:91:SER:O	32:BK:93:GLN:HB2	1.93	0.68
38:BQ:27:ARG:HH11	38:BQ:27:ARG:HG3	1.58	0.68
21:CU:28:LEU:O	21:CU:28:LEU:HD23	1.94	0.68
42:DU:44:HIS:HD2	42:DU:57:ILE:HG21	1.57	0.68
22:BA:2352:A:N1	44:BW:30:VAL:HG21	2.08	0.68
22:BA:855:G:N3	44:BW:23:LYS:HD3	2.09	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BW:39:GLN:HG2	44:BW:41:GLY:N	2.00	0.68
31:BJ:65:THR:CG2	31:BJ:68:LYS:HE3	2.22	0.68
39:DR:39:LEU:O	39:DR:40:MET:HB2	1.92	0.68
22:BA:1178:C:H2'	22:BA:1179:G:N7	2.08	0.68
57:DA:1401:G:H2'	57:DA:1402:U:H6	1.56	0.68
25:BD:104:VAL:HA	25:BD:106:LYS:NZ	2.08	0.68
41:BT:43:ILE:O	41:BT:47:VAL:HG23	1.93	0.68
35:DN:37:THR:HB	35:DN:40:LYS:HB2	1.75	0.68
30:BI:20:SER:HB3	30:BI:21:PRO:HD3	1.74	0.68
57:DA:375:G:H5'	57:DA:375:G:C8	2.27	0.68
53:CA:1348:U:HO2'	53:CA:1349:A:H8	1.42	0.68
28:BG:95:ALA:HB2	28:BG:104:LEU:HD23	1.75	0.68
57:DA:1299:G:H22	57:DA:1640:A:H5'	1.56	0.68
22:BA:1319:C:O2'	22:BA:1320:C:H5'	1.93	0.68
53:CA:198:G:O2'	53:CA:199:A:H8	1.76	0.68
1:AA:642:A:H2'	1:AA:643:C:H6	1.56	0.68
57:DA:1739:A:H2'	57:DA:1740:G:C8	2.27	0.68
28:DG:48:THR:O	28:DG:49:LEU:HB2	1.92	0.68
43:DV:61:LEU:HD23	43:DV:61:LEU:H	1.57	0.68
1:AA:958:A:C6	1:AA:959:A:N1	2.61	0.68
1:AA:82:G:N2	1:AA:84:U:H3	1.91	0.68
43:BV:61:LEU:O	43:BV:71:LYS:HA	1.92	0.68
1:AA:21:G:H2'	1:AA:22:G:C8	2.28	0.68
22:BA:532:A:HO2'	22:BA:2021:C:H5	1.40	0.68
34:BM:1:MET:O	34:BM:2:LEU:HB2	1.92	0.68
21:CU:19:LYS:N	21:CU:19:LYS:HZ3	1.91	0.68
40:BS:84:ARG:CB	40:BS:96:ILE:HD11	2.16	0.68
1:AA:1138:G:O2'	1:AA:1139:G:H4'	1.93	0.68
53:CA:566:G:H4'	53:CA:567:G:OP1	1.94	0.68
1:AA:841:C:C2	1:AA:843:U:H5'	2.28	0.68
53:CA:87:C:O2'	53:CA:88:U:H4'	1.93	0.68
41:DT:1:MET:HG2	41:DT:4:GLU:HA	1.73	0.68
31:DJ:57:LEU:HG	31:DJ:128:ASN:H	1.58	0.68
31:DJ:59:ALA:O	31:DJ:62:VAL:HG12	1.91	0.68
34:BM:43:ALA:HA	34:BM:46:ILE:CG1	2.23	0.68
22:BA:215:G:H4'	22:BA:216:A:H4'	1.76	0.68
22:BA:620:G:H4'	22:BA:621:A:O5'	1.93	0.68
53:CA:998:C:H2'	53:CA:999:C:H6	1.58	0.68
53:CA:1264:U:H2'	53:CA:1265:C:C6	2.28	0.68
47:DZ:40:THR:H	47:DZ:43:ILE:HD11	1.57	0.68
29:DH:1:MET:HB3	29:DH:21:VAL:O	1.93	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1349:A:H2'	1:AA:1350:A:C8	2.28	0.68
3:CC:59:PRO:HG2	3:CC:62:SER:HB3	1.74	0.68
44:DW:18:LYS:H	44:DW:36:ILE:HG12	1.56	0.68
57:DA:13:A:O2'	57:DA:15:G:N7	2.27	0.68
24:BC:104:LEU:O	24:BC:105:ALA:HB2	1.93	0.68
12:AL:27:PRO:HB2	12:AL:28:GLN:OE1	1.91	0.68
41:DT:6:ARG:O	41:DT:9:LYS:HD2	1.92	0.68
53:CA:818:G:C2'	53:CA:819:A:H5''	2.24	0.68
29:BH:2:GLN:O	29:BH:3:VAL:HG22	1.93	0.68
55:CM:64:VAL:HG12	55:CM:65:GLU:HG3	1.76	0.68
2:AB:95:TRP:HZ2	2:AB:100:LEU:HD23	1.57	0.68
32:DK:7:MET:HE2	32:DK:7:MET:HA	1.75	0.68
46:DY:2:LYS:HD2	46:DY:4:LYS:HE3	1.75	0.68
57:DA:2507:C:H1'	57:DA:2583:G:C2	2.29	0.68
9:AI:113:LYS:HG3	9:AI:119:LYS:HA	1.75	0.68
1:AA:736:C:H2'	1:AA:737:C:C6	2.28	0.68
1:AA:1386:G:H2'	1:AA:1387:G:H8	1.58	0.68
38:DQ:34:ALA:O	38:DQ:38:VAL:HG23	1.93	0.68
51:D3:15:LYS:NZ	51:D3:19:GLY:HA2	2.08	0.68
24:BC:43:ASN:HB3	24:BC:45:ASN:H	1.58	0.68
51:B3:26:ALA:O	51:B3:27:ASN:HB2	1.91	0.68
4:CD:56:GLU:HA	4:CD:56:GLU:OE1	1.92	0.68
57:DA:2426:A:H3'	57:DA:2427:C:H5'	1.75	0.68
44:BW:23:LYS:HE3	44:BW:24:ARG:HG3	1.75	0.68
52:D4:16:ILE:CG1	52:D4:25:VAL:HG22	2.19	0.68
57:DA:2813:A:H2'	57:DA:2814:A:C8	2.27	0.68
57:DA:1062:G:O4'	57:DA:1088:A:N7	2.27	0.68
59:DF:136:ILE:O	59:DF:137:PHE:O	2.12	0.68
53:CA:753:A:H4'	53:CA:754:C:O5'	1.93	0.68
24:BC:141:HIS:HD2	24:BC:192:GLY:O	1.75	0.68
9:AI:32:ARG:HG2	9:AI:36:GLN:CB	2.22	0.68
40:DS:4:ILE:HG22	40:DS:106:VAL:HG13	1.76	0.68
56:CP:44:SER:H	56:CP:46:LYS:HZ3	1.42	0.68
5:AE:14:LEU:HB2	5:AE:36:THR:HG22	1.74	0.68
14:CN:66:THR:HG23	14:CN:82:LYS:HE3	1.75	0.68
9:CI:24:ASN:O	9:CI:61:ASP:HA	1.94	0.68
53:CA:1190:G:H3'	3:CC:2:GLN:O	1.94	0.68
57:DA:2683:C:O2'	57:DA:2684:U:H5'	1.93	0.68
4:AD:160:LEU:H	4:AD:160:LEU:HD13	1.58	0.68
6:AF:3:HIS:H	6:AF:92:THR:CG2	2.04	0.68
1:AA:255:G:H4'	17:AQ:18:LYS:HE3	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:181:A:H2	57:DA:434:U:H1'	1.59	0.68
22:BA:1063:G:OP1	30:BI:76:ALA:HB3	1.94	0.68
53:CA:1181:G:H2'	53:CA:1182:G:C8	2.29	0.68
54:CG:22:LEU:HA	54:CG:25:PHE:CB	2.19	0.68
31:BJ:65:THR:HG23	31:BJ:66:GLY:N	2.09	0.68
57:DA:36:G:C6	57:DA:445:C:N4	2.62	0.68
57:DA:1398:C:HO2'	57:DA:1399:C:H6	1.42	0.68
1:AA:202:G:N2	1:AA:466:A:H61	1.91	0.68
53:CA:1148:U:O2'	53:CA:1149:C:H5'	1.94	0.68
1:AA:1278:G:O5'	1:AA:1279:G:H5'	1.94	0.68
57:DA:945:A:H5'	57:DA:946:C:OP2	1.94	0.68
24:BC:143:VAL:HG12	24:BC:144:GLU:O	1.94	0.68
8:AH:9:MET:HE2	8:AH:32:LYS:HG2	1.76	0.68
11:AK:121:ARG:CZ	21:AU:35:GLU:HG3	2.24	0.68
30:BI:7:TYR:HA	30:BI:58:ILE:HB	1.75	0.68
1:AA:182:A:N3	1:AA:184:G:C8	2.62	0.68
34:BM:2:LEU:HD23	34:BM:69:PRO:HD2	1.76	0.68
31:BJ:99:ARG:O	31:BJ:103:ILE:HG23	1.92	0.68
57:DA:765:C:H2'	57:DA:766:U:C6	2.28	0.68
57:DA:784:G:HO2'	57:DA:785:G:H8	1.38	0.68
57:DA:298:G:H2'	57:DA:339:U:O4	1.93	0.68
57:DA:1290:C:HO2'	57:DA:1291:C:H6	0.75	0.68
57:DA:2232:C:P	45:DX:26:ARG:NH1	2.67	0.68
59:DF:43:ILE:HG12	59:DF:77:LYS:HD3	1.76	0.68
1:AA:486:U:H5''	1:AA:486:U:C6	2.29	0.68
1:AA:1130:A:H5''	1:AA:1130:A:C8	2.29	0.68
57:DA:1263:U:O2'	48:D0:7:PRO:HD2	1.93	0.68
42:DU:58:VAL:HG13	42:DU:60:LYS:HG2	1.76	0.68
53:CA:608:A:H2'	53:CA:609:A:O4'	1.93	0.68
51:D3:22:LYS:H	51:D3:48:MET:HB3	1.57	0.68
22:BA:2857:G:N2	22:BA:2860:A:OP2	2.24	0.68
57:DA:1751:U:H2'	57:DA:1752:C:C6	2.28	0.68
1:AA:577:G:O2'	1:AA:578:C:H5'	1.92	0.68
3:AC:119:ILE:HG21	3:AC:197:VAL:HG11	1.75	0.68
12:CL:50:LYS:N	12:CL:50:LYS:HD2	2.09	0.68
1:AA:1167:A:C8	1:AA:1169:A:N6	2.62	0.68
57:DA:184:C:H2'	57:DA:185:G:C8	2.29	0.68
51:D3:31:ILE:HG21	51:D3:34:LYS:NZ	2.08	0.68
57:DA:2149:U:O2'	57:DA:2150:C:C6	2.42	0.68
1:AA:1277:C:O2'	1:AA:1279:G:H8	1.71	0.68
2:AB:42:LEU:HG	2:AB:43:GLU:HG3	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BV:10:LYS:NZ	43:BV:11:GLU:HG3	2.08	0.68
57:DA:1935:G:H1'	57:DA:1964:G:N2	2.08	0.68
57:DA:512:G:OP2	57:DA:1235:G:H5'	1.93	0.68
1:AA:1287:A:H2'	1:AA:1288:A:C8	2.29	0.68
11:AK:42:GLY:HA3	11:AK:73:VAL:HG12	1.74	0.68
9:CI:11:ARG:HD3	9:CI:106:ASP:OD1	1.94	0.68
57:DA:391:A:H2'	57:DA:392:U:H6	1.59	0.68
44:BW:28:GLU:HB3	44:BW:31:LEU:CD2	2.18	0.68
57:DA:1024:G:H2'	57:DA:1025:G:C8	2.29	0.68
57:DA:1827:U:H2'	57:DA:1828:G:O4'	1.92	0.68
1:AA:243:A:C4'	1:AA:244:U:H5''	2.20	0.68
53:CA:1300:G:H22	53:CA:1334:G:H2'	1.58	0.68
35:BN:23:ASN:H	35:BN:23:ASN:ND2	1.92	0.68
22:BA:2887:A:H2'	22:BA:2887:A:N3	2.08	0.68
57:DA:2850:A:O2'	57:DA:2851:A:H5'	1.93	0.68
37:BP:105:LYS:HA	37:BP:108:ARG:NH2	2.09	0.68
57:DA:397:U:O2'	57:DA:398:C:O4'	2.12	0.68
22:BA:1050:A:C2	22:BA:2751:G:C4	2.82	0.68
57:DA:672:C:O2'	26:DE:77:ILE:HD11	1.92	0.68
57:DA:2529:G:H4'	28:DG:174:LYS:HD3	1.74	0.68
16:AP:73:ALA:O	16:AP:77:GLU:HB2	1.93	0.68
31:BJ:31:GLU:HG3	31:BJ:142:ILE:HG21	1.76	0.68
57:DA:2626:C:O2'	57:DA:2627:G:H5'	1.93	0.68
53:CA:1090:U:H2'	53:CA:1091:U:H6	1.59	0.68
53:CA:1113:C:H2'	53:CA:1114:C:H6	1.59	0.68
40:BS:63:GLY:O	40:BS:64:ALA:HB3	1.93	0.68
22:BA:962:G:N2	22:BA:2250:G:H1	1.92	0.68
37:BP:50:ARG:HD2	37:BP:51:ASN:N	2.08	0.68
44:BW:26:GLY:O	44:BW:27:GLY:C	2.32	0.68
20:AT:77:ASN:HD22	20:AT:78:LEU:N	1.92	0.68
57:DA:2135:A:H3'	57:DA:2136:G:C5'	2.20	0.68
17:AQ:55:GLY:HA3	17:AQ:82:VAL:HG11	1.76	0.68
25:BD:182:ALA:O	25:BD:184:ARG:N	2.26	0.68
1:AA:206:C:H2'	1:AA:207:C:O4'	1.94	0.68
53:CA:1147:C:HO2'	53:CA:1148:U:H6	1.40	0.68
29:BH:90:LEU:HB2	29:BH:123:ARG:HB3	1.73	0.68
1:AA:1458:G:H5'	20:AT:26:MET:HB3	1.77	0.68
57:DA:1815:A:H4'	57:DA:1816:C:OP1	1.93	0.68
33:DL:92:LEU:CD2	33:DL:124:GLY:HA3	2.23	0.68
35:BN:103:ARG:HD3	35:BN:110:MET:HE3	1.76	0.68
24:DC:128:THR:CG2	24:DC:188:ARG:HB3	2.24	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:947:A:HO2'	22:BA:984:A:H2	1.41	0.68
25:DD:9:VAL:O	37:DP:4:ILE:HD11	1.93	0.68
22:BA:1259:G:O2'	22:BA:1260:A:H5'	1.94	0.68
58:DB:94:A:OP1	43:DV:19:ARG:HD3	1.94	0.68
34:BM:64:TRP:CZ3	34:BM:106:ASP:HB2	2.29	0.68
57:DA:2662:A:H2'	57:DA:2663:G:O4'	1.94	0.68
22:BA:2798:U:OP2	22:BA:2798:U:H2'	1.94	0.68
53:CA:142:G:C2	53:CA:143:A:H1'	2.28	0.68
44:DW:18:LYS:HD3	44:DW:19:ARG:HG2	1.75	0.67
27:BF:131:VAL:HG21	27:BF:151:LEU:HG	1.76	0.67
5:AE:80:LEU:HD23	5:AE:122:VAL:CG1	2.16	0.67
9:CI:49:GLN:N	9:CI:50:PRO:HD2	2.10	0.67
53:CA:413:G:C6	4:CD:32:LYS:HE3	2.30	0.67
57:DA:1668:A:O4'	57:DA:1669:A:C2	2.47	0.67
54:CG:24:LYS:O	54:CG:28:ILE:HG12	1.92	0.67
53:CA:738:C:H2'	53:CA:739:C:C6	2.23	0.67
53:CA:1051:C:O2'	53:CA:1052:U:O5'	2.07	0.67
46:DY:28:LEU:HD11	46:DY:43:LEU:HD13	1.74	0.67
21:CU:39:LYS:N	21:CU:40:PRO:CD	2.57	0.67
22:BA:1417:C:O2'	22:BA:1418:G:H5'	1.93	0.67
57:DA:832:U:P	33:DL:38:GLN:H	2.17	0.67
33:BL:78:ARG:HB3	33:BL:113:ALA:HB3	1.74	0.67
31:DJ:110:PRO:HG2	31:DJ:111:LYS:HG2	1.76	0.67
39:DR:82:HIS:O	39:DR:82:HIS:CG	2.47	0.67
44:BW:50:VAL:O	44:BW:52:CYS:N	2.26	0.67
9:CI:35:GLU:HA	9:CI:39:GLY:HA3	1.77	0.67
1:AA:1239:A:N6	1:AA:1299:A:H62	1.92	0.67
58:DB:17:C:H42	58:DB:68:C:N4	1.91	0.67
53:CA:1152:A:H2'	53:CA:1153:G:H8	1.58	0.67
57:DA:2145:C:H3'	57:DA:2147:A:OP2	1.94	0.67
57:DA:1056:G:H1'	57:DA:1103:A:N6	2.09	0.67
53:CA:1071:C:H2'	53:CA:1072:G:H8	1.60	0.67
26:BE:149:ILE:HD11	26:BE:172:ALA:HA	1.76	0.67
53:CA:1458:G:O2'	20:CT:22:SER:CB	2.41	0.67
33:DL:63:LYS:HB3	51:D3:12:ARG:HD2	1.76	0.67
45:DX:30:PRO:HG2	45:DX:32:LEU:CD2	2.24	0.67
25:BD:24:VAL:HA	25:BD:191:GLY:H	1.59	0.67
9:AI:112:ARG:NH2	10:AJ:64:GLN:HE22	1.93	0.67
22:BA:284:U:H2'	22:BA:285:G:C8	2.29	0.67
22:BA:480:A:OP2	42:BU:43:LYS:HD2	1.94	0.67
22:BA:2339:C:H2'	22:BA:2340:A:H8	1.57	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1045:C:H5''	22:BA:1046:A:H5'	1.75	0.67
57:DA:712:G:N2	57:DA:720:U:H1'	2.09	0.67
22:BA:1113:U:H2'	22:BA:1114:C:H6	1.59	0.67
20:CT:42:ASP:HB3	20:CT:45:ALA:HB3	1.76	0.67
57:DA:45:G:H5'	57:DA:46:G:H5'	1.77	0.67
57:DA:531:C:H4'	57:DA:532:A:C8	2.30	0.67
1:AA:408:A:OP1	4:AD:109:THR:HG21	1.95	0.67
53:CA:1348:U:H4'	9:CI:121:ARG:HG3	1.75	0.67
38:DQ:91:ARG:HG3	39:DR:11:GLN:CD	2.15	0.67
53:CA:571:U:H5''	53:CA:572:A:OP2	1.94	0.67
57:DA:1635:A:H2'	57:DA:1636:U:H6	1.58	0.67
57:DA:1181:U:H2'	57:DA:1182:G:C8	2.30	0.67
1:AA:548:G:H2'	1:AA:549:C:C6	2.29	0.67
33:DL:142:ILE:HG22	33:DL:144:GLU:H	1.58	0.67
29:DH:41:LYS:HA	29:DH:44:ILE:HG12	1.74	0.67
19:CS:49:ALA:HB1	19:CS:56:HIS:HB3	1.75	0.67
31:BJ:44:TYR:O	31:BJ:45:THR:HG22	1.94	0.67
57:DA:2756:U:O2'	57:DA:2757:A:H5'	1.95	0.67
52:B4:10:LEU:HB2	52:B4:33:HIS:CD2	2.29	0.67
57:DA:1056:G:N2	57:DA:1102:C:H5	1.92	0.67
57:DA:1695:G:H8	24:DC:7:PRO:HB2	1.59	0.67
22:BA:1779:U:C5	22:BA:1784:A:N7	2.62	0.67
3:CC:76:ILE:HA	3:CC:83:VAL:HG13	1.76	0.67
57:DA:475:C:H2'	57:DA:476:G:C8	2.30	0.67
57:DA:876:C:H3'	57:DA:877:A:C8	2.28	0.67
57:DA:2282:G:H1'	57:DA:2390:U:C5	2.28	0.67
57:DA:2389:G:C5'	57:DA:2390:U:H5'	2.23	0.67
1:AA:1094:G:HO2'	1:AA:1095:U:P	2.18	0.67
22:BA:714:U:H5'	22:BA:715:A:OP2	1.93	0.67
47:DZ:20:LYS:O	47:DZ:24:LEU:HD13	1.94	0.67
19:AS:51:HIS:CD2	19:AS:53:GLY:H	2.12	0.67
9:CI:114:LYS:HB2	9:CI:117:LEU:HD12	1.76	0.67
9:CI:118:ARG:NH2	9:CI:122:ARG:HE	1.90	0.67
22:BA:800:A:H4'	22:BA:801:G:O5'	1.92	0.67
14:CN:47:LEU:O	14:CN:50:LEU:HG	1.93	0.67
57:DA:2360:G:H1'	33:DL:60:ARG:HH21	1.60	0.67
10:CJ:15:HIS:HE1	10:CJ:68:ARG:HD3	1.57	0.67
22:BA:1506:U:H2'	22:BA:1507:C:C6	2.30	0.67
5:AE:152:VAL:HB	5:AE:155:LYS:HZ2	1.58	0.67
1:AA:265:G:H2'	1:AA:266:G:H5'	1.76	0.67
1:AA:265:G:C2'	1:AA:266:G:H5'	2.25	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:46:VAL:HA	9:AI:49:GLN:HG3	1.75	0.67
34:BM:8:LYS:HD2	34:BM:8:LYS:N	2.07	0.67
29:BH:41:LYS:HA	29:BH:44:ILE:HG12	1.76	0.67
22:BA:1343:G:H2'	22:BA:1344:U:H6	1.60	0.67
1:AA:1373:G:H5''	7:AG:35:LYS:HB2	1.74	0.67
1:AA:1285:A:H5'	1:AA:1286:U:C4	2.29	0.67
27:BF:161:SER:OG	27:BF:164:GLU:HG3	1.95	0.67
10:AJ:14:ASP:HB3	10:AJ:17:LEU:HB3	1.76	0.67
25:DD:30:GLU:HG2	25:DD:185:ASN:ND2	2.08	0.67
14:CN:46:LYS:HE3	19:CS:10:ILE:HB	1.77	0.67
43:BV:48:MET:O	43:BV:51:GLN:HG3	1.94	0.67
19:CS:40:PHE:CB	19:CS:41:PRO:HD2	2.23	0.67
57:DA:324:A:C2	57:DA:325:G:H1'	2.29	0.67
25:BD:5:VAL:N	25:BD:32:ASN:HD21	1.90	0.67
57:DA:1695:G:H2'	57:DA:1696:G:O4'	1.95	0.67
53:CA:1298:U:H5	54:CG:113:LYS:HA	1.58	0.67
20:CT:23:ARG:HB3	20:CT:60:GLN:HE21	1.59	0.67
1:AA:345:C:O2'	32:BK:116:ILE:HD13	1.94	0.67
49:B1:34:GLU:HG2	49:B1:49:LYS:HG3	1.77	0.67
4:CD:176:LYS:HE2	4:CD:178:GLU:CD	2.14	0.67
57:DA:923:G:H1'	44:DW:23:LYS:HZ2	1.59	0.67
40:DS:14:ALA:HB1	40:DS:18:ARG:NH2	2.08	0.67
57:DA:1965:C:H5'	57:DA:1966:A:H5''	1.75	0.67
53:CA:996:A:N1	53:CA:1046:A:H5'	2.09	0.67
57:DA:1303:G:O2'	57:DA:1304:A:H8	1.76	0.67
51:B3:40:LYS:HA	51:B3:43:LEU:HD12	1.75	0.67
57:DA:1590:A:H2'	57:DA:1591:A:C8	2.29	0.67
59:DF:104:THR:HG22	59:DF:105:ILE:HG13	1.76	0.67
22:BA:1157:G:N2	22:BA:1158:C:C2	2.63	0.67
44:BW:24:ARG:HD3	44:BW:65:LYS:CE	2.25	0.67
57:DA:1915:U:O2'	57:DA:1916:A:H5'	1.95	0.67
52:D4:7:VAL:CG1	52:D4:8:LYS:H	2.08	0.67
1:AA:246:A:H4'	1:AA:247:G:OP1	1.93	0.67
57:DA:2360:G:C1'	33:DL:60:ARG:HH21	2.06	0.67
25:BD:106:LYS:H	25:BD:106:LYS:HD2	1.59	0.67
41:BT:32:LEU:N	41:BT:83:ALA:HB3	2.08	0.67
53:CA:1268:G:N2	53:CA:1327:C:H1'	2.09	0.67
57:DA:1635:A:H5'	57:DA:1635:A:H8	1.58	0.67
42:DU:17:ASP:HB2	42:DU:38:ILE:HA	1.76	0.67
1:AA:363:A:OP1	12:AL:57:THR:HG21	1.95	0.67
57:DA:2271:G:O2'	57:DA:2272:U:H5'	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:143:C:HO2'	22:BA:144:A:H8	1.42	0.67
53:CA:1513:A:H2'	53:CA:1514:G:H8	1.60	0.67
22:BA:2032:G:N7	63:BA:3534:HOH:O	2.28	0.67
22:BA:2356:U:H4'	44:BW:16:GLU:HG3	1.77	0.67
53:CA:985:C:C4	53:CA:986:U:O4	2.48	0.67
53:CA:1250:A:H2'	53:CA:1251:A:O4'	1.94	0.67
2:AB:40:ILE:HG21	2:AB:201:GLY:H	1.58	0.67
57:DA:2429:G:H3'	57:DA:2429:G:OP2	1.95	0.67
4:AD:33:ILE:O	4:AD:34:GLU:HB3	1.95	0.67
53:CA:1239:A:H3'	54:CG:118:ARG:HH22	1.60	0.67
57:DA:1669:A:C2'	57:DA:1669:A:N3	2.58	0.67
53:CA:523:A:H61	12:CL:49:ARG:HH12	1.41	0.67
24:DC:181:ARG:HG3	24:DC:265:PHE:O	1.95	0.67
22:BA:1327:A:OP2	63:BA:3612:HOH:O	2.13	0.67
2:CB:125:PHE:HD1	2:CB:137:THR:HG22	1.59	0.67
22:BA:1434:A:H2'	22:BA:1435:G:C8	2.28	0.67
32:BK:63:VAL:HG11	32:BK:103:VAL:HG12	1.77	0.67
13:AM:10:ASP:CG	13:AM:11:HIS:H	1.96	0.67
22:BA:1277:G:H5'	35:BN:20:MET:CE	2.24	0.67
28:DG:16:VAL:HG11	28:DG:44:HIS:CD2	2.30	0.67
8:AH:93:LYS:HE3	8:AH:116:ARG:HH12	1.60	0.67
53:CA:1399:C:H4'	53:CA:1400:C:O5'	1.95	0.67
1:AA:461:A:H3'	1:AA:461:A:N3	2.08	0.67
14:CN:40:ARG:NH1	19:CS:6:LYS:HB2	2.10	0.67
22:BA:13:A:O2'	22:BA:15:G:N7	2.28	0.67
57:DA:655:A:O2'	57:DA:656:G:C8	2.48	0.67
21:AU:10:PRO:HG2	3:CC:71:ARG:NH2	2.10	0.67
42:DU:81:ARG:HD2	42:DU:81:ARG:N	2.10	0.67
43:BV:80:HIS:CD2	43:BV:83:LYS:N	2.52	0.67
57:DA:1328:A:H2'	57:DA:1330:C:C4	2.30	0.67
5:AE:155:LYS:HA	5:AE:158:LYS:HZ3	1.60	0.67
1:AA:300:A:H1'	1:AA:565:U:O2	1.94	0.67
1:AA:251:G:H4'	1:AA:252:U:O5'	1.94	0.67
9:AI:40:ARG:CA	9:AI:44:ARG:HB3	2.23	0.67
2:CB:184:ALA:HB3	2:CB:195:VAL:HG21	1.76	0.67
40:DS:71:VAL:O	40:DS:71:VAL:HG13	1.95	0.67
53:CA:183:C:O2'	53:CA:184:G:H5'	1.94	0.67
46:DY:18:LEU:O	46:DY:22:LEU:HD13	1.95	0.67
53:CA:995:C:H42	53:CA:1046:A:H1'	1.58	0.67
57:DA:1590:A:H2'	57:DA:1591:A:H8	1.60	0.67
28:BG:126:THR:HG22	28:BG:127:GLN:H	1.60	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:204:A:H4'	22:BA:205:G:OP1	1.94	0.67
1:AA:624:C:H4'	16:AP:10:GLY:O	1.95	0.67
53:CA:1200:C:O2'	53:CA:1201:A:OP2	2.12	0.67
57:DA:704:G:H1'	57:DA:727:A:N6	2.09	0.67
57:DA:705:A:N6	57:DA:726:G:H1'	2.10	0.67
35:DN:22:ARG:O	35:DN:22:ARG:HG2	1.95	0.67
57:DA:1345:C:OP2	57:DA:1345:C:H3'	1.94	0.67
22:BA:811:U:O2'	22:BA:1250:G:H2'	1.95	0.67
53:CA:92:U:H2'	53:CA:93:U:C5	2.30	0.67
22:BA:1082:U:H5'	30:BI:117:THR:O	1.95	0.67
1:AA:259:G:H2'	1:AA:260:G:C8	2.30	0.67
4:AD:99:ASN:O	4:AD:103:ARG:HB2	1.95	0.67
32:BK:5:GLN:O	32:BK:6:THR:HB	1.93	0.67
22:BA:2134:A:O2'	22:BA:2135:A:H8	1.78	0.67
53:CA:1102:A:H2'	53:CA:1103:C:H6	1.58	0.67
53:CA:239:U:C6	53:CA:239:U:H5'	2.30	0.67
57:DA:481:G:O2'	57:DA:507:A:N6	2.27	0.67
32:DK:118:LEU:C	32:DK:120:PRO:HD2	2.15	0.67
29:DH:31:VAL:HB	29:DH:32:PRO:HD3	1.77	0.67
32:DK:59:LYS:HG2	32:DK:89:ASN:HA	1.75	0.67
1:AA:953:G:C2	1:AA:954:G:H1'	2.28	0.67
22:BA:1799:G:H4'	22:BA:1800:C:O5'	1.94	0.67
8:AH:81:GLY:O	17:AQ:35:LYS:HE2	1.95	0.67
1:AA:1533:C:H3'	1:AA:1534:A:H5''	1.77	0.67
31:BJ:44:TYR:C	31:BJ:44:TYR:CD1	2.66	0.66
54:CG:92:PRO:HA	54:CG:95:ARG:HB2	1.77	0.66
57:DA:1038:G:N1	57:DA:1039:A:C5	2.63	0.66
7:AG:52:ARG:HH12	7:AG:121:ASN:HD21	1.42	0.66
53:CA:245:U:H5''	53:CA:245:U:H6	1.60	0.66
57:DA:492:A:H2'	57:DA:493:G:C8	2.29	0.66
53:CA:313:A:H2'	53:CA:314:C:H6	1.60	0.66
57:DA:511:U:H4'	57:DA:1235:G:H4'	1.76	0.66
57:DA:1300:G:H5''	57:DA:1301:A:H5'	1.77	0.66
1:AA:1068:G:O2'	1:AA:1069:C:H5'	1.95	0.66
1:AA:382:A:H2'	1:AA:383:A:C8	2.28	0.66
22:BA:1820:U:OP1	24:BC:176:ARG:HG2	1.96	0.66
1:AA:1025:U:H5''	1:AA:1026:G:H5'	1.78	0.66
4:CD:167:PRO:HB3	4:CD:169:TRP:CH2	2.30	0.66
4:AD:167:PRO:HB2	4:AD:170:LEU:HD11	1.77	0.66
22:BA:1305:C:O2	22:BA:1305:C:H2'	1.95	0.66
57:DA:602:A:H1'	57:DA:656:G:N2	2.09	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:571:U:C5	57:DA:575:A:C6	2.84	0.66
57:DA:1324:G:H1'	57:DA:1616:A:H62	1.59	0.66
57:DA:1565:C:O2'	57:DA:1566:A:O5'	2.13	0.66
22:BA:277:G:H4'	22:BA:278:A:N7	2.10	0.66
24:DC:166:ARG:CB	24:DC:171:VAL:HG22	2.25	0.66
1:AA:1316:G:H5''	1:AA:1317:C:OP2	1.95	0.66
4:AD:68:GLU:O	4:AD:72:ARG:HG2	1.95	0.66
22:BA:301:G:OP2	42:BU:81:ARG:NH1	2.29	0.66
20:AT:29:THR:HA	20:AT:32:LYS:HG2	1.76	0.66
28:BG:137:LYS:HA	28:BG:140:ILE:HD11	1.76	0.66
54:CG:142:ARG:O	54:CG:146:ALA:HB3	1.94	0.66
22:BA:1695:G:C8	24:BC:7:PRO:HG2	2.30	0.66
1:AA:1452:C:H4'	1:AA:1453:G:C4	2.31	0.66
19:CS:35:ARG:HH21	19:CS:51:HIS:CD2	2.14	0.66
53:CA:1225:A:H4'	19:CS:77:ARG:NH1	2.10	0.66
57:DA:2331:G:H1'	44:DW:40:ARG:HB3	1.76	0.66
33:BL:77:ILE:HD11	33:BL:108:ALA:HB1	1.76	0.66
31:BJ:77:HIS:HD2	31:BJ:79:GLY:N	1.92	0.66
1:AA:1281:C:O2'	1:AA:1282:C:H5'	1.95	0.66
57:DA:1311:G:H1'	57:DA:1313:U:O4	1.95	0.66
5:CE:35:LEU:HD11	5:CE:136:VAL:HG11	1.77	0.66
28:DG:88:LEU:HD13	28:DG:93:TYR:HB3	1.77	0.66
24:BC:131:MET:HA	24:BC:134:ILE:HD12	1.75	0.66
53:CA:245:U:H6	53:CA:245:U:C5'	2.09	0.66
53:CA:807:A:H2'	53:CA:808:C:C6	2.31	0.66
22:BA:65:U:H2'	22:BA:66:C:C6	2.30	0.66
43:DV:80:HIS:HD2	43:DV:82:TYR:H	1.41	0.66
51:D3:15:LYS:HZ1	51:D3:19:GLY:HA2	1.61	0.66
53:CA:143:A:N3	53:CA:143:A:H2'	2.11	0.66
22:BA:2207:C:H2'	22:BA:2208:C:H6	1.59	0.66
22:BA:1378:A:O2'	22:BA:1379:U:O5'	2.13	0.66
57:DA:553:G:H2'	57:DA:554:U:O4'	1.95	0.66
3:CC:190:THR:HG22	3:CC:191:THR:H	1.59	0.66
22:BA:2275:C:O2'	34:BM:84:LYS:HA	1.95	0.66
22:BA:918:A:H4'	23:BB:97:C:O2	1.95	0.66
41:DT:60:THR:HG22	41:DT:83:ALA:HA	1.76	0.66
57:DA:1676:A:H2'	57:DA:1677:A:O4'	1.96	0.66
35:DN:90:ARG:NH2	35:DN:116:VAL:HG11	2.09	0.66
57:DA:568:U:H2'	57:DA:570:G:OP2	1.95	0.66
4:CD:32:LYS:HB3	4:CD:35:GLN:OE1	1.95	0.66
57:DA:2707:U:H2'	57:DA:2708:G:H8	1.59	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:173:U:OP1	53:CA:198:G:H4'	1.96	0.66
22:BA:503:A:H5'	22:BA:505:A:OP1	1.94	0.66
22:BA:1746:A:H2'	22:BA:1747:U:C6	2.30	0.66
37:BP:21:PRO:HA	37:BP:46:VAL:CG1	2.25	0.66
32:DK:24:VAL:HG13	32:DK:33:ALA:HB2	1.77	0.66
53:CA:1450:U:H4'	53:CA:1451:U:C5	2.31	0.66
57:DA:642:U:H2'	57:DA:644:A:OP2	1.94	0.66
4:CD:137:SER:HB2	4:CD:138:PRO:HD2	1.77	0.66
40:DS:24:ILE:HG21	40:DS:36:LEU:HD21	1.78	0.66
22:BA:1110:G:HO2'	22:BA:1111:A:H8	1.44	0.66
22:BA:1414:C:C4	22:BA:1415:U:H5	2.14	0.66
4:AD:55:ARG:HH12	4:AD:58:GLN:HG2	1.60	0.66
32:BK:61:VAL:HG22	32:BK:87:LEU:HD11	1.77	0.66
57:DA:2214:C:O2'	57:DA:2215:C:C5'	2.43	0.66
25:DD:8:LYS:HB2	25:DD:201:LEU:CD1	2.24	0.66
4:AD:145:ARG:HD2	4:AD:147:LYS:HE2	1.77	0.66
11:CK:27:ASN:HA	11:CK:57:SER:HB3	1.77	0.66
57:DA:1808:A:O3'	57:DA:1809:A:H8	1.77	0.66
9:CI:71:ILE:CD1	9:CI:72:SER:H	2.09	0.66
53:CA:878:A:OP1	8:CH:79:ARG:HB2	1.94	0.66
24:DC:93:VAL:HG13	24:DC:94:LEU:N	2.11	0.66
36:DO:62:LEU:HD11	36:DO:65:THR:HG23	1.78	0.66
38:BQ:26:ALA:HB1	38:BQ:30:VAL:CG2	2.26	0.66
22:BA:2772:C:H2'	22:BA:2773:C:C6	2.30	0.66
22:BA:1859:U:H2'	22:BA:1860:G:C8	2.30	0.66
12:CL:80:LEU:HD23	12:CL:97:VAL:HG21	1.78	0.66
57:DA:2271:G:H2'	57:DA:2272:U:C6	2.31	0.66
22:BA:1694:C:H4'	22:BA:1695:G:O5'	1.95	0.66
22:BA:1809:A:H2'	22:BA:1810:A:C8	2.30	0.66
35:BN:31:HIS:O	35:BN:33:ILE:HD12	1.95	0.66
57:DA:243:U:HO2'	57:DA:244:A:H8	1.41	0.66
22:BA:826:U:O2'	33:BL:53:GLY:HA3	1.95	0.66
26:BE:189:THR:OG1	26:BE:191:ASP:HB3	1.95	0.66
42:BU:86:PHE:CE1	42:BU:101:THR:HG21	2.30	0.66
35:BN:96:ARG:HH22	35:BN:116:VAL:HG23	1.59	0.66
22:BA:346:A:C2	22:BA:347:A:H1'	2.29	0.66
57:DA:624:C:O2'	57:DA:657:U:H5''	1.95	0.66
57:DA:1274:A:O2'	57:DA:1275:A:H5''	1.95	0.66
52:B4:10:LEU:CD1	52:B4:33:HIS:HD2	2.04	0.66
57:DA:1440:U:O2'	57:DA:1441:G:H5'	1.95	0.66
25:DD:48:ILE:HG22	25:DD:84:LEU:HD23	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:D1:25:ASN:HB3	49:D1:28:THR:OG1	1.96	0.66
53:CA:344:A:H5''	53:CA:345:C:H5	1.60	0.66
40:DS:51:LEU:O	40:DS:55:ILE:HD13	1.96	0.66
57:DA:878:A:H4'	57:DA:898:C:H42	1.60	0.66
22:BA:1475:G:O2'	22:BA:1476:U:P	2.54	0.66
2:AB:71:THR:O	2:AB:72:LYS:HG2	1.95	0.66
46:BY:9:LYS:HB3	46:BY:12:GLU:HG3	1.76	0.66
3:AC:134:LYS:HE3	3:AC:138:GLN:NE2	2.11	0.66
42:BU:82:VAL:O	42:BU:94:PHE:O	2.13	0.66
25:BD:149:ASN:CG	25:BD:150:GLN:H	1.98	0.66
22:BA:2352:A:H5''	22:BA:2353:G:OP2	1.96	0.66
44:BW:18:LYS:CA	44:BW:36:ILE:HG13	2.14	0.66
5:AE:103:GLY:HA2	5:AE:121:ASN:HA	1.78	0.66
6:AF:6:ILE:CG1	6:AF:89:VAL:HG23	2.20	0.66
53:CA:373:A:C8	53:CA:373:A:H5'	2.30	0.66
35:DN:98:LEU:O	35:DN:112:TYR:HB2	1.95	0.66
57:DA:675:A:OP1	26:DE:60:TRP:CZ2	2.47	0.66
53:CA:734:G:N2	18:CR:63:TYR:CE2	2.64	0.66
30:DI:51:GLY:O	30:DI:52:LEU:HB2	1.94	0.66
49:B1:7:LYS:HA	49:B1:23:THR:HG22	1.77	0.66
57:DA:1008:A:H4'	57:DA:1009:A:OP1	1.95	0.66
25:DD:106:LYS:O	25:DD:107:VAL:HB	1.95	0.66
57:DA:492:A:O2'	57:DA:493:G:H5'	1.95	0.66
1:AA:475:C:H2'	1:AA:476:U:C6	2.31	0.66
57:DA:2283:C:O2'	57:DA:2284:A:H5'	1.95	0.66
22:BA:142:A:H2'	22:BA:143:C:C6	2.31	0.66
1:AA:666:G:H5'	1:AA:726:C:H1'	1.78	0.66
4:AD:94:GLU:HG2	4:AD:185:PRO:HG3	1.78	0.66
40:DS:66:ILE:H	40:DS:66:ILE:HD13	1.61	0.66
49:B1:10:LEU:O	49:B1:19:PHE:HB2	1.96	0.66
43:BV:19:ARG:O	43:BV:22:ALA:HB3	1.95	0.66
57:DA:2015:A:C6	48:D0:2:VAL:HG11	2.31	0.66
1:AA:1520:C:H2'	1:AA:1521:C:H6	1.61	0.66
31:BJ:95:ARG:O	31:BJ:95:ARG:HG3	1.96	0.66
35:BN:8:ARG:HB3	35:BN:10:LEU:HD22	1.75	0.66
22:BA:990:A:H5'	22:BA:990:A:H8	1.59	0.66
44:BW:31:LEU:N	44:BW:31:LEU:HD23	2.09	0.66
25:BD:133:THR:HG23	25:BD:134:HIS:CD2	2.31	0.66
58:DB:90:C:H6	58:DB:90:C:H5''	1.60	0.66
57:DA:2307:G:H1'	57:DA:2308:G:C5	2.30	0.66
25:BD:4:LEU:HD22	25:BD:101:PHE:HE1	1.57	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:922:G:H2'	1:AA:923:A:C8	2.30	0.66
57:DA:140:C:H5'	57:DA:141:G:N2	2.10	0.66
31:BJ:17:VAL:CG2	31:BJ:137:PRO:HB2	2.25	0.66
57:DA:2750:A:O2'	57:DA:2752:C:N4	2.29	0.66
53:CA:858:G:O6	53:CA:869:G:H3'	1.95	0.66
12:CL:97:VAL:O	12:CL:97:VAL:HG23	1.94	0.66
57:DA:391:A:C6	57:DA:411:G:C2	2.84	0.66
32:DK:40:LYS:NZ	32:DK:89:ASN:HD21	1.93	0.66
45:BX:76:LYS:HG3	45:BX:77:TYR:H	1.60	0.66
26:BE:161:ALA:HA	26:BE:164:LEU:HB2	1.78	0.66
33:DL:9:ALA:HB3	33:DL:12:SER:HB3	1.78	0.66
22:BA:2249:U:O4	63:BA:3509:HOH:O	2.13	0.66
26:BE:5:LEU:HD12	26:BE:10:SER:HB3	1.78	0.66
22:BA:1693:U:O2'	24:BC:13:ARG:NH2	2.29	0.66
1:AA:272:C:H2'	1:AA:273:U:H6	1.60	0.66
22:BA:2571:U:O2'	25:BD:151:THR:HG21	1.96	0.66
22:BA:2336:A:N6	44:BW:40:ARG:HD2	2.10	0.66
44:BW:39:GLN:HE21	44:BW:43:LYS:H	1.42	0.66
58:DB:57:A:O2'	58:DB:58:A:C8	2.41	0.66
53:CA:277:C:OP1	17:CQ:44:HIS:HE1	1.78	0.66
53:CA:1323:G:H2'	53:CA:1324:A:C8	2.31	0.66
9:CI:78:ILE:O	9:CI:82:ILE:HG13	1.96	0.66
57:DA:574:A:C2	57:DA:2032:G:O2'	2.49	0.66
57:DA:1393:A:N6	41:DT:19:LYS:HB2	2.11	0.66
10:CJ:15:HIS:HA	10:CJ:18:ILE:CG2	2.23	0.66
25:BD:107:VAL:H	25:BD:206:ALA:N	1.92	0.66
57:DA:1079:C:H41	57:DA:1088:A:C5'	2.06	0.66
57:DA:2800:A:C4	57:DA:2801:G:H1'	2.30	0.66
22:BA:1461:C:O2'	22:BA:1462:C:H5'	1.96	0.66
24:DC:29:PHE:CE2	24:DC:31:PRO:HG2	2.30	0.66
43:DV:70:ILE:HD13	43:DV:70:ILE:N	2.10	0.66
23:BB:15:A:O2'	23:BB:16:G:H5'	1.96	0.66
51:D3:15:LYS:HG2	51:D3:16:THR:H	1.61	0.66
15:CO:81:ILE:HG22	15:CO:86:LEU:HB2	1.76	0.66
57:DA:2887:A:H1'	48:D0:39:ARG:HH22	1.60	0.66
2:AB:76:SER:HB2	2:AB:92:ASN:HB2	1.77	0.66
7:AG:24:LYS:O	7:AG:28:ILE:HG12	1.96	0.66
35:BN:65:LEU:HD11	35:BN:69:ARG:NH2	2.11	0.66
33:DL:93:ASN:CG	33:DL:94:THR:H	1.98	0.66
57:DA:2217:G:H2'	57:DA:2218:G:H8	1.61	0.66
53:CA:960:U:O2'	53:CA:1223:C:H4'	1.96	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:573:U:H4'	57:DA:574:A:OP1	1.96	0.66
43:BV:80:HIS:ND1	43:BV:81:PRO:HD2	2.11	0.66
57:DA:1313:U:O2'	57:DA:1314:C:H5'	1.95	0.66
55:CM:12:LYS:HB3	55:CM:17:ALA:HB2	1.78	0.66
53:CA:1169:A:H2'	53:CA:1170:A:H8	1.61	0.66
57:DA:2038:G:H2'	57:DA:2039:U:O4'	1.96	0.66
26:BE:148:ILE:HA	26:BE:187:VAL:HB	1.78	0.66
25:DD:118:PHE:CD1	25:DD:119:ALA:N	2.63	0.66
22:BA:2466:C:OP1	52:B4:4:ARG:HB2	1.96	0.66
24:DC:93:VAL:CG1	24:DC:101:ARG:H	2.09	0.66
51:D3:41:ARG:CG	51:D3:41:ARG:HH21	2.09	0.66
31:DJ:25:LEU:HD12	31:DJ:64:VAL:HA	1.78	0.66
30:BI:42:ASN:HA	30:BI:45:THR:HB	1.78	0.66
1:AA:536:C:H2'	1:AA:537:G:C8	2.31	0.66
36:DO:13:ARG:O	36:DO:17:LYS:HB2	1.95	0.66
40:BS:24:ILE:HD12	40:BS:32:ALA:HA	1.78	0.66
53:CA:1533:C:H2'	53:CA:1534:A:H5''	1.77	0.66
22:BA:1984:G:C6	22:BA:1985:C:C5	2.83	0.66
22:BA:1159:U:C2'	22:BA:1160:G:H5'	2.26	0.66
25:DD:14:ILE:HG13	37:DP:11:GLN:HE22	1.58	0.66
20:AT:43:LYS:CB	20:AT:86:ALA:HB1	2.19	0.65
53:CA:961:U:OP1	53:CA:961:U:H3'	1.97	0.65
57:DA:1060:U:H1'	57:DA:1062:G:OP2	1.95	0.65
57:DA:2311:A:H4'	57:DA:2312:U:OP2	1.94	0.65
4:AD:117:VAL:HG12	4:AD:130:ASN:O	1.96	0.65
57:DA:1038:G:C2	57:DA:1039:A:N7	2.64	0.65
37:DP:48:ALA:HB3	37:DP:59:THR:OG1	1.97	0.65
57:DA:207:A:H2'	57:DA:208:C:H6	1.58	0.65
50:B2:27:GLY:O	50:B2:30:VAL:HB	1.96	0.65
57:DA:2896:C:O2'	57:DA:2897:U:H5'	1.97	0.65
2:CB:160:LEU:HD22	2:CB:175:ALA:HB2	1.79	0.65
33:DL:77:ILE:HG12	33:DL:101:ILE:HD11	1.78	0.65
6:AF:97:THR:O	6:AF:98:GLU:HG2	1.96	0.65
27:BF:125:GLY:HA3	27:BF:159:ALA:HB3	1.78	0.65
57:DA:1796:U:H2'	57:DA:1797:G:C8	2.30	0.65
57:DA:158:U:H1'	57:DA:169:G:N2	2.11	0.65
22:BA:1738:G:O2'	22:BA:1739:A:H8	1.78	0.65
57:DA:1714:U:H3'	57:DA:1715:G:C5'	2.26	0.65
3:CC:161:ILE:HD13	3:CC:161:ILE:H	1.62	0.65
22:BA:409:G:O2'	22:BA:410:G:H5'	1.96	0.65
57:DA:1309:G:H4'	50:D2:7:PRO:HB2	1.78	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:89:ARG:HH11	13:AM:94:LEU:HB3	1.61	0.65
22:BA:1438:U:O2'	22:BA:1439:A:H5'	1.95	0.65
44:BW:37:VAL:HG22	44:BW:55:ASP:O	1.97	0.65
44:BW:39:GLN:HE21	44:BW:43:LYS:N	1.94	0.65
37:DP:88:ARG:NE	37:DP:112:ARG:HH21	1.92	0.65
1:AA:204:G:H1'	1:AA:465:A:C2	2.31	0.65
22:BA:1885:A:H2'	22:BA:1886:U:H6	1.61	0.65
28:BG:104:LEU:HB2	28:BG:112:VAL:HG22	1.78	0.65
24:BC:109:LEU:HD23	24:BC:110:LYS:H	1.60	0.65
22:BA:2134:A:HO2'	22:BA:2135:A:H8	1.44	0.65
22:BA:1450:G:C6	22:BA:1451:C:N4	2.64	0.65
24:DC:171:VAL:N	24:DC:185:ALA:HB2	2.10	0.65
52:B4:3:VAL:O	52:B4:4:ARG:O	2.14	0.65
22:BA:2492:U:H2'	22:BA:2493:U:H6	1.61	0.65
57:DA:1011:G:H4'	57:DA:1012:U:OP1	1.96	0.65
58:DB:52:A:N6	36:DO:33:ARG:HE	1.93	0.65
17:AQ:29:LYS:HB2	17:AQ:36:PHE:CZ	2.31	0.65
57:DA:2635:A:H5'	25:DD:79:LEU:HB2	1.76	0.65
11:AK:52:ARG:HD2	11:AK:56:LYS:HD3	1.79	0.65
53:CA:1031:C:H5'	53:CA:1032:G:H5''	1.77	0.65
3:CC:26:LYS:HA	3:CC:26:LYS:HE3	1.77	0.65
41:BT:9:LYS:HG3	41:BT:9:LYS:O	1.96	0.65
16:AP:59:HIS:CE1	16:AP:63:GLN:HE22	2.13	0.65
14:CN:52:ARG:HA	14:CN:52:ARG:NE	2.12	0.65
27:BF:98:PHE:O	27:BF:102:LEU:HB2	1.96	0.65
57:DA:1275:A:C2'	57:DA:1275:A:N3	2.59	0.65
22:BA:1131:G:C4	31:BJ:77:HIS:ND1	2.65	0.65
53:CA:1146:A:O2'	53:CA:1147:C:H5'	1.96	0.65
1:AA:373:A:H2'	1:AA:374:A:H8	1.61	0.65
57:DA:1125:G:H4'	52:D4:37:GLN:NE2	2.11	0.65
21:CU:35:GLU:CG	21:CU:36:PHE:H	2.08	0.65
53:CA:174:A:O2'	53:CA:175:C:H5'	1.96	0.65
35:BN:55:ALA:HA	35:BN:80:PHE:CE1	2.32	0.65
53:CA:1102:A:H5''	53:CA:1102:A:H8	1.60	0.65
31:DJ:127:GLY:O	31:DJ:129:GLU:HG3	1.95	0.65
57:DA:309:A:H1'	57:DA:329:G:C4	2.32	0.65
40:BS:73:LYS:HB2	40:BS:106:VAL:HB	1.79	0.65
57:DA:1739:A:H2'	57:DA:1740:G:H8	1.59	0.65
35:BN:73:ASN:HA	35:BN:76:VAL:HG12	1.78	0.65
3:AC:6:PRO:HG2	3:AC:183:TYR:CD2	2.31	0.65
57:DA:1413:A:H2'	57:DA:1414:C:C6	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:86:VAL:HG22	7:AG:150:PHE:HB3	1.78	0.65
27:BF:72:SER:HB2	27:BF:80:GLN:N	2.11	0.65
53:CA:631:C:H3'	53:CA:632:U:H5'	1.77	0.65
50:B2:19:ARG:O	50:B2:23:ALA:HB2	1.97	0.65
20:CT:67:HIS:HB3	20:CT:68:LYS:HD2	1.78	0.65
29:BH:94:ILE:HG21	29:BH:99:ILE:HG12	1.76	0.65
29:DH:68:ARG:CD	29:DH:71:LYS:HD3	2.26	0.65
7:AG:4:ARG:NE	7:AG:4:ARG:HA	2.12	0.65
37:DP:20:ARG:HD2	37:DP:21:PRO:HD2	1.77	0.65
59:DF:91:ARG:NH2	59:DF:91:ARG:HB3	2.11	0.65
53:CA:1301:U:O2'	53:CA:1302:C:C5	2.49	0.65
1:AA:76:G:H2'	1:AA:76:G:N3	2.11	0.65
57:DA:2616:C:H2'	57:DA:2617:U:H6	1.60	0.65
1:AA:275:G:H2'	1:AA:276:G:H8	1.62	0.65
28:DG:53:PRO:HB3	28:DG:61:TRP:H	1.60	0.65
53:CA:109:A:C8	53:CA:327:A:O4'	2.50	0.65
53:CA:456:A:H2'	53:CA:457:G:C8	2.32	0.65
38:BQ:100:PHE:HD1	39:BR:13:ARG:HH22	1.44	0.65
24:DC:130:PRO:HG2	24:DC:133:ASN:ND2	2.11	0.65
1:AA:761:G:H2'	1:AA:762:U:H6	1.62	0.65
20:CT:24:ARG:HD3	20:CT:28:ARG:HH21	1.62	0.65
53:CA:745:G:H2'	53:CA:746:A:C8	2.32	0.65
57:DA:2:G:C6	57:DA:3:U:C4	2.84	0.65
53:CA:122:G:O2'	53:CA:123:U:H5'	1.97	0.65
1:AA:1270:G:H2'	1:AA:1271:A:H8	1.62	0.65
58:DB:57:A:C6	59:DF:25:MET:CG	2.79	0.65
44:DW:43:LYS:HD2	44:DW:79:ILE:HD11	1.77	0.65
5:AE:110:MET:O	5:AE:114:LEU:HB2	1.96	0.65
38:DQ:40:LYS:CD	38:DQ:44:TYR:HE2	2.06	0.65
10:CJ:5:ARG:HG2	10:CJ:79:PRO:HG3	1.78	0.65
41:DT:19:LYS:HE2	41:DT:23:ALA:HB3	1.79	0.65
4:AD:106:PHE:CG	4:AD:144:ILE:HD11	2.32	0.65
53:CA:1299:A:O2'	53:CA:1300:G:H4'	1.95	0.65
57:DA:2408:U:O2'	57:DA:2409:G:C8	2.43	0.65
53:CA:1525:G:OP1	21:CU:37:TYR:HD1	1.80	0.65
21:CU:37:TYR:O	21:CU:38:GLU:HG2	1.96	0.65
1:AA:596:A:N6	1:AA:645:G:C6	2.65	0.65
31:DJ:74:TYR:CE2	31:DJ:103:ILE:HD11	2.31	0.65
1:AA:269:C:H2'	1:AA:270:A:C8	2.32	0.65
22:BA:1248:G:OP2	26:BE:44:ARG:NH1	2.29	0.65
57:DA:1268:A:H2'	57:DA:1269:A:C8	2.32	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2379:G:H2'	57:DA:2380:C:C6	2.31	0.65
17:CQ:75:VAL:O	17:CQ:76:ARG:HB3	1.97	0.65
57:DA:2426:A:H3'	57:DA:2427:C:C5'	2.25	0.65
22:BA:2207:C:H2'	22:BA:2208:C:C6	2.31	0.65
22:BA:2654:A:H4'	22:BA:2655:G:OP1	1.96	0.65
26:DE:47:LYS:HB3	26:DE:51:GLU:HB2	1.77	0.65
22:BA:1392:A:H61	41:BT:18:GLU:CD	1.99	0.65
57:DA:275:C:H2'	57:DA:276:U:O4'	1.97	0.65
36:DO:11:ALA:HB2	36:DO:96:GLY:N	2.11	0.65
3:CC:118:SER:O	3:CC:122:GLN:HG2	1.97	0.65
38:BQ:63:ARG:HH12	38:BQ:96:ASP:CB	2.10	0.65
37:BP:57:ALA:HB1	37:BP:73:PHE:O	1.97	0.65
44:BW:45:HIS:N	44:BW:45:HIS:ND1	2.43	0.65
57:DA:2756:U:H4'	57:DA:2757:A:O5'	1.97	0.65
1:AA:408:A:P	4:AD:109:THR:HG21	2.37	0.65
57:DA:1255:U:O2'	57:DA:1256:G:OP1	2.15	0.65
34:DM:27:SER:H	34:DM:66:ARG:HH22	1.38	0.65
57:DA:1613:G:C6	57:DA:1619:G:O6	2.50	0.65
24:BC:16:VAL:N	24:BC:203:VAL:HG12	2.09	0.65
46:BY:47:ARG:HH21	46:BY:47:ARG:CG	2.08	0.65
22:BA:1416:G:O2'	22:BA:1417:C:H6	1.78	0.65
1:AA:896:C:H2'	1:AA:897:C:H6	1.62	0.65
15:AO:18:ALA:O	15:AO:19:ASN:HB2	1.97	0.65
5:AE:133:ILE:H	5:AE:133:ILE:HD12	1.61	0.65
22:BA:2188:U:H2'	22:BA:2189:U:H6	1.60	0.65
4:CD:187:ARG:C	4:CD:189:ASP:H	2.00	0.65
17:AQ:22:VAL:HG21	17:AQ:60:ILE:HD11	1.79	0.65
22:BA:1059:G:H5''	22:BA:1060:U:H3'	1.79	0.65
57:DA:532:A:H4'	57:DA:533:G:C8	2.32	0.65
26:DE:60:TRP:CZ2	26:DE:71:GLY:HA2	2.32	0.65
57:DA:312:G:H5'	57:DA:331:C:O2'	1.96	0.65
5:CE:131:ASN:HD22	5:CE:132:PRO:CD	2.09	0.65
22:BA:932:U:C4'	22:BA:933:A:H5''	2.24	0.65
11:AK:22:ILE:HG22	11:AK:31:VAL:HG13	1.77	0.65
3:CC:119:ILE:O	3:CC:123:LEU:HB2	1.97	0.65
22:BA:2752:C:H2'	22:BA:2753:A:C8	2.32	0.65
22:BA:638:G:H2'	22:BA:639:U:C6	2.32	0.65
57:DA:164:C:O2'	57:DA:165:A:H5'	1.97	0.65
11:AK:60:PHE:O	11:AK:63:GLN:HB3	1.96	0.65
20:AT:6:ALA:HB1	20:AT:9:ARG:HB2	1.78	0.65
29:DH:54:LEU:HA	29:DH:57:LYS:CG	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:471:U:H2'	53:CA:472:U:C6	2.30	0.65
22:BA:1266:G:H5''	40:BS:15:GLN:HE22	1.62	0.65
31:BJ:44:TYR:HD1	31:BJ:44:TYR:O	1.79	0.65
38:BQ:91:ARG:CZ	39:BR:11:GLN:H	2.08	0.65
57:DA:2212:A:C8	57:DA:2214:C:N4	2.65	0.65
57:DA:246:C:H2'	57:DA:247:G:H5'	1.79	0.65
9:CI:19:PHE:O	9:CI:63:TYR:HB3	1.96	0.65
53:CA:519:C:O2'	53:CA:520:A:C5'	2.44	0.65
11:CK:27:ASN:ND2	11:CK:27:ASN:H	1.94	0.65
57:DA:2408:U:C2	57:DA:2409:G:N7	2.65	0.65
25:BD:97:SER:HB3	25:BD:99:GLU:OE1	1.96	0.65
49:B1:8:ILE:HG22	49:B1:9:LYS:N	2.10	0.65
22:BA:1936:A:C2	22:BA:1943:U:C5	2.84	0.65
53:CA:1024:G:H2'	53:CA:1025:U:O4'	1.96	0.65
8:CH:76:ARG:HD3	8:CH:77:VAL:H	1.62	0.65
1:AA:210:C:H4'	1:AA:211:G:N2	2.12	0.65
53:CA:1064:G:O2'	53:CA:1190:G:N2	2.28	0.65
48:B0:39:ARG:HB2	48:B0:39:ARG:HH11	1.62	0.65
57:DA:1252:G:H5''	63:DA:3286:HOH:O	1.97	0.65
27:BF:7:TYR:O	27:BF:12:VAL:HG12	1.96	0.65
41:BT:64:LYS:HA	41:BT:79:ASP:OD1	1.97	0.65
22:BA:675:A:OP1	26:BE:58:LYS:HE2	1.97	0.65
57:DA:251:A:H4'	33:DL:47:ARG:NH2	2.11	0.65
59:DF:33:ILE:HB	59:DF:90:LEU:HB2	1.79	0.65
57:DA:1439:A:H1'	57:DA:1553:A:N6	2.12	0.65
6:CF:43:GLY:HA2	6:CF:58:HIS:CE1	2.32	0.65
1:AA:511:C:HO2'	1:AA:512:U:H5''	1.60	0.65
32:DK:80:ASP:HB2	37:DP:67:GLU:OE1	1.97	0.65
32:BK:2:ILE:HG21	32:BK:39:ILE:HD12	1.79	0.65
22:BA:2726:A:O2'	22:BA:2727:A:H5'	1.95	0.65
22:BA:684:G:OP1	50:B2:16:HIS:CD2	2.48	0.65
22:BA:2507:C:O2	22:BA:2507:C:H2'	1.97	0.65
57:DA:7:G:H2'	57:DA:8:C:O4'	1.97	0.65
1:AA:82:G:N2	1:AA:84:U:N3	2.44	0.65
40:BS:24:ILE:HG23	40:BS:71:VAL:HG11	1.78	0.65
58:DB:81:G:C5	58:DB:82:U:C5	2.85	0.65
22:BA:2663:G:H2'	22:BA:2664:G:H8	1.61	0.65
22:BA:540:C:O2'	22:BA:541:A:H5'	1.97	0.65
22:BA:2703:C:H2'	22:BA:2704:C:H6	1.62	0.65
41:DT:20:ALA:HB1	41:DT:31:VAL:HG21	1.77	0.65
41:DT:87:LEU:HD23	41:DT:88:LYS:N	2.12	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:99:GLU:CG	25:BD:100:LEU:H	2.09	0.65
57:DA:859:G:N2	57:DA:916:G:H2'	2.11	0.65
1:AA:1162:C:H2'	1:AA:1163:A:C8	2.31	0.65
56:CP:35:ARG:HH12	56:CP:38:PHE:HB3	1.61	0.65
22:BA:2485:G:H5''	34:BM:45:GLN:NE2	2.12	0.65
1:AA:701:U:O2'	1:AA:702:A:OP2	2.15	0.65
46:DY:4:LYS:H	46:DY:4:LYS:HD3	1.62	0.65
10:AJ:14:ASP:CB	10:AJ:17:LEU:HB3	2.27	0.65
40:DS:52:GLU:O	40:DS:55:ILE:HB	1.97	0.65
18:AR:19:GLU:HG3	18:AR:54:LEU:HD22	1.79	0.65
57:DA:1521:G:C6	57:DA:1522:A:N6	2.65	0.65
4:AD:31:CYS:O	4:AD:32:LYS:HB2	1.95	0.65
40:BS:51:LEU:O	40:BS:55:ILE:HG13	1.97	0.65
22:BA:733:G:C8	22:BA:761:A:N6	2.65	0.65
3:CC:117:ASP:HA	3:CC:120:THR:HB	1.79	0.65
53:CA:748:G:H2'	53:CA:749:A:C8	2.32	0.65
37:DP:86:LYS:HA	37:DP:86:LYS:HZ2	1.61	0.65
57:DA:2298:A:H2'	57:DA:2299:U:C6	2.32	0.64
38:BQ:65:ASN:ND2	38:BQ:69:ARG:NH2	2.42	0.64
42:DU:81:ARG:HD2	42:DU:81:ARG:H	1.60	0.64
57:DA:1742:U:H2'	57:DA:1743:G:C8	2.33	0.64
5:AE:83:PRO:HB3	5:AE:96:GLN:HE21	1.62	0.64
57:DA:401:A:H2'	57:DA:402:A:C8	2.32	0.64
32:DK:61:VAL:HG13	32:DK:87:LEU:HD21	1.79	0.64
28:DG:83:THR:C	28:DG:84:LYS:HD3	2.17	0.64
41:DT:67:VAL:HB	41:DT:76:ARG:HG3	1.79	0.64
53:CA:160:A:H2'	53:CA:161:A:O4'	1.97	0.64
34:BM:43:ALA:O	34:BM:46:ILE:HG13	1.97	0.64
46:BY:17:GLU:HB2	46:BY:53:VAL:HG11	1.78	0.64
31:BJ:55:ILE:HD11	31:BJ:57:LEU:HD22	1.79	0.64
22:BA:1671:U:O2	22:BA:1673:G:C8	2.49	0.64
11:AK:42:GLY:HA3	11:AK:73:VAL:CG1	2.27	0.64
57:DA:2264:C:C2	57:DA:2277:G:N2	2.65	0.64
37:BP:63:ILE:HA	37:BP:68:GLY:HA2	1.78	0.64
22:BA:1186:G:OP1	63:BA:3581:HOH:O	2.15	0.64
22:BA:1641:A:H5''	22:BA:1642:G:OP2	1.96	0.64
57:DA:1754:A:OP1	37:DP:93:LYS:HE3	1.97	0.64
24:BC:29:PHE:CE2	24:BC:31:PRO:HG2	2.32	0.64
22:BA:1945:G:H2'	22:BA:1946:U:H6	1.61	0.64
33:BL:47:ARG:HG3	33:BL:50:PHE:HB2	1.79	0.64
22:BA:1026:G:O2'	22:BA:1027:A:H5'	1.97	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1843:C:O2'	24:DC:253:GLY:HA3	1.97	0.64
44:BW:44:PHE:O	44:BW:78:PHE:HA	1.97	0.64
29:BH:78:VAL:HG11	29:BH:145:ASN:HB3	1.78	0.64
53:CA:579:A:H2'	53:CA:580:C:C6	2.32	0.64
18:AR:22:TYR:CZ	18:AR:23:LYS:HE3	2.32	0.64
2:CB:66:ILE:H	2:CB:88:GLN:HB3	1.62	0.64
33:DL:96:LYS:HD3	33:DL:103:ILE:HA	1.79	0.64
31:BJ:38:GLY:O	31:BJ:43:GLU:HB2	1.97	0.64
28:BG:86:LEU:HD11	28:BG:132:LEU:HD21	1.78	0.64
44:BW:17:ALA:O	44:BW:18:LYS:HB3	1.97	0.64
58:DB:55:U:H1'	59:DF:25:MET:CE	2.27	0.64
45:BX:34:SER:HA	45:BX:49:ARG:HA	1.79	0.64
57:DA:607:U:H5	57:DA:619:G:C4	2.16	0.64
57:DA:184:C:H2'	57:DA:185:G:H8	1.60	0.64
53:CA:1183:U:C3'	53:CA:1184:G:H5''	2.24	0.64
57:DA:589:U:HO2'	57:DA:590:A:H5'	1.62	0.64
57:DA:1616:A:H8	57:DA:1616:A:OP1	1.79	0.64
4:AD:29:THR:C	4:AD:30:LYS:HD3	2.16	0.64
40:DS:9:HIS:H	40:DS:102:HIS:CE1	2.16	0.64
32:DK:87:LEU:HD12	32:DK:92:GLU:HA	1.78	0.64
28:BG:112:VAL:HG23	28:BG:113:ASP:N	2.12	0.64
57:DA:822:G:H5''	63:DA:3357:HOH:O	1.96	0.64
54:CG:2:ARG:HG2	54:CG:3:ARG:N	2.11	0.64
36:BO:31:THR:CG2	36:BO:34:HIS:H	2.09	0.64
21:AU:39:LYS:N	21:AU:40:PRO:HD2	2.12	0.64
22:BA:1654:A:H1'	25:BD:118:PHE:CD1	2.31	0.64
1:AA:183:C:O2'	1:AA:184:G:H5'	1.97	0.64
2:CB:59:ILE:HA	2:CB:62:ARG:HD3	1.78	0.64
22:BA:303:G:H2'	22:BA:304:U:H6	1.62	0.64
3:AC:21:TRP:CG	3:AC:58:ARG:HG2	2.32	0.64
2:AB:13:VAL:CG2	2:AB:207:ARG:HH22	2.11	0.64
35:BN:73:ASN:HD22	35:BN:76:VAL:HG11	1.62	0.64
53:CA:369:G:OP2	53:CA:388:G:N2	2.29	0.64
2:AB:119:GLN:HA	2:AB:122:ASP:HB2	1.80	0.64
6:CF:90:MET:HE1	18:CR:60:ARG:HD3	1.79	0.64
47:BZ:9:THR:HG22	47:BZ:10:ARG:N	2.12	0.64
22:BA:2722:G:H2'	22:BA:2723:C:C6	2.32	0.64
22:BA:228:C:H4'	22:BA:229:C:H5''	1.78	0.64
57:DA:75:G:H4'	46:DY:48:ARG:NH2	2.12	0.64
33:BL:101:ILE:CG2	33:BL:102:GLY:N	2.60	0.64
34:BM:35:ALA:O	34:BM:36:VAL:CB	2.43	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1387:A:C5'	57:DA:1469:A:H1'	2.27	0.64
41:DT:29:THR:HB	41:DT:87:LEU:N	2.10	0.64
53:CA:663:A:O2'	53:CA:664:G:H5'	1.98	0.64
9:CI:6:TYR:HE2	9:CI:17:ARG:HA	1.62	0.64
18:CR:72:ARG:H	18:CR:72:ARG:NE	1.92	0.64
50:D2:22:MET:HG2	50:D2:22:MET:O	1.97	0.64
57:DA:2285:C:OP2	49:D1:5:ARG:HD3	1.97	0.64
25:DD:122:VAL:HA	25:DD:127:PHE:H	1.62	0.64
57:DA:1965:C:H3'	57:DA:1966:A:H5''	1.78	0.64
1:AA:61:G:O2'	1:AA:62:U:H5'	1.98	0.64
2:CB:56:LEU:HD22	2:CB:59:ILE:HD11	1.79	0.64
57:DA:1262:A:H2	48:D0:6:LYS:HD2	1.63	0.64
57:DA:2653:U:C4	57:DA:2654:A:C6	2.84	0.64
57:DA:391:A:O2'	57:DA:392:U:H5'	1.98	0.64
2:AB:71:THR:HG22	2:AB:72:LYS:H	1.61	0.64
22:BA:988:A:P	47:BZ:11:SER:HB3	2.37	0.64
58:DB:81:G:H2'	58:DB:82:U:H6	1.63	0.64
2:AB:119:GLN:C	2:AB:119:GLN:HE21	2.01	0.64
22:BA:646:U:H3'	22:BA:647:G:H5''	1.79	0.64
31:DJ:106:LYS:HB2	31:DJ:119:PHE:HE2	1.63	0.64
26:DE:110:SER:O	26:DE:113:VAL:HG12	1.97	0.64
1:AA:64:G:H4'	1:AA:65:A:H5''	1.80	0.64
57:DA:354:A:H2'	57:DA:355:U:O4'	1.96	0.64
4:CD:195:ASN:HB3	4:CD:197:HIS:CD2	2.32	0.64
13:AM:113:LYS:H	13:AM:114:PRO:CD	2.10	0.64
22:BA:1794:A:H2'	22:BA:1795:C:C6	2.32	0.64
58:DB:50:A:C2	58:DB:51:G:H1'	2.32	0.64
57:DA:197:A:H62	57:DA:2430:A:C2'	2.01	0.64
53:CA:1218:C:H2'	53:CA:1219:A:H8	1.63	0.64
22:BA:2092:U:H4'	22:BA:2093:G:O5'	1.97	0.64
29:BH:29:PHE:O	29:BH:33:GLN:HB3	1.98	0.64
6:AF:3:HIS:N	6:AF:92:THR:HG23	2.07	0.64
22:BA:1071:G:H1'	22:BA:1089:A:N7	2.11	0.64
24:DC:8:THR:O	24:DC:9:SER:HB3	1.97	0.64
57:DA:249:C:C5'	57:DA:2394:C:O2'	2.44	0.64
57:DA:1275:A:O2'	57:DA:1276:A:C1'	2.45	0.64
57:DA:1399:C:H2'	57:DA:1400:U:C5	2.33	0.64
26:DE:112:LEU:HD11	26:DE:186:VAL:HG11	1.79	0.64
26:DE:130:LYS:CB	26:DE:133:LEU:HB3	2.27	0.64
57:DA:1905:C:O2'	57:DA:1929:G:H1'	1.97	0.64
22:BA:1963:U:H6	22:BA:1963:U:O5'	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:111:GLY:O	25:BD:169:ARG:O	2.16	0.64
28:BG:115:GLN:CD	28:BG:115:GLN:N	2.50	0.64
57:DA:27:G:N2	57:DA:512:G:H2'	2.12	0.64
42:DU:35:VAL:HG12	42:DU:36:GLU:H	1.63	0.64
22:BA:2485:G:C5'	34:BM:45:GLN:HE21	2.11	0.64
22:BA:39:G:H2'	22:BA:40:U:C6	2.32	0.64
57:DA:810:U:O4	33:DL:30:THR:HG22	1.96	0.64
1:AA:920:U:H2'	1:AA:921:U:C6	2.32	0.64
54:CG:16:LYS:HE2	9:CI:45:MET:SD	2.38	0.64
38:DQ:27:ARG:HA	38:DQ:33:VAL:CG1	2.27	0.64
29:DH:132:PHE:CZ	29:DH:134:VAL:HB	2.33	0.64
1:AA:1127:G:O2'	1:AA:1128:C:H5'	1.97	0.64
26:DE:133:LEU:O	26:DE:137:LYS:HB2	1.98	0.64
22:BA:819:A:OP2	22:BA:1187:G:N2	2.27	0.64
57:DA:2408:U:O2'	57:DA:2409:G:O5'	2.14	0.64
1:AA:274:A:O2'	1:AA:275:G:H8	1.79	0.64
24:DC:70:LYS:HD3	24:DC:101:ARG:HH12	1.62	0.64
22:BA:2264:C:H41	44:BW:11:ASN:ND2	1.95	0.64
54:CG:128:GLU:HG3	54:CG:130:LYS:H	1.61	0.64
1:AA:1094:G:O2'	1:AA:1095:U:OP2	2.15	0.64
57:DA:720:U:H2'	57:DA:721:A:C8	2.33	0.64
22:BA:1378:A:O2'	22:BA:1379:U:H3'	1.96	0.64
47:DZ:18:LYS:O	47:DZ:22:THR:HG23	1.98	0.64
21:CU:15:LEU:HD12	21:CU:15:LEU:O	1.96	0.64
25:DD:36:GLN:HG3	25:DD:38:LYS:HZ1	1.62	0.64
45:BX:30:PRO:O	45:BX:32:LEU:HD12	1.97	0.64
33:BL:93:ASN:O	33:BL:95:LEU:N	2.30	0.64
53:CA:1298:U:C5	54:CG:113:LYS:HA	2.32	0.64
32:BK:116:ILE:HD12	32:BK:117:SER:N	2.13	0.64
24:BC:108:GLY:O	24:BC:109:LEU:HD22	1.98	0.64
3:CC:80:GLY:O	3:CC:83:VAL:HG22	1.97	0.64
26:BE:23:PHE:CD1	26:BE:111:GLU:HG3	2.32	0.64
22:BA:137:U:H5'	22:BA:140:C:C5	2.31	0.64
57:DA:2615:U:C2	48:D0:3:GLN:HA	2.33	0.64
57:DA:2825:G:H3'	57:DA:2826:A:H8	1.62	0.64
40:DS:24:ILE:HG22	40:DS:35:ILE:HD11	1.80	0.64
16:AP:59:HIS:HE1	16:AP:63:GLN:HE22	1.45	0.64
22:BA:1556:C:O2'	22:BA:1557:C:H5'	1.97	0.64
22:BA:1469:A:H2'	22:BA:1470:A:C8	2.33	0.64
57:DA:1901:A:O2'	57:DA:1902:C:H5'	1.98	0.64
23:BB:24:G:N7	23:BB:56:G:H2'	2.13	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2267:A:N3	22:BA:2267:A:H2'	2.13	0.64
1:AA:1433:A:OP2	63:AA:1837:HOH:O	2.15	0.64
25:DD:94:GLN:HG2	25:DD:94:GLN:O	1.98	0.64
28:DG:164:ALA:O	28:DG:165:ASP:HB2	1.96	0.64
28:BG:86:LEU:N	28:BG:86:LEU:HD12	2.12	0.64
44:BW:18:LYS:HG3	44:BW:19:ARG:N	2.13	0.64
17:AQ:12:VAL:HG13	17:AQ:13:SER:H	1.62	0.64
53:CA:1160:G:C6	53:CA:1181:G:O6	2.50	0.64
57:DA:2815:C:H2'	57:DA:2816:G:H8	1.62	0.64
58:DB:5:U:H2'	58:DB:6:G:H8	1.59	0.64
36:DO:30:ARG:HH12	36:DO:102:ARG:HB2	1.62	0.64
53:CA:413:G:N2	53:CA:428:G:O2'	2.31	0.64
22:BA:1510:G:H2'	22:BA:1511:G:H8	1.62	0.64
53:CA:1170:A:H2'	53:CA:1171:A:O4'	1.97	0.64
57:DA:176:A:H3'	57:DA:177:G:N2	2.13	0.64
53:CA:1326:U:H2'	53:CA:1327:C:C6	2.33	0.64
22:BA:28:A:C2	22:BA:513:A:C8	2.85	0.64
57:DA:2808:G:HO2'	57:DA:2809:A:H8	1.45	0.64
22:BA:1842:G:H2'	22:BA:1843:C:C6	2.32	0.64
1:AA:946:A:H2'	1:AA:947:G:C8	2.31	0.64
44:DW:20:LEU:HD11	44:DW:35:ILE:HG13	1.78	0.64
5:AE:87:VAL:HG12	5:AE:92:ARG:HA	1.79	0.64
11:AK:19:VAL:HG22	11:AK:82:GLU:HG2	1.79	0.64
57:DA:729:G:C6	24:DC:206:LYS:HB2	2.33	0.64
58:DB:17:C:O2'	58:DB:18:G:H8	1.81	0.64
53:CA:429:U:H1'	53:CA:430:A:H5''	1.80	0.64
25:DD:149:ASN:O	25:DD:152:PRO:HD2	1.97	0.64
32:DK:21:CYS:HA	32:DK:41:ILE:HD12	1.80	0.64
25:DD:107:VAL:CG1	25:DD:109:VAL:HG23	2.28	0.64
22:BA:568:U:OP1	33:BL:36:LYS:HE3	1.97	0.64
57:DA:481:G:O2'	57:DA:482:A:OP2	2.16	0.64
4:CD:104:MET:SD	4:CD:142:VAL:HG13	2.38	0.64
46:DY:1:MET:H3	46:DY:1:MET:HE2	1.63	0.64
53:CA:97:G:C6	53:CA:98:A:H1'	2.33	0.64
43:BV:42:LEU:HD13	43:BV:47:VAL:HG21	1.79	0.64
57:DA:832:U:OP1	33:DL:39:LYS:N	2.29	0.64
57:DA:2683:C:H2'	57:DA:2684:U:H6	1.61	0.64
59:DF:103:ILE:HA	59:DF:107:VAL:HG21	1.78	0.64
18:CR:19:GLU:CD	18:CR:20:ILE:H	2.01	0.64
37:BP:104:GLY:O	37:BP:106:ALA:N	2.31	0.64
24:DC:224:MET:SD	24:DC:229:HIS:HB2	2.37	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:33:SER:OG	48:B0:35:GLU:HG3	1.97	0.64
53:CA:888:G:O3'	53:CA:1488:G:H4'	1.97	0.64
22:BA:996:A:O2'	22:BA:997:G:H5'	1.98	0.64
37:BP:50:ARG:CD	37:BP:51:ASN:N	2.61	0.64
53:CA:268:U:H2'	53:CA:269:C:H6	1.62	0.64
22:BA:1078:U:H4'	22:BA:1079:C:H6	1.63	0.64
57:DA:118:A:OP2	57:DA:119:A:H3'	1.98	0.64
57:DA:128:C:H2'	57:DA:129:C:C6	2.33	0.64
1:AA:922:G:H4'	5:AE:24:VAL:HA	1.80	0.64
22:BA:656:G:H2'	22:BA:657:U:C6	2.32	0.64
35:BN:72:ASP:OD1	35:BN:75:ILE:HG23	1.97	0.64
22:BA:78:U:H2'	22:BA:79:C:H6	1.62	0.64
57:DA:29:U:H5	63:DA:3207:HOH:O	1.78	0.64
29:BH:130:VAL:HG23	29:BH:131:SER:H	1.63	0.64
33:DL:100:ILE:O	33:DL:101:ILE:HB	1.96	0.64
37:BP:112:ARG:C	37:BP:113:LEU:HD23	2.18	0.64
1:AA:830:G:H2'	1:AA:831:A:H8	1.63	0.64
6:AF:2:ARG:HH21	6:AF:68:GLN:NE2	1.95	0.64
38:BQ:94:LEU:O	38:BQ:96:ASP:N	2.31	0.64
44:DW:37:VAL:CG1	44:DW:55:ASP:HB2	2.22	0.64
4:CD:191:SER:O	4:CD:192:ALA:HB2	1.98	0.64
57:DA:590:A:H2'	57:DA:591:U:H6	1.64	0.64
53:CA:1154:G:H2'	53:CA:1155:A:H8	1.62	0.64
23:BB:90:C:C6	23:BB:90:C:H5''	2.23	0.64
55:CM:13:HIS:HB3	55:CM:16:ILE:HD13	1.80	0.64
57:DA:1810:A:H2'	57:DA:1811:G:O4'	1.97	0.64
45:DX:11:PRO:CB	45:DX:27:ARG:HH21	2.11	0.64
25:DD:149:ASN:O	25:DD:151:THR:N	2.31	0.64
57:DA:1489:C:H4'	57:DA:1490:A:OP1	1.97	0.64
34:DM:42:THR:HG22	34:DM:44:ARG:N	2.12	0.64
42:DU:26:ASN:O	42:DU:34:ILE:HB	1.98	0.64
22:BA:357:C:H2'	22:BA:358:U:H6	1.60	0.64
5:CE:155:LYS:HB3	8:CH:70:VAL:HG23	1.80	0.64
1:AA:690:G:H2'	1:AA:691:G:C8	2.33	0.64
15:AO:80:LEU:HD12	15:AO:80:LEU:O	1.96	0.64
57:DA:1783:A:H5'	57:DA:2608:G:H4'	1.79	0.63
35:DN:19:ALA:HA	35:DN:22:ARG:HB3	1.80	0.63
10:CJ:44:THR:HG22	10:CJ:45:ARG:H	1.63	0.63
57:DA:1081:U:H4'	30:DI:123:ALA:HA	1.80	0.63
57:DA:1071:G:N7	57:DA:1089:A:C5	2.66	0.63
59:DF:147:ARG:HG2	59:DF:149:ARG:HH12	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:652:U:O4	53:CA:752:G:H2'	1.99	0.63
1:AA:197:A:O2'	1:AA:198:G:C8	2.50	0.63
59:DF:47:LYS:HA	59:DF:50:ASP:HB3	1.78	0.63
22:BA:2198:A:HO2'	22:BA:2224:G:H22	1.44	0.63
22:BA:2198:A:OP2	22:BA:2198:A:C3'	2.46	0.63
22:BA:2636:C:H2'	22:BA:2637:U:H6	1.60	0.63
6:AF:36:ILE:HG22	6:AF:64:VAL:HG22	1.80	0.63
46:DY:19:LEU:HA	46:DY:22:LEU:HB2	1.79	0.63
57:DA:2508:G:C2	57:DA:2582:G:C6	2.86	0.63
57:DA:2597:G:OP1	24:DC:240:GLY:HA3	1.98	0.63
48:B0:39:ARG:HG2	48:B0:40:HIS:ND1	2.13	0.63
37:DP:86:LYS:HA	37:DP:86:LYS:NZ	2.13	0.63
33:DL:29:LYS:HG2	33:DL:30:THR:HG23	1.80	0.63
5:CE:107:GLY:O	5:CE:111:ARG:HB2	1.98	0.63
22:BA:2291:U:H2'	22:BA:2292:U:C6	2.32	0.63
22:BA:708:G:N2	22:BA:724:U:H1'	2.13	0.63
28:BG:23:ILE:HD12	28:BG:23:ILE:H	1.63	0.63
13:AM:18:LEU:O	13:AM:24:VAL:HG21	1.98	0.63
40:BS:43:ALA:HA	40:BS:46:LEU:HD12	1.78	0.63
24:BC:181:ARG:NH2	24:BC:265:PHE:HB3	2.13	0.63
6:CF:80:PHE:CE2	24:DC:123:ILE:HG21	2.32	0.63
42:BU:38:ILE:HG22	42:BU:39:ASN:N	2.13	0.63
6:AF:52:ASN:O	6:AF:53:LYS:HB3	1.98	0.63
53:CA:484:G:H4'	53:CA:485:U:O5'	1.95	0.63
22:BA:1009:A:O5'	22:BA:1009:A:H8	1.81	0.63
22:BA:876:C:H2'	22:BA:877:A:O4'	1.98	0.63
37:BP:50:ARG:HB2	37:BP:56:SER:HA	1.81	0.63
41:DT:28:ASN:HB2	41:DT:87:LEU:HB3	1.80	0.63
58:DB:83:G:OP1	47:DZ:16:LEU:HD21	1.98	0.63
5:AE:153:ALA:HA	5:AE:156:ARG:CB	2.28	0.63
57:DA:686:U:C6	57:DA:788:A:N1	2.67	0.63
1:AA:413:G:N2	1:AA:428:G:O2'	2.31	0.63
53:CA:219:U:H2'	53:CA:220:G:H8	1.64	0.63
57:DA:2753:A:H2'	57:DA:2754:U:C6	2.33	0.63
57:DA:1178:C:H2'	57:DA:1179:G:O4'	1.99	0.63
57:DA:477:A:C2'	57:DA:478:A:H8	2.11	0.63
40:BS:4:ILE:HB	40:BS:106:VAL:HA	1.79	0.63
22:BA:532:A:N7	22:BA:2021:C:H2'	2.13	0.63
3:CC:150:VAL:HG12	3:CC:199:VAL:HG12	1.79	0.63
57:DA:2458:G:O2'	57:DA:2460:U:C5	2.51	0.63
1:AA:98:A:H2'	1:AA:99:C:H6	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:665:U:O2'	22:BA:666:A:H5'	1.98	0.63
1:AA:1038:C:H2'	1:AA:1039:G:C8	2.33	0.63
32:DK:28:SER:O	32:DK:29:HIS:CB	2.45	0.63
44:BW:40:ARG:H	44:BW:56:HIS:HB3	1.63	0.63
53:CA:1067:A:H4'	53:CA:1068:G:O5'	1.96	0.63
26:DE:105:LEU:HD12	26:DE:200:LEU:HD11	1.80	0.63
22:BA:2449:U:H4'	22:BA:2450:A:OP1	1.97	0.63
57:DA:1328:A:H2'	57:DA:1330:C:N4	2.13	0.63
22:BA:1187:G:H5''	39:BR:83:TYR:CE2	2.33	0.63
8:CH:78:SER:HB2	8:CH:124:ILE:O	1.99	0.63
53:CA:84:U:N3	53:CA:87:C:H1'	2.13	0.63
22:BA:1057:A:N7	22:BA:1086:A:H2'	2.13	0.63
57:DA:49:A:H4'	57:DA:50:U:O5'	1.97	0.63
59:DF:147:ARG:O	59:DF:148:VAL:HG22	1.99	0.63
41:DT:4:GLU:HG3	41:DT:6:ARG:NH2	2.13	0.63
1:AA:1143:G:H2'	1:AA:1144:G:H8	1.64	0.63
25:BD:38:LYS:O	25:BD:46:ARG:HA	1.99	0.63
57:DA:1417:C:O2'	57:DA:1418:G:H5'	1.99	0.63
40:BS:18:ARG:O	40:BS:19:LEU:HB2	1.96	0.63
22:BA:580:U:H2'	22:BA:581:C:H6	1.63	0.63
57:DA:477:A:H2'	57:DA:478:A:C8	2.33	0.63
8:CH:85:TYR:CD2	8:CH:123:GLU:HB2	2.33	0.63
16:AP:79:ASN:O	16:AP:80:LYS:HB2	1.98	0.63
22:BA:1696:G:H5''	22:BA:1696:G:H8	1.64	0.63
3:AC:10:ARG:O	3:AC:13:ILE:O	2.16	0.63
53:CA:529:G:O6	12:CL:45:ASN:HA	1.99	0.63
7:AG:146:ALA:C	7:AG:148:LYS:H	2.00	0.63
57:DA:999:U:O2'	57:DA:1000:A:H5'	1.98	0.63
57:DA:1349:C:H2'	57:DA:1350:C:C5	2.32	0.63
49:B1:3:GLY:O	49:B1:4:ILE:HG12	1.98	0.63
23:BB:112:G:H2'	23:BB:113:C:C6	2.33	0.63
5:AE:113:VAL:HG21	5:AE:140:ILE:HD12	1.80	0.63
35:BN:58:ASP:O	35:BN:59:SER:HB3	1.96	0.63
57:DA:185:G:C6	57:DA:212:G:C2	2.86	0.63
53:CA:82:G:C2'	53:CA:83:C:H4'	2.29	0.63
22:BA:1992:G:N2	22:BA:1996:C:O2'	2.32	0.63
57:DA:1555:G:O2'	57:DA:1556:C:H5'	1.98	0.63
57:DA:86:G:C2	57:DA:87:U:C4	2.86	0.63
20:AT:53:MET:O	20:AT:56:ILE:HG22	1.98	0.63
11:AK:87:GLY:H	11:AK:113:THR:HG22	1.63	0.63
53:CA:243:A:H4'	53:CA:244:U:H5'	1.80	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2714:G:H2'	57:DA:2715:C:C6	2.32	0.63
57:DA:1574:C:H2'	57:DA:1575:C:O4'	1.97	0.63
7:AG:61:PHE:HE1	7:AG:65:LEU:HD22	1.63	0.63
13:AM:19:THR:HA	13:AM:24:VAL:HG23	1.79	0.63
22:BA:1919:A:O2'	22:BA:1920:C:H5'	1.98	0.63
22:BA:1682:G:C8	22:BA:1757:A:C2	2.86	0.63
22:BA:1483:G:C2	22:BA:1484:U:C2	2.87	0.63
57:DA:1196:C:H1'	57:DA:1226:A:C4	2.33	0.63
57:DA:2006:C:H2'	57:DA:2007:U:C6	2.34	0.63
38:DQ:77:LYS:HE2	38:DQ:116:LEU:HD21	1.80	0.63
4:AD:88:ASN:HA	4:AD:91:ALA:HB3	1.79	0.63
31:DJ:117:ALA:HA	31:DJ:120:ARG:HD2	1.79	0.63
31:BJ:43:GLU:O	31:BJ:45:THR:CG2	2.47	0.63
37:BP:50:ARG:CG	37:BP:57:ALA:N	2.61	0.63
37:BP:50:ARG:O	37:BP:51:ASN:HB2	1.99	0.63
17:AQ:10:ARG:O	17:AQ:22:VAL:HG13	1.97	0.63
17:AQ:18:LYS:HA	17:AQ:47:ASP:CB	2.21	0.63
57:DA:1779:U:H5	57:DA:1784:A:N7	1.96	0.63
38:DQ:4:LYS:HE3	38:DQ:7:VAL:HG13	1.81	0.63
57:DA:666:A:H5''	33:DL:48:ARG:HG2	1.79	0.63
24:DC:144:GLU:HG3	24:DC:151:GLY:CA	2.28	0.63
22:BA:2742:G:OP1	52:B4:36:ARG:HD3	1.99	0.63
22:BA:2150:C:H2'	22:BA:2151:U:C6	2.33	0.63
22:BA:704:G:O2'	22:BA:726:G:N2	2.20	0.63
57:DA:1417:C:H4'	57:DA:1587:G:H21	1.64	0.63
1:AA:596:A:H2'	1:AA:597:G:C8	2.32	0.63
1:AA:1054:C:O2'	1:AA:1055:A:H5''	1.99	0.63
53:CA:1380:U:H4'	53:CA:1381:U:OP1	1.98	0.63
57:DA:69:C:H2'	57:DA:70:G:C8	2.34	0.63
22:BA:947:A:O2'	22:BA:984:A:H2	1.81	0.63
9:CI:118:ARG:HH21	9:CI:122:ARG:HE	1.47	0.63
22:BA:1738:G:HO2'	22:BA:1739:A:H8	1.47	0.63
6:CF:88:MET:HG2	6:CF:90:MET:SD	2.38	0.63
22:BA:1646:C:H5''	22:BA:1647:U:O5'	1.98	0.63
8:AH:74:ILE:HD13	8:AH:128:VAL:HG13	1.79	0.63
22:BA:1970:A:H4'	22:BA:1971:U:O5'	1.98	0.63
41:BT:26:LYS:O	41:BT:27:SER:HB2	1.99	0.63
17:AQ:37:ILE:H	17:AQ:37:ILE:HD12	1.63	0.63
57:DA:2069:G:N2	57:DA:2443:C:C2	2.66	0.63
57:DA:2093:G:C6	57:DA:2225:A:C2'	2.78	0.63
22:BA:994:C:H3'	38:BQ:53:LYS:HE2	1.81	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DJ:13:ARG:HG2	31:DJ:51:GLY:O	1.98	0.63
37:DP:109:ILE:O	37:DP:110:LYS:HG3	1.99	0.63
57:DA:225:C:H2'	57:DA:226:A:O4'	1.98	0.63
54:CG:9:ARG:HD3	54:CG:24:LYS:HZ1	1.64	0.63
57:DA:2345:G:H4'	57:DA:2346:A:C5'	2.27	0.63
51:B3:29:ARG:O	51:B3:30:HIS:HB2	1.98	0.63
1:AA:923:A:H2'	1:AA:924:C:H6	1.63	0.63
37:BP:59:THR:HG23	37:BP:72:VAL:HG13	1.81	0.63
22:BA:494:G:N2	40:BS:57:ASN:HD21	1.95	0.63
25:DD:184:ARG:NH2	37:DP:6:GLN:HE21	1.97	0.63
36:BO:68:LYS:O	36:BO:71:ALA:HB3	1.98	0.63
30:DI:104:GLN:HA	30:DI:107:GLU:CB	2.27	0.63
29:DH:27:ARG:HH21	29:DH:27:ARG:HB2	1.63	0.63
57:DA:491:G:O2'	57:DA:492:A:H5'	1.98	0.63
24:DC:31:PRO:O	24:DC:32:LEU:HD23	1.99	0.63
53:CA:1026:G:H1	53:CA:1036:A:N6	1.96	0.63
57:DA:156:A:H2'	57:DA:157:C:H6	1.63	0.63
12:AL:85:ARG:CZ	12:AL:87:LYS:HB3	2.28	0.63
39:DR:87:GLN:HG2	39:DR:88:GLY:N	2.13	0.63
4:CD:106:PHE:HD1	4:CD:158:LEU:HD21	1.62	0.63
25:DD:28:GLU:HA	25:DD:185:ASN:O	1.99	0.63
53:CA:1513:A:H2'	53:CA:1514:G:C8	2.34	0.63
4:CD:195:ASN:HB3	4:CD:197:HIS:NE2	2.14	0.63
5:CE:157:GLY:HA3	8:CH:63:LYS:HZ2	1.62	0.63
53:CA:154:U:H2'	53:CA:155:A:H5'	1.79	0.63
1:AA:1314:C:C5	19:AS:5:LYS:HD3	2.33	0.63
22:BA:2793:C:H2'	22:BA:2794:C:H6	1.63	0.63
53:CA:295:C:H2'	53:CA:296:U:H6	1.62	0.63
33:BL:23:ILE:HG12	39:BR:82:HIS:CE1	2.34	0.63
51:B3:53:ASP:HA	51:B3:56:LEU:HD23	1.80	0.63
45:BX:10:ARG:HB2	45:BX:11:PRO:CD	2.29	0.63
25:BD:107:VAL:O	25:BD:174:SER:O	2.16	0.63
57:DA:1607:C:H4'	57:DA:1608:A:C8	2.34	0.63
57:DA:226:A:C2	57:DA:230:G:O6	2.51	0.63
57:DA:2515:C:OP1	31:DJ:81:ILE:HG22	1.99	0.63
53:CA:754:C:H2'	53:CA:754:C:O2	1.98	0.63
57:DA:1814:G:N1	57:DA:1815:A:N6	2.46	0.63
31:DJ:73:VAL:HG23	31:DJ:74:TYR:H	1.62	0.63
31:DJ:74:TYR:OH	31:DJ:100:VAL:HG13	1.99	0.63
3:CC:134:LYS:HD3	3:CC:138:GLN:OE1	1.98	0.63
8:CH:1:SER:C	8:CH:3:GLN:H	2.00	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:13:G:O2'	23:BB:15:A:OP2	2.16	0.63
6:CF:59:TYR:HE2	18:CR:66:LEU:HD21	1.64	0.63
43:DV:75:GLN:HB2	43:DV:90:ASP:O	1.97	0.63
6:CF:90:MET:CE	18:CR:60:ARG:HD3	2.28	0.63
57:DA:2902:C:H2'	57:DA:2903:U:O4'	1.98	0.63
30:BI:71:LYS:HG2	30:BI:72:THR:H	1.63	0.63
22:BA:1813:G:N3	24:BC:49:THR:HG21	2.14	0.63
1:AA:785:G:C2'	1:AA:786:G:H5'	2.29	0.63
37:BP:19:PHE:O	37:BP:20:ARG:HB3	1.99	0.63
22:BA:1789:A:OP1	24:BC:220:ARG:HD3	1.97	0.63
26:BE:76:PRO:HA	26:BE:82:GLY:HA3	1.81	0.63
21:AU:8:ASN:N	21:AU:8:ASN:HD22	1.96	0.63
57:DA:764:A:N3	57:DA:781:A:C6	2.67	0.63
53:CA:1279:G:C5'	10:CJ:9:ARG:HH22	2.11	0.63
3:AC:156:LEU:HD13	3:AC:163:ARG:HB2	1.81	0.63
1:AA:1007:U:C2'	1:AA:1008:U:H5''	2.29	0.63
57:DA:64:A:O2'	41:DT:69:ARG:HG2	1.99	0.63
57:DA:1635:A:H2'	57:DA:1636:U:C6	2.34	0.63
22:BA:914:G:C8	22:BA:914:G:H5''	2.32	0.63
5:CE:39:GLY:HA2	5:CE:45:VAL:HA	1.80	0.63
57:DA:172:A:H2'	57:DA:173:A:H8	1.64	0.63
57:DA:2619:C:OP1	25:DD:157:LYS:HE2	1.98	0.63
29:BH:131:SER:HB2	29:BH:139:PHE:HD2	1.64	0.63
14:CN:33:VAL:HG22	14:CN:40:ARG:HH21	1.62	0.63
57:DA:2886:A:H62	48:D0:39:ARG:HD3	1.63	0.63
7:AG:3:ARG:HG3	7:AG:4:ARG:H	1.64	0.63
49:B1:47:ILE:H	49:B1:47:ILE:HD12	1.64	0.63
31:BJ:88:THR:HG22	31:BJ:91:GLU:HB2	1.81	0.63
22:BA:1947:C:C2	22:BA:1960:A:C2	2.87	0.63
27:BF:24:VAL:O	27:BF:27:VAL:HG12	1.98	0.63
15:AO:72:LYS:HA	15:AO:72:LYS:HE2	1.80	0.63
22:BA:2378:A:N7	22:BA:2379:G:H1'	2.14	0.63
57:DA:2746:U:H1'	28:DG:138:GLN:HE21	1.62	0.63
39:DR:4:VAL:HG22	39:DR:40:MET:HB3	1.80	0.63
57:DA:1207:C:O2'	57:DA:1208:C:H6	1.75	0.63
57:DA:1078:U:H4'	57:DA:1079:C:C5'	2.29	0.63
57:DA:1744:A:H3'	57:DA:1745:A:H8	1.63	0.63
4:AD:34:GLU:O	4:AD:37:PRO:HD3	1.99	0.63
21:AU:18:PHE:O	21:AU:21:SER:HB3	1.99	0.63
24:BC:106:PRO:HA	24:BC:141:HIS:CE1	2.34	0.63
57:DA:105:C:H2'	57:DA:106:C:C6	2.34	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:685:A:H5'	57:DA:686:U:OP1	1.99	0.63
34:DM:42:THR:CG2	34:DM:44:ARG:H	2.11	0.63
1:AA:502:A:H2'	1:AA:503:C:O4'	1.98	0.63
34:BM:66:ARG:HG3	34:BM:101:VAL:HG13	1.81	0.63
42:DU:43:LYS:HG2	42:DU:45:GLN:HG2	1.80	0.63
9:CI:118:ARG:HG3	9:CI:124:PRO:HG3	1.80	0.63
57:DA:370:G:N1	57:DA:424:G:C5	2.67	0.63
57:DA:1176:U:H2'	57:DA:1177:G:C8	2.34	0.63
53:CA:286:C:H2'	53:CA:287:U:O4'	1.98	0.63
43:BV:25:LYS:HD3	43:BV:43:ASP:HA	1.79	0.63
1:AA:697:U:O2	1:AA:798:U:H1'	1.98	0.63
20:AT:14:GLU:HA	20:AT:17:ARG:HB2	1.80	0.63
6:CF:27:ALA:O	6:CF:31:GLY:HA3	1.99	0.63
57:DA:2339:C:O2'	57:DA:2340:A:O4'	2.17	0.63
57:DA:2197:U:O2'	57:DA:2224:G:N1	2.30	0.62
22:BA:2051:A:OP2	22:BA:2051:A:H8	1.82	0.62
44:BW:9:THR:CG2	44:BW:10:ARG:HH11	2.11	0.62
53:CA:1014:A:H2	53:CA:1219:A:H1'	1.63	0.62
53:CA:1365:G:H2'	53:CA:1366:C:C6	2.34	0.62
9:CI:51:LEU:HG	9:CI:86:LEU:CD2	2.25	0.62
24:BC:16:VAL:N	24:BC:203:VAL:CG1	2.62	0.62
41:BT:38:ALA:HB1	41:BT:43:ILE:CG2	2.29	0.62
22:BA:509:C:H5''	22:BA:509:C:C6	2.24	0.62
22:BA:1735:A:C2	22:BA:1736:U:C2	2.87	0.62
50:D2:46:LYS:N	50:D2:46:LYS:HD2	2.14	0.62
26:BE:146:VAL:HG23	26:BE:167:VAL:HG23	1.81	0.62
57:DA:1264:A:H2'	57:DA:2014:A:N6	2.14	0.62
28:BG:61:TRP:O	28:BG:62:ALA:C	2.36	0.62
43:DV:55:GLU:O	43:DV:57:TYR:N	2.32	0.62
4:AD:169:TRP:CE3	4:AD:185:PRO:HB3	2.34	0.62
22:BA:1607:C:N4	22:BA:1622:G:N7	2.47	0.62
1:AA:872:A:C4	1:AA:874:G:N7	2.66	0.62
22:BA:1853:A:N1	22:BA:2087:G:H1'	2.14	0.62
23:BB:104:A:H2'	23:BB:105:G:O4'	1.98	0.62
33:BL:99:ASN:OD1	63:BL:301:HOH:O	2.16	0.62
57:DA:2225:A:H5'	57:DA:2226:C:H5'	1.80	0.62
17:CQ:13:SER:HB3	17:CQ:21:VAL:HB	1.81	0.62
22:BA:2092:U:O2'	22:BA:2093:G:P	2.57	0.62
1:AA:279:A:H5''	1:AA:281:G:O4'	1.99	0.62
57:DA:455:C:N3	57:DA:473:G:H5'	2.14	0.62
53:CA:515:G:N7	63:CA:1855:HOH:O	2.31	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:43:GLN:NE2	39:BR:77:PHE:HD1	1.96	0.62
3:AC:46:LEU:HB3	3:AC:49:ALA:HB3	1.80	0.62
35:DN:73:ASN:HA	35:DN:76:VAL:HG13	1.81	0.62
22:BA:2199:A:H5'	22:BA:2200:C:H5	1.64	0.62
57:DA:2712:C:C2	57:DA:2715:C:OP1	2.52	0.62
31:DJ:89:PHE:CE2	31:DJ:100:VAL:HG11	2.33	0.62
41:BT:73:ARG:CZ	41:BT:73:ARG:HB3	2.28	0.62
57:DA:1495:A:H2'	57:DA:1496:A:C8	2.34	0.62
31:BJ:124:VAL:HG23	31:BJ:125:TYR:H	1.64	0.62
31:BJ:54:ILE:HD12	31:BJ:54:ILE:C	2.19	0.62
35:BN:33:ILE:HD11	35:BN:118:ARG:NH2	2.14	0.62
1:AA:761:G:H2'	1:AA:762:U:C6	2.34	0.62
53:CA:1062:U:H2'	53:CA:1063:C:C6	2.34	0.62
1:AA:1247:U:O2'	1:AA:1248:A:H5'	1.99	0.62
22:BA:2146:C:H4'	22:BA:2147:A:O5'	1.98	0.62
28:DG:126:THR:HG22	28:DG:127:GLN:H	1.62	0.62
53:CA:438:U:H2'	53:CA:494:G:O6	1.98	0.62
53:CA:718:A:C5	11:CK:117:HIS:CD2	2.88	0.62
57:DA:2576:G:C8	57:DA:2580:U:O4	2.52	0.62
33:BL:81:ASP:O	33:BL:82:LEU:HB3	2.00	0.62
24:DC:38:LYS:HE2	24:DC:55:GLY:H	1.64	0.62
38:BQ:94:LEU:O	38:BQ:94:LEU:HD13	1.99	0.62
22:BA:924:G:H4'	44:BW:24:ARG:HH21	1.65	0.62
22:BA:2091:C:O2	45:BX:33:HIS:CE1	2.52	0.62
57:DA:1060:U:C4'	57:DA:1061:U:H2'	2.29	0.62
58:DB:44:G:H5''	59:DF:91:ARG:NE	2.15	0.62
53:CA:93:U:H2'	53:CA:95:C:C5	2.34	0.62
5:AE:153:ALA:CA	5:AE:156:ARG:HB2	2.30	0.62
53:CA:533:A:C2	53:CA:536:C:C5	2.87	0.62
57:DA:126:A:O5'	50:D2:19:ARG:HG3	1.99	0.62
1:AA:1398:A:H5''	1:AA:1398:A:C8	2.27	0.62
28:BG:72:ASN:O	28:BG:76:ILE:HG22	1.98	0.62
43:DV:9:ARG:HG2	43:DV:39:ALA:O	2.00	0.62
36:BO:31:THR:HG23	36:BO:33:ARG:H	1.61	0.62
1:AA:518:C:H2'	1:AA:530:G:C8	2.34	0.62
46:BY:17:GLU:HG3	46:BY:18:LEU:N	2.13	0.62
22:BA:1340:U:H3'	41:BT:61:LEU:HD22	1.82	0.62
43:BV:26:PHE:HD1	43:BV:27:PRO:O	1.83	0.62
22:BA:143:C:O2'	22:BA:144:A:H8	1.83	0.62
8:CH:63:LYS:O	8:CH:70:VAL:HG12	2.00	0.62
22:BA:1539:U:H2'	22:BA:1540:G:H8	1.64	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:48:GLY:HA3	5:CE:66:ALA:HB2	1.81	0.62
22:BA:2103:C:H2'	22:BA:2104:C:H5'	1.81	0.62
22:BA:2842:G:C2'	22:BA:2843:G:H5'	2.29	0.62
37:BP:77:SER:OG	37:BP:79:VAL:HG13	2.00	0.62
32:BK:8:LEU:HD23	32:BK:8:LEU:N	2.14	0.62
38:BQ:111:LYS:NZ	39:BR:48:LYS:HD3	2.14	0.62
22:BA:854:C:O2	22:BA:924:G:C2	2.52	0.62
53:CA:1322:C:H2'	53:CA:1322:C:O2	1.99	0.62
27:BF:134:GLN:HG2	27:BF:135:ILE:H	1.63	0.62
22:BA:763:G:O2'	22:BA:764:A:H3'	2.00	0.62
22:BA:1079:C:C4	22:BA:1088:A:H2	2.17	0.62
57:DA:726:G:OP2	57:DA:726:G:H8	1.83	0.62
58:DB:17:C:HO2'	58:DB:18:G:H8	1.47	0.62
52:B4:25:VAL:HG11	52:B4:35:GLN:HE21	1.65	0.62
31:DJ:44:TYR:O	31:DJ:45:THR:HB	1.98	0.62
57:DA:2303:G:H5'	59:DF:121:PHE:CE1	2.35	0.62
25:BD:98:VAL:O	25:BD:100:LEU:N	2.31	0.62
24:BC:109:LEU:HD23	24:BC:110:LYS:N	2.14	0.62
12:AL:23:LEU:CB	12:AL:58:ASN:HD22	2.13	0.62
57:DA:477:A:H2'	57:DA:478:A:H8	1.64	0.62
22:BA:1936:A:C2	22:BA:1943:U:H5	2.17	0.62
20:CT:34:VAL:HG21	20:CT:53:MET:HG2	1.81	0.62
40:BS:39:THR:HG22	40:BS:44:ALA:HB2	1.80	0.62
53:CA:1201:A:H1'	53:CA:1202:U:OP2	2.00	0.62
22:BA:1818:U:O2'	22:BA:1819:A:OP2	2.16	0.62
7:AG:4:ARG:HA	7:AG:4:ARG:HE	1.64	0.62
57:DA:1758:U:O4	57:DA:2695:U:H4'	2.00	0.62
22:BA:21:A:O2'	22:BA:22:C:H5'	2.00	0.62
9:CI:30:ASN:O	9:CI:32:ARG:HG2	1.99	0.62
22:BA:1376:C:O2'	22:BA:1377:G:H5'	1.98	0.62
1:AA:817:C:H4'	1:AA:818:G:OP1	1.97	0.62
40:DS:6:LYS:NZ	40:DS:104:THR:HG23	2.14	0.62
22:BA:2321:U:H6	22:BA:2321:U:H5''	1.64	0.62
53:CA:51:A:H4'	53:CA:52:C:H5'	1.81	0.62
1:AA:508:U:O2'	1:AA:509:A:C8	2.52	0.62
40:DS:17:VAL:HG11	40:DS:103:ILE:HG13	1.81	0.62
32:BK:112:PHE:O	32:BK:115:ILE:HG22	1.99	0.62
26:DE:73:ILE:O	26:DE:73:ILE:HG13	1.99	0.62
6:AF:42:TRP:HZ2	6:AF:61:LEU:HD22	1.64	0.62
26:DE:29:HIS:HA	26:DE:32:VAL:HG22	1.82	0.62
22:BA:2555:U:C5	22:BA:2556:C:C2	2.88	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:96:ILE:HG13	11:AK:97:ARG:N	2.14	0.62
39:BR:48:LYS:HD2	39:BR:48:LYS:H	1.65	0.62
10:CJ:52:LEU:HD21	10:CJ:59:LYS:HA	1.82	0.62
57:DA:1347:A:O2'	57:DA:1348:C:H5'	1.99	0.62
25:BD:106:LYS:HB3	25:BD:206:ALA:CB	2.26	0.62
1:AA:1021:A:C2'	1:AA:1022:A:H5''	2.26	0.62
53:CA:330:C:O2'	53:CA:331:G:C8	2.45	0.62
22:BA:2134:A:N6	22:BA:2157:G:C5	2.68	0.62
57:DA:627:A:O2'	57:DA:628:G:C8	2.50	0.62
57:DA:138:U:H2'	57:DA:140:C:H1'	1.82	0.62
12:AL:23:LEU:O	12:AL:25:ALA:N	2.32	0.62
37:DP:50:ARG:CB	37:DP:57:ALA:H	2.13	0.62
57:DA:64:A:OP1	41:DT:77:ARG:HG2	1.98	0.62
57:DA:27:G:H22	57:DA:512:G:H2'	1.65	0.62
25:DD:105:LYS:HA	25:DD:177:VAL:CG2	2.29	0.62
17:CQ:27:PHE:CD1	17:CQ:36:PHE:HB3	2.34	0.62
22:BA:1076:C:H2'	22:BA:1077:A:C8	2.33	0.62
28:BG:7:PRO:O	28:BG:8:VAL:HB	1.99	0.62
53:CA:1514:G:H2'	53:CA:1515:G:C8	2.34	0.62
22:BA:1821:A:H2'	22:BA:1822:C:C6	2.34	0.62
22:BA:269:C:H2'	22:BA:270:A:H5'	1.81	0.62
53:CA:1361:G:H2'	53:CA:1362:A:H5'	1.80	0.62
11:AK:13:LYS:O	11:AK:14:GLN:HB3	1.99	0.62
22:BA:491:G:H2'	22:BA:492:A:C8	2.34	0.62
53:CA:277:C:H2'	53:CA:278:G:H8	1.64	0.62
53:CA:1323:G:H2'	53:CA:1324:A:H8	1.63	0.62
5:AE:79:THR:OG1	5:AE:80:LEU:N	2.32	0.62
57:DA:1912:A:N6	57:DA:1917:U:N3	2.46	0.62
57:DA:616:A:H2'	57:DA:617:G:H8	1.59	0.62
17:AQ:12:VAL:CG1	17:AQ:13:SER:N	2.63	0.62
57:DA:1071:G:N7	57:DA:1089:A:C6	2.67	0.62
57:DA:374:A:N6	57:DA:401:A:C8	2.67	0.62
57:DA:1565:C:H3'	24:DC:17:LYS:HE2	1.82	0.62
52:D4:36:ARG:HG2	52:D4:37:GLN:N	2.14	0.62
1:AA:877:G:N2	8:AH:1:SER:HB2	2.12	0.62
59:DF:48:LEU:HG	59:DF:49:LEU:HD22	1.82	0.62
57:DA:1416:G:O2'	57:DA:1417:C:O5'	2.16	0.62
42:DU:34:ILE:HG12	42:DU:62:ALA:O	2.00	0.62
31:BJ:74:TYR:HB2	31:BJ:87:ALA:O	1.99	0.62
16:AP:22:ALA:HB2	16:AP:32:PHE:HA	1.80	0.62
5:CE:59:ILE:O	5:CE:59:ILE:HG13	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2623:G:H4'	57:DA:2825:G:C8	2.34	0.62
22:BA:2663:G:H2'	22:BA:2664:G:C8	2.34	0.62
57:DA:2461:A:H1'	57:DA:2492:U:H3	1.63	0.62
31:BJ:88:THR:HG22	31:BJ:91:GLU:CG	2.30	0.62
11:CK:117:HIS:O	11:CK:118:ASN:HB2	1.99	0.62
32:BK:38:ILE:HD11	32:BK:112:PHE:HZ	1.64	0.62
3:CC:84:GLU:HA	3:CC:87:ARG:HB2	1.81	0.62
53:CA:166:U:H2'	53:CA:167:A:H5'	1.82	0.62
44:DW:77:LYS:N	44:DW:77:LYS:HZ2	1.97	0.62
3:CC:5:HIS:NE2	3:CC:183:TYR:HE2	1.98	0.62
26:DE:136:GLN:HA	26:DE:139:LYS:HG2	1.81	0.62
57:DA:743:A:OP1	25:DD:135:GLY:HA2	1.99	0.62
12:AL:73:LEU:HD11	12:AL:79:ILE:HG21	1.81	0.62
57:DA:677:A:O2'	57:DA:2071:A:H5'	2.00	0.62
57:DA:2403:C:H2'	57:DA:2404:U:H6	1.63	0.62
25:BD:53:GLY:HA3	25:BD:77:ARG:HB2	1.82	0.62
23:BB:116:G:H4'	36:BO:54:VAL:O	1.99	0.62
32:BK:95:ILE:O	32:BK:95:ILE:HD12	1.99	0.62
2:CB:114:LYS:CE	2:CB:151:LYS:HB2	2.22	0.62
53:CA:1176:A:H2'	53:CA:1177:G:O4'	1.99	0.62
57:DA:729:G:H3'	57:DA:730:A:C5'	2.30	0.62
38:DQ:27:ARG:HA	38:DQ:33:VAL:HG12	1.82	0.62
53:CA:664:G:N2	53:CA:741:G:H1	1.90	0.62
38:DQ:57:ARG:O	38:DQ:61:ILE:HD13	2.00	0.62
41:BT:15:HIS:HB3	41:BT:31:VAL:HG22	1.80	0.62
1:AA:372:C:H4'	1:AA:373:A:OP1	1.99	0.62
57:DA:232:G:O2'	57:DA:233:A:H5''	1.98	0.62
3:AC:154:GLY:O	3:AC:195:ILE:HG12	2.00	0.62
57:DA:2574:G:O2'	25:DD:148:GLN:HB2	1.99	0.62
4:CD:61:ARG:HH21	4:CD:67:LEU:CA	2.11	0.62
57:DA:1635:A:H5'	57:DA:1635:A:C8	2.34	0.62
22:BA:2772:C:H2'	22:BA:2773:C:H6	1.65	0.62
35:DN:28:LEU:O	35:DN:32:GLU:N	2.31	0.62
57:DA:2271:G:H2'	57:DA:2272:U:H6	1.63	0.62
53:CA:1206:G:H4'	3:CC:191:THR:O	1.99	0.62
1:AA:35:G:H2'	1:AA:36:C:H6	1.64	0.62
1:AA:1306:A:N6	1:AA:1331:G:H1'	2.14	0.62
22:BA:390:U:O2'	22:BA:391:A:OP2	2.18	0.62
42:BU:52:ASN:C	42:BU:54:PRO:HD2	2.20	0.62
22:BA:1681:G:O2'	22:BA:1762:A:H1'	1.99	0.62
53:CA:205:A:C6	53:CA:206:C:N4	2.67	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1941:C:H2'	57:DA:1942:C:C6	2.34	0.62
53:CA:328:C:H2'	53:CA:328:C:O2	1.97	0.62
22:BA:161:A:OP2	22:BA:162:U:H3'	2.00	0.62
38:BQ:57:ARG:HA	38:BQ:60:TRP:CE3	2.35	0.62
53:CA:279:A:C5'	53:CA:280:C:H3'	2.22	0.62
2:CB:93:HIS:ND1	2:CB:145:ASN:O	2.33	0.62
9:CI:59:LYS:HE3	9:CI:60:LEU:HG	1.82	0.62
57:DA:2889:C:N4	57:DA:2890:G:C6	2.68	0.62
57:DA:1071:G:O2'	57:DA:1072:C:H5'	1.99	0.62
53:CA:802:A:H2'	53:CA:803:G:H5'	1.82	0.62
57:DA:2798:U:H5'	57:DA:2800:A:C5	2.35	0.62
53:CA:1102:A:H2'	53:CA:1103:C:C6	2.34	0.62
11:AK:87:GLY:N	11:AK:113:THR:HG22	2.15	0.62
22:BA:1417:C:H2'	22:BA:1418:G:C8	2.35	0.62
49:D1:5:ARG:HD2	49:D1:25:ASN:HB2	1.81	0.62
1:AA:86:G:C2	1:AA:87:C:N4	2.66	0.62
22:BA:1931:U:C6	22:BA:1931:U:H5'	2.34	0.62
57:DA:1268:A:C6	57:DA:2013:A:C8	2.87	0.62
11:AK:35:ASP:OD2	11:AK:39:ASN:HB2	1.99	0.62
57:DA:754:U:H2'	57:DA:755:U:C6	2.35	0.62
1:AA:1202:U:O4'	14:AN:68:ARG:HD2	1.99	0.62
28:DG:44:HIS:HA	28:DG:49:LEU:HA	1.80	0.62
48:B0:47:TYR:CE2	48:B0:52:LYS:HB2	2.35	0.62
8:AH:10:LEU:HD11	8:AH:126:CYS:CB	2.30	0.62
19:CS:46:LEU:H	19:CS:46:LEU:HD23	1.63	0.62
33:BL:92:LEU:HD23	33:BL:125:LEU:HD23	1.81	0.62
53:CA:1366:C:O2'	53:CA:1367:C:C6	2.52	0.62
45:BX:4:CYS:HB2	45:BX:51:SER:HB3	1.81	0.62
57:DA:1826:G:P	24:DC:220:ARG:HB3	2.39	0.62
57:DA:781:A:N1	57:DA:1776:G:O2'	2.29	0.62
33:DL:47:ARG:HG2	33:DL:47:ARG:NH2	2.10	0.62
4:AD:145:ARG:NH1	4:AD:147:LYS:HE3	2.09	0.62
22:BA:1730:C:H1'	22:BA:1731:G:C2	2.35	0.62
3:AC:156:LEU:N	3:AC:156:LEU:HD12	2.13	0.62
11:AK:91:GLY:HA2	11:AK:94:SER:HB3	1.82	0.62
24:DC:1:ALA:O	24:DC:18:VAL:HG23	2.00	0.62
39:BR:1:MET:HA	39:BR:42:ALA:O	2.00	0.62
22:BA:790:U:H2'	63:BA:3756:HOH:O	1.98	0.62
20:AT:27:MET:CE	20:AT:57:VAL:HG22	2.28	0.62
53:CA:119:A:H4'	53:CA:120:A:C8	2.34	0.62
53:CA:796:C:OP1	11:CK:127:ARG:HB3	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:DG:86:LEU:HD12	28:DG:132:LEU:HD11	1.82	0.62
28:BG:29:ASN:CG	28:BG:30:GLY:N	2.52	0.62
57:DA:1512:C:O2'	57:DA:1513:U:H5'	1.99	0.62
27:BF:40:GLY:HA2	27:BF:84:ILE:HD11	1.81	0.62
2:AB:20:ARG:HA	2:AB:20:ARG:NH1	2.15	0.62
17:CQ:59:GLU:HG2	17:CQ:76:ARG:HG2	1.82	0.62
57:DA:2665:A:H2'	57:DA:2666:C:O2	1.99	0.62
22:BA:669:G:N3	22:BA:669:G:H2'	2.15	0.62
22:BA:1819:A:OP1	24:BC:154:ALA:HA	1.99	0.62
41:BT:29:THR:HA	41:BT:86:THR:HA	1.82	0.62
12:AL:72:ASN:OD1	12:AL:104:SER:HB3	1.99	0.62
27:BF:114:ARG:H	27:BF:114:ARG:HD2	1.64	0.62
10:AJ:19:ASP:HA	10:AJ:22:THR:HB	1.81	0.62
31:BJ:43:GLU:O	31:BJ:45:THR:HG22	2.00	0.62
14:CN:9:GLU:HA	14:CN:12:ARG:HD2	1.81	0.62
53:CA:1219:A:OP1	14:CN:52:ARG:HG3	2.00	0.62
17:AQ:18:LYS:C	17:AQ:47:ASP:OD2	2.38	0.62
57:DA:704:G:C2'	57:DA:726:G:H22	2.11	0.62
57:DA:2147:A:OP1	57:DA:2147:A:H4'	2.00	0.62
57:DA:1746:A:H2'	57:DA:1747:U:H6	1.65	0.62
37:DP:52:ARG:HH11	37:DP:52:ARG:HG2	1.65	0.62
22:BA:1056:G:O2'	22:BA:1086:A:H1'	2.00	0.62
4:AD:117:VAL:CA	4:AD:122:ILE:HD11	2.30	0.62
2:AB:86:CYS:HB2	2:AB:88:GLN:HG3	1.81	0.62
22:BA:2134:A:O2'	22:BA:2135:A:H5''	2.00	0.62
41:DT:38:ALA:HB1	41:DT:81:LYS:NZ	2.15	0.62
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.34	0.62
1:AA:1320:C:H41	19:AS:36:ARG:HG2	1.65	0.62
22:BA:475:C:C4	22:BA:481:G:O6	2.52	0.62
34:BM:46:ILE:HD12	34:BM:47:GLU:N	2.15	0.62
22:BA:2383:G:H2'	22:BA:2384:U:C6	2.35	0.62
57:DA:1300:G:H4'	57:DA:1301:A:O5'	2.00	0.62
22:BA:1278:C:H2'	22:BA:1279:G:H8	1.64	0.62
33:BL:82:LEU:HD23	33:BL:82:LEU:C	2.20	0.62
1:AA:819:A:H4'	1:AA:820:U:OP2	1.99	0.62
14:CN:60:ARG:HG2	14:CN:61:ASN:H	1.65	0.62
57:DA:1525:A:H2'	57:DA:1526:C:O4'	2.00	0.62
53:CA:453:G:H2'	53:CA:454:G:C8	2.35	0.62
3:CC:176:THR:HG22	3:CC:178:ARG:HG3	1.82	0.62
22:BA:2243:U:H2'	22:BA:2244:U:C6	2.35	0.62
22:BA:2243:U:O2'	22:BA:2244:U:H5'	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DC:53:ILE:HA	24:DC:214:GLY:O	2.00	0.62
16:AP:57:ILE:O	16:AP:61:VAL:HG23	2.00	0.62
53:CA:1217:C:O2'	53:CA:1218:C:O4'	2.13	0.61
5:AE:100:GLU:HB3	5:AE:121:ASN:HA	1.80	0.61
53:CA:372:C:O2'	53:CA:373:A:P	2.58	0.61
56:CP:75:ILE:HG22	56:CP:80:LYS:HD2	1.81	0.61
57:DA:1338:G:H4'	41:DT:18:GLU:CD	2.20	0.61
26:DE:149:ILE:HG23	26:DE:188:MET:CA	2.30	0.61
36:DO:30:ARG:HA	36:DO:35:ILE:HD13	1.82	0.61
57:DA:372:G:P	45:DX:61:LYS:HZ1	2.23	0.61
20:CT:23:ARG:HB3	20:CT:60:GLN:HE22	1.61	0.61
57:DA:1439:A:C2	57:DA:1553:A:N7	2.68	0.61
14:AN:46:LYS:HD2	19:AS:12:LEU:HD21	1.83	0.61
2:CB:162:VAL:HG13	2:CB:184:ALA:HB2	1.82	0.61
30:DI:74:PRO:O	30:DI:78:LEU:HG	2.00	0.61
57:DA:2699:C:H2'	57:DA:2700:A:H8	1.62	0.61
25:DD:137:SER:C	25:DD:138:LEU:HD22	2.21	0.61
21:AU:36:PHE:HA	21:AU:39:LYS:HE2	1.82	0.61
47:DZ:30:ARG:HH21	47:DZ:33:HIS:HB2	1.63	0.61
57:DA:476:G:O2'	57:DA:477:A:O5'	2.17	0.61
57:DA:329:G:O6	42:DU:16:LYS:HB2	2.00	0.61
29:BH:27:ARG:NH1	29:BH:38:PRO:HG3	2.14	0.61
57:DA:2508:G:N2	57:DA:2582:G:C6	2.68	0.61
35:BN:73:ASN:O	35:BN:76:VAL:HG12	1.99	0.61
5:CE:157:GLY:HA3	8:CH:63:LYS:NZ	2.14	0.61
22:BA:875:G:C2'	22:BA:876:C:H5'	2.30	0.61
22:BA:2104:C:H2'	22:BA:2105:U:O4'	2.00	0.61
6:AF:42:TRP:CZ2	6:AF:61:LEU:HD22	2.35	0.61
4:AD:151:GLN:H	4:AD:154:VAL:HG13	1.65	0.61
37:BP:24:THR:HG22	37:BP:87:ARG:H	1.65	0.61
22:BA:1667:G:O2'	22:BA:1991:U:O4	2.17	0.61
26:DE:166:LYS:HA	26:DE:166:LYS:HE2	1.82	0.61
22:BA:2259:U:O4'	22:BA:2427:C:H2'	2.00	0.61
45:BX:40:GLU:O	45:BX:43:LYS:HD2	2.00	0.61
27:BF:104:THR:HG22	27:BF:105:ILE:HG23	1.80	0.61
57:DA:2756:U:H1'	57:DA:2757:A:H5''	1.83	0.61
12:CL:42:LYS:HG2	12:CL:43:LYS:N	2.15	0.61
22:BA:1090:A:O2'	22:BA:1091:G:H5'	2.00	0.61
9:CI:58:GLU:HG3	9:CI:59:LYS:H	1.64	0.61
1:AA:1242:G:O2'	1:AA:1243:C:H5'	2.00	0.61
57:DA:1338:G:H5''	41:DT:17:SER:HB3	1.80	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:148:ILE:HA	26:DE:187:VAL:HB	1.82	0.61
4:CD:33:ILE:O	4:CD:35:GLN:HG2	1.99	0.61
57:DA:2310:C:H42	59:DF:76:PHE:HE1	1.48	0.61
57:DA:2305:U:H4'	59:DF:132:ARG:HG2	1.81	0.61
53:CA:1147:C:O2'	53:CA:1148:U:H6	1.82	0.61
57:DA:1565:C:C3'	24:DC:17:LYS:HE2	2.30	0.61
12:CL:5:GLN:HG3	12:CL:9:LYS:NZ	2.15	0.61
57:DA:2716:C:O2'	57:DA:2717:C:H5'	2.00	0.61
1:AA:1370:G:O5'	9:AI:110:VAL:HG21	1.99	0.61
1:AA:935:A:H61	7:AG:2:ARG:HB2	1.65	0.61
20:AT:68:LYS:HB2	20:AT:68:LYS:HZ2	1.65	0.61
36:BO:51:ALA:HB3	36:BO:78:VAL:HG13	1.81	0.61
46:BY:9:LYS:HA	46:BY:9:LYS:NZ	2.15	0.61
22:BA:2752:C:H2'	22:BA:2753:A:H8	1.65	0.61
17:CQ:25:GLU:HA	17:CQ:39:ARG:O	1.99	0.61
22:BA:2672:U:C2'	22:BA:2673:G:O5'	2.48	0.61
22:BA:2438:U:O2'	22:BA:2439:A:H5''	2.00	0.61
19:CS:45:GLY:H	19:CS:61:VAL:HB	1.65	0.61
57:DA:816:C:H2'	57:DA:817:C:H6	1.65	0.61
22:BA:2180:U:H2'	22:BA:2181:U:C5	2.35	0.61
57:DA:2520:C:H2'	57:DA:2521:C:H6	1.65	0.61
45:BX:5:GLN:HE21	45:BX:49:ARG:H	1.45	0.61
54:CG:59:GLU:HG3	54:CG:60:ALA:N	2.15	0.61
33:DL:48:ARG:HG3	33:DL:48:ARG:HH11	1.64	0.61
21:AU:3:ILE:HA	21:AU:19:LYS:NZ	2.14	0.61
57:DA:2036:C:O2'	57:DA:2037:A:C8	2.52	0.61
29:DH:72:ILE:HD11	29:DH:141:LYS:N	2.13	0.61
4:CD:176:LYS:CG	4:CD:178:GLU:HB2	2.29	0.61
22:BA:2742:G:O2'	22:BA:2743:U:H5'	2.00	0.61
53:CA:198:G:C4	53:CA:199:A:C8	2.88	0.61
57:DA:1417:C:H2'	57:DA:1418:G:C8	2.35	0.61
1:AA:579:A:O2'	15:AO:53:ARG:NH1	2.34	0.61
57:DA:2631:G:C6	57:DA:2632:A:N7	2.68	0.61
53:CA:587:G:H4'	8:CH:3:GLN:HA	1.83	0.61
57:DA:1645:G:H4'	57:DA:1646:C:C5	2.35	0.61
22:BA:2383:G:H2'	22:BA:2384:U:H6	1.65	0.61
33:DL:9:ALA:HB3	33:DL:12:SER:CB	2.30	0.61
20:AT:5:SER:OG	20:AT:6:ALA:N	2.33	0.61
26:DE:122:GLU:HA	26:DE:190:ALA:HB2	1.81	0.61
22:BA:1833:C:C4	22:BA:1834:U:C5	2.88	0.61
53:CA:642:A:O2'	53:CA:643:C:C6	2.54	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:116:ARG:O	29:DH:117:LEU:HG	2.00	0.61
22:BA:1023:U:H5'	22:BA:1023:U:H6	1.66	0.61
22:BA:894:U:H2'	22:BA:895:U:C6	2.35	0.61
1:AA:1425:U:O2'	1:AA:1426:G:H5'	2.00	0.61
57:DA:1033:U:H4'	57:DA:1034:G:OP1	2.00	0.61
44:BW:19:ARG:HH12	44:BW:22:VAL:HG11	1.65	0.61
58:DB:55:U:H1'	59:DF:25:MET:SD	2.39	0.61
44:BW:9:THR:OG1	44:BW:10:ARG:N	2.28	0.61
57:DA:152:A:C2	57:DA:175:G:C2	2.88	0.61
45:BX:29:LEU:HD23	45:BX:29:LEU:N	2.15	0.61
17:AQ:45:VAL:HG13	17:AQ:72:TRP:O	2.01	0.61
30:DI:76:ALA:HB2	30:DI:131:THR:HB	1.82	0.61
2:CB:100:LEU:O	2:CB:103:TRP:HE3	1.83	0.61
57:DA:222:A:N6	57:DA:232:G:H1'	2.15	0.61
14:AN:40:ARG:HH22	14:AN:44:VAL:HG21	1.65	0.61
57:DA:1127:A:O2'	57:DA:1128:G:H5'	2.01	0.61
39:BR:41:ILE:O	39:BR:46:GLU:HB2	1.99	0.61
57:DA:1905:C:N4	57:DA:1930:G:N1	2.49	0.61
22:BA:2033:A:H3'	63:BA:3476:HOH:O	2.00	0.61
45:DX:2:ARG:HH21	45:DX:32:LEU:HD23	1.64	0.61
1:AA:536:C:H2'	1:AA:537:G:H8	1.63	0.61
40:BS:73:LYS:HE3	40:BS:74:ILE:H	1.65	0.61
1:AA:688:G:H2'	1:AA:689:C:H6	1.65	0.61
33:DL:73:ILE:O	33:DL:105:ILE:HG23	2.00	0.61
53:CA:1447:A:O2'	53:CA:1448:C:OP1	2.18	0.61
57:DA:852:U:H2'	57:DA:853:C:C6	2.34	0.61
57:DA:586:A:O5'	57:DA:586:A:H8	1.83	0.61
13:AM:79:LEU:HD22	13:AM:86:ARG:HB2	1.83	0.61
33:BL:57:LEU:HD22	51:B3:53:ASP:HB3	1.82	0.61
22:BA:893:C:H2'	22:BA:894:U:O4'	2.00	0.61
39:BR:27:ILE:HG13	39:BR:33:VAL:CG1	2.30	0.61
22:BA:42:A:H3'	22:BA:43:G:H5''	1.82	0.61
57:DA:2261:C:C2	57:DA:2280:G:N2	2.68	0.61
6:AF:18:VAL:HG11	6:AF:58:HIS:CD2	2.35	0.61
12:AL:78:VAL:HG12	12:AL:101:LEU:HD23	1.82	0.61
57:DA:1594:U:H2'	57:DA:1595:C:C6	2.36	0.61
38:BQ:38:VAL:O	38:BQ:41:ALA:HB3	2.00	0.61
57:DA:182:A:H2'	57:DA:183:C:C6	2.35	0.61
53:CA:451:A:H61	53:CA:481:G:H5'	1.66	0.61
1:AA:242:G:C2	1:AA:245:U:C4	2.88	0.61
35:DN:35:LYS:HD3	35:DN:112:TYR:OH	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DL:55:MET:SD	33:DL:59:ARG:NE	2.74	0.61
22:BA:1735:A:H2'	22:BA:1736:U:C6	2.35	0.61
57:DA:1438:U:C5	57:DA:1552:A:N1	2.68	0.61
54:CG:110:ARG:HG3	54:CG:111:GLY:N	2.13	0.61
26:BE:147:LEU:HD23	26:BE:183:PHE:CD1	2.36	0.61
53:CA:695:A:H2'	53:CA:696:A:C8	2.36	0.61
22:BA:740:C:H5'	22:BA:1784:A:H3'	1.82	0.61
9:CI:38:PHE:CE2	9:CI:71:ILE:HG22	2.35	0.61
53:CA:702:A:H5'	53:CA:703:G:N7	2.15	0.61
22:BA:2327:A:H2'	22:BA:2328:A:C8	2.35	0.61
24:DC:106:PRO:HB3	24:DC:141:HIS:CE1	2.33	0.61
53:CA:238:A:H2'	53:CA:239:U:C5'	2.31	0.61
57:DA:1447:C:H2'	57:DA:1448:G:H8	1.66	0.61
5:CE:151:MET:O	5:CE:154:ALA:HB3	2.01	0.61
25:DD:4:LEU:HD12	25:DD:32:ASN:OD1	2.00	0.61
22:BA:1945:G:H2'	22:BA:1946:U:C6	2.35	0.61
26:DE:5:LEU:HA	26:DE:120:VAL:HG13	1.83	0.61
53:CA:157:U:O2'	53:CA:158:G:H5'	2.01	0.61
53:CA:613:C:H2'	53:CA:614:C:C6	2.35	0.61
22:BA:455:C:N3	22:BA:472:A:H2'	2.16	0.61
22:BA:588:U:H2'	22:BA:589:U:C6	2.35	0.61
11:CK:64:VAL:O	11:CK:68:ARG:HB2	2.00	0.61
22:BA:871:U:OP1	34:BM:5:LYS:HG3	2.01	0.61
44:BW:23:LYS:HD2	44:BW:24:ARG:H	1.65	0.61
44:BW:41:GLY:O	44:BW:42:THR:C	2.39	0.61
22:BA:1179:G:H3'	22:BA:1180:U:C4'	2.26	0.61
57:DA:2358:A:H61	33:DL:54:GLN:HE22	1.46	0.61
57:DA:674:G:H5''	26:DE:71:GLY:H	1.65	0.61
24:DC:147:PRO:HD3	24:DC:184:GLU:HG3	1.82	0.61
22:BA:1085:A:H2'	22:BA:1086:A:N3	2.15	0.61
57:DA:2232:C:OP1	45:DX:26:ARG:NH1	2.34	0.61
57:DA:2448:A:HO2'	57:DA:2449:U:H5	1.45	0.61
38:DQ:91:ARG:CZ	39:DR:11:GLN:H	2.13	0.61
21:CU:36:PHE:CD1	21:CU:40:PRO:HB3	2.33	0.61
10:AJ:65:TYR:HB3	14:AN:95:LEU:HD11	1.81	0.61
57:DA:1759:A:H2'	57:DA:1760:C:C6	2.36	0.61
2:CB:127:LYS:HE2	2:CB:136:ARG:HH21	1.65	0.61
57:DA:1965:C:H2'	57:DA:1966:A:C8	2.35	0.61
22:BA:319:G:C4	22:BA:333:G:N2	2.69	0.61
57:DA:2619:C:H4'	25:DD:156:PHE:O	2.01	0.61
22:BA:435:C:O2'	22:BA:436:C:H5'	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:244:A:H2'	57:DA:245:G:O4'	2.00	0.61
53:CA:51:A:H4'	53:CA:52:C:C5'	2.31	0.61
22:BA:2180:U:H2'	22:BA:2181:U:H5	1.65	0.61
22:BA:623:C:H2'	22:BA:624:C:H6	1.65	0.61
24:BC:158:GLY:H	24:BC:194:VAL:HG13	1.66	0.61
25:DD:110:THR:HA	25:DD:171:THR:HA	1.83	0.61
6:CF:75:GLU:OE2	6:CF:89:VAL:HG11	2.01	0.61
53:CA:1478:U:H2'	53:CA:1479:C:C6	2.36	0.61
33:DL:18:ARG:HB3	33:DL:21:ARG:HD2	1.83	0.61
53:CA:202:G:HO2'	53:CA:468:A:H8	1.41	0.61
11:CK:106:ILE:O	11:CK:106:ILE:HG12	2.01	0.61
53:CA:676:A:H2'	53:CA:677:U:H6	1.65	0.61
38:BQ:91:ARG:HD3	39:BR:11:GLN:CG	2.30	0.61
44:BW:47:GLY:C	44:BW:49:ASN:H	2.04	0.61
57:DA:151:C:H2'	57:DA:152:A:C8	2.36	0.61
53:CA:267:C:OP2	17:CQ:68:LYS:HD2	2.00	0.61
53:CA:961:U:H5	53:CA:1223:C:H1'	1.66	0.61
2:CB:81:ASP:CG	2:CB:82:ALA:H	2.04	0.61
53:CA:1069:C:H4'	53:CA:1192:C:O2	2.00	0.61
10:CJ:37:ARG:HG2	10:CJ:75:ASP:HB3	1.82	0.61
34:DM:40:ARG:HB2	34:DM:93:VAL:HG21	1.82	0.61
5:AE:105:ILE:HG13	5:AE:123:LEU:HA	1.83	0.61
31:BJ:111:LYS:CD	31:BJ:112:GLY:H	2.12	0.61
57:DA:1809:A:O2'	57:DA:1810:A:H8	1.81	0.61
57:DA:1183:U:H2'	57:DA:1184:U:H6	1.65	0.61
25:BD:1:MET:SD	25:BD:100:LEU:HD11	2.41	0.61
1:AA:250:A:H4'	1:AA:251:G:O5'	2.00	0.61
22:BA:2886:A:N3	22:BA:2887:A:H1'	2.16	0.61
1:AA:1066:C:H6	1:AA:1066:C:H5''	1.65	0.61
57:DA:686:U:H6	57:DA:788:A:N1	1.98	0.61
53:CA:818:G:C3'	53:CA:819:A:H5''	2.30	0.61
57:DA:594:U:H2'	57:DA:595:C:C6	2.35	0.61
5:CE:68:ARG:O	5:CE:70:MET:HG2	2.01	0.61
57:DA:2348:U:O2'	57:DA:2349:G:O4'	2.18	0.61
1:AA:1201:A:H1'	1:AA:1202:U:OP2	2.01	0.61
22:BA:1110:G:O2'	22:BA:1111:A:O5'	2.18	0.61
13:AM:86:ARG:HH21	13:AM:96:VAL:HG12	1.66	0.61
1:AA:820:U:H4'	1:AA:821:G:OP2	1.99	0.61
1:AA:390:U:H2'	1:AA:391:G:C8	2.35	0.61
15:CO:69:LEU:O	15:CO:69:LEU:HD22	2.01	0.61
3:CC:9:ILE:HD12	14:CN:97:LYS:HD3	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:44:ARG:HA	5:AE:71:ILE:O	2.00	0.61
4:AD:63:ILE:HG23	4:AD:64:TYR:CD1	2.35	0.61
28:DG:148:ARG:HB2	28:DG:152:ARG:NH2	2.16	0.61
38:BQ:94:LEU:C	38:BQ:96:ASP:H	2.03	0.61
28:BG:84:LYS:HB3	28:BG:132:LEU:O	2.01	0.61
44:BW:17:ALA:O	44:BW:18:LYS:CB	2.48	0.61
44:BW:37:VAL:C	44:BW:38:ARG:HG2	2.21	0.61
44:BW:39:GLN:C	44:BW:41:GLY:N	2.50	0.61
57:DA:2324:U:C5'	57:DA:2325:G:H5''	2.29	0.61
12:CL:42:LYS:HG2	12:CL:43:LYS:H	1.66	0.61
53:CA:1288:A:H2'	53:CA:1289:A:H8	1.65	0.61
9:CI:48:ARG:HH21	9:CI:57:VAL:HG21	1.65	0.61
57:DA:36:G:O2'	57:DA:37:C:H5'	2.00	0.61
1:AA:843:U:H2'	1:AA:844:G:H5'	1.83	0.61
20:CT:73:ARG:CG	20:CT:73:ARG:NH1	2.59	0.61
39:DR:27:ILE:HG22	39:DR:28:ALA:N	2.10	0.61
24:DC:62:ARG:HD3	24:DC:83:ASP:CG	2.20	0.61
28:DG:163:TYR:N	28:DG:163:TYR:CD2	2.69	0.61
57:DA:379:G:C6	57:DA:396:G:C6	2.89	0.61
11:AK:126:ARG:C	21:AU:33:ARG:HH12	2.04	0.61
13:AM:106:ARG:HH11	13:AM:106:ARG:HA	1.66	0.61
53:CA:72:A:N6	53:CA:99:C:H1'	2.16	0.61
16:AP:37:GLY:HA2	16:AP:51:ARG:NH1	2.16	0.61
3:AC:13:ILE:O	3:AC:15:LYS:N	2.34	0.61
57:DA:1754:A:C6	57:DA:1755:A:C6	2.88	0.61
1:AA:1432:G:O2'	1:AA:1433:A:OP2	2.17	0.61
57:DA:870:U:H2'	57:DA:871:U:H5'	1.82	0.61
29:DH:24:GLY:O	29:DH:28:ASN:HB2	2.01	0.61
25:DD:133:THR:HG23	25:DD:134:HIS:N	2.14	0.61
57:DA:1197:G:H5'	57:DA:1227:G:O2'	2.01	0.61
22:BA:1590:A:H2'	22:BA:1591:A:C8	2.35	0.61
1:AA:1329:A:H5''	13:AM:25:GLY:H	1.66	0.61
3:CC:46:LEU:HD22	3:CC:75:VAL:HG22	1.81	0.61
11:CK:96:ILE:HD13	11:CK:109:ILE:HD13	1.82	0.61
25:BD:70:LYS:O	25:BD:71:ALA:HB3	2.01	0.61
29:DH:78:VAL:HB	29:DH:144:VAL:HA	1.83	0.61
39:DR:62:GLU:HB3	39:DR:97:LYS:HB3	1.82	0.61
53:CA:269:C:H2'	53:CA:270:A:H8	1.66	0.61
10:CJ:80:THR:O	10:CJ:84:VAL:HG22	2.01	0.61
51:D3:32:LEU:HA	51:D3:35:LYS:HG3	1.82	0.61
53:CA:32:A:C2'	53:CA:33:A:H8	2.12	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:29:THR:CB	41:DT:86:THR:H	2.14	0.61
57:DA:1062:G:H22	57:DA:1077:A:H2	1.49	0.61
41:BT:59:ASN:O	41:BT:83:ALA:O	2.18	0.61
23:BB:45:A:O2'	23:BB:46:A:H5'	2.01	0.61
22:BA:2135:A:O2'	22:BA:2136:G:H8	1.84	0.61
53:CA:802:A:C2'	53:CA:803:G:H5'	2.31	0.61
28:BG:73:SER:HA	28:BG:76:ILE:HG22	1.82	0.61
53:CA:570:G:H1'	53:CA:820:U:C4	2.36	0.61
11:AK:86:LYS:HA	11:AK:113:THR:HG22	1.81	0.61
53:CA:113:G:N2	53:CA:353:A:H8	1.97	0.61
36:DO:24:THR:HG22	36:DO:41:ALA:HA	1.83	0.61
57:DA:27:G:HO2'	57:DA:28:A:H8	1.49	0.61
1:AA:795:C:H5''	1:AA:796:C:OP2	2.01	0.61
12:AL:87:LYS:O	12:AL:88:ASP:HB2	2.01	0.61
29:DH:62:LEU:HD12	29:DH:63:ALA:N	2.16	0.61
1:AA:914:A:O2'	1:AA:915:A:H5'	2.00	0.61
28:DG:43:LYS:O	28:DG:49:LEU:HD12	2.01	0.61
16:AP:67:ILE:CG2	16:AP:72:ALA:HB2	2.31	0.61
37:DP:25:VAL:HA	37:DP:85:VAL:HA	1.81	0.61
53:CA:630:A:C2	63:CA:1858:HOH:O	2.52	0.61
54:CG:78:ARG:HA	54:CG:84:TYR:HB2	1.82	0.61
22:BA:2500:U:H5''	22:BA:2501:C:OP2	2.01	0.61
22:BA:1:G:H2'	22:BA:1:G:N3	2.15	0.61
57:DA:1535:A:H2'	57:DA:1535:A:N3	2.16	0.61
25:BD:158:GLY:O	25:BD:159:LYS:C	2.38	0.61
38:BQ:63:ARG:NH1	38:BQ:96:ASP:CA	2.33	0.61
57:DA:620:G:O2'	57:DA:622:G:N7	2.33	0.61
32:BK:47:ILE:CG1	32:BK:48:PRO:HD2	2.23	0.61
53:CA:1160:G:HO2'	53:CA:1161:C:C5'	2.14	0.61
57:DA:2440:C:H2'	57:DA:2441:U:O4'	2.01	0.61
57:DA:674:G:H4'	26:DE:69:ARG:HB3	1.83	0.61
22:BA:636:G:H3'	33:BL:128:THR:HG21	1.81	0.61
1:AA:80:A:C2	1:AA:81:A:H1'	2.36	0.61
59:DF:65:LEU:HD23	59:DF:65:LEU:H	1.65	0.61
53:CA:1145:A:O2'	53:CA:1146:A:H5''	2.01	0.61
53:CA:348:G:O2'	53:CA:349:A:H5'	2.01	0.61
57:DA:2230:G:H2'	57:DA:2231:U:C6	2.36	0.61
1:AA:96:U:O2'	1:AA:97:G:H8	1.82	0.61
38:BQ:40:LYS:HD3	38:BQ:44:TYR:CZ	2.36	0.61
14:AN:40:ARG:HH12	14:AN:44:VAL:CG1	2.11	0.61
25:BD:92:VAL:O	25:BD:93:GLY:C	2.37	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:9:MET:HE1	8:AH:32:LYS:HA	1.82	0.61
1:AA:1142:G:C2	1:AA:1143:G:H1'	2.36	0.61
1:AA:539:A:H2'	1:AA:540:G:H8	1.60	0.61
25:DD:137:SER:HB3	25:DD:138:LEU:CD2	2.30	0.61
57:DA:663:G:OP1	33:DL:17:LYS:HG2	2.00	0.61
53:CA:1285:A:O2'	53:CA:1286:U:H5'	2.01	0.61
22:BA:2585:U:O2'	22:BA:2586:U:C5'	2.49	0.61
53:CA:108:G:H5'	53:CA:109:A:H5''	1.82	0.61
22:BA:2602:A:H4'	22:BA:2603:G:H5'	1.82	0.61
10:CJ:30:LYS:CG	10:CJ:36:VAL:HG22	2.31	0.61
57:DA:370:G:C6	57:DA:424:G:N7	2.69	0.61
22:BA:2391:G:O6	22:BA:2425:A:H8	1.84	0.61
53:CA:642:A:N7	8:CH:106:SER:HA	2.16	0.61
24:BC:156:SER:O	24:BC:194:VAL:HG11	2.01	0.61
2:AB:32:GLY:HA3	2:AB:39:ILE:HG12	1.82	0.61
22:BA:2804:U:H2'	22:BA:2805:C:C6	2.35	0.61
53:CA:464:U:C4	53:CA:466:A:H4'	2.36	0.61
30:DI:50:LYS:HE2	30:DI:50:LYS:HA	1.83	0.61
57:DA:57:C:O2'	41:DT:36:LYS:HE2	2.01	0.61
53:CA:1356:G:H2'	53:CA:1357:A:C8	2.36	0.60
26:DE:98:LYS:O	26:DE:99:LYS:HB2	2.00	0.60
24:DC:52:HIS:HD2	24:DC:217:PRO:O	1.83	0.60
57:DA:2839:G:N2	57:DA:2880:C:C4	2.69	0.60
57:DA:2846:G:OP1	37:DP:51:ASN:HB2	2.01	0.60
57:DA:1394:U:H4'	57:DA:1603:A:H4'	1.83	0.60
57:DA:1998:A:O3'	57:DA:2724:U:H4'	2.01	0.60
22:BA:2886:A:C2	22:BA:2887:A:H1'	2.36	0.60
10:AJ:41:PRO:O	10:AJ:42:LEU:HB2	2.00	0.60
29:DH:84:ALA:HA	29:DH:89:LYS:O	2.01	0.60
57:DA:1510:G:N2	57:DA:1511:G:C4	2.69	0.60
12:CL:79:ILE:HD12	12:CL:96:THR:CG2	2.31	0.60
17:CQ:29:LYS:HE2	17:CQ:36:PHE:CZ	2.36	0.60
43:DV:4:ILE:HB	43:DV:63:ILE:HG13	1.83	0.60
28:BG:8:VAL:HG12	28:BG:49:LEU:H	1.65	0.60
57:DA:1597:A:O3'	57:DA:1598:A:H8	1.84	0.60
57:DA:1737:G:C6	57:DA:1738:G:N1	2.69	0.60
57:DA:1738:G:O2'	57:DA:1739:A:H8	1.83	0.60
57:DA:2259:U:O4'	57:DA:2427:C:H2'	2.01	0.60
47:BZ:8:GLN:O	47:BZ:10:ARG:N	2.33	0.60
22:BA:2804:U:H2'	22:BA:2805:C:H6	1.64	0.60
57:DA:457:A:N1	57:DA:470:A:H5''	2.15	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1172:C:O2'	53:CA:1173:U:H5'	2.01	0.60
19:CS:79:TYR:O	19:CS:80:ARG:HB2	2.00	0.60
57:DA:1665:A:N7	63:DA:3436:HOH:O	2.31	0.60
26:DE:48:THR:O	26:DE:52:VAL:HG23	2.01	0.60
13:AM:45:SER:O	13:AM:46:GLU:HB2	2.00	0.60
38:DQ:111:LYS:HE3	39:DR:48:LYS:HD3	1.83	0.60
22:BA:2393:U:H5'	33:BL:60:ARG:O	2.01	0.60
1:AA:1058:G:C5	1:AA:1059:C:C5	2.89	0.60
22:BA:90:U:H2'	22:BA:91:A:C8	2.35	0.60
49:D1:46:VAL:HG22	49:D1:47:ILE:H	1.66	0.60
1:AA:1530:G:O2'	1:AA:1531:A:C8	2.54	0.60
57:DA:2061:G:N7	57:DA:2501:C:H4'	2.15	0.60
45:DX:19:HIS:C	45:DX:21:LEU:H	2.03	0.60
57:DA:604:G:C2	57:DA:605:G:C5	2.88	0.60
57:DA:616:A:C2'	57:DA:617:G:C8	2.80	0.60
56:CP:75:ILE:HA	56:CP:78:VAL:HG23	1.83	0.60
57:DA:2882:A:C5'	35:DN:96:ARG:HD3	2.31	0.60
57:DA:2881:U:O2'	57:DA:2882:A:H5'	2.02	0.60
58:DB:13:G:H5''	58:DB:13:G:H8	1.66	0.60
57:DA:585:G:H2'	57:DA:1254:A:H61	1.66	0.60
10:CJ:41:PRO:O	10:CJ:42:LEU:HB2	2.01	0.60
57:DA:1809:A:H2'	57:DA:1810:A:C8	2.36	0.60
53:CA:936:C:O2'	53:CA:937:A:C8	2.49	0.60
26:BE:108:ILE:HB	33:BL:2:ARG:HH22	1.66	0.60
42:DU:14:THR:HB	42:DU:68:ASN:CB	2.30	0.60
57:DA:1819:A:H4'	57:DA:1820:U:H5'	1.83	0.60
22:BA:459:U:H2'	22:BA:460:A:H8	1.65	0.60
1:AA:500:G:H2'	1:AA:501:C:C6	2.36	0.60
57:DA:1962:C:H4'	57:DA:1963:U:OP1	2.01	0.60
1:AA:186:C:O4'	20:AT:75:LYS:HD2	2.00	0.60
1:AA:215:C:H2'	1:AA:216:U:C6	2.36	0.60
43:DV:14:LYS:CG	43:DV:18:ARG:HD2	2.31	0.60
37:DP:28:LYS:NZ	37:DP:82:SER:HB2	2.16	0.60
57:DA:2529:G:H4'	28:DG:174:LYS:CD	2.31	0.60
40:BS:59:GLU:HA	40:BS:64:ALA:HB2	1.83	0.60
22:BA:1110:G:O2'	22:BA:1111:A:H8	1.84	0.60
13:AM:86:ARG:NH2	13:AM:96:VAL:HG12	2.16	0.60
3:CC:120:THR:O	3:CC:120:THR:HG22	2.00	0.60
35:BN:58:ASP:OD2	35:BN:63:ARG:NH2	2.33	0.60
53:CA:968:A:N3	53:CA:1062:U:H4'	2.15	0.60
12:CL:26:CYS:HB2	12:CL:29:LYS:HE2	1.81	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1974:C:H2'	57:DA:1975:G:H8	1.66	0.60
57:DA:609:A:H2'	57:DA:610:C:O4'	2.01	0.60
25:DD:29:VAL:HB	25:DD:98:VAL:HG12	1.81	0.60
1:AA:1496:C:H2'	1:AA:1497:G:O4'	2.01	0.60
29:BH:147:VAL:HG12	29:BH:149:GLU:HG3	1.82	0.60
8:CH:91:LEU:HD12	8:CH:116:ARG:HG3	1.83	0.60
6:AF:93:LYS:O	6:AF:94:HIS:HB2	2.01	0.60
22:BA:1064:C:H5'	30:BI:88:GLY:HA3	1.84	0.60
53:CA:1147:C:H4'	9:CI:6:TYR:CE1	2.37	0.60
41:BT:39:THR:HB	41:BT:42:GLU:H	1.66	0.60
53:CA:1304:G:H1'	53:CA:1333:A:N6	2.16	0.60
32:DK:60:ALA:HA	32:DK:87:LEU:CD2	2.29	0.60
57:DA:226:A:H2'	57:DA:227:A:C8	2.36	0.60
34:BM:31:PHE:CE2	34:BM:110:GLU:HG2	2.37	0.60
37:DP:50:ARG:HB3	37:DP:56:SER:HB3	1.83	0.60
22:BA:1568:G:OP1	24:BC:62:ARG:NH1	2.34	0.60
1:AA:107:G:H2'	1:AA:108:G:H5'	1.83	0.60
4:AD:10:LEU:CD2	4:AD:62:ARG:HG3	2.31	0.60
39:BR:15:SER:O	39:BR:18:GLN:HB3	2.00	0.60
57:DA:513:A:H2'	57:DA:514:A:H8	1.65	0.60
17:CQ:29:LYS:HE2	17:CQ:36:PHE:CE1	2.36	0.60
22:BA:216:A:H2'	22:BA:217:A:C8	2.35	0.60
53:CA:73:C:O2'	53:CA:74:A:H8	1.84	0.60
43:BV:26:PHE:CZ	43:BV:42:LEU:HD12	2.37	0.60
28:DG:8:VAL:HB	28:DG:49:LEU:HB3	1.84	0.60
53:CA:464:U:O4	53:CA:466:A:H4'	2.01	0.60
19:AS:17:LYS:HB3	19:AS:30:LEU:HD23	1.83	0.60
18:CR:39:VAL:HG12	18:CR:40:PRO:HD2	1.83	0.60
53:CA:486:U:O2	53:CA:486:U:H2'	1.98	0.60
57:DA:1666:G:O3'	32:DK:6:THR:HG23	2.01	0.60
45:BX:46:VAL:HG21	45:BX:67:LEU:HD11	1.84	0.60
57:DA:447:A:C8	57:DA:473:G:C6	2.89	0.60
10:CJ:5:ARG:HH21	10:CJ:77:VAL:HG13	1.66	0.60
53:CA:397:A:N7	53:CA:547:A:O2'	2.34	0.60
34:DM:17:ASN:OD1	34:DM:95:LEU:HB3	2.01	0.60
30:BI:15:GLY:CA	30:BI:50:LYS:HB3	2.28	0.60
46:BY:43:LEU:O	46:BY:47:ARG:HB2	2.02	0.60
2:AB:66:ILE:HB	2:AB:88:GLN:CB	2.30	0.60
53:CA:1079:G:H2'	53:CA:1080:A:C8	2.37	0.60
22:BA:571:U:C5	22:BA:575:A:C6	2.88	0.60
1:AA:174:A:O2'	1:AA:175:C:H5'	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:389:G:C8	57:DA:2413:G:H4'	2.36	0.60
57:DA:91:A:O2'	57:DA:92:U:H6	1.84	0.60
53:CA:496:A:O2'	53:CA:497:G:C8	2.54	0.60
12:AL:43:LYS:HB2	12:AL:44:PRO:HD3	1.83	0.60
1:AA:548:G:O2'	1:AA:549:C:H5'	2.02	0.60
5:CE:55:VAL:N	5:CE:56:PRO:HD2	2.17	0.60
29:BH:67:ALA:C	29:BH:69:ALA:H	2.04	0.60
1:AA:686:U:O2'	1:AA:687:A:H8	1.79	0.60
22:BA:1310:G:C2'	22:BA:1311:G:H5'	2.31	0.60
39:BR:21:ARG:NH2	39:BR:93:PHE:CD1	2.70	0.60
29:DH:62:LEU:C	29:DH:64:ALA:H	2.04	0.60
22:BA:332:A:C2	22:BA:335:C:C5	2.89	0.60
12:AL:7:VAL:HG13	17:AQ:30:HIS:CD2	2.35	0.60
22:BA:39:G:H2'	22:BA:40:U:H6	1.65	0.60
4:AD:190:LEU:O	4:AD:191:SER:HB2	2.01	0.60
53:CA:103:U:C2	53:CA:104:G:C8	2.90	0.60
31:BJ:75:TYR:CD1	31:BJ:86:GLN:HB3	2.36	0.60
25:BD:45:TYR:CD1	25:BD:45:TYR:N	2.68	0.60
24:BC:225:ASN:HB3	24:BC:226:PRO:HD2	1.83	0.60
53:CA:960:U:C5'	53:CA:961:U:H5''	2.31	0.60
19:CS:50:VAL:HG11	19:CS:70:LEU:HB3	1.83	0.60
17:AQ:13:SER:O	17:AQ:16:MET:SD	2.59	0.60
12:CL:42:LYS:HD3	12:CL:43:LYS:HZ2	1.65	0.60
53:CA:410:G:OP1	4:CD:25:ARG:HD2	2.02	0.60
24:DC:144:GLU:HG3	24:DC:151:GLY:N	2.16	0.60
41:BT:39:THR:O	41:BT:40:LYS:HB2	2.01	0.60
53:CA:86:G:H1'	53:CA:87:C:O5'	2.01	0.60
20:CT:3:ILE:O	20:CT:4:LYS:HG2	2.01	0.60
42:DU:90:LYS:HE2	42:DU:92:VAL:HG12	1.83	0.60
17:CQ:3:LYS:HZ2	17:CQ:6:THR:HG21	1.64	0.60
57:DA:2563:U:H1'	57:DA:2566:A:N6	2.17	0.60
37:BP:33:GLU:HB2	37:BP:38:ARG:HH11	1.67	0.60
12:AL:33:CYS:HA	12:AL:53:ARG:O	2.00	0.60
22:BA:1935:G:H1'	22:BA:1964:G:N2	2.16	0.60
53:CA:821:G:H2'	53:CA:822:U:C6	2.36	0.60
2:AB:139:GLU:O	2:AB:143:LEU:HD23	2.00	0.60
1:AA:1303:C:O2'	1:AA:1304:G:H5'	2.00	0.60
57:DA:1846:G:H5''	57:DA:1847:A:OP2	2.01	0.60
28:BG:23:ILE:HG21	28:BG:71:LEU:HD11	1.83	0.60
41:BT:28:ASN:C	41:BT:91:GLN:HE22	2.05	0.60
39:DR:48:LYS:H	39:DR:48:LYS:HD2	1.65	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BZ:40:THR:HG23	47:BZ:43:ILE:HG23	1.84	0.60
17:AQ:67:SER:OG	17:AQ:70:LYS:HB3	2.02	0.60
31:BJ:26:GLY:HA2	31:BJ:29:ALA:HB3	1.84	0.60
24:DC:120:ASP:CG	24:DC:121:ALA:H	2.04	0.60
57:DA:2184:A:H2'	57:DA:2185:U:O4'	2.01	0.60
5:CE:129:SER:HA	63:CE:202:HOH:O	2.01	0.60
19:AS:52:ASN:O	19:AS:76:THR:HG22	2.01	0.60
22:BA:1313:U:H4'	22:BA:1332:G:H4'	1.82	0.60
56:CP:36:VAL:O	56:CP:36:VAL:HG13	2.00	0.60
25:BD:61:THR:OG1	25:BD:63:PRO:HD2	2.00	0.60
57:DA:2332:C:H4'	44:DW:40:ARG:CZ	2.32	0.60
5:AE:121:ASN:N	5:AE:121:ASN:HD22	2.00	0.60
1:AA:1241:G:C2	1:AA:1242:G:C5	2.90	0.60
57:DA:1386:C:O2'	57:DA:1387:A:H8	1.85	0.60
57:DA:1078:U:H4'	57:DA:1079:C:H5''	1.81	0.60
57:DA:1663:G:C2	57:DA:1998:A:C5	2.90	0.60
1:AA:1442:G:H2'	1:AA:1443:C:H6	1.66	0.60
57:DA:83:A:N6	57:DA:101:A:H5'	2.16	0.60
1:AA:1003:G:N2	1:AA:1005:A:H5'	2.17	0.60
26:BE:175:ILE:HG23	26:BE:175:ILE:O	2.00	0.60
46:DY:28:LEU:HD23	46:DY:42:LEU:HD13	1.82	0.60
59:DF:42:ALA:CB	59:DF:49:LEU:HD21	2.31	0.60
53:CA:67:C:OP1	53:CA:199:A:H5''	2.01	0.60
29:BH:3:VAL:HA	29:BH:37:VAL:O	2.02	0.60
45:DX:29:LEU:HB2	45:DX:30:PRO:CD	2.31	0.60
22:BA:2328:A:H2'	22:BA:2329:U:H6	1.62	0.60
32:DK:39:ILE:HB	32:DK:41:ILE:HD13	1.82	0.60
1:AA:487:A:H2'	1:AA:488:C:O4'	2.01	0.60
32:DK:7:MET:HG3	32:DK:17:ARG:HH12	1.65	0.60
39:BR:21:ARG:HG3	39:BR:95:ASP:OD1	2.01	0.60
22:BA:1873:G:O2'	22:BA:1874:C:H5'	2.02	0.60
42:BU:71:ILE:HD12	42:BU:95:PHE:CD2	2.36	0.60
43:DV:44:HIS:CD2	43:DV:85:LYS:HB2	2.37	0.60
53:CA:958:A:H62	19:CS:54:ARG:NH1	2.00	0.60
3:CC:13:ILE:HG22	3:CC:14:VAL:HG23	1.84	0.60
3:CC:122:GLN:HB2	3:CC:127:VAL:HG21	1.83	0.60
33:BL:96:LYS:HA	33:BL:101:ILE:HG22	1.84	0.60
48:B0:35:GLU:OE1	48:B0:45:ASP:HB2	2.00	0.60
40:BS:48:LYS:O	40:BS:52:GLU:HG3	2.01	0.60
10:AJ:8:ILE:HG12	10:AJ:100:ILE:HG22	1.83	0.60
37:BP:17:PRO:HG3	37:BP:83:ILE:O	2.00	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1385:A:H1'	22:BA:1386:C:C6	2.37	0.60
11:AK:108:ASN:HB3	21:AU:6:ARG:HG2	1.83	0.60
54:CG:75:LYS:HG3	54:CG:76:SER:N	2.17	0.60
37:DP:102:ARG:HD2	37:DP:106:ALA:O	2.02	0.60
28:DG:72:ASN:O	28:DG:76:ILE:HG12	2.01	0.60
24:DC:257:ARG:NH2	24:DC:266:ILE:HD11	2.16	0.60
38:DQ:71:ASN:HD21	38:DQ:106:THR:HG23	1.66	0.60
44:BW:18:LYS:HE3	44:BW:19:ARG:CG	2.30	0.60
53:CA:960:U:O2'	53:CA:1223:C:H5''	2.01	0.60
57:DA:2361:G:OP1	51:D3:25:HIS:HA	2.02	0.60
33:BL:77:ILE:O	33:BL:110:VAL:O	2.20	0.60
57:DA:1341:G:H3'	57:DA:1397:U:O2	2.01	0.60
31:DJ:6:ALA:HB3	31:DJ:45:THR:HB	1.82	0.60
57:DA:1605:C:H4'	57:DA:1610:A:C6	2.36	0.60
22:BA:1731:G:C4	22:BA:1733:G:N7	2.69	0.60
25:DD:119:ALA:HB3	25:DD:163:GLY:N	2.11	0.60
57:DA:1038:G:N3	57:DA:1039:A:C8	2.69	0.60
22:BA:2728:U:O2'	22:BA:2729:G:C5'	2.47	0.60
23:BB:28:C:OP1	36:BO:31:THR:HG21	2.02	0.60
21:AU:36:PHE:HB3	21:AU:40:PRO:HD3	1.84	0.60
40:BS:18:ARG:CG	40:BS:76:VAL:HG13	2.32	0.60
22:BA:28:A:O2'	22:BA:29:U:H5'	2.02	0.60
57:DA:279:A:C2	57:DA:362:A:H4'	2.36	0.60
57:DA:976:G:H2'	57:DA:977:G:C8	2.34	0.60
28:BG:60:GLY:O	28:BG:61:TRP:HB2	2.02	0.60
51:B3:32:LEU:HA	51:B3:35:LYS:HD2	1.82	0.60
3:CC:120:THR:HG23	3:CC:187:GLU:O	2.01	0.60
28:DG:95:ALA:HB3	28:DG:127:GLN:HA	1.83	0.60
57:DA:516:C:H2'	57:DA:517:C:H6	1.67	0.60
14:AN:51:PRO:O	14:AN:52:ARG:HB2	2.01	0.60
22:BA:794:A:H2'	22:BA:795:C:C6	2.36	0.60
25:BD:8:LYS:HB2	25:BD:201:LEU:HD22	1.84	0.60
1:AA:267:C:O2'	1:AA:268:U:H5'	2.01	0.60
31:BJ:3:THR:HG21	38:BQ:60:TRP:NE1	2.17	0.60
31:BJ:44:TYR:HD2	38:BQ:63:ARG:HD3	1.67	0.60
39:BR:39:LEU:HA	39:BR:49:ILE:CG2	2.32	0.60
22:BA:2094:A:P	29:BH:22:LYS:HD2	2.42	0.60
57:DA:2336:A:N7	44:DW:40:ARG:NH2	2.50	0.60
53:CA:1159:U:H5	53:CA:1182:G:O2'	1.81	0.60
24:DC:211:ARG:HD2	24:DC:215:VAL:O	2.01	0.60
57:DA:1275:A:N7	35:DN:16:HIS:HB2	2.17	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1387:A:O2'	57:DA:1388:G:H8	1.77	0.60
26:DE:131:THR:HG22	26:DE:161:ALA:H	1.66	0.60
47:DZ:16:LEU:HD23	47:DZ:19:HIS:CD2	2.37	0.60
15:AO:15:GLY:C	15:AO:17:ASP:H	2.05	0.60
22:BA:1941:C:C5'	22:BA:1941:C:H6	2.10	0.60
1:AA:374:A:OP1	1:AA:452:A:N1	2.35	0.60
30:BI:10:LEU:HD13	30:BI:27:LEU:HA	1.84	0.60
10:AJ:57:VAL:HG22	10:AJ:58:ASN:N	2.14	0.60
26:BE:193:VAL:O	26:BE:197:GLU:HB2	2.02	0.60
10:AJ:53:ILE:CG2	10:AJ:61:ALA:HB1	2.31	0.60
57:DA:2056:G:N2	48:D0:1:ALA:H1	1.99	0.60
41:DT:48:GLN:HA	41:DT:48:GLN:HE21	1.67	0.60
3:CC:41:TYR:HE1	3:CC:89:VAL:HG12	1.67	0.60
17:CQ:27:PHE:HD1	17:CQ:36:PHE:HB3	1.66	0.60
22:BA:1673:G:C2'	22:BA:1674:G:H5'	2.31	0.60
22:BA:2021:C:P	48:B0:8:THR:HG21	2.42	0.60
53:CA:1514:G:H2'	53:CA:1515:G:H8	1.67	0.60
4:CD:138:PRO:O	4:CD:139:ASN:HB2	2.02	0.60
22:BA:987:C:H2'	22:BA:988:A:H5'	1.84	0.60
57:DA:1797:G:O3'	24:DC:255:LYS:O	2.20	0.60
57:DA:1713:A:H4'	57:DA:1714:U:OP1	2.01	0.60
40:BS:13:SER:O	40:BS:14:ALA:HB2	2.00	0.60
22:BA:875:G:H2'	22:BA:876:C:H5'	1.83	0.60
8:AH:104:SER:O	8:AH:122:GLY:HA3	2.02	0.60
19:AS:3:SER:O	19:AS:5:LYS:HG3	2.01	0.60
57:DA:2834:G:H1'	57:DA:2879:A:H61	1.65	0.60
14:AN:15:LEU:HD23	14:AN:18:LYS:HD2	1.82	0.60
26:DE:44:ARG:H	26:DE:89:PRO:HA	1.66	0.60
13:AM:40:GLU:HG3	13:AM:41:ASP:N	2.17	0.60
6:CF:9:MET:HE1	18:CR:64:LEU:O	2.02	0.60
22:BA:2810:A:H2'	22:BA:2811:G:O4'	2.01	0.60
45:BX:52:ALA:O	45:BX:53:LYS:CB	2.49	0.60
27:BF:133:GLU:H	27:BF:150:GLY:HA3	1.65	0.60
2:CB:80:LYS:O	2:CB:84:LEU:N	2.34	0.60
22:BA:1078:U:H4'	22:BA:1079:C:C6	2.37	0.60
2:CB:103:TRP:HB2	2:CB:106:VAL:HB	1.84	0.60
46:BY:47:ARG:NH2	46:BY:47:ARG:HG3	2.07	0.60
57:DA:1439:A:H3'	57:DA:1439:A:H8	1.65	0.60
14:AN:30:ILE:HG23	14:AN:44:VAL:HG12	1.83	0.60
24:BC:93:VAL:O	24:BC:94:LEU:HB3	1.99	0.60
1:AA:826:C:H5'	8:AH:12:ARG:NH2	2.13	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:90:LEU:HB3	29:DH:123:ARG:HD2	1.84	0.60
22:BA:572:A:C2	22:BA:2033:A:C2	2.89	0.60
35:DN:67:PHE:HE2	35:DN:73:ASN:HD21	1.49	0.60
21:CU:35:GLU:O	21:CU:36:PHE:CD2	2.54	0.60
34:BM:6:ARG:HD2	34:BM:8:LYS:NZ	2.16	0.60
24:DC:68:ARG:NH1	24:DC:115:ILE:HD12	2.14	0.60
25:DD:45:TYR:HE2	25:DD:47:ALA:HB3	1.67	0.60
37:BP:95:LYS:HG2	37:BP:97:TYR:CE1	2.36	0.60
16:AP:20:VAL:CG2	16:AP:32:PHE:HB2	2.32	0.60
56:CP:16:PHE:CE2	56:CP:40:ASN:HB2	2.36	0.60
53:CA:47:C:H4'	53:CA:48:C:O5'	2.00	0.60
40:BS:59:GLU:HA	40:BS:64:ALA:CB	2.32	0.60
1:AA:1314:C:O2'	1:AA:1315:U:H5'	2.02	0.60
53:CA:675:A:H1'	11:CK:117:HIS:ND1	2.17	0.60
53:CA:158:G:C5	53:CA:164:G:C6	2.90	0.60
53:CA:1422:G:H5''	32:DK:48:PRO:HB3	1.83	0.60
4:CD:94:GLU:OE1	4:CD:103:ARG:NE	2.33	0.60
1:AA:582:C:C2	1:AA:583:A:C8	2.90	0.60
22:BA:2491:U:H5''	22:BA:2570:G:H5''	1.84	0.60
57:DA:1557:C:H2'	57:DA:1558:C:C6	2.37	0.60
8:CH:93:LYS:N	8:CH:93:LYS:HD3	2.17	0.60
22:BA:2547:A:H2'	22:BA:2548:U:C6	2.37	0.60
22:BA:1515:A:H2'	22:BA:1516:G:O4'	2.02	0.60
48:D0:30:ASP:OD1	48:D0:47:TYR:HB3	2.02	0.60
57:DA:2094:A:O2'	57:DA:2095:A:O4'	2.20	0.60
44:BW:39:GLN:NE2	44:BW:43:LYS:N	2.50	0.60
44:BW:67:LYS:O	44:BW:68:PHE:HB2	2.01	0.60
53:CA:1181:G:O2'	53:CA:1182:G:O4'	2.17	0.60
57:DA:1054:A:C4	57:DA:1055:G:H1'	2.36	0.60
57:DA:1063:G:O2'	57:DA:1064:C:C6	2.54	0.60
53:CA:93:U:C2	53:CA:95:C:N4	2.70	0.60
35:DN:37:THR:HG22	35:DN:39:PRO:CD	2.29	0.60
1:AA:261:U:OP2	20:AT:73:ARG:NH2	2.35	0.60
37:DP:67:GLU:CD	37:DP:68:GLY:H	2.05	0.60
22:BA:1011:G:H5''	38:BQ:76:SER:OG	2.02	0.60
22:BA:705:A:N6	22:BA:726:G:H1'	2.17	0.60
53:CA:1101:A:H1'	53:CA:1102:A:O4'	2.02	0.60
24:DC:93:VAL:HG11	24:DC:101:ARG:H	1.67	0.60
57:DA:1352:U:H5	57:DA:1377:G:C5	2.19	0.60
31:DJ:25:LEU:HD22	31:DJ:26:GLY:N	2.17	0.60
1:AA:547:A:H4'	1:AA:548:G:O5'	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:125:PHE:CD1	2:CB:137:THR:HG22	2.37	0.60
31:BJ:21:THR:HG22	31:BJ:22:GLY:H	1.66	0.60
1:AA:1381:U:O2'	1:AA:1382:C:C5'	2.49	0.60
2:AB:19:THR:HG23	2:AB:20:ARG:H	1.66	0.60
17:CQ:59:GLU:HB3	17:CQ:76:ARG:O	2.01	0.60
57:DA:2582:G:H2'	57:DA:2582:G:N3	2.16	0.60
1:AA:1046:A:O2'	1:AA:1047:G:H5'	2.01	0.60
45:DX:39:VAL:O	45:DX:40:GLU:HB2	2.00	0.60
22:BA:749:A:C6	22:BA:1618:A:C2	2.89	0.60
29:BH:125:THR:HG23	29:BH:126:GLY:H	1.67	0.60
22:BA:2443:C:O2'	22:BA:2444:G:H5'	2.02	0.60
57:DA:1379:U:H2'	57:DA:1379:U:O2	2.01	0.60
22:BA:950:G:C6	22:BA:951:C:C4	2.90	0.60
5:AE:55:VAL:N	5:AE:56:PRO:HD2	2.16	0.60
31:BJ:43:GLU:O	31:BJ:44:TYR:C	2.40	0.59
22:BA:2571:U:O2'	25:BD:151:THR:CG2	2.50	0.59
57:DA:238:C:H4'	57:DA:608:A:O2'	2.02	0.59
57:DA:181:A:C2	57:DA:434:U:H1'	2.37	0.59
57:DA:833:A:H2'	57:DA:834:G:C8	2.36	0.59
22:BA:1131:G:OP1	31:BJ:82:GLY:HA2	2.02	0.59
1:AA:466:A:O2'	1:AA:467:U:H5	1.85	0.59
57:DA:2142:A:H2'	57:DA:2143:C:H4'	1.83	0.59
41:BT:44:LYS:O	41:BT:48:GLN:HG2	2.02	0.59
55:CM:12:LYS:H	55:CM:44:ILE:HG13	1.66	0.59
57:DA:226:A:H2'	57:DA:227:A:H8	1.66	0.59
35:BN:79:LEU:O	35:BN:80:PHE:CB	2.49	0.59
24:BC:185:ALA:C	24:BC:187:CYS:H	2.06	0.59
53:CA:338:A:N6	53:CA:351:G:H1	1.98	0.59
25:DD:125:TRP:HB3	25:DD:160:LYS:HD3	1.84	0.59
22:BA:946:C:H2'	22:BA:947:A:H8	1.66	0.59
58:DB:86:G:C2'	58:DB:87:U:H5"	2.30	0.59
53:CA:808:C:OP1	15:CO:47:LYS:HE2	2.02	0.59
1:AA:788:U:H2'	1:AA:789:U:H6	1.65	0.59
38:BQ:27:ARG:NH1	38:BQ:27:ARG:HG3	2.17	0.59
53:CA:608:A:OP2	63:CA:1859:HOH:O	2.16	0.59
40:BS:59:GLU:HA	40:BS:64:ALA:HA	1.84	0.59
22:BA:1415:U:O2	22:BA:1415:U:H2'	2.01	0.59
57:DA:2635:A:C5'	25:DD:79:LEU:HB2	2.32	0.59
17:CQ:25:GLU:HG2	17:CQ:40:THR:HG22	1.83	0.59
22:BA:1465:G:C6	22:BA:1466:U:N3	2.70	0.59
29:DH:83:LYS:HE2	29:DH:149:GLU:HB3	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:49:ALA:O	29:DH:53:GLU:HB2	2.01	0.59
32:BK:51:LYS:HE3	32:BK:52:VAL:HG12	1.83	0.59
57:DA:784:G:C6	24:DC:227:VAL:HG11	2.38	0.59
54:CG:63:VAL:HG11	54:CG:127:ALA:HB2	1.84	0.59
57:DA:585:G:C2'	57:DA:1254:A:H61	2.14	0.59
53:CA:404:G:O6	4:CD:1:ALA:HB2	2.01	0.59
42:DU:73:ASN:HB3	42:DU:95:PHE:HE2	1.67	0.59
59:DF:91:ARG:HA	59:DF:95:MET:SD	2.42	0.59
41:BT:40:LYS:O	41:BT:44:LYS:N	2.34	0.59
53:CA:1239:A:H62	53:CA:1299:A:N6	2.00	0.59
57:DA:1438:U:H2'	57:DA:1439:A:O4'	2.02	0.59
57:DA:1126:A:H8	57:DA:1126:A:OP1	1.84	0.59
22:BA:1784:A:H4'	22:BA:1785:A:C5'	2.32	0.59
11:CK:126:ARG:O	21:CU:33:ARG:CZ	2.50	0.59
32:DK:76:VAL:O	37:DP:71:ARG:HG3	2.02	0.59
2:AB:133:ALA:O	2:AB:137:THR:HG23	2.01	0.59
57:DA:203:A:H8	57:DA:203:A:O5'	1.85	0.59
22:BA:945:A:H5'	22:BA:946:C:OP2	2.02	0.59
53:CA:564:C:H5'	53:CA:564:C:C6	2.36	0.59
36:DO:15:ARG:HG2	36:DO:93:ASP:OD1	2.02	0.59
22:BA:2250:G:O5'	22:BA:2250:G:H8	1.86	0.59
15:AO:85:GLY:O	15:AO:86:LEU:HB3	2.01	0.59
33:BL:14:LYS:HG3	33:BL:15:ALA:N	2.17	0.59
53:CA:265:G:O3'	17:CQ:67:SER:HA	2.01	0.59
53:CA:637:C:H2'	53:CA:638:U:C6	2.37	0.59
9:AI:9:GLY:HA2	9:AI:80:HIS:HD2	1.66	0.59
1:AA:1084:G:C5	1:AA:1085:U:C4	2.91	0.59
1:AA:903:G:H2'	1:AA:904:U:H6	1.67	0.59
57:DA:615:U:O4	26:DE:39:ALA:HB2	2.02	0.59
53:CA:1493:A:H3'	57:DA:1913:A:N6	2.17	0.59
42:BU:28:LEU:HB2	42:BU:32:LYS:O	2.01	0.59
58:DB:42:C:N4	59:DF:87:LYS:NZ	2.50	0.59
57:DA:1716:U:O2'	57:DA:1717:A:H5'	2.03	0.59
57:DA:2849:U:OP1	37:DP:92:ARG:NH1	2.36	0.59
53:CA:1226:C:C5	55:CM:102:LYS:HA	2.37	0.59
53:CA:951:G:H2'	53:CA:952:U:C6	2.36	0.59
57:DA:395:U:O2'	57:DA:396:G:H8	1.84	0.59
2:AB:117:GLU:HA	2:AB:120:SER:HB2	1.83	0.59
11:AK:39:ASN:O	11:AK:40:ALA:HB3	2.02	0.59
57:DA:2533:U:H4'	57:DA:2664:G:H4'	1.84	0.59
22:BA:646:U:H3'	22:BA:647:G:C5'	2.33	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1813:G:N3	24:BC:49:THR:CG2	2.65	0.59
25:BD:122:VAL:HG12	25:BD:123:LYS:N	2.17	0.59
22:BA:1669:A:H2'	22:BA:1669:A:N3	2.16	0.59
22:BA:2233:U:H2'	22:BA:2234:G:C8	2.37	0.59
36:DO:94:ARG:HD2	36:DO:97:PHE:O	2.03	0.59
53:CA:1440:U:OP2	53:CA:1440:U:H6	1.84	0.59
44:BW:14:ASP:O	44:BW:15:SER:HB2	2.02	0.59
57:DA:2386:A:H2	44:DW:38:ARG:HG2	1.68	0.59
44:DW:45:HIS:HB3	44:DW:58:LEU:HD11	1.84	0.59
57:DA:2756:U:C1'	57:DA:2757:A:H5''	2.32	0.59
57:DA:45:G:H5'	57:DA:46:G:OP1	2.03	0.59
22:BA:1062:G:C2'	22:BA:1063:G:C8	2.86	0.59
57:DA:782:A:H5'	57:DA:783:A:C2	2.37	0.59
57:DA:574:A:H4'	57:DA:575:A:H5'	1.84	0.59
57:DA:1338:G:H4'	41:DT:18:GLU:OE2	2.02	0.59
43:BV:80:HIS:CD2	43:BV:83:LYS:CB	2.85	0.59
57:DA:1534:U:C6	57:DA:1538:G:N1	2.70	0.59
53:CA:1142:G:H2'	53:CA:1143:G:C8	2.37	0.59
53:CA:1148:U:H2'	53:CA:1149:C:O4'	2.02	0.59
57:DA:1609:A:N6	57:DA:1616:A:C2	2.71	0.59
1:AA:345:C:OP1	37:BP:36:LYS:HE2	2.01	0.59
2:AB:99:MET:HA	2:AB:106:VAL:HG21	1.84	0.59
14:AN:9:GLU:OE1	14:AN:60:ARG:HB3	2.01	0.59
22:BA:790:U:O2'	22:BA:791:C:O5'	2.20	0.59
57:DA:388:G:N7	57:DA:390:U:H2'	2.18	0.59
1:AA:1228:C:H2'	1:AA:1229:A:C8	2.37	0.59
39:DR:24:LYS:HA	39:DR:94:THR:HG23	1.83	0.59
1:AA:1386:G:H2'	1:AA:1387:G:C8	2.36	0.59
41:BT:28:ASN:HA	41:BT:91:GLN:NE2	2.17	0.59
18:CR:33:THR:HG23	18:CR:39:VAL:HG22	1.84	0.59
22:BA:226:A:N6	22:BA:227:A:C6	2.70	0.59
58:DB:31:C:H5''	59:DF:29:ARG:HH12	1.67	0.59
11:CK:85:VAL:HG11	11:CK:92:ARG:NH1	2.17	0.59
53:CA:885:G:HO2'	53:CA:914:A:H2	1.51	0.59
57:DA:590:A:C6	57:DA:591:U:C4	2.90	0.59
57:DA:532:A:H5'	57:DA:533:G:O4'	2.03	0.59
31:BJ:64:VAL:HG22	31:BJ:68:LYS:HD2	1.84	0.59
4:CD:29:THR:C	4:CD:30:LYS:HD3	2.22	0.59
39:DR:27:ILE:HG13	39:DR:33:VAL:HG11	1.85	0.59
43:BV:10:LYS:HZ3	43:BV:10:LYS:HB2	1.67	0.59
53:CA:951:G:H2'	53:CA:952:U:H6	1.67	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:124:LYS:HG3	21:CU:34:ARG:HD2	1.85	0.59
21:CU:35:GLU:HA	21:CU:35:GLU:OE2	2.01	0.59
32:DK:76:VAL:HB	37:DP:72:VAL:HG22	1.84	0.59
46:DY:20:ASN:ND2	46:DY:50:VAL:HG22	2.16	0.59
11:AK:125:LYS:O	11:AK:126:ARG:HB2	2.01	0.59
5:CE:14:LEU:HD13	5:CE:36:THR:HG22	1.85	0.59
55:CM:78:ARG:NH2	55:CM:79:LEU:HD23	2.16	0.59
1:AA:672:U:H2'	1:AA:673:A:C8	2.38	0.59
1:AA:714:G:H2'	1:AA:715:A:C8	2.37	0.59
53:CA:596:A:C2	53:CA:597:G:C5	2.91	0.59
41:BT:2:ILE:HG13	41:BT:3:ARG:NH2	2.18	0.59
22:BA:196:A:H2'	22:BA:805:G:O6	2.02	0.59
53:CA:388:G:O2'	53:CA:389:A:P	2.61	0.59
23:BB:112:G:H2'	23:BB:113:C:H6	1.67	0.59
41:BT:29:THR:HB	41:BT:86:THR:HG22	1.84	0.59
57:DA:2351:G:O6	51:D3:42:HIS:HE1	1.85	0.59
53:CA:1336:C:H1'	53:CA:1337:G:C2	2.36	0.59
27:BF:128:SER:HA	27:BF:154:THR:HA	1.83	0.59
53:CA:1084:G:C5	53:CA:1085:U:C4	2.91	0.59
55:CM:86:ARG:NH1	55:CM:90:HIS:HD2	2.00	0.59
57:DA:2552:U:C2	57:DA:2554:U:H5'	2.38	0.59
53:CA:460:A:O2'	53:CA:462:G:H5'	2.02	0.59
1:AA:994:A:C5	1:AA:1216:A:H4'	2.37	0.59
26:BE:169:VAL:O	26:BE:170:ARG:HD2	2.02	0.59
57:DA:538:A:O2'	31:DJ:8:PRO:HG3	2.02	0.59
13:AM:68:LEU:O	13:AM:72:ILE:HG13	2.02	0.59
57:DA:2333:A:C2	57:DA:2335:A:N6	2.69	0.59
44:BW:67:LYS:HB3	44:BW:80:SER:H	1.66	0.59
2:CB:80:LYS:HD3	2:CB:90:PHE:CZ	2.37	0.59
57:DA:2446:G:H5''	57:DA:2447:G:OP2	2.03	0.59
2:AB:65:LYS:HG2	2:AB:153:MET:HG3	1.84	0.59
11:CK:74:LYS:HG3	11:CK:78:ILE:HG12	1.85	0.59
57:DA:2720:U:H5''	37:DP:52:ARG:HH21	1.68	0.59
22:BA:783:A:C8	22:BA:784:G:H4'	2.37	0.59
57:DA:1439:A:N7	57:DA:1440:U:H1'	2.16	0.59
22:BA:2503:A:H4'	22:BA:2504:U:OP1	2.02	0.59
57:DA:1013:C:O2'	57:DA:1014:A:H5'	2.03	0.59
2:AB:116:LEU:HD12	2:AB:140:LEU:HD11	1.84	0.59
1:AA:545:C:H5'	4:AD:68:GLU:CG	2.32	0.59
39:BR:97:LYS:O	39:BR:98:ILE:HB	2.03	0.59
33:DL:33:ARG:HD3	33:DL:40:SER:HA	1.82	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:6:PRO:O	3:AC:10:ARG:HG2	2.03	0.59
53:CA:296:U:C2	53:CA:297:G:C8	2.90	0.59
1:AA:569:C:H5''	1:AA:570:G:OP1	2.02	0.59
53:CA:1478:U:H2'	53:CA:1479:C:H6	1.65	0.59
39:DR:62:GLU:OE1	39:DR:97:LYS:HD2	2.02	0.59
1:AA:865:A:O2'	1:AA:866:C:H5'	2.03	0.59
23:BB:109:A:H2'	23:BB:110:C:C6	2.38	0.59
57:DA:836:G:C6	57:DA:837:C:C4	2.91	0.59
7:AG:29:LEU:HD23	7:AG:29:LEU:O	2.02	0.59
26:BE:7:ASP:O	26:BE:9:GLN:N	2.36	0.59
7:AG:106:ALA:HB1	7:AG:132:THR:HB	1.82	0.59
22:BA:614:A:O2'	22:BA:615:U:OP2	2.19	0.59
57:DA:2255:G:H2'	57:DA:2256:G:O4'	2.01	0.59
37:BP:50:ARG:CG	37:BP:57:ALA:H	2.16	0.59
53:CA:1493:A:H3'	57:DA:1913:A:H62	1.67	0.59
6:AF:92:THR:O	6:AF:93:LYS:HG2	2.01	0.59
57:DA:589:U:C2'	57:DA:590:A:H8	2.15	0.59
57:DA:726:G:OP2	57:DA:726:G:C8	2.55	0.59
58:DB:111:U:O2'	58:DB:112:G:C8	2.53	0.59
57:DA:1274:A:C6	57:DA:1302:A:C2	2.91	0.59
57:DA:323:C:H6	26:DE:165:HIS:CE1	2.20	0.59
31:DJ:43:GLU:O	31:DJ:45:THR:N	2.35	0.59
25:BD:114:LYS:NZ	25:BD:116:LYS:HE2	2.18	0.59
33:BL:28:GLY:O	33:BL:29:LYS:O	2.21	0.59
22:BA:1105:U:H2'	22:BA:1106:G:H8	1.67	0.59
8:AH:45:ILE:HA	8:AH:63:LYS:HG3	1.84	0.59
57:DA:1183:U:H2'	57:DA:1184:U:C6	2.37	0.59
57:DA:128:C:H6	57:DA:128:C:H5''	1.67	0.59
25:DD:117:GLY:HA2	25:DD:164:GLN:OE1	2.02	0.59
57:DA:685:A:H1'	57:DA:688:U:O4	2.02	0.59
12:AL:29:LYS:O	12:AL:81:ILE:HG22	2.02	0.59
53:CA:1452:C:H5'	53:CA:1453:G:C5	2.37	0.59
11:CK:126:ARG:O	21:CU:33:ARG:NH2	2.34	0.59
22:BA:2492:U:H2'	22:BA:2493:U:C6	2.37	0.59
34:DM:42:THR:HB	34:DM:45:GLN:CG	2.31	0.59
53:CA:497:G:O2'	53:CA:498:A:C8	2.53	0.59
24:DC:78:GLU:OE2	24:DC:94:LEU:HD22	2.03	0.59
57:DA:188:G:H2'	57:DA:189:G:H5'	1.85	0.59
22:BA:26:G:H1'	22:BA:514:A:H61	1.66	0.59
30:BI:105:LEU:HA	30:BI:108:ILE:HB	1.84	0.59
25:BD:110:THR:CG2	25:BD:171:THR:HG22	2.31	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BZ:3:THR:HA	47:BZ:37:ARG:O	2.03	0.59
1:AA:674:G:H4'	18:AR:69:TYR:CD1	2.37	0.59
8:AH:6:ILE:HB	8:AH:76:ARG:NH1	2.16	0.59
57:DA:851:C:H4'	47:DZ:46:MET:HG2	1.84	0.59
12:AL:6:LEU:HD23	17:AQ:33:TYR:CE2	2.37	0.59
4:CD:197:HIS:O	4:CD:201:GLU:HG3	2.03	0.59
48:B0:43:THR:HG23	48:B0:47:TYR:O	2.02	0.59
51:B3:56:LEU:H	51:B3:56:LEU:HD22	1.67	0.59
22:BA:632:A:O2'	22:BA:633:A:H5'	2.02	0.59
58:DB:38:C:H4'	36:DO:100:HIS:NE2	2.17	0.59
2:AB:53:LEU:HA	2:AB:56:LEU:HB3	1.84	0.59
57:DA:901:C:H2'	57:DA:902:C:H6	1.66	0.59
12:CL:34:THR:HG22	12:CL:35:ARG:HE	1.67	0.59
22:BA:1115:G:O2'	22:BA:1116:G:O5'	2.21	0.59
37:BP:50:ARG:CD	37:BP:56:SER:HB3	2.13	0.59
44:BW:39:GLN:HG3	44:BW:42:THR:H	1.66	0.59
44:BW:9:THR:HG22	44:BW:10:ARG:NH1	2.17	0.59
53:CA:960:U:H4'	53:CA:961:U:H5''	1.84	0.59
57:DA:2447:G:N7	57:DA:2500:U:H2'	2.17	0.59
11:CK:104:PHE:H	11:CK:104:PHE:HD1	1.50	0.59
57:DA:1078:U:H4'	57:DA:1079:C:O5'	2.01	0.59
57:DA:1662:U:C2'	57:DA:1663:G:H5''	2.29	0.59
22:BA:558:U:H5''	31:BJ:111:LYS:HE3	1.84	0.59
14:AN:48:GLN:NE2	14:AN:48:GLN:HA	2.18	0.59
57:DA:960:A:C2'	57:DA:962:G:H5'	2.31	0.59
25:DD:117:GLY:O	25:DD:119:ALA:N	2.36	0.59
57:DA:638:G:H2'	57:DA:639:U:C6	2.38	0.59
43:BV:44:HIS:CE1	43:BV:85:LYS:HB2	2.37	0.59
35:DN:51:LEU:HA	35:DN:54:LEU:CD2	2.33	0.59
53:CA:795:C:H5''	11:CK:127:ARG:HH21	1.68	0.59
41:DT:67:VAL:O	41:DT:68:LYS:HG3	2.02	0.59
53:CA:113:G:H1'	53:CA:354:G:H5'	1.83	0.59
22:BA:1252:G:N3	38:BQ:32:ARG:HG2	2.18	0.59
22:BA:444:C:H4'	26:BE:44:ARG:HD3	1.85	0.59
22:BA:533:G:H2'	22:BA:534:U:C6	2.38	0.59
22:BA:141:G:N1	41:BT:2:ILE:HG23	2.17	0.59
28:DG:8:VAL:HG11	28:DG:49:LEU:HD23	1.85	0.59
48:D0:28:SER:HB3	48:D0:39:ARG:NE	2.17	0.59
22:BA:540:C:C2'	22:BA:541:A:H5'	2.33	0.59
33:BL:56:PRO:HD2	33:BL:59:ARG:HG3	1.83	0.59
12:AL:79:ILE:HD12	12:AL:96:THR:HG21	1.85	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1305:G:H22	53:CA:1331:G:H2'	1.67	0.59
53:CA:1331:G:HO2'	53:CA:1332:A:H8	1.51	0.59
42:DU:11:ILE:HG21	42:DU:79:ALA:HB2	1.84	0.59
1:AA:158:G:H2'	1:AA:159:G:H5''	1.84	0.59
12:CL:27:PRO:HB2	12:CL:28:GLN:OE1	2.03	0.59
29:BH:6:LEU:O	29:BH:15:LEU:HA	2.02	0.59
57:DA:1833:C:C4	57:DA:1834:U:C4	2.91	0.59
34:BM:78:LEU:HD23	34:BM:79:ALA:N	2.17	0.59
57:DA:2196:C:O2'	57:DA:2197:U:H5'	2.03	0.59
59:DF:92:GLY:O	59:DF:95:MET:HB3	2.03	0.59
53:CA:1144:G:H21	53:CA:1146:A:N6	2.00	0.59
31:BJ:111:LYS:CD	31:BJ:112:GLY:N	2.63	0.59
31:BJ:110:PRO:HB2	31:BJ:111:LYS:HG3	1.84	0.59
53:CA:734:G:H2'	53:CA:735:C:C6	2.38	0.59
11:AK:22:ILE:HD11	11:AK:85:VAL:HG13	1.83	0.59
1:AA:1006:G:H2'	1:AA:1007:U:C6	2.38	0.59
53:CA:654:G:H2'	53:CA:655:A:C8	2.38	0.59
10:AJ:51:VAL:CB	14:AN:80:ARG:HB2	2.31	0.59
22:BA:752:A:C8	22:BA:1781:U:O4'	2.56	0.59
1:AA:429:U:H1'	1:AA:430:A:H5''	1.84	0.59
35:DN:73:ASN:HA	35:DN:76:VAL:HG22	1.85	0.59
1:AA:1222:G:OP1	1:AA:1321:U:O2'	2.18	0.59
3:CC:180:ASP:OD2	3:CC:203:LYS:HB2	2.03	0.59
22:BA:547:A:C8	22:BA:548:G:N3	2.71	0.59
2:AB:163:ILE:HG23	2:AB:164:ASP:N	2.15	0.59
22:BA:2637:U:OP1	25:BD:83:ARG:NH2	2.36	0.59
57:DA:70:G:O2'	57:DA:71:A:H5''	2.03	0.59
57:DA:507:A:OP2	57:DA:507:A:H2'	2.02	0.59
1:AA:185:U:H2'	1:AA:186:C:H6	1.67	0.59
1:AA:409:U:OP1	4:AD:23:GLY:HA3	2.02	0.59
22:BA:142:A:H2'	22:BA:143:C:C5	2.37	0.59
22:BA:1799:G:N2	22:BA:1818:U:O2'	2.34	0.59
1:AA:762:U:C2	1:AA:763:G:C8	2.90	0.59
57:DA:2260:C:H2'	57:DA:2261:C:H6	1.67	0.59
22:BA:2514:U:H2'	22:BA:2515:C:C6	2.37	0.59
33:DL:81:ASP:O	33:DL:83:ALA:N	2.35	0.59
6:CF:68:GLN:HG2	6:CF:69:GLU:H	1.67	0.59
8:AH:85:TYR:CD2	8:AH:123:GLU:HB2	2.38	0.59
1:AA:1111:A:O2'	1:AA:1112:C:H5'	2.02	0.59
57:DA:1461:C:H2'	57:DA:1462:C:C6	2.37	0.59
1:AA:1508:A:H2'	1:AA:1509:C:O4'	2.03	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2345:G:C5	22:BA:2381:A:C2	2.91	0.59
40:BS:42:LYS:O	40:BS:42:LYS:HD3	2.03	0.59
31:DJ:2:LYS:NZ	31:DJ:2:LYS:HB2	2.17	0.59
33:BL:114:GLY:C	33:BL:115:GLU:HG3	2.23	0.59
45:BX:58:ILE:HD11	45:BX:66:VAL:HG11	1.85	0.59
45:BX:6:VAL:HG12	45:BX:50:VAL:HG22	1.85	0.59
57:DA:2214:C:H2'	57:DA:2215:C:H6	1.67	0.59
57:DA:602:A:H1'	57:DA:656:G:H22	1.66	0.59
57:DA:705:A:H2'	57:DA:706:A:C8	2.38	0.59
8:CH:28:SER:HB2	8:CH:57:GLU:O	2.02	0.59
57:DA:17:G:H4'	38:DQ:24:TYR:HE1	1.68	0.59
57:DA:2421:G:N7	51:D3:30:HIS:HD2	2.01	0.59
33:BL:95:LEU:HB3	33:BL:100:ILE:HD11	1.84	0.59
53:CA:1072:G:C6	53:CA:1073:U:C4	2.91	0.59
20:CT:60:GLN:HB3	20:CT:65:LEU:HD12	1.85	0.59
57:DA:2023:C:O2'	57:DA:2024:G:H5'	2.02	0.59
57:DA:794:A:H2'	57:DA:795:C:H6	1.66	0.59
28:BG:88:LEU:HD11	28:BG:95:ALA:CB	2.32	0.59
24:BC:141:HIS:O	24:BC:143:VAL:HG23	2.03	0.59
1:AA:1469:C:H5'	1:AA:1469:C:H6	1.67	0.59
24:DC:159:THR:O	24:DC:194:VAL:HG12	2.03	0.59
57:DA:67:U:H2'	57:DA:68:G:C8	2.36	0.59
22:BA:946:C:H5'	63:BA:3339:HOH:O	2.02	0.59
5:CE:37:VAL:HG12	5:CE:38:VAL:N	2.18	0.59
34:BM:41:LEU:O	34:BM:93:VAL:HG23	2.02	0.59
57:DA:1494:A:H2'	57:DA:1495:A:H8	1.67	0.59
30:BI:120:ASP:HB3	30:BI:123:ALA:HB3	1.83	0.59
25:DD:32:ASN:HB3	25:DD:52:THR:OG1	2.02	0.59
12:AL:3:VAL:O	12:AL:7:VAL:HG23	2.03	0.59
22:BA:1414:C:C4	22:BA:1415:U:C5	2.90	0.59
26:BE:121:VAL:O	26:BE:189:THR:HA	2.03	0.59
1:AA:1520:C:C2	1:AA:1521:C:C5	2.91	0.59
22:BA:987:C:C2'	22:BA:988:A:H5'	2.33	0.59
57:DA:273:G:H2'	57:DA:274:C:C6	2.38	0.59
37:BP:67:GLU:HG3	37:BP:68:GLY:H	1.68	0.59
53:CA:1240:U:H5''	54:CG:108:ARG:HH21	1.68	0.59
25:DD:99:GLU:HG3	25:DD:100:LEU:N	2.18	0.59
53:CA:439:U:H4'	4:CD:120:LYS:HD2	1.85	0.59
22:BA:187:G:C2	22:BA:210:C:O2	2.56	0.59
22:BA:686:U:H2'	22:BA:788:A:N1	2.18	0.59
3:CC:149:LYS:HG3	3:CC:168:ARG:HB2	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:10:LYS:HA	2:CB:10:LYS:HE3	1.84	0.59
22:BA:1478:G:H1	22:BA:1513:U:H3	1.51	0.59
56:CP:20:VAL:HG21	56:CP:32:PHE:HB2	1.85	0.59
5:AE:136:VAL:HG22	5:AE:136:VAL:O	2.02	0.59
53:CA:256:U:H2'	53:CA:257:G:O4'	2.03	0.58
56:CP:52:LEU:O	56:CP:53:ASP:HB2	2.03	0.58
57:DA:740:C:H5''	57:DA:1784:A:H3'	1.83	0.58
57:DA:574:A:H4'	57:DA:575:A:C5'	2.33	0.58
57:DA:1204:A:H4'	57:DA:1205:A:C5'	2.33	0.58
53:CA:412:A:H4'	53:CA:413:G:OP1	2.01	0.58
2:CB:95:TRP:CH2	2:CB:171:ALA:HA	2.38	0.58
53:CA:1130:A:C5	53:CA:1146:A:C6	2.90	0.58
41:BT:40:LYS:CA	41:BT:43:ILE:HG23	2.33	0.58
1:AA:450:G:N7	1:AA:481:G:O6	2.36	0.58
57:DA:984:A:O2'	57:DA:985:C:OP1	2.21	0.58
3:AC:156:LEU:CD1	3:AC:156:LEU:H	2.13	0.58
25:BD:101:PHE:HE2	25:BD:203:VAL:CG2	2.15	0.58
53:CA:696:A:H8	53:CA:696:A:O5'	1.86	0.58
8:CH:82:LEU:HD12	12:CL:3:VAL:HG11	1.84	0.58
53:CA:66:A:N6	53:CA:67:C:N4	2.50	0.58
21:AU:24:LYS:HG2	21:AU:25:ALA:H	1.67	0.58
28:BG:33:THR:C	28:BG:34:ARG:HD3	2.22	0.58
27:BF:40:GLY:C	27:BF:84:ILE:HD11	2.24	0.58
53:CA:624:C:H4'	56:CP:10:GLY:C	2.23	0.58
42:BU:42:LYS:HB3	42:BU:57:ILE:HG23	1.85	0.58
20:CT:30:PHE:CE2	20:CT:52:GLU:HG2	2.37	0.58
35:BN:38:LEU:HB3	35:BN:39:PRO:HD3	1.85	0.58
32:BK:91:SER:O	32:BK:92:GLU:C	2.41	0.58
22:BA:962:G:H21	22:BA:2250:G:H1	1.49	0.58
57:DA:1411:U:H2'	57:DA:1412:U:C6	2.37	0.58
38:BQ:100:PHE:HD1	39:BR:13:ARG:NH2	1.99	0.58
41:BT:29:THR:HB	41:BT:86:THR:CG2	2.33	0.58
1:AA:570:G:H2'	1:AA:571:U:C6	2.38	0.58
22:BA:269:C:C2'	22:BA:270:A:H5'	2.32	0.58
6:CF:66:ALA:HB3	6:CF:71:ILE:HD13	1.85	0.58
22:BA:2344:U:H4'	22:BA:2345:G:OP1	2.01	0.58
36:DO:74:VAL:HB	36:DO:106:LEU:HD11	1.84	0.58
22:BA:1744:A:C2	22:BA:1745:A:H1'	2.39	0.58
3:AC:52:SER:HB2	3:AC:111:ASP:OD2	2.03	0.58
53:CA:861:G:H2'	53:CA:862:C:H6	1.67	0.58
5:AE:12:GLU:HB2	5:AE:38:VAL:HG12	1.84	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:72:ASN:HD22	12:CL:72:ASN:H	1.50	0.58
39:BR:49:ILE:HB	39:BR:51:VAL:O	2.03	0.58
37:BP:52:ARG:HH11	37:BP:52:ARG:HG2	1.68	0.58
53:CA:251:G:H4'	53:CA:252:U:H5'	1.85	0.58
53:CA:1124:G:O2'	53:CA:1125:U:C5	2.56	0.58
57:DA:1286:A:C4	57:DA:1289:C:N4	2.71	0.58
57:DA:1325:U:H4'	57:DA:1326:U:OP1	2.03	0.58
41:BT:32:LEU:O	41:BT:34:VAL:HG13	2.04	0.58
41:BT:54:GLU:O	41:BT:55:VAL:HB	2.03	0.58
41:BT:38:ALA:HB3	41:BT:81:LYS:HE2	1.85	0.58
5:CE:104:ILE:HA	5:CE:122:VAL:HB	1.85	0.58
57:DA:1809:A:C2'	57:DA:1810:A:C8	2.86	0.58
8:AH:45:ILE:HG22	8:AH:62:LEU:HD13	1.85	0.58
25:DD:148:GLN:HG2	25:DD:152:PRO:HG2	1.84	0.58
22:BA:2813:A:C2	22:BA:2887:A:N6	2.63	0.58
57:DA:639:U:O2'	57:DA:640:C:O4'	2.22	0.58
33:DL:79:LEU:HD22	33:DL:115:GLU:O	2.02	0.58
22:BA:564:C:C2'	22:BA:565:C:H5'	2.32	0.58
28:DG:163:TYR:N	28:DG:163:TYR:HD2	2.00	0.58
22:BA:726:G:O2'	22:BA:727:A:P	2.60	0.58
36:BO:31:THR:HG22	36:BO:34:HIS:N	2.15	0.58
3:AC:143:LEU:N	3:AC:143:LEU:HD22	2.16	0.58
5:CE:38:VAL:HG12	5:CE:39:GLY:H	1.67	0.58
22:BA:2210:U:H4'	22:BA:2211:A:C5'	2.32	0.58
1:AA:966:G:H2'	1:AA:967:C:C6	2.37	0.58
34:DM:34:LYS:HB2	34:DM:131:VAL:CG2	2.33	0.58
28:BG:9:VAL:O	28:BG:11:PRO:HD3	2.03	0.58
57:DA:2015:A:C5	48:D0:2:VAL:HG11	2.37	0.58
35:BN:66:ALA:O	35:BN:69:ARG:O	2.21	0.58
22:BA:639:U:H2'	22:BA:640:C:C6	2.38	0.58
53:CA:642:A:C8	8:CH:106:SER:HA	2.38	0.58
34:BM:76:LYS:O	34:BM:77:PRO:O	2.20	0.58
34:BM:76:LYS:HG3	34:BM:77:PRO:HD2	1.85	0.58
53:CA:892:A:O2'	53:CA:1415:G:H4'	2.03	0.58
57:DA:634:C:H2'	57:DA:635:C:C6	2.38	0.58
5:CE:84:VAL:HG22	5:CE:85:LYS:N	2.18	0.58
22:BA:60:G:O2'	22:BA:61:C:P	2.62	0.58
10:AJ:88:MET:HB3	10:AJ:89:ARG:HH12	1.68	0.58
54:CG:135:LYS:O	54:CG:139:ASP:HB2	2.03	0.58
48:D0:37:HIS:CG	48:D0:43:THR:HG22	2.38	0.58
53:CA:855:U:H5	53:CA:871:U:O4	1.86	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:49:ASP:O	4:CD:53:GLN:HG3	2.02	0.58
57:DA:404:A:H5'	57:DA:405:U:OP1	2.02	0.58
38:BQ:86:SER:O	38:BQ:87:VAL:C	2.42	0.58
28:BG:83:THR:HA	28:BG:84:LYS:CE	2.34	0.58
53:CA:252:U:H2'	53:CA:253:A:H8	1.67	0.58
14:CN:8:ARG:HD2	14:CN:12:ARG:CZ	2.34	0.58
17:AQ:60:ILE:HG22	17:AQ:72:TRP:HE3	1.68	0.58
12:AL:82:ARG:NH1	12:AL:83:GLY:O	2.36	0.58
58:DB:11:C:H2'	58:DB:15:A:N6	2.19	0.58
57:DA:2030:A:N3	57:DA:2499:C:H5''	2.18	0.58
31:DJ:41:LYS:C	31:DJ:43:GLU:N	2.56	0.58
4:CD:25:ARG:HG2	4:CD:25:ARG:NH1	2.18	0.58
57:DA:1283:G:H22	57:DA:1286:A:H5'	1.66	0.58
33:BL:30:THR:O	33:BL:33:ARG:HG2	2.04	0.58
57:DA:233:A:O2'	57:DA:234:U:O5'	2.21	0.58
57:DA:1439:A:H3'	57:DA:1439:A:C8	2.39	0.58
57:DA:1441:G:H2'	57:DA:1442:U:C6	2.38	0.58
53:CA:722:G:O3'	53:CA:723:U:C5	2.56	0.58
24:BC:170:TYR:CE2	24:BC:184:GLU:HA	2.38	0.58
57:DA:593:U:H2'	57:DA:594:U:H6	1.67	0.58
22:BA:511:U:O4	22:BA:512:G:C2	2.55	0.58
22:BA:2821:A:H4'	25:BD:167:ASN:ND2	2.18	0.58
10:AJ:29:ALA:HB1	10:AJ:36:VAL:HG21	1.84	0.58
54:CG:112:ASP:HB3	54:CG:117:LEU:HB3	1.85	0.58
1:AA:184:G:H2'	1:AA:185:U:C5	2.37	0.58
22:BA:1931:U:O2'	22:BA:1932:A:H5'	2.03	0.58
53:CA:599:C:O3'	8:CH:121:GLY:HA3	2.03	0.58
28:BG:8:VAL:O	28:BG:9:VAL:HG12	2.03	0.58
16:AP:77:GLU:C	16:AP:79:ASN:H	2.06	0.58
40:BS:63:GLY:O	40:BS:64:ALA:CB	2.51	0.58
57:DA:1519:G:H5'	57:DA:1520:U:OP2	2.03	0.58
22:BA:1945:G:C4	22:BA:1946:U:C5	2.90	0.58
22:BA:1794:A:H2'	22:BA:1795:C:H6	1.67	0.58
12:AL:64:SER:OG	12:AL:96:THR:HG23	2.02	0.58
53:CA:615:G:H2'	53:CA:616:G:H8	1.68	0.58
13:AM:40:GLU:HG3	13:AM:41:ASP:H	1.68	0.58
12:CL:34:THR:HG22	12:CL:35:ARG:HG2	1.85	0.58
53:CA:170:U:O2'	53:CA:171:A:H5'	2.04	0.58
57:DA:1231:U:H2'	57:DA:1232:G:C8	2.38	0.58
22:BA:2685:G:OP1	32:BK:78:ARG:NH2	2.35	0.58
34:DM:108:VAL:HG11	34:DM:112:LEU:HD12	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:88:ASN:HB2	32:DK:91:SER:HB2	1.85	0.58
41:BT:11:LEU:HG	41:BT:46:ALA:HB1	1.85	0.58
38:DQ:108:LEU:O	38:DQ:108:LEU:HD23	2.03	0.58
22:BA:930:G:H1'	47:BZ:24:LEU:HD21	1.85	0.58
57:DA:1420:A:C8	57:DA:2211:A:N6	2.68	0.58
57:DA:534:U:H1'	38:DQ:44:TYR:HB3	1.85	0.58
2:AB:40:ILE:HG21	2:AB:201:GLY:N	2.18	0.58
57:DA:2360:G:H5''	57:DA:2361:G:OP2	2.04	0.58
53:CA:1258:G:O2'	53:CA:1259:C:H5'	2.04	0.58
26:DE:105:LEU:HB3	26:DE:200:LEU:HD11	1.85	0.58
22:BA:1130:U:O2'	22:BA:1131:G:H8	1.87	0.58
28:BG:112:VAL:HG23	28:BG:113:ASP:H	1.68	0.58
28:DG:93:TYR:CD2	28:DG:93:TYR:N	2.69	0.58
57:DA:1918:A:H4'	57:DA:1919:A:OP1	2.02	0.58
20:AT:27:MET:O	20:AT:31:ILE:HG13	2.03	0.58
24:DC:62:ARG:HH21	24:DC:62:ARG:CG	2.13	0.58
22:BA:1962:C:O2'	22:BA:1964:G:OP2	2.22	0.58
53:CA:818:G:H3'	53:CA:819:A:C5'	2.33	0.58
57:DA:91:A:HO2'	57:DA:92:U:H6	1.51	0.58
1:AA:330:C:H6	1:AA:330:C:H5''	1.69	0.58
1:AA:1055:A:H1'	3:AC:155:ARG:NH2	2.16	0.58
4:AD:61:ARG:HG2	4:AD:71:PHE:CD2	2.38	0.58
28:BG:10:VAL:O	28:BG:10:VAL:CG2	2.51	0.58
22:BA:527:C:H4'	22:BA:528:A:O5'	2.03	0.58
52:D4:3:VAL:O	52:D4:4:ARG:HB2	2.03	0.58
1:AA:1094:G:O2'	1:AA:1095:U:P	2.61	0.58
1:AA:1108:G:H5''	3:AC:175:HIS:ND1	2.17	0.58
57:DA:2507:C:H1'	57:DA:2583:G:N2	2.17	0.58
57:DA:754:U:H2'	57:DA:755:U:H6	1.68	0.58
57:DA:391:A:H2'	57:DA:392:U:C6	2.38	0.58
4:CD:137:SER:O	4:CD:140:ASP:HB2	2.02	0.58
18:CR:22:TYR:HA	18:CR:57:ALA:HB1	1.86	0.58
3:CC:133:MET:HB2	3:CC:150:VAL:HG21	1.84	0.58
41:BT:87:LEU:HB2	41:BT:91:GLN:HE21	1.67	0.58
1:AA:996:A:C2	1:AA:1046:A:H5'	2.38	0.58
40:DS:47:VAL:O	40:DS:50:VAL:HB	2.04	0.58
22:BA:2244:U:O2'	22:BA:2245:U:H5'	2.03	0.58
25:DD:208:LYS:O	25:DD:209:ALA:CB	2.51	0.58
22:BA:2786:U:H2'	22:BA:2787:C:H6	1.68	0.58
22:BA:119:A:H4'	22:BA:120:U:O5'	2.04	0.58
1:AA:1223:C:OP1	1:AA:1224:U:H3'	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2677:G:H2'	57:DA:2678:C:C6	2.38	0.58
1:AA:144:G:C4	1:AA:179:A:C2	2.92	0.58
22:BA:2646:C:OP2	22:BA:2732:G:O2'	2.22	0.58
22:BA:616:A:H4'	26:BE:101:TYR:CE2	2.38	0.58
57:DA:1130:U:O2'	57:DA:1131:G:C8	2.57	0.58
57:DA:422:A:H2'	57:DA:423:A:C8	2.39	0.58
22:BA:923:G:H21	44:BW:23:LYS:HZ3	1.52	0.58
20:AT:34:VAL:HG11	20:AT:78:LEU:HD22	1.86	0.58
57:DA:2296:U:H5	36:DO:9:ARG:HH22	1.49	0.58
5:AE:108:GLY:O	5:AE:109:ALA:HB3	2.04	0.58
9:AI:6:TYR:CG	9:AI:7:GLY:N	2.69	0.58
57:DA:740:C:C5	57:DA:1981:A:C2	2.92	0.58
57:DA:740:C:O2'	57:DA:741:U:H5'	2.04	0.58
22:BA:1180:U:O2'	22:BA:1181:U:H5'	2.04	0.58
57:DA:1255:U:HO2'	57:DA:1256:G:P	2.26	0.58
57:DA:2060:A:H62	26:DE:69:ARG:HH12	1.50	0.58
38:DQ:60:TRP:O	38:DQ:64:ILE:HG12	2.03	0.58
57:DA:1286:A:C6	57:DA:1289:C:N3	2.72	0.58
53:CA:93:U:O5'	53:CA:93:U:H6	1.86	0.58
55:CM:18:LEU:HD22	55:CM:32:ILE:HG21	1.86	0.58
43:BV:10:LYS:HZ1	43:BV:11:GLU:HG3	1.68	0.58
2:AB:86:CYS:SG	2:AB:221:ARG:HB2	2.43	0.58
4:CD:109:THR:HG22	4:CD:111:ALA:N	2.15	0.58
22:BA:2214:C:C6	22:BA:2214:C:H5'	2.29	0.58
12:AL:81:ILE:HD11	12:AL:94:TYR:CG	2.39	0.58
2:AB:103:TRP:CH2	2:AB:107:ARG:HD3	2.38	0.58
57:DA:802:A:H2'	57:DA:803:U:H6	1.63	0.58
21:CU:33:ARG:NH1	21:CU:34:ARG:HD3	2.19	0.58
50:B2:43:THR:O	50:B2:44:VAL:CG2	2.51	0.58
2:CB:20:ARG:HH21	2:CB:38:HIS:CD2	2.22	0.58
42:DU:47:PRO:HB3	42:DU:54:PRO:CG	2.33	0.58
57:DA:1964:G:H4'	57:DA:1965:C:OP2	2.03	0.58
40:BS:73:LYS:HA	40:BS:73:LYS:HE3	1.85	0.58
12:CL:80:LEU:O	12:CL:97:VAL:HG22	2.04	0.58
57:DA:154:U:H2'	57:DA:155:A:O4'	2.03	0.58
22:BA:2020:A:O3'	48:B0:8:THR:HG21	2.03	0.58
14:CN:66:THR:CG2	14:CN:82:LYS:HE3	2.33	0.58
53:CA:1533:C:C2'	53:CA:1534:A:H5''	2.32	0.58
53:CA:745:G:H2'	53:CA:746:A:H8	1.69	0.58
5:AE:59:ILE:O	5:AE:62:ALA:HB3	2.04	0.58
57:DA:633:A:H8	57:DA:633:A:O5'	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:14:GLN:HA	11:CK:76:TYR:O	2.03	0.58
57:DA:708:G:N2	57:DA:724:U:H1'	2.19	0.58
22:BA:7:G:H2'	22:BA:8:C:C6	2.39	0.58
22:BA:2783:U:H2'	22:BA:2784:U:C6	2.38	0.58
2:AB:36:LYS:HA	2:AB:36:LYS:HE3	1.85	0.58
22:BA:1062:G:O2'	22:BA:1063:G:O4'	2.20	0.58
53:CA:1183:U:O2'	53:CA:1184:G:OP1	2.20	0.58
9:CI:59:LYS:HG2	9:CI:60:LEU:HG	1.85	0.58
53:CA:375:U:OP1	56:CP:70:ARG:HD3	2.02	0.58
1:AA:243:A:C2	1:AA:245:U:H2'	2.39	0.58
57:DA:1387:A:N3	57:DA:1388:G:C8	2.72	0.58
52:B4:9:LYS:N	52:B4:9:LYS:CD	2.66	0.58
22:BA:243:U:O2'	22:BA:244:A:H5'	2.04	0.58
57:DA:2313:C:O2'	57:DA:2314:A:H8	1.76	0.58
53:CA:559:A:H4'	53:CA:560:A:C5'	2.33	0.58
7:AG:12:LEU:H	7:AG:12:LEU:CD2	2.10	0.58
53:CA:78:A:H2'	53:CA:79:G:H8	1.68	0.58
53:CA:1239:A:H62	53:CA:1299:A:H61	1.51	0.58
57:DA:1552:A:N3	57:DA:1552:A:H2'	2.18	0.58
57:DA:82:U:H2'	57:DA:83:A:H5''	1.86	0.58
11:AK:22:ILE:HG13	11:AK:22:ILE:O	2.02	0.58
57:DA:2572:A:C8	25:DD:149:ASN:ND2	2.69	0.58
28:DG:112:VAL:CG1	28:DG:114:HIS:HB3	2.33	0.58
22:BA:1286:A:O2'	22:BA:1288:G:OP2	2.19	0.58
59:DF:39:VAL:HG22	59:DF:49:LEU:HG	1.84	0.58
1:AA:1162:C:H2'	1:AA:1163:A:H8	1.68	0.58
53:CA:1381:U:C4	54:CG:77:ARG:NH1	2.72	0.58
12:CL:19:ASN:N	12:CL:19:ASN:HD22	1.98	0.58
57:DA:2807:U:H3'	57:DA:2808:G:H5''	1.85	0.58
22:BA:482:A:N6	22:BA:506:G:O2'	2.33	0.58
55:CM:78:ARG:HH21	55:CM:79:LEU:CD2	2.16	0.58
22:BA:2498:C:O2'	22:BA:2499:C:H5'	2.04	0.58
16:AP:19:VAL:HG13	16:AP:37:GLY:C	2.24	0.58
57:DA:1303:G:HO2'	57:DA:1304:A:H8	1.50	0.58
42:BU:51:LEU:O	42:BU:52:ASN:HB2	2.04	0.58
1:AA:1466:C:H2'	1:AA:1467:C:O4'	2.04	0.58
53:CA:992:U:O2'	53:CA:993:G:OP2	2.17	0.58
44:DW:51:GLY:HA2	44:DW:59:PHE:HD2	1.67	0.58
53:CA:719:C:H3'	53:CA:720:C:C6	2.38	0.58
25:DD:21:SER:O	25:DD:23:PRO:HD3	2.02	0.58
1:AA:484:G:H4'	1:AA:485:U:O5'	2.02	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:112:GLU:O	4:CD:116:LEU:HD23	2.03	0.58
4:CD:115:GLN:HE21	4:CD:153:ARG:NH2	2.02	0.58
3:AC:5:HIS:HD2	3:AC:7:ASN:H	1.52	0.58
1:AA:695:A:H2'	1:AA:696:A:C8	2.38	0.58
12:CL:33:CYS:HB3	12:CL:77:SER:O	2.03	0.58
49:D1:10:LEU:HD23	49:D1:20:TYR:HB3	1.86	0.58
39:DR:70:GLU:CD	39:DR:70:GLU:H	2.06	0.58
34:BM:114:ARG:HA	34:BM:130:PHE:CE1	2.39	0.58
57:DA:815:C:P	39:DR:85:LYS:HE2	2.44	0.58
22:BA:2373:G:H2'	22:BA:2374:C:C6	2.39	0.58
53:CA:985:C:O2'	53:CA:986:U:H5'	2.03	0.58
53:CA:1217:C:OP1	14:CN:8:ARG:HB2	2.02	0.58
53:CA:1318:A:O2'	19:CS:36:ARG:HD3	2.03	0.58
44:DW:18:LYS:HD3	44:DW:19:ARG:H	1.66	0.58
53:CA:1288:A:H2'	53:CA:1289:A:C8	2.39	0.58
22:BA:1140:C:P	31:BJ:68:LYS:HZ3	2.26	0.58
58:DB:13:G:N2	58:DB:16:G:C4	2.72	0.58
10:CJ:39:PRO:HA	10:CJ:74:VAL:H	1.68	0.58
57:DA:2141:G:H2'	57:DA:2142:A:C8	2.39	0.58
58:DB:116:G:H2'	58:DB:117:G:H8	1.68	0.58
36:DO:30:ARG:HG2	36:DO:31:THR:N	2.18	0.58
53:CA:415:A:H3'	53:CA:416:G:H8	1.67	0.58
53:CA:16:A:C2'	53:CA:17:U:H5'	2.34	0.58
20:AT:26:MET:CE	20:AT:56:ILE:HD11	2.34	0.58
57:DA:1821:A:OP1	24:DC:199:HIS:NE2	2.29	0.58
14:CN:87:ALA:HB2	14:CN:92:ILE:HD12	1.86	0.58
53:CA:344:A:H5''	53:CA:345:C:C5	2.38	0.58
8:AH:88:LYS:HG3	8:AH:89:ASP:N	2.18	0.58
22:BA:1791:A:N6	22:BA:1828:G:O2'	2.26	0.58
28:BG:59:ASP:O	28:BG:62:ALA:HB3	2.03	0.58
43:BV:42:LEU:CD1	43:BV:47:VAL:HG21	2.34	0.58
53:CA:995:C:N4	53:CA:1046:A:H1'	2.18	0.58
22:BA:1984:G:C5	22:BA:1985:C:C5	2.91	0.58
57:DA:1843:C:H6	57:DA:1843:C:O5'	1.87	0.58
35:DN:47:VAL:C	35:DN:50:PRO:HD2	2.23	0.58
57:DA:2629:U:H5''	57:DA:2630:G:OP1	2.03	0.58
18:AR:59:LYS:HA	18:AR:62:ARG:HD2	1.85	0.58
22:BA:553:G:H2'	22:BA:554:U:O4'	2.04	0.58
53:CA:1009:U:H2'	53:CA:1010:U:C6	2.37	0.58
27:BF:175:PRO:O	27:BF:176:PHE:HB2	2.03	0.58
57:DA:2602:A:H3'	57:DA:2602:A:OP1	2.02	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:126:ASN:HD22	25:BD:126:ASN:N	2.00	0.58
1:AA:1087:G:O2'	1:AA:1088:G:H5'	2.03	0.58
51:B3:44:ARG:N	51:B3:45:PRO:HD2	2.19	0.58
38:BQ:60:TRP:CZ2	38:BQ:93:ILE:HB	2.39	0.58
53:CA:252:U:H6	53:CA:252:U:H5'	1.69	0.58
45:BX:39:VAL:HG21	45:BX:42:GLU:HB2	1.85	0.58
13:AM:81:ASP:OD2	27:BF:111:ARG:HD2	2.03	0.58
57:DA:1275:A:HO2'	57:DA:1276:A:C1'	2.14	0.58
31:DJ:41:LYS:C	31:DJ:43:GLU:H	2.07	0.58
25:BD:114:LYS:HE3	25:BD:114:LYS:O	2.03	0.58
41:BT:57:VAL:O	41:BT:85:VAL:O	2.21	0.58
5:AE:152:VAL:HG12	5:AE:155:LYS:HZ1	1.68	0.58
53:CA:523:A:N6	12:CL:49:ARG:HH12	2.00	0.58
1:AA:345:C:H3'	37:BP:33:GLU:OE1	2.04	0.58
57:DA:117:G:N1	57:DA:119:A:N6	2.51	0.58
12:CL:3:VAL:HG23	12:CL:4:ASN:N	2.16	0.58
1:AA:411:A:H62	1:AA:413:G:N2	2.02	0.58
1:AA:428:G:O4'	1:AA:430:A:C8	2.57	0.58
53:CA:198:G:O6	53:CA:220:G:C5	2.57	0.58
32:DK:104:THR:C	32:DK:106:GLU:H	2.07	0.58
28:BG:59:ASP:HB2	28:BG:63:GLN:CG	2.33	0.58
1:AA:1167:A:C8	1:AA:1169:A:C6	2.92	0.58
4:CD:137:SER:O	4:CD:181:PHE:HD2	1.86	0.58
57:DA:271:G:O2'	57:DA:272:A:H5''	2.04	0.58
29:DH:54:LEU:HA	29:DH:57:LYS:HG2	1.86	0.58
18:AR:54:LEU:HD12	18:AR:58:ILE:HD11	1.84	0.58
1:AA:918:A:H2'	1:AA:919:A:C8	2.39	0.58
19:AS:46:LEU:H	19:AS:61:VAL:HG23	1.69	0.58
43:DV:59:GLU:HG2	43:DV:60:VAL:H	1.68	0.58
26:DE:61:ARG:HE	26:DE:65:THR:HB	1.69	0.58
24:BC:33:LEU:HA	24:BC:61:TYR:O	2.04	0.58
11:AK:110:THR:HG22	21:AU:4:LYS:CB	2.33	0.58
1:AA:1506:U:H2'	63:AA:1800:HOH:O	2.02	0.58
1:AA:968:A:H4'	1:AA:969:A:OP2	2.02	0.58
12:CL:41:PRO:HD2	12:CL:47:ALA:O	2.04	0.58
28:DG:19:ASN:HD22	28:DG:19:ASN:N	2.02	0.58
48:B0:27:LEU:HD23	48:B0:27:LEU:H	1.69	0.58
8:AH:33:VAL:HG12	8:AH:34:ALA:N	2.19	0.58
22:BA:1165:A:H2'	22:BA:1166:G:H8	1.68	0.58
53:CA:249:U:C2	53:CA:276:G:N1	2.72	0.58
53:CA:280:C:H4'	53:CA:281:G:OP2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BK:18:ARG:H	32:BK:45:GLU:CB	2.15	0.58
57:DA:524:G:H2'	57:DA:525:U:H6	1.68	0.58
53:CA:404:G:N7	4:CD:1:ALA:HA	2.18	0.58
10:CJ:42:LEU:HD22	10:CJ:71:LEU:HD23	1.85	0.58
26:DE:147:LEU:O	26:DE:148:ILE:HB	2.03	0.58
57:DA:2312:U:H2'	57:DA:2313:C:C6	2.39	0.58
53:CA:1129:C:HO2'	53:CA:1130:A:H8	1.45	0.58
57:DA:1327:A:O2'	57:DA:1328:A:O4'	2.11	0.58
53:CA:1297:G:C8	53:CA:1297:G:OP2	2.57	0.58
16:AP:5:ARG:HA	16:AP:68:SER:OG	2.04	0.58
4:AD:129:VAL:HG13	4:AD:131:ILE:CD1	2.32	0.58
43:DV:29:ILE:HG22	43:DV:39:ALA:HA	1.86	0.58
22:BA:1964:G:H4'	22:BA:1965:C:OP2	2.02	0.58
22:BA:1330:C:O2'	22:BA:1331:G:H5'	2.04	0.58
59:DF:48:LEU:HD23	59:DF:48:LEU:H	1.68	0.58
59:DF:66:ILE:HG13	59:DF:83:PRO:HB3	1.86	0.58
22:BA:1865:U:O2'	22:BA:1866:A:H5''	2.03	0.58
22:BA:2060:A:O2'	22:BA:2061:G:OP2	2.17	0.58
25:DD:107:VAL:HG13	25:DD:109:VAL:HG23	1.86	0.58
40:DS:27:LYS:O	40:DS:71:VAL:HG12	2.03	0.58
57:DA:503:A:C6	57:DA:506:G:C6	2.91	0.58
22:BA:1943:U:H4'	22:BA:1944:U:O5'	2.04	0.58
6:CF:42:TRP:HB2	6:CF:59:TYR:HB2	1.85	0.58
53:CA:1272:G:H5'	14:CN:33:VAL:HB	1.86	0.58
53:CA:631:C:H5''	53:CA:632:U:O4'	2.04	0.58
18:CR:19:GLU:CD	18:CR:20:ILE:N	2.57	0.58
57:DA:2461:A:N1	57:DA:2490:G:N2	2.52	0.58
49:B1:13:SER:HB3	49:B1:47:ILE:O	2.04	0.58
22:BA:623:C:H2'	22:BA:624:C:C6	2.39	0.58
31:BJ:75:TYR:HD1	31:BJ:86:GLN:HB3	1.69	0.58
11:AK:107:THR:HG22	11:AK:108:ASN:ND2	2.17	0.58
22:BA:2862:G:H2'	22:BA:2863:C:H6	1.69	0.58
57:DA:484:C:N4	57:DA:497:A:C2	2.72	0.58
54:CG:42:VAL:O	54:CG:43:TYR:HB2	2.03	0.58
8:CH:94:VAL:HG21	8:CH:127:TYR:HB3	1.86	0.58
14:AN:63:CYS:HG	14:AN:66:THR:HG1	1.47	0.58
22:BA:1150:C:H2'	22:BA:1151:A:O5'	2.04	0.58
57:DA:2093:G:O6	57:DA:2225:A:C2'	2.52	0.58
57:DA:1359:A:N1	57:DA:1360:G:H1'	2.17	0.58
40:BS:84:ARG:O	40:BS:95:ARG:O	2.22	0.58
53:CA:1014:A:C2	53:CA:1219:A:H1'	2.39	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:143:LEU:O	5:AE:146:MET:HB3	2.04	0.58
33:BL:77:ILE:HG12	33:BL:95:LEU:HD13	1.86	0.58
2:AB:157:PRO:O	2:AB:180:ILE:HD12	2.03	0.58
1:AA:1365:G:H2'	1:AA:1366:C:C6	2.39	0.58
58:DB:27:C:H2'	58:DB:28:C:H6	1.67	0.58
57:DA:1068:G:C8	57:DA:1069:A:N7	2.72	0.58
57:DA:1056:G:C1'	57:DA:1103:A:H61	2.16	0.58
22:BA:1735:A:H2'	22:BA:1736:U:H6	1.69	0.58
22:BA:1106:G:C2	22:BA:1107:G:C8	2.92	0.58
53:CA:934:C:H4'	53:CA:935:A:OP1	2.03	0.58
25:BD:101:PHE:CD1	25:BD:101:PHE:N	2.72	0.58
1:AA:619:U:H3	4:AD:130:ASN:CB	2.17	0.58
22:BA:278:A:C2	22:BA:362:A:C8	2.92	0.58
57:DA:104:A:H2'	57:DA:105:C:C6	2.39	0.58
24:BC:173:LEU:HD22	24:BC:183:VAL:CG2	2.34	0.58
22:BA:1459:G:O2'	22:BA:1460:U:H3'	2.04	0.58
37:DP:50:ARG:CA	37:DP:57:ALA:O	2.52	0.58
1:AA:1319:A:H2'	1:AA:1323:G:N7	2.19	0.58
57:DA:858:G:C4	57:DA:2268:A:C2	2.91	0.58
25:DD:178:VAL:HG12	25:DD:179:ARG:HG3	1.86	0.58
36:BO:79:ALA:HB2	36:BO:110:ALA:HA	1.86	0.58
19:CS:52:ASN:HD21	19:CS:55:GLN:N	2.02	0.58
53:CA:1190:G:O2'	53:CA:1191:A:P	2.61	0.58
33:DL:141:LYS:HD2	33:DL:142:ILE:N	2.19	0.58
41:BT:25:GLU:HA	41:BT:28:ASN:O	2.04	0.58
53:CA:321:A:O2'	53:CA:1436:U:H5'	2.03	0.58
22:BA:2672:U:H2'	22:BA:2673:G:O5'	2.04	0.58
48:D0:26:SER:O	48:D0:27:LEU:HD13	2.03	0.58
48:D0:38:LEU:HB2	48:D0:41:HIS:NE2	2.18	0.58
22:BA:2645:G:H3'	22:BA:2646:C:H5'	1.86	0.58
1:AA:51:A:H4'	1:AA:52:C:O5'	2.03	0.58
1:AA:754:C:O2	1:AA:754:C:H5''	2.03	0.58
32:BK:34:GLY:O	32:BK:35:VAL:C	2.42	0.58
29:DH:102:ALA:C	29:DH:104:THR:H	2.07	0.58
22:BA:2358:A:H61	33:BL:54:GLN:HE22	1.51	0.58
53:CA:623:C:H6	53:CA:623:C:O5'	1.87	0.58
14:AN:11:LYS:NZ	14:AN:11:LYS:HB2	2.19	0.58
5:CE:52:ALA:HB2	5:CE:61:LYS:HE3	1.86	0.58
44:BW:8:SER:O	44:BW:9:THR:CG2	2.52	0.57
10:CJ:52:LEU:HD23	10:CJ:62:ARG:HG2	1.85	0.57
44:DW:28:GLU:HG3	44:DW:29:SER:H	1.68	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1063:G:H2'	22:BA:1064:C:O4'	2.04	0.57
54:CG:136:LYS:O	54:CG:140:VAL:HG23	2.04	0.57
57:DA:1274:A:O2'	57:DA:1275:A:C5'	2.52	0.57
53:CA:577:G:C4	53:CA:816:A:C2	2.93	0.57
15:AO:63:ARG:HG2	15:AO:87:ARG:NH1	2.11	0.57
1:AA:480:U:H5''	1:AA:481:G:OP2	2.04	0.57
18:CR:58:ILE:O	18:CR:62:ARG:HG3	2.04	0.57
54:CG:100:MET:HE3	54:CG:100:MET:H	1.69	0.57
57:DA:2571:U:C4	57:DA:2574:G:C8	2.92	0.57
2:AB:74:ALA:O	2:AB:75:ALA:HB2	2.03	0.57
38:DQ:91:ARG:HG3	39:DR:11:GLN:NE2	2.18	0.57
33:DL:110:VAL:HB	33:DL:127:VAL:HA	1.84	0.57
57:DA:636:G:H3'	33:DL:128:THR:HG21	1.86	0.57
28:DG:112:VAL:HG12	28:DG:114:HIS:N	2.15	0.57
1:AA:415:A:H2'	1:AA:416:G:H8	1.67	0.57
1:AA:426:U:O2'	1:AA:427:U:H5'	2.04	0.57
1:AA:1322:C:HO2'	1:AA:1323:G:P	2.26	0.57
57:DA:2718:G:O3'	37:DP:95:LYS:HG3	2.03	0.57
22:BA:568:U:O2	22:BA:570:G:C8	2.56	0.57
53:CA:109:A:H8	53:CA:327:A:O4'	1.86	0.57
57:DA:28:A:C6	57:DA:513:A:C8	2.91	0.57
57:DA:1737:G:N7	57:DA:1738:G:C6	2.72	0.57
59:DF:107:VAL:N	59:DF:108:PRO:CD	2.67	0.57
16:AP:59:HIS:CE1	16:AP:63:GLN:NE2	2.71	0.57
1:AA:1261:A:N1	1:AA:1274:A:C2	2.72	0.57
4:AD:151:GLN:H	4:AD:154:VAL:CG1	2.17	0.57
53:CA:264:C:O2'	17:CQ:64:ARG:HG3	2.03	0.57
19:AS:43:MET:O	19:AS:61:VAL:HG21	2.04	0.57
36:BO:59:ALA:HA	36:BO:62:LEU:HD12	1.86	0.57
55:CM:82:LEU:HD21	19:CS:60:PHE:HB3	1.85	0.57
57:DA:1153:C:H2'	57:DA:1154:G:C8	2.39	0.57
22:BA:49:A:H61	22:BA:177:G:H2'	1.69	0.57
53:CA:31:G:H5'	53:CA:306:A:N1	2.19	0.57
57:DA:2744:G:N2	57:DA:2745:C:C2	2.72	0.57
10:CJ:7:ARG:NH1	10:CJ:102:LEU:HG	2.19	0.57
22:BA:2428:G:OP1	22:BA:2429:G:OP1	2.22	0.57
53:CA:1417:G:C6	53:CA:1482:G:C6	2.92	0.57
57:DA:749:A:C6	57:DA:1618:A:C2	2.92	0.57
53:CA:960:U:C5	53:CA:1225:A:H1'	2.40	0.57
14:CN:62:ARG:HE	14:CN:69:PRO:HA	1.68	0.57
27:BF:147:ARG:HG3	27:BF:148:VAL:H	1.68	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:36:G:N1	57:DA:445:C:C4	2.73	0.57
10:CJ:84:VAL:CG2	10:CJ:85:ASP:H	2.06	0.57
33:BL:94:THR:HG22	33:BL:95:LEU:H	1.67	0.57
41:DT:29:THR:N	41:DT:87:LEU:HB2	2.19	0.57
58:DB:6:G:H4'	58:DB:28:C:H4'	1.86	0.57
3:AC:33:ASP:O	3:AC:37:LYS:HB2	2.04	0.57
4:CD:31:CYS:O	4:CD:32:LYS:HB2	2.05	0.57
30:BI:48:ILE:HG13	30:BI:49:GLU:H	1.68	0.57
53:CA:1299:A:C8	53:CA:1301:U:H1'	2.38	0.57
53:CA:1296:C:O2'	53:CA:1302:C:C4	2.56	0.57
57:DA:2874:C:H2'	57:DA:2875:C:C5	2.39	0.57
31:DJ:84:ILE:HG23	31:DJ:84:ILE:O	2.05	0.57
37:BP:33:GLU:HB3	37:BP:36:LYS:H	1.68	0.57
22:BA:364:C:H2'	22:BA:365:U:C6	2.38	0.57
39:BR:46:GLU:O	39:BR:46:GLU:OE1	2.21	0.57
53:CA:1226:C:H5''	55:CM:94:LEU:HD21	1.85	0.57
1:AA:1160:G:C6	1:AA:1181:G:O6	2.57	0.57
1:AA:497:G:N2	1:AA:498:A:C6	2.72	0.57
1:AA:545:C:C5'	4:AD:68:GLU:HG3	2.34	0.57
57:DA:287:G:O2'	57:DA:288:U:H5'	2.05	0.57
57:DA:308:G:C6	57:DA:309:A:C6	2.93	0.57
53:CA:1504:G:H3'	53:CA:1505:G:H5'	1.86	0.57
17:CQ:61:ARG:HG2	17:CQ:75:VAL:CG1	2.34	0.57
53:CA:1089:G:H2'	53:CA:1090:U:O4'	2.04	0.57
16:AP:10:GLY:O	16:AP:11:ALA:HB2	2.04	0.57
25:DD:38:LYS:HB3	25:DD:38:LYS:HZ3	1.67	0.57
22:BA:1313:U:O2	22:BA:1313:U:H2'	2.04	0.57
22:BA:2007:U:H2'	22:BA:2008:C:H6	1.69	0.57
57:DA:632:A:H5''	33:DL:68:SER:OG	2.04	0.57
22:BA:1534:U:H5'	22:BA:1535:A:OP1	2.05	0.57
54:CG:4:ARG:HG3	54:CG:5:VAL:N	2.18	0.57
19:AS:4:LEU:HD12	19:AS:4:LEU:H	1.68	0.57
2:CB:105:THR:O	2:CB:108:GLN:HG2	2.04	0.57
39:BR:58:VAL:CG1	39:BR:102:SER:HB2	2.34	0.57
46:BY:26:PHE:HD1	46:BY:27:ASN:HD22	1.51	0.57
57:DA:1006:C:C2	57:DA:1138:G:N2	2.72	0.57
55:CM:28:ARG:HD2	55:CM:28:ARG:O	2.03	0.57
34:BM:96:ILE:C	34:BM:96:ILE:HD12	2.25	0.57
55:CM:36:ALA:HB2	55:CM:55:LEU:HD21	1.85	0.57
22:BA:2648:G:O2'	22:BA:2649:C:H5'	2.04	0.57
1:AA:633:G:O2'	1:AA:634:C:H5'	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2298:A:H5'	57:DA:2322:A:O2'	2.04	0.57
5:AE:120:HIS:C	5:AE:121:ASN:HD22	2.08	0.57
53:CA:1213:A:O2'	53:CA:1214:C:C5'	2.42	0.57
57:DA:17:G:H4'	38:DQ:24:TYR:CE1	2.40	0.57
10:CJ:37:ARG:HB3	10:CJ:74:VAL:O	2.04	0.57
57:DA:2313:C:O2'	57:DA:2314:A:H5'	2.03	0.57
37:DP:90:ALA:HB3	37:DP:110:LYS:HB2	1.87	0.57
1:AA:842:U:H2'	1:AA:844:G:P	2.43	0.57
23:BB:90:C:H6	23:BB:90:C:C5'	2.11	0.57
57:DA:2726:A:O2'	57:DA:2727:A:H5'	2.04	0.57
22:BA:1998:A:H2'	22:BA:1999:C:H6	1.68	0.57
57:DA:118:A:O5'	57:DA:119:A:H5''	2.04	0.57
14:AN:60:ARG:O	14:AN:61:ASN:CB	2.50	0.57
41:DT:38:ALA:HB1	41:DT:81:LYS:HZ3	1.67	0.57
32:BK:43:ILE:HG12	32:BK:56:ASP:HB2	1.86	0.57
43:DV:27:PRO:O	43:DV:88:HIS:HA	2.02	0.57
22:BA:1028:A:N6	22:BA:1125:G:H2'	2.19	0.57
9:AI:28:VAL:HB	9:AI:63:TYR:CD2	2.34	0.57
37:DP:7:LEU:O	37:DP:7:LEU:HD12	2.05	0.57
57:DA:482:A:N6	57:DA:506:G:C4	2.71	0.57
57:DA:2267:A:N6	57:DA:2272:U:H3	2.03	0.57
22:BA:1045:C:C3'	22:BA:1046:A:H5'	2.34	0.57
57:DA:851:C:C4'	47:DZ:46:MET:HG2	2.34	0.57
57:DA:2668:G:O2'	57:DA:2669:G:H8	1.87	0.57
57:DA:2623:G:H21	48:D0:18:HIS:CE1	2.22	0.57
22:BA:988:A:OP2	47:BZ:11:SER:HB3	2.03	0.57
57:DA:1693:U:H4'	57:DA:1694:C:OP2	2.04	0.57
25:BD:136:ASN:ND2	25:BD:139:SER:O	2.36	0.57
22:BA:1269:A:O5'	22:BA:1269:A:H8	1.87	0.57
22:BA:699:A:H1'	22:BA:1634:A:H2'	1.85	0.57
57:DA:2642:G:H5'	31:DJ:80:HIS:CE1	2.39	0.57
11:AK:100:ASN:HB2	11:AK:106:ILE:HG21	1.85	0.57
31:BJ:118:MET:HA	31:BJ:121:LYS:HE2	1.87	0.57
22:BA:381:G:OP1	45:BX:17:ARG:HD3	2.04	0.57
37:BP:37:LYS:HG2	37:BP:37:LYS:O	2.04	0.57
57:DA:12:U:O2	57:DA:12:U:H2'	2.03	0.57
24:DC:177:SER:O	24:DC:270:ARG:HG3	2.03	0.57
53:CA:960:U:H5'	53:CA:961:U:H5''	1.86	0.57
57:DA:2353:G:H2'	57:DA:2354:C:O4'	2.03	0.57
27:BF:131:VAL:HG22	27:BF:151:LEU:H	1.69	0.57
53:CA:1048:G:H21	53:CA:1214:C:H5	1.53	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:96:ARG:HH11	35:DN:116:VAL:HG22	1.69	0.57
22:BA:1179:G:OP2	22:BA:1180:U:H5''	2.05	0.57
24:BC:12:ARG:CG	24:BC:12:ARG:NH1	2.59	0.57
57:DA:2542:A:H4'	57:DA:2543:G:H5'	1.84	0.57
57:DA:2408:U:O2'	57:DA:2409:G:C5'	2.53	0.57
38:BQ:43:GLN:NE2	39:BR:77:PHE:HB3	2.12	0.57
53:CA:738:C:C6	53:CA:739:C:H5	2.21	0.57
39:BR:42:ALA:HA	39:BR:46:GLU:CB	2.30	0.57
1:AA:1064:G:N2	1:AA:1190:G:O2'	2.36	0.57
1:AA:826:C:C5'	8:AH:12:ARG:HH21	2.12	0.57
35:DN:82:GLU:O	35:DN:86:ARG:HG3	2.04	0.57
46:DY:39:GLN:O	46:DY:42:LEU:HB2	2.04	0.57
1:AA:1324:A:H2'	1:AA:1325:C:C6	2.39	0.57
11:AK:126:ARG:CB	21:AU:33:ARG:NH1	2.67	0.57
57:DA:206:U:O2'	57:DA:207:A:H5'	2.03	0.57
57:DA:973:A:H5'	57:DA:974:G:OP2	2.03	0.57
40:BS:72:THR:HG21	40:BS:108:SER:OG	2.05	0.57
57:DA:1738:G:HO2'	57:DA:1739:A:H8	1.49	0.57
24:DC:15:VAL:HG22	24:DC:204:LEU:O	2.03	0.57
22:BA:619:G:H5''	22:BA:620:G:OP2	2.04	0.57
57:DA:579:G:C8	57:DA:2017:U:C4	2.93	0.57
22:BA:1983:G:O2'	22:BA:1984:G:H5'	2.03	0.57
37:BP:77:SER:HG	37:BP:79:VAL:HG13	1.69	0.57
1:AA:575:G:H2'	1:AA:821:G:OP2	2.04	0.57
1:AA:35:G:H2'	1:AA:36:C:C6	2.40	0.57
22:BA:42:A:C3'	22:BA:43:G:H5''	2.34	0.57
24:BC:85:ASN:OD1	24:BC:85:ASN:N	2.36	0.57
57:DA:414:C:H5''	57:DA:1879:C:O2'	2.04	0.57
22:BA:2203:U:H5''	22:BA:2204:G:OP1	2.04	0.57
8:AH:87:ARG:O	8:AH:121:GLY:HA3	2.04	0.57
11:CK:63:GLN:HB2	11:CK:98:ALA:HB2	1.85	0.57
1:AA:306:A:H2'	1:AA:307:C:C6	2.39	0.57
30:DI:109:ALA:HB1	30:DI:125:THR:HA	1.85	0.57
44:BW:28:GLU:O	44:BW:30:VAL:N	2.38	0.57
44:BW:9:THR:HG23	44:BW:10:ARG:CD	2.19	0.57
45:BX:39:VAL:HG22	45:BX:44:ARG:O	2.04	0.57
57:DA:1142:A:C8	57:DA:1144:A:N7	2.73	0.57
17:AQ:51:GLU:HG2	17:AQ:52:CYS:SG	2.45	0.57
2:CB:90:PHE:CE2	2:CB:149:GLY:HA3	2.39	0.57
53:CA:373:A:C2'	53:CA:374:A:H5'	2.34	0.57
57:DA:251:A:H8	57:DA:251:A:O5'	1.87	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:828:U:H2'	57:DA:828:U:O2	2.02	0.57
57:DA:1055:G:C3'	57:DA:1056:G:H5'	2.35	0.57
58:DB:45:A:H2'	58:DB:46:A:H8	1.67	0.57
26:DE:128:ALA:HB1	26:DE:129:PRO:CD	2.32	0.57
20:CT:2:ASN:N	20:CT:7:LYS:NZ	2.49	0.57
57:DA:1553:A:C8	57:DA:1555:G:C6	2.93	0.57
57:DA:1555:G:H2'	57:DA:1556:C:C6	2.39	0.57
57:DA:1476:U:H1'	57:DA:1732:C:C2	2.40	0.57
25:BD:29:VAL:HB	25:BD:98:VAL:HG22	1.86	0.57
1:AA:512:U:O2'	1:AA:513:C:O4'	2.22	0.57
52:B4:24:ARG:HG2	52:B4:24:ARG:HH21	1.70	0.57
52:B4:37:GLN:O	52:B4:37:GLN:HG2	2.04	0.57
25:DD:137:SER:CB	25:DD:138:LEU:HD22	2.33	0.57
21:CU:33:ARG:CZ	21:CU:34:ARG:HD3	2.34	0.57
35:DN:1:MET:O	35:DN:2:ARG:HB2	2.04	0.57
4:AD:62:ARG:HA	4:AD:62:ARG:NE	2.19	0.57
30:BI:53:PRO:O	30:BI:74:PRO:HD2	2.04	0.57
53:CA:1386:G:O2'	53:CA:1387:G:H5'	2.05	0.57
22:BA:26:G:C6	22:BA:27:G:N1	2.72	0.57
1:AA:397:A:N7	1:AA:547:A:O2'	2.36	0.57
34:BM:23:GLY:O	34:BM:101:VAL:HG12	2.04	0.57
22:BA:1348:C:H2'	22:BA:1349:C:H5'	1.86	0.57
1:AA:181:A:H5''	1:AA:182:A:OP1	2.04	0.57
28:DG:115:GLN:HG2	28:DG:116:LEU:H	1.68	0.57
1:AA:688:G:H5''	1:AA:688:G:C8	2.37	0.57
6:CF:42:TRP:HB2	6:CF:59:TYR:CB	2.34	0.57
1:AA:1517:G:N3	22:BA:1919:A:O2'	2.37	0.57
4:AD:64:TYR:CE1	4:AD:93:LEU:HD13	2.39	0.57
53:CA:461:A:N3	53:CA:461:A:H2'	2.19	0.57
8:CH:24:VAL:HG12	8:CH:62:LEU:HD21	1.86	0.57
25:BD:142:VAL:HB	25:BD:143:PRO:CD	2.34	0.57
35:DN:103:ARG:HB2	35:DN:110:MET:CG	2.34	0.57
23:BB:98:G:H1	43:BV:14:LYS:HB3	1.69	0.57
39:BR:62:GLU:O	39:BR:64:VAL:HG23	2.03	0.57
32:DK:10:VAL:HG13	32:DK:12:ASP:OD1	2.04	0.57
22:BA:2641:G:OP1	31:BJ:76:HIS:HE1	1.87	0.57
3:AC:34:SER:OG	3:AC:94:ALA:HA	2.03	0.57
31:BJ:4:PHE:O	31:BJ:44:TYR:HE1	1.88	0.57
44:DW:25:PHE:O	44:DW:27:GLY:N	2.37	0.57
17:AQ:20:ILE:N	17:AQ:47:ASP:OD1	2.37	0.57
17:AQ:80:LYS:HB2	17:AQ:80:LYS:NZ	2.19	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:740:U:O2'	53:CA:741:G:H5'	2.04	0.57
53:CA:1151:A:H2'	53:CA:1152:A:C8	2.40	0.57
57:DA:303:G:C2	57:DA:304:U:C2	2.93	0.57
57:DA:60:G:HO2'	57:DA:61:C:P	2.27	0.57
57:DA:2849:U:O4	57:DA:2867:G:C8	2.58	0.57
5:CE:98:ALA:O	5:CE:121:ASN:HB2	2.03	0.57
57:DA:1998:A:H4'	57:DA:2724:U:O2'	2.03	0.57
38:BQ:39:ILE:O	38:BQ:43:GLN:HG3	2.04	0.57
53:CA:134:G:H2'	53:CA:135:C:O4'	2.05	0.57
57:DA:1126:A:H4'	57:DA:1127:A:C5'	2.34	0.57
3:AC:49:ALA:HB1	3:AC:75:VAL:HG22	1.86	0.57
22:BA:2134:A:N6	22:BA:2135:A:N6	2.53	0.57
1:AA:1151:A:H5'	10:AJ:42:LEU:O	2.04	0.57
57:DA:799:G:P	57:DA:800:A:H3'	2.43	0.57
25:DD:114:LYS:HB2	25:DD:116:LYS:HE3	1.85	0.57
53:CA:246:A:C4	53:CA:282:A:N6	2.73	0.57
29:BH:2:GLN:HA	29:BH:20:ASN:HA	1.86	0.57
41:BT:68:LYS:HE2	41:BT:77:ARG:NE	2.20	0.57
22:BA:94:A:H2'	22:BA:95:A:C8	2.40	0.57
25:DD:101:PHE:HE2	25:DD:205:PRO:HD3	1.69	0.57
46:DY:1:MET:N	46:DY:1:MET:HE2	2.19	0.57
22:BA:2531:A:P	28:BG:174:LYS:HG3	2.43	0.57
53:CA:1206:G:C6	53:CA:1207:G:C5	2.93	0.57
41:BT:24:MET:O	41:BT:24:MET:HG3	2.04	0.57
22:BA:1539:U:C2	22:BA:1540:G:C8	2.93	0.57
1:AA:508:U:H4'	1:AA:509:A:OP1	2.04	0.57
57:DA:1545:A:H2'	57:DA:1546:G:O4'	2.05	0.57
22:BA:2391:G:O2'	22:BA:2424:C:N4	2.33	0.57
57:DA:1461:C:H2'	57:DA:1462:C:H6	1.68	0.57
30:DI:106:GLN:HA	30:DI:109:ALA:HB3	1.86	0.57
1:AA:1016:A:C8	1:AA:1017:U:H1'	2.40	0.57
53:CA:106:C:O2	53:CA:379:C:H4'	2.04	0.57
20:AT:60:GLN:NE2	20:AT:65:LEU:HD21	2.20	0.57
1:AA:122:G:H2'	1:AA:123:U:H6	1.70	0.57
32:BK:59:LYS:HG3	32:BK:89:ASN:HD22	1.70	0.57
53:CA:1409:C:H6	53:CA:1409:C:O5'	1.88	0.57
22:BA:1247:A:C4	22:BA:1249:U:C5	2.91	0.57
38:BQ:91:ARG:CB	38:BQ:94:LEU:HB2	2.34	0.57
22:BA:923:G:H21	44:BW:23:LYS:NZ	2.03	0.57
14:CN:52:ARG:HA	14:CN:52:ARG:CZ	2.35	0.57
44:DW:18:LYS:H	44:DW:36:ILE:CG1	2.18	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AQ:51:GLU:O	17:AQ:52:CYS:O	2.22	0.57
57:DA:2440:C:O2'	57:DA:2441:U:H4'	2.04	0.57
57:DA:532:A:N1	57:DA:2020:A:O2'	2.35	0.57
35:DN:97:ILE:HD11	35:DN:99:LYS:NZ	2.20	0.57
41:DT:58:VAL:HG23	41:DT:85:VAL:HA	1.87	0.57
57:DA:304:U:H2'	57:DA:305:C:C6	2.39	0.57
57:DA:1055:G:N3	57:DA:1055:G:H2'	2.20	0.57
57:DA:1476:U:H2'	57:DA:1477:A:H8	1.69	0.57
1:AA:75:G:C5	1:AA:76:G:C8	2.91	0.57
2:CB:48:MET:O	2:CB:199:ILE:HG22	2.05	0.57
22:BA:2134:A:C6	22:BA:2135:A:C6	2.93	0.57
22:BA:869:G:H2'	22:BA:870:U:O4'	2.03	0.57
14:CN:76:PHE:CE2	14:CN:92:ILE:HG21	2.32	0.57
22:BA:544:C:N3	22:BA:548:G:OP1	2.37	0.57
28:BG:26:LYS:HB3	28:BG:32:LEU:HA	1.86	0.57
41:DT:45:ALA:HA	41:DT:48:GLN:CG	2.34	0.57
57:DA:2808:G:O2'	57:DA:2809:A:H8	1.88	0.57
57:DA:991:C:OP2	57:DA:1186:G:OP2	2.22	0.57
41:BT:61:LEU:HD12	41:BT:61:LEU:O	2.04	0.57
22:BA:2531:A:H5'	28:BG:156:TYR:CE2	2.40	0.57
43:BV:51:GLN:HE22	43:BV:79:ARG:HH12	1.53	0.57
29:DH:32:PRO:HA	45:DX:38:TRP:CD1	2.40	0.57
1:AA:1520:C:H2'	1:AA:1521:C:C6	2.40	0.57
26:DE:61:ARG:HD2	26:DE:61:ARG:O	2.05	0.57
26:DE:150:THR:O	26:DE:192:ALA:HB2	2.05	0.57
8:AH:46:GLU:HB3	8:AH:61:THR:HB	1.86	0.57
35:BN:82:GLU:O	35:BN:85:PRO:HG2	2.05	0.57
57:DA:840:C:H4'	57:DA:1192:G:O2'	2.05	0.57
53:CA:679:C:O2	53:CA:712:A:C2	2.58	0.57
57:DA:263:G:H4'	57:DA:430:A:O4'	2.05	0.57
22:BA:830:G:H4'	22:BA:831:G:OP2	2.04	0.57
22:BA:1016:G:H2'	22:BA:1017:G:O5'	2.03	0.57
6:CF:98:GLU:O	6:CF:99:ALA:HB3	2.05	0.57
53:CA:476:U:C6	53:CA:476:U:OP2	2.57	0.57
53:CA:976:G:H5'	53:CA:977:A:OP2	2.05	0.57
27:BF:147:ARG:HG3	27:BF:148:VAL:N	2.20	0.57
57:DA:600:G:H5''	26:DE:27:LEU:HD22	1.87	0.57
22:BA:1024:G:N2	22:BA:1142:A:H2	2.02	0.57
57:DA:310:A:O2'	57:DA:311:A:C8	2.46	0.57
42:DU:95:PHE:N	42:DU:95:PHE:CD1	2.71	0.57
44:DW:8:SER:O	44:DW:9:THR:HB	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:784:G:O2'	22:BA:785:G:H5''	2.04	0.57
2:AB:9:LEU:HD23	2:AB:11:ALA:H	1.69	0.57
1:AA:258:G:C4	1:AA:259:G:C8	2.92	0.57
28:BG:95:ALA:CB	28:BG:104:LEU:HD23	2.34	0.57
57:DA:1655:A:H5'	25:DD:118:PHE:CE1	2.40	0.57
53:CA:802:A:O2'	53:CA:803:G:H5'	2.05	0.57
22:BA:2727:A:O2'	22:BA:2728:U:H5'	2.04	0.57
43:DV:28:ALA:HA	43:DV:88:HIS:ND1	2.19	0.57
44:DW:22:VAL:O	44:DW:23:LYS:HG3	2.05	0.57
35:BN:108:ALA:O	35:BN:110:MET:HG2	2.05	0.57
53:CA:919:A:O2'	53:CA:920:U:H5'	2.04	0.57
57:DA:528:A:C2	57:DA:2042:A:H2'	2.39	0.57
34:DM:36:VAL:HG13	43:DV:82:TYR:CD1	2.39	0.57
53:CA:1342:C:H2'	53:CA:1343:G:C8	2.40	0.57
57:DA:243:U:O2'	57:DA:244:A:H8	1.88	0.57
53:CA:369:G:O2'	53:CA:370:C:H5'	2.05	0.57
57:DA:74:A:H4'	57:DA:75:G:O5'	2.04	0.57
37:BP:19:PHE:O	37:BP:23:ASP:OD1	2.23	0.57
31:BJ:88:THR:HG22	31:BJ:91:GLU:CB	2.35	0.57
53:CA:613:C:H2'	53:CA:614:C:H6	1.68	0.57
54:CG:76:SER:HA	54:CG:85:GLN:HA	1.87	0.57
53:CA:1084:G:OP1	53:CA:1086:U:C5	2.57	0.57
22:BA:2564:A:C2	22:BA:2647:U:H4'	2.40	0.57
22:BA:1247:A:C2	22:BA:1249:U:C6	2.93	0.57
2:AB:187:ASP:HB2	2:AB:203:ASP:HB3	1.86	0.57
22:BA:469:G:O6	50:B2:37:LYS:HE3	2.04	0.57
20:CT:9:ARG:HD3	20:CT:12:GLN:NE2	2.20	0.57
5:CE:25:LYS:HB2	5:CE:25:LYS:NZ	2.20	0.57
4:AD:133:SER:O	4:AD:134:TYR:C	2.43	0.57
57:DA:2241:A:H2'	57:DA:2242:G:C8	2.40	0.57
44:BW:22:VAL:O	44:BW:23:LYS:O	2.23	0.57
22:BA:2013:A:C2	40:BS:88:ARG:NH1	2.73	0.57
53:CA:982:U:H1'	53:CA:983:A:C8	2.39	0.57
6:AF:38:ARG:HB3	6:AF:63:ASN:HB2	1.87	0.57
53:CA:374:A:O2'	53:CA:375:U:H5'	2.03	0.57
38:DQ:42:GLY:O	38:DQ:45:ALA:HB3	2.03	0.57
57:DA:1071:G:O6	57:DA:1091:G:N7	2.38	0.57
59:DF:34:THR:O	59:DF:35:LEU:HB2	2.04	0.57
1:AA:1124:G:H2'	1:AA:1145:A:H61	1.69	0.57
53:CA:1168:U:C2'	53:CA:1168:U:O2	2.46	0.57
22:BA:1998:A:H2'	22:BA:1999:C:C6	2.40	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2230:G:C1'	45:DX:31:ASN:HB3	2.34	0.57
53:CA:1458:G:H4'	20:CT:22:SER:HB2	1.85	0.57
22:BA:752:A:N7	22:BA:1781:U:O4'	2.38	0.57
2:AB:103:TRP:CZ3	2:AB:107:ARG:HD3	2.40	0.57
22:BA:1450:G:N2	22:BA:1452:G:O6	2.35	0.57
24:DC:72:GLY:O	24:DC:73:ILE:HD13	2.05	0.57
31:BJ:21:THR:C	31:BJ:23:LYS:H	2.08	0.57
31:BJ:13:ARG:O	31:BJ:14:ASP:CB	2.53	0.57
32:DK:103:VAL:HG23	32:DK:122:VAL:O	2.05	0.57
10:AJ:10:LEU:O	10:AJ:71:LEU:HD13	2.05	0.57
22:BA:1045:C:C4'	22:BA:1046:A:H5'	2.35	0.57
1:AA:208:U:H3	1:AA:212:G:N2	2.03	0.57
53:CA:940:C:H5'	54:CG:101:ARG:HH22	1.67	0.57
22:BA:141:G:H5'	22:BA:142:A:C8	2.39	0.57
32:BK:88:ASN:ND2	32:BK:90:ASN:H	2.03	0.57
1:AA:574:A:H5''	1:AA:575:G:OP2	2.04	0.57
26:DE:53:THR:OG1	26:DE:54:GLY:N	2.38	0.57
43:BV:49:ASN:O	43:BV:52:ALA:HB3	2.05	0.57
32:BK:99:ILE:HG23	32:BK:100:PHE:N	2.20	0.57
22:BA:1901:A:O2'	22:BA:1902:C:H5'	2.05	0.57
41:BT:14:PRO:HB2	41:BT:16:VAL:HG23	1.87	0.57
19:CS:62:THR:HG22	19:CS:63:ASP:H	1.69	0.57
28:DG:139:VAL:HA	28:DG:142:GLN:HB3	1.86	0.57
39:BR:4:VAL:HA	39:BR:12:HIS:O	2.04	0.57
28:BG:132:LEU:HD23	28:BG:132:LEU:N	2.20	0.57
22:BA:2013:A:OP1	40:BS:96:ILE:HA	2.04	0.57
57:DA:1912:A:H62	57:DA:1917:U:H3	1.46	0.57
22:BA:1071:G:C8	22:BA:1089:A:N6	2.73	0.57
1:AA:243:A:H4'	1:AA:244:U:H5'	1.86	0.57
22:BA:1142:A:C4	22:BA:1144:A:C8	2.93	0.57
34:DM:19:GLY:N	34:DM:38:ARG:NH2	2.41	0.57
26:DE:126:VAL:HG22	26:DE:127:GLU:OE2	2.05	0.57
1:AA:375:U:H4'	16:AP:17:TYR:CE2	2.40	0.57
57:DA:2037:A:H2'	57:DA:2038:G:C8	2.40	0.57
57:DA:117:G:C6	57:DA:119:A:C6	2.93	0.57
10:AJ:52:LEU:HD23	10:AJ:62:ARG:CG	2.35	0.57
38:BQ:97:ILE:HD13	38:BQ:104:ALA:HB3	1.86	0.57
2:AB:148:GLY:C	2:AB:150:ILE:H	2.07	0.57
24:DC:196:ASN:O	24:DC:197:ALA:HB3	2.04	0.57
1:AA:198:G:C4	1:AA:199:A:N7	2.72	0.57
21:CU:35:GLU:OE1	21:CU:37:TYR:CD1	2.58	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BP:105:LYS:CA	37:BP:108:ARG:HH21	2.18	0.57
57:DA:2286:G:H4'	57:DA:2287:A:C1'	2.35	0.57
57:DA:1682:G:H2'	57:DA:1683:U:C5	2.40	0.57
28:DG:162:ARG:HG3	28:DG:166:GLU:HG3	1.86	0.57
57:DA:477:A:O2'	57:DA:478:A:H8	1.87	0.57
9:AI:100:ALA:HB1	9:AI:102:PHE:CE2	2.40	0.57
57:DA:7:G:O2'	31:DJ:15:TRP:HZ2	1.87	0.57
57:DA:1734:G:C2'	57:DA:1735:A:H8	2.17	0.57
53:CA:98:A:C2	53:CA:99:C:C2	2.93	0.57
19:CS:52:ASN:C	19:CS:52:ASN:HD22	2.07	0.57
34:DM:136:MET:HE2	43:DV:57:TYR:HD2	1.70	0.57
1:AA:1270:G:H2'	1:AA:1271:A:C8	2.40	0.57
57:DA:871:U:OP1	34:DM:4:PRO:HA	2.05	0.57
32:BK:78:ARG:NH1	37:BP:70:GLU:OE2	2.38	0.57
33:BL:132:ARG:HG3	33:BL:142:ILE:HD12	1.87	0.57
53:CA:707:U:H4'	11:CK:21:HIS:CD2	2.40	0.57
22:BA:745:G:H2'	22:BA:746:U:H5'	1.87	0.57
32:DK:57:VAL:O	32:DK:57:VAL:HG13	2.05	0.57
59:DF:110:ILE:HD13	59:DF:110:ILE:H	1.70	0.57
25:DD:39:ASP:CG	25:DD:40:LEU:H	2.08	0.57
51:B3:60:CYS:O	51:B3:61:LEU:HD23	2.05	0.57
32:DK:63:VAL:HG12	32:DK:64:ARG:HD3	1.87	0.57
36:BO:2:ASP:O	36:BO:3:LYS:HB3	2.05	0.57
57:DA:2091:C:C4	57:DA:2092:U:O4	2.58	0.56
44:BW:24:ARG:HD3	44:BW:65:LYS:CD	2.35	0.56
9:AI:6:TYR:CE2	9:AI:17:ARG:HB2	2.37	0.56
57:DA:739:A:HO2'	57:DA:740:C:H5	1.48	0.56
24:DC:8:THR:O	24:DC:9:SER:CB	2.53	0.56
57:DA:571:U:O2'	57:DA:573:U:H5''	2.05	0.56
22:BA:1993:U:C4'	25:BD:133:THR:HG21	2.29	0.56
53:CA:666:G:C4	53:CA:741:G:C2	2.93	0.56
53:CA:1151:A:C6	53:CA:1152:A:N6	2.73	0.56
42:DU:95:PHE:O	42:DU:97:SER:N	2.38	0.56
53:CA:764:C:N4	53:CA:812:G:N1	2.52	0.56
57:DA:2304:G:N2	57:DA:2312:U:H3	1.97	0.56
57:DA:2849:U:O4	57:DA:2867:G:H8	1.86	0.56
37:DP:22:GLY:HA3	37:DP:91:VAL:CG2	2.35	0.56
53:CA:735:C:H5'	18:CR:59:LYS:HD3	1.87	0.56
22:BA:1085:A:H3'	22:BA:1086:A:H2	1.67	0.56
57:DA:224:U:H5	57:DA:420:C:H4'	1.70	0.56
22:BA:789:A:OP1	22:BA:790:U:H5	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:367:U:OP1	53:CA:395:C:H1'	2.05	0.56
57:DA:777:G:N7	57:DA:793:A:C2	2.65	0.56
22:BA:544:C:H3'	22:BA:545:U:O2	2.03	0.56
57:DA:919:U:H2'	57:DA:920:A:H8	1.64	0.56
22:BA:1559:U:H4'	22:BA:1560:G:OP2	2.04	0.56
57:DA:477:A:C2'	57:DA:478:A:C8	2.88	0.56
31:BJ:56:VAL:O	31:BJ:124:VAL:O	2.23	0.56
1:AA:1447:A:H5''	1:AA:1448:C:C5	2.38	0.56
22:BA:335:C:H5''	42:BU:81:ARG:HD3	1.86	0.56
37:BP:91:VAL:HG11	37:BP:96:LEU:HD21	1.86	0.56
53:CA:1448:C:O2'	53:CA:1449:C:C6	2.58	0.56
1:AA:1091:U:H1'	1:AA:1095:U:O2	2.05	0.56
9:CI:61:ASP:O	9:CI:62:LEU:HD22	2.05	0.56
25:DD:12:THR:HG22	25:DD:13:ARG:O	2.05	0.56
22:BA:1113:U:C2	22:BA:1114:C:C5	2.92	0.56
28:BG:126:THR:HG22	28:BG:127:GLN:N	2.20	0.56
26:BE:134:LEU:O	26:BE:134:LEU:HD12	2.05	0.56
5:CE:157:GLY:HA3	8:CH:63:LYS:HE3	1.86	0.56
1:AA:1314:C:OP2	19:AS:5:LYS:HD2	2.05	0.56
34:BM:77:PRO:HD2	34:BM:80:VAL:HG11	1.87	0.56
1:AA:853:C:C2'	1:AA:854:U:H5'	2.34	0.56
15:AO:9:LYS:NZ	15:AO:9:LYS:HB3	2.19	0.56
57:DA:1249:U:H4'	38:DQ:3:VAL:HB	1.85	0.56
26:BE:127:GLU:H	26:BE:127:GLU:CD	2.07	0.56
47:DZ:37:ARG:HA	47:DZ:37:ARG:NE	2.19	0.56
4:AD:84:ASN:HD22	4:AD:87:GLU:HG2	1.70	0.56
30:DI:83:ALA:HB2	30:DI:99:LYS:O	2.05	0.56
57:DA:950:G:C6	57:DA:951:C:N3	2.73	0.56
24:BC:64:VAL:HG12	24:BC:64:VAL:O	2.04	0.56
40:DS:80:PRO:HD2	40:DS:100:THR:OG1	2.05	0.56
44:BW:40:ARG:HB2	44:BW:56:HIS:CE1	2.40	0.56
25:BD:13:ARG:HH12	37:BP:74:GLN:HE21	1.51	0.56
4:CD:190:LEU:O	4:CD:191:SER:O	2.23	0.56
57:DA:185:G:H2'	57:DA:186:G:H8	1.70	0.56
9:CI:35:GLU:HA	9:CI:39:GLY:CA	2.35	0.56
57:DA:1826:G:C6	57:DA:1827:U:C4	2.93	0.56
53:CA:501:C:H1'	53:CA:549:C:O2'	2.04	0.56
53:CA:764:C:N4	53:CA:812:G:C6	2.73	0.56
58:DB:26:C:H1'	58:DB:117:G:H1'	1.87	0.56
4:CD:25:ARG:HG2	4:CD:25:ARG:HH11	1.69	0.56
2:CB:103:TRP:HA	2:CB:106:VAL:H	1.70	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:CM:32:ILE:O	55:CM:32:ILE:HD13	2.05	0.56
6:CF:43:GLY:O	6:CF:44:ARG:C	2.44	0.56
59:DF:134:GLN:HB2	59:DF:137:PHE:HE2	1.70	0.56
53:CA:197:A:C6	53:CA:221:C:H4'	2.40	0.56
30:BI:3:LYS:CD	30:BI:4:VAL:HG23	2.35	0.56
57:DA:1957:C:O2'	57:DA:1985:C:H1'	2.05	0.56
31:BJ:55:ILE:HD12	31:BJ:56:VAL:O	2.04	0.56
22:BA:2307:G:N2	22:BA:2311:A:C8	2.73	0.56
56:CP:54:LEU:H	56:CP:54:LEU:HD23	1.70	0.56
57:DA:1751:U:H2'	57:DA:1752:C:H6	1.69	0.56
33:BL:78:ARG:HB3	33:BL:113:ALA:CB	2.34	0.56
1:AA:872:A:C8	1:AA:874:G:C8	2.93	0.56
57:DA:770:G:H1'	57:DA:1379:U:C4	2.40	0.56
33:DL:117:THR:HG22	33:DL:118:THR:H	1.70	0.56
5:AE:134:ASN:O	5:AE:137:ARG:HB3	2.05	0.56
24:BC:39:SER:C	24:BC:41:GLY:H	2.07	0.56
20:CT:57:VAL:HG12	20:CT:71:ALA:HB2	1.87	0.56
53:CA:658:C:H1'	15:CO:21:THR:HG21	1.86	0.56
1:AA:1071:C:H2'	1:AA:1072:G:C8	2.40	0.56
30:DI:96:LYS:HE2	30:DI:138:VAL:HG11	1.87	0.56
53:CA:149:A:C2	53:CA:150:U:C2	2.93	0.56
57:DA:2195:U:H2'	57:DA:2196:C:H6	1.69	0.56
44:BW:28:GLU:CA	44:BW:28:GLU:OE2	2.54	0.56
18:CR:71:ASP:OD1	21:CU:3:ILE:HD11	2.05	0.56
53:CA:972:C:O2'	10:CJ:57:VAL:HG23	2.06	0.56
53:CA:984:C:O2'	53:CA:985:C:C6	2.51	0.56
17:AQ:12:VAL:CG1	17:AQ:13:SER:H	2.18	0.56
22:BA:1071:G:H1'	22:BA:1089:A:C8	2.40	0.56
37:DP:112:ARG:O	37:DP:113:LEU:HB3	2.05	0.56
57:DA:589:U:H2'	57:DA:590:A:C8	2.38	0.56
49:D1:7:LYS:O	49:D1:8:ILE:HD13	2.05	0.56
22:BA:1670:C:O2	25:BD:134:HIS:NE2	2.37	0.56
52:B4:9:LYS:O	52:B4:10:LEU:HD23	2.05	0.56
1:AA:466:A:O2'	1:AA:467:U:C5	2.58	0.56
57:DA:1076:C:O2'	57:DA:1077:A:C8	2.58	0.56
53:CA:953:G:C6	53:CA:1229:A:N6	2.73	0.56
22:BA:1056:G:H21	22:BA:1103:A:H62	1.51	0.56
22:BA:1107:G:N2	22:BA:1108:U:C2	2.72	0.56
57:DA:2448:A:O2'	57:DA:2449:U:H5	1.88	0.56
57:DA:2025:C:H2'	57:DA:2026:U:C6	2.41	0.56
54:CG:30:MET:HE1	54:CG:33:GLY:HA2	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DX:76:LYS:HG3	45:DX:77:TYR:N	2.21	0.56
57:DA:176:A:H3'	57:DA:177:G:H21	1.69	0.56
57:DA:53:A:H2'	57:DA:54:G:C8	2.41	0.56
53:CA:652:U:HO2'	53:CA:653:U:P	2.29	0.56
34:BM:31:PHE:CZ	34:BM:110:GLU:HG2	2.40	0.56
24:BC:141:HIS:CD2	24:BC:192:GLY:O	2.58	0.56
57:DA:994:C:OP2	38:DQ:49:ARG:HG3	2.04	0.56
32:BK:6:THR:O	32:BK:6:THR:HG22	2.05	0.56
1:AA:1141:C:O2'	1:AA:1142:G:O5'	2.11	0.56
53:CA:1455:G:H2'	53:CA:1456:A:C8	2.40	0.56
24:DC:171:VAL:HG23	24:DC:185:ALA:HB1	1.87	0.56
11:CK:124:LYS:O	21:CU:34:ARG:HB2	2.06	0.56
25:BD:9:VAL:CG2	25:BD:26:VAL:HB	2.33	0.56
57:DA:1049:C:O2	57:DA:1113:U:H4'	2.05	0.56
57:DA:2714:G:H8	57:DA:2714:G:O5'	1.88	0.56
57:DA:2714:G:O2'	57:DA:2715:C:H5'	2.06	0.56
53:CA:238:A:C2'	53:CA:239:U:H5''	2.34	0.56
4:AD:86:GLY:O	4:AD:89:LEU:HB3	2.06	0.56
2:CB:130:LYS:HD3	2:CB:133:ALA:HB3	1.87	0.56
22:BA:2773:C:OP1	25:BD:171:THR:HG23	2.04	0.56
24:BC:140:VAL:HG13	24:BC:189:ALA:HB1	1.87	0.56
1:AA:8:A:N6	4:AD:204:SER:HB2	2.20	0.56
57:DA:2282:G:H1'	57:DA:2390:U:H5	1.69	0.56
1:AA:914:A:N3	1:AA:915:A:C8	2.73	0.56
57:DA:2244:U:H2'	57:DA:2245:U:O4'	2.04	0.56
45:DX:58:ILE:HA	45:DX:66:VAL:HG21	1.87	0.56
57:DA:2669:G:H2'	57:DA:2670:A:C8	2.39	0.56
57:DA:2651:C:O2'	57:DA:2652:C:H5'	2.06	0.56
31:BJ:97:PRO:C	31:BJ:99:ARG:N	2.58	0.56
31:DJ:111:LYS:HB2	31:DJ:115:GLY:H	1.71	0.56
26:BE:48:THR:H	26:BE:51:GLU:HG3	1.69	0.56
22:BA:2249:U:N3	22:BA:2253:G:OP2	2.38	0.56
20:AT:2:ASN:O	20:AT:3:ILE:C	2.43	0.56
53:CA:748:G:H2'	53:CA:749:A:H8	1.67	0.56
22:BA:2292:U:H2'	22:BA:2293:G:C8	2.41	0.56
1:AA:98:A:H2'	1:AA:99:C:C6	2.41	0.56
7:AG:145:GLU:HA	7:AG:148:LYS:HB2	1.87	0.56
43:BV:21:ARG:HA	43:BV:25:LYS:O	2.05	0.56
57:DA:424:G:O2'	57:DA:425:G:H5'	2.06	0.56
11:AK:14:GLN:HA	11:AK:76:TYR:O	2.05	0.56
12:AL:71:HIS:ND1	12:AL:73:LEU:HB2	2.20	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:676:A:H2'	53:CA:677:U:C6	2.40	0.56
22:BA:1668:A:H4'	22:BA:1669:A:O5'	2.05	0.56
37:BP:61:ARG:HG2	37:BP:70:GLU:CG	2.35	0.56
35:DN:47:VAL:O	35:DN:50:PRO:HD2	2.06	0.56
57:DA:1006:C:O5'	57:DA:1006:C:H6	1.87	0.56
35:BN:85:PRO:HA	35:BN:88:ALA:HB2	1.86	0.56
45:BX:65:THR:O	45:BX:68:ALA:HB3	2.06	0.56
26:BE:95:LYS:O	26:BE:96:VAL:HB	2.06	0.56
57:DA:108:G:H2'	57:DA:109:C:C6	2.41	0.56
53:CA:542:G:H2'	53:CA:543:U:H6	1.71	0.56
29:BH:75:LEU:HD22	29:BH:143:ILE:HG12	1.88	0.56
1:AA:303:A:H2'	1:AA:304:U:O4'	2.05	0.56
33:BL:7:SER:HB2	33:BL:8:PRO:HD2	1.87	0.56
57:DA:2497:A:O2'	57:DA:2498:C:OP2	2.24	0.56
55:CM:21:ILE:HB	55:CM:24:VAL:HG23	1.87	0.56
26:BE:132:LYS:HB3	26:BE:132:LYS:NZ	2.19	0.56
1:AA:525:C:H2'	1:AA:526:C:C6	2.40	0.56
1:AA:901:A:N7	1:AA:902:G:H1'	2.20	0.56
25:DD:175:LEU:O	25:DD:176:ASP:HB2	2.05	0.56
42:DU:32:LYS:HE2	42:DU:65:GLN:CD	2.26	0.56
26:DE:117:ARG:NH2	33:DL:2:ARG:HB3	2.21	0.56
22:BA:1501:G:O2'	22:BA:1502:A:H5'	2.05	0.56
1:AA:135:C:H2'	1:AA:136:C:H5'	1.87	0.56
4:AD:100:VAL:O	4:AD:100:VAL:HG12	2.05	0.56
4:AD:80:ARG:HH21	4:AD:81:LEU:HD21	1.71	0.56
22:BA:2462:C:H2'	22:BA:2463:C:C6	2.40	0.56
22:BA:1154:G:OP1	38:BQ:57:ARG:HD3	2.05	0.56
28:BG:117:PRO:O	28:BG:118:ALA:O	2.24	0.56
5:AE:121:ASN:HD21	5:AE:122:VAL:HG13	1.71	0.56
12:CL:43:LYS:CB	12:CL:44:PRO:CD	2.73	0.56
32:DK:71:ARG:CB	32:DK:72:PRO:HD3	2.26	0.56
22:BA:1169:A:C2	22:BA:1181:U:O2	2.59	0.56
58:DB:18:G:C2	58:DB:67:G:O6	2.59	0.56
57:DA:2394:C:H41	51:D3:30:HIS:CE1	2.23	0.56
52:B4:9:LYS:C	52:B4:10:LEU:HD23	2.26	0.56
29:DH:38:PRO:O	29:DH:40:THR:HG23	2.06	0.56
57:DA:1062:G:H2'	57:DA:1070:A:OP1	2.05	0.56
41:BT:50:LEU:HD12	41:BT:50:LEU:N	2.19	0.56
5:CE:103:GLY:HA3	5:CE:121:ASN:CA	2.34	0.56
8:CH:17:GLN:NE2	8:CH:69:ALA:HB1	2.19	0.56
53:CA:536:C:H2'	53:CA:537:G:C8	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2513:A:C5	57:DA:2514:U:C4	2.93	0.56
57:DA:2742:G:OP1	52:D4:36:ARG:HD3	2.04	0.56
26:BE:145:ASP:HA	26:BE:166:LYS:O	2.05	0.56
26:BE:119:ILE:HD13	26:BE:187:VAL:HA	1.87	0.56
1:AA:1143:G:H2'	1:AA:1144:G:C8	2.40	0.56
45:DX:4:CYS:HB3	45:DX:9:LYS:H	1.71	0.56
57:DA:491:G:C4	57:DA:492:A:C8	2.94	0.56
57:DA:503:A:N3	57:DA:505:A:H2'	2.20	0.56
18:CR:21:ASP:HB3	18:CR:23:LYS:CG	2.36	0.56
57:DA:992:C:H4'	39:DR:74:ILE:HD13	1.87	0.56
57:DA:1722:A:C6	57:DA:1739:A:C8	2.93	0.56
34:BM:64:TRP:CH2	34:BM:106:ASP:HB2	2.41	0.56
57:DA:2461:A:H1'	57:DA:2492:U:N3	2.20	0.56
53:CA:204:G:H2'	53:CA:205:A:O4'	2.05	0.56
57:DA:700:G:C6	57:DA:701:G:C5	2.93	0.56
22:BA:1171:G:C6	22:BA:1172:C:C4	2.93	0.56
29:DH:9:VAL:CG1	29:DH:10:ALA:N	2.69	0.56
57:DA:2366:A:H2'	57:DA:2367:G:O4'	2.05	0.56
53:CA:322:C:O2'	20:CT:17:ARG:HG3	2.05	0.56
15:CO:73:ASP:OD2	15:CO:76:ARG:HD3	2.05	0.56
1:AA:234:C:O2'	1:AA:235:C:H5'	2.06	0.56
1:AA:827:U:C4	1:AA:870:U:C2	2.94	0.56
53:CA:352:C:H5''	53:CA:352:C:H6	1.69	0.56
57:DA:1823:G:H5''	63:DA:3766:HOH:O	2.05	0.56
53:CA:846:G:O2'	53:CA:847:G:H5'	2.05	0.56
15:AO:42:PHE:CE1	15:AO:55:LEU:HD22	2.40	0.56
55:CM:57:ASP:O	55:CM:61:LYS:HG3	2.06	0.56
39:DR:89:HIS:NE2	39:DR:91:GLN:HB2	2.21	0.56
6:CF:45:ARG:HG2	6:CF:46:GLN:H	1.69	0.56
57:DA:1373:A:H2'	57:DA:1374:G:O4'	2.05	0.56
53:CA:962:C:N4	53:CA:974:A:H61	2.04	0.56
6:AF:4:TYR:CD2	6:AF:71:ILE:HD13	2.41	0.56
8:CH:11:THR:HG23	8:CH:14:ARG:HH22	1.69	0.56
57:DA:764:A:C2	57:DA:781:A:C2	2.93	0.56
31:DJ:48:VAL:HG12	31:DJ:49:ASP:N	2.20	0.56
2:CB:99:MET:O	2:CB:103:TRP:HB3	2.05	0.56
57:DA:2310:C:H2'	57:DA:2311:A:H5''	1.88	0.56
24:BC:12:ARG:HG2	24:BC:12:ARG:NH1	2.11	0.56
41:BT:39:THR:CB	41:BT:42:GLU:HB2	2.31	0.56
57:DA:960:A:C8	57:DA:962:G:C8	2.93	0.56
59:DF:147:ARG:H	59:DF:147:ARG:HD2	1.71	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:2:ARG:HG2	35:DN:5:LYS:HD3	1.86	0.56
25:DD:184:ARG:HH22	37:DP:6:GLN:NE2	2.00	0.56
25:BD:169:ARG:O	25:BD:170:VAL:CG1	2.51	0.56
36:BO:102:ARG:O	36:BO:105:ALA:HB3	2.05	0.56
22:BA:464:U:O2'	50:B2:16:HIS:CE1	2.58	0.56
36:DO:58:ILE:O	36:DO:62:LEU:HB2	2.05	0.56
3:AC:110:LEU:HD21	3:AC:143:LEU:HD23	1.87	0.56
59:DF:7:TYR:O	59:DF:8:LYS:HG3	2.06	0.56
24:BC:255:LYS:O	24:BC:257:ARG:N	2.31	0.56
57:DA:1568:G:H21	24:DC:57:HIS:CE1	2.23	0.56
57:DA:1943:U:O4'	57:DA:1943:U:O2	2.20	0.56
57:DA:2654:A:H4'	57:DA:2655:G:OP1	2.04	0.56
29:DH:32:PRO:HA	45:DX:38:TRP:HD1	1.68	0.56
22:BA:1413:A:H2'	22:BA:1414:C:O4'	2.06	0.56
42:BU:85:ARG:HA	42:BU:91:LYS:O	2.05	0.56
42:BU:35:VAL:HB	42:BU:38:ILE:HG13	1.86	0.56
1:AA:322:C:O2'	20:AT:17:ARG:HG2	2.06	0.56
53:CA:1057:G:H4'	3:CC:196:GLY:H	1.70	0.56
13:AM:15:VAL:HA	13:AM:33:LEU:CD1	2.36	0.56
53:CA:1000:A:H1'	53:CA:1041:G:N2	2.21	0.56
27:BF:16:MET:O	27:BF:20:ASN:HA	2.05	0.56
32:BK:77:ILE:N	32:BK:77:ILE:HD12	2.21	0.56
22:BA:1427:A:H4'	22:BA:1428:C:O5'	2.06	0.56
7:AG:49:LEU:CD1	7:AG:60:ALA:HB1	2.35	0.56
55:CM:69:ARG:HA	55:CM:72:ILE:HG22	1.88	0.56
53:CA:1366:C:HO2'	53:CA:1367:C:H6	1.49	0.56
15:CO:38:LEU:HG	15:CO:42:PHE:CE1	2.40	0.56
57:DA:340:A:H2'	57:DA:341:C:O4'	2.05	0.56
45:DX:52:ALA:O	45:DX:53:LYS:HB3	2.04	0.56
57:DA:1997:C:OP2	25:DD:129:THR:OG1	2.22	0.56
53:CA:536:C:H2'	53:CA:537:G:H8	1.69	0.56
57:DA:1439:A:N7	57:DA:1440:U:N1	2.54	0.56
57:DA:962:G:OP1	57:DA:962:G:H3'	2.06	0.56
57:DA:52:A:O2'	57:DA:53:A:H5'	2.05	0.56
57:DA:628:G:C6	57:DA:636:G:C2	2.93	0.56
53:CA:694:A:C3'	53:CA:695:A:H5''	2.31	0.56
20:AT:54:GLN:N	20:AT:55:PRO:HD2	2.21	0.56
20:AT:66:ILE:HG23	20:AT:66:ILE:O	2.05	0.56
1:AA:175:C:O2'	1:AA:176:C:H5'	2.05	0.56
1:AA:707:U:OP1	11:AK:86:LYS:HE3	2.05	0.56
37:BP:105:LYS:O	37:BP:108:ARG:HD3	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2199:A:H5''	22:BA:2199:A:H8	1.67	0.56
22:BA:1032:A:H1'	52:B4:23:ILE:CD1	2.35	0.56
1:AA:499:A:H1'	1:AA:500:G:C8	2.41	0.56
2:CB:133:ALA:HA	2:CB:137:THR:HG21	1.87	0.56
22:BA:1707:G:H2'	22:BA:1708:C:H6	1.68	0.56
1:AA:792:A:H4'	1:AA:793:U:O5'	2.06	0.56
53:CA:346:G:H2'	53:CA:346:G:N3	2.19	0.56
48:B0:42:ILE:HD12	48:B0:48:TYR:HB2	1.87	0.56
1:AA:683:G:H21	11:AK:39:ASN:HA	1.71	0.56
16:AP:10:GLY:HA3	16:AP:15:PRO:HA	1.88	0.56
40:DS:24:ILE:HG22	40:DS:35:ILE:CD1	2.35	0.56
57:DA:848:C:H2'	57:DA:849:A:H8	1.70	0.56
5:AE:113:VAL:HG21	5:AE:140:ILE:CD1	2.36	0.56
53:CA:1062:U:H2'	53:CA:1063:C:C5	2.41	0.56
53:CA:205:A:C5	53:CA:206:C:N4	2.73	0.56
25:BD:70:LYS:O	25:BD:71:ALA:CB	2.53	0.56
5:CE:84:VAL:HG22	5:CE:85:LYS:H	1.71	0.56
1:AA:143:A:H5'	1:AA:144:G:H5'	1.87	0.56
22:BA:813:U:H2'	22:BA:814:C:C6	2.40	0.56
57:DA:1248:G:O2'	38:DQ:2:ARG:HA	2.04	0.56
22:BA:2678:C:H2'	22:BA:2679:A:O4'	2.06	0.56
26:BE:151:GLY:HA2	26:BE:192:ALA:HB2	1.87	0.56
22:BA:2473:U:O2	22:BA:2473:U:H2'	2.05	0.56
15:CO:83:ARG:HG2	15:CO:83:ARG:O	2.06	0.56
17:AQ:31:PRO:HB2	17:AQ:32:ILE:HD12	1.87	0.56
22:BA:1161:C:H1'	39:BR:8:GLY:O	2.06	0.56
28:DG:10:VAL:HB	28:DG:14:VAL:HG21	1.87	0.56
57:DA:2093:G:N7	57:DA:2225:A:H2'	2.20	0.56
1:AA:1129:C:H2'	1:AA:1139:G:N7	2.20	0.56
58:DB:110:C:O2'	58:DB:111:U:C5'	2.46	0.56
57:DA:30:G:C6	57:DA:31:C:N3	2.74	0.56
58:DB:27:C:H2'	58:DB:28:C:C6	2.39	0.56
58:DB:28:C:OP1	36:DO:31:THR:HG21	2.06	0.56
22:BA:2062:A:O2'	22:BA:2063:C:C5'	2.48	0.56
57:DA:1060:U:O4'	57:DA:1061:U:H2'	2.05	0.56
57:DA:1290:C:O2'	57:DA:1291:C:C6	2.43	0.56
41:BT:39:THR:HG22	41:BT:41:ALA:HB3	1.87	0.56
53:CA:263:A:P	20:CT:73:ARG:HH12	2.29	0.56
30:BI:23:VAL:HG23	30:BI:24:GLY:H	1.71	0.56
53:CA:537:G:H5''	12:CL:109:ARG:HH12	1.70	0.56
53:CA:1348:U:O2'	53:CA:1349:A:H8	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DM:62:LYS:HG2	34:DM:64:TRP:CZ2	2.41	0.56
24:DC:145:MET:HE2	24:DC:181:ARG:NH2	2.21	0.56
36:DO:115:LEU:H	36:DO:115:LEU:CD1	2.17	0.56
57:DA:855:G:N3	44:DW:23:LYS:HE3	2.21	0.56
1:AA:367:U:C6	1:AA:394:G:N2	2.74	0.56
1:AA:109:A:C6	1:AA:326:G:C6	2.93	0.56
24:DC:122:ALA:HB3	24:DC:127:ASN:ND2	2.21	0.56
1:AA:1253:G:H2'	1:AA:1254:A:C8	2.35	0.56
38:BQ:20:ALA:HA	38:BQ:23:TYR:CD1	2.40	0.56
57:DA:1343:G:C5	57:DA:1597:A:N6	2.74	0.56
53:CA:1264:U:H2'	53:CA:1265:C:H6	1.71	0.56
3:AC:119:ILE:HD11	3:AC:133:MET:HA	1.88	0.56
22:BA:962:G:OP1	63:BA:3353:HOH:O	2.18	0.56
57:DA:724:U:H2'	57:DA:725:G:O4'	2.05	0.56
29:DH:5:LEU:O	29:DH:6:LEU:HD12	2.06	0.56
24:BC:24:HIS:CG	24:BC:25:LYS:H	2.24	0.56
50:B2:18:PHE:O	50:B2:22:MET:HB2	2.06	0.56
53:CA:487:A:H2'	53:CA:488:C:O4'	2.05	0.56
56:CP:29:ASN:N	56:CP:29:ASN:OD1	2.37	0.56
29:DH:12:LEU:HD12	29:DH:12:LEU:O	2.05	0.56
4:AD:166:LYS:NZ	4:AD:166:LYS:HB3	2.20	0.56
22:BA:976:G:C2	22:BA:977:G:C8	2.93	0.56
7:AG:39:GLU:HB2	7:AG:43:TYR:CE2	2.40	0.56
21:CU:19:LYS:N	21:CU:19:LYS:NZ	2.53	0.56
45:BX:32:LEU:HA	45:BX:51:SER:HA	1.88	0.56
57:DA:2387:U:H1'	44:DW:38:ARG:HH12	1.70	0.56
57:DA:455:C:H3'	57:DA:456:C:C5'	2.35	0.56
34:BM:33:LEU:CD2	34:BM:128:THR:HB	2.36	0.56
53:CA:35:G:H21	12:CL:114:SER:HB3	1.70	0.56
57:DA:1337:G:H8	57:DA:1337:G:OP2	1.88	0.56
52:B4:9:LYS:N	52:B4:9:LYS:HD3	2.09	0.56
15:CO:38:LEU:HG	15:CO:42:PHE:HE1	1.70	0.56
57:DA:1090:A:H3'	57:DA:1091:G:H5''	1.88	0.56
57:DA:2519:U:C6	57:DA:2542:A:N6	2.73	0.56
53:CA:517:G:H5'	53:CA:519:C:C2	2.41	0.56
57:DA:374:A:C6	57:DA:401:A:C8	2.94	0.56
22:BA:1103:A:H2'	22:BA:1104:C:H5'	1.87	0.56
24:BC:77:VAL:HG13	24:BC:113:ASP:O	2.06	0.56
57:DA:962:G:O2'	57:DA:963:U:C6	2.59	0.56
1:AA:1002:G:H2'	1:AA:1003:G:O4'	2.06	0.56
2:AB:221:ARG:CZ	2:AB:221:ARG:HB3	2.36	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B3:31:ILE:HG13	51:B3:31:ILE:O	2.05	0.56
57:DA:1814:G:C2	57:DA:1815:A:N6	2.74	0.56
46:DY:31:GLN:C	46:DY:33:ALA:H	2.09	0.56
21:CU:31:VAL:O	21:CU:33:ARG:N	2.39	0.56
53:CA:174:A:H2'	53:CA:175:C:H6	1.71	0.56
22:BA:1867:G:HO2'	22:BA:1868:C:H5'	1.69	0.56
58:DB:100:G:H2'	58:DB:101:A:O4'	2.06	0.56
57:DA:1008:A:OP1	57:DA:1008:A:H8	1.89	0.56
31:DJ:64:VAL:HG11	31:DJ:69:ARG:HA	1.87	0.56
39:BR:25:LEU:H	39:BR:94:THR:CG2	2.18	0.56
1:AA:86:G:N2	1:AA:87:C:N4	2.53	0.56
2:AB:20:ARG:HH12	2:AB:38:HIS:CE1	2.24	0.56
57:DA:1735:A:H2'	57:DA:1736:U:C6	2.41	0.56
57:DA:77:G:O2'	57:DA:78:U:O4'	2.18	0.56
19:CS:52:ASN:ND2	19:CS:54:ARG:HG2	2.21	0.56
22:BA:1695:G:H2'	22:BA:1696:G:O4'	2.06	0.56
22:BA:2275:C:HO2'	34:BM:84:LYS:HA	1.69	0.56
22:BA:1947:C:N3	22:BA:1960:A:C2	2.74	0.56
53:CA:437:U:H2'	53:CA:438:U:O5'	2.06	0.56
22:BA:1832:C:N4	22:BA:1833:C:C4	2.73	0.56
22:BA:2561:U:O3'	32:BK:40:LYS:HE2	2.06	0.56
22:BA:1238:G:O2'	22:BA:1239:G:H5'	2.06	0.56
53:CA:449:G:N1	53:CA:450:G:C6	2.74	0.56
57:DA:2732:G:H5''	57:DA:2733:A:O4'	2.05	0.56
49:B1:29:LYS:HB3	49:B1:29:LYS:NZ	2.20	0.56
57:DA:2650:U:C2	57:DA:2671:G:N2	2.74	0.56
54:CG:12:LEU:HD22	54:CG:13:PRO:O	2.05	0.56
22:BA:1698:A:H4'	22:BA:1699:G:O5'	2.05	0.56
28:BG:85:LYS:HA	28:BG:130:ILE:O	2.06	0.56
25:BD:151:THR:CG2	25:BD:152:PRO:CD	2.78	0.56
45:BX:11:PRO:HB3	45:BX:29:LEU:HB3	1.86	0.56
45:BX:34:SER:HA	45:BX:48:LEU:O	2.06	0.56
57:DA:2336:A:N7	44:DW:40:ARG:CZ	2.69	0.56
9:CI:56:MET:HG3	9:CI:57:VAL:HG23	1.88	0.56
58:DB:112:G:N2	36:DO:45:SER:HA	2.05	0.56
57:DA:247:G:C5	57:DA:249:C:H1'	2.41	0.56
57:DA:1273:U:H4'	57:DA:1275:A:OP2	2.06	0.56
57:DA:301:G:C6	57:DA:302:C:N4	2.74	0.56
4:CD:25:ARG:HH11	4:CD:25:ARG:CG	2.19	0.56
57:DA:1062:G:OP1	57:DA:1070:A:H4'	2.06	0.56
22:BA:1510:G:H2'	22:BA:1511:G:C8	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1326:U:O2'	57:DA:1327:A:O5'	2.24	0.56
2:AB:9:LEU:HD23	2:AB:11:ALA:N	2.21	0.56
57:DA:1655:A:H2'	57:DA:1656:C:H6	1.66	0.56
1:AA:922:G:H1'	5:AE:23:THR:HG22	1.87	0.56
20:AT:57:VAL:HG12	20:AT:58:ASP:N	2.20	0.56
21:CU:36:PHE:CD2	21:CU:39:LYS:HE2	2.41	0.56
57:DA:1491:G:C6	57:DA:1500:G:C2	2.93	0.56
24:BC:165:ALA:HB3	24:BC:172:THR:CG2	2.32	0.56
59:DF:41:GLU:O	59:DF:43:ILE:N	2.39	0.56
57:DA:1011:G:O2'	57:DA:1013:C:H5''	2.05	0.56
22:BA:581:C:H2'	22:BA:582:A:C8	2.41	0.56
53:CA:858:G:O6	53:CA:869:G:C8	2.59	0.56
53:CA:1253:G:N1	53:CA:1285:A:N6	2.54	0.56
22:BA:1563:U:H2'	22:BA:1564:C:C6	2.41	0.56
57:DA:503:A:C4	57:DA:506:G:N7	2.74	0.56
2:AB:14:HIS:HB2	2:AB:208:ALA:HB2	1.87	0.56
57:DA:1264:A:H5'	48:D0:7:PRO:HG2	1.87	0.56
16:AP:51:ARG:O	16:AP:52:LEU:HD12	2.06	0.56
17:CQ:59:GLU:HG3	17:CQ:75:VAL:HG22	1.88	0.56
28:BG:174:LYS:HE2	28:BG:176:LYS:OXT	2.05	0.56
57:DA:1259:G:H2'	57:DA:1260:A:H8	1.71	0.56
42:DU:44:HIS:CD2	42:DU:57:ILE:HG21	2.40	0.56
4:CD:137:SER:CB	4:CD:138:PRO:HD2	2.36	0.56
22:BA:616:A:O2'	22:BA:617:G:H5'	2.06	0.56
29:DH:33:GLN:O	29:DH:35:LYS:HG2	2.06	0.56
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.05	0.56
1:AA:1269:A:H2	1:AA:1312:G:N3	2.02	0.56
14:AN:82:LYS:HE2	14:AN:85:GLU:HG3	1.87	0.56
31:BJ:43:GLU:O	31:BJ:45:THR:N	2.39	0.56
27:BF:134:GLN:NE2	27:BF:148:VAL:O	2.39	0.56
27:BF:131:VAL:CG2	27:BF:151:LEU:HG	2.36	0.56
22:BA:1092:C:H2'	22:BA:1093:G:O4'	2.05	0.56
57:DA:2020:A:H5'	48:D0:8:THR:HG22	1.88	0.56
51:D3:33:THR:HG23	51:D3:34:LYS:N	2.21	0.56
53:CA:548:G:H2'	53:CA:549:C:C6	2.41	0.56
53:CA:811:C:H4'	53:CA:900:A:N6	2.20	0.56
31:DJ:4:PHE:O	31:DJ:44:TYR:CZ	2.58	0.56
24:BC:247:TRP:C	24:BC:249:VAL:H	2.10	0.56
1:AA:92:U:H2'	1:AA:93:U:C5	2.41	0.56
2:CB:95:TRP:CZ3	2:CB:171:ALA:HA	2.41	0.56
2:CB:74:ALA:CB	2:CB:206:ILE:HD11	2.35	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:947:A:O2'	57:DA:948:C:O4'	2.24	0.56
1:AA:258:G:N2	1:AA:259:G:H1'	2.21	0.56
2:CB:44:LYS:O	2:CB:48:MET:HG3	2.05	0.56
22:BA:2389:G:C5'	22:BA:2390:U:H5'	2.32	0.56
57:DA:140:C:H5'	57:DA:141:G:H21	1.70	0.56
57:DA:2800:A:C2'	57:DA:2801:G:H4'	2.36	0.56
49:B1:8:ILE:CG2	49:B1:9:LYS:N	2.68	0.56
29:BH:12:LEU:HD12	29:BH:19:VAL:HG11	1.87	0.56
32:DK:13:ASN:H	32:DK:13:ASN:HD22	1.53	0.56
57:DA:1815:A:C2	57:DA:1817:G:O6	2.59	0.56
53:CA:120:A:H3'	53:CA:121:U:C5'	2.35	0.56
46:DY:25:GLN:HB2	46:DY:46:VAL:HG11	1.87	0.56
11:CK:121:ARG:NH2	21:CU:35:GLU:HB2	2.20	0.56
28:DG:84:LYS:O	28:DG:85:LYS:HB3	2.06	0.56
2:AB:174:GLU:O	2:AB:178:LEU:HB2	2.06	0.56
57:DA:279:A:N6	57:DA:361:G:O2'	2.39	0.56
25:DD:187:LEU:HD12	25:DD:188:LEU:H	1.71	0.56
2:AB:127:LYS:HG3	2:AB:128:LEU:N	2.21	0.56
5:CE:148:SER:H	5:CE:151:MET:HE3	1.71	0.56
57:DA:1343:G:H2'	57:DA:1344:U:H5	1.70	0.56
57:DA:852:U:H2'	57:DA:853:C:H6	1.71	0.56
26:BE:47:LYS:HD3	26:BE:51:GLU:O	2.05	0.56
40:DS:44:ALA:O	40:DS:48:LYS:HB2	2.04	0.56
22:BA:622:G:H2'	22:BA:623:C:H6	1.71	0.56
57:DA:1971:U:O2'	57:DA:1972:G:OP1	2.22	0.56
4:AD:191:SER:O	4:AD:192:ALA:HB2	2.06	0.56
1:AA:864:A:H3'	1:AA:865:A:C8	2.41	0.56
36:DO:70:ALA:O	36:DO:74:VAL:HG23	2.06	0.56
37:BP:61:ARG:HG2	37:BP:70:GLU:HG2	1.88	0.56
57:DA:1272:A:C5	57:DA:1618:A:H1'	2.40	0.56
11:CK:94:SER:O	11:CK:97:ARG:HB2	2.06	0.56
36:DO:108:ASP:C	36:DO:110:ALA:H	2.09	0.56
25:BD:33:ARG:NH2	25:BD:74:GLU:O	2.38	0.56
36:DO:88:LYS:O	36:DO:89:ASP:HB3	2.06	0.56
9:AI:38:PHE:HA	9:AI:41:GLU:OE1	2.06	0.56
8:CH:12:ARG:HH12	8:CH:27:PRO:HD2	1.70	0.56
31:DJ:86:GLN:O	31:DJ:87:ALA:HB2	2.06	0.56
38:BQ:63:ARG:NH2	38:BQ:95:ALA:C	2.60	0.55
27:BF:56:LEU:HA	27:BF:59:ILE:HD12	1.87	0.55
9:CI:51:LEU:C	9:CI:53:LEU:H	2.09	0.55
57:DA:729:G:C2'	57:DA:729:G:N3	2.68	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:246:C:C2'	57:DA:247:G:H5'	2.35	0.55
57:DA:674:G:O3'	26:DE:60:TRP:CH2	2.59	0.55
57:DA:2060:A:C2'	26:DE:63:LYS:HZ2	2.08	0.55
57:DA:826:U:O2'	33:DL:53:GLY:HA3	2.05	0.55
34:DM:72:PRO:HA	34:DM:92:TRP:CE3	2.41	0.55
15:AO:16:ARG:O	15:AO:17:ASP:HB3	2.05	0.55
59:DF:31:GLU:C	59:DF:95:MET:HE1	2.27	0.55
57:DA:1716:U:C4	57:DA:1745:A:N6	2.74	0.55
57:DA:1611:C:O2'	57:DA:1612:C:H6	1.88	0.55
4:CD:81:LEU:O	4:CD:83:GLY:N	2.39	0.55
41:BT:50:LEU:O	41:BT:51:PHE:HB2	2.06	0.55
53:CA:330:C:O2'	53:CA:331:G:O5'	2.24	0.55
57:DA:92:U:O2'	57:DA:93:G:H5'	2.07	0.55
57:DA:1416:G:C6	57:DA:1417:C:N4	2.74	0.55
1:AA:596:A:N6	1:AA:645:G:N1	2.54	0.55
57:DA:204:A:OP1	57:DA:206:U:H1'	2.06	0.55
27:BF:38:GLY:HA2	27:BF:85:GLY:HA3	1.87	0.55
4:AD:196:GLU:C	4:AD:198:LEU:H	2.08	0.55
32:DK:17:ARG:HG2	32:DK:18:ARG:H	1.70	0.55
47:DZ:4:ILE:CG2	47:DZ:56:VAL:HG13	2.36	0.55
53:CA:183:C:HO2'	53:CA:184:G:C5'	2.19	0.55
13:AM:10:ASP:OD1	13:AM:44:ILE:HD13	2.06	0.55
46:DY:19:LEU:HG	46:DY:22:LEU:HD22	1.89	0.55
3:CC:84:GLU:C	3:CC:86:LEU:H	2.08	0.55
53:CA:861:G:C5	53:CA:862:C:C5	2.94	0.55
12:CL:33:CYS:HA	12:CL:54:VAL:HA	1.88	0.55
11:AK:109:ILE:HB	21:AU:5:VAL:CG2	2.35	0.55
26:BE:151:GLY:CA	26:BE:192:ALA:HB2	2.36	0.55
7:AG:92:PRO:O	7:AG:93:VAL:HG13	2.06	0.55
22:BA:194:G:C8	63:BA:3759:HOH:O	2.59	0.55
37:BP:80:VAL:O	37:BP:81:ASP:HB3	2.06	0.55
57:DA:2591:C:OP1	24:DC:237:ARG:HD2	2.05	0.55
22:BA:1684:G:H2'	22:BA:1685:C:C6	2.41	0.55
22:BA:396:G:H1'	45:BX:28:PHE:HB3	1.86	0.55
30:DI:132:ALA:HA	30:DI:137:LEU:HD12	1.88	0.55
31:BJ:5:THR:HG22	31:BJ:6:ALA:O	2.06	0.55
9:CI:44:ARG:HH21	9:CI:48:ARG:NH1	2.04	0.55
56:CP:71:VAL:O	56:CP:74:LEU:HB2	2.07	0.55
57:DA:729:G:O2'	57:DA:1775:U:H1'	2.06	0.55
58:DB:12:C:H5''	58:DB:15:A:H62	1.70	0.55
35:DN:12:ARG:HG3	35:DN:13:ASN:H	1.70	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1338:G:O2'	41:DT:18:GLU:HG3	2.06	0.55
26:DE:108:ILE:O	26:DE:112:LEU:HB2	2.06	0.55
57:DA:1534:U:H2'	57:DA:1536:C:O2	2.07	0.55
57:DA:1053:C:N4	57:DA:1054:A:H62	2.04	0.55
59:DF:57:ALA:HB2	59:DF:64:PRO:HG2	1.88	0.55
45:DX:51:SER:OG	45:DX:54:GLY:HA3	2.05	0.55
22:BA:1188:U:C2'	22:BA:1189:A:H5'	2.36	0.55
53:CA:1167:A:N7	53:CA:1169:A:N6	2.54	0.55
57:DA:2876:G:H4'	37:DP:2:ASN:HD21	1.72	0.55
21:AU:52:VAL:HG13	21:AU:53:LYS:N	2.13	0.55
53:CA:263:A:OP1	20:CT:73:ARG:NH1	2.39	0.55
57:DA:2023:C:H4'	57:DA:2617:U:O3'	2.07	0.55
1:AA:922:G:H2'	1:AA:923:A:H8	1.71	0.55
51:B3:21:PHE:HB2	51:B3:49:VAL:HG13	1.89	0.55
25:DD:112:THR:HG22	25:DD:113:SER:N	2.21	0.55
57:DA:866:A:O2'	57:DA:867:C:H6	1.88	0.55
22:BA:545:U:O4'	22:BA:545:U:O2	2.22	0.55
11:AK:124:LYS:CE	21:AU:33:ARG:HH21	2.18	0.55
57:DA:1237:A:O2'	57:DA:1238:G:H4'	2.07	0.55
2:AB:95:TRP:HH2	2:AB:100:LEU:HB2	1.70	0.55
24:BC:20:ASN:C	24:BC:20:ASN:ND2	2.59	0.55
24:BC:20:ASN:HD21	24:BC:22:GLU:HG2	1.70	0.55
40:DS:32:ALA:O	40:DS:33:LEU:HB2	2.06	0.55
8:CH:80:PRO:HA	8:CH:83:ARG:HE	1.71	0.55
9:AI:128:LYS:HD2	9:AI:129:ARG:H	1.71	0.55
22:BA:1842:G:O4'	24:BC:242:HIS:CE1	2.59	0.55
31:DJ:111:LYS:HB2	31:DJ:115:GLY:N	2.22	0.55
44:BW:77:LYS:O	44:BW:78:PHE:HB2	2.05	0.55
57:DA:452:G:OP1	26:DE:53:THR:HG23	2.06	0.55
1:AA:903:G:C5	1:AA:904:U:C5	2.94	0.55
40:DS:79:GLY:HA3	40:DS:100:THR:OG1	2.06	0.55
2:CB:147:LEU:H	2:CB:147:LEU:HD12	1.71	0.55
51:D3:61:LEU:HB2	51:D3:64:ALA:HB3	1.87	0.55
47:DZ:6:ILE:HD12	47:DZ:47:ILE:HD11	1.88	0.55
22:BA:2868:A:H2'	22:BA:2869:G:C8	2.42	0.55
57:DA:187:G:C2	57:DA:210:C:C2	2.94	0.55
1:AA:1136:C:H5''	1:AA:1137:C:OP2	2.05	0.55
59:DF:36:ASN:O	59:DF:37:MET:HB3	2.06	0.55
22:BA:1405:U:H2'	22:BA:1406:U:C6	2.41	0.55
1:AA:1526:G:P	21:AU:38:GLU:HB2	2.47	0.55
56:CP:17:TYR:CD1	56:CP:39:PHE:HD2	2.24	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:CG:32:ASP:HB2	54:CG:34:LYS:HD3	1.88	0.55
22:BA:996:A:C4'	38:BQ:91:ARG:HG2	2.33	0.55
22:BA:2052:A:H4'	25:BD:148:GLN:O	2.07	0.55
57:DA:2296:U:C4'	57:DA:2297:A:OP1	2.30	0.55
56:CP:5:ARG:O	56:CP:19:VAL:HA	2.06	0.55
57:DA:1117:C:O5'	57:DA:1117:C:H6	1.89	0.55
10:CJ:6:ILE:HG23	10:CJ:100:ILE:HG23	1.87	0.55
57:DA:303:G:O2'	57:DA:304:U:C6	2.55	0.55
5:CE:132:PRO:O	5:CE:136:VAL:HG12	2.06	0.55
57:DA:1555:G:N2	57:DA:1556:C:C2	2.74	0.55
24:BC:77:VAL:O	24:BC:77:VAL:HG22	2.07	0.55
24:BC:91:ALA:HB3	24:BC:103:ILE:HG22	1.88	0.55
12:CL:2:THR:CB	12:CL:5:GLN:HB2	2.35	0.55
35:DN:83:LEU:HD11	35:DN:86:ARG:HH21	1.72	0.55
37:DP:48:ALA:HB3	37:DP:59:THR:CB	2.35	0.55
53:CA:570:G:H2'	53:CA:571:U:C6	2.41	0.55
53:CA:65:A:H4'	53:CA:66:A:O5'	2.05	0.55
22:BA:2503:A:O2'	22:BA:2505:G:OP2	2.24	0.55
46:DY:17:GLU:OE1	46:DY:53:VAL:HB	2.06	0.55
2:AB:165:ALA:HB2	2:AB:186:VAL:HG12	1.88	0.55
30:BI:104:GLN:O	30:BI:105:LEU:CB	2.54	0.55
4:AD:71:PHE:CE1	4:AD:199:ILE:HD11	2.41	0.55
5:CE:44:ARG:NH2	5:CE:70:MET:HB2	2.20	0.55
22:BA:1653:G:H1	35:BN:11:ASN:ND2	2.04	0.55
53:CA:1003:G:N2	53:CA:1005:A:H5''	2.21	0.55
8:AH:83:ARG:O	8:AH:84:ILE:HD13	2.06	0.55
45:BX:7:THR:OG1	45:BX:9:LYS:HD2	2.06	0.55
56:CP:46:LYS:HE2	56:CP:47:GLU:N	2.21	0.55
25:DD:4:LEU:HD23	25:DD:101:PHE:CE1	2.41	0.55
42:DU:58:VAL:HG12	42:DU:60:LYS:H	1.71	0.55
40:BS:59:GLU:HA	40:BS:64:ALA:CA	2.37	0.55
14:AN:15:LEU:N	14:AN:18:LYS:HE2	2.22	0.55
2:CB:147:LEU:N	2:CB:147:LEU:HD12	2.21	0.55
47:DZ:6:ILE:O	47:DZ:34:THR:HA	2.07	0.55
10:AJ:48:ARG:NH2	14:AN:100:TRP:CD2	2.74	0.55
22:BA:907:G:C2'	22:BA:908:C:H5'	2.36	0.55
3:AC:115:VAL:HG11	3:AC:199:VAL:HG21	1.88	0.55
1:AA:868:C:N4	1:AA:869:G:C2	2.73	0.55
53:CA:922:G:H2'	53:CA:923:A:C8	2.41	0.55
49:D1:18:HIS:HD1	49:D1:48:TYR:HH	1.55	0.55
22:BA:2347:C:OP1	22:BA:2347:C:H4'	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:909:A:H2	53:CA:1413:A:N3	2.04	0.55
57:DA:2092:U:HO2'	57:DA:2093:G:H8	1.05	0.55
39:BR:49:ILE:HD12	39:BR:52:PRO:CA	2.12	0.55
53:CA:254:G:H5''	17:CQ:70:LYS:HD3	1.86	0.55
10:CJ:57:VAL:HG22	10:CJ:58:ASN:N	2.16	0.55
57:DA:2297:A:N3	57:DA:2298:A:C8	2.74	0.55
27:BF:129:MET:SD	27:BF:153:ILE:HD11	2.47	0.55
6:AF:6:ILE:HG12	6:AF:89:VAL:CG2	2.22	0.55
22:BA:1059:G:C6	22:BA:1060:U:N3	2.74	0.55
9:CI:49:GLN:N	9:CI:50:PRO:CD	2.70	0.55
22:BA:1138:G:H5''	22:BA:1139:G:OP2	2.06	0.55
31:BJ:65:THR:CG2	31:BJ:66:GLY:N	2.69	0.55
34:DM:27:SER:N	34:DM:66:ARG:NH2	2.45	0.55
21:AU:19:LYS:HE2	21:AU:19:LYS:N	2.21	0.55
57:DA:296:U:C2	57:DA:297:G:C8	2.94	0.55
57:DA:1125:G:C6	57:DA:1126:A:N6	2.74	0.55
32:DK:13:ASN:HD21	32:DK:97:THR:N	1.99	0.55
57:DA:64:A:P	41:DT:77:ARG:HG2	2.45	0.55
1:AA:721:G:H4'	1:AA:722:G:C5'	2.36	0.55
57:DA:2285:C:C5	49:D1:5:ARG:NH2	2.72	0.55
57:DA:70:G:OP2	57:DA:70:G:H8	1.89	0.55
2:CB:137:THR:O	2:CB:140:LEU:HB3	2.06	0.55
6:AF:47:LEU:HD13	6:AF:51:ILE:HG22	1.88	0.55
53:CA:309:A:H1'	53:CA:608:A:C2	2.41	0.55
53:CA:1215:G:HO2'	53:CA:1216:A:H8	1.53	0.55
57:DA:1714:U:H3'	57:DA:1715:G:H5'	1.88	0.55
57:DA:1527:G:H1'	57:DA:1546:G:N2	2.20	0.55
53:CA:643:C:O2'	53:CA:644:U:C5'	2.54	0.55
53:CA:162:A:H2'	53:CA:163:C:O4'	2.05	0.55
25:BD:121:THR:O	25:BD:122:VAL:HB	2.05	0.55
22:BA:2805:C:C4	22:BA:2806:C:C4	2.94	0.55
57:DA:467:G:H4'	57:DA:796:C:O2'	2.06	0.55
10:AJ:7:ARG:O	10:AJ:100:ILE:HA	2.05	0.55
57:DA:2677:G:H2'	57:DA:2678:C:H6	1.71	0.55
57:DA:2591:C:P	24:DC:237:ARG:HD2	2.46	0.55
53:CA:678:U:H1'	53:CA:777:A:O3'	2.05	0.55
29:BH:62:LEU:HD12	29:BH:63:ALA:N	2.21	0.55
57:DA:357:C:H2'	57:DA:358:U:H6	1.72	0.55
49:B1:16:THR:HB	49:B1:41:VAL:HG21	1.88	0.55
14:CN:20:PHE:HE1	14:CN:54:SER:HB2	1.71	0.55
1:AA:937:A:N6	1:AA:1345:U:O4	2.39	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2093:G:O6	57:DA:2225:A:H2'	2.05	0.55
57:DA:2226:C:H2'	57:DA:2227:A:C8	2.42	0.55
44:BW:14:ASP:OD2	44:BW:16:GLU:OE1	2.25	0.55
19:CS:40:PHE:HB3	19:CS:41:PRO:CD	2.32	0.55
45:BX:63:ILE:O	45:BX:67:LEU:HG	2.06	0.55
57:DA:239:C:HO2'	57:DA:621:A:H2	1.55	0.55
53:CA:1181:G:H2'	53:CA:1182:G:N7	2.21	0.55
57:DA:447:A:H5'	57:DA:449:A:C5	2.42	0.55
35:DN:98:LEU:HD21	48:D0:53:VAL:HG11	1.87	0.55
57:DA:2889:C:C4	57:DA:2890:G:C6	2.94	0.55
33:BL:91:ASP:H	33:BL:94:THR:CG2	2.19	0.55
53:CA:502:A:H2'	53:CA:503:C:O4'	2.07	0.55
53:CA:1278:G:O2'	53:CA:1279:G:C2	2.57	0.55
37:BP:4:ILE:O	37:BP:6:GLN:N	2.40	0.55
31:DJ:51:GLY:C	31:DJ:121:LYS:HE3	2.26	0.55
57:DA:1079:C:N3	57:DA:1088:A:H2	2.03	0.55
57:DA:2315:G:C2	57:DA:2316:G:C4	2.95	0.55
57:DA:1312:U:C2	57:DA:1603:A:C6	2.94	0.55
15:CO:63:ARG:HH12	57:DA:715:A:P	2.29	0.55
37:DP:62:LYS:O	37:DP:63:ILE:HB	2.07	0.55
22:BA:2134:A:O2'	22:BA:2135:A:C8	2.56	0.55
57:DA:2800:A:H2'	57:DA:2801:G:O4'	2.06	0.55
57:DA:1904:G:H1'	57:DA:1927:A:N1	2.21	0.55
24:DC:196:ASN:OD1	24:DC:199:HIS:HB2	2.06	0.55
28:DG:85:LYS:O	28:DG:86:LEU:HG	2.05	0.55
1:AA:1319:A:C8	1:AA:1323:G:C6	2.94	0.55
57:DA:1491:G:O6	57:DA:1500:G:C2	2.59	0.55
57:DA:1491:G:C2	57:DA:1492:G:N7	2.75	0.55
35:DN:1:MET:O	35:DN:2:ARG:CB	2.55	0.55
59:DF:52:ALA:HA	59:DF:55:ASP:HB2	1.88	0.55
57:DA:867:C:O2'	57:DA:868:U:C5'	2.55	0.55
57:DA:2286:G:O6	49:D1:22:THR:HG21	2.06	0.55
1:AA:270:A:H2'	1:AA:271:C:H6	1.66	0.55
53:CA:562:U:H1'	12:CL:11:ARG:HD2	1.87	0.55
33:BL:65:GLY:O	33:BL:66:PHE:CB	2.53	0.55
22:BA:181:A:H1'	22:BA:435:C:H5'	1.87	0.55
57:DA:587:C:H1'	57:DA:671:C:H5'	1.89	0.55
22:BA:1414:C:C5	22:BA:1415:U:H5	2.25	0.55
2:AB:71:THR:HG22	2:AB:72:LYS:N	2.21	0.55
15:AO:80:LEU:HD12	15:AO:80:LEU:C	2.27	0.55
23:BB:73:A:C4	23:BB:104:A:C2	2.95	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:77:THR:O	6:AF:81:ASN:HB2	2.06	0.55
26:DE:119:ILE:HG13	26:DE:119:ILE:O	2.06	0.55
52:D4:9:LYS:HD3	52:D4:9:LYS:O	2.06	0.55
1:AA:961:U:H6	1:AA:961:U:O5'	1.90	0.55
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.41	0.55
3:AC:96:VAL:HB	3:AC:97:PRO:HD2	1.88	0.55
10:AJ:21:ALA:HA	10:AJ:24:GLU:HG3	1.88	0.55
57:DA:606:U:O2'	57:DA:607:U:H4'	2.07	0.55
58:DB:45:A:OP1	59:DF:91:ARG:HD2	2.07	0.55
57:DA:1746:A:H2'	57:DA:1747:U:C6	2.42	0.55
1:AA:1124:G:H2'	1:AA:1145:A:N6	2.21	0.55
5:CE:79:THR:HG23	5:CE:81:GLN:H	1.70	0.55
53:CA:1298:U:H4'	53:CA:1299:A:O5'	2.07	0.55
57:DA:1808:A:C3'	57:DA:1809:A:H8	2.20	0.55
25:DD:149:ASN:OD1	25:DD:150:GLN:N	2.40	0.55
1:AA:924:C:O2'	1:AA:925:G:H5'	2.06	0.55
57:DA:1155:A:H5''	38:DQ:54:ARG:NE	2.22	0.55
54:CG:88:VAL:HG22	54:CG:89:GLU:N	2.18	0.55
1:AA:428:G:C1'	1:AA:430:A:C8	2.89	0.55
37:DP:95:LYS:HE3	37:DP:95:LYS:HA	1.88	0.55
57:DA:1114:C:O2'	57:DA:1115:G:O4'	2.24	0.55
24:DC:124:LYS:NZ	24:DC:124:LYS:HB3	2.21	0.55
57:DA:202:U:H3'	57:DA:203:A:C8	2.41	0.55
4:AD:196:GLU:HA	4:AD:199:ILE:CG2	2.37	0.55
22:BA:1872:A:H2'	22:BA:1873:G:O4'	2.07	0.55
22:BA:303:G:H2'	22:BA:304:U:C6	2.41	0.55
47:DZ:40:THR:N	47:DZ:43:ILE:HD11	2.20	0.55
53:CA:1091:U:O2	53:CA:1093:A:H8	1.89	0.55
1:AA:1533:C:O5'	1:AA:1533:C:H6	1.89	0.55
45:BX:70:LEU:HB3	45:BX:75:GLU:HB2	1.89	0.55
1:AA:328:C:O2	1:AA:328:C:H2'	2.06	0.55
10:AJ:8:ILE:HA	10:AJ:99:GLN:O	2.05	0.55
34:BM:80:VAL:HG22	34:BM:81:ARG:O	2.06	0.55
25:BD:143:PRO:HD2	25:BD:144:GLY:H	1.71	0.55
17:CQ:45:VAL:HG11	17:CQ:60:ILE:CG2	2.36	0.55
28:DG:18:ILE:HD12	28:DG:42:VAL:HG13	1.87	0.55
53:CA:604:G:C6	53:CA:605:U:N3	2.75	0.55
22:BA:839:U:H1'	22:BA:1191:G:H1'	1.89	0.55
53:CA:179:A:H2'	53:CA:180:U:C6	2.41	0.55
26:DE:90:GLN:OE1	26:DE:90:GLN:HA	2.06	0.55
12:AL:74:GLN:O	12:AL:75:GLU:C	2.45	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:927:A:C6	57:DA:928:A:C6	2.95	0.55
43:BV:5:ASN:H	43:BV:5:ASN:ND2	2.04	0.55
21:CU:53:LYS:HB2	21:CU:53:LYS:NZ	2.21	0.55
39:BR:45:GLU:HA	39:BR:45:GLU:OE2	2.05	0.55
3:CC:113:LYS:HG3	3:CC:184:ASN:ND2	2.22	0.55
22:BA:996:A:H4'	38:BQ:91:ARG:CG	2.32	0.55
22:BA:2366:A:C2	22:BA:2367:G:H1'	2.41	0.55
44:BW:40:ARG:HB2	44:BW:56:HIS:ND1	2.21	0.55
53:CA:1316:G:N2	53:CA:1318:A:H3'	2.21	0.55
57:DA:2136:G:C2'	57:DA:2137:U:C6	2.89	0.55
57:DA:2269:G:H2'	57:DA:2270:A:C8	2.38	0.55
44:DW:33:GLY:O	44:DW:34:SER:CB	2.53	0.55
27:BF:134:GLN:O	27:BF:136:ILE:N	2.34	0.55
5:AE:120:HIS:O	5:AE:121:ASN:CB	2.53	0.55
41:DT:43:ILE:HG21	41:DT:58:VAL:HG11	1.88	0.55
25:BD:104:VAL:HA	25:BD:106:LYS:HZ3	1.70	0.55
29:DH:38:PRO:O	29:DH:40:THR:N	2.40	0.55
57:DA:1053:C:N4	57:DA:1054:A:N6	2.55	0.55
57:DA:1062:G:H8	57:DA:1070:A:OP2	1.90	0.55
9:CI:5:TYR:HD2	9:CI:5:TYR:N	2.04	0.55
1:AA:1123:U:O3'	10:AJ:38:GLY:HA3	2.06	0.55
53:CA:80:A:H3'	53:CA:81:A:H4'	1.88	0.55
53:CA:1239:A:O2'	53:CA:1241:G:C5	2.58	0.55
22:BA:1733:G:C2	22:BA:1734:G:C5	2.95	0.55
1:AA:1442:G:H2'	1:AA:1443:C:C6	2.41	0.55
1:AA:74:A:C6	1:AA:97:G:O6	2.60	0.55
57:DA:55:G:N2	57:DA:116:C:C2	2.75	0.55
22:BA:2421:G:N7	51:B3:30:HIS:CD2	2.74	0.55
41:DT:39:THR:HG21	41:DT:42:GLU:CB	2.33	0.55
49:B1:7:LYS:HG3	49:B1:23:THR:HG22	1.89	0.55
43:DV:30:ILE:HD12	43:DV:38:LEU:HD23	1.89	0.55
22:BA:572:A:OP1	22:BA:573:U:H5	1.89	0.55
22:BA:1962:C:H4'	22:BA:1963:U:OP1	2.06	0.55
1:AA:1361:G:C2'	1:AA:1362:A:H5'	2.34	0.55
22:BA:2492:U:HO2'	22:BA:2493:U:H5'	1.70	0.55
57:DA:1335:C:OP1	41:DT:68:LYS:HD2	2.05	0.55
42:DU:39:ASN:OD1	42:DU:64:ILE:HB	2.06	0.55
57:DA:2285:C:H2'	57:DA:2286:G:H5''	1.89	0.55
24:DC:66:PHE:HB3	24:DC:150:GLY:O	2.06	0.55
57:DA:492:A:O2'	57:DA:493:G:C5'	2.54	0.55
57:DA:477:A:O2'	57:DA:478:A:O4'	2.24	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:68:G:H5'	1:AA:171:A:O2'	2.07	0.55
1:AA:1203:C:H2'	1:AA:1204:A:O4'	2.06	0.55
22:BA:627:A:C6	22:BA:637:A:C8	2.95	0.55
57:DA:75:G:H4'	46:DY:48:ARG:HH21	1.72	0.55
53:CA:157:U:C2'	53:CA:158:G:H5'	2.37	0.55
26:DE:88:ARG:HB3	26:DE:89:PRO:HD2	1.87	0.55
53:CA:1087:G:H2'	53:CA:1088:G:H8	1.70	0.55
14:AN:63:CYS:HB2	14:AN:79:SER:OG	2.06	0.55
27:BF:60:SER:O	27:BF:61:GLY:C	2.45	0.55
39:DR:98:ILE:HG22	39:DR:98:ILE:O	2.07	0.55
53:CA:1098:C:H2'	53:CA:1099:G:O4'	2.06	0.55
6:AF:10:VAL:HG12	6:AF:11:HIS:N	2.21	0.55
38:DQ:48:ASP:HA	38:DQ:51:GLN:HB2	1.89	0.55
22:BA:2325:G:C6	22:BA:2326:C:N4	2.75	0.55
28:BG:163:TYR:O	28:BG:164:ALA:CB	2.55	0.55
7:AG:68:VAL:HG12	7:AG:102:TRP:HE3	1.72	0.55
44:BW:24:ARG:HD2	44:BW:24:ARG:C	2.25	0.55
29:BH:31:VAL:O	29:BH:32:PRO:C	2.45	0.55
44:DW:39:GLN:HG2	44:DW:42:THR:HB	1.87	0.55
57:DA:1024:G:H21	57:DA:1144:A:C4'	2.20	0.55
58:DB:69:G:H2'	58:DB:70:C:O4'	2.07	0.55
57:DA:1205:A:N7	26:DE:165:HIS:CG	2.75	0.55
57:DA:1310:G:N2	57:DA:1605:C:C2	2.75	0.55
35:DN:37:THR:HB	35:DN:40:LYS:CB	2.37	0.55
53:CA:517:G:H2'	53:CA:531:U:C5	2.41	0.55
57:DA:1565:C:HO2'	57:DA:1566:A:P	2.29	0.55
59:DF:147:ARG:HD3	59:DF:149:ARG:HH22	1.72	0.55
57:DA:1038:G:N1	57:DA:1039:A:N7	2.55	0.55
57:DA:1156:A:P	38:DQ:54:ARG:HE	2.29	0.55
22:BA:1967:C:H2'	22:BA:1968:G:C8	2.42	0.55
24:BC:169:ALA:O	24:BC:185:ALA:HB3	2.06	0.55
36:BO:34:HIS:HD2	36:BO:53:THR:OG1	1.90	0.55
25:DD:122:VAL:HG22	25:DD:127:PHE:O	2.07	0.55
27:BF:45:ASP:HB3	27:BF:48:LEU:HB2	1.89	0.55
4:AD:173:ASP:O	4:AD:174:ALA:CB	2.54	0.55
1:AA:269:C:N4	1:AA:270:A:N6	2.55	0.55
30:BI:58:ILE:O	30:BI:60:VAL:HG23	2.06	0.55
1:AA:600:A:H2'	1:AA:601:G:H8	1.71	0.55
46:BY:18:LEU:O	46:BY:22:LEU:HB2	2.07	0.55
1:AA:1225:A:H2'	1:AA:1226:C:C6	2.42	0.55
32:BK:107:LEU:O	32:BK:109:SER:N	2.39	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.42	0.55
53:CA:1191:A:OP1	3:CC:2:GLN:NE2	2.40	0.55
22:BA:1737:G:N1	22:BA:1738:G:N2	2.55	0.55
5:CE:157:GLY:HA3	8:CH:63:LYS:CE	2.37	0.55
57:DA:2834:G:H1'	57:DA:2879:A:N6	2.21	0.55
22:BA:1016:G:C2'	22:BA:1017:G:O5'	2.54	0.55
40:DS:80:PRO:HG2	40:DS:100:THR:HG21	1.89	0.55
57:DA:2822:G:H2'	57:DA:2823:A:H5''	1.88	0.55
22:BA:45:G:H5''	22:BA:46:G:H5'	1.88	0.55
22:BA:1381:G:H1'	22:BA:1571:A:N1	2.22	0.55
57:DA:170:U:H2'	57:DA:171:U:H6	1.72	0.55
3:CC:24:ASN:O	3:CC:28:PHE:HB2	2.06	0.55
57:DA:123:G:O3'	57:DA:1376:C:H4'	2.06	0.55
22:BA:1303:G:O2'	22:BA:1304:A:H5'	2.07	0.55
1:AA:141:G:N2	1:AA:142:G:H1'	2.21	0.55
57:DA:2066:C:H5''	63:DA:3530:HOH:O	2.06	0.55
53:CA:600:A:OP1	8:CH:88:LYS:HG2	2.06	0.55
57:DA:2092:U:H1'	57:DA:2093:G:N7	2.11	0.55
44:BW:19:ARG:NH2	44:BW:22:VAL:CG2	2.67	0.55
58:DB:54:G:H21	59:DF:25:MET:HE2	1.70	0.55
53:CA:979:C:H2'	53:CA:980:C:O4'	2.07	0.55
38:BQ:69:ARG:CG	38:BQ:69:ARG:HH21	2.19	0.55
22:BA:1063:G:H2'	22:BA:1064:C:C6	2.41	0.55
53:CA:373:A:H5'	53:CA:373:A:H8	1.72	0.55
57:DA:674:G:O3'	26:DE:60:TRP:HH2	1.89	0.55
33:BL:94:THR:CG2	33:BL:95:LEU:N	2.70	0.55
22:BA:2724:U:P	25:BD:116:LYS:HZ2	2.30	0.55
53:CA:429:U:O2	53:CA:430:A:H5''	2.07	0.55
57:DA:1062:G:C4	57:DA:1063:G:C8	2.94	0.55
57:DA:1744:A:H3'	57:DA:1745:A:C8	2.41	0.55
22:BA:1509:A:N3	22:BA:1510:G:C8	2.75	0.55
57:DA:2543:G:C6	57:DA:2765:A:C5	2.95	0.55
22:BA:1104:C:H2'	22:BA:1105:U:H6	1.72	0.55
57:DA:230:G:O2'	57:DA:231:A:H8	1.90	0.55
54:CG:8:GLN:CD	54:CG:9:ARG:H	2.09	0.55
25:BD:90:PHE:HB2	25:BD:92:VAL:HG23	1.88	0.55
22:BA:2394:C:OP2	51:B3:29:ARG:HD3	2.07	0.55
1:AA:923:A:O4'	1:AA:1398:A:C2	2.60	0.55
1:AA:439:U:C6	4:AD:119:HIS:HD2	2.25	0.55
4:CD:176:LYS:HE2	4:CD:178:GLU:OE1	2.07	0.55
41:DT:50:LEU:HD23	41:DT:51:PHE:N	2.17	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2151:U:N3	22:BA:2152:G:C5	2.75	0.55
21:CU:35:GLU:HG3	21:CU:36:PHE:N	2.21	0.55
7:AG:52:ARG:HH12	7:AG:121:ASN:ND2	2.04	0.55
46:DY:17:GLU:HG2	46:DY:50:VAL:HG13	1.89	0.55
46:DY:60:LYS:HG2	46:DY:60:LYS:O	2.07	0.55
28:BG:74:MET:O	28:BG:78:VAL:HG22	2.07	0.55
57:DA:2577:A:H2	48:D0:1:ALA:N	2.05	0.55
8:CH:75:GLN:O	8:CH:126:CYS:CB	2.55	0.55
26:DE:153:LEU:HB2	26:DE:171:ASP:HB3	1.88	0.55
22:BA:1858:A:H2'	22:BA:1859:U:C6	2.41	0.55
32:BK:63:VAL:HG12	32:BK:64:ARG:HG3	1.89	0.55
19:CS:54:ARG:CG	19:CS:55:GLN:H	2.19	0.55
1:AA:21:G:H2'	1:AA:22:G:H8	1.71	0.55
53:CA:1343:G:H1'	9:CI:122:ARG:NH1	2.22	0.55
22:BA:990:A:C5'	22:BA:990:A:H8	2.20	0.55
20:CT:62:ALA:HA	20:CT:67:HIS:CE1	2.41	0.55
53:CA:644:U:C2	53:CA:645:G:C8	2.95	0.55
22:BA:1313:U:O3'	22:BA:1332:G:H5''	2.07	0.55
57:DA:2834:G:C1'	57:DA:2879:A:H61	2.20	0.55
53:CA:604:G:H2'	53:CA:605:U:O4'	2.07	0.55
1:AA:550:G:H2'	1:AA:551:U:H6	1.72	0.55
1:AA:1384:C:H2'	1:AA:1385:G:H8	1.72	0.55
5:AE:17:VAL:HG22	5:AE:18:ASN:N	2.22	0.55
30:DI:21:PRO:N	30:DI:22:PRO:HD2	2.22	0.55
36:DO:79:ALA:HB1	36:DO:114:GLY:HA3	1.89	0.55
9:CI:90:ASP:HB3	9:CI:93:LEU:HD23	1.88	0.55
57:DA:1954:G:O2'	57:DA:1955:U:P	2.64	0.55
35:BN:9:GLN:O	35:BN:17:ARG:HD3	2.06	0.55
31:BJ:40:HIS:CD2	31:BJ:41:LYS:HG2	2.42	0.55
22:BA:2269:G:O2'	44:BW:18:LYS:HG2	2.07	0.55
22:BA:2331:G:O2'	44:BW:39:GLN:O	2.25	0.55
57:DA:2296:U:C5	36:DO:9:ARG:NH2	2.74	0.55
2:CB:89:PHE:CE2	2:CB:152:ASP:HB2	2.41	0.55
57:DA:2396:G:C2	57:DA:2421:G:C2	2.95	0.55
57:DA:1342:A:C5	57:DA:1345:C:N4	2.75	0.55
57:DA:648:G:H2'	57:DA:649:G:H8	1.73	0.55
31:DJ:44:TYR:HB2	38:DQ:63:ARG:NH2	2.23	0.55
57:DA:60:G:O2'	57:DA:61:C:OP1	2.24	0.55
53:CA:560:A:C6	5:CE:127:TYR:CE2	2.94	0.55
9:CI:9:GLY:HA3	9:CI:16:ALA:HB3	1.88	0.55
41:BT:40:LYS:HG2	41:BT:58:VAL:HG22	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1432:G:O2'	57:DA:1433:A:H5'	2.06	0.55
57:DA:2876:G:C2	57:DA:2877:G:H1'	2.42	0.55
12:CL:109:ARG:CB	12:CL:118:VAL:HG21	2.36	0.55
1:AA:263:A:H2'	1:AA:264:C:C5	2.41	0.55
50:D2:35:ARG:HG3	50:D2:42:LEU:HD21	1.88	0.55
39:BR:2:TYR:CE1	39:BR:42:ALA:HB3	2.42	0.55
1:AA:172:A:C5	1:AA:174:A:N7	2.75	0.55
25:BD:11:MET:HA	25:BD:24:VAL:O	2.06	0.55
57:DA:204:A:C4	57:DA:206:U:O4	2.60	0.55
53:CA:327:A:C2	53:CA:329:A:N3	2.75	0.55
57:DA:242:G:H8	51:D3:3:ILE:O	1.90	0.55
4:CD:106:PHE:CD1	4:CD:106:PHE:N	2.66	0.55
20:AT:33:LYS:HE2	20:AT:33:LYS:N	2.22	0.55
26:DE:47:LYS:O	26:DE:83:VAL:HB	2.07	0.55
57:DA:273:G:O2'	57:DA:274:C:O4'	2.25	0.55
22:BA:2794:C:H2'	22:BA:2795:C:C6	2.42	0.55
22:BA:2298:A:H61	22:BA:2318:G:H1'	1.71	0.55
57:DA:742:A:H2'	57:DA:743:A:C8	2.41	0.55
53:CA:202:G:O2'	53:CA:468:A:H8	1.89	0.55
13:AM:13:HIS:HB3	13:AM:41:ASP:HA	1.88	0.55
53:CA:1084:G:OP1	53:CA:1086:U:C6	2.60	0.55
57:DA:901:C:H2'	57:DA:902:C:C6	2.41	0.55
57:DA:422:A:H2'	57:DA:423:A:H8	1.71	0.55
51:B3:41:ARG:HG3	51:B3:44:ARG:NH2	2.22	0.55
1:AA:1500:A:OP2	63:AA:1872:HOH:O	2.18	0.55
57:DA:2557:G:H2'	57:DA:2558:C:C6	2.42	0.55
1:AA:718:A:C8	11:AK:117:HIS:HB3	2.42	0.55
37:DP:9:GLN:HB3	37:DP:12:MET:CE	2.36	0.55
22:BA:77:G:N2	22:BA:110:G:H1'	2.22	0.55
47:BZ:13:ILE:HG22	47:BZ:14:GLY:N	2.22	0.55
2:CB:221:ARG:HA	2:CB:224:ARG:CZ	2.37	0.55
17:CQ:13:SER:O	17:CQ:20:ILE:HB	2.07	0.54
57:DA:1993:U:O2'	57:DA:1994:C:H5'	2.07	0.54
57:DA:784:G:C2	24:DC:227:VAL:HG21	2.42	0.54
54:CG:59:GLU:HB2	54:CG:62:GLU:HB2	1.88	0.54
58:DB:12:C:H5''	58:DB:15:A:N6	2.22	0.54
57:DA:1079:C:N4	57:DA:1088:A:N3	2.55	0.54
57:DA:2308:G:O6	57:DA:2311:A:N7	2.40	0.54
22:BA:587:C:OP2	33:BL:21:ARG:NH1	2.39	0.54
30:BI:19:PRO:HG2	30:BI:23:VAL:CG2	2.37	0.54
5:AE:81:GLN:HG2	5:AE:149:PRO:CG	2.36	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:117:VAL:HA	4:AD:122:ILE:HD11	1.88	0.54
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.41	0.54
57:DA:637:A:N6	57:DA:652:U:H4'	2.22	0.54
32:BK:76:VAL:HB	37:BP:72:VAL:HG21	1.87	0.54
38:DQ:50:ARG:N	38:DQ:50:ARG:HD2	2.22	0.54
53:CA:220:G:C2	53:CA:221:C:C6	2.95	0.54
57:DA:865:C:H5''	57:DA:866:A:OP1	2.07	0.54
23:BB:28:C:C2'	23:BB:29:A:H5'	2.37	0.54
46:DY:17:GLU:HG3	46:DY:53:VAL:HG11	1.89	0.54
22:BA:545:U:H2'	22:BA:546:U:C4'	2.33	0.54
22:BA:2879:A:H4'	22:BA:2880:C:OP1	2.07	0.54
11:AK:124:LYS:NZ	21:AU:33:ARG:HH21	2.05	0.54
22:BA:580:U:H2'	22:BA:581:C:C6	2.42	0.54
59:DF:16:MET:HA	59:DF:21:TYR:HB2	1.88	0.54
57:DA:1381:G:H2'	57:DA:1382:G:H5''	1.89	0.54
57:DA:1263:U:HO2'	48:D0:7:PRO:HD2	1.72	0.54
3:CC:126:ARG:HE	3:CC:126:ARG:CA	2.20	0.54
22:BA:1184:U:H2'	22:BA:1185:G:O5'	2.06	0.54
4:CD:106:PHE:HB3	4:CD:154:VAL:CG2	2.37	0.54
22:BA:1005:C:O2'	31:BJ:30:THR:HG21	2.07	0.54
57:DA:2636:C:H2'	57:DA:2637:U:H6	1.71	0.54
22:BA:1912:A:C2	22:BA:1919:A:C6	2.95	0.54
44:DW:77:LYS:O	44:DW:78:PHE:HB2	2.07	0.54
4:AD:60:VAL:O	4:AD:63:ILE:HG22	2.06	0.54
22:BA:225:C:H2'	22:BA:226:A:O4'	2.07	0.54
3:CC:148:ILE:HD13	3:CC:201:ILE:HG12	1.87	0.54
2:CB:9:LEU:HG	2:CB:10:LYS:H	1.72	0.54
35:DN:103:ARG:HD3	35:DN:110:MET:SD	2.46	0.54
35:DN:103:ARG:HG3	35:DN:104:ALA:N	2.22	0.54
22:BA:1501:G:C2'	22:BA:1502:A:H5'	2.36	0.54
26:BE:151:GLY:N	26:BE:192:ALA:HB2	2.22	0.54
57:DA:2823:A:C5	57:DA:2824:C:C5	2.94	0.54
3:AC:153:SER:HB2	3:AC:164:THR:HG22	1.87	0.54
53:CA:1126:U:O4	10:CJ:73:LEU:HD11	2.06	0.54
24:BC:56:GLY:O	24:BC:57:HIS:O	2.25	0.54
22:BA:324:A:C2	22:BA:325:G:H1'	2.42	0.54
9:CI:125:GLN:HE21	9:CI:125:GLN:H	1.54	0.54
22:BA:2354:C:C4'	44:BW:31:LEU:HD22	2.37	0.54
44:BW:40:ARG:HG2	44:BW:52:CYS:SG	2.48	0.54
22:BA:1063:G:H2'	22:BA:1064:C:H6	1.72	0.54
22:BA:1073:A:C3'	22:BA:1074:G:C5'	2.78	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1068:G:O2'	53:CA:1069:C:H5'	2.07	0.54
53:CA:1250:A:N3	53:CA:1287:A:N6	2.55	0.54
56:CP:5:ARG:HA	56:CP:71:VAL:HG11	1.89	0.54
57:DA:1773:A:H2'	57:DA:1774:C:O4'	2.08	0.54
35:DN:35:LYS:NZ	35:DN:112:TYR:HE1	1.93	0.54
57:DA:834:G:H2'	57:DA:835:C:O4'	2.07	0.54
31:DJ:44:TYR:HB2	38:DQ:63:ARG:NH1	2.21	0.54
31:DJ:43:GLU:O	31:DJ:45:THR:HG22	2.07	0.54
3:AC:166:TRP:N	3:AC:166:TRP:HE3	1.94	0.54
57:DA:1079:C:H2'	57:DA:1080:A:C8	2.42	0.54
54:CG:91:ARG:HG2	54:CG:92:PRO:CD	2.30	0.54
24:BC:106:PRO:CA	24:BC:141:HIS:CE1	2.91	0.54
24:BC:144:GLU:HA	24:BC:151:GLY:HA2	1.88	0.54
53:CA:1050:G:O2'	53:CA:1051:C:C6	2.59	0.54
15:CO:63:ARG:NH2	57:DA:715:A:H5'	2.20	0.54
57:DA:1038:G:C2	57:DA:1039:A:C5	2.95	0.54
20:AT:66:ILE:CD1	20:AT:70:LYS:HE3	2.35	0.54
53:CA:818:G:C3'	53:CA:819:A:C5'	2.85	0.54
29:DH:96:THR:HG22	29:DH:113:SER:OG	2.07	0.54
57:DA:860:U:HO2'	57:DA:861:A:C5'	2.20	0.54
22:BA:1199:U:H2'	22:BA:1200:C:H6	1.71	0.54
32:DK:19:VAL:HG12	32:DK:41:ILE:HG12	1.88	0.54
22:BA:580:U:O3'	38:BQ:30:VAL:CG1	2.56	0.54
2:CB:128:LEU:HD22	2:CB:132:GLU:HG2	1.89	0.54
1:AA:1250:A:N3	1:AA:1370:G:O2'	2.37	0.54
9:AI:83:THR:HG21	9:AI:102:PHE:CB	2.35	0.54
30:BI:126:ARG:HA	30:BI:129:GLU:CB	2.36	0.54
1:AA:702:A:C4	22:BA:1847:A:H2	2.25	0.54
3:AC:118:SER:O	3:AC:122:GLN:HG2	2.06	0.54
34:BM:64:TRP:HZ3	34:BM:106:ASP:HB2	1.72	0.54
46:BY:9:LYS:HB3	46:BY:12:GLU:HB2	1.88	0.54
53:CA:632:U:H3'	53:CA:633:G:H5'	1.88	0.54
22:BA:2188:U:H2'	22:BA:2189:U:C6	2.42	0.54
53:CA:642:A:O2'	53:CA:643:C:H6	1.89	0.54
1:AA:1503:A:C8	1:AA:1531:A:H1'	2.42	0.54
5:AE:132:PRO:HA	5:AE:135:VAL:HG13	1.88	0.54
42:DU:32:LYS:HE2	42:DU:65:GLN:OE1	2.07	0.54
57:DA:1248:G:H2'	38:DQ:1:ALA:O	2.08	0.54
28:BG:163:TYR:O	28:BG:164:ALA:HB2	2.06	0.54
28:DG:28:LYS:HG3	28:DG:79:THR:HG22	1.90	0.54
53:CA:1520:C:H2'	53:CA:1521:C:C6	2.42	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1322:A:H2'	22:BA:1323:C:H5'	1.89	0.54
4:CD:19:PHE:O	4:CD:22:SER:HB2	2.07	0.54
25:BD:57:ALA:O	25:BD:60:VAL:HG12	2.08	0.54
36:DO:26:LEU:HD23	36:DO:92:PHE:CE1	2.42	0.54
38:BQ:91:ARG:NE	39:BR:11:GLN:HB2	2.22	0.54
28:BG:84:LYS:CB	28:BG:132:LEU:H	2.20	0.54
57:DA:612:G:C2	57:DA:617:G:O6	2.60	0.54
57:DA:1787:A:H2'	57:DA:1788:C:C6	2.42	0.54
57:DA:1825:U:C4	57:DA:1826:G:N7	2.75	0.54
35:DN:96:ARG:NH1	35:DN:116:VAL:HG22	2.21	0.54
53:CA:502:A:H4'	53:CA:550:G:H4'	1.89	0.54
35:DN:16:HIS:C	35:DN:18:GLN:H	2.11	0.54
57:DA:1399:C:H2'	57:DA:1400:U:C6	2.42	0.54
1:AA:465:A:H2'	1:AA:466:A:O4'	2.07	0.54
57:DA:2151:U:H2'	57:DA:2152:G:H8	1.71	0.54
58:DB:42:C:H4'	59:DF:63:LYS:HB3	1.88	0.54
57:DA:2849:U:OP2	37:DP:92:ARG:HG3	2.07	0.54
35:BN:23:ASN:HD22	35:BN:23:ASN:N	1.95	0.54
30:BI:24:GLY:O	30:BI:27:LEU:HG	2.07	0.54
2:AB:67:LEU:HB3	2:AB:160:LEU:CD1	2.37	0.54
57:DA:1437:C:N4	57:DA:1552:A:H2	2.04	0.54
42:DU:3:LYS:HG2	42:DU:84:PHE:HZ	1.72	0.54
57:DA:118:A:OP1	50:D2:22:MET:SD	2.66	0.54
38:DQ:91:ARG:HH11	39:DR:10:LYS:HB3	1.69	0.54
57:DA:98:G:O2'	57:DA:103:A:C8	2.61	0.54
37:DP:61:ARG:NH1	37:DP:63:ILE:HD11	2.21	0.54
43:DV:30:ILE:HG12	43:DV:91:PHE:HB2	1.89	0.54
53:CA:920:U:C2	53:CA:921:U:C5	2.95	0.54
53:CA:350:G:C6	53:CA:351:G:C6	2.95	0.54
21:AU:24:LYS:CG	21:AU:25:ALA:H	2.21	0.54
30:BI:64:ARG:HG3	30:BI:65:SER:N	2.22	0.54
4:AD:173:ASP:O	4:AD:174:ALA:HB2	2.07	0.54
22:BA:445:C:H5''	38:BQ:2:ARG:HB2	1.89	0.54
12:CL:19:ASN:N	12:CL:19:ASN:ND2	2.56	0.54
6:AF:49:TYR:HE2	6:AF:51:ILE:HB	1.72	0.54
1:AA:577:G:O4'	1:AA:816:A:H2'	2.06	0.54
1:AA:1118:U:H2'	1:AA:1119:C:C6	2.41	0.54
35:BN:33:ILE:HG23	35:BN:114:GLU:HB3	1.89	0.54
57:DA:2006:C:H2'	57:DA:2007:U:H6	1.71	0.54
48:D0:38:LEU:N	48:D0:41:HIS:CE1	2.75	0.54
2:AB:168:GLU:HB3	2:AB:171:ALA:HB3	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DM:1:MET:O	34:DM:2:LEU:O	2.25	0.54
22:BA:531:C:C5	22:BA:2035:G:C2	2.96	0.54
3:CC:129:PHE:CE1	3:CC:156:LEU:HB3	2.42	0.54
22:BA:1906:G:H2'	22:BA:1907:G:O5'	2.06	0.54
5:AE:67:ARG:HB2	5:AE:68:ARG:HE	1.72	0.54
42:BU:44:HIS:O	42:BU:45:GLN:C	2.46	0.54
4:CD:39:GLN:C	4:CD:41:GLY:H	2.10	0.54
9:CI:29:ILE:HA	9:CI:64:ILE:O	2.06	0.54
53:CA:9:G:O2'	53:CA:10:A:H5'	2.08	0.54
14:AN:12:ARG:HG2	14:AN:53:ASP:HB3	1.88	0.54
22:BA:1403:A:C2	22:BA:1404:C:C2	2.95	0.54
17:CQ:12:VAL:HG22	17:CQ:12:VAL:O	2.08	0.54
1:AA:340:U:H2'	1:AA:341:C:H6	1.73	0.54
15:AO:78:THR:O	15:AO:82:GLU:OE1	2.24	0.54
39:BR:48:LYS:HD2	39:BR:48:LYS:N	2.22	0.54
53:CA:1081:A:H2'	53:CA:1082:A:O4'	2.06	0.54
22:BA:2225:A:H4'	22:BA:2226:C:H6	1.72	0.54
17:AQ:20:ILE:H	17:AQ:47:ASP:CG	2.10	0.54
24:BC:252:LYS:HZ3	24:BC:252:LYS:HB2	1.73	0.54
39:DR:49:ILE:HB	39:DR:51:VAL:O	2.07	0.54
1:AA:77:A:H2'	1:AA:78:A:N7	2.22	0.54
57:DA:1429:G:C2	57:DA:1430:G:C5	2.96	0.54
38:BQ:43:GLN:HE22	39:BR:77:PHE:HD1	1.55	0.54
43:BV:10:LYS:N	43:BV:10:LYS:HD3	2.16	0.54
53:CA:1052:U:H3'	53:CA:1053:G:H5''	1.89	0.54
22:BA:2282:G:H4'	22:BA:2389:G:O2'	2.07	0.54
32:BK:21:CYS:CB	32:BK:39:ILE:HD11	2.35	0.54
57:DA:2800:A:H2'	57:DA:2801:G:C4'	2.37	0.54
29:DH:90:LEU:CB	29:DH:123:ARG:HB3	2.33	0.54
57:DA:776:G:H1'	57:DA:793:A:N1	2.23	0.54
4:CD:57:LYS:HG3	4:CD:58:GLN:N	2.22	0.54
59:DF:177:ARG:NH1	59:DF:178:LYS:HB3	2.21	0.54
57:DA:2714:G:C8	57:DA:2714:G:O5'	2.60	0.54
22:BA:358:U:H2'	22:BA:359:G:O4'	2.07	0.54
28:DG:162:ARG:HB2	28:DG:166:GLU:HB3	1.88	0.54
57:DA:1698:A:H4'	57:DA:1699:G:OP1	2.04	0.54
34:BM:42:THR:OG1	34:BM:45:GLN:HG3	2.07	0.54
59:DF:5:ASP:C	59:DF:7:TYR:H	2.11	0.54
22:BA:1857:G:O2'	22:BA:1858:A:P	2.66	0.54
11:AK:15:VAL:HG13	11:AK:78:ILE:CG2	2.37	0.54
2:CB:60:ALA:C	2:CB:62:ARG:H	2.11	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1504:G:C3'	53:CA:1505:G:H5'	2.37	0.54
22:BA:163:C:O2'	22:BA:164:C:O5'	2.22	0.54
22:BA:979:A:H2'	22:BA:982:C:N4	2.22	0.54
7:AG:69:ARG:HG3	7:AG:95:ARG:CG	2.38	0.54
1:AA:1348:U:HO2'	1:AA:1349:A:H8	1.53	0.54
1:AA:736:C:H2'	1:AA:737:C:H6	1.69	0.54
29:DH:41:LYS:H	29:DH:44:ILE:HG23	1.73	0.54
22:BA:988:A:C2'	22:BA:989:G:O5'	2.56	0.54
22:BA:1159:U:H2'	22:BA:1160:G:H5'	1.90	0.54
57:DA:1901:A:OP2	24:DC:252:LYS:HE3	2.07	0.54
1:AA:1332:A:N3	1:AA:1332:A:H5''	2.23	0.54
22:BA:622:G:H2'	22:BA:623:C:C6	2.43	0.54
4:CD:115:GLN:NE2	4:CD:153:ARG:HH22	2.06	0.54
39:BR:58:VAL:HG13	39:BR:102:SER:HB2	1.89	0.54
1:AA:1101:A:H4'	1:AA:1102:A:O5'	2.07	0.54
11:AK:24:ALA:HA	11:AK:29:THR:HG23	1.90	0.54
46:BY:5:GLU:O	46:BY:8:GLU:HB2	2.06	0.54
22:BA:2478:A:H5'	52:B4:32:LYS:HD3	1.88	0.54
57:DA:2785:C:O3'	25:DD:70:LYS:HD3	2.07	0.54
57:DA:2188:U:H2'	57:DA:2189:U:C6	2.43	0.54
57:DA:846:U:O2'	57:DA:847:U:H5''	2.08	0.54
22:BA:747:U:O2	22:BA:2014:A:H1'	2.08	0.54
22:BA:50:U:H4'	22:BA:51:G:OP2	2.08	0.54
22:BA:1754:A:C6	22:BA:1755:A:C6	2.95	0.54
22:BA:1411:U:C4	22:BA:1412:U:C4	2.95	0.54
3:CC:34:SER:O	3:CC:38:VAL:HG13	2.08	0.54
22:BA:404:A:C8	22:BA:406:G:C6	2.96	0.54
22:BA:1512:C:OP2	22:BA:1512:C:H6	1.91	0.54
23:BB:93:C:H2'	23:BB:94:A:H8	1.73	0.54
6:AF:38:ARG:HH11	6:AF:38:ARG:HG2	1.72	0.54
53:CA:914:A:O2'	53:CA:915:A:O4'	2.26	0.54
37:DP:87:ARG:HG2	37:DP:88:ARG:H	1.72	0.54
57:DA:1827:U:O4'	57:DA:1970:A:O2'	2.26	0.54
57:DA:2881:U:H2'	57:DA:2882:A:C8	2.38	0.54
49:D1:24:LYS:HE2	49:D1:52:LYS:NZ	2.22	0.54
57:DA:826:U:C5	57:DA:828:U:H6	2.26	0.54
1:AA:1355:G:O2'	1:AA:1356:G:H5'	2.07	0.54
57:DA:1205:A:H5''	57:DA:1206:G:N7	2.22	0.54
25:BD:106:LYS:N	25:BD:106:LYS:HD2	2.22	0.54
53:CA:429:U:C1'	53:CA:430:A:H5''	2.37	0.54
53:CA:1243:C:H2'	53:CA:1244:G:C8	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1997:C:O2'	57:DA:1998:A:C5'	2.55	0.54
32:BK:3:GLN:O	32:BK:6:THR:HB	2.07	0.54
22:BA:752:A:N7	22:BA:1781:U:H1'	2.22	0.54
30:DI:48:ILE:HG13	30:DI:49:GLU:N	2.23	0.54
20:AT:27:MET:HG3	20:AT:28:ARG:N	2.21	0.54
57:DA:1417:C:O2'	57:DA:1418:G:C5'	2.55	0.54
57:DA:1010:A:O2'	57:DA:1011:G:C5'	2.55	0.54
31:DJ:25:LEU:HB2	31:DJ:62:VAL:CG2	2.38	0.54
2:CB:127:LYS:HE2	2:CB:136:ARG:NH2	2.22	0.54
30:BI:60:VAL:HG22	30:BI:66:PHE:HB2	1.90	0.54
35:DN:33:ILE:HG23	35:DN:114:GLU:HB2	1.89	0.54
39:DR:66:HIS:CD2	39:DR:94:THR:HG22	2.43	0.54
57:DA:878:A:H4'	57:DA:898:C:N4	2.20	0.54
48:D0:28:SER:HB3	48:D0:39:ARG:HE	1.71	0.54
7:AG:20:GLU:O	7:AG:24:LYS:HG3	2.08	0.54
22:BA:1159:U:O2'	22:BA:1160:G:H5'	2.08	0.54
22:BA:2722:G:H4'	35:BN:3:HIS:O	2.07	0.54
41:BT:87:LEU:HB2	41:BT:91:GLN:HG2	1.89	0.54
31:BJ:88:THR:HG23	31:BJ:91:GLU:H	1.73	0.54
57:DA:2403:C:H2'	57:DA:2404:U:C6	2.42	0.54
53:CA:1480:A:H2'	53:CA:1481:U:O4'	2.07	0.54
24:DC:257:ARG:CZ	24:DC:266:ILE:HD11	2.38	0.54
2:AB:49:PHE:HB2	2:AB:53:LEU:HD23	1.90	0.54
6:CF:67:PRO:O	6:CF:69:GLU:N	2.41	0.54
55:CM:68:LEU:HD22	55:CM:69:ARG:HH11	1.72	0.54
6:AF:11:HIS:HD2	6:AF:12:PRO:CD	2.21	0.54
14:AN:87:ALA:HB2	14:AN:92:ILE:HD12	1.88	0.54
41:BT:7:LEU:O	41:BT:10:VAL:HG13	2.08	0.54
24:DC:77:VAL:HG23	24:DC:112:GLY:H	1.72	0.54
9:AI:24:ASN:H	9:AI:61:ASP:HB2	1.73	0.54
57:DA:1157:G:O2'	57:DA:1158:C:H5'	2.07	0.54
1:AA:230:G:H5''	16:AP:31:ARG:HH21	1.72	0.54
57:DA:2004:G:C5	57:DA:2005:A:C8	2.95	0.54
57:DA:1628:G:H2'	57:DA:1629:U:H6	1.72	0.54
59:DF:113:PHE:O	59:DF:114:ARG:CB	2.55	0.54
22:BA:1486:U:H2'	22:BA:1487:U:C6	2.42	0.54
22:BA:595:C:H2'	22:BA:596:U:C6	2.42	0.54
20:CT:54:GLN:N	20:CT:55:PRO:HD2	2.23	0.54
14:CN:96:LYS:HD2	14:CN:96:LYS:H	1.72	0.54
20:AT:19:HIS:O	20:AT:23:ARG:HG2	2.07	0.54
57:DA:2526:G:C5	57:DA:2527:C:C5	2.96	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BG:120:ILE:HD13	28:BG:121:THR:N	2.22	0.54
28:BG:85:LYS:HG2	28:BG:131:VAL:HG12	1.88	0.54
22:BA:2331:G:O2'	22:BA:2336:A:N1	2.30	0.54
19:CS:35:ARG:NH1	19:CS:76:THR:HG22	2.23	0.54
22:BA:2225:A:H4'	22:BA:2226:C:O5'	2.08	0.54
45:BX:29:LEU:CD2	45:BX:29:LEU:N	2.71	0.54
57:DA:1915:U:C2'	57:DA:1916:A:H8	2.11	0.54
1:AA:247:G:C6	1:AA:278:G:C2	2.96	0.54
57:DA:1342:A:C4	57:DA:1345:C:N4	2.76	0.54
41:DT:30:ILE:O	41:DT:85:VAL:HG23	2.08	0.54
54:CG:129:ASN:OD1	54:CG:134:VAL:HG11	2.08	0.54
53:CA:1144:G:N2	53:CA:1146:A:H62	2.04	0.54
57:DA:1312:U:H4'	57:DA:1313:U:O5'	2.07	0.54
5:AE:155:LYS:HD2	5:AE:156:ARG:N	2.21	0.54
57:DA:224:U:O4	57:DA:420:C:H5'	2.08	0.54
57:DA:2408:U:H5	63:DA:3596:HOH:O	1.89	0.54
4:AD:130:ASN:O	4:AD:131:ILE:C	2.45	0.54
26:BE:187:VAL:O	26:BE:188:MET:HB3	2.08	0.54
24:BC:106:PRO:CA	24:BC:141:HIS:HE1	2.20	0.54
46:BY:32:ALA:CB	46:BY:37:LEU:HD12	2.30	0.54
57:DA:95:A:H2'	57:DA:96:C:C5'	2.37	0.54
22:BA:868:U:C4	22:BA:869:G:N7	2.76	0.54
33:DL:65:GLY:O	33:DL:66:PHE:HB2	2.08	0.54
1:AA:32:A:H2'	1:AA:33:A:H8	1.68	0.54
14:AN:83:VAL:HG12	14:AN:84:ARG:N	2.22	0.54
28:DG:1:SER:C	28:DG:3:VAL:H	2.10	0.54
1:AA:1158:C:H2'	1:AA:1158:C:O2	2.06	0.54
31:DJ:92:MET:HE2	31:DJ:95:ARG:HD2	1.90	0.54
26:DE:170:ARG:NH2	26:DE:176:ASP:HB2	2.21	0.54
22:BA:309:A:N3	22:BA:329:G:O2'	2.40	0.54
53:CA:1139:G:H4'	53:CA:1140:C:C5'	2.38	0.54
44:DW:67:LYS:HB3	44:DW:80:SER:HB2	1.90	0.54
57:DA:1572:A:O5'	57:DA:1572:A:H8	1.90	0.54
1:AA:706:A:O2'	11:AK:30:ILE:HD11	2.07	0.54
1:AA:914:A:C4	1:AA:915:A:C8	2.96	0.54
34:DM:81:ARG:NH2	34:DM:84:LYS:HE2	2.22	0.54
1:AA:1343:G:O3'	9:AI:123:ARG:HB3	2.08	0.54
16:AP:67:ILE:HG21	16:AP:72:ALA:HB2	1.89	0.54
57:DA:1304:A:O2'	57:DA:1305:C:O5'	2.23	0.54
4:AD:151:GLN:O	4:AD:152:SER:C	2.46	0.54
53:CA:264:C:H2'	53:CA:265:G:O4'	2.06	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:659:G:H4'	26:BE:95:LYS:HD3	1.89	0.54
5:AE:64:GLU:HG2	5:AE:68:ARG:NH2	2.23	0.54
57:DA:2620:C:O4'	25:DD:161:MET:HG3	2.07	0.54
53:CA:891:U:C5	53:CA:906:A:C2	2.96	0.54
8:CH:5:PRO:O	8:CH:8:ASP:HB3	2.07	0.54
17:CQ:14:ASP:OD2	17:CQ:52:CYS:HB2	2.07	0.54
53:CA:304:U:H2'	53:CA:305:G:C8	2.41	0.54
6:AF:17:GLN:HG2	4:CD:188:SER:HB2	1.89	0.54
12:CL:24:GLU:O	12:CL:25:ALA:HB3	2.08	0.54
57:DA:364:C:H2'	57:DA:365:U:C6	2.42	0.54
10:AJ:80:THR:HG22	10:AJ:82:LYS:H	1.73	0.54
29:DH:66:ASN:HD22	29:DH:137:GLU:HB3	1.73	0.54
57:DA:284:U:H2'	57:DA:285:G:H8	1.72	0.54
24:DC:260:LYS:HA	24:DC:263:ASP:OD1	2.08	0.54
1:AA:613:C:H2'	1:AA:614:C:H6	1.71	0.54
29:BH:43:ASN:HD22	29:BH:43:ASN:N	2.05	0.54
15:CO:27:GLN:O	15:CO:30:LEU:HB2	2.07	0.54
42:DU:9:GLU:OE1	42:DU:23:LYS:HA	2.07	0.54
4:CD:68:GLU:O	4:CD:69:ARG:C	2.46	0.54
14:CN:55:SER:C	14:CN:57:SER:H	2.10	0.54
57:DA:2269:G:O3'	44:DW:18:LYS:HE2	2.08	0.54
57:DA:590:A:H2'	57:DA:591:U:C6	2.42	0.54
57:DA:1982:U:H6	57:DA:1982:U:O5'	1.90	0.54
1:AA:279:A:H5''	1:AA:281:G:H5'	1.88	0.54
1:AA:1356:G:H2'	1:AA:1357:A:H8	1.68	0.54
53:CA:577:G:N9	53:CA:816:A:C2	2.76	0.54
1:AA:204:G:C1'	1:AA:465:A:C2	2.90	0.54
57:DA:2142:A:C3'	57:DA:2143:C:H4'	2.37	0.54
57:DA:1062:G:C8	57:DA:1088:A:C8	2.96	0.54
57:DA:1064:C:OP1	30:DI:88:GLY:HA3	2.07	0.54
57:DA:1327:A:C2	57:DA:1328:A:H1'	2.42	0.54
57:DA:1327:A:N3	57:DA:1328:A:H1'	2.23	0.54
26:DE:130:LYS:HG3	26:DE:133:LEU:HD13	1.89	0.54
5:CE:79:THR:HA	5:CE:121:ASN:CG	2.28	0.54
23:BB:89:U:H3'	23:BB:90:C:C5'	2.37	0.54
53:CA:520:A:OP1	12:CL:48:LEU:HG	2.07	0.54
39:BR:1:MET:HG3	39:BR:1:MET:O	2.08	0.54
57:DA:2682:A:H61	57:DA:2728:U:H1'	1.72	0.54
24:BC:80:LEU:HA	24:BC:90:ILE:O	2.07	0.54
57:DA:637:A:OP2	33:DL:112:LEU:HD22	2.07	0.54
1:AA:1143:G:O2'	1:AA:1144:G:H5'	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:430:A:H2'	1:AA:431:A:H8	1.73	0.54
24:DC:180:MET:CE	24:DC:268:ARG:HE	2.21	0.54
22:BA:74:A:H5'	22:BA:75:G:O4'	2.06	0.54
29:DH:99:ILE:HG22	29:DH:100:ALA:N	2.22	0.54
23:BB:27:C:OP1	36:BO:34:HIS:HE1	1.91	0.54
53:CA:441:A:C2	53:CA:497:G:C6	2.95	0.54
42:DU:39:ASN:HD21	42:DU:64:ILE:HG22	1.73	0.54
57:DA:381:G:H5''	45:DX:15:ASN:HD22	1.73	0.54
22:BA:459:U:H2'	22:BA:460:A:C8	2.42	0.54
40:BS:18:ARG:HG2	40:BS:76:VAL:HG13	1.88	0.54
57:DA:2714:G:H2'	57:DA:2715:C:H6	1.71	0.54
57:DA:492:A:H2'	57:DA:493:G:H8	1.68	0.54
40:DS:29:VAL:O	40:DS:33:LEU:HB2	2.07	0.54
1:AA:516:U:O2'	1:AA:517:G:H5'	2.08	0.54
5:CE:14:LEU:HD12	5:CE:15:ILE:N	2.23	0.54
22:BA:2484:G:OP1	34:BM:44:ARG:HD3	2.07	0.54
57:DA:156:A:H3'	57:DA:156:A:OP2	2.07	0.54
20:CT:50:PHE:O	20:CT:53:MET:HG3	2.07	0.54
22:BA:528:A:C2	22:BA:2042:A:H2'	2.42	0.54
22:BA:1842:G:O4'	24:BC:242:HIS:HE1	1.90	0.54
57:DA:1721:G:H1'	57:DA:1739:A:N6	2.22	0.54
50:B2:35:ARG:CG	50:B2:42:LEU:HD11	2.37	0.54
1:AA:1343:G:H1'	9:AI:122:ARG:NH1	2.23	0.54
42:DU:58:VAL:CG1	42:DU:60:LYS:HG2	2.37	0.54
3:AC:136:ALA:O	3:AC:140:ALA:HB2	2.07	0.54
53:CA:483:C:H2'	53:CA:484:G:C8	2.43	0.54
1:AA:874:G:O2'	1:AA:875:U:H5'	2.07	0.54
53:CA:644:U:H2'	53:CA:645:G:H8	1.72	0.54
22:BA:1385:A:O2'	22:BA:1396:U:O2	2.23	0.54
26:BE:170:ARG:HH21	26:BE:170:ARG:HG2	1.71	0.54
57:DA:2337:G:N3	57:DA:2337:G:H2'	2.23	0.54
55:CM:81:ASP:HB3	55:CM:82:LEU:HD12	1.90	0.54
22:BA:1269:A:OP2	63:BA:3379:HOH:O	2.19	0.54
53:CA:106:C:O2'	53:CA:107:G:H5'	2.08	0.54
22:BA:31:C:O2'	22:BA:1238:G:H5'	2.06	0.54
58:DB:85:G:N2	58:DB:92:C:C2	2.76	0.54
26:BE:41:GLN:OE1	26:BE:43:THR:HG21	2.08	0.54
53:CA:1261:A:N7	53:CA:1274:A:H2	2.06	0.54
38:DQ:101:ASP:HB2	39:DR:2:TYR:OH	2.08	0.54
30:DI:112:LYS:HZ3	30:DI:128:ILE:HD12	1.73	0.54
22:BA:2352:A:O5'	22:BA:2352:A:H8	1.91	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BW:22:VAL:O	44:BW:25:PHE:HD2	1.89	0.54
44:BW:37:VAL:CG1	44:BW:38:ARG:N	2.70	0.54
57:DA:1914:C:O2'	57:DA:1915:U:O4'	2.26	0.54
57:DA:1830:C:H5'	24:DC:14:HIS:CE1	2.42	0.54
57:DA:740:C:C5'	57:DA:1784:A:H3'	2.38	0.54
57:DA:740:C:O2'	57:DA:741:U:C5'	2.56	0.54
57:DA:2813:A:H2'	57:DA:2814:A:H8	1.72	0.54
53:CA:405:U:O4	4:CD:1:ALA:HB1	2.07	0.54
57:DA:2140:G:C6	57:DA:2152:G:C6	2.96	0.54
22:BA:1829:A:N3	24:BC:14:HIS:HE1	2.06	0.54
24:BC:16:VAL:HB	24:BC:203:VAL:HB	1.90	0.54
41:BT:32:LEU:N	41:BT:32:LEU:HD23	2.23	0.54
57:DA:100:U:C6	57:DA:100:U:OP1	2.61	0.54
53:CA:737:C:OP1	6:CF:91:ARG:HD2	2.08	0.54
14:AN:42:ASN:C	14:AN:44:VAL:H	2.10	0.54
24:BC:77:VAL:O	24:BC:77:VAL:CG2	2.56	0.54
53:CA:15:G:H8	53:CA:15:G:H5'	1.73	0.54
30:DI:52:LEU:O	30:DI:54:ILE:HD12	2.08	0.54
4:AD:16:THR:CG2	4:AD:17:ASP:H	2.17	0.54
24:DC:169:ALA:O	24:DC:185:ALA:HB3	2.08	0.54
52:B4:4:ARG:HG3	52:B4:6:SER:O	2.08	0.54
28:DG:132:LEU:N	28:DG:132:LEU:HD12	2.22	0.54
35:BN:71:ARG:NH2	35:BN:71:ARG:HG3	2.21	0.54
34:DM:42:THR:HG22	34:DM:45:GLN:H	1.72	0.54
36:BO:31:THR:HG22	36:BO:34:HIS:O	2.08	0.54
32:DK:39:ILE:HD11	32:DK:62:VAL:HG23	1.88	0.54
1:AA:1053:G:O6	1:AA:1199:U:H2'	2.08	0.54
22:BA:1252:G:N1	38:BQ:36:GLN:OE1	2.38	0.54
53:CA:1391:U:H2'	53:CA:1392:G:H8	1.70	0.54
1:AA:57:G:C6	1:AA:356:A:N1	2.76	0.54
57:DA:974:G:H1'	57:DA:975:A:C8	2.41	0.54
8:AH:88:LYS:HA	8:AH:91:LEU:CD1	2.36	0.54
22:BA:1857:G:N2	22:BA:1884:G:O2'	2.41	0.54
22:BA:247:G:H4'	22:BA:386:G:C5	2.42	0.54
43:BV:40:ILE:CG2	43:BV:41:GLU:N	2.71	0.54
53:CA:769:G:H4'	53:CA:1513:A:H4'	1.89	0.54
25:DD:79:LEU:HD22	25:DD:79:LEU:N	2.22	0.54
53:CA:643:C:O2'	53:CA:644:U:H5'	2.07	0.54
57:DA:2185:U:H2'	57:DA:2186:G:C8	2.42	0.54
2:AB:49:PHE:CG	2:AB:212:TYR:OH	2.60	0.54
2:AB:212:TYR:O	2:AB:216:VAL:HG23	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:24:HIS:CG	24:BC:25:LYS:N	2.76	0.54
53:CA:714:G:H2'	53:CA:715:A:C8	2.43	0.54
22:BA:1289:C:H2'	22:BA:1290:C:C6	2.42	0.54
34:BM:17:ASN:O	34:BM:38:ARG:HD3	2.08	0.54
56:CP:77:GLU:C	56:CP:79:ASN:H	2.10	0.54
10:CJ:25:ILE:O	10:CJ:25:ILE:HG22	2.08	0.54
28:BG:155:PRO:O	28:BG:170:THR:HA	2.08	0.54
53:CA:962:C:O2'	53:CA:963:G:H8	1.89	0.54
53:CA:985:C:O2'	53:CA:986:U:C5'	2.56	0.54
53:CA:1493:A:H8	57:DA:1913:A:N6	2.04	0.54
57:DA:604:G:C6	57:DA:625:G:C6	2.96	0.54
22:BA:1062:G:C8	22:BA:1088:A:C8	2.96	0.54
57:DA:524:G:H2'	57:DA:525:U:C6	2.43	0.54
1:AA:652:U:O2'	1:AA:653:U:O5'	2.26	0.54
57:DA:2143:C:H5''	57:DA:2144:G:N7	2.22	0.54
41:BT:39:THR:O	41:BT:41:ALA:N	2.40	0.54
22:BA:780:G:N2	22:BA:783:A:H62	1.99	0.54
8:AH:105:THR:HG21	8:AH:120:LEU:CD1	2.31	0.54
57:DA:2516:A:C4	57:DA:2569:G:N2	2.76	0.54
1:AA:1468:A:H2'	1:AA:1469:C:C5'	2.37	0.54
57:DA:1038:G:C6	57:DA:1039:A:N7	2.76	0.54
1:AA:176:C:H2'	1:AA:177:G:N3	2.22	0.54
15:CO:16:ARG:HB2	15:CO:23:SER:HB2	1.88	0.54
44:DW:23:LYS:HD2	44:DW:24:ARG:H	1.71	0.54
41:DT:63:VAL:HG21	41:DT:80:TRP:CE2	2.43	0.54
22:BA:2505:G:O4'	61:BA:3136:CLM:CL2	2.63	0.54
36:BO:31:THR:O	36:BO:102:ARG:NH1	2.39	0.54
57:DA:1048:A:C5	57:DA:1049:C:N4	2.76	0.54
57:DA:1238:G:O2'	57:DA:1239:G:H5'	2.07	0.54
22:BA:511:U:H5	22:BA:512:G:C5	2.26	0.54
31:DJ:94:ALA:O	31:DJ:95:ARG:CB	2.56	0.54
22:BA:478:A:C6	22:BA:480:A:C6	2.96	0.54
1:AA:182:A:C2	1:AA:184:G:C8	2.96	0.54
1:AA:49:U:C4	1:AA:364:A:C6	2.96	0.54
6:AF:9:MET:HE3	18:AR:64:LEU:HD22	1.89	0.54
32:BK:63:VAL:HG22	32:BK:107:LEU:HD21	1.89	0.54
12:AL:88:ASP:HB3	12:AL:89:LEU:HD22	1.90	0.54
3:CC:12:GLY:O	3:CC:13:ILE:HD13	2.08	0.54
40:DS:55:ILE:O	40:DS:59:GLU:HG2	2.08	0.54
58:DB:81:G:C4	58:DB:82:U:C5	2.96	0.54
1:AA:919:A:O2'	1:AA:920:U:H5'	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:70:U:O2'	1:AA:71:A:C8	2.61	0.54
41:BT:86:THR:O	41:BT:87:LEU:HD23	2.07	0.54
23:BB:78:A:C2	23:BB:99:A:C4	2.96	0.54
23:BB:78:A:H2'	23:BB:79:G:O4'	2.08	0.54
37:BP:85:VAL:O	37:BP:86:LYS:HB2	2.08	0.54
48:D0:38:LEU:HB2	48:D0:41:HIS:CE1	2.43	0.54
57:DA:1231:U:H2'	57:DA:1232:G:H8	1.72	0.54
47:DZ:37:ARG:HA	47:DZ:37:ARG:HE	1.73	0.54
1:AA:1101:A:N7	2:AB:170:ILE:HG22	2.23	0.54
22:BA:1657:U:O3'	25:BD:138:LEU:HD23	2.08	0.54
19:CS:28:LYS:O	19:CS:30:LEU:HD12	2.08	0.54
53:CA:1461:G:C5	53:CA:1462:C:C4	2.96	0.54
12:CL:36:VAL:O	12:CL:36:VAL:HG23	2.08	0.54
57:DA:2766:A:N3	57:DA:2766:A:H2'	2.22	0.54
7:AG:37:THR:O	7:AG:41:ILE:HG13	2.07	0.54
53:CA:110:C:H2'	53:CA:111:G:C8	2.43	0.54
38:BQ:86:SER:O	38:BQ:88:GLU:N	2.41	0.54
44:BW:40:ARG:HG3	44:BW:56:HIS:ND1	2.23	0.54
44:BW:29:SER:HA	44:BW:63:ASP:HB3	1.90	0.54
14:CN:68:ARG:NH1	14:CN:80:ARG:HH12	2.06	0.54
29:BH:32:PRO:O	29:BH:33:GLN:HB2	2.07	0.54
57:DA:2384:U:OP2	57:DA:2384:U:H6	1.90	0.54
27:BF:133:GLU:H	27:BF:150:GLY:HA2	1.71	0.54
57:DA:2748:A:H1'	28:DG:66:THR:CG2	2.34	0.54
57:DA:2758:A:H2'	57:DA:2759:G:H5'	1.89	0.54
57:DA:238:C:H2'	57:DA:239:C:O4'	2.07	0.54
38:DQ:42:GLY:HA3	39:DR:75:VAL:HG21	1.90	0.54
22:BA:1179:G:C2	22:BA:1180:U:O2'	2.61	0.54
33:BL:85:VAL:CG2	33:BL:94:THR:HG23	2.38	0.54
22:BA:85:G:OP1	42:BU:27:VAL:HG11	2.08	0.54
26:DE:196:VAL:HG13	26:DE:200:LEU:HD23	1.89	0.54
4:CD:29:THR:HG22	4:CD:30:LYS:HD3	1.89	0.54
33:DL:48:ARG:HG3	33:DL:48:ARG:NH1	2.18	0.54
34:DM:26:VAL:HG21	34:DM:132:THR:O	2.08	0.54
57:DA:1612:C:C2'	57:DA:1613:G:O5'	2.56	0.54
53:CA:90:C:O2'	53:CA:91:U:C6	2.53	0.54
57:DA:373:U:HO2'	57:DA:374:A:H8	1.51	0.54
57:DA:2869:G:H2'	57:DA:2870:C:O4'	2.08	0.54
53:CA:989:U:C2'	53:CA:990:C:H5'	2.38	0.54
1:AA:428:G:H1'	1:AA:430:A:N7	2.22	0.54
24:DC:179:GLU:HA	24:DC:269:ARG:O	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1323:G:H2'	1:AA:1324:A:H8	1.73	0.54
57:DA:1706:C:O2'	57:DA:1707:G:OP1	2.26	0.54
53:CA:1382:C:O2'	53:CA:1383:C:C5'	2.55	0.54
57:DA:1967:C:O2'	57:DA:1968:G:H5'	2.08	0.54
2:AB:14:HIS:O	2:AB:14:HIS:CG	2.61	0.54
22:BA:1835:G:C4	22:BA:1931:U:C4	2.96	0.54
25:DD:33:ARG:H	25:DD:33:ARG:HD2	1.72	0.54
29:BH:68:ARG:HH22	29:BH:72:ILE:HG21	1.70	0.54
57:DA:2666:C:H2'	57:DA:2667:C:C5'	2.38	0.54
19:CS:10:ILE:HG22	19:CS:14:LEU:HD21	1.90	0.54
59:DF:103:ILE:O	59:DF:103:ILE:HG22	2.08	0.54
27:BF:72:SER:HB2	27:BF:80:GLN:HB2	1.90	0.54
58:DB:50:A:OP1	36:DO:68:LYS:HB2	2.07	0.54
22:BA:2266:A:H4'	22:BA:2267:A:O5'	2.08	0.54
5:AE:37:VAL:HG11	5:AE:113:VAL:HA	1.90	0.54
22:BA:2793:C:H2'	22:BA:2794:C:C6	2.41	0.54
33:BL:55:MET:HE3	33:BL:55:MET:HA	1.89	0.54
1:AA:1210:C:H2'	1:AA:1211:U:H5'	1.89	0.54
22:BA:1537:G:H2'	22:BA:1538:G:O4'	2.09	0.54
1:AA:507:C:H3'	1:AA:508:U:H5''	1.89	0.54
22:BA:2555:U:H5	22:BA:2556:C:C2	2.26	0.54
2:AB:32:GLY:HA3	2:AB:39:ILE:H	1.73	0.54
57:DA:1232:G:H2'	57:DA:1233:C:C6	2.43	0.54
5:AE:17:VAL:HG22	5:AE:18:ASN:H	1.73	0.54
1:AA:340:U:H2'	1:AA:341:C:C6	2.43	0.54
22:BA:2001:C:H4'	22:BA:2689:U:H2'	1.89	0.54
53:CA:1406:U:H2'	53:CA:1407:C:H5'	1.90	0.54
1:AA:237:G:H5''	17:AQ:26:ARG:NH2	2.23	0.54
51:D3:44:ARG:H	51:D3:45:PRO:HD2	1.73	0.54
38:DQ:15:LYS:O	38:DQ:19:GLN:HG3	2.09	0.54
22:BA:1006:C:C2'	22:BA:1007:C:H5'	2.38	0.54
22:BA:958:U:H5'	34:BM:14:LYS:NZ	2.22	0.54
22:BA:2405:G:O2'	22:BA:2411:A:N6	2.41	0.54
1:AA:11:G:C5	1:AA:12:U:C5	2.96	0.54
53:CA:8:A:C5	4:CD:205:LYS:HG3	2.43	0.54
49:D1:34:GLU:HG3	49:D1:49:LYS:HB2	1.90	0.54
55:CM:111:PRO:HG2	55:CM:113:LYS:HG3	1.89	0.54
22:BA:1153:C:H2'	22:BA:1154:G:O4'	2.08	0.53
22:BA:2385:C:O2'	22:BA:2386:A:O4'	2.25	0.53
53:CA:1494:G:N2	53:CA:1495:U:C2	2.76	0.53
53:CA:373:A:N3	53:CA:374:A:C8	2.77	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1790:C:H2'	57:DA:1791:A:C8	2.43	0.53
57:DA:1117:C:H2'	57:DA:1118:C:C6	2.43	0.53
57:DA:585:G:H1'	57:DA:1256:G:N2	2.23	0.53
36:DO:7:ARG:NH2	36:DO:29:HIS:HD2	2.05	0.53
22:BA:2449:U:O5'	22:BA:2449:U:H6	1.91	0.53
59:DF:35:LEU:HA	59:DF:152:ASP:O	2.08	0.53
26:DE:129:PRO:HD3	26:DE:156:ASN:OD1	2.08	0.53
22:BA:1250:G:OP2	33:BL:21:ARG:NH2	2.40	0.53
57:DA:2616:C:H2'	57:DA:2617:U:C6	2.40	0.53
22:BA:1494:A:H2'	22:BA:1495:A:H8	1.69	0.53
57:DA:2345:G:C6	57:DA:2347:C:N4	2.75	0.53
38:DQ:10:ARG:HB2	38:DQ:10:ARG:CZ	2.37	0.53
8:AH:17:GLN:HE21	8:AH:71:VAL:CG2	2.15	0.53
53:CA:725:G:C5	53:CA:726:C:C5	2.97	0.53
53:CA:338:A:N1	53:CA:351:G:N2	2.55	0.53
53:CA:496:A:C2'	53:CA:496:A:N3	2.70	0.53
4:AD:61:ARG:NH1	4:AD:68:GLU:HG2	2.22	0.53
39:BR:25:LEU:H	39:BR:94:THR:HG21	1.73	0.53
57:DA:973:A:H1'	57:DA:1188:U:C6	2.42	0.53
30:BI:123:ALA:C	30:BI:125:THR:H	2.10	0.53
24:BC:257:ARG:HE	24:BC:269:ARG:NH2	2.06	0.53
13:AM:106:ARG:HH21	13:AM:112:ARG:CB	2.19	0.53
53:CA:598:U:H2'	53:CA:599:C:O4'	2.08	0.53
53:CA:457:G:N3	53:CA:457:G:H2'	2.24	0.53
53:CA:1450:U:H4'	53:CA:1451:U:H5	1.73	0.53
3:AC:21:TRP:CD1	3:AC:58:ARG:HG2	2.44	0.53
57:DA:1740:G:H2'	57:DA:1741:C:H6	1.73	0.53
9:CI:114:LYS:HD2	9:CI:120:ALA:O	2.08	0.53
53:CA:1202:U:H2'	53:CA:1203:C:H6	1.73	0.53
25:DD:36:GLN:HE21	25:DD:38:LYS:HZ1	1.55	0.53
57:DA:1666:G:H4'	32:DK:6:THR:HG23	1.88	0.53
48:D0:32:THR:HG21	48:D0:47:TYR:CE2	2.43	0.53
57:DA:751:A:O5'	40:DS:90:LYS:HA	2.08	0.53
14:CN:20:PHE:CA	14:CN:24:ALA:HB2	2.38	0.53
22:BA:2846:G:H2'	22:BA:2847:U:O4'	2.08	0.53
57:DA:2046:G:C2	57:DA:2047:C:C2	2.96	0.53
26:DE:111:GLU:HA	26:DE:114:ARG:HE	1.73	0.53
40:BS:68:ASP:O	40:BS:109:ASP:HB3	2.09	0.53
22:BA:2140:G:H2'	22:BA:2141:G:C8	2.42	0.53
53:CA:844:G:O2'	53:CA:845:A:H5''	2.08	0.53
22:BA:1956:U:O2'	22:BA:1957:C:H5'	2.07	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:5:MET:HA	14:AN:8:ARG:HD2	1.90	0.53
4:CD:84:ASN:HD22	4:CD:84:ASN:C	2.10	0.53
55:CM:2:ARG:HA	55:CM:7:ASN:O	2.07	0.53
57:DA:1865:U:C4	57:DA:1875:G:C2	2.96	0.53
57:DA:2332:C:O2'	44:DW:40:ARG:NH2	2.41	0.53
57:DA:857:G:O2'	44:DW:19:ARG:CZ	2.57	0.53
52:D4:19:ARG:O	52:D4:20:ASP:CB	2.55	0.53
24:BC:251:THR:CG2	24:BC:252:LYS:H	2.00	0.53
53:CA:429:U:H3'	4:CD:8:LEU:HD23	1.90	0.53
53:CA:560:A:C4	5:CE:127:TYR:CD2	2.97	0.53
22:BA:1190:G:OP1	33:BL:32:GLY:CA	2.53	0.53
22:BA:783:A:H8	22:BA:784:G:H4'	1.71	0.53
22:BA:1731:G:O2'	22:BA:1732:C:H3'	2.08	0.53
57:DA:2022:U:O2'	57:DA:2616:C:O2'	2.24	0.53
57:DA:1507:C:H5'	57:DA:1508:A:OP2	2.08	0.53
53:CA:802:A:H2'	53:CA:803:G:C5'	2.38	0.53
24:DC:166:ARG:HA	24:DC:171:VAL:HA	1.89	0.53
22:BA:1430:G:H2'	22:BA:1431:A:H8	1.72	0.53
1:AA:337:G:H2'	1:AA:338:A:C8	2.42	0.53
31:DJ:58:ASN:OD1	31:DJ:127:GLY:HA2	2.08	0.53
25:BD:191:GLY:O	25:BD:192:ALA:HB3	2.08	0.53
1:AA:1161:C:O2'	1:AA:1162:C:H5'	2.09	0.53
2:AB:113:LEU:O	2:AB:117:GLU:HG3	2.07	0.53
2:AB:130:LYS:NZ	2:AB:133:ALA:HB2	2.23	0.53
22:BA:2585:U:HO2'	22:BA:2586:U:C5'	2.21	0.53
24:BC:71:ASP:HA	24:BC:117:SER:O	2.08	0.53
22:BA:1936:A:H2	22:BA:1943:U:C4	2.25	0.53
1:AA:49:U:O4	1:AA:365:U:C5	2.57	0.53
7:AG:113:LYS:HB2	7:AG:117:LEU:HD12	1.90	0.53
57:DA:2478:A:N7	57:DA:2529:G:C6	2.76	0.53
42:BU:100:GLU:O	42:BU:101:THR:HB	2.08	0.53
23:BB:116:G:H4'	36:BO:54:VAL:HG22	1.90	0.53
53:CA:321:A:N7	53:CA:328:C:C2	2.76	0.53
15:CO:70:LYS:HA	15:CO:77:TYR:HB2	1.90	0.53
53:CA:629:A:H2'	53:CA:630:A:O4'	2.08	0.53
57:DA:471:A:O5'	57:DA:471:A:H8	1.91	0.53
25:DD:98:VAL:HG23	25:DD:180:VAL:HG12	1.90	0.53
37:BP:83:ILE:HD13	37:BP:83:ILE:C	2.29	0.53
53:CA:1337:G:H5''	53:CA:1338:G:OP1	2.08	0.53
59:DF:60:SER:C	59:DF:62:GLN:H	2.11	0.53
1:AA:802:A:H5''	1:AA:803:G:OP2	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:74:GLU:O	35:BN:77:ALA:HB3	2.08	0.53
53:CA:424:G:H2'	53:CA:425:G:H8	1.73	0.53
51:D3:9:ALA:HB1	51:D3:13:PHE:HD2	1.73	0.53
25:BD:119:ALA:HB2	25:BD:165:MET:CB	2.38	0.53
22:BA:672:C:OP2	33:BL:42:SER:OG	2.20	0.53
57:DA:195:A:C6	57:DA:198:C:C5	2.96	0.53
1:AA:1234:C:O2'	1:AA:1235:U:H5'	2.09	0.53
33:DL:3:LEU:C	33:DL:3:LEU:HD12	2.27	0.53
39:DR:21:ARG:HB2	39:DR:93:PHE:HD1	1.72	0.53
57:DA:2352:A:O5'	57:DA:2352:A:H8	1.91	0.53
2:CB:89:PHE:HB3	2:CB:149:GLY:O	2.08	0.53
53:CA:1175:G:H2'	53:CA:1176:A:C8	2.42	0.53
57:DA:454:A:H4'	57:DA:455:C:OP2	2.08	0.53
58:DB:15:A:OP1	58:DB:108:A:H5'	2.08	0.53
26:DE:108:ILE:HD13	26:DE:108:ILE:O	2.08	0.53
31:DJ:48:VAL:HG12	31:DJ:49:ASP:H	1.73	0.53
1:AA:92:U:O2'	1:AA:93:U:O4'	2.21	0.53
37:DP:91:VAL:HG11	37:DP:96:LEU:HD21	1.91	0.53
5:AE:94:PHE:HZ	5:AE:96:GLN:CD	2.11	0.53
57:DA:963:U:O2'	57:DA:964:C:H6	1.90	0.53
24:BC:90:ILE:CG2	24:BC:102:TYR:CD1	2.92	0.53
29:DH:84:ALA:N	29:DH:148:ALA:HA	2.23	0.53
24:BC:173:LEU:O	24:BC:180:MET:HA	2.07	0.53
1:AA:414:A:O2'	1:AA:415:A:O4'	2.24	0.53
28:DG:120:ILE:O	28:DG:120:ILE:HG23	2.07	0.53
26:BE:143:LEU:HD13	26:BE:146:VAL:HG11	1.89	0.53
57:DA:1210:G:H5''	57:DA:1211:C:H3'	1.91	0.53
31:DJ:65:THR:O	31:DJ:68:LYS:NZ	2.38	0.53
22:BA:285:G:H2'	22:BA:285:G:N3	2.21	0.53
36:DO:24:THR:OG1	36:DO:90:VAL:HG11	2.09	0.53
47:DZ:28:LEU:HD23	47:DZ:28:LEU:N	2.24	0.53
30:DI:57:VAL:O	30:DI:58:ILE:HG13	2.08	0.53
59:DF:28:PRO:CB	59:DF:168:LEU:HD21	2.37	0.53
24:BC:255:LYS:C	24:BC:257:ARG:H	2.11	0.53
38:BQ:6:GLY:HA2	38:BQ:9:ALA:HB3	1.91	0.53
4:CD:34:GLU:O	4:CD:37:PRO:HD3	2.08	0.53
19:CS:52:ASN:HD21	19:CS:54:ARG:HG2	1.73	0.53
1:AA:958:A:C5	1:AA:959:A:C6	2.96	0.53
9:CI:27:ILE:HD13	9:CI:62:LEU:HB3	1.90	0.53
43:BV:51:GLN:HB2	43:BV:57:TYR:OH	2.08	0.53
57:DA:2461:A:H1'	57:DA:2492:U:C2	2.42	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2086:U:H2'	22:BA:2087:G:C8	2.43	0.53
24:BC:159:THR:O	24:BC:194:VAL:HG12	2.07	0.53
53:CA:1477:U:H2'	53:CA:1478:U:C6	2.43	0.53
25:BD:121:THR:O	25:BD:122:VAL:CB	2.57	0.53
25:DD:29:VAL:HB	25:DD:98:VAL:CG1	2.39	0.53
22:BA:2862:G:H2'	22:BA:2863:C:C6	2.43	0.53
57:DA:347:A:H2'	57:DA:348:A:H8	1.72	0.53
57:DA:2590:A:H5''	24:DC:237:ARG:NE	2.22	0.53
51:D3:9:ALA:HB1	51:D3:13:PHE:CD2	2.43	0.53
22:BA:1440:U:H2'	22:BA:1441:G:O4'	2.09	0.53
52:D4:27:CYS:SG	52:D4:33:HIS:HB2	2.48	0.53
37:BP:64:SER:O	37:BP:65:ASN:C	2.46	0.53
23:BB:20:G:H2'	23:BB:21:G:O4'	2.09	0.53
57:DA:486:C:H2'	57:DA:487:C:C6	2.43	0.53
25:BD:35:THR:OG1	25:BD:49:GLN:HG2	2.08	0.53
57:DA:2674:G:O3'	32:DK:30:ARG:HG2	2.07	0.53
1:AA:1326:U:H2'	1:AA:1327:C:C6	2.43	0.53
27:BF:21:TYR:HE2	27:BF:28:PRO:HD3	1.73	0.53
34:BM:68:PHE:C	34:BM:68:PHE:CD2	2.82	0.53
47:DZ:15:ARG:N	47:DZ:15:ARG:HD2	2.24	0.53
37:DP:65:ASN:N	37:DP:65:ASN:HD22	2.05	0.53
12:CL:78:VAL:HG23	12:CL:101:LEU:HD12	1.90	0.53
44:BW:51:GLY:HA3	44:BW:59:PHE:CZ	2.42	0.53
58:DB:57:A:C5	59:DF:25:MET:CB	2.91	0.53
57:DA:600:G:H5'	26:DE:27:LEU:HD13	1.90	0.53
26:DE:147:LEU:HB3	26:DE:186:VAL:HG23	1.90	0.53
9:CI:5:TYR:CD2	9:CI:5:TYR:N	2.75	0.53
57:DA:1282:U:O4	57:DA:1283:G:C6	2.61	0.53
57:DA:415:A:C2	57:DA:2409:G:C6	2.96	0.53
57:DA:55:G:C2	57:DA:116:C:C2	2.96	0.53
22:BA:1422:G:C4	22:BA:1423:G:C8	2.96	0.53
53:CA:1053:G:O6	53:CA:1199:U:H2'	2.09	0.53
57:DA:994:C:O2	39:DR:10:LYS:HE2	2.08	0.53
1:AA:923:A:H2'	1:AA:924:C:C6	2.42	0.53
57:DA:922:C:H2'	57:DA:923:G:H8	1.72	0.53
25:DD:113:SER:OG	25:DD:114:LYS:N	2.41	0.53
22:BA:544:C:C4	22:BA:550:C:N4	2.77	0.53
25:DD:107:VAL:HG13	25:DD:203:VAL:HG23	1.90	0.53
4:AD:71:PHE:HE1	4:AD:199:ILE:HD11	1.73	0.53
57:DA:1188:U:O2'	57:DA:1189:A:H5'	2.08	0.53
57:DA:975:A:C2'	57:DA:976:G:H8	2.22	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:140:U:O2	53:CA:183:C:N4	2.42	0.53
22:BA:1871:A:C8	22:BA:1872:A:C6	2.96	0.53
57:DA:1737:G:H5'	57:DA:1738:G:OP2	2.08	0.53
25:DD:185:ASN:O	25:DD:186:LEU:HD12	2.08	0.53
44:DW:20:LEU:HD11	44:DW:35:ILE:CG1	2.38	0.53
1:AA:830:G:H2'	1:AA:831:A:C8	2.42	0.53
7:AG:145:GLU:CA	7:AG:148:LYS:HB2	2.39	0.53
9:AI:9:GLY:HA2	9:AI:80:HIS:CD2	2.44	0.53
1:AA:853:C:O2'	1:AA:854:U:H5'	2.09	0.53
32:BK:121:GLU:O	32:BK:122:VAL:C	2.46	0.53
59:DF:32:LYS:HB3	59:DF:156:THR:HB	1.89	0.53
15:CO:57:ARG:O	15:CO:61:GLN:HG2	2.09	0.53
57:DA:2088:A:H2'	57:DA:2089:C:C6	2.43	0.53
11:CK:17:ASP:OD2	11:CK:80:ASN:HB2	2.09	0.53
4:CD:148:ALA:O	4:CD:151:GLN:HB2	2.07	0.53
1:AA:1081:A:H5'	5:AE:22:LYS:HG3	1.89	0.53
57:DA:260:G:C6	57:DA:261:G:C5	2.95	0.53
22:BA:2520:C:O2'	22:BA:2521:C:H5'	2.09	0.53
1:AA:628:G:H2'	1:AA:629:A:C8	2.43	0.53
57:DA:2064:C:H2'	57:DA:2065:C:C6	2.43	0.53
44:BW:43:LYS:HE2	44:BW:68:PHE:HE1	1.73	0.53
53:CA:277:C:H2'	53:CA:278:G:C8	2.43	0.53
57:DA:656:G:O2'	57:DA:657:U:O4'	2.18	0.53
17:AQ:18:LYS:CA	17:AQ:47:ASP:HB2	2.26	0.53
57:DA:196:A:H61	57:DA:831:G:H21	1.55	0.53
15:CO:38:LEU:HD12	15:CO:41:HIS:HB3	1.90	0.53
57:DA:320:A:H5''	57:DA:321:U:OP1	2.09	0.53
57:DA:311:A:O2'	57:DA:332:A:H5'	2.08	0.53
26:DE:109:LEU:O	26:DE:112:LEU:HB3	2.09	0.53
38:DQ:63:ARG:O	38:DQ:66:ALA:N	2.41	0.53
1:AA:206:C:C2	1:AA:207:C:H1'	2.44	0.53
57:DA:1078:U:H5''	57:DA:1079:C:OP1	2.08	0.53
57:DA:1071:G:O4'	57:DA:1088:A:O2'	2.26	0.53
57:DA:1717:A:H2'	57:DA:1718:G:O4'	2.09	0.53
57:DA:1281:G:O2'	57:DA:1282:U:H5'	2.08	0.53
11:AK:91:GLY:O	11:AK:95:THR:HB	2.07	0.53
53:CA:1350:A:H2	54:CG:33:GLY:HA3	1.74	0.53
24:BC:106:PRO:CG	24:BC:141:HIS:CE1	2.92	0.53
1:AA:439:U:C2'	1:AA:440:C:H5'	2.39	0.53
53:CA:367:U:C6	53:CA:394:G:N2	2.77	0.53
29:DH:94:ILE:HG13	29:DH:98:ASP:CB	2.37	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BO:64:TYR:O	36:BO:67:ASN:OD1	2.27	0.53
57:DA:381:G:C5'	45:DX:15:ASN:HD22	2.21	0.53
53:CA:1013:G:N2	53:CA:1015:G:H3'	2.24	0.53
57:DA:443:A:H2'	26:DE:40:ARG:NE	2.23	0.53
33:DL:17:LYS:NZ	33:DL:19:LEU:HD22	2.23	0.53
22:BA:27:G:N2	22:BA:512:G:O2'	2.40	0.53
22:BA:514:A:H1'	22:BA:581:C:O2'	2.08	0.53
57:DA:510:C:H2'	57:DA:511:U:C5	2.43	0.53
1:AA:792:A:C4	1:AA:794:A:N6	2.77	0.53
40:DS:84:ARG:HB3	40:DS:96:ILE:HG23	1.89	0.53
17:CQ:29:LYS:HB2	17:CQ:36:PHE:CE1	2.44	0.53
1:AA:684:U:H3	1:AA:706:A:H61	1.56	0.53
42:BU:97:SER:O	42:BU:98:ASN:CB	2.56	0.53
53:CA:781:A:H2'	53:CA:782:A:H5'	1.89	0.53
24:DC:132:ARG:HG3	24:DC:132:ARG:O	2.08	0.53
29:DH:54:LEU:HA	29:DH:57:LYS:HG3	1.90	0.53
27:BF:114:ARG:N	27:BF:114:ARG:HD2	2.23	0.53
53:CA:640:A:O2'	8:CH:106:SER:HB2	2.09	0.53
27:BF:120:SER:HB2	27:BF:127:TYR:CE1	2.44	0.53
53:CA:449:G:C2	53:CA:450:G:C5	2.96	0.53
9:AI:107:ALA:O	9:AI:109:GLN:HG2	2.08	0.53
53:CA:1320:C:O2'	19:CS:72:GLU:HA	2.09	0.53
26:BE:21:ARG:HG3	26:BE:22:ASP:N	2.22	0.53
30:DI:5:GLN:OE1	30:DI:59:THR:HG21	2.09	0.53
57:DA:2638:G:H1'	57:DA:2778:A:N6	2.23	0.53
25:BD:85:ALA:O	25:BD:86:GLU:HB2	2.08	0.53
31:BJ:38:GLY:C	31:BJ:40:HIS:H	2.12	0.53
22:BA:2352:A:C6	44:BW:30:VAL:HG11	2.43	0.53
11:CK:92:ARG:HH22	21:CU:19:LYS:HD2	1.73	0.53
11:CK:111:ASP:N	21:CU:3:ILE:N	2.55	0.53
19:CS:13:HIS:O	19:CS:17:LYS:HG2	2.08	0.53
19:CS:38:THR:HA	19:CS:69:LYS:HA	1.90	0.53
29:BH:31:VAL:CB	29:BH:32:PRO:HD2	2.21	0.53
44:DW:19:ARG:HA	44:DW:34:SER:HA	1.90	0.53
57:DA:36:G:N1	57:DA:445:C:N4	2.55	0.53
57:DA:574:A:C8	57:DA:2055:C:H5''	2.44	0.53
57:DA:575:A:H2'	57:DA:576:U:C5	2.44	0.53
57:DA:674:G:H2'	57:DA:804:A:H61	1.72	0.53
10:CJ:45:ARG:O	10:CJ:46:LYS:C	2.46	0.53
22:BA:243:U:OP1	51:B3:5:THR:CG2	2.49	0.53
57:DA:1073:A:OP2	57:DA:1073:A:H4'	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1505:A:C6	22:BA:1506:U:N3	2.76	0.53
24:DC:144:GLU:HG3	24:DC:151:GLY:HA2	1.89	0.53
57:DA:1808:A:H3'	57:DA:1809:A:C8	2.42	0.53
57:DA:227:A:O2'	57:DA:228:C:O5'	2.25	0.53
39:DR:33:VAL:HG23	39:DR:61:ALA:HB3	1.90	0.53
1:AA:275:G:HO2'	1:AA:276:G:H5'	1.72	0.53
32:BK:7:MET:SD	32:BK:20:MET:HB2	2.48	0.53
4:AD:16:THR:CG2	4:AD:17:ASP:N	2.69	0.53
1:AA:66:A:N6	1:AA:104:G:C2	2.77	0.53
53:CA:119:A:H4'	53:CA:120:A:O5'	2.08	0.53
22:BA:1288:G:C4	22:BA:1327:A:C2	2.96	0.53
57:DA:2577:A:C2	48:D0:1:ALA:N	2.77	0.53
57:DA:747:U:C2'	57:DA:2613:U:O4	2.55	0.53
1:AA:1052:U:C5'	1:AA:1053:G:OP2	2.56	0.53
34:BM:132:THR:HG22	34:BM:133:LYS:N	2.20	0.53
1:AA:1015:G:H1'	1:AA:1218:C:O2'	2.08	0.53
24:DC:131:MET:HA	24:DC:134:ILE:CG1	2.37	0.53
1:AA:269:C:H2'	1:AA:270:A:H8	1.74	0.53
1:AA:536:C:O2'	1:AA:537:G:H5'	2.08	0.53
5:CE:68:ARG:O	5:CE:69:ASN:C	2.47	0.53
57:DA:1187:G:H5''	39:DR:83:TYR:CE1	2.44	0.53
1:AA:673:A:H2'	1:AA:674:G:C8	2.44	0.53
1:AA:212:G:H2'	1:AA:213:G:H8	1.73	0.53
13:AM:7:ASN:O	13:AM:9:PRO:HD3	2.09	0.53
4:CD:106:PHE:HB3	4:CD:154:VAL:HG23	1.91	0.53
58:DB:8:C:H5''	36:DO:15:ARG:NH1	2.24	0.53
57:DA:586:A:O2'	57:DA:671:C:O2	2.25	0.53
53:CA:1190:G:O3'	3:CC:2:GLN:HB3	2.08	0.53
22:BA:346:A:H2'	22:BA:347:A:H8	1.73	0.53
26:BE:58:LYS:HZ1	26:BE:62:GLN:HA	1.74	0.53
33:DL:103:ILE:H	33:DL:103:ILE:HD12	1.73	0.53
33:BL:57:LEU:HG	33:BL:61:LEU:HD22	1.90	0.53
40:DS:6:LYS:HZ2	40:DS:104:THR:HG23	1.73	0.53
57:DA:1544:A:C6	57:DA:1545:A:C6	2.97	0.53
4:AD:64:TYR:CD1	4:AD:93:LEU:HD13	2.44	0.53
53:CA:1086:U:O2'	53:CA:1087:G:H5'	2.08	0.53
31:DJ:8:PRO:HG2	31:DJ:9:GLU:H	1.73	0.53
5:AE:132:PRO:O	5:AE:136:VAL:HG13	2.09	0.53
31:BJ:37:ARG:HA	31:BJ:118:MET:HE2	1.90	0.53
22:BA:2567:G:H2'	22:BA:2568:U:C6	2.43	0.53
53:CA:1339:A:H2'	53:CA:1340:A:O4'	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:89:THR:OG1	5:CE:90:GLY:N	2.39	0.53
22:BA:1839:G:H2'	22:BA:1840:G:H8	1.72	0.53
13:AM:23:GLY:HA3	13:AM:64:VAL:HG12	1.91	0.53
58:DB:57:A:C5	59:DF:25:MET:SD	3.02	0.53
57:DA:183:C:H2'	57:DA:184:C:H5'	1.89	0.53
57:DA:1982:U:H6	57:DA:1982:U:C5'	2.22	0.53
57:DA:739:A:O2'	57:DA:740:C:H5	1.85	0.53
57:DA:1032:A:H1'	52:D4:23:ILE:CD1	2.27	0.53
22:BA:636:G:O5'	33:BL:128:THR:HG22	2.09	0.53
57:DA:1469:A:H2'	57:DA:1470:A:H8	1.67	0.53
53:CA:1279:G:H2'	10:CJ:45:ARG:NH2	2.23	0.53
57:DA:2144:G:O2'	57:DA:2147:A:OP2	2.16	0.53
53:CA:567:G:H1'	63:CA:1820:HOH:O	2.07	0.53
57:DA:1281:G:H2'	57:DA:1282:U:O4'	2.09	0.53
57:DA:2721:A:C2	57:DA:2873:A:C5	2.97	0.53
25:BD:97:SER:C	25:BD:99:GLU:HG2	2.29	0.53
1:AA:563:A:N6	63:AA:1818:HOH:O	2.41	0.53
31:DJ:82:GLY:O	31:DJ:84:ILE:N	2.42	0.53
1:AA:1152:A:H2'	1:AA:1153:G:H8	1.73	0.53
8:AH:12:ARG:HH11	8:AH:26:MET:HB2	1.74	0.53
1:AA:430:A:C4	1:AA:431:A:C8	2.96	0.53
27:BF:34:THR:CG2	27:BF:89:THR:HG23	2.35	0.53
57:DA:90:U:H3'	57:DA:91:A:H5''	1.91	0.53
35:DN:56:LYS:HA	35:DN:84:GLY:CA	2.35	0.53
13:AM:4:ALA:H	13:AM:56:ARG:HG3	1.74	0.53
2:CB:19:THR:OG1	2:CB:20:ARG:N	2.41	0.53
22:BA:2198:A:H4'	22:BA:2199:A:OP1	2.07	0.53
42:DU:54:PRO:HG2	42:DU:55:GLY:N	2.20	0.53
2:CB:122:ASP:HB3	2:CB:124:THR:HG22	1.91	0.53
2:CB:46:VAL:HG13	2:CB:47:PRO:CD	2.38	0.53
53:CA:1138:G:N2	53:CA:1140:C:C4	2.76	0.53
27:BF:82:TYR:HD2	27:BF:83:PRO:HD2	1.74	0.53
42:BU:73:ASN:HD21	42:BU:76:THR:HG23	1.73	0.53
19:CS:52:ASN:HD22	19:CS:54:ARG:H	1.57	0.53
22:BA:2383:G:H5''	22:BA:2383:G:C8	2.39	0.53
57:DA:1258:U:H2'	57:DA:1259:G:H8	1.72	0.53
57:DA:1259:G:H2'	57:DA:1260:A:O4'	2.09	0.53
1:AA:1387:G:C6	1:AA:1388:C:N4	2.77	0.53
22:BA:960:A:H2'	22:BA:962:G:H5'	1.88	0.53
28:BG:139:VAL:C	28:BG:141:GLY:N	2.61	0.53
57:DA:271:G:O2'	57:DA:272:A:C5'	2.56	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:57:A:C4	27:BF:25:MET:HB3	2.43	0.53
37:BP:111:GLU:CD	37:BP:111:GLU:N	2.61	0.53
57:DA:2734:A:C8	57:DA:2735:G:C8	2.96	0.53
59:DF:56:LEU:O	59:DF:60:SER:HB3	2.08	0.53
57:DA:927:A:H2'	57:DA:928:A:C8	2.44	0.53
22:BA:2562:U:H2'	22:BA:2563:U:H5'	1.90	0.53
26:BE:152:GLU:O	26:BE:153:LEU:HG	2.09	0.53
41:DT:34:VAL:O	41:DT:34:VAL:HG12	2.09	0.53
11:AK:57:SER:O	11:AK:90:PRO:HG3	2.08	0.53
57:DA:622:G:O2'	57:DA:623:C:H5'	2.09	0.53
58:DB:19:C:H2'	58:DB:20:G:H8	1.72	0.53
58:DB:68:C:O2'	58:DB:69:G:O5'	2.26	0.53
53:CA:1150:A:H1'	53:CA:1280:A:N6	2.24	0.53
24:BC:246:PRO:HG2	24:BC:247:TRP:CH2	2.44	0.53
4:AD:147:LYS:O	4:AD:149:LYS:N	2.42	0.53
41:BT:48:GLN:HE21	41:BT:48:GLN:HA	1.72	0.53
53:CA:1245:C:H2'	53:CA:1246:A:C8	2.37	0.53
1:AA:620:C:H2'	1:AA:621:A:O4'	2.08	0.53
6:CF:92:THR:HG22	6:CF:93:LYS:N	2.24	0.53
59:DF:101:ARG:HH11	59:DF:138:PRO:HB3	1.74	0.53
38:DQ:89:ILE:HG22	38:DQ:91:ARG:H	1.74	0.53
44:BW:58:LEU:HD23	44:BW:79:ILE:HD12	1.91	0.53
57:DA:799:G:C6	57:DA:800:A:C5	2.97	0.53
21:CU:33:ARG:NH2	21:CU:34:ARG:HD3	2.24	0.53
57:DA:1210:G:C6	57:DA:1237:A:N7	2.77	0.53
32:DK:17:ARG:CG	32:DK:18:ARG:H	2.21	0.53
57:DA:972:A:N1	57:DA:973:A:N6	2.57	0.53
41:BT:69:ARG:CZ	41:BT:70:HIS:HA	2.39	0.53
53:CA:391:G:H5''	56:CP:8:ARG:CD	2.38	0.53
22:BA:2800:A:H5''	22:BA:2800:A:H8	1.73	0.53
22:BA:1869:G:N2	22:BA:1873:G:C6	2.77	0.53
53:CA:1446:A:H2'	53:CA:1447:A:C5'	2.38	0.53
22:BA:1817:G:OP1	24:BC:86:ARG:NH2	2.42	0.53
23:BB:56:G:H5''	23:BB:57:A:OP1	2.09	0.53
1:AA:1039:G:O2'	1:AA:1040:U:H5'	2.07	0.53
17:AQ:46:HIS:HA	17:AQ:70:LYS:HE3	1.91	0.53
22:BA:1385:A:C4	22:BA:1386:C:C5	2.97	0.53
22:BA:1115:G:HO2'	22:BA:1116:G:P	2.30	0.53
5:AE:136:VAL:O	5:AE:137:ARG:HB2	2.09	0.53
39:BR:64:VAL:O	39:BR:65:ALA:HB3	2.09	0.53
57:DA:109:C:H4'	57:DA:348:A:H4'	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:424:G:H2'	53:CA:425:G:C8	2.43	0.53
33:DL:3:LEU:O	33:DL:4:ASN:C	2.47	0.53
57:DA:1320:C:HO2'	57:DA:1321:A:H8	1.56	0.53
37:BP:22:GLY:O	37:BP:109:ILE:HD11	2.09	0.53
22:BA:634:C:H2'	22:BA:635:C:C6	2.43	0.53
45:DX:36:ARG:HA	45:DX:47:THR:HA	1.90	0.53
36:BO:88:LYS:O	36:BO:89:ASP:HB2	2.09	0.53
53:CA:458:U:H2'	53:CA:459:A:C8	2.43	0.53
22:BA:483:A:C8	22:BA:484:C:C5	2.97	0.53
8:CH:114:ALA:O	8:CH:117:GLN:HB3	2.09	0.53
1:AA:139:A:C2'	1:AA:140:U:H5'	2.39	0.53
22:BA:1688:U:H1'	22:BA:1701:A:C6	2.43	0.53
25:DD:56:LYS:HB3	25:DD:56:LYS:NZ	2.24	0.53
1:AA:991:U:H4'	1:AA:992:U:OP1	2.09	0.53
24:BC:210:ALA:O	24:BC:215:VAL:HG23	2.09	0.53
15:AO:60:SER:O	15:AO:64:LYS:HG3	2.08	0.53
22:BA:1132:U:H3'	22:BA:1133:A:H5''	1.90	0.53
21:CU:16:ARG:HD2	21:CU:19:LYS:NZ	2.24	0.53
20:AT:79:THR:O	20:AT:82:ILE:HG13	2.08	0.53
57:DA:2331:G:C1'	44:DW:40:ARG:HB3	2.38	0.53
53:CA:1493:A:C8	53:CA:1493:A:OP1	2.62	0.53
52:D4:7:VAL:CG1	52:D4:8:LYS:N	2.71	0.53
35:DN:96:ARG:HG2	35:DN:98:LEU:HD13	1.91	0.53
57:DA:1255:U:H2'	26:DE:68:ALA:HB2	1.91	0.53
34:DM:38:ARG:O	34:DM:126:ILE:HG21	2.08	0.53
15:AO:23:SER:HB3	15:AO:26:VAL:HG23	1.89	0.53
34:DM:23:GLY:O	34:DM:101:VAL:HG12	2.09	0.53
57:DA:1607:C:H4'	57:DA:1608:A:O5'	2.09	0.53
53:CA:1242:G:C2	53:CA:1243:C:H1'	2.44	0.53
53:CA:537:G:H2'	53:CA:538:G:C8	2.44	0.53
53:CA:1346:A:C8	53:CA:1348:U:N3	2.77	0.53
26:BE:119:ILE:O	26:BE:187:VAL:O	2.25	0.53
38:DQ:91:ARG:NE	39:DR:11:GLN:HB2	2.24	0.53
1:AA:427:U:C4	1:AA:428:G:C6	2.96	0.53
43:DV:30:ILE:HB	43:DV:38:LEU:HB3	1.91	0.53
53:CA:1523:G:P	11:CK:124:LYS:HZ3	2.32	0.53
32:DK:70:ARG:HH11	32:DK:76:VAL:CG2	2.21	0.53
1:AA:108:G:H2'	1:AA:109:A:OP1	2.08	0.53
19:AS:28:LYS:HB3	19:AS:29:PRO:CD	2.38	0.53
42:DU:39:ASN:HB3	42:DU:62:ALA:HB3	1.91	0.53
57:DA:1008:A:H5''	31:DJ:37:ARG:HH22	1.74	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:115:ASP:O	2:CB:119:GLN:HB2	2.08	0.53
57:DA:1189:A:H2'	57:DA:1190:G:O4'	2.09	0.53
28:DG:106:LEU:HB2	28:DG:108:PHE:CE1	2.38	0.53
47:BZ:2:LYS:HE2	47:BZ:2:LYS:O	2.09	0.53
30:BI:126:ARG:HA	30:BI:129:GLU:CG	2.39	0.53
31:BJ:56:VAL:HG12	31:BJ:57:LEU:N	2.24	0.53
53:CA:177:G:O2'	53:CA:1448:C:H4'	2.09	0.53
47:BZ:29:ARG:C	47:BZ:30:ARG:HG3	2.29	0.53
57:DA:370:G:C6	57:DA:424:G:C5	2.97	0.53
53:CA:166:U:OP2	53:CA:166:U:H6	1.92	0.53
29:BH:80:ILE:HG23	29:BH:147:VAL:HG21	1.90	0.53
14:AN:14:ALA:HB1	14:AN:18:LYS:NZ	2.24	0.53
50:B2:12:ARG:CZ	50:B2:12:ARG:HB2	2.38	0.53
21:AU:4:LYS:O	21:AU:4:LYS:HD2	2.08	0.53
37:BP:80:VAL:HG12	37:BP:81:ASP:N	2.24	0.53
39:DR:14:VAL:HG22	39:DR:15:SER:O	2.09	0.53
26:DE:23:PHE:HB2	26:DE:114:ARG:HH22	1.74	0.53
25:BD:119:ALA:HB2	25:BD:165:MET:HB3	1.90	0.53
22:BA:2520:C:C6	22:BA:2567:G:H1'	2.43	0.53
57:DA:1638:C:H4'	57:DA:2710:C:O2	2.09	0.53
57:DA:1614:A:N6	40:DS:91:GLY:HA2	2.24	0.53
1:AA:662:U:H2'	1:AA:663:A:C8	2.44	0.53
4:CD:159:GLU:OE2	4:CD:160:LEU:HD22	2.08	0.53
38:DQ:9:ALA:O	38:DQ:12:ARG:HG2	2.08	0.53
53:CA:384:G:H2'	53:CA:385:C:C6	2.44	0.53
3:AC:24:ASN:HD22	3:AC:25:THR:H	1.55	0.53
1:AA:1333:A:H2'	1:AA:1334:G:O4'	2.09	0.53
38:BQ:78:PHE:CZ	38:BQ:82:LEU:HD11	2.44	0.53
38:BQ:86:SER:HB2	39:BR:50:GLY:C	2.29	0.53
39:BR:49:ILE:HG22	39:BR:54:VAL:HG12	1.90	0.53
44:BW:9:THR:O	44:BW:10:ARG:O	2.27	0.53
27:BF:105:ILE:O	27:BF:109:ARG:HD3	2.08	0.53
2:CB:114:LYS:HA	2:CB:117:GLU:CG	2.30	0.53
57:DA:804:A:H2'	57:DA:806:C:C4	2.44	0.53
57:DA:1388:G:H2'	57:DA:1389:G:H8	1.73	0.53
57:DA:1341:G:C2	41:DT:84:TYR:CE2	2.97	0.53
57:DA:298:G:HO2'	57:DA:322:A:H2	1.57	0.53
22:BA:2681:C:C2	22:BA:2724:U:O4	2.61	0.53
4:CD:8:LEU:HD22	4:CD:21:LYS:HD2	1.91	0.53
57:DA:1329:U:HO2'	57:DA:1330:C:P	2.32	0.53
53:CA:85:U:O2	53:CA:85:U:O4'	2.27	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:374:A:H5''	1:AA:452:A:N1	2.24	0.53
57:DA:234:U:O2'	57:DA:235:U:C5'	2.52	0.53
22:BA:933:A:C2'	22:BA:933:A:N3	2.72	0.53
25:DD:24:VAL:HG23	25:DD:190:LYS:HA	1.90	0.53
24:BC:134:ILE:O	24:BC:166:ARG:NH1	2.41	0.53
23:BB:46:A:C5	23:BB:47:C:C5	2.97	0.53
22:BA:2729:G:H8	22:BA:2729:G:H5''	1.74	0.53
49:B1:8:ILE:HD11	49:B1:24:LYS:HG2	1.90	0.53
24:DC:28:PRO:HG3	24:DC:62:ARG:NH1	2.23	0.53
1:AA:66:A:O4'	1:AA:173:U:C4	2.62	0.53
46:DY:28:LEU:HD22	46:DY:28:LEU:O	2.09	0.53
53:CA:198:G:N3	53:CA:199:A:C8	2.77	0.53
41:DT:69:ARG:HD2	41:DT:70:HIS:H	1.74	0.53
1:AA:107:G:C2'	1:AA:108:G:H5'	2.39	0.53
57:DA:716:A:C3'	57:DA:717:C:H5''	2.39	0.53
57:DA:1049:C:H2'	57:DA:1050:A:H8	1.74	0.53
57:DA:2287:A:HO2'	57:DA:2288:A:H3'	1.73	0.53
31:DJ:94:ALA:O	31:DJ:95:ARG:HB3	2.09	0.53
2:CB:128:LEU:HB3	2:CB:131:LYS:HB3	1.89	0.53
1:AA:600:A:H2'	1:AA:601:G:C8	2.44	0.53
28:DG:167:VAL:HG23	28:DG:168:VAL:N	2.21	0.53
12:AL:87:LYS:HB2	12:AL:87:LYS:NZ	2.24	0.53
57:DA:1735:A:H2'	57:DA:1736:U:H6	1.74	0.53
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.44	0.53
3:CC:15:LYS:HG3	3:CC:16:PRO:HD2	1.91	0.53
53:CA:994:A:O2'	53:CA:995:C:H6	1.92	0.53
1:AA:1453:G:H2'	1:AA:1454:G:O4'	2.09	0.53
26:BE:160:ALA:O	26:BE:161:ALA:HB3	2.09	0.53
53:CA:295:C:C5	53:CA:296:U:C5	2.97	0.53
53:CA:967:C:N3	53:CA:968:A:N6	2.56	0.53
22:BA:2319:G:HO2'	22:BA:2320:U:H5	1.57	0.53
53:CA:552:U:C2	53:CA:553:A:C8	2.97	0.53
22:BA:1298:C:C2	22:BA:1643:G:N2	2.77	0.53
57:DA:718:A:C3'	57:DA:719:C:H5'	2.39	0.53
34:DM:97:GLN:HB2	34:DM:98:PRO:HD2	1.91	0.53
1:AA:1034:G:H2'	1:AA:1035:A:C8	2.43	0.53
12:AL:111:GLN:O	12:AL:112:ALA:HB3	2.09	0.53
22:BA:2068:U:H5''	22:BA:2068:U:H6	1.74	0.53
31:DJ:77:HIS:CE1	31:DJ:83:GLY:HA3	2.44	0.53
6:CF:6:ILE:HD12	6:CF:6:ILE:H	1.72	0.53
22:BA:2193:G:H2'	22:BA:2194:U:C6	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2334:U:H4'	22:BA:2335:A:OP2	2.09	0.52
58:DB:57:A:C2'	58:DB:58:A:H8	2.22	0.52
57:DA:727:A:C2'	57:DA:728:G:C8	2.92	0.52
12:AL:82:ARG:HB2	12:AL:97:VAL:HG23	1.91	0.52
57:DA:1277:G:O2'	35:DN:24:MET:HB2	2.09	0.52
57:DA:322:A:H3'	26:DE:163:ASN:HD21	1.74	0.52
53:CA:560:A:C8	53:CA:566:G:C4	2.98	0.52
5:CE:104:ILE:N	5:CE:122:VAL:H	2.00	0.52
53:CA:1301:U:O2'	53:CA:1302:C:C6	2.60	0.52
57:DA:508:A:N6	40:DS:9:HIS:NE2	2.56	0.52
57:DA:1441:G:C2	57:DA:1442:U:C2	2.97	0.52
1:AA:299:G:C6	1:AA:300:A:C6	2.96	0.52
4:AD:113:ALA:O	4:AD:116:LEU:HB2	2.08	0.52
53:CA:738:C:C5	53:CA:739:C:H5	2.27	0.52
50:D2:45:SER:C	50:D2:46:LYS:HD2	2.30	0.52
53:CA:17:U:H2'	53:CA:18:C:C6	2.43	0.52
22:BA:2728:U:HO2'	22:BA:2729:G:H8	1.53	0.52
30:DI:49:GLU:HG3	30:DI:54:ILE:HD11	1.90	0.52
57:DA:2700:A:C2	57:DA:2708:G:C2	2.97	0.52
57:DA:1567:G:H5''	24:DC:84:PRO:HG3	1.90	0.52
1:AA:197:A:H4'	1:AA:198:G:O5'	2.07	0.52
21:CU:34:ARG:O	21:CU:35:GLU:O	2.26	0.52
1:AA:978:A:OP2	1:AA:1362:A:N6	2.42	0.52
35:DN:2:ARG:HD2	35:DN:2:ARG:O	2.09	0.52
59:DF:45:ASP:C	59:DF:47:LYS:H	2.12	0.52
1:AA:1257:A:H4'	1:AA:1258:G:OP2	2.08	0.52
57:DA:1010:A:O2'	57:DA:1011:G:H5''	2.09	0.52
57:DA:1364:G:N2	57:DA:1367:A:OP2	2.42	0.52
4:CD:100:VAL:HG21	4:CD:136:VAL:HG21	1.91	0.52
4:CD:93:LEU:O	4:CD:96:ARG:HG3	2.09	0.52
55:CM:64:VAL:HG12	55:CM:65:GLU:N	2.20	0.52
22:BA:946:C:O2'	22:BA:947:A:C5'	2.57	0.52
24:DC:32:LEU:O	24:DC:33:LEU:HD23	2.09	0.52
53:CA:1134:G:C5	53:CA:1135:U:H1'	2.44	0.52
24:BC:69:ASN:O	24:BC:70:LYS:C	2.46	0.52
57:DA:2266:A:O2'	57:DA:2267:A:OP2	2.25	0.52
53:CA:1190:G:H5'	3:CC:175:HIS:NE2	2.24	0.52
3:AC:119:ILE:CG2	3:AC:197:VAL:HG11	2.38	0.52
14:CN:33:VAL:HG22	14:CN:40:ARG:NH2	2.23	0.52
32:DK:59:LYS:HE3	32:DK:89:ASN:CG	2.29	0.52
26:BE:131:THR:HG23	26:BE:160:ALA:HA	1.89	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2886:A:N7	48:D0:39:ARG:NE	2.57	0.52
22:BA:1639:C:C2'	22:BA:1640:A:H5'	2.40	0.52
22:BA:1538:G:H2'	22:BA:1539:U:C6	2.44	0.52
1:AA:508:U:O2'	1:AA:509:A:H8	1.91	0.52
36:BO:52:SER:OG	36:BO:54:VAL:HG12	2.09	0.52
53:CA:614:C:N3	53:CA:615:G:C8	2.77	0.52
22:BA:88:G:C2	22:BA:89:A:C8	2.97	0.52
27:BF:127:TYR:O	27:BF:128:SER:HB2	2.08	0.52
32:BK:99:ILE:CG2	32:BK:100:PHE:N	2.72	0.52
1:AA:1102:A:O2'	1:AA:1103:C:H5'	2.09	0.52
22:BA:403:U:O2'	22:BA:404:A:OP2	2.18	0.52
45:DX:36:ARG:HG2	45:DX:47:THR:HB	1.90	0.52
22:BA:936:A:H2'	22:BA:937:C:C6	2.44	0.52
53:CA:284:C:H2'	53:CA:285:C:H6	1.73	0.52
53:CA:192:A:H8	53:CA:192:A:O5'	1.92	0.52
14:CN:100:TRP:CD1	14:CN:100:TRP:C	2.83	0.52
27:BF:123:GLY:HA2	27:BF:162:ASP:OD2	2.09	0.52
32:BK:14:SER:OG	32:BK:86:LEU:HD12	2.10	0.52
22:BA:2525:G:C2	22:BA:2539:C:C2	2.97	0.52
38:DQ:90:ASP:O	38:DQ:94:LEU:HB2	2.09	0.52
57:DA:1213:A:H2'	57:DA:1214:A:C8	2.43	0.52
22:BA:1955:U:H5	22:BA:2557:G:N2	2.08	0.52
15:CO:7:THR:O	15:CO:11:VAL:HG23	2.09	0.52
22:BA:2572:A:N7	25:BD:150:GLN:HB3	2.23	0.52
22:BA:2333:A:H4'	22:BA:2334:U:O5'	2.09	0.52
27:BF:105:ILE:C	27:BF:108:PRO:HD2	2.30	0.52
57:DA:806:C:H2'	57:DA:807:U:H6	1.74	0.52
41:DT:20:ALA:HB1	41:DT:31:VAL:HG11	1.90	0.52
53:CA:1279:G:H5'	10:CJ:9:ARG:HH12	1.74	0.52
53:CA:765:G:O6	53:CA:811:C:C5	2.63	0.52
53:CA:577:G:H4'	53:CA:816:A:H2'	1.92	0.52
15:AO:16:ARG:HD3	15:AO:20:ASP:OD2	2.08	0.52
31:DJ:45:THR:H	31:DJ:46:PRO:HD3	1.73	0.52
34:DM:27:SER:N	34:DM:66:ARG:HH22	2.07	0.52
41:BT:15:HIS:O	41:BT:17:SER:N	2.43	0.52
5:AE:149:PRO:HG2	5:AE:150:GLU:HG2	1.92	0.52
57:DA:2400:G:H2'	57:DA:2401:U:O4'	2.09	0.52
57:DA:53:A:C2	57:DA:179:C:H4'	2.44	0.52
22:BA:364:C:O2'	22:BA:365:U:H5'	2.08	0.52
14:AN:60:ARG:HA	63:AN:302:HOH:O	2.09	0.52
22:BA:2725:A:O2'	22:BA:2726:A:H2'	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:84:ALA:HB3	29:DH:148:ALA:HB2	1.91	0.52
44:DW:24:ARG:HA	44:DW:66:VAL:H	1.74	0.52
46:DY:57:LEU:O	46:DY:57:LEU:HD13	2.09	0.52
57:DA:748:G:O5'	40:DS:89:ALA:HB2	2.08	0.52
26:BE:75:SER:HB3	26:BE:78:TRP:HB2	1.91	0.52
22:BA:323:C:N4	22:BA:333:G:C5	2.77	0.52
57:DA:1649:G:C6	57:DA:2009:A:C6	2.97	0.52
53:CA:345:C:H4'	53:CA:346:G:C5'	2.38	0.52
6:CF:5:GLU:OE2	18:CR:23:LYS:HE2	2.09	0.52
53:CA:320:A:C2	53:CA:334:C:N3	2.78	0.52
57:DA:1264:A:C6	57:DA:1265:A:N6	2.77	0.52
57:DA:1945:G:H2'	57:DA:1946:U:C6	2.44	0.52
22:BA:2403:C:C4	22:BA:2415:G:C2	2.98	0.52
22:BA:2856:A:N6	22:BA:2857:G:C6	2.78	0.52
57:DA:2623:G:H4'	57:DA:2825:G:H8	1.74	0.52
22:BA:963:U:H2'	22:BA:964:C:C6	2.45	0.52
53:CA:1202:U:H2'	53:CA:1203:C:C6	2.45	0.52
40:DS:39:THR:O	40:DS:40:ASN:HB3	2.09	0.52
3:AC:6:PRO:HG2	3:AC:183:TYR:CG	2.44	0.52
13:AM:113:LYS:H	13:AM:114:PRO:HD2	1.75	0.52
3:CC:116:ALA:HB2	3:CC:199:VAL:HG21	1.91	0.52
22:BA:2673:G:C2	22:BA:2674:G:C8	2.97	0.52
22:BA:1833:C:C5	22:BA:1834:U:C5	2.98	0.52
57:DA:836:G:C5	57:DA:837:C:C4	2.96	0.52
50:B2:12:ARG:NH2	50:B2:12:ARG:HB2	2.25	0.52
48:D0:37:HIS:HB2	48:D0:41:HIS:HE1	1.74	0.52
48:B0:27:LEU:H	48:B0:27:LEU:CD2	2.22	0.52
57:DA:632:A:H4'	33:DL:68:SER:HA	1.91	0.52
22:BA:745:G:C2'	22:BA:746:U:H5'	2.40	0.52
55:CM:68:LEU:O	55:CM:72:ILE:HG22	2.09	0.52
57:DA:1794:A:H1'	57:DA:1900:A:C2	2.44	0.52
37:DP:32:VAL:HA	37:DP:37:LYS:HA	1.91	0.52
1:AA:1399:C:H4'	1:AA:1400:C:O5'	2.08	0.52
48:D0:29:VAL:HG21	48:D0:34:GLY:HA2	1.89	0.52
57:DA:1838:C:C2	57:DA:1899:A:C2	2.98	0.52
57:DA:929:U:O2'	57:DA:930:G:H5'	2.09	0.52
34:DM:13:HIS:O	34:DM:14:LYS:HB2	2.09	0.52
34:DM:119:LEU:O	34:DM:119:LEU:HD23	2.09	0.52
1:AA:809:G:C6	1:AA:810:C:C5	2.97	0.52
17:AQ:40:THR:HG22	17:AQ:41:THR:N	2.25	0.52
38:BQ:85:ALA:O	38:BQ:86:SER:O	2.27	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:121:ASN:ND2	5:AE:122:VAL:HG13	2.24	0.52
22:BA:1060:U:H5''	22:BA:1061:U:OP1	2.09	0.52
24:DC:9:SER:OG	24:DC:12:ARG:HB2	2.08	0.52
57:DA:2812:G:C6	57:DA:2813:A:C6	2.97	0.52
39:DR:49:ILE:HD13	39:DR:53:PHE:H	1.75	0.52
57:DA:247:G:H4'	57:DA:386:G:C4	2.44	0.52
57:DA:1337:G:C8	57:DA:1337:G:OP2	2.62	0.52
57:DA:1388:G:O2'	57:DA:1389:G:C5'	2.54	0.52
10:CJ:40:ILE:HG22	10:CJ:42:LEU:CD1	2.39	0.52
57:DA:1204:A:O4'	57:DA:1206:G:C5	2.63	0.52
3:AC:55:VAL:O	3:AC:65:VAL:HA	2.09	0.52
53:CA:1239:A:H3'	54:CG:118:ARG:NH2	2.24	0.52
55:CM:18:LEU:H	55:CM:18:LEU:HD12	1.74	0.52
57:DA:231:A:O2'	57:DA:232:G:H5'	2.10	0.52
1:AA:76:G:C2	1:AA:95:C:N3	2.77	0.52
57:DA:2021:C:H2'	57:DA:2021:C:O2	2.09	0.52
24:BC:80:LEU:HD13	24:BC:109:LEU:HG	1.91	0.52
29:BH:8:LYS:O	29:BH:9:VAL:CB	2.54	0.52
57:DA:1491:G:C2	57:DA:1492:G:C8	2.98	0.52
43:DV:77:VAL:HG23	43:DV:89:ILE:CG2	2.40	0.52
22:BA:2748:A:O3'	28:BG:3:VAL:HG11	2.09	0.52
57:DA:379:G:C5	57:DA:396:G:C6	2.97	0.52
59:DF:177:ARG:CZ	59:DF:178:LYS:H	2.22	0.52
2:AB:100:LEU:HB3	2:AB:174:GLU:HG2	1.90	0.52
24:BC:20:ASN:CG	24:BC:23:LEU:HD23	2.30	0.52
4:AD:57:LYS:HG2	4:AD:202:LEU:CD2	2.38	0.52
53:CA:587:G:H4'	8:CH:3:GLN:CA	2.37	0.52
29:BH:27:ARG:HH12	29:BH:38:PRO:HG3	1.74	0.52
12:CL:97:VAL:HG23	12:CL:100:ALA:HB3	1.91	0.52
25:DD:51:THR:HG21	25:DD:75:ALA:O	2.09	0.52
12:AL:86:VAL:CG1	12:AL:89:LEU:HD23	2.39	0.52
22:BA:2415:G:H4'	33:BL:66:PHE:HB2	1.91	0.52
22:BA:2019:A:H4'	38:BQ:33:VAL:HG21	1.91	0.52
1:AA:1118:U:H2'	1:AA:1119:C:H6	1.74	0.52
9:AI:12:LYS:H	9:AI:105:ARG:HH12	1.55	0.52
22:BA:1639:C:O2'	22:BA:1640:A:H5'	2.09	0.52
22:BA:2841:C:H2'	22:BA:2842:G:C8	2.44	0.52
22:BA:2109:U:O4	22:BA:2110:G:C5	2.62	0.52
57:DA:2185:U:H2'	57:DA:2186:G:H8	1.75	0.52
26:DE:59:PRO:HB2	26:DE:67:ARG:NH2	2.24	0.52
26:DE:65:THR:HG23	26:DE:67:ARG:HG3	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.45	0.52
22:BA:907:G:H2'	22:BA:908:C:H5'	1.91	0.52
1:AA:1384:C:H2'	1:AA:1385:G:C8	2.44	0.52
22:BA:324:A:N6	22:BA:339:U:O4'	2.42	0.52
54:CG:99:ALA:O	54:CG:103:ILE:HG13	2.08	0.52
57:DA:1161:C:H2'	57:DA:1162:G:H8	1.74	0.52
37:BP:92:ARG:O	37:BP:92:ARG:HG3	2.10	0.52
57:DA:2011:U:H2'	57:DA:2012:G:O4'	2.09	0.52
37:DP:13:LYS:H	37:DP:13:LYS:HD2	1.74	0.52
31:BJ:27:ARG:HH11	31:BJ:27:ARG:HG2	1.74	0.52
32:BK:111:LYS:H	32:BK:111:LYS:HE2	1.72	0.52
57:DA:58:G:N2	57:DA:59:U:H1'	2.24	0.52
22:BA:674:G:H5''	26:BE:71:GLY:HA3	1.91	0.52
27:BF:134:GLN:CG	27:BF:135:ILE:H	2.19	0.52
57:DA:2748:A:C4	57:DA:2757:A:N6	2.77	0.52
21:AU:7:GLU:HB2	21:AU:11:PHE:CE1	2.45	0.52
53:CA:1249:C:H4'	9:CI:74:GLN:HE22	1.74	0.52
57:DA:2812:G:H2'	57:DA:2813:A:C8	2.45	0.52
10:CJ:33:GLY:O	10:CJ:35:GLN:N	2.42	0.52
41:DT:29:THR:H	41:DT:87:LEU:CB	2.19	0.52
57:DA:1087:G:C5	57:DA:1089:A:C2	2.97	0.52
53:CA:1129:C:O2'	53:CA:1130:A:H8	1.88	0.52
1:AA:373:A:C2	1:AA:374:A:C8	2.97	0.52
1:AA:374:A:H2'	1:AA:375:U:C6	2.44	0.52
53:CA:733:G:O2'	53:CA:734:G:H5''	2.09	0.52
20:CT:4:LYS:HE3	20:CT:5:SER:N	2.15	0.52
22:BA:915:C:C6	22:BA:915:C:H5''	2.42	0.52
53:CA:1458:G:O3'	20:CT:22:SER:CA	2.53	0.52
1:AA:511:C:H2'	1:AA:534:U:O2	2.09	0.52
28:BG:22:VAL:HG22	28:BG:36:LEU:CD1	2.35	0.52
57:DA:858:G:H2'	57:DA:2268:A:N3	2.25	0.52
57:DA:64:A:H8	57:DA:64:A:O5'	1.93	0.52
36:BO:106:LEU:HD12	36:BO:106:LEU:C	2.29	0.52
36:BO:67:ASN:O	36:BO:69:ASP:N	2.42	0.52
57:DA:2290:G:C5	57:DA:2291:U:C4	2.98	0.52
22:BA:26:G:H1'	22:BA:514:A:N6	2.24	0.52
22:BA:581:C:O2'	22:BA:582:A:H5'	2.10	0.52
30:BI:105:LEU:HD23	30:BI:108:ILE:HG21	1.91	0.52
30:BI:78:LEU:HD23	30:BI:81:LYS:HE3	1.90	0.52
10:AJ:35:GLN:HG2	10:AJ:77:VAL:CB	2.37	0.52
2:CB:47:PRO:HA	2:CB:50:ASN:HB2	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:183:C:H2'	53:CA:183:C:O2	2.08	0.52
46:BY:53:VAL:O	46:BY:57:LEU:HD23	2.09	0.52
12:CL:70:GLY:C	12:CL:98:ARG:HH22	2.13	0.52
31:BJ:124:VAL:O	31:BJ:125:TYR:HB2	2.09	0.52
57:DA:2077:A:OP1	57:DA:2238:G:N1	2.41	0.52
57:DA:40:U:C4	57:DA:41:C:C4	2.97	0.52
57:DA:2248:C:H3'	57:DA:2249:U:C6	2.45	0.52
53:CA:1093:A:C5	53:CA:1095:U:O4'	2.62	0.52
40:DS:66:ILE:HD13	40:DS:66:ILE:N	2.23	0.52
27:BF:12:VAL:HG13	27:BF:13:LYS:H	1.74	0.52
57:DA:736:C:O5'	57:DA:736:C:H6	1.92	0.52
1:AA:994:A:C2	14:AN:4:SER:HB2	2.44	0.52
57:DA:749:A:H1'	57:DA:1618:A:OP1	2.08	0.52
57:DA:430:A:OP2	57:DA:431:U:H5	1.92	0.52
57:DA:1944:U:O4'	57:DA:1955:U:H1'	2.09	0.52
57:DA:845:A:N1	57:DA:932:U:O2	2.42	0.52
57:DA:2738:A:H2	57:DA:2766:A:H61	1.57	0.52
57:DA:1866:A:H2'	57:DA:1867:G:O4'	2.10	0.52
1:AA:1098:C:C2	1:AA:1099:G:C8	2.97	0.52
57:DA:416:U:C4	57:DA:417:C:C4	2.97	0.52
51:D3:50:SER:O	51:D3:52:GLY:N	2.42	0.52
27:BF:33:ILE:HG12	27:BF:155:ILE:HG12	1.91	0.52
25:DD:88:GLU:O	25:DD:89:GLU:HG3	2.08	0.52
2:CB:170:ILE:O	2:CB:174:GLU:HG3	2.09	0.52
30:BI:107:GLU:O	30:BI:111:THR:HG23	2.10	0.52
37:DP:77:SER:OG	37:DP:79:VAL:HG22	2.09	0.52
3:CC:33:ASP:O	3:CC:37:LYS:HG2	2.10	0.52
30:BI:75:ALA:HB3	30:BI:131:THR:HG21	1.91	0.52
1:AA:1411:C:C2'	1:AA:1412:C:H5'	2.39	0.52
14:CN:6:LYS:O	14:CN:10:VAL:HG23	2.08	0.52
22:BA:2699:C:H2'	22:BA:2700:A:O4'	2.09	0.52
2:AB:105:THR:O	2:AB:105:THR:HG22	2.10	0.52
30:BI:86:LYS:HD2	30:BI:86:LYS:H	1.74	0.52
25:DD:111:GLY:HA3	25:DD:194:PRO:HG2	1.89	0.52
28:BG:84:LYS:O	28:BG:85:LYS:HB2	2.08	0.52
57:DA:2748:A:C2	57:DA:2757:A:C5	2.97	0.52
57:DA:1775:U:H2'	57:DA:1776:G:O5'	2.08	0.52
10:CJ:80:THR:HB	10:CJ:82:LYS:NZ	2.24	0.52
1:AA:975:A:H8	1:AA:1357:A:HO2'	1.56	0.52
57:DA:648:G:H2'	57:DA:649:G:C8	2.44	0.52
57:DA:1079:C:O2'	57:DA:1080:A:O4'	2.28	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1073:U:C2	53:CA:1074:G:C8	2.97	0.52
5:CE:137:ARG:HA	5:CE:140:ILE:HG13	1.91	0.52
8:AH:105:THR:CG2	8:AH:120:LEU:HD13	2.32	0.52
25:BD:100:LEU:HB3	25:BD:101:PHE:CD1	2.45	0.52
6:CF:91:ARG:O	6:CF:93:LYS:HE3	2.10	0.52
2:AB:75:ALA:O	2:AB:79:VAL:HG23	2.09	0.52
24:BC:141:HIS:CB	24:BC:190:THR:HB	2.36	0.52
41:DT:9:LYS:HG2	41:DT:9:LYS:O	2.09	0.52
24:DC:170:TYR:HD2	24:DC:183:VAL:O	1.92	0.52
29:BH:96:THR:HG23	29:BH:96:THR:O	2.10	0.52
1:AA:1320:C:N4	19:AS:35:ARG:HB2	2.25	0.52
53:CA:1102:A:H5''	53:CA:1102:A:C8	2.41	0.52
35:DN:84:GLY:O	35:DN:88:ALA:HB2	2.09	0.52
57:DA:2191:A:H3'	57:DA:2192:U:H6	1.73	0.52
13:AM:3:ILE:HA	13:AM:56:ARG:NH1	2.24	0.52
27:BF:39:VAL:CG1	27:BF:49:LEU:HD13	2.39	0.52
1:AA:1253:G:O2'	1:AA:1254:A:H5'	2.10	0.52
57:DA:1649:G:H2'	57:DA:1650:A:H8	1.75	0.52
57:DA:480:A:H3'	57:DA:481:G:H5'	1.89	0.52
8:CH:1:SER:C	8:CH:3:GLN:N	2.63	0.52
57:DA:7:G:H4'	31:DJ:15:TRP:CH2	2.45	0.52
39:BR:67:GLY:C	39:BR:93:PHE:CE2	2.83	0.52
22:BA:301:G:H1'	22:BA:302:C:C6	2.44	0.52
46:DY:4:LYS:HB2	46:DY:4:LYS:NZ	2.24	0.52
58:DB:94:A:OP1	43:DV:19:ARG:CD	2.56	0.52
8:AH:93:LYS:CE	8:AH:116:ARG:HH12	2.23	0.52
53:CA:1029:U:H4'	53:CA:1032:G:H1	1.73	0.52
48:B0:45:ASP:O	48:B0:52:LYS:HE3	2.09	0.52
4:AD:189:ASP:O	4:AD:190:LEU:HB3	2.10	0.52
22:BA:2345:G:C4	22:BA:2381:A:C2	2.97	0.52
57:DA:1130:U:O2'	57:DA:1131:G:H8	1.93	0.52
57:DA:223:A:C5	57:DA:422:A:N7	2.77	0.52
22:BA:49:A:N6	22:BA:177:G:C4	2.78	0.52
33:BL:7:SER:HB2	33:BL:8:PRO:CD	2.40	0.52
57:DA:1157:G:H2'	57:DA:1158:C:C6	2.44	0.52
57:DA:2049:G:N2	57:DA:2620:C:C2	2.77	0.52
22:BA:484:C:H2'	22:BA:485:C:H6	1.74	0.52
57:DA:929:U:H1'	47:DZ:25:GLY:O	2.09	0.52
5:AE:86:GLY:O	5:AE:93:VAL:HB	2.10	0.52
57:DA:2372:U:H1'	49:D1:45:HIS:CE1	2.45	0.52
22:BA:777:G:O2'	22:BA:778:G:H5'	2.08	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:115:G:C2	53:CA:289:G:N7	2.77	0.52
1:AA:188:C:O2	1:AA:188:C:H2'	2.08	0.52
44:DW:70:VAL:O	44:DW:70:VAL:HG22	2.10	0.52
22:BA:1524:G:O2'	22:BA:1525:A:H5'	2.10	0.52
25:BD:149:ASN:OD1	25:BD:150:GLN:N	2.42	0.52
22:BA:2352:A:C2	44:BW:30:VAL:CG1	2.84	0.52
21:CU:24:LYS:CG	21:CU:25:ALA:N	2.55	0.52
57:DA:2218:G:H2'	57:DA:2219:U:H6	1.75	0.52
10:CJ:52:LEU:HB2	14:CN:80:ARG:HE	1.75	0.52
57:DA:1993:U:O2'	57:DA:1994:C:C5'	2.57	0.52
57:DA:30:G:C5	57:DA:31:C:C4	2.98	0.52
43:BV:80:HIS:HD2	43:BV:83:LYS:CB	2.22	0.52
53:CA:82:G:C5	53:CA:89:U:C5	2.98	0.52
53:CA:91:U:C4	53:CA:92:U:C4	2.98	0.52
4:AD:121:ALA:C	4:AD:122:ILE:HD13	2.30	0.52
32:BK:20:MET:O	32:BK:41:ILE:HG13	2.09	0.52
57:DA:2851:A:C2'	57:DA:2852:G:C8	2.92	0.52
12:AL:29:LYS:O	12:AL:80:LEU:HD12	2.10	0.52
51:B3:21:PHE:HB2	51:B3:49:VAL:HG11	1.90	0.52
49:B1:9:LYS:O	49:B1:50:GLU:HG3	2.09	0.52
22:BA:2199:A:H3'	22:BA:2200:C:H6	1.74	0.52
2:AB:165:ALA:HA	2:AB:172:ILE:HD11	1.92	0.52
2:AB:141:GLU:HA	2:AB:144:GLU:HB2	1.91	0.52
1:AA:1053:G:C6	1:AA:1199:U:C2	2.98	0.52
57:DA:68:G:C6	57:DA:69:C:C4	2.97	0.52
16:AP:20:VAL:HG21	16:AP:32:PHE:HB2	1.90	0.52
22:BA:341:C:H2'	22:BA:342:A:O4'	2.10	0.52
22:BA:2773:C:OP1	25:BD:171:THR:CG2	2.57	0.52
31:BJ:20:ALA:O	31:BJ:21:THR:O	2.28	0.52
1:AA:194:C:O2'	1:AA:195:A:H5'	2.09	0.52
22:BA:215:G:C4'	22:BA:216:A:H4'	2.40	0.52
29:DH:120:GLY:O	29:DH:121:VAL:HB	2.09	0.52
57:DA:2668:G:O2'	57:DA:2669:G:O5'	2.27	0.52
3:CC:61:LYS:O	3:CC:96:VAL:HB	2.09	0.52
22:BA:959:A:H62	34:BM:82:MET:HE3	1.75	0.52
57:DA:720:U:H2'	57:DA:721:A:H8	1.74	0.52
59:DF:103:ILE:HG21	59:DF:173:ASP:O	2.09	0.52
24:BC:139:THR:O	24:BC:161:VAL:O	2.27	0.52
31:DJ:106:LYS:HE2	31:DJ:109:LEU:HB2	1.91	0.52
22:BA:2319:G:O2'	22:BA:2320:U:H5	1.92	0.52
22:BA:2320:U:H4'	22:BA:2321:U:H5''	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1084:G:C6	1:AA:1085:U:O4	2.62	0.52
1:AA:122:G:H2'	1:AA:123:U:C6	2.44	0.52
1:AA:1073:U:O2'	2:AB:102:ASN:ND2	2.43	0.52
22:BA:976:G:C2	22:BA:977:G:N7	2.77	0.52
15:CO:54:GLY:O	15:CO:58:MET:HG3	2.09	0.52
3:AC:22:PHE:CD1	10:AJ:12:ALA:HA	2.45	0.52
38:BQ:75:TYR:CZ	38:BQ:79:ILE:HG13	2.43	0.52
9:AI:88:GLU:HG3	9:AI:89:TYR:H	1.74	0.52
22:BA:843:G:O2'	22:BA:844:A:H5'	2.10	0.52
48:B0:53:VAL:O	48:B0:54:ILE:O	2.26	0.52
57:DA:659:G:H4'	26:DE:95:LYS:HD3	1.91	0.52
25:DD:60:VAL:O	25:DD:60:VAL:HG13	2.10	0.52
2:CB:25:LYS:HD2	2:CB:25:LYS:H	1.75	0.52
24:DC:19:VAL:O	24:DC:19:VAL:HG12	2.09	0.52
28:BG:84:LYS:HB2	28:BG:132:LEU:HG	1.91	0.52
44:BW:37:VAL:CG1	44:BW:38:ARG:H	2.21	0.52
57:DA:857:G:H1'	44:DW:19:ARG:HE	1.71	0.52
17:AQ:45:VAL:HG21	17:AQ:60:ILE:CD1	2.27	0.52
22:BA:1062:G:O2'	22:BA:1063:G:C8	2.63	0.52
57:DA:1255:U:H5'	57:DA:2502:G:H22	1.74	0.52
57:DA:1206:G:H2'	57:DA:1207:C:C6	2.45	0.52
26:DE:105:LEU:O	26:DE:109:LEU:HB2	2.09	0.52
36:DO:29:HIS:HB3	36:DO:36:TYR:HB2	1.92	0.52
57:DA:2314:A:C2	57:DA:2315:G:C5	2.97	0.52
1:AA:1279:G:C2'	1:AA:1279:G:N3	2.71	0.52
57:DA:1291:C:O2'	57:DA:1292:G:O4'	2.27	0.52
5:CE:80:LEU:O	5:CE:81:GLN:CB	2.57	0.52
53:CA:1301:U:O2'	53:CA:1302:C:H5	1.90	0.52
1:AA:373:A:HO2'	1:AA:374:A:H5'	1.73	0.52
53:CA:36:C:H4'	12:CL:118:VAL:O	2.10	0.52
1:AA:563:A:C2'	1:AA:563:A:N3	2.67	0.52
43:BV:10:LYS:HZ2	43:BV:11:GLU:N	2.07	0.52
57:DA:54:G:H2'	57:DA:55:G:O4'	2.08	0.52
8:AH:1:SER:C	8:AH:3:GLN:N	2.62	0.52
29:DH:89:LYS:HD2	29:DH:124:THR:HA	1.92	0.52
22:BA:1452:G:H2'	22:BA:1457:U:O4	2.09	0.52
25:BD:120:GLY:HA2	25:BD:162:ALA:HB2	1.88	0.52
33:DL:123:ARG:HA	33:DL:143:GLU:HB3	1.92	0.52
22:BA:2148:G:HO2'	22:BA:2149:U:P	2.33	0.52
22:BA:869:G:H4'	34:BM:8:LYS:HE2	1.91	0.52
53:CA:725:G:H2'	53:CA:726:C:H6	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1681:G:O2'	57:DA:1762:A:O2'	2.27	0.52
22:BA:581:C:H2'	22:BA:582:A:H8	1.75	0.52
7:AG:110:ARG:HH11	7:AG:110:ARG:HB2	1.75	0.52
22:BA:947:A:O2'	22:BA:984:A:C2	2.58	0.52
22:BA:983:A:C6	22:BA:984:A:C2	2.98	0.52
56:CP:48:GLU:CD	56:CP:51:ARG:HB2	2.30	0.52
32:DK:17:ARG:O	32:DK:45:GLU:HB3	2.10	0.52
41:BT:5:GLU:OE1	46:BY:18:LEU:HD11	2.10	0.52
9:AI:128:LYS:CD	9:AI:129:ARG:H	2.23	0.52
22:BA:2341:G:H2'	22:BA:2342:C:C6	2.45	0.52
1:AA:215:C:O2'	1:AA:216:U:H5'	2.09	0.52
57:DA:1734:G:HO2'	57:DA:1735:A:H8	1.55	0.52
43:DV:15:GLY:O	43:DV:19:ARG:HG3	2.10	0.52
33:DL:93:ASN:CG	33:DL:94:THR:N	2.62	0.52
48:B0:33:SER:O	48:B0:34:GLY:O	2.28	0.52
26:DE:28:VAL:O	26:DE:32:VAL:HG13	2.10	0.52
28:DG:149:ALA:O	28:DG:151:ARG:N	2.43	0.52
22:BA:1590:A:H2'	22:BA:1591:A:H8	1.75	0.52
57:DA:797:G:OP1	26:DE:57:LYS:HG2	2.10	0.52
45:BX:52:ALA:O	45:BX:53:LYS:HB3	2.10	0.52
2:CB:9:LEU:HD23	2:CB:9:LEU:H	1.74	0.52
54:CG:4:ARG:HD2	54:CG:5:VAL:H	1.74	0.52
55:CM:36:ALA:HB3	55:CM:55:LEU:HD11	1.92	0.52
22:BA:747:U:C4	22:BA:2613:U:C4	2.98	0.52
4:CD:72:ARG:HA	4:CD:203:TYR:HE1	1.74	0.52
55:CM:91:ARG:HD3	55:CM:91:ARG:O	2.09	0.52
22:BA:2228:G:H2'	22:BA:2229:U:C6	2.45	0.52
41:DT:10:VAL:HG23	41:DT:11:LEU:H	1.73	0.52
59:DF:122:ASP:HB2	59:DF:126:ASN:HB2	1.92	0.52
44:BW:23:LYS:NZ	44:BW:24:ARG:HG3	2.25	0.52
45:BX:29:LEU:HD23	45:BX:29:LEU:H	1.74	0.52
22:BA:1079:C:C4	22:BA:1080:A:N7	2.78	0.52
24:DC:16:VAL:H	24:DC:203:VAL:HG12	1.75	0.52
10:CJ:44:THR:OG1	10:CJ:70:HIS:CE1	2.63	0.52
1:AA:89:U:O2'	1:AA:90:C:C5'	2.57	0.52
57:DA:372:G:C8	45:DX:56:ARG:HG2	2.45	0.52
37:DP:52:ARG:NH1	37:DP:52:ARG:HG2	2.24	0.52
1:AA:945:G:C6	1:AA:1337:G:C5	2.98	0.52
50:D2:38:GLY:O	50:D2:42:LEU:HD13	2.10	0.52
57:DA:125:A:H5''	50:D2:19:ARG:HB2	1.92	0.52
57:DA:1910:G:C2	57:DA:1921:G:C2	2.98	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BK:76:VAL:HB	37:BP:72:VAL:HG23	1.91	0.52
49:B1:34:GLU:O	49:B1:35:LEU:HB3	2.09	0.52
22:BA:574:A:H4'	22:BA:575:A:O5'	2.10	0.52
57:DA:855:G:H21	44:DW:23:LYS:HZ2	1.57	0.52
53:CA:569:C:H5''	53:CA:570:G:OP1	2.09	0.52
1:AA:1221:G:H2'	1:AA:1222:G:H8	1.74	0.52
38:DQ:65:ASN:HA	38:DQ:75:TYR:HB2	1.91	0.52
4:CD:61:ARG:HG3	4:CD:71:PHE:CD2	2.44	0.52
1:AA:1158:C:C2'	1:AA:1158:C:O2	2.58	0.52
57:DA:1512:C:H2'	57:DA:1513:U:C6	2.45	0.52
57:DA:308:G:N1	57:DA:309:A:C2	2.78	0.52
57:DA:329:G:OP1	57:DA:329:G:H3'	2.10	0.52
22:BA:309:A:O3'	42:BU:15:GLY:HA2	2.10	0.52
34:BM:42:THR:O	34:BM:44:ARG:N	2.42	0.52
30:DI:32:VAL:HG22	30:DI:58:ILE:HG21	1.92	0.52
22:BA:386:G:H4'	22:BA:387:U:OP2	2.09	0.52
22:BA:163:C:HO2'	22:BA:164:C:C5'	2.22	0.52
22:BA:136:G:H2'	22:BA:137:U:C5	2.45	0.52
26:DE:70:SER:HG	26:DE:78:TRP:HH2	1.57	0.52
57:DA:412:A:N7	57:DA:2412:A:H1'	2.24	0.52
22:BA:408:G:O2'	22:BA:409:G:H5'	2.10	0.52
21:CU:14:ALA:O	21:CU:15:LEU:O	2.28	0.52
17:CQ:37:ILE:HG13	17:CQ:38:LYS:O	2.10	0.52
24:BC:159:THR:HG1	24:BC:194:VAL:HG11	1.74	0.52
32:BK:57:VAL:C	32:BK:58:LEU:HD23	2.30	0.52
57:DA:2239:G:H2'	57:DA:2240:U:H6	1.74	0.52
1:AA:901:A:C5	1:AA:902:G:H1'	2.45	0.52
10:AJ:21:ALA:HA	10:AJ:24:GLU:OE2	2.10	0.52
53:CA:1262:C:H2'	53:CA:1263:C:H5'	1.91	0.52
57:DA:1625:C:H5''	57:DA:1626:A:OP2	2.09	0.52
50:B2:29:GLN:O	50:B2:33:ARG:HG3	2.09	0.52
55:CM:106:ARG:HA	55:CM:110:GLY:O	2.10	0.52
53:CA:1017:U:OP2	53:CA:1017:U:H6	1.92	0.52
12:AL:106:VAL:CG2	12:AL:116:TYR:HB3	2.40	0.52
53:CA:1269:A:H2	53:CA:1312:G:H21	1.58	0.52
8:AH:48:PHE:O	8:AH:49:LYS:HB2	2.09	0.52
44:BW:29:SER:N	44:BW:63:ASP:HB3	2.24	0.52
50:B2:3:ARG:CG	50:B2:3:ARG:NH2	2.64	0.52
57:DA:2136:G:O6	57:DA:2156:G:C2	2.63	0.52
45:BX:29:LEU:HB2	45:BX:30:PRO:CD	2.40	0.52
38:BQ:4:LYS:NZ	38:BQ:7:VAL:HG13	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1179:G:N1	22:BA:1180:U:O2'	2.43	0.52
38:DQ:4:LYS:O	38:DQ:5:ARG:HB2	2.10	0.52
59:DF:74:ALA:HB1	59:DF:76:PHE:CD2	2.45	0.52
5:CE:104:ILE:H	5:CE:122:VAL:N	1.98	0.52
57:DA:1809:A:C2	57:DA:1810:A:C4	2.98	0.52
57:DA:82:U:H2'	57:DA:83:A:O4'	2.10	0.52
25:BD:101:PHE:HD1	25:BD:101:PHE:N	2.08	0.52
57:DA:126:A:H2'	50:D2:46:LYS:CE	2.40	0.52
1:AA:439:U:HO2'	1:AA:440:C:H5'	1.75	0.52
57:DA:1906:G:C8	57:DA:1929:G:C4	2.98	0.52
57:DA:1820:U:OP1	24:DC:176:ARG:NE	2.43	0.52
1:AA:66:A:H2'	1:AA:66:A:N3	2.25	0.52
53:CA:119:A:H5'	53:CA:120:A:C5'	2.40	0.52
53:CA:722:G:O3'	53:CA:723:U:C6	2.63	0.52
22:BA:725:G:C6	22:BA:726:G:N1	2.78	0.52
53:CA:197:A:N6	53:CA:221:C:H4'	2.25	0.52
53:CA:495:A:C6	53:CA:496:A:N6	2.78	0.52
24:DC:76:VAL:O	24:DC:93:VAL:O	2.28	0.52
57:DA:1760:C:OP1	57:DA:2712:C:H5	1.93	0.52
57:DA:1681:G:O2'	57:DA:1762:A:C2'	2.58	0.52
2:AB:100:LEU:HD12	2:AB:178:LEU:CD2	2.37	0.52
57:DA:511:U:H5''	57:DA:512:G:OP2	2.09	0.52
22:BA:1653:G:H4'	22:BA:1654:A:O5'	2.09	0.52
32:DK:99:ILE:HD12	32:DK:118:LEU:HB2	1.91	0.52
57:DA:1645:G:H4'	57:DA:1646:C:H5	1.75	0.52
22:BA:1871:A:H8	22:BA:1872:A:C6	2.28	0.52
53:CA:389:A:H2'	53:CA:390:U:O4'	2.10	0.52
53:CA:204:G:H2'	53:CA:205:A:C8	2.45	0.52
53:CA:677:U:H3	53:CA:713:G:H22	1.58	0.52
31:BJ:25:LEU:HD22	31:BJ:26:GLY:N	2.25	0.52
46:BY:26:PHE:HD1	46:BY:27:ASN:ND2	2.08	0.52
4:AD:84:ASN:HD22	4:AD:87:GLU:H	1.57	0.52
22:BA:1203:U:H1'	33:BL:4:ASN:HB3	1.91	0.52
19:CS:28:LYS:HB3	19:CS:29:PRO:HD2	1.92	0.52
22:BA:2689:U:H5''	22:BA:2690:U:OP2	2.09	0.52
1:AA:811:C:H4'	1:AA:900:A:N6	2.24	0.52
45:DX:6:VAL:CG1	45:DX:50:VAL:HG12	2.40	0.52
45:DX:6:VAL:HG12	45:DX:50:VAL:HG12	1.92	0.52
53:CA:555:U:H2'	53:CA:556:C:C6	2.45	0.52
59:DF:58:ALA:HB1	59:DF:139:GLU:HG2	1.91	0.52
28:DG:175:LYS:HD3	28:DG:175:LYS:C	2.31	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:898:C:H2'	22:BA:899:A:H5'	1.92	0.52
22:BA:1786:A:H1'	22:BA:1938:A:N6	2.25	0.52
31:BJ:4:PHE:O	31:BJ:44:TYR:CE1	2.62	0.52
57:DA:1374:G:H2'	57:DA:1375:U:O4'	2.10	0.52
57:DA:2210:U:H4'	57:DA:2211:A:H5'	1.89	0.52
53:CA:1077:G:C2	53:CA:1081:A:C2	2.98	0.52
17:AQ:60:ILE:HG22	17:AQ:61:ARG:N	2.25	0.52
58:DB:11:C:C5	58:DB:12:C:H5	2.28	0.52
57:DA:2504:U:H5'	57:DA:2504:U:H6	1.74	0.52
26:DE:131:THR:HG22	26:DE:161:ALA:N	2.25	0.52
31:DJ:35:ARG:NH1	31:DJ:140:LEU:HD11	2.25	0.52
3:AC:38:VAL:O	3:AC:42:LEU:HB2	2.10	0.52
57:DA:1059:G:N3	30:DI:131:THR:HG22	2.25	0.52
34:DM:26:VAL:HA	34:DM:66:ARG:NH2	2.25	0.52
41:BT:39:THR:CG2	41:BT:39:THR:O	2.57	0.52
41:BT:57:VAL:HG22	41:BT:58:VAL:N	2.25	0.52
41:BT:33:LYS:HG3	41:BT:80:TRP:CE3	2.44	0.52
53:CA:94:G:O2'	53:CA:95:C:H5'	2.09	0.52
53:CA:672:U:H2'	53:CA:673:A:H8	1.75	0.52
5:AE:158:LYS:HE2	8:AH:63:LYS:NZ	2.25	0.52
57:DA:2039:U:H2'	57:DA:2040:G:C8	2.45	0.52
6:CF:41:ASP:OD2	6:CF:58:HIS:HE1	1.93	0.52
57:DA:2514:U:H2'	57:DA:2515:C:C6	2.45	0.52
1:AA:1151:A:O2'	1:AA:1152:A:C5'	2.53	0.52
53:CA:989:U:H2'	53:CA:990:C:H5'	1.92	0.52
36:DO:111:ARG:HA	36:DO:115:LEU:O	2.10	0.52
22:BA:1031:G:H4'	52:B4:6:SER:HB2	1.92	0.52
54:CG:35:LYS:O	9:CI:42:THR:HG21	2.10	0.52
22:BA:1416:G:O2'	22:BA:1417:C:C6	2.56	0.52
24:DC:93:VAL:HG12	24:DC:101:ARG:N	2.24	0.52
22:BA:460:A:OP1	50:B2:41:ARG:NH1	2.38	0.52
57:DA:1363:C:C2	57:DA:1364:G:C8	2.98	0.52
27:BF:39:VAL:HG13	27:BF:84:ILE:HD12	1.90	0.52
34:BM:66:ARG:NH1	34:BM:104:GLU:OE1	2.41	0.52
57:DA:1688:U:C4	57:DA:1698:A:C2	2.98	0.52
29:BH:137:GLU:HG3	29:BH:138:VAL:N	2.25	0.52
53:CA:926:G:C6	53:CA:1505:G:C6	2.98	0.52
23:BB:12:C:C5	44:BW:72:GLY:HA3	2.44	0.52
46:DY:18:LEU:HD13	46:DY:22:LEU:HD13	1.92	0.52
1:AA:740:U:O2'	1:AA:741:G:H5'	2.09	0.52
1:AA:1170:A:H2'	1:AA:1171:A:O4'	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1815:A:H1'	22:BA:1817:G:C8	2.45	0.52
37:BP:113:LEU:O	37:BP:113:LEU:HG	2.10	0.52
22:BA:1789:A:OP2	24:BC:220:ARG:NH1	2.39	0.52
22:BA:1853:A:H2'	22:BA:1854:A:C8	2.44	0.52
22:BA:1538:G:H2'	22:BA:1539:U:C5	2.45	0.52
22:BA:2318:G:C6	22:BA:2319:G:N1	2.77	0.52
57:DA:2834:G:C1'	57:DA:2879:A:N6	2.73	0.52
1:AA:1111:A:C2	3:AC:176:THR:HG23	2.46	0.52
1:AA:1112:C:H1'	3:AC:178:ARG:HD3	1.91	0.52
26:DE:65:THR:CG2	26:DE:67:ARG:HG3	2.40	0.52
1:AA:524:G:C6	1:AA:525:C:N4	2.78	0.52
6:CF:38:ARG:HG3	6:CF:63:ASN:HB2	1.91	0.52
22:BA:1753:G:OP1	37:BP:92:ARG:HD3	2.10	0.52
57:DA:786:C:H4'	57:DA:1780:A:N7	2.25	0.52
53:CA:728:A:H2'	53:CA:729:A:C8	2.45	0.52
57:DA:547:A:H8	57:DA:548:G:H5'	1.74	0.52
38:BQ:13:HIS:CD2	38:BQ:31:TYR:CD2	2.98	0.52
31:BJ:123:LYS:CD	31:BJ:123:LYS:N	2.73	0.52
4:AD:194:ILE:O	4:AD:194:ILE:HG13	2.09	0.52
51:D3:23:HIS:O	51:D3:46:LYS:HB2	2.09	0.52
33:DL:64:PHE:HD2	51:D3:24:LYS:HG2	1.74	0.52
28:DG:154:GLU:O	28:DG:156:TYR:N	2.43	0.52
1:AA:329:A:H2'	1:AA:332:G:N7	2.24	0.52
40:BS:95:ARG:O	40:BS:96:ILE:CG1	2.58	0.51
5:AE:45:VAL:HG22	5:AE:117:ALA:HA	1.92	0.51
57:DA:617:G:O2'	57:DA:618:G:O4'	2.27	0.51
4:CD:196:GLU:O	4:CD:200:VAL:HG23	2.09	0.51
57:DA:183:C:H6	57:DA:183:C:O5'	1.91	0.51
22:BA:1061:U:H3'	22:BA:1062:G:H5''	1.92	0.51
2:AB:40:ILE:HD13	2:AB:201:GLY:CA	2.27	0.51
57:DA:571:U:C4	57:DA:575:A:C5	2.98	0.51
35:DN:15:SER:HA	35:DN:18:GLN:HB3	1.93	0.51
57:DA:322:A:H3'	26:DE:163:ASN:ND2	2.25	0.51
31:DJ:45:THR:HG21	31:DJ:50:THR:HG23	1.91	0.51
38:DQ:64:ILE:HD12	38:DQ:95:ALA:CB	2.39	0.51
57:DA:1055:G:H3'	57:DA:1056:G:H5'	1.91	0.51
53:CA:82:G:N7	53:CA:89:U:C4	2.78	0.51
22:BA:271:G:O2'	22:BA:272:A:H5''	2.09	0.51
57:DA:2346:A:H3'	57:DA:2347:C:C5'	2.35	0.51
26:BE:124:PHE:C	26:BE:124:PHE:CD1	2.82	0.51
1:AA:17:U:H2'	1:AA:18:C:C6	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2136:G:C2	22:BA:2137:U:C4	2.98	0.51
57:DA:1904:G:C2'	57:DA:1905:C:H5'	2.38	0.51
24:DC:115:ILE:HB	24:DC:126:GLY:O	2.10	0.51
33:DL:63:LYS:C	33:DL:65:GLY:H	2.14	0.51
22:BA:2430:A:H5'	22:BA:2431:U:OP2	2.10	0.51
51:D3:41:ARG:HD2	51:D3:41:ARG:O	2.10	0.51
22:BA:2637:U:C2'	22:BA:2638:G:H5'	2.40	0.51
22:BA:580:U:C2	22:BA:581:C:C5	2.98	0.51
59:DF:28:PRO:HB2	59:DF:168:LEU:CD2	2.40	0.51
1:AA:672:U:H2'	1:AA:673:A:H8	1.74	0.51
40:BS:73:LYS:HB3	40:BS:106:VAL:HB	1.91	0.51
22:BA:247:G:H4'	22:BA:386:G:C6	2.44	0.51
36:BO:79:ALA:HA	36:BO:115:LEU:HD13	1.93	0.51
31:BJ:56:VAL:CG1	31:BJ:57:LEU:N	2.73	0.51
22:BA:2403:C:C4	22:BA:2415:G:N1	2.78	0.51
17:CQ:61:ARG:CG	17:CQ:75:VAL:HG11	2.40	0.51
3:AC:179:ALA:HB1	3:AC:202:PHE:HE1	1.74	0.51
22:BA:137:U:O2'	22:BA:138:U:P	2.68	0.51
4:AD:169:TRP:CD1	4:AD:170:LEU:HG	2.46	0.51
22:BA:1476:U:HO2'	22:BA:1477:A:C5'	2.23	0.51
57:DA:2016:U:C4	57:DA:2017:U:C4	2.97	0.51
22:BA:1338:G:O2'	22:BA:1339:G:H5'	2.10	0.51
57:DA:74:A:H5'	46:DY:48:ARG:HH22	1.74	0.51
51:B3:56:LEU:H	51:B3:56:LEU:CD2	2.22	0.51
22:BA:2838:G:H1'	35:BN:45:ARG:NH1	2.24	0.51
22:BA:1833:C:C5	22:BA:1834:U:H5	2.28	0.51
25:DD:110:THR:OG1	25:DD:171:THR:HG22	2.10	0.51
1:AA:1530:G:O2'	1:AA:1531:A:H8	1.92	0.51
47:BZ:38:GLU:O	47:BZ:43:ILE:HG12	2.10	0.51
25:BD:62:LYS:HB2	25:BD:63:PRO:HD3	1.91	0.51
2:CB:9:LEU:HD12	2:CB:11:ALA:C	2.31	0.51
5:AE:135:VAL:O	5:AE:139:THR:HG23	2.09	0.51
14:AN:63:CYS:SG	14:AN:66:THR:OG1	2.61	0.51
22:BA:2429:G:P	63:BA:3702:HOH:O	2.67	0.51
19:AS:4:LEU:HD22	19:AS:8:PRO:HA	1.91	0.51
55:CM:106:ARG:HH21	55:CM:112:ARG:CZ	2.23	0.51
3:CC:142:ARG:HG2	3:CC:143:LEU:HD12	1.91	0.51
4:CD:117:VAL:HG11	4:CD:132:ALA:HA	1.91	0.51
24:BC:254:LYS:O	24:BC:256:THR:N	2.41	0.51
22:BA:1371:G:O2'	22:BA:1372:U:H5'	2.11	0.51
57:DA:2550:G:C2	57:DA:2559:C:O2	2.62	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1355:G:O2'	57:DA:1356:G:H5'	2.11	0.51
53:CA:1195:C:H2'	53:CA:1197:A:O4'	2.10	0.51
29:DH:109:GLU:OE2	29:DH:109:GLU:HA	2.10	0.51
40:DS:68:ASP:N	40:DS:68:ASP:OD1	2.43	0.51
21:AU:45:LYS:HA	21:AU:45:LYS:HE3	1.92	0.51
22:BA:996:A:O3'	38:BQ:91:ARG:HG2	2.10	0.51
38:BQ:63:ARG:HH22	38:BQ:96:ASP:CA	2.23	0.51
28:BG:85:LYS:HG2	28:BG:131:VAL:CG1	2.40	0.51
22:BA:2094:A:OP1	29:BH:22:LYS:HD2	2.10	0.51
57:DA:2324:U:HO2'	57:DA:2385:C:H5	1.57	0.51
52:D4:19:ARG:HH12	52:D4:26:ILE:HG13	1.76	0.51
57:DA:612:G:C2	57:DA:614:A:H1'	2.44	0.51
22:BA:1073:A:H8	22:BA:1073:A:P	2.34	0.51
49:D1:32:LYS:HE3	49:D1:52:LYS:OXT	2.09	0.51
57:DA:828:U:C5	57:DA:829:A:N6	2.78	0.51
57:DA:674:G:H5''	26:DE:71:GLY:N	2.24	0.51
2:CB:95:TRP:HZ2	2:CB:100:LEU:HD13	1.74	0.51
57:DA:1608:A:C8	57:DA:1611:C:N4	2.78	0.51
22:BA:954:G:OP2	34:BM:16:ARG:NH2	2.41	0.51
32:DK:87:LEU:HD12	32:DK:92:GLU:CA	2.40	0.51
1:AA:263:A:H2'	1:AA:264:C:C6	2.46	0.51
57:DA:466:A:P	50:D2:34:ARG:HH21	2.33	0.51
59:DF:59:ILE:HG23	59:DF:137:PHE:HE1	1.75	0.51
39:BR:1:MET:HB2	39:BR:43:ASN:ND2	2.24	0.51
57:DA:638:G:O2'	57:DA:639:U:O4'	2.25	0.51
1:AA:1458:G:OP1	20:AT:26:MET:HA	2.09	0.51
1:AA:414:A:H2'	1:AA:415:A:H8	1.75	0.51
43:BV:44:HIS:CE1	43:BV:86:LEU:H	2.13	0.51
15:CO:16:ARG:HB2	15:CO:23:SER:CB	2.40	0.51
21:CU:33:ARG:HH22	21:CU:34:ARG:HH11	1.58	0.51
41:DT:62:VAL:HG12	41:DT:63:VAL:N	2.24	0.51
57:DA:867:C:O2'	57:DA:868:U:H5'	2.11	0.51
3:CC:53:ARG:HB2	3:CC:53:ARG:HH11	1.75	0.51
24:DC:70:LYS:HB2	24:DC:101:ARG:HH22	1.74	0.51
10:AJ:67:ILE:CG1	14:AN:95:LEU:HD13	2.40	0.51
30:BI:33:ASN:HB3	30:BI:36:GLU:CB	2.38	0.51
22:BA:511:U:C5	22:BA:512:G:C5	2.98	0.51
22:BA:580:U:O2'	38:BQ:30:VAL:HG13	2.10	0.51
29:DH:80:ILE:HB	29:DH:101:ASP:OD2	2.10	0.51
16:AP:20:VAL:HG23	16:AP:34:GLU:O	2.10	0.51
2:CB:128:LEU:O	2:CB:129:THR:C	2.49	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1140:C:H2'	53:CA:1141:C:C5	2.45	0.51
57:DA:1262:A:C2	48:D0:6:LYS:HD2	2.43	0.51
22:BA:919:U:C3'	22:BA:919:U:C6	2.94	0.51
57:DA:2894:G:HO2'	57:DA:2895:G:P	2.33	0.51
53:CA:142:G:C5	53:CA:143:A:C8	2.98	0.51
53:CA:1215:G:O2'	53:CA:1216:A:H8	1.93	0.51
22:BA:1682:G:H2'	22:BA:1683:U:C6	2.45	0.51
16:AP:2:VAL:HG23	16:AP:65:ALA:HA	1.91	0.51
32:DK:64:ARG:HD2	32:DK:102:PRO:O	2.10	0.51
37:DP:9:GLN:HB3	37:DP:12:MET:HE2	1.93	0.51
1:AA:138:G:O2'	1:AA:139:A:H5'	2.10	0.51
57:DA:417:C:H2'	57:DA:418:C:H6	1.76	0.51
41:DT:10:VAL:HG23	41:DT:11:LEU:CD1	2.40	0.51
57:DA:1229:C:H2'	57:DA:1230:A:C8	2.45	0.51
25:BD:140:HIS:CE1	63:BD:301:HOH:O	2.62	0.51
22:BA:2238:G:N7	63:BA:3501:HOH:O	2.34	0.51
53:CA:418:C:H1'	53:CA:540:G:O2'	2.10	0.51
56:CP:66:THR:HG22	56:CP:67:ILE:N	2.25	0.51
22:BA:2418:A:C5	22:BA:2419:U:C5	2.98	0.51
46:BY:23:ARG:O	46:BY:24:GLU:C	2.48	0.51
22:BA:2897:U:H2'	22:BA:2898:U:C6	2.46	0.51
19:CS:36:ARG:O	19:CS:69:LYS:HD2	2.10	0.51
45:BX:30:PRO:HD2	45:BX:32:LEU:HD11	1.92	0.51
57:DA:2331:G:H4'	44:DW:41:GLY:N	2.25	0.51
57:DA:1916:A:H2'	57:DA:1917:U:C6	2.46	0.51
21:AU:10:PRO:HG2	3:CC:71:ARG:CZ	2.40	0.51
57:DA:1673:G:O2'	57:DA:1674:G:H5'	2.10	0.51
4:CD:2:ARG:NH2	4:CD:114:ARG:NH1	2.58	0.51
10:CJ:8:ILE:HG22	10:CJ:100:ILE:HG12	1.92	0.51
38:DQ:74:SER:O	38:DQ:78:PHE:HB2	2.09	0.51
1:AA:1240:U:H3'	1:AA:1241:G:H5'	1.93	0.51
10:CJ:15:HIS:CA	10:CJ:18:ILE:HG22	2.30	0.51
57:DA:2151:U:H2'	57:DA:2152:G:C8	2.45	0.51
36:DO:31:THR:HG23	36:DO:34:HIS:C	2.30	0.51
24:DC:144:GLU:HG2	24:DC:146:LYS:O	2.11	0.51
23:BB:89:U:H4'	23:BB:89:U:OP2	2.11	0.51
57:DA:1431:A:H2'	57:DA:1432:G:O4'	2.10	0.51
22:BA:1057:A:C2	22:BA:1082:U:C2	2.98	0.51
57:DA:415:A:N1	57:DA:2409:G:C6	2.78	0.51
1:AA:560:A:H5'	1:AA:566:G:H21	1.73	0.51
14:AN:40:ARG:HH12	14:AN:44:VAL:HG21	1.73	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:41:ASP:OD2	6:CF:58:HIS:CE1	2.63	0.51
57:DA:53:A:O2'	57:DA:54:G:H5'	2.10	0.51
1:AA:1005:A:C2	1:AA:1006:G:H1'	2.46	0.51
1:AA:414:A:N3	1:AA:415:A:C8	2.78	0.51
1:AA:198:G:C2'	1:AA:199:A:H8	2.24	0.51
28:DG:120:ILE:CG1	28:DG:140:ILE:HG22	2.37	0.51
57:DA:2413:G:H2'	57:DA:2414:G:H8	1.75	0.51
4:CD:61:ARG:NH2	4:CD:67:LEU:HA	2.21	0.51
25:DD:107:VAL:H	25:DD:206:ALA:N	2.05	0.51
25:DD:106:LYS:CB	25:DD:206:ALA:H	2.23	0.51
30:BI:100:ILE:HG22	30:BI:101:SER:N	2.23	0.51
22:BA:511:U:C5	22:BA:512:G:C4	2.97	0.51
29:DH:80:ILE:HB	29:DH:101:ASP:HB2	1.91	0.51
1:AA:57:G:H2'	1:AA:58:C:H6	1.73	0.51
22:BA:947:A:H2'	22:BA:948:C:C6	2.45	0.51
57:DA:28:A:O2'	57:DA:29:U:H5'	2.09	0.51
47:DZ:7:THR:O	47:DZ:54:VAL:HA	2.10	0.51
57:DA:502:A:C5	57:DA:505:A:N7	2.79	0.51
10:AJ:29:ALA:CB	10:AJ:36:VAL:HG21	2.40	0.51
22:BA:1747:U:H2'	22:BA:1748:C:H6	1.70	0.51
34:DM:34:LYS:HB3	34:DM:129:THR:HG22	1.92	0.51
54:CG:124:SER:O	54:CG:128:GLU:HG2	2.10	0.51
1:AA:914:A:O2'	1:AA:915:A:C5'	2.58	0.51
27:BF:122:ASP:OD1	27:BF:126:ASN:HB2	2.10	0.51
57:DA:2348:U:HO2'	57:DA:2349:G:H8	1.57	0.51
53:CA:998:C:H2'	53:CA:999:C:C6	2.40	0.51
29:DH:41:LYS:HA	29:DH:44:ILE:CG1	2.39	0.51
12:AL:7:VAL:HG13	17:AQ:30:HIS:HD2	1.75	0.51
31:DJ:106:LYS:HD2	31:DJ:119:PHE:CD2	2.45	0.51
57:DA:811:U:H5''	57:DA:812:C:OP2	2.10	0.51
53:CA:968:A:C4	53:CA:1062:U:H4'	2.45	0.51
26:DE:72:SER:O	26:DE:74:LYS:N	2.43	0.51
22:BA:1744:A:H3'	22:BA:1745:A:H8	1.74	0.51
22:BA:2783:U:H2'	22:BA:2784:U:H6	1.75	0.51
27:BF:118:ALA:HB2	27:BF:176:PHE:CD2	2.45	0.51
9:CI:125:GLN:H	9:CI:125:GLN:NE2	2.09	0.51
1:AA:626:G:C4	1:AA:627:G:C8	2.99	0.51
53:CA:554:A:H2'	53:CA:555:U:C6	2.46	0.51
22:BA:1626:A:O2'	22:BA:1627:G:OP2	2.28	0.51
22:BA:1444:G:H2'	22:BA:1445:G:C8	2.46	0.51
22:BA:1360:G:P	63:BA:3618:HOH:O	2.69	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:34:ALA:O	8:CH:38:VAL:HG23	2.09	0.51
7:AG:136:LYS:O	7:AG:140:VAL:HG23	2.10	0.51
26:DE:79:ARG:O	26:DE:80:SER:C	2.49	0.51
9:AI:93:LEU:HD12	9:AI:94:ARG:N	2.25	0.51
22:BA:69:C:H2'	22:BA:70:G:C8	2.46	0.51
25:DD:16:THR:HG23	25:DD:18:ASP:H	1.75	0.51
2:CB:112:ARG:O	2:CB:112:ARG:HG3	2.09	0.51
31:BJ:44:TYR:CD1	38:BQ:59:LEU:HD11	2.45	0.51
6:AF:71:ILE:HG23	6:AF:72:ASP:N	2.25	0.51
57:DA:442:G:C6	57:DA:444:C:N4	2.78	0.51
57:DA:2812:G:N2	57:DA:2889:C:C2	2.78	0.51
57:DA:571:U:HO2'	57:DA:573:U:H6	1.54	0.51
57:DA:834:G:H1'	57:DA:2358:A:C2	2.45	0.51
25:DD:200:ASP:O	25:DD:201:LEU:HD23	2.10	0.51
53:CA:740:U:H4'	15:CO:38:LEU:HD11	1.92	0.51
1:AA:751:U:H4'	15:AO:23:SER:HA	1.91	0.51
22:BA:244:A:H2'	22:BA:245:G:O4'	2.11	0.51
22:BA:2730:C:O3'	25:BD:174:SER:HB3	2.11	0.51
22:BA:2064:C:H2'	22:BA:2065:C:C6	2.44	0.51
11:CK:70:ALA:HA	11:CK:73:VAL:HG22	1.93	0.51
1:AA:1124:G:OP1	10:AJ:37:ARG:C	2.49	0.51
16:AP:6:LEU:HG	16:AP:17:TYR:CB	2.40	0.51
22:BA:1733:G:N3	22:BA:1734:G:C8	2.79	0.51
1:AA:264:C:H2'	1:AA:265:G:O4'	2.10	0.51
1:AA:275:G:H5''	1:AA:275:G:H8	1.75	0.51
37:BP:33:GLU:CB	37:BP:38:ARG:HH11	2.24	0.51
59:DF:111:ARG:HG3	59:DF:135:ILE:HG12	1.93	0.51
1:AA:15:G:C4'	5:AE:28:ARG:NH1	2.73	0.51
57:DA:2852:G:H2'	57:DA:2853:C:O4'	2.09	0.51
41:DT:9:LYS:HG3	46:DY:21:LEU:HD13	1.91	0.51
29:BH:12:LEU:HB2	29:BH:19:VAL:HG11	1.93	0.51
37:DP:57:ALA:HB1	37:DP:73:PHE:O	2.11	0.51
57:DA:778:G:C6	57:DA:779:U:N3	2.78	0.51
22:BA:869:G:C5	22:BA:870:U:C5	2.98	0.51
53:CA:198:G:O2'	53:CA:199:A:C8	2.55	0.51
53:CA:382:A:N7	53:CA:383:A:C6	2.78	0.51
57:DA:862:G:H2'	57:DA:863:A:O4'	2.11	0.51
57:DA:63:A:N6	57:DA:91:A:N6	2.57	0.51
23:BB:28:C:O2'	23:BB:29:A:H5'	2.10	0.51
24:DC:94:LEU:HD13	24:DC:100:ARG:HD3	1.90	0.51
29:BH:4:ILE:HG12	29:BH:18:GLN:NE2	2.24	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:9:VAL:HG22	25:BD:10:GLY:H	1.76	0.51
1:AA:721:G:H1'	1:AA:722:G:C2	2.45	0.51
57:DA:2287:A:N7	57:DA:2289:G:C8	2.78	0.51
2:CB:127:LYS:HE3	2:CB:132:GLU:HG3	1.91	0.51
1:AA:1303:C:O2'	1:AA:1304:G:C5'	2.58	0.51
1:AA:791:G:C6	1:AA:792:A:N7	2.78	0.51
6:AF:85:ILE:O	6:AF:86:ARG:C	2.48	0.51
1:AA:687:A:C8	1:AA:701:U:H5	2.29	0.51
28:BG:16:VAL:HG11	28:BG:49:LEU:HD21	1.92	0.51
36:BO:51:ALA:HB3	36:BO:78:VAL:CG1	2.41	0.51
29:DH:61:VAL:HG13	29:DH:62:LEU:HG	1.93	0.51
57:DA:2234:G:C6	57:DA:2235:G:N7	2.79	0.51
57:DA:526:A:N6	57:DA:2626:C:H4'	2.26	0.51
9:AI:11:ARG:HA	9:AI:105:ARG:NH1	2.26	0.51
1:AA:1533:C:H3'	1:AA:1534:A:C5'	2.40	0.51
1:AA:1305:G:HO2'	1:AA:1306:A:H8	1.58	0.51
53:CA:636:U:H2'	53:CA:637:C:C6	2.45	0.51
57:DA:2323:G:N2	57:DA:2335:A:H2	2.08	0.51
53:CA:892:A:C5	53:CA:893:C:C5	2.98	0.51
57:DA:483:A:H2'	57:DA:484:C:H6	1.74	0.51
54:CG:4:ARG:NH2	54:CG:6:ILE:HB	2.26	0.51
22:BA:31:C:H4'	22:BA:1238:G:H4'	1.92	0.51
22:BA:747:U:H2'	22:BA:2613:U:O4	2.10	0.51
22:BA:1444:G:H2'	22:BA:1445:G:H8	1.75	0.51
53:CA:1248:A:O2'	9:CI:37:TYR:HD1	1.94	0.51
47:BZ:7:THR:HG22	47:BZ:32:GLY:HA2	1.92	0.51
32:BK:36:GLY:HA2	32:BK:62:VAL:O	2.10	0.51
53:CA:301:G:H2'	53:CA:302:G:C8	2.45	0.51
53:CA:865:A:C2	53:CA:918:A:H4'	2.46	0.51
3:CC:185:THR:HG22	3:CC:186:SER:H	1.73	0.51
53:CA:129:A:O2'	53:CA:130:A:C8	2.63	0.51
14:CN:53:ASP:HA	14:CN:58:ARG:HD3	1.93	0.51
39:BR:54:VAL:HG22	39:BR:57:GLY:HA3	1.93	0.51
39:BR:9:GLY:C	39:BR:10:LYS:HD2	2.30	0.51
58:DB:58:A:C2'	58:DB:59:A:C8	2.77	0.51
58:DB:54:G:N2	59:DF:25:MET:HE1	2.26	0.51
20:AT:77:ASN:HD22	20:AT:78:LEU:H	1.56	0.51
57:DA:655:A:H4'	57:DA:656:G:O5'	2.09	0.51
22:BA:765:C:H2'	22:BA:766:U:C6	2.46	0.51
33:BL:27:LEU:CD1	33:BL:27:LEU:N	2.60	0.51
30:BI:89:SER:OG	30:BI:135:MET:HA	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2440:C:N3	57:DA:2441:U:H1'	2.25	0.51
38:DQ:35:PHE:O	38:DQ:39:ILE:HG12	2.11	0.51
57:DA:301:G:C6	57:DA:317:G:C6	2.99	0.51
22:BA:1131:G:O2'	22:BA:2026:U:H5'	2.11	0.51
57:DA:1087:G:N2	57:DA:1103:A:H1'	2.25	0.51
59:DF:129:MET:HG3	59:DF:153:ILE:HD12	1.91	0.51
59:DF:131:VAL:C	59:DF:133:GLU:H	2.13	0.51
53:CA:560:A:N7	53:CA:566:G:C4	2.78	0.51
22:BA:1734:G:N3	22:BA:1735:A:C8	2.78	0.51
57:DA:118:A:C8	57:DA:119:A:C8	2.99	0.51
22:BA:277:G:H4'	22:BA:278:A:C8	2.46	0.51
53:CA:654:G:H2'	53:CA:655:A:H8	1.74	0.51
53:CA:952:U:H5	55:CM:102:LYS:HZ1	1.58	0.51
31:BJ:130:HIS:CD2	31:BJ:132:HIS:H	2.13	0.51
57:DA:86:G:C2	57:DA:87:U:C5	2.99	0.51
1:AA:1151:A:C4	1:AA:1152:A:N7	2.79	0.51
16:AP:28:ARG:HE	16:AP:29:ASN:ND2	2.01	0.51
12:CL:6:LEU:HA	12:CL:9:LYS:O	2.11	0.51
57:DA:799:G:C6	57:DA:800:A:C6	2.99	0.51
53:CA:1453:G:H2'	53:CA:1453:G:N3	2.23	0.51
21:CU:39:LYS:H	21:CU:40:PRO:CD	2.19	0.51
37:DP:48:ALA:HB3	37:DP:59:THR:HB	1.93	0.51
14:CN:76:PHE:CE2	14:CN:95:LEU:HD22	2.45	0.51
23:BB:49:C:OP1	36:BO:101:GLY:HA3	2.10	0.51
36:BO:36:TYR:CD2	36:BO:36:TYR:N	2.78	0.51
53:CA:562:U:H4'	53:CA:563:A:O5'	2.10	0.51
1:AA:1250:A:O3'	9:AI:68:GLY:HA2	2.10	0.51
2:AB:202:ASN:ND2	2:AB:205:ALA:HB2	2.26	0.51
24:BC:257:ARG:HE	24:BC:269:ARG:HH22	1.58	0.51
53:CA:597:G:N7	53:CA:598:U:C5	2.79	0.51
57:DA:1956:U:O2'	57:DA:1957:C:H5'	2.10	0.51
57:DA:2283:C:H5''	57:DA:2283:C:H6	1.76	0.51
57:DA:2425:A:H4'	57:DA:2426:A:O5'	2.11	0.51
22:BA:2276:G:P	34:BM:83:GLY:O	2.69	0.51
33:BL:101:ILE:HG23	33:BL:102:GLY:N	2.25	0.51
22:BA:645:C:O2'	22:BA:646:U:H5''	2.09	0.51
47:BZ:40:THR:OG1	47:BZ:41:PRO:HD2	2.11	0.51
33:BL:79:LEU:HB2	33:BL:114:GLY:O	2.10	0.51
10:AJ:88:MET:HB3	10:AJ:89:ARG:NH1	2.25	0.51
57:DA:223:A:C5	57:DA:422:A:C8	2.99	0.51
22:BA:2563:U:O2	22:BA:2565:A:H8	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1293:C:H2'	1:AA:1294:G:C8	2.46	0.51
17:CQ:47:ASP:HB3	17:CQ:74:LEU:CB	2.40	0.51
22:BA:1838:C:C4	22:BA:1899:A:C4	2.99	0.51
45:BX:36:ARG:HG3	45:BX:47:THR:HB	1.92	0.51
53:CA:568:G:N2	53:CA:883:C:C2	2.79	0.51
49:D1:16:THR:CG2	49:D1:41:VAL:HB	2.41	0.51
1:AA:782:A:H2'	1:AA:783:C:O4'	2.10	0.51
22:BA:2082:A:O5'	22:BA:2082:A:H8	1.93	0.51
57:DA:2157:G:OP2	57:DA:2157:G:N2	2.44	0.51
22:BA:792:A:H5'	22:BA:793:A:H5'	1.92	0.51
3:AC:89:VAL:O	3:AC:93:ILE:HG13	2.10	0.51
33:BL:87:GLY:O	33:BL:89:VAL:N	2.44	0.51
22:BA:693:A:H2'	22:BA:694:U:O4'	2.11	0.51
39:BR:48:LYS:CD	39:BR:48:LYS:H	2.23	0.51
53:CA:247:G:C6	53:CA:278:G:N1	2.79	0.51
52:D4:22:VAL:O	52:D4:24:ARG:HG3	2.11	0.51
17:AQ:20:ILE:HB	17:AQ:47:ASP:OD1	2.11	0.51
32:BK:18:ARG:N	32:BK:45:GLU:HB2	2.21	0.51
53:CA:1066:C:H2'	53:CA:1067:A:C8	2.45	0.51
9:CI:40:ARG:H	9:CI:44:ARG:HD3	1.76	0.51
54:CG:59:GLU:HG3	54:CG:60:ALA:H	1.75	0.51
35:DN:34:ILE:HD12	35:DN:44:LEU:HD21	1.91	0.51
57:DA:301:G:O2'	57:DA:302:C:O5'	2.29	0.51
53:CA:814:A:H2'	53:CA:816:A:O5'	2.11	0.51
36:DO:7:ARG:HA	36:DO:10:ARG:NH2	2.26	0.51
57:DA:1062:G:O2'	57:DA:1063:G:H8	1.93	0.51
2:CB:103:TRP:HD1	2:CB:107:ARG:HB3	1.75	0.51
2:CB:103:TRP:O	2:CB:107:ARG:HG2	2.10	0.51
2:CB:76:SER:O	2:CB:79:VAL:HG12	2.11	0.51
22:BA:1104:C:H2'	22:BA:1105:U:C6	2.46	0.51
57:DA:230:G:C2	57:DA:231:A:N7	2.78	0.51
57:DA:1439:A:C3'	57:DA:1439:A:C8	2.93	0.51
6:CF:2:ARG:HD2	6:CF:92:THR:OG1	2.10	0.51
57:DA:2513:A:C2	25:DD:148:GLN:NE2	2.77	0.51
32:BK:2:ILE:O	32:BK:6:THR:HG21	2.09	0.51
22:BA:562:U:H2'	22:BA:572:A:O4'	2.11	0.51
57:DA:1799:G:C5	24:DC:175:LEU:HD13	2.45	0.51
1:AA:197:A:H1'	1:AA:198:G:O4'	2.11	0.51
1:AA:1320:C:N3	19:AS:35:ARG:NH1	2.58	0.51
14:AN:20:PHE:HA	14:AN:24:ALA:HB3	1.92	0.51
53:CA:66:A:H5'	53:CA:67:C:OP2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:366:A:H4'	1:AA:367:U:OP1	2.09	0.51
29:BH:4:ILE:HG23	29:BH:17:ASP:O	2.10	0.51
57:DA:397:U:OP1	45:DX:30:PRO:CA	2.55	0.51
57:DA:1475:G:N3	57:DA:1475:G:H2'	2.25	0.51
57:DA:2713:U:H3'	57:DA:2714:G:H5''	1.93	0.51
53:CA:704:A:C2'	53:CA:705:G:H8	2.23	0.51
22:BA:28:A:C5	22:BA:513:A:N7	2.79	0.51
22:BA:971:G:H2'	22:BA:972:A:H5'	1.93	0.51
22:BA:534:U:H2'	22:BA:535:G:H8	1.76	0.51
1:AA:792:A:N3	1:AA:794:A:C5	2.79	0.51
22:BA:2820:A:OP1	35:BN:2:ARG:NH2	2.44	0.51
57:DA:1187:G:H8	57:DA:1187:G:OP2	1.93	0.51
10:AJ:11:LYS:CG	10:AJ:97:ASP:HB3	2.38	0.51
35:BN:38:LEU:C	35:BN:38:LEU:HD12	2.31	0.51
32:BK:92:GLU:O	32:BK:93:GLN:O	2.28	0.51
1:AA:957:U:O2	1:AA:959:A:H8	1.94	0.51
53:CA:1202:U:O2'	53:CA:1203:C:H5'	2.10	0.51
22:BA:2838:G:H2'	22:BA:2839:G:O4'	2.11	0.51
26:DE:55:SER:OG	26:DE:56:GLY:N	2.44	0.51
22:BA:2847:U:H2'	22:BA:2848:G:O4'	2.10	0.51
48:B0:54:ILE:O	48:B0:54:ILE:HG22	2.11	0.51
56:CP:67:ILE:HG12	56:CP:72:ALA:HB2	1.92	0.51
1:AA:468:A:O2'	1:AA:469:C:H5'	2.10	0.51
2:CB:150:ILE:HD11	2:CB:153:MET:HE2	1.91	0.51
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.92	0.51
46:DY:6:LEU:HD21	46:DY:56:LEU:HD12	1.92	0.51
22:BA:845:A:C6	22:BA:847:U:C6	2.99	0.51
1:AA:771:G:H2'	1:AA:772:U:C6	2.45	0.51
53:CA:1042:A:H2'	53:CA:1043:G:O4'	2.10	0.51
44:BW:35:ILE:HG12	44:BW:35:ILE:O	2.10	0.51
22:BA:1614:A:H61	40:BS:88:ARG:H	1.59	0.51
45:BX:32:LEU:H	45:BX:32:LEU:HD12	1.75	0.51
52:D4:19:ARG:HD2	52:D4:24:ARG:HD2	1.91	0.51
30:BI:135:MET:HG2	30:BI:137:LEU:HG	1.92	0.51
57:DA:1342:A:C6	57:DA:1397:U:C6	2.98	0.51
53:CA:577:G:C6	53:CA:812:G:N2	2.79	0.51
58:DB:40:U:O2'	58:DB:45:A:N6	2.43	0.51
4:AD:147:LYS:O	4:AD:149:LYS:HB2	2.10	0.51
57:DA:1285:A:N6	57:DA:1329:U:C5	2.79	0.51
57:DA:1286:A:C4	57:DA:1289:C:C4	2.99	0.51
57:DA:1608:A:O3'	57:DA:1609:A:H3'	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1999:C:H5''	57:DA:2723:C:O2'	2.11	0.51
5:AE:152:VAL:CB	5:AE:155:LYS:NZ	2.74	0.51
6:CF:3:HIS:HB2	6:CF:92:THR:HG23	1.93	0.51
25:BD:92:VAL:HG12	25:BD:92:VAL:O	2.10	0.51
5:AE:23:THR:HA	5:AE:28:ARG:HA	1.91	0.51
22:BA:1452:G:H3'	63:BA:3413:HOH:O	2.09	0.51
35:DN:83:LEU:CD1	35:DN:86:ARG:HH21	2.24	0.51
9:CI:38:PHE:HE2	9:CI:71:ILE:HG22	1.76	0.51
22:BA:1324:G:C4	22:BA:1328:A:N6	2.78	0.51
53:CA:702:A:H5'	53:CA:703:G:C8	2.46	0.51
57:DA:716:A:H3'	57:DA:717:C:H5''	1.92	0.51
1:AA:1161:C:O2'	1:AA:1162:C:C5'	2.58	0.51
24:DC:127:ASN:O	24:DC:191:LEU:HD22	2.10	0.51
53:CA:705:G:H2'	53:CA:706:A:C8	2.46	0.51
16:AP:22:ALA:CB	16:AP:32:PHE:HA	2.40	0.51
1:AA:55:A:C4	1:AA:56:U:C6	2.99	0.51
42:BU:42:LYS:HD3	42:BU:42:LYS:N	2.25	0.51
8:AH:88:LYS:HG3	8:AH:89:ASP:H	1.76	0.51
22:BA:2820:A:H3'	22:BA:2820:A:H8	1.76	0.51
57:DA:1263:U:O2'	48:D0:6:LYS:HG3	2.11	0.51
20:CT:74:HIS:O	20:CT:78:LEU:HB2	2.11	0.51
28:BG:9:VAL:HA	28:BG:48:THR:HA	1.92	0.51
53:CA:926:G:H3'	53:CA:1505:G:H21	1.76	0.51
41:BT:61:LEU:C	41:BT:61:LEU:CD1	2.79	0.51
22:BA:2311:A:H1'	27:BF:78:ILE:CD1	2.40	0.51
22:BA:2311:A:O3'	22:BA:2312:U:C6	2.64	0.51
25:BD:68:PHE:HB3	25:BD:73:VAL:HA	1.93	0.51
36:DO:25:ARG:HB3	36:DO:93:ASP:HB2	1.91	0.51
57:DA:672:C:H5'	57:DA:672:C:H6	1.74	0.51
22:BA:532:A:O2'	22:BA:2021:C:H5	1.93	0.51
57:DA:2683:C:H2'	57:DA:2684:U:C6	2.42	0.51
53:CA:996:A:H2'	53:CA:997:U:C6	2.46	0.51
16:AP:12:LYS:O	16:AP:13:LYS:HB2	2.10	0.51
35:BN:73:ASN:HD22	35:BN:76:VAL:CG1	2.23	0.51
57:DA:2264:C:H41	44:DW:11:ASN:ND2	2.08	0.51
53:CA:50:A:H1'	53:CA:52:C:C6	2.46	0.51
37:BP:87:ARG:NH2	37:BP:111:GLU:HG3	2.25	0.51
57:DA:223:A:N6	57:DA:422:A:C6	2.78	0.51
3:AC:164:THR:O	3:AC:165:GLU:C	2.49	0.51
23:BB:93:C:H2'	23:BB:94:A:C8	2.46	0.51
48:B0:53:VAL:O	48:B0:54:ILE:C	2.49	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1220:G:C2	57:DA:1230:A:C2	2.99	0.51
57:DA:132:G:N2	57:DA:148:U:C2	2.79	0.51
36:DO:49:VAL:HG11	36:DO:81:ARG:HB3	1.92	0.51
26:DE:85:PHE:O	26:DE:86:ALA:C	2.49	0.51
28:DG:70:LEU:O	28:DG:74:MET:HB2	2.10	0.51
22:BA:1122:G:N3	22:BA:1122:G:H2'	2.26	0.51
57:DA:1923:U:H2'	57:DA:1924:C:H6	1.76	0.51
22:BA:313:G:C2'	22:BA:314:C:H5'	2.40	0.51
22:BA:2884:U:O2	22:BA:2884:U:O4'	2.28	0.51
22:BA:1224:U:H4'	39:BR:88:GLY:O	2.10	0.51
10:AJ:15:HIS:CG	10:AJ:16:ARG:N	2.78	0.51
53:CA:1499:A:O2'	53:CA:1500:A:H5'	2.11	0.51
24:DC:2:VAL:O	24:DC:3:VAL:HB	2.11	0.51
22:BA:1155:A:C4	22:BA:1157:G:N7	2.79	0.51
45:BX:29:LEU:HB2	45:BX:30:PRO:HD3	1.91	0.51
4:CD:186:GLU:O	4:CD:187:ARG:HB2	2.10	0.51
57:DA:1827:U:C4'	57:DA:1970:A:HO2'	2.19	0.51
57:DA:704:G:H2'	57:DA:726:G:N2	2.19	0.51
57:DA:1789:A:OP1	24:DC:220:ARG:HD3	2.11	0.51
1:AA:1239:A:H4'	1:AA:1240:U:H5'	1.93	0.51
57:DA:570:G:C5	57:DA:2030:A:N7	2.79	0.51
57:DA:576:U:H2'	57:DA:577:G:C8	2.45	0.51
41:DT:43:ILE:CG2	41:DT:58:VAL:HG11	2.41	0.51
10:CJ:10:LEU:O	10:CJ:18:ILE:HD11	2.11	0.51
57:DA:2143:C:H3'	57:DA:2144:G:C8	2.46	0.51
58:DB:24:G:H1'	58:DB:27:C:H41	1.73	0.51
11:CK:74:LYS:HD2	11:CK:104:PHE:HE1	1.76	0.51
37:BP:33:GLU:OE1	37:BP:33:GLU:C	2.49	0.51
34:BM:54:THR:O	34:BM:56:ALA:N	2.44	0.51
25:DD:118:PHE:CG	25:DD:119:ALA:N	2.78	0.51
57:DA:628:G:H2'	57:DA:629:G:C8	2.46	0.51
1:AA:1152:A:O2'	1:AA:1153:G:H5'	2.11	0.51
38:BQ:106:THR:O	38:BQ:107:ALA:C	2.48	0.51
37:DP:56:SER:O	37:DP:75:THR:HG22	2.10	0.51
52:B4:24:ARG:HG2	52:B4:24:ARG:NH2	2.26	0.51
22:BA:2707:U:O2	35:BN:71:ARG:NH1	2.44	0.51
23:BB:49:C:OP1	36:BO:102:ARG:HG3	2.09	0.51
25:DD:108:ASP:OD1	25:DD:207:VAL:HG23	2.11	0.51
1:AA:1157:A:C5	1:AA:1180:A:C6	2.98	0.51
57:DA:1237:A:H2	57:DA:1238:G:H1'	1.70	0.51
55:CM:103:THR:HG22	55:CM:104:ASN:N	2.26	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:111:A:C2	57:DA:112:U:C2	2.98	0.51
35:DN:114:GLU:HG2	35:DN:115:LEU:N	2.24	0.51
57:DA:329:G:H4'	57:DA:330:A:OP1	2.07	0.51
57:DA:476:G:O2'	57:DA:477:A:H3'	2.10	0.51
57:DA:156:A:H2'	57:DA:157:C:C6	2.43	0.51
35:DN:94:TYR:N	35:DN:94:TYR:CD1	2.76	0.51
57:DA:2267:A:N6	57:DA:2272:U:N3	2.52	0.51
53:CA:1507:A:H2'	53:CA:1508:A:C8	2.46	0.51
22:BA:1843:C:O2'	22:BA:1844:C:H5'	2.10	0.51
57:DA:78:U:C2'	57:DA:79:C:H5'	2.41	0.51
43:DV:73:LYS:O	43:DV:92:VAL:HG22	2.10	0.51
1:AA:958:A:C6	1:AA:959:A:C6	2.99	0.51
1:AA:1348:U:H2'	1:AA:1349:A:H8	1.74	0.51
1:AA:1288:A:H2'	1:AA:1289:A:H8	1.76	0.51
22:BA:2495:G:O2'	22:BA:2496:C:H5'	2.10	0.51
25:DD:12:THR:HG22	25:DD:13:ARG:N	2.25	0.51
22:BA:1278:C:H2'	22:BA:1279:G:C8	2.44	0.51
42:BU:87:GLU:O	42:BU:88:ASP:O	2.28	0.51
57:DA:2636:C:H2'	57:DA:2637:U:C6	2.45	0.51
53:CA:750:C:H4'	15:CO:20:ASP:HB2	1.92	0.51
24:DC:231:HIS:O	24:DC:232:GLY:C	2.48	0.51
1:AA:570:G:C4	1:AA:571:U:C5	2.99	0.51
6:AF:40:GLU:HB2	6:AF:42:TRP:HE1	1.75	0.51
25:BD:53:GLY:HA3	25:BD:77:ARG:CB	2.41	0.51
57:DA:1525:A:C6	57:DA:1526:C:C2	2.99	0.51
22:BA:2109:U:C4	22:BA:2181:U:O4	2.63	0.51
39:DR:62:GLU:CD	39:DR:97:LYS:HD2	2.32	0.51
57:DA:1973:G:C6	57:DA:1974:C:N4	2.79	0.51
53:CA:68:G:N2	53:CA:152:A:H1'	2.26	0.51
57:DA:708:G:H2'	57:DA:709:U:H6	1.76	0.51
53:CA:1416:G:C2'	53:CA:1417:G:H5'	2.40	0.51
6:CF:99:ALA:O	6:CF:100:SER:HB2	2.11	0.51
22:BA:976:G:N3	22:BA:976:G:H2'	2.25	0.51
53:CA:889:A:HO2'	53:CA:890:G:P	2.34	0.51
8:CH:38:VAL:HA	8:CH:41:GLU:CG	2.41	0.51
33:BL:89:VAL:HA	33:BL:121:THR:HG23	1.92	0.51
57:DA:696:G:C2	57:DA:767:U:O2	2.63	0.51
51:D3:57:VAL:O	51:D3:60:CYS:HB2	2.10	0.51
2:CB:23:ASN:HB2	2:CB:189:ASN:O	2.11	0.51
1:AA:1414:U:H2'	1:AA:1415:G:H8	1.76	0.51
57:DA:2603:G:H4'	57:DA:2603:G:OP2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1157:G:H2'	22:BA:1158:C:C6	2.45	0.51
38:BQ:63:ARG:NH2	38:BQ:96:ASP:N	2.57	0.51
57:DA:1420:A:N3	57:DA:2211:A:N7	2.59	0.51
57:DA:2216:G:O2'	57:DA:2217:G:C8	2.23	0.51
57:DA:2135:A:C2'	57:DA:2136:G:O4'	2.56	0.51
57:DA:2757:A:OP1	52:D4:20:ASP:N	2.44	0.51
57:DA:616:A:H4'	26:DE:101:TYR:CZ	2.45	0.51
57:DA:185:G:C5	57:DA:212:G:N2	2.78	0.51
38:DQ:40:LYS:O	38:DQ:44:TYR:HD2	1.93	0.51
58:DB:19:C:H2'	58:DB:20:G:C8	2.46	0.51
49:D1:8:ILE:HD11	49:D1:52:LYS:HE3	1.93	0.51
57:DA:1395:A:H4'	57:DA:1397:U:C5	2.45	0.51
53:CA:765:G:H1'	53:CA:812:G:N2	2.26	0.51
59:DF:67:THR:O	59:DF:84:ILE:HG22	2.11	0.51
53:CA:673:A:H1'	18:CR:63:TYR:CE2	2.46	0.51
8:AH:45:ILE:C	8:AH:63:LYS:HD2	2.31	0.51
11:AK:22:ILE:HD13	11:AK:95:THR:CG2	2.32	0.51
6:CF:3:HIS:HB2	6:CF:92:THR:HA	1.93	0.51
52:D4:36:ARG:HG2	52:D4:37:GLN:H	1.76	0.51
1:AA:342:C:C2'	1:AA:343:U:H5'	2.41	0.51
57:DA:120:U:O4	57:DA:177:G:C8	2.64	0.51
2:CB:164:ASP:HB3	2:CB:167:HIS:HB3	1.93	0.51
22:BA:1421:G:C2	22:BA:1422:G:C8	2.99	0.51
2:AB:110:ILE:HD12	2:AB:147:LEU:CD1	2.37	0.51
1:AA:16:A:C2'	1:AA:17:U:H5'	2.41	0.51
22:BA:657:U:O2'	22:BA:658:U:H5'	2.11	0.51
57:DA:193:U:H4'	57:DA:802:A:HO2'	1.76	0.51
57:DA:94:A:C6	57:DA:95:A:C6	2.99	0.51
35:BN:103:ARG:HD3	35:BN:110:MET:CE	2.41	0.51
53:CA:243:A:C2	53:CA:246:A:C8	2.99	0.51
24:DC:94:LEU:HA	24:DC:100:ARG:HG2	1.93	0.51
29:BH:14:SER:O	29:BH:16:GLY:N	2.44	0.51
57:DA:379:G:C6	57:DA:380:G:C5	2.99	0.51
10:AJ:65:TYR:CB	14:AN:95:LEU:HD11	2.40	0.51
57:DA:70:G:H5'	57:DA:112:U:O2	2.11	0.51
22:BA:2773:C:H2'	22:BA:2774:C:H6	1.76	0.51
22:BA:946:C:H2'	22:BA:947:A:C8	2.45	0.51
22:BA:2581:G:H4'	22:BA:2582:G:N7	2.26	0.51
1:AA:61:G:H2'	1:AA:62:U:H6	1.74	0.51
2:AB:17:HIS:CD2	2:AB:202:ASN:ND2	2.78	0.51
53:CA:1134:G:N1	53:CA:1141:C:C4	2.78	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BY:59:GLU:O	46:BY:63:ALA:HB3	2.11	0.51
1:AA:1380:U:H5'	1:AA:1381:U:OP1	2.11	0.51
57:DA:1936:A:H2	57:DA:1943:U:O4	1.94	0.51
1:AA:641:U:H4'	8:AH:106:SER:O	2.10	0.51
57:DA:2663:G:H2'	57:DA:2664:G:H8	1.76	0.51
22:BA:799:G:C6	22:BA:800:A:C6	2.99	0.51
26:BE:58:LYS:HE3	26:BE:62:GLN:HE21	1.74	0.51
13:AM:24:VAL:O	13:AM:24:VAL:HG23	2.10	0.51
57:DA:1651:G:N2	57:DA:2007:U:C2	2.79	0.51
57:DA:2069:G:C2	57:DA:2443:C:C2	2.98	0.51
26:DE:139:LYS:NZ	26:DE:139:LYS:HB2	2.25	0.51
53:CA:465:A:H8	53:CA:467:U:OP1	1.94	0.51
22:BA:588:U:H1'	26:BE:85:PHE:CD1	2.46	0.51
32:BK:99:ILE:HG22	32:BK:119:ALA:HA	1.92	0.51
22:BA:395:U:O2'	22:BA:396:G:N7	2.41	0.51
1:AA:550:G:O2'	1:AA:551:U:H5'	2.11	0.51
22:BA:38:A:O2'	26:BE:43:THR:HA	2.10	0.51
37:DP:37:LYS:O	37:DP:38:ARG:HB3	2.11	0.51
57:DA:2550:G:O6	57:DA:2551:C:N4	2.44	0.51
7:AG:78:ARG:HH22	7:AG:81:GLY:HA2	1.75	0.51
12:CL:88:ASP:HB3	12:CL:89:LEU:HD22	1.92	0.51
28:DG:34:ARG:O	28:DG:35:THR:HG23	2.11	0.51
1:AA:669:G:O2'	1:AA:670:G:H5'	2.11	0.51
22:BA:1309:G:H4'	50:B2:7:PRO:HB2	1.93	0.51
57:DA:2138:G:OP2	57:DA:2138:G:H8	1.94	0.51
57:DA:2672:U:H6	57:DA:2672:U:O5'	1.94	0.51
57:DA:2226:C:H2'	57:DA:2227:A:H8	1.74	0.51
22:BA:923:G:N3	44:BW:23:LYS:CE	2.69	0.51
53:CA:985:C:O2'	53:CA:986:U:O5'	2.29	0.51
44:DW:31:LEU:C	44:DW:33:GLY:H	2.13	0.51
44:DW:46:ALA:HA	44:DW:50:VAL:HG12	1.91	0.51
6:AF:4:TYR:HA	6:AF:91:ARG:O	2.11	0.51
17:AQ:79:GLU:C	17:AQ:80:LYS:HD3	2.32	0.51
22:BA:1097:U:H3'	22:BA:1098:A:H4'	1.93	0.51
56:CP:52:LEU:HD21	56:CP:75:ILE:HG12	1.92	0.51
53:CA:39:G:H2'	53:CA:40:C:H6	1.76	0.51
57:DA:298:G:O5'	57:DA:298:G:H8	1.94	0.51
57:DA:333:G:O2'	57:DA:334:C:H5'	2.11	0.51
57:DA:338:G:H2'	57:DA:339:U:H5'	1.93	0.51
57:DA:1281:G:C6	57:DA:1290:C:N4	2.79	0.51
22:BA:811:U:HO2'	22:BA:1250:G:H2'	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:9:LEU:HB2	2:AB:42:LEU:HD13	1.92	0.51
22:BA:1107:G:C2	22:BA:1108:U:C2	2.99	0.51
57:DA:2039:U:H2'	57:DA:2040:G:H8	1.75	0.51
1:AA:257:G:H2'	1:AA:258:G:H8	1.76	0.51
57:DA:1655:A:C8	57:DA:1656:C:C5	2.99	0.51
57:DA:627:A:O2'	57:DA:628:G:O4'	2.29	0.51
57:DA:942:G:H2'	57:DA:943:A:H5'	1.92	0.51
59:DF:43:ILE:HD13	59:DF:82:TYR:HE2	1.75	0.51
57:DA:528:A:C2	57:DA:2043:C:H4'	2.46	0.51
57:DA:527:C:O2'	57:DA:528:A:P	2.69	0.51
57:DA:1582:C:H2'	57:DA:1585:C:H42	1.75	0.51
36:BO:31:THR:HG23	36:BO:33:ARG:N	2.26	0.51
24:DC:93:VAL:CG1	24:DC:94:LEU:N	2.74	0.51
40:DS:49:LYS:HZ3	40:DS:49:LYS:HB3	1.76	0.51
31:DJ:64:VAL:HG22	31:DJ:68:LYS:HE2	1.93	0.51
16:AP:20:VAL:HG21	16:AP:32:PHE:CB	2.41	0.51
57:DA:1968:G:H5'	63:DA:3480:HOH:O	2.11	0.51
36:DO:24:THR:H	36:DO:90:VAL:CG1	2.23	0.51
30:BI:32:VAL:HG13	30:BI:66:PHE:CE2	2.46	0.51
57:DA:511:U:C5'	57:DA:1235:G:H4'	2.40	0.51
53:CA:595:A:H4'	53:CA:596:A:OP1	2.11	0.51
27:BF:68:LYS:N	27:BF:68:LYS:HD2	2.23	0.51
53:CA:64:G:C8	53:CA:99:C:N4	2.78	0.51
43:DV:56:PHE:C	43:DV:58:SER:H	2.14	0.51
43:DV:72:VAL:HA	43:DV:92:VAL:O	2.10	0.51
9:AI:119:LYS:HG3	9:AI:122:ARG:HB3	1.93	0.51
57:DA:2425:A:H1'	57:DA:2427:C:C5	2.45	0.51
28:BG:124:CYS:HB3	28:BG:126:THR:O	2.10	0.51
42:BU:94:PHE:O	42:BU:94:PHE:CD1	2.64	0.51
22:BA:1607:C:N4	22:BA:1622:G:C5	2.78	0.51
22:BA:2232:C:H2'	22:BA:2233:U:H6	1.75	0.51
27:BF:128:SER:OG	27:BF:154:THR:HB	2.10	0.51
57:DA:223:A:C6	57:DA:422:A:N7	2.79	0.51
53:CA:449:G:C2	53:CA:450:G:C4	2.99	0.51
57:DA:2049:G:C5	57:DA:2050:C:C5	2.99	0.51
38:BQ:13:HIS:CD2	38:BQ:31:TYR:CG	2.99	0.51
36:DO:8:ILE:HD12	36:DO:8:ILE:H	1.75	0.51
22:BA:2714:G:P	63:BA:3549:HOH:O	2.68	0.51
22:BA:2865:U:C4	22:BA:2866:U:C4	3.00	0.51
57:DA:2100:G:C6	57:DA:2101:A:C6	2.99	0.51
23:BB:2:G:C6	23:BB:119:A:C2	2.98	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:53:GLU:O	29:BH:53:GLU:HG2	2.11	0.51
22:BA:2543:G:H2'	22:BA:2544:G:C8	2.46	0.51
22:BA:2272:U:H5''	22:BA:2273:A:OP1	2.11	0.51
55:CM:3:ILE:O	55:CM:4:ALA:HB2	2.11	0.51
30:DI:86:LYS:O	30:DI:87:SER:HB2	2.11	0.51
22:BA:999:U:OP2	63:BA:3356:HOH:O	2.20	0.51
25:BD:151:THR:C	25:BD:153:GLY:N	2.62	0.50
44:BW:30:VAL:HG23	44:BW:59:PHE:HD1	1.75	0.50
21:CU:24:LYS:CD	21:CU:25:ALA:H	2.24	0.50
5:AE:114:LEU:HD21	5:AE:122:VAL:HG23	1.92	0.50
53:CA:1157:A:C2	53:CA:1181:G:C8	2.99	0.50
57:DA:1991:U:H6	57:DA:1991:U:H5''	1.74	0.50
57:DA:705:A:H62	57:DA:726:G:H1'	1.76	0.50
10:CJ:79:PRO:HA	10:CJ:84:VAL:HG11	1.92	0.50
57:DA:2060:A:H62	26:DE:69:ARG:NH1	2.07	0.50
42:DU:73:ASN:HB3	42:DU:95:PHE:CE2	2.46	0.50
25:BD:114:LYS:HZ3	25:BD:116:LYS:HE2	1.76	0.50
57:DA:1328:A:H2'	57:DA:1330:C:C5	2.45	0.50
1:AA:374:A:H2'	1:AA:375:U:H6	1.75	0.50
57:DA:1476:U:O2'	57:DA:1477:A:H5'	2.11	0.50
45:DX:67:LEU:O	45:DX:77:TYR:OH	2.27	0.50
1:AA:587:G:H4'	8:AH:3:GLN:CA	2.39	0.50
32:BK:2:ILE:HG21	32:BK:39:ILE:CD1	2.40	0.50
32:BK:39:ILE:HG22	32:BK:60:ALA:O	2.11	0.50
24:DC:62:ARG:HD2	24:DC:62:ARG:N	2.26	0.50
53:CA:1452:C:H5'	53:CA:1453:G:C4	2.46	0.50
46:DY:50:VAL:HA	46:DY:53:VAL:HG23	1.92	0.50
3:CC:76:ILE:HG12	3:CC:83:VAL:HG11	1.93	0.50
13:AM:4:ALA:HB2	13:AM:59:VAL:HG13	1.92	0.50
45:DX:4:CYS:HB3	45:DX:9:LYS:N	2.26	0.50
32:DK:19:VAL:HG12	32:DK:41:ILE:CG1	2.40	0.50
57:DA:746:U:H5'	57:DA:748:G:O4'	2.11	0.50
1:AA:1196:A:O2'	1:AA:1197:A:OP2	2.29	0.50
57:DA:595:C:O2	57:DA:663:G:C2	2.65	0.50
57:DA:2788:C:H2'	57:DA:2789:C:C6	2.45	0.50
22:BA:1434:A:OP1	22:BA:1434:A:H4'	2.11	0.50
38:DQ:93:ILE:O	38:DQ:96:ASP:HB3	2.11	0.50
53:CA:140:U:H2'	53:CA:141:G:O4'	2.11	0.50
22:BA:2820:A:O2'	22:BA:2821:A:P	2.70	0.50
1:AA:1226:C:H4'	1:AA:1227:A:OP1	2.10	0.50
57:DA:1380:G:H1'	57:DA:1569:A:N6	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:878:A:H5''	8:AH:80:PRO:HG2	1.94	0.50
1:AA:687:A:N7	1:AA:701:U:H5	2.10	0.50
28:BG:8:VAL:CG1	28:BG:9:VAL:N	2.74	0.50
37:DP:107:ALA:O	37:DP:108:ARG:C	2.50	0.50
29:BH:66:ASN:C	29:BH:68:ARG:H	2.13	0.50
13:AM:10:ASP:OD1	13:AM:44:ILE:HB	2.12	0.50
45:DX:62:GLY:O	45:DX:66:VAL:HG23	2.10	0.50
57:DA:2581:G:H5''	57:DA:2582:G:OP1	2.11	0.50
9:AI:117:LEU:HD23	9:AI:123:ARG:HD3	1.93	0.50
22:BA:1802:A:N1	22:BA:1822:C:H1'	2.27	0.50
13:AM:86:ARG:HH22	13:AM:97:ARG:HA	1.76	0.50
1:AA:932:C:OP1	7:AG:3:ARG:HB3	2.12	0.50
57:DA:1520:U:O4	57:DA:1521:G:C6	2.64	0.50
53:CA:295:C:C4	53:CA:296:U:C4	2.99	0.50
53:CA:643:C:H5''	8:CH:31:LEU:HD13	1.93	0.50
14:AN:51:PRO:O	14:AN:52:ARG:CB	2.59	0.50
56:CP:4:ILE:HD12	56:CP:4:ILE:N	2.26	0.50
57:DA:750:A:H5''	57:DA:751:A:OP2	2.10	0.50
1:AA:633:G:H2'	1:AA:634:C:H6	1.75	0.50
53:CA:148:G:N1	53:CA:149:A:C5	2.78	0.50
22:BA:747:U:OP2	40:BS:90:LYS:NZ	2.42	0.50
34:BM:13:HIS:O	34:BM:14:LYS:HB2	2.12	0.50
22:BA:2405:G:H1'	22:BA:2412:A:N6	2.26	0.50
57:DA:1213:A:O2'	57:DA:1214:A:H5'	2.11	0.50
54:CG:49:LEU:HG	54:CG:123:LEU:HB3	1.93	0.50
29:BH:76:GLU:HG2	29:BH:106:ALA:HB2	1.92	0.50
22:BA:1374:G:O2'	22:BA:1375:U:H5'	2.11	0.50
32:BK:65:THR:HG1	32:BK:68:GLY:H	1.58	0.50
29:DH:75:LEU:O	29:DH:76:GLU:HB2	2.10	0.50
14:AN:47:LEU:HD23	14:AN:47:LEU:O	2.11	0.50
57:DA:2422:C:H2'	57:DA:2423:U:H5''	1.93	0.50
31:BJ:44:TYR:CD2	38:BQ:63:ARG:HD3	2.46	0.50
22:BA:856:G:C1'	44:BW:23:LYS:HB3	2.36	0.50
22:BA:2354:C:H4'	44:BW:31:LEU:HD22	1.94	0.50
53:CA:961:U:O4	53:CA:983:A:N6	2.44	0.50
57:DA:1021:A:C2'	57:DA:1022:G:H4'	2.40	0.50
57:DA:656:G:O2'	57:DA:657:U:H5'	2.10	0.50
17:AQ:11:VAL:HG12	17:AQ:12:VAL:H	1.76	0.50
22:BA:1079:C:N4	22:BA:1088:A:C2	2.72	0.50
57:DA:2428:G:N2	33:DL:60:ARG:CZ	2.75	0.50
57:DA:247:G:C8	57:DA:249:C:C6	2.99	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2447:G:C8	57:DA:2500:U:H2'	2.47	0.50
57:DA:333:G:O2'	57:DA:334:C:H6	1.93	0.50
53:CA:1072:G:H2'	53:CA:1073:U:C6	2.46	0.50
22:BA:1509:A:H1'	22:BA:1510:G:C5'	2.31	0.50
57:DA:1311:G:H21	57:DA:1603:A:H62	1.58	0.50
57:DA:1611:C:HO2'	57:DA:1612:C:H6	1.51	0.50
57:DA:463:G:N2	57:DA:466:A:OP2	2.37	0.50
1:AA:1066:C:H5''	1:AA:1066:C:C6	2.45	0.50
22:BA:415:A:C5	22:BA:416:U:C5	2.98	0.50
57:DA:527:C:N3	57:DA:2779:U:H2'	2.26	0.50
63:BA:3241:HOH:O	26:BE:81:GLY:HA2	2.12	0.50
57:DA:1014:A:C2	57:DA:1149:G:C2	2.99	0.50
37:BP:3:ILE:HD13	37:BP:3:ILE:C	2.31	0.50
22:BA:2264:C:N4	44:BW:11:ASN:ND2	2.59	0.50
31:DJ:73:VAL:HG23	31:DJ:74:TYR:N	2.27	0.50
57:DA:1179:G:N2	57:DA:1180:U:C2	2.80	0.50
4:AD:61:ARG:HH21	4:AD:67:LEU:HD23	1.76	0.50
53:CA:1434:A:N6	53:CA:1435:G:N1	2.59	0.50
22:BA:919:U:H3'	22:BA:919:U:C6	2.46	0.50
57:DA:1722:A:N6	57:DA:1739:A:C8	2.79	0.50
31:BJ:31:GLU:OE2	31:BJ:35:ARG:HD2	2.11	0.50
57:DA:2626:C:C2'	57:DA:2627:G:H5'	2.42	0.50
17:AQ:33:TYR:O	17:AQ:35:LYS:N	2.44	0.50
7:AG:96:ASN:N	7:AG:96:ASN:OD1	2.44	0.50
57:DA:163:C:O2'	57:DA:164:C:O4'	2.23	0.50
40:BS:13:SER:O	40:BS:14:ALA:CB	2.59	0.50
2:AB:49:PHE:HB2	2:AB:53:LEU:CD2	2.42	0.50
54:CG:37:THR:HA	54:CG:40:SER:OG	2.11	0.50
56:CP:32:PHE:CD1	56:CP:32:PHE:C	2.85	0.50
57:DA:416:U:H2'	57:DA:417:C:O4'	2.11	0.50
5:CE:105:ILE:O	5:CE:105:ILE:HG22	2.10	0.50
43:BV:1:MET:HG3	43:BV:2:PHE:N	2.26	0.50
57:DA:2537:U:H2'	57:DA:2538:C:C6	2.46	0.50
58:DB:84:G:N2	58:DB:93:C:C2	2.78	0.50
11:CK:19:VAL:HG22	11:CK:82:GLU:HG2	1.92	0.50
57:DA:21:A:H2'	57:DA:22:C:C6	2.46	0.50
22:BA:758:C:O2	22:BA:1981:A:H2	1.94	0.50
33:BL:40:SER:O	33:BL:41:ARG:HB2	2.12	0.50
13:AM:28:ARG:NH2	13:AM:62:PHE:HB2	2.26	0.50
14:CN:27:LYS:HD2	14:CN:27:LYS:C	2.31	0.50
53:CA:688:G:H5''	53:CA:688:G:H8	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BV:65:VAL:O	43:BV:65:VAL:CG2	2.59	0.50
30:DI:89:SER:HB3	30:DI:97:VAL:HG11	1.93	0.50
57:DA:432:A:O5'	57:DA:432:A:H8	1.93	0.50
57:DA:45:G:C5'	57:DA:46:G:H5'	2.42	0.50
37:DP:87:ARG:HG2	37:DP:88:ARG:N	2.26	0.50
38:DQ:4:LYS:CE	38:DQ:7:VAL:H	2.24	0.50
53:CA:900:A:O5'	53:CA:900:A:H8	1.94	0.50
5:CE:118:GLY:O	5:CE:119:VAL:HG13	2.12	0.50
2:AB:42:LEU:HG	2:AB:43:GLU:N	2.25	0.50
57:DA:191:A:C2	57:DA:192:C:C2	2.99	0.50
57:DA:800:A:H4'	57:DA:801:G:O5'	2.10	0.50
24:DC:71:ASP:O	24:DC:73:ILE:HG12	2.12	0.50
1:AA:351:G:H4'	1:AA:352:C:OP1	2.10	0.50
57:DA:1416:G:HO2'	57:DA:1417:C:P	2.33	0.50
32:DK:21:CYS:SG	32:DK:39:ILE:CG2	2.99	0.50
57:DA:443:A:N6	26:DE:36:ALA:HB1	2.20	0.50
57:DA:1178:C:C2	57:DA:1179:G:C8	3.00	0.50
30:BI:56:VAL:HG23	30:BI:69:VAL:O	2.10	0.50
30:BI:6:ALA:HB3	30:BI:60:VAL:H	1.77	0.50
57:DA:2631:G:N2	57:DA:2788:C:C2	2.79	0.50
57:DA:972:A:C2	57:DA:973:A:N6	2.79	0.50
57:DA:989:G:C4'	57:DA:990:A:OP1	2.57	0.50
57:DA:2075:U:N3	57:DA:2435:A:C2	2.80	0.50
53:CA:599:C:H4'	8:CH:121:GLY:C	2.31	0.50
2:AB:20:ARG:O	2:AB:22:TRP:N	2.44	0.50
53:CA:926:G:H3'	53:CA:1505:G:N2	2.26	0.50
53:CA:1446:A:H2'	53:CA:1447:A:H5'	1.93	0.50
22:BA:1026:G:H2'	22:BA:1027:A:C8	2.47	0.50
1:AA:858:G:C2'	1:AA:859:G:H5'	2.41	0.50
1:AA:785:G:H2'	1:AA:786:G:H5'	1.94	0.50
22:BA:1537:G:H5''	22:BA:1537:G:N3	2.27	0.50
3:CC:6:PRO:HG2	3:CC:183:TYR:CD2	2.47	0.50
14:AN:50:LEU:HB3	14:AN:51:PRO:HD2	1.92	0.50
1:AA:179:A:C2'	1:AA:180:U:H5'	2.42	0.50
31:BJ:37:ARG:HG2	31:BJ:37:ARG:O	2.12	0.50
33:BL:132:ARG:HA	33:BL:142:ILE:CD1	2.42	0.50
57:DA:1249:U:H4'	38:DQ:3:VAL:CB	2.40	0.50
49:B1:29:LYS:HD2	49:B1:31:GLU:OE1	2.11	0.50
57:DA:2648:G:H2'	57:DA:2649:C:O4'	2.10	0.50
51:D3:44:ARG:N	51:D3:45:PRO:HD2	2.27	0.50
6:CF:6:ILE:HG22	6:CF:7:VAL:N	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:10:VAL:HG23	41:DT:11:LEU:HD12	1.92	0.50
43:BV:65:VAL:O	43:BV:66:ASP:OD1	2.29	0.50
1:AA:189:A:O2'	1:AA:190:A:H5'	2.11	0.50
57:DA:2059:A:O3'	26:DE:64:GLY:HA2	2.11	0.50
57:DA:661:A:H2'	57:DA:662:G:O4'	2.10	0.50
1:AA:443:C:O2'	1:AA:444:G:H5'	2.12	0.50
57:DA:2477:U:O4	52:D4:10:LEU:HD22	2.10	0.50
22:BA:412:A:O2'	22:BA:413:C:H5'	2.11	0.50
26:DE:16:GLU:O	26:DE:16:GLU:HG3	2.12	0.50
48:B0:9:ARG:HH21	48:B0:9:ARG:HG3	1.76	0.50
1:AA:1074:G:C6	1:AA:1075:U:C4	2.99	0.50
12:CL:65:TYR:HE1	12:CL:67:GLY:HA2	1.77	0.50
26:BE:61:ARG:NH1	26:BE:64:GLY:HA3	2.26	0.50
38:BQ:85:ALA:O	38:BQ:87:VAL:O	2.29	0.50
57:DA:2211:A:OP2	57:DA:2211:A:H4'	2.11	0.50
17:CQ:46:HIS:HB2	17:CQ:70:LYS:CE	2.41	0.50
44:DW:65:LYS:HE2	44:DW:84:GLU:HA	1.92	0.50
22:BA:1068:G:H2'	22:BA:1069:A:H5'	1.93	0.50
1:AA:1239:A:H62	1:AA:1299:A:H61	1.53	0.50
33:BL:95:LEU:HB3	33:BL:100:ILE:CG1	2.42	0.50
15:AO:24:THR:HG22	15:AO:69:LEU:HD12	1.94	0.50
31:DJ:38:GLY:C	31:DJ:40:HIS:H	2.15	0.50
31:DJ:44:TYR:CD2	31:DJ:44:TYR:C	2.84	0.50
4:CD:29:THR:C	4:CD:31:CYS:H	2.15	0.50
2:CB:96:LEU:H	2:CB:99:MET:HE3	1.77	0.50
59:DF:90:LEU:HB3	59:DF:95:MET:HG3	1.92	0.50
1:AA:844:G:H2'	1:AA:844:G:N3	2.26	0.50
21:AU:3:ILE:HA	21:AU:19:LYS:HZ1	1.75	0.50
57:DA:639:U:HO2'	57:DA:640:C:H6	1.58	0.50
57:DA:1905:C:N4	57:DA:1930:G:C2	2.80	0.50
20:AT:55:PRO:HG2	20:AT:56:ILE:H	1.77	0.50
3:CC:110:LEU:O	3:CC:110:LEU:HD23	2.11	0.50
50:B2:43:THR:O	50:B2:44:VAL:CB	2.59	0.50
36:BO:75:GLY:HA3	36:BO:106:LEU:HA	1.92	0.50
13:AM:2:ARG:HG3	13:AM:56:ARG:HH12	1.77	0.50
36:BO:47:VAL:O	36:BO:47:VAL:HG23	2.12	0.50
57:DA:1474:U:C2'	57:DA:1475:G:H5'	2.37	0.50
1:AA:1159:U:N3	1:AA:1182:G:C5	2.80	0.50
53:CA:1386:G:C2	53:CA:1387:G:C8	2.99	0.50
1:AA:1053:G:O2'	1:AA:1054:C:OP2	2.21	0.50
57:DA:664:G:H4'	57:DA:941:A:OP1	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1561:C:H2'	22:BA:1562:U:H6	1.75	0.50
31:BJ:21:THR:CG2	31:BJ:22:GLY:N	2.72	0.50
53:CA:1004:A:H2'	53:CA:1005:A:C8	2.46	0.50
1:AA:128:G:O2'	1:AA:129:A:H5'	2.10	0.50
6:AF:29:ILE:HG22	6:AF:30:THR:N	2.26	0.50
1:AA:593:U:H2'	1:AA:594:U:H6	1.75	0.50
53:CA:1447:A:P	53:CA:1448:C:H5	2.35	0.50
56:CP:54:LEU:HG	56:CP:55:ASP:H	1.76	0.50
57:DA:1259:G:H2'	57:DA:1260:A:C8	2.47	0.50
51:D3:18:LYS:HG3	51:D3:19:GLY:N	2.26	0.50
57:DA:14:A:C6	57:DA:526:A:C2	3.00	0.50
53:CA:1272:G:H2'	53:CA:1273:C:H5'	1.93	0.50
53:CA:643:C:H5''	8:CH:31:LEU:HD22	1.92	0.50
15:CO:28:VAL:HG13	15:CO:62:ARG:HG3	1.92	0.50
22:BA:2512:C:H2'	22:BA:2513:A:O4'	2.11	0.50
24:DC:120:ASP:CG	24:DC:121:ALA:N	2.65	0.50
38:DQ:71:ASN:ND2	38:DQ:106:THR:HA	2.25	0.50
53:CA:151:A:H2'	53:CA:152:A:O4'	2.10	0.50
11:AK:100:ASN:HB2	11:AK:106:ILE:CG2	2.42	0.50
20:CT:14:GLU:HA	20:CT:17:ARG:HB2	1.93	0.50
32:BK:77:ILE:CD1	32:BK:105:ARG:HH12	2.25	0.50
54:CG:32:ASP:CB	54:CG:34:LYS:HD3	2.42	0.50
23:BB:94:A:C2'	23:BB:95:U:H5'	2.40	0.50
6:CF:62:MET:O	6:CF:63:ASN:HB2	2.11	0.50
25:BD:140:HIS:HE1	63:BD:302:HOH:O	1.93	0.50
53:CA:130:A:O2'	53:CA:131:A:O5'	2.23	0.50
30:DI:61:TYR:HE2	30:DI:67:THR:H	1.58	0.50
1:AA:119:A:C2	1:AA:240:G:C8	3.00	0.50
44:BW:30:VAL:O	44:BW:30:VAL:CG2	2.56	0.50
4:CD:187:ARG:HG3	4:CD:191:SER:OG	2.12	0.50
57:DA:433:C:O2'	57:DA:434:U:H5'	2.11	0.50
57:DA:533:G:OP1	38:DQ:27:ARG:HD3	2.11	0.50
57:DA:449:A:O2'	57:DA:450:G:C5'	2.58	0.50
2:AB:153:MET:HE2	2:AB:157:PRO:HG3	1.93	0.50
53:CA:501:C:H1'	53:CA:549:C:H1'	1.93	0.50
54:CG:74:VAL:CG1	54:CG:143:MET:HB2	2.42	0.50
57:DA:1342:A:N6	57:DA:1397:U:C5	2.80	0.50
22:BA:1485:U:C2	22:BA:1505:A:C2	3.00	0.50
1:AA:373:A:N3	1:AA:374:A:C8	2.79	0.50
57:DA:2842:G:H2'	57:DA:2843:G:O4'	2.11	0.50
53:CA:733:G:O2'	53:CA:734:G:C5'	2.59	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:222:A:H3'	57:DA:421:C:H5'	1.94	0.50
54:CG:9:ARG:HD3	54:CG:24:LYS:NZ	2.26	0.50
57:DA:117:G:C2	57:DA:119:A:N6	2.79	0.50
2:AB:66:ILE:HG13	2:AB:220:VAL:HG11	1.93	0.50
34:BM:31:PHE:CZ	34:BM:110:GLU:HA	2.47	0.50
22:BA:603:A:C8	22:BA:655:A:C6	2.99	0.50
28:DG:53:PRO:HB3	28:DG:61:TRP:N	2.26	0.50
42:DU:52:ASN:CG	42:DU:54:PRO:HD3	2.31	0.50
7:AG:38:ALA:O	7:AG:42:VAL:HG23	2.11	0.50
16:AP:20:VAL:HG21	16:AP:32:PHE:CG	2.47	0.50
40:DS:27:LYS:O	40:DS:28:LYS:O	2.30	0.50
35:DN:28:LEU:HD23	35:DN:29:VAL:N	2.26	0.50
1:AA:794:A:H2'	1:AA:795:C:C6	2.47	0.50
1:AA:184:G:H4'	1:AA:224:U:O3'	2.11	0.50
43:DV:80:HIS:CD2	43:DV:83:LYS:N	2.79	0.50
7:AG:90:VAL:HG23	7:AG:94:ARG:HD3	1.93	0.50
34:BM:62:LYS:HB3	34:BM:106:ASP:HB3	1.93	0.50
26:BE:12:LEU:HD13	26:BE:12:LEU:O	2.12	0.50
33:DL:90:VAL:HB	33:DL:122:VAL:HA	1.93	0.50
17:AQ:29:LYS:HB2	17:AQ:36:PHE:CE1	2.46	0.50
57:DA:811:U:H1'	57:DA:1251:C:C2	2.46	0.50
57:DA:2520:C:H2'	57:DA:2521:C:C6	2.46	0.50
22:BA:1385:A:H4'	22:BA:1386:C:OP1	2.11	0.50
45:DX:39:VAL:HG22	45:DX:44:ARG:O	2.10	0.50
48:D0:27:LEU:HB3	48:D0:37:HIS:O	2.11	0.50
48:D0:38:LEU:O	48:D0:41:HIS:ND1	2.45	0.50
15:AO:9:LYS:O	15:AO:13:GLU:HG3	2.11	0.50
14:CN:20:PHE:HA	14:CN:24:ALA:HB2	1.92	0.50
30:DI:20:SER:OG	30:DI:25:PRO:HG2	2.11	0.50
1:AA:675:A:OP1	18:AR:70:THR:HG21	2.10	0.50
24:DC:79:ARG:C	24:DC:80:LEU:HD12	2.31	0.50
53:CA:425:G:H2'	53:CA:426:U:O4'	2.11	0.50
1:AA:628:G:C2	1:AA:629:A:C4	3.00	0.50
53:CA:284:C:H2'	53:CA:285:C:C6	2.47	0.50
31:BJ:123:LYS:HD2	31:BJ:123:LYS:N	2.25	0.50
57:DA:236:C:H2'	57:DA:237:C:H6	1.76	0.50
30:DI:12:VAL:HG12	30:DI:13:ALA:N	2.26	0.50
1:AA:1417:G:C6	1:AA:1482:G:C6	3.00	0.50
2:CB:26:MET:HE2	2:CB:29:PHE:HD2	1.77	0.50
57:DA:1361:G:C2'	57:DA:1362:C:H5'	2.41	0.50
53:CA:1186:G:H4'	9:CI:111:GLU:CD	2.31	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:840:C:N3	53:CA:842:U:H4'	2.26	0.50
57:DA:382:A:H2'	57:DA:383:C:H5''	1.94	0.50
57:DA:345:A:O2'	57:DA:346:A:C2	2.61	0.50
1:AA:1421:G:C6	1:AA:1422:G:N7	2.79	0.50
24:DC:91:ALA:HB3	24:DC:103:ILE:HG23	1.92	0.50
22:BA:2052:A:O4'	25:BD:147:GLY:HA3	2.11	0.50
58:DB:57:A:C4	59:DF:25:MET:CB	2.93	0.50
53:CA:268:U:C2	53:CA:269:C:C5	3.00	0.50
10:CJ:52:LEU:CD2	10:CJ:59:LYS:HA	2.42	0.50
57:DA:2299:U:O2'	57:DA:2300:C:O4'	2.27	0.50
21:AU:8:ASN:O	21:AU:11:PHE:HE2	1.95	0.50
57:DA:533:G:H21	38:DQ:44:TYR:HD1	1.58	0.50
52:B4:30:GLU:HB3	52:B4:33:HIS:ND1	2.26	0.50
26:DE:112:LEU:HD12	26:DE:118:LEU:HD13	1.94	0.50
26:DE:149:ILE:HG23	26:DE:188:MET:N	2.25	0.50
24:BC:229:HIS:CD2	24:BC:246:PRO:HB3	2.46	0.50
1:AA:92:U:O2'	1:AA:93:U:H5'	2.12	0.50
3:AC:35:ASP:OD1	3:AC:56:ILE:HG21	2.11	0.50
53:CA:672:U:O2'	53:CA:673:A:H5'	2.11	0.50
53:CA:5:U:H4'	53:CA:6:G:H5''	1.93	0.50
22:BA:1459:G:C5	22:BA:1461:C:C4	3.00	0.50
35:DN:54:LEU:HB2	35:DN:62:ASN:ND2	2.27	0.50
1:AA:66:A:O2'	1:AA:67:C:H5'	2.12	0.50
46:DY:31:GLN:OE1	46:DY:37:LEU:HB2	2.11	0.50
57:DA:942:G:C2'	57:DA:943:A:H5'	2.42	0.50
11:CK:124:LYS:O	21:CU:33:ARG:NE	2.44	0.50
34:BM:6:ARG:CZ	34:BM:6:ARG:HB2	2.42	0.50
22:BA:2061:G:H5''	22:BA:2503:A:C2	2.46	0.50
57:DA:867:C:O2'	57:DA:868:U:O5'	2.30	0.50
21:AU:24:LYS:HG2	21:AU:25:ALA:N	2.27	0.50
53:CA:1013:G:H22	53:CA:1015:G:H3'	1.76	0.50
1:AA:1160:G:O6	1:AA:1181:G:C5	2.64	0.50
53:CA:113:G:C1'	53:CA:354:G:H5'	2.40	0.50
42:DU:35:VAL:HG12	42:DU:36:GLU:N	2.26	0.50
40:BS:3:THR:HB	40:BS:62:ASP:OD2	2.12	0.50
57:DA:991:C:O5'	57:DA:991:C:H6	1.93	0.50
53:CA:1501:C:N4	53:CA:1504:G:C2	2.79	0.50
42:BU:71:ILE:HD12	42:BU:95:PHE:CE2	2.47	0.50
44:BW:71:LYS:HD2	44:BW:71:LYS:N	2.25	0.50
10:CJ:30:LYS:HG2	10:CJ:36:VAL:HG22	1.93	0.50
57:DA:1722:A:H61	57:DA:1738:G:H1'	1.77	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:765:G:N1	1:AA:812:G:O2'	2.40	0.50
51:D3:22:LYS:H	51:D3:48:MET:CB	2.23	0.50
25:DD:12:THR:CG2	25:DD:13:ARG:N	2.74	0.50
57:DA:1301:A:C8	57:DA:1303:G:C8	2.99	0.50
22:BA:1110:G:O2'	22:BA:1111:A:P	2.70	0.50
22:BA:1392:A:C6	22:BA:1393:A:C6	2.99	0.50
1:AA:1038:C:H2'	1:AA:1039:G:H8	1.73	0.50
22:BA:1853:A:C5	22:BA:1889:A:C6	3.00	0.50
11:AK:76:TYR:N	11:AK:76:TYR:CD1	2.80	0.50
1:AA:903:G:C4	1:AA:904:U:C5	3.00	0.50
4:CD:115:GLN:NE2	4:CD:153:ARG:NH2	2.59	0.50
8:CH:24:VAL:HG22	8:CH:25:THR:N	2.27	0.50
31:BJ:76:HIS:O	31:BJ:84:ILE:HD12	2.10	0.50
22:BA:1381:G:H2'	22:BA:1382:G:H5'	1.94	0.50
57:DA:486:C:H2'	57:DA:487:C:H6	1.76	0.50
56:CP:67:ILE:HG23	56:CP:67:ILE:O	2.12	0.50
36:DO:49:VAL:CG1	36:DO:81:ARG:HB3	2.41	0.50
11:CK:15:VAL:O	11:CK:16:SER:HB2	2.11	0.50
22:BA:2407:A:H2'	22:BA:2408:U:C6	2.46	0.50
24:BC:211:ARG:NE	24:BC:211:ARG:HA	2.27	0.50
39:DR:6:GLN:HE21	39:DR:6:GLN:HA	1.76	0.50
4:CD:60:VAL:HG22	4:CD:194:ILE:HG21	1.93	0.50
22:BA:994:C:O3'	22:BA:995:C:H3'	2.11	0.50
39:BR:49:ILE:HG21	39:BR:53:PHE:N	2.27	0.50
44:BW:40:ARG:NH1	44:BW:45:HIS:NE2	2.58	0.50
57:DA:2321:U:OP2	57:DA:2322:A:OP2	2.30	0.50
5:AE:80:LEU:HD12	5:AE:146:MET:CE	2.42	0.50
22:BA:1060:U:O4'	22:BA:1062:G:C5'	2.57	0.50
53:CA:1287:A:O2'	53:CA:1288:A:C8	2.60	0.50
9:CI:48:ARG:C	9:CI:50:PRO:HD2	2.32	0.50
57:DA:1991:U:H2'	57:DA:1992:G:H5'	1.93	0.50
57:DA:726:G:O2'	57:DA:727:A:OP2	2.27	0.50
57:DA:311:A:C2	57:DA:328:U:O4	2.64	0.50
1:AA:652:U:O4	1:AA:752:G:H2'	2.12	0.50
11:CK:74:LYS:O	11:CK:74:LYS:HG2	2.11	0.50
57:DA:1322:A:C5	57:DA:1323:C:C5	2.99	0.50
5:CE:132:PRO:O	5:CE:134:ASN:N	2.45	0.50
5:AE:152:VAL:HB	5:AE:155:LYS:NZ	2.26	0.50
53:CA:936:C:O2'	53:CA:937:A:O5'	2.30	0.50
1:AA:259:G:C4	1:AA:260:G:C8	3.00	0.50
9:AI:57:VAL:HG12	9:AI:58:GLU:HG2	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:15:G:H2'	1:AA:16:A:H8	1.76	0.50
24:DC:62:ARG:NH2	24:DC:62:ARG:HG2	2.21	0.50
22:BA:1416:G:O2'	22:BA:1417:C:O5'	2.30	0.50
10:AJ:53:ILE:HG22	10:AJ:61:ALA:CB	2.39	0.50
22:BA:2262:U:H4'	22:BA:2328:A:H2	1.77	0.50
25:DD:159:LYS:HA	25:DD:159:LYS:HE2	1.93	0.50
24:DC:67:LYS:CB	24:DC:150:GLY:HA2	2.39	0.50
57:DA:188:G:C2'	57:DA:189:G:H5'	2.41	0.50
57:DA:1179:G:C2	57:DA:1180:U:C2	2.99	0.50
47:BZ:3:THR:C	47:BZ:4:ILE:HG22	2.32	0.50
39:DR:78:ARG:HB3	39:DR:83:TYR:CD1	2.46	0.50
22:BA:95:A:O2'	46:BY:41:HIS:HD2	1.95	0.50
8:AH:4:ASP:HB2	8:AH:80:PRO:HG3	1.92	0.50
32:DK:104:THR:OG1	32:DK:106:GLU:HB2	2.11	0.50
53:CA:71:A:C2	53:CA:72:A:C8	3.00	0.50
29:BH:58:LEU:HA	29:BH:61:VAL:HB	1.93	0.50
22:BA:142:A:O2'	22:BA:143:C:O4'	2.30	0.50
57:DA:2667:C:H2'	57:DA:2668:G:C8	2.46	0.50
1:AA:1091:U:C2	1:AA:1095:U:N3	2.80	0.50
53:CA:309:A:O2'	53:CA:607:A:N1	2.33	0.50
1:AA:1373:G:H5''	7:AG:35:LYS:HD2	1.94	0.50
53:CA:123:U:OP1	53:CA:311:C:O2'	2.28	0.50
22:BA:1912:A:C2	22:BA:1919:A:C5	2.99	0.50
30:BI:72:THR:HB	30:BI:112:LYS:NZ	2.26	0.50
1:AA:570:G:H2'	1:AA:571:U:H6	1.76	0.50
53:CA:437:U:C2'	53:CA:438:U:O5'	2.59	0.50
53:CA:642:A:O2'	53:CA:643:C:O5'	2.30	0.50
26:DE:72:SER:C	26:DE:74:LYS:H	2.14	0.50
22:BA:88:G:C6	22:BA:89:A:N7	2.80	0.50
47:BZ:40:THR:CG2	47:BZ:43:ILE:HG23	2.41	0.50
53:CA:861:G:H2'	53:CA:862:C:C6	2.45	0.50
22:BA:7:G:H2'	22:BA:8:C:H6	1.75	0.50
39:DR:68:ARG:NH1	39:DR:90:ARG:HG2	2.26	0.50
5:AE:63:MET:O	5:AE:67:ARG:HG2	2.12	0.50
59:DF:113:PHE:CE2	59:DF:116:LEU:HD22	2.47	0.50
1:AA:626:G:H2'	1:AA:627:G:C8	2.47	0.50
8:AH:48:PHE:O	8:AH:49:LYS:CB	2.59	0.50
3:CC:185:THR:O	3:CC:186:SER:HB2	2.11	0.50
22:BA:2545:G:O2'	22:BA:2546:U:H5'	2.12	0.50
57:DA:596:U:C2	57:DA:662:G:N2	2.79	0.50
22:BA:1716:U:O2'	22:BA:1717:A:H5'	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DS:82:MET:HB2	40:DS:98:LYS:HB2	1.93	0.50
1:AA:43:C:H2'	1:AA:44:A:O4'	2.11	0.50
22:BA:2107:G:O6	22:BA:2183:A:C6	2.65	0.50
57:DA:146:A:C2	57:DA:147:C:C2	2.99	0.50
22:BA:1548:A:H2'	22:BA:1549:A:C8	2.47	0.50
53:CA:377:G:H2'	53:CA:378:G:H8	1.76	0.50
3:CC:172:VAL:O	3:CC:174:LEU:HD23	2.11	0.50
31:DJ:60:ASP:N	31:DJ:60:ASP:OD1	2.45	0.50
39:BR:101:ILE:HG22	39:BR:101:ILE:O	2.12	0.50
22:BA:242:G:H5''	51:B3:63:TYR:CE2	2.47	0.50
1:AA:1358:U:H6	1:AA:1359:C:C5	2.30	0.50
26:DE:34:ALA:HB1	26:DE:94:GLN:HB2	1.92	0.50
25:BD:151:THR:O	25:BD:152:PRO:C	2.48	0.50
22:BA:2336:A:N6	44:BW:40:ARG:HB3	2.26	0.50
44:BW:41:GLY:O	44:BW:43:LYS:N	2.44	0.50
58:DB:57:A:N6	59:DF:25:MET:SD	2.85	0.50
57:DA:2135:A:H2'	57:DA:2136:G:H8	1.76	0.50
57:DA:612:G:N2	57:DA:614:A:HO2'	2.09	0.50
57:DA:614:A:H4'	57:DA:616:A:H62	1.77	0.50
22:BA:764:A:H3'	22:BA:765:C:H5'	1.94	0.50
53:CA:1092:A:C6	53:CA:1183:U:O2	2.64	0.50
57:DA:2585:U:O2'	57:DA:2586:U:H5'	2.11	0.50
58:DB:108:A:HO2'	58:DB:109:A:P	2.35	0.50
51:D3:28:LEU:O	51:D3:29:ARG:HB3	2.12	0.50
15:AO:77:TYR:OH	15:AO:87:ARG:HG2	2.11	0.50
22:BA:729:G:C2'	22:BA:729:G:N3	2.72	0.50
1:AA:91:U:H2'	1:AA:92:U:C1'	2.42	0.50
57:DA:2314:A:H2'	57:DA:2315:G:H8	1.76	0.50
4:AD:147:LYS:HD3	4:AD:147:LYS:N	2.25	0.50
57:DA:1286:A:C6	57:DA:1329:U:C2	3.00	0.50
55:CM:13:HIS:NE2	55:CM:41:ASP:HA	2.25	0.50
22:BA:1996:C:OP1	32:BK:31:ARG:NE	2.44	0.50
57:DA:1441:G:C4	57:DA:1551:A:C2	3.00	0.50
57:DA:120:U:C2	57:DA:149:A:C6	2.99	0.50
57:DA:49:A:C8	57:DA:51:G:C2	2.99	0.50
22:BA:1498:C:HO2'	22:BA:1499:C:H6	1.53	0.50
35:DN:75:ILE:O	35:DN:75:ILE:HD12	2.11	0.50
57:DA:1817:G:H4'	24:DC:85:ASN:O	2.12	0.50
59:DF:41:GLU:CG	59:DF:42:ALA:H	2.24	0.50
1:AA:1161:C:O2'	1:AA:1162:C:C6	2.59	0.50
24:DC:127:ASN:O	24:DC:190:THR:HA	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:663:G:H5'	57:DA:664:G:OP2	2.12	0.50
31:DJ:23:LYS:CB	31:DJ:28:LEU:HD13	2.42	0.50
30:BI:58:ILE:HG22	30:BI:60:VAL:HG23	1.92	0.50
53:CA:512:U:O2'	53:CA:513:C:H5'	2.12	0.50
57:DA:975:A:H2'	57:DA:976:G:C8	2.47	0.50
47:DZ:4:ILE:CD1	47:DZ:58:GLU:HA	2.38	0.50
22:BA:1857:G:O2'	22:BA:1858:A:OP2	2.27	0.50
57:DA:818:G:N7	57:DA:1187:G:C6	2.80	0.50
1:AA:716:A:C6	1:AA:717:U:N3	2.79	0.50
22:BA:1184:U:C2'	22:BA:1185:G:O5'	2.59	0.50
57:DA:1737:G:C5	57:DA:1738:G:C6	2.99	0.50
57:DA:1739:A:C2	57:DA:1740:G:C4	3.00	0.50
31:BJ:97:PRO:C	31:BJ:99:ARG:H	2.14	0.50
53:CA:1114:C:O2'	14:CN:99:SER:HB2	2.12	0.50
57:DA:721:A:C2	57:DA:722:A:C4	2.99	0.50
22:BA:1799:G:H22	22:BA:1818:U:HO2'	1.57	0.50
20:AT:3:ILE:O	20:AT:4:LYS:HB2	2.10	0.50
53:CA:747:A:H2'	53:CA:748:G:O4'	2.12	0.50
6:AF:52:ASN:O	6:AF:53:LYS:CB	2.60	0.50
11:CK:96:ILE:HG21	11:CK:109:ILE:HD11	1.93	0.50
22:BA:2516:A:C2	22:BA:2569:G:C4	3.00	0.50
57:DA:2552:U:C2	57:DA:2554:U:C5'	2.95	0.50
53:CA:1416:G:N2	53:CA:1485:U:H1'	2.27	0.50
57:DA:108:G:H2'	57:DA:109:C:H6	1.77	0.50
7:AG:49:LEU:HD12	7:AG:60:ALA:HB1	1.94	0.50
7:AG:99:ALA:O	7:AG:103:ILE:HG13	2.12	0.50
27:BF:21:TYR:CE2	27:BF:28:PRO:HD3	2.47	0.50
47:BZ:6:ILE:HD11	47:BZ:47:ILE:HD11	1.94	0.50
11:CK:90:PRO:O	11:CK:91:GLY:C	2.50	0.50
57:DA:2829:A:H2'	57:DA:2830:C:H5'	1.94	0.50
6:CF:81:ASN:O	6:CF:83:ALA:N	2.45	0.50
23:BB:54:G:H2'	23:BB:55:U:H6	1.77	0.50
22:BA:1210:G:P	22:BA:1212:G:H5'	2.52	0.50
25:BD:112:THR:O	25:BD:195:GLY:HA2	2.11	0.50
7:AG:53:SER:C	7:AG:55:LYS:H	2.15	0.50
22:BA:522:A:C6	22:BA:523:C:C4	2.99	0.50
57:DA:2200:C:N4	57:DA:2224:G:N2	2.60	0.50
44:BW:24:ARG:HD3	44:BW:65:LYS:HE2	1.93	0.50
58:DB:54:G:H21	59:DF:25:MET:CE	2.25	0.50
53:CA:1363:A:C5	53:CA:1365:G:C6	2.99	0.50
57:DA:2296:U:O2'	57:DA:2297:A:O5'	2.30	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BF:110:ILE:O	27:BF:111:ARG:C	2.49	0.50
57:DA:612:G:N2	57:DA:614:A:O2'	2.45	0.50
57:DA:740:C:C5	57:DA:1981:A:N1	2.80	0.50
4:CD:2:ARG:HE	4:CD:114:ARG:HD2	1.77	0.50
1:AA:244:U:O4	1:AA:906:A:H1'	2.12	0.50
58:DB:41:G:H3'	58:DB:42:C:C5'	2.40	0.50
57:DA:2847:U:H2'	57:DA:2848:G:C5'	2.33	0.50
57:DA:1429:G:N3	57:DA:1430:G:N7	2.59	0.50
53:CA:1378:C:H3'	53:CA:1379:G:C5'	2.42	0.50
22:BA:1499:C:H2'	22:BA:1500:G:C8	2.30	0.50
51:B3:31:ILE:CD1	51:B3:34:LYS:HD2	2.36	0.50
1:AA:922:G:C6	1:AA:923:A:C6	2.99	0.50
53:CA:1517:G:C8	57:DA:1920:C:OP1	2.64	0.50
57:DA:1910:G:C6	57:DA:1911:U:C4	3.00	0.50
29:BH:9:VAL:O	29:BH:13:GLY:N	2.45	0.50
57:DA:1815:A:H1'	57:DA:1817:G:N7	2.27	0.50
46:DY:25:GLN:HA	46:DY:28:LEU:HB3	1.93	0.50
43:BV:4:ILE:O	43:BV:63:ILE:HA	2.11	0.50
57:DA:389:G:O2'	57:DA:390:U:H5'	2.12	0.50
8:AH:17:GLN:NE2	8:AH:69:ALA:HB1	2.26	0.50
22:BA:1429:G:H2'	22:BA:1430:G:H8	1.76	0.50
10:CJ:50:THR:HB	10:CJ:64:GLN:OE1	2.12	0.50
22:BA:1579:A:O2'	22:BA:1580:A:H5'	2.12	0.50
28:BG:30:GLY:O	28:BG:32:LEU:N	2.45	0.50
57:DA:380:G:O3'	45:DX:15:ASN:HB2	2.12	0.50
40:BS:18:ARG:HG3	40:BS:76:VAL:HG13	1.94	0.50
53:CA:1387:G:C4	53:CA:1388:C:C5	3.00	0.50
7:AG:23:ALA:O	7:AG:26:VAL:HG22	2.12	0.50
4:AD:47:LEU:CD2	4:AD:52:VAL:HG12	2.40	0.50
22:BA:1257:C:H5'	26:BE:78:TRP:CH2	2.46	0.50
22:BA:2581:G:H4'	22:BA:2582:G:C8	2.46	0.50
22:BA:300:A:H2'	22:BA:334:C:H1'	1.93	0.50
59:DF:11:VAL:HG12	59:DF:12:VAL:N	2.26	0.50
22:BA:304:U:H2'	22:BA:305:C:C6	2.47	0.50
1:AA:1409:C:H2'	1:AA:1410:A:H8	1.77	0.50
16:AP:12:LYS:HG2	16:AP:13:LYS:HG2	1.94	0.50
57:DA:1844:C:O3'	24:DC:255:LYS:NZ	2.43	0.50
41:BT:29:THR:CA	41:BT:86:THR:HA	2.42	0.50
26:DE:54:GLY:O	26:DE:55:SER:HB3	2.12	0.50
22:BA:2517:C:C6	22:BA:2542:A:N7	2.79	0.50
57:DA:404:A:C2	57:DA:406:G:N1	2.80	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:117:G:C6	22:BA:119:A:N6	2.80	0.50
1:AA:1086:U:O2'	1:AA:1087:G:H5'	2.12	0.50
22:BA:49:A:C6	22:BA:177:G:C4	3.00	0.50
29:DH:8:LYS:C	29:DH:8:LYS:HD2	2.32	0.50
26:DE:42:GLY:HA2	26:DE:92:HIS:HE1	1.77	0.50
37:DP:5:LYS:HE2	37:DP:9:GLN:NE2	2.27	0.50
14:AN:90:GLY:O	14:AN:92:ILE:N	2.44	0.50
1:AA:1097:C:H2'	1:AA:1098:C:H6	1.77	0.50
1:AA:562:U:H1'	12:AL:11:ARG:HB3	1.93	0.50
22:BA:2017:U:H5''	22:BA:2018:G:OP1	2.12	0.50
57:DA:2691:C:O2'	57:DA:2692:G:H5'	2.10	0.50
33:DL:88:GLY:O	33:DL:89:VAL:HG12	2.12	0.50
3:AC:54:ILE:HD12	3:AC:54:ILE:C	2.31	0.50
23:BB:35:C:H2'	23:BB:36:C:O4'	2.10	0.50
22:BA:2154:A:H2'	22:BA:2155:U:O4'	2.12	0.50
1:AA:40:C:O2	1:AA:40:C:H2'	2.12	0.50
21:AU:32:ARG:O	21:AU:32:ARG:HG2	2.12	0.50
8:CH:89:ASP:N	8:CH:89:ASP:OD1	2.45	0.50
43:DV:41:GLU:HG2	43:DV:42:LEU:N	2.26	0.50
37:BP:43:GLU:H	37:BP:62:LYS:NZ	2.09	0.50
12:CL:120:ARG:HG2	12:CL:121:PRO:N	2.25	0.50
21:CU:25:ALA:O	21:CU:29:ALA:N	2.40	0.49
53:CA:986:U:C2'	53:CA:987:G:O5'	2.60	0.49
57:DA:2353:G:H21	44:DW:30:VAL:HG21	1.77	0.49
4:CD:191:SER:O	4:CD:192:ALA:CB	2.60	0.49
57:DA:432:A:O2'	57:DA:433:C:H5'	2.12	0.49
57:DA:730:A:O2'	57:DA:731:C:H5'	2.12	0.49
58:DB:17:C:O2'	58:DB:18:G:C5'	2.60	0.49
53:CA:1124:G:O2'	53:CA:1125:U:C6	2.64	0.49
57:DA:1206:G:H2'	57:DA:1207:C:C5	2.47	0.49
26:DE:130:LYS:O	26:DE:134:LEU:HB3	2.12	0.49
30:BI:21:PRO:HB2	30:BI:22:PRO:HD3	1.94	0.49
18:CR:59:LYS:O	18:CR:63:TYR:CD1	2.65	0.49
5:AE:149:PRO:O	5:AE:152:VAL:HG22	2.12	0.49
5:AE:152:VAL:CB	5:AE:155:LYS:HZ2	2.25	0.49
57:DA:100:U:H1'	57:DA:101:A:N7	2.27	0.49
1:AA:345:C:C3'	37:BP:33:GLU:OE1	2.60	0.49
59:DF:137:PHE:CB	59:DF:138:PRO:HD2	2.34	0.49
53:CA:14:U:O2	53:CA:16:A:C8	2.65	0.49
22:BA:272:A:O2'	22:BA:273:G:O5'	2.29	0.49
34:BM:108:VAL:HG13	34:BM:109:PRO:HD2	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BM:50:ARG:O	34:BM:53:MET:HB3	2.12	0.49
57:DA:2708:G:O2'	57:DA:2709:G:H5'	2.12	0.49
22:BA:2742:G:C2'	22:BA:2743:U:H5'	2.42	0.49
53:CA:121:U:H3'	53:CA:121:U:OP1	2.11	0.49
57:DA:855:G:O2'	44:DW:23:LYS:HD3	2.12	0.49
57:DA:95:A:HO2'	46:DY:39:GLN:HA	1.77	0.49
53:CA:380:G:N2	53:CA:383:A:OP2	2.43	0.49
57:DA:2718:G:OP1	37:DP:97:TYR:HD1	1.95	0.49
29:BH:2:GLN:C	29:BH:3:VAL:HG13	2.32	0.49
36:DO:62:LEU:CD1	36:DO:65:THR:HG23	2.41	0.49
1:AA:1195:C:H2'	1:AA:1197:A:H5'	1.94	0.49
57:DA:477:A:O2'	57:DA:478:A:O5'	2.30	0.49
53:CA:160:A:O2'	53:CA:344:A:N6	2.44	0.49
34:BM:46:ILE:C	34:BM:46:ILE:HD12	2.32	0.49
22:BA:1654:A:H4'	25:BD:118:PHE:CZ	2.47	0.49
53:CA:1004:A:H2'	53:CA:1005:A:O4'	2.12	0.49
38:BQ:8:ILE:HD12	38:BQ:9:ALA:N	2.27	0.49
8:CH:65:PHE:CD2	8:CH:66:GLN:HG2	2.47	0.49
11:AK:30:ILE:HB	11:AK:45:THR:HG22	1.94	0.49
36:BO:78:VAL:HG23	36:BO:79:ALA:N	2.27	0.49
53:CA:1293:C:H2'	53:CA:1294:G:H8	1.73	0.49
22:BA:1340:U:H4'	22:BA:1341:G:OP2	2.11	0.49
57:DA:1343:G:O2'	57:DA:1344:U:C6	2.59	0.49
6:AF:46:GLN:NE2	6:AF:55:HIS:HB2	2.27	0.49
28:DG:7:PRO:O	28:DG:8:VAL:HB	2.12	0.49
1:AA:739:C:C4	1:AA:740:U:C5	3.00	0.49
57:DA:391:A:O2'	57:DA:392:U:C5'	2.60	0.49
17:AQ:29:LYS:HG2	17:AQ:34:GLY:HA2	1.92	0.49
27:BF:72:SER:HB2	27:BF:80:GLN:H	1.77	0.49
57:DA:1519:G:C6	57:DA:1520:U:N3	2.80	0.49
1:AA:36:C:OP1	12:AL:119:LYS:HE3	2.12	0.49
16:AP:61:VAL:HA	16:AP:65:ALA:H	1.76	0.49
57:DA:453:A:N3	57:DA:457:A:O2'	2.45	0.49
56:CP:20:VAL:CG2	56:CP:32:PHE:HB2	2.41	0.49
57:DA:709:U:H2'	57:DA:710:U:H6	1.77	0.49
54:CG:4:ARG:HG2	54:CG:4:ARG:HH11	1.76	0.49
1:AA:550:G:H2'	1:AA:551:U:C6	2.47	0.49
57:DA:845:A:N6	57:DA:932:U:N3	2.59	0.49
57:DA:1989:G:H2'	57:DA:1990:C:H5'	1.92	0.49
22:BA:1909:C:C2	22:BA:1922:G:N2	2.80	0.49
18:CR:44:THR:OG1	18:CR:46:THR:HG22	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:80:ARG:HG3	19:AS:80:ARG:O	2.12	0.49
52:B4:15:LYS:O	52:B4:16:ILE:O	2.30	0.49
4:AD:56:GLU:O	4:AD:59:LYS:HB3	2.12	0.49
25:BD:40:LEU:HD12	25:BD:40:LEU:H	1.77	0.49
53:CA:398:U:H2'	53:CA:399:G:H8	1.77	0.49
22:BA:2084:C:O5'	22:BA:2084:C:H6	1.94	0.49
28:BG:38:ASP:OD1	28:BG:38:ASP:N	2.44	0.49
22:BA:2006:C:H6	22:BA:2006:C:O5'	1.95	0.49
26:BE:115:GLN:O	26:BE:116:ASP:C	2.51	0.49
44:BW:28:GLU:CD	44:BW:29:SER:H	2.15	0.49
53:CA:1319:A:N6	53:CA:1323:G:C2	2.80	0.49
44:DW:37:VAL:C	44:DW:39:GLN:H	2.15	0.49
27:BF:37:MET:CE	27:BF:151:LEU:HB3	2.43	0.49
17:AQ:21:VAL:HA	17:AQ:43:LEU:O	2.12	0.49
53:CA:371:A:C2'	53:CA:372:C:H5'	2.41	0.49
57:DA:1774:C:O2	24:DC:10:PRO:HB2	2.12	0.49
1:AA:1299:A:O2'	1:AA:1300:G:H4'	2.12	0.49
2:AB:40:ILE:HG21	2:AB:201:GLY:CA	2.42	0.49
38:DQ:6:GLY:C	38:DQ:8:ILE:H	2.14	0.49
1:AA:464:U:N3	1:AA:466:A:H5'	2.27	0.49
57:DA:2142:A:C2'	57:DA:2143:C:H4'	2.41	0.49
4:CD:25:ARG:O	4:CD:26:ALA:C	2.50	0.49
57:DA:2316:G:H2'	57:DA:2317:A:H8	1.77	0.49
57:DA:1328:A:H3'	57:DA:1330:C:H41	1.77	0.49
29:DH:47:PHE:O	29:DH:51:ARG:HG3	2.12	0.49
1:AA:481:G:H3'	1:AA:481:G:H8	1.76	0.49
53:CA:734:G:H2'	53:CA:735:C:H6	1.77	0.49
32:DK:87:LEU:HD23	32:DK:87:LEU:H	1.77	0.49
57:DA:2232:C:O5'	57:DA:2232:C:H6	1.94	0.49
57:DA:228:C:H5'	57:DA:229:C:H5	1.77	0.49
57:DA:81:G:H2'	57:DA:82:U:O4'	2.12	0.49
57:DA:1931:U:O2'	57:DA:1932:A:H5'	2.12	0.49
8:AH:17:GLN:CD	8:AH:69:ALA:HB1	2.32	0.49
25:DD:48:ILE:CG2	25:DD:84:LEU:HD23	2.42	0.49
2:CB:131:LYS:O	2:CB:131:LYS:HE3	2.11	0.49
31:BJ:21:THR:O	31:BJ:23:LYS:N	2.44	0.49
57:DA:478:A:C6	57:DA:480:A:C6	3.00	0.49
22:BA:2603:G:H2'	22:BA:2604:U:C6	2.46	0.49
53:CA:1004:A:C4	53:CA:1026:G:N7	2.80	0.49
57:DA:1353:A:O4'	57:DA:1569:A:H2	1.95	0.49
1:AA:715:A:H2'	1:AA:716:A:C8	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:598:U:H4'	8:CH:85:TYR:CD1	2.47	0.49
22:BA:2313:C:H5''	27:BF:87:LYS:HD3	1.93	0.49
36:BO:110:ALA:O	36:BO:113:ALA:HB3	2.12	0.49
31:BJ:54:ILE:HD11	31:BJ:56:VAL:HG23	1.94	0.49
29:DH:61:VAL:HG13	29:DH:62:LEU:N	2.26	0.49
29:DH:62:LEU:C	29:DH:64:ALA:N	2.65	0.49
22:BA:2721:A:H1'	22:BA:2873:A:H2'	1.93	0.49
22:BA:1277:G:H4'	35:BN:20:MET:HE2	1.92	0.49
53:CA:996:A:O2'	53:CA:997:U:O4'	2.29	0.49
13:AM:89:ARG:NH1	13:AM:94:LEU:HB3	2.25	0.49
57:DA:1412:U:H2'	57:DA:1413:A:O4'	2.11	0.49
29:BH:99:ILE:HG22	29:BH:99:ILE:O	2.12	0.49
42:BU:53:GLN:N	42:BU:54:PRO:CD	2.75	0.49
22:BA:1680:U:H2'	22:BA:1681:G:O4'	2.11	0.49
22:BA:2423:U:O2'	22:BA:2424:C:P	2.70	0.49
1:AA:389:A:C6	1:AA:390:U:H1'	2.48	0.49
53:CA:461:A:P	53:CA:462:G:OP2	2.70	0.49
35:DN:103:ARG:HG3	35:DN:104:ALA:H	1.77	0.49
22:BA:1014:A:H2'	22:BA:1015:U:C6	2.48	0.49
39:DR:90:ARG:O	39:DR:91:GLN:HB3	2.12	0.49
22:BA:2691:C:O3'	22:BA:2871:U:H4'	2.11	0.49
22:BA:2869:G:H2'	22:BA:2870:C:O4'	2.12	0.49
57:DA:2773:C:H2'	57:DA:2774:C:H6	1.76	0.49
24:BC:210:ALA:HB1	24:BC:215:VAL:HG23	1.94	0.49
9:CI:15:ALA:O	9:CI:66:VAL:HG23	2.12	0.49
22:BA:286:U:H2'	22:BA:287:G:O4'	2.12	0.49
1:AA:832:G:C6	1:AA:833:G:N7	2.80	0.49
4:AD:11:SER:HA	4:AD:18:LEU:HD12	1.94	0.49
38:DQ:29:ARG:HD2	48:D0:9:ARG:NH1	2.27	0.49
53:CA:1441:A:C2	53:CA:1442:G:H1'	2.47	0.49
22:BA:1911:U:C2	22:BA:1918:A:C2	3.00	0.49
23:BB:37:C:C5	23:BB:38:C:C4	3.00	0.49
22:BA:1567:G:H2'	24:BC:84:PRO:HG3	1.93	0.49
53:CA:828:U:H2'	53:CA:829:G:O5'	2.12	0.49
12:AL:107:LYS:O	12:AL:108:ASP:HB2	2.12	0.49
7:AG:13:PRO:HB2	7:AG:18:GLY:HA2	1.94	0.49
54:CG:148:LYS:NZ	54:CG:148:LYS:HB2	2.27	0.49
22:BA:2322:A:N6	22:BA:2333:A:H62	2.10	0.49
22:BA:2365:G:O2'	22:BA:2366:A:C8	2.58	0.49
27:BF:146:ASP:O	27:BF:147:ARG:HB2	2.12	0.49
53:CA:373:A:C2	53:CA:374:A:C8	3.00	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:590:A:C5	57:DA:591:U:C5	3.00	0.49
57:DA:2880:C:H1'	35:DN:93:GLY:N	2.09	0.49
57:DA:1203:U:N3	57:DA:1204:A:N6	2.60	0.49
31:DJ:45:THR:HG23	31:DJ:45:THR:O	2.12	0.49
25:BD:114:LYS:HE3	25:BD:114:LYS:CA	2.43	0.49
53:CA:429:U:H1'	53:CA:430:A:C5'	2.42	0.49
59:DF:64:PRO:HA	59:DF:88:VAL:CG2	2.41	0.49
57:DA:1745:A:H2'	57:DA:1746:A:H8	1.78	0.49
57:DA:1281:G:C2'	57:DA:1282:U:H5'	2.42	0.49
41:BT:51:PHE:O	41:BT:53:VAL:HG13	2.12	0.49
53:CA:82:G:C6	53:CA:89:U:C5	3.00	0.49
53:CA:1244:G:O2'	53:CA:1245:C:O4'	2.24	0.49
2:CB:75:ALA:HB2	2:CB:209:VAL:HG21	1.94	0.49
30:BI:27:LEU:HD12	30:BI:27:LEU:C	2.33	0.49
57:DA:1808:A:H5''	57:DA:1809:A:N7	2.27	0.49
8:AH:63:LYS:O	8:AH:70:VAL:HG23	2.12	0.49
57:DA:228:C:H5'	57:DA:229:C:C5	2.47	0.49
57:DA:2401:U:H3'	57:DA:2402:U:C5'	2.35	0.49
53:CA:937:A:C2	53:CA:1379:G:C6	3.00	0.49
57:DA:2566:A:O2'	57:DA:2567:G:OP2	2.28	0.49
31:BJ:130:HIS:HD2	31:BJ:132:HIS:N	2.01	0.49
32:BK:4:GLU:O	32:BK:5:GLN:HB2	2.12	0.49
22:BA:655:A:O2'	22:BA:656:G:H8	1.92	0.49
22:BA:751:A:H8	22:BA:751:A:O5'	1.95	0.49
12:AL:23:LEU:HG	12:AL:24:GLU:H	1.76	0.49
28:DG:103:ASN:HD22	28:DG:111:PRO:HB2	1.77	0.49
37:DP:56:SER:O	37:DP:57:ALA:HB2	2.11	0.49
22:BA:573:U:O3'	22:BA:574:A:H3'	2.11	0.49
35:DN:82:GLU:C	35:DN:85:PRO:HD2	2.33	0.49
22:BA:1430:G:H2'	22:BA:1431:A:C8	2.47	0.49
22:BA:417:C:H2'	22:BA:418:C:H6	1.77	0.49
35:DN:56:LYS:HE2	35:DN:87:PHE:O	2.12	0.49
28:BG:33:THR:HA	28:BG:34:ARG:HH11	1.76	0.49
53:CA:495:A:N1	53:CA:496:A:N6	2.61	0.49
21:AU:34:ARG:HD3	21:AU:39:LYS:NZ	2.27	0.49
25:DD:106:LYS:HB3	25:DD:206:ALA:N	2.23	0.49
57:DA:1049:C:O2'	57:DA:1050:A:C5'	2.59	0.49
57:DA:1965:C:H5''	57:DA:1965:C:H6	1.76	0.49
1:AA:56:U:H2'	1:AA:57:G:C8	2.47	0.49
22:BA:503:A:H4'	22:BA:504:A:O5'	2.12	0.49
22:BA:1654:A:H2'	22:BA:1655:A:H8	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:186:C:H4'	20:AT:75:LYS:HG3	1.94	0.49
22:BA:1798:U:OP1	24:BC:257:ARG:HB2	2.12	0.49
57:DA:2013:A:N6	57:DA:2014:A:C2	2.80	0.49
22:BA:1223:G:P	39:BR:68:ARG:HH12	2.34	0.49
22:BA:1847:A:H2'	22:BA:1847:A:N3	2.26	0.49
31:BJ:54:ILE:HD12	31:BJ:55:ILE:N	2.28	0.49
13:AM:88:LEU:O	13:AM:92:ARG:HG3	2.12	0.49
57:DA:2234:G:C5	57:DA:2235:G:C8	3.00	0.49
57:DA:2622:U:O2'	57:DA:2825:G:N7	2.43	0.49
57:DA:2:G:C5	57:DA:3:U:C4	3.00	0.49
1:AA:1270:G:OP2	1:AA:1270:G:H8	1.94	0.49
32:BK:12:ASP:HB3	32:BK:85:VAL:HG13	1.93	0.49
14:CN:60:ARG:NH2	14:CN:70:HIS:HB3	2.27	0.49
22:BA:2512:C:O2'	25:BD:159:LYS:HE3	2.12	0.49
53:CA:1240:U:O2'	54:CG:37:THR:HB	2.12	0.49
22:BA:49:A:H61	22:BA:177:G:C2'	2.24	0.49
53:CA:147:G:H2'	53:CA:148:G:C8	2.47	0.49
22:BA:1244:A:O5'	33:BL:7:SER:HB3	2.12	0.49
53:CA:54:C:H2'	53:CA:352:C:N4	2.27	0.49
22:BA:1486:U:H2'	22:BA:1487:U:H6	1.77	0.49
53:CA:131:A:C2	53:CA:132:C:N3	2.81	0.49
18:AR:66:LEU:O	18:AR:67:LEU:HD23	2.12	0.49
2:CB:27:LYS:N	2:CB:28:PRO:CD	2.74	0.49
26:BE:1:MET:HG3	26:BE:14:VAL:HG23	1.94	0.49
16:AP:78:VAL:O	16:AP:78:VAL:HG22	2.11	0.49
22:BA:2765:A:H2'	22:BA:2765:A:N3	2.27	0.49
5:CE:18:ASN:OD1	5:CE:18:ASN:N	2.46	0.49
32:DK:107:LEU:C	32:DK:109:SER:H	2.16	0.49
24:BC:237:ARG:O	24:BC:238:ASN:HB2	2.12	0.49
57:DA:2223:G:H2'	57:DA:2224:G:H5'	1.93	0.49
39:BR:10:LYS:HD2	39:BR:10:LYS:N	2.27	0.49
57:DA:1373:A:H4'	57:DA:2212:A:H1'	1.94	0.49
14:CN:13:VAL:HA	14:CN:59:GLN:NE2	2.28	0.49
57:DA:604:G:C6	57:DA:625:G:N1	2.81	0.49
53:CA:1159:U:O4'	53:CA:1182:G:N2	2.44	0.49
57:DA:785:G:O2'	57:DA:1779:U:C5'	2.60	0.49
38:DQ:39:ILE:O	38:DQ:42:GLY:N	2.45	0.49
57:DA:37:C:H2'	57:DA:38:A:O4'	2.13	0.49
57:DA:2882:A:H5''	35:DN:96:ARG:HD3	1.94	0.49
10:CJ:5:ARG:C	10:CJ:6:ILE:HD12	2.33	0.49
58:DB:11:C:H5'	44:DW:71:LYS:HD3	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:149:ILE:HG12	26:DE:149:ILE:O	2.10	0.49
4:CD:28:ASP:O	4:CD:29:THR:O	2.29	0.49
57:DA:1070:A:H61	30:DI:8:VAL:HB	1.77	0.49
58:DB:42:C:H2'	58:DB:43:C:C5	2.46	0.49
58:DB:44:G:OP1	59:DF:91:ARG:NH1	2.45	0.49
57:DA:1716:U:HO2'	57:DA:1717:A:H8	0.65	0.49
41:BT:31:VAL:HA	41:BT:84:TYR:H	1.77	0.49
53:CA:261:U:OP1	20:CT:70:LYS:HE2	2.13	0.49
2:AB:184:ALA:HB3	2:AB:195:VAL:HG21	1.94	0.49
57:DA:420:C:H2'	57:DA:421:C:H6	1.77	0.49
1:AA:274:A:H4'	1:AA:275:G:O5'	2.11	0.49
26:BE:149:ILE:O	26:BE:188:MET:HA	2.13	0.49
57:DA:651:G:C6	57:DA:652:U:C4	3.01	0.49
53:CA:821:G:O2'	53:CA:822:U:H5'	2.12	0.49
35:BN:71:ARG:HG2	35:BN:71:ARG:HH21	1.74	0.49
53:CA:173:U:H5''	53:CA:174:A:OP2	2.13	0.49
41:DT:76:ARG:HG2	41:DT:77:ARG:N	2.27	0.49
33:DL:7:SER:HB2	33:DL:8:PRO:HD2	1.93	0.49
57:DA:1364:G:H1'	57:DA:1368:G:N2	2.28	0.49
57:DA:2056:G:H2'	57:DA:2056:G:N3	2.28	0.49
53:CA:238:A:H2'	53:CA:239:U:C4'	2.43	0.49
25:DD:179:ARG:NH1	37:DP:7:LEU:HD11	2.27	0.49
53:CA:491:G:C2'	53:CA:492:C:H5'	2.43	0.49
39:DR:3:ALA:HB2	39:DR:101:ILE:HD13	1.93	0.49
32:DK:2:ILE:O	32:DK:3:GLN:HG2	2.12	0.49
19:CS:54:ARG:HG2	19:CS:55:GLN:N	2.27	0.49
57:DA:2669:G:H2'	57:DA:2670:A:H8	1.76	0.49
33:DL:23:ILE:HG13	39:DR:82:HIS:CE1	2.48	0.49
53:CA:770:C:O2'	53:CA:899:C:N3	2.42	0.49
1:AA:897:C:H2'	1:AA:897:C:O2	2.13	0.49
7:AG:146:ALA:C	7:AG:148:LYS:N	2.65	0.49
17:CQ:25:GLU:CG	17:CQ:40:THR:HG22	2.42	0.49
22:BA:1313:U:C2'	22:BA:1313:U:O2	2.60	0.49
1:AA:484:G:HO2'	1:AA:485:U:P	2.34	0.49
32:BK:11:ALA:O	32:BK:99:ILE:HG13	2.13	0.49
53:CA:1097:C:H2'	53:CA:1098:C:H6	1.78	0.49
39:DR:2:TYR:CE1	39:DR:13:ARG:HD2	2.47	0.49
1:AA:1326:U:H2'	1:AA:1327:C:H6	1.77	0.49
1:AA:626:G:H2'	1:AA:627:G:H8	1.76	0.49
37:BP:92:ARG:HH11	37:BP:92:ARG:HB2	1.78	0.49
22:BA:2832:U:HO2'	22:BA:2833:U:P	2.34	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1084:A:H2'	57:DA:1085:A:H5'	1.95	0.49
35:DN:9:GLN:C	35:DN:10:LEU:O	2.50	0.49
13:AM:39:ALA:HB3	13:AM:42:VAL:HG13	1.95	0.49
53:CA:212:G:O2'	53:CA:213:G:O5'	2.30	0.49
28:DG:60:GLY:O	28:DG:62:ALA:N	2.42	0.49
11:CK:33:ILE:O	11:CK:41:LEU:HB2	2.12	0.49
1:AA:1504:G:H3'	63:AA:1801:HOH:O	2.11	0.49
53:CA:762:U:O5'	53:CA:762:U:H6	1.95	0.49
1:AA:1183:U:H3'	1:AA:1184:G:H5''	1.95	0.49
31:BJ:40:HIS:NE2	31:BJ:41:LYS:HE3	2.27	0.49
53:CA:1365:G:C2	53:CA:1366:C:C2	3.01	0.49
38:BQ:65:ASN:O	38:BQ:69:ARG:HB3	2.12	0.49
57:DA:605:G:H1'	57:DA:657:U:O2'	2.13	0.49
53:CA:1067:A:O3'	53:CA:1094:G:H5'	2.11	0.49
22:BA:1019:U:H2'	22:BA:1020:A:C8	2.48	0.49
22:BA:1022:G:O6	31:BJ:68:LYS:HE2	2.13	0.49
57:DA:571:U:O3'	57:DA:573:U:C5	2.65	0.49
57:DA:300:A:OP2	42:DU:96:LYS:HD3	2.12	0.49
58:DB:88:C:O2'	58:DB:89:U:OP2	2.23	0.49
15:AO:20:ASP:OD1	15:AO:23:SER:HB2	2.13	0.49
22:BA:221:A:C8	22:BA:266:G:O6	2.66	0.49
1:AA:464:U:H2'	1:AA:466:A:OP2	2.13	0.49
57:DA:2152:G:N3	57:DA:2152:G:H2'	2.27	0.49
36:DO:7:ARG:HH22	36:DO:29:HIS:HD2	1.61	0.49
57:DA:1611:C:O2'	57:DA:1612:C:C6	2.60	0.49
29:DH:48:GLU:HG2	29:DH:51:ARG:NH2	2.13	0.49
57:DA:1430:G:O2'	57:DA:1431:A:H5'	2.12	0.49
35:BN:23:ASN:ND2	35:BN:23:ASN:N	2.57	0.49
32:DK:113:MET:O	32:DK:116:ILE:HG12	2.12	0.49
57:DA:1439:A:C8	57:DA:1440:U:O4'	2.65	0.49
11:AK:22:ILE:HG21	11:AK:95:THR:HG21	1.94	0.49
57:DA:2571:U:O4	57:DA:2574:G:C8	2.65	0.49
26:BE:145:ASP:OD1	26:BE:183:PHE:HD2	1.96	0.49
1:AA:1190:G:OP2	3:AC:4:VAL:HB	2.13	0.49
23:BB:45:A:C4	23:BB:46:A:C8	3.01	0.49
34:DM:29:GLY:CA	34:DM:64:TRP:HZ3	2.26	0.49
43:DV:30:ILE:HG13	43:DV:40:ILE:HD11	1.93	0.49
22:BA:571:U:C4	22:BA:575:A:C5	3.01	0.49
57:DA:1819:A:O4'	57:DA:1821:A:C5	2.66	0.49
24:DC:166:ARG:HG3	24:DC:166:ARG:O	2.11	0.49
1:AA:198:G:N2	1:AA:220:G:H1'	2.27	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:119:A:H5'	53:CA:120:A:H5'	1.93	0.49
59:DF:43:ILE:HD13	59:DF:82:TYR:CE2	2.46	0.49
57:DA:1015:U:H2'	57:DA:1016:G:O4'	2.13	0.49
1:AA:596:A:C6	1:AA:645:G:C2	3.00	0.49
57:DA:71:A:OP2	57:DA:71:A:H3'	2.12	0.49
1:AA:57:G:N1	1:AA:356:A:C2	2.81	0.49
53:CA:209:U:H2'	53:CA:209:U:O2	2.11	0.49
53:CA:210:C:O2	53:CA:210:C:H2'	2.13	0.49
22:BA:300:A:N1	22:BA:333:G:O2'	2.42	0.49
1:AA:520:A:C2	1:AA:536:C:O2	2.65	0.49
24:DC:29:PHE:C	24:DC:31:PRO:HD2	2.32	0.49
22:BA:93:G:O2'	22:BA:94:A:H5'	2.12	0.49
20:CT:79:THR:O	20:CT:82:ILE:HG13	2.13	0.49
57:DA:1936:A:H2	57:DA:1943:U:C4	2.30	0.49
43:DV:44:HIS:CE1	43:DV:85:LYS:HD3	2.47	0.49
3:CC:59:PRO:O	3:CC:61:LYS:N	2.45	0.49
53:CA:142:G:C6	53:CA:143:A:C8	3.00	0.49
22:BA:988:A:H2'	22:BA:989:G:O5'	2.12	0.49
35:BN:73:ASN:ND2	35:BN:76:VAL:HG11	2.27	0.49
53:CA:204:G:H2'	53:CA:205:A:H8	1.77	0.49
37:BP:111:GLU:H	37:BP:111:GLU:CD	2.16	0.49
39:BR:27:ILE:HG13	39:BR:33:VAL:HG12	1.94	0.49
57:DA:2734:A:N7	57:DA:2735:G:C8	2.81	0.49
10:AJ:80:THR:HB	10:AJ:83:THR:HG22	1.93	0.49
39:DR:2:TYR:HE1	39:DR:13:ARG:HD2	1.77	0.49
57:DA:1320:C:O2'	57:DA:1321:A:H5''	2.13	0.49
22:BA:936:A:H2'	22:BA:937:C:H6	1.78	0.49
3:AC:22:PHE:C	3:AC:22:PHE:CD2	2.85	0.49
55:CM:87:GLY:O	55:CM:91:ARG:HD2	2.12	0.49
57:DA:2058:A:N6	57:DA:2059:A:N6	2.60	0.49
22:BA:2853:C:H2'	22:BA:2854:G:H8	1.77	0.49
22:BA:735:A:H3'	22:BA:736:C:C6	2.48	0.49
1:AA:588:G:C2	1:AA:589:U:C2	3.00	0.49
22:BA:1409:U:O2'	22:BA:1410:G:H5'	2.13	0.49
22:BA:320:A:H4'	22:BA:322:A:N7	2.28	0.49
53:CA:59:A:H2'	53:CA:59:A:N3	2.27	0.49
22:BA:2611:C:H6	22:BA:2611:C:O5'	1.95	0.49
25:DD:181:ASP:C	25:DD:183:GLU:H	2.16	0.49
22:BA:966:G:C6	22:BA:967:U:C4	3.00	0.49
1:AA:729:A:H2'	1:AA:730:G:O4'	2.13	0.49
22:BA:1256:G:O2'	26:BE:77:ILE:HD11	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2092:U:O4'	57:DA:2092:U:O2	2.30	0.49
22:BA:1000:A:C2	22:BA:1155:A:C4	3.01	0.49
28:BG:85:LYS:HG2	28:BG:131:VAL:HB	1.95	0.49
6:AF:16:GLU:CB	4:CD:191:SER:HB2	2.40	0.49
2:CB:90:PHE:HE1	2:CB:92:ASN:HD22	1.60	0.49
30:BI:90:GLY:O	30:BI:92:PRO:HD3	2.12	0.49
22:BA:1061:U:H1'	22:BA:1070:A:O4'	2.12	0.49
38:DQ:25:GLY:C	38:DQ:27:ARG:H	2.15	0.49
35:DN:90:ARG:HH21	35:DN:116:VAL:HG11	1.75	0.49
53:CA:38:G:C2	53:CA:397:A:C2	3.00	0.49
57:DA:1277:G:N3	35:DN:23:ASN:HB3	2.28	0.49
57:DA:304:U:H2'	57:DA:305:C:C5	2.48	0.49
53:CA:765:G:O6	53:CA:811:C:C4	2.65	0.49
53:CA:900:A:H2'	53:CA:901:A:C8	2.48	0.49
57:DA:2052:A:N7	25:DD:146:ILE:HD11	2.26	0.49
57:DA:2148:G:N2	57:DA:2149:U:O4	2.41	0.49
53:CA:559:A:H1'	53:CA:561:U:H2'	1.94	0.49
4:AD:28:ASP:C	4:AD:29:THR:O	2.49	0.49
22:BA:1734:G:C2'	22:BA:1735:A:H8	2.25	0.49
32:DK:108:ARG:HA	32:DK:116:ILE:HG21	1.95	0.49
5:AE:152:VAL:O	5:AE:156:ARG:HB2	2.13	0.49
57:DA:1436:G:H2'	57:DA:1437:C:O4'	2.12	0.49
2:CB:164:ASP:CG	2:CB:203:ASP:HB2	2.32	0.49
22:BA:276:U:O2'	22:BA:277:G:O5'	2.30	0.49
25:BD:94:GLN:O	25:BD:95:SER:HB2	2.12	0.49
34:BM:49:ALA:O	34:BM:50:ARG:C	2.50	0.49
12:AL:33:CYS:HB3	12:AL:54:VAL:HG22	1.94	0.49
49:B1:50:GLU:O	49:B1:51:ALA:HB2	2.13	0.49
57:DA:799:G:O6	57:DA:800:A:C6	2.66	0.49
1:AA:1322:C:O2'	1:AA:1323:G:P	2.70	0.49
14:AN:22:LYS:CG	14:AN:23:ARG:N	2.74	0.49
29:DH:96:THR:HA	29:DH:113:SER:OG	2.12	0.49
4:CD:54:LEU:O	4:CD:58:GLN:HB2	2.12	0.49
57:DA:395:U:O2'	57:DA:396:G:O5'	2.30	0.49
4:AD:2:ARG:NH2	4:AD:114:ARG:HD3	2.28	0.49
4:AD:3:TYR:O	4:AD:4:LEU:HB2	2.11	0.49
45:DX:1:SER:O	45:DX:3:VAL:N	2.45	0.49
22:BA:1560:G:H2'	22:BA:1561:C:C6	2.48	0.49
57:DA:1649:G:H2'	57:DA:1650:A:C8	2.47	0.49
1:AA:518:C:H4'	1:AA:519:C:H5"	1.94	0.49
8:AH:91:LEU:HD23	8:AH:92:PRO:HD2	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1370:G:C5'	9:AI:110:VAL:HG21	2.43	0.49
17:CQ:29:LYS:HD2	17:CQ:34:GLY:HA2	1.95	0.49
57:DA:2899:A:O2'	57:DA:2900:A:H5'	2.11	0.49
1:AA:642:A:C5	8:AH:106:SER:HA	2.47	0.49
22:BA:301:G:O2'	22:BA:302:C:O5'	2.31	0.49
44:BW:72:GLY:N	44:BW:73:PRO:CD	2.75	0.49
57:DA:1738:G:O2'	57:DA:1739:A:C8	2.59	0.49
46:DY:18:LEU:O	46:DY:18:LEU:HD13	2.12	0.49
57:DA:2250:G:O5'	57:DA:2250:G:C8	2.65	0.49
57:DA:412:A:N6	57:DA:2412:A:O4'	2.46	0.49
53:CA:1513:A:O2'	53:CA:1514:G:H5'	2.12	0.49
1:AA:1453:G:H2'	1:AA:1453:G:N3	2.27	0.49
22:BA:2188:U:O2'	22:BA:2189:U:H5'	2.11	0.49
18:AR:22:TYR:HA	18:AR:57:ALA:HB1	1.95	0.49
57:DA:2461:A:H1'	57:DA:2492:U:O2	2.12	0.49
11:AK:13:LYS:O	11:AK:14:GLN:CB	2.61	0.49
57:DA:538:A:N6	57:DA:555:G:O2'	2.45	0.49
22:BA:1744:A:H2'	22:BA:1744:A:N3	2.27	0.49
22:BA:1534:U:H5'	22:BA:1535:A:P	2.52	0.49
32:BK:77:ILE:HD13	32:BK:105:ARG:HH12	1.76	0.49
53:CA:487:A:H3'	53:CA:488:C:C6	2.47	0.49
22:BA:2562:U:C2'	22:BA:2563:U:H5'	2.42	0.49
57:DA:2011:U:C2'	57:DA:2012:G:H5'	2.43	0.49
7:AG:108:ARG:NH2	7:AG:118:ARG:HH22	2.11	0.49
7:AG:72:VAL:HG12	7:AG:89:GLU:HA	1.94	0.49
53:CA:680:C:C2	53:CA:711:G:N2	2.80	0.49
7:AG:30:MET:HG2	7:AG:31:VAL:N	2.28	0.49
25:BD:176:ASP:OD2	25:BD:176:ASP:N	2.42	0.49
57:DA:771:G:O2'	57:DA:772:C:H5'	2.12	0.49
31:BJ:44:TYR:HA	38:BQ:59:LEU:HD21	1.94	0.49
44:BW:40:ARG:HH11	44:BW:45:HIS:CE1	2.30	0.49
58:DB:55:U:H4'	59:DF:24:VAL:HG23	1.94	0.49
57:DA:2209:G:C6	57:DA:2216:G:C6	3.01	0.49
20:AT:43:LYS:NZ	20:AT:86:ALA:HA	2.27	0.49
57:DA:2332:C:H4'	44:DW:40:ARG:NH1	2.28	0.49
27:BF:99:PHE:O	27:BF:102:LEU:HB3	2.11	0.49
57:DA:605:G:H2'	57:DA:606:U:C6	2.48	0.49
37:DP:88:ARG:HH11	37:DP:112:ARG:CZ	2.25	0.49
9:CI:14:SER:HA	9:CI:68:GLY:O	2.13	0.49
4:CD:2:ARG:HE	4:CD:114:ARG:CD	2.25	0.49
35:DN:42:LYS:HA	35:DN:45:ARG:HD3	1.92	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:93:GLY:O	35:DN:116:VAL:HG21	2.13	0.49
57:DA:1387:A:C4	57:DA:1388:G:C8	3.01	0.49
42:DU:94:PHE:O	42:DU:95:PHE:C	2.50	0.49
34:DM:40:ARG:HB2	34:DM:93:VAL:CG2	2.43	0.49
57:DA:2147:A:N3	57:DA:2147:A:H5''	2.27	0.49
2:CB:95:TRP:CZ2	2:CB:100:LEU:HD13	2.47	0.49
34:DM:26:VAL:HA	34:DM:66:ARG:HH22	1.77	0.49
1:AA:1277:C:H2'	1:AA:1278:G:H5''	1.95	0.49
4:AD:25:ARG:O	4:AD:26:ALA:HB2	2.13	0.49
31:BJ:49:ASP:OD2	31:BJ:49:ASP:C	2.50	0.49
57:DA:2407:A:C2	57:DA:2408:U:N3	2.81	0.49
57:DA:1552:A:C2'	57:DA:1553:A:H5'	2.41	0.49
38:BQ:43:GLN:NE2	39:BR:77:PHE:CD1	2.80	0.49
57:DA:116:C:H5''	57:DA:128:C:H41	1.78	0.49
1:AA:1006:G:H2'	1:AA:1007:U:H6	1.76	0.49
53:CA:754:C:C2'	53:CA:754:C:O2	2.61	0.49
29:DH:84:ALA:HB3	29:DH:148:ALA:CB	2.43	0.49
57:DA:1802:A:O2'	57:DA:1803:A:H5'	2.12	0.49
1:AA:198:G:C6	1:AA:220:G:C2	3.01	0.49
32:DK:76:VAL:HB	37:DP:72:VAL:CG2	2.42	0.49
22:BA:727:A:OP1	22:BA:1431:A:O2'	2.28	0.49
53:CA:382:A:C8	53:CA:383:A:C5	3.00	0.49
57:DA:1587:G:N2	57:DA:1588:G:H1'	2.28	0.49
2:CB:19:THR:HG22	2:CB:37:VAL:CG2	2.40	0.49
4:AD:7:LYS:O	4:AD:10:LEU:HB2	2.12	0.49
35:BN:24:MET:HE3	35:BN:44:LEU:HB2	1.92	0.49
31:DJ:69:ARG:CZ	31:DJ:89:PHE:HE1	2.25	0.49
30:BI:32:VAL:HG22	30:BI:66:PHE:CG	2.47	0.49
35:DN:31:HIS:O	35:DN:33:ILE:N	2.39	0.49
57:DA:1845:G:C6	57:DA:1846:G:C5	3.01	0.49
50:D2:15:SER:O	50:D2:16:HIS:ND1	2.45	0.49
1:AA:594:U:H2'	1:AA:595:A:O4'	2.12	0.49
57:DA:2657:A:O3'	28:DG:159:LYS:NZ	2.45	0.49
25:BD:66:GLY:O	25:BD:69:ALA:HB3	2.12	0.49
37:DP:28:LYS:HZ2	37:DP:82:SER:HB2	1.76	0.49
1:AA:577:G:C4'	1:AA:816:A:H2'	2.42	0.49
57:DA:2625:G:H5'	57:DA:2626:C:OP2	2.13	0.49
57:DA:2599:G:OP2	24:DC:234:GLY:HA2	2.13	0.49
57:DA:1521:G:C6	57:DA:1522:A:C6	3.00	0.49
57:DA:676:A:H2	57:DA:2069:G:N3	2.11	0.49
17:AQ:66:LEU:O	17:AQ:67:SER:HB3	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:68:LEU:HG	13:AM:72:ILE:HD11	1.95	0.49
22:BA:2649:C:O2'	22:BA:2650:U:H5'	2.12	0.49
22:BA:1901:A:H2'	22:BA:1902:C:C6	2.48	0.49
1:AA:150:U:H2'	1:AA:151:A:H8	1.78	0.49
22:BA:350:G:H2'	22:BA:351:C:C6	2.47	0.49
28:DG:22:VAL:HG12	28:DG:23:ILE:H	1.78	0.49
47:DZ:10:ARG:HD2	47:DZ:52:PHE:O	2.13	0.49
1:AA:657:U:H2'	1:AA:658:C:H6	1.78	0.49
22:BA:842:U:O4	63:BA:3587:HOH:O	2.19	0.49
1:AA:1131:G:H2'	1:AA:1132:C:O5'	2.12	0.49
9:AI:62:LEU:HD23	9:AI:62:LEU:N	2.28	0.49
1:AA:999:C:H2'	1:AA:1000:A:H8	1.77	0.49
57:DA:2096:C:O2'	57:DA:2097:A:H5'	2.12	0.49
57:DA:2197:U:C6	57:DA:2224:G:C6	3.01	0.49
28:BG:118:ALA:O	28:BG:120:ILE:N	2.45	0.49
44:BW:39:GLN:HG3	44:BW:42:THR:HB	1.94	0.49
53:CA:247:G:C6	53:CA:278:G:C2	3.01	0.49
53:CA:975:A:O2'	53:CA:976:G:OP2	2.30	0.49
45:BX:38:TRP:HB2	45:BX:45:PHE:HE2	1.76	0.49
2:CB:80:LYS:O	2:CB:81:ASP:C	2.51	0.49
12:CL:42:LYS:HD3	12:CL:43:LYS:NZ	2.27	0.49
53:CA:1117:A:C6	53:CA:1184:G:O6	2.65	0.49
57:DA:589:U:C2	57:DA:590:A:N7	2.81	0.49
57:DA:740:C:C6	57:DA:1981:A:C2	3.01	0.49
57:DA:1273:U:H4'	57:DA:1275:A:P	2.53	0.49
10:CJ:37:ARG:CG	10:CJ:75:ASP:HB3	2.42	0.49
57:DA:1241:A:H5'	57:DA:1241:A:N3	2.27	0.49
57:DA:301:G:O3'	42:DU:81:ARG:NH1	2.45	0.49
22:BA:244:A:C2	22:BA:255:A:C4	3.01	0.49
25:DD:146:ILE:HG13	25:DD:155:VAL:HG22	1.94	0.49
53:CA:1073:U:C4	53:CA:1074:G:N7	2.81	0.49
37:DP:22:GLY:HA3	37:DP:91:VAL:HG21	1.94	0.49
5:CE:113:VAL:CG2	5:CE:136:VAL:HG23	2.43	0.49
53:CA:1239:A:N6	53:CA:1299:A:N6	2.60	0.49
32:DK:108:ARG:CA	32:DK:116:ILE:HD13	2.43	0.49
57:DA:2024:G:N2	57:DA:2040:G:H1'	2.27	0.49
57:DA:830:G:OP2	57:DA:830:G:H8	1.96	0.49
22:BA:1494:A:C2	22:BA:1495:A:C4	3.01	0.49
57:DA:1507:C:H3'	57:DA:1508:A:O4'	2.11	0.49
22:BA:2135:A:O2'	22:BA:2136:G:C8	2.57	0.49
57:DA:627:A:C2	57:DA:637:A:C4	3.00	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:8:ASP:O	8:AH:11:THR:HG22	2.11	0.49
57:DA:800:A:N1	57:DA:802:A:C8	2.80	0.49
57:DA:1820:U:OP1	24:DC:176:ARG:HB3	2.13	0.49
35:BN:37:THR:HG22	35:BN:110:MET:HE1	1.94	0.49
35:BN:36:THR:HG23	35:BN:37:THR:O	2.12	0.49
57:DA:91:A:O2'	57:DA:92:U:C6	2.63	0.49
2:AB:138:ARG:HB2	2:AB:138:ARG:NH1	2.27	0.49
22:BA:1562:U:H2'	22:BA:1563:U:O4'	2.13	0.49
57:DA:478:A:C6	57:DA:480:A:C5	3.01	0.49
11:AK:34:THR:HG1	11:AK:39:ASN:H	1.61	0.49
53:CA:926:G:C6	53:CA:1505:G:C5	3.01	0.49
33:DL:105:ILE:HG22	33:DL:106:GLU:N	2.27	0.49
57:DA:672:C:O2'	57:DA:673:C:H5'	2.13	0.49
53:CA:1108:G:H5''	3:CC:175:HIS:CE1	2.47	0.49
53:CA:1190:G:OP1	3:CC:3:LYS:HA	2.13	0.49
12:AL:4:ASN:ND2	12:AL:8:ARG:HH12	2.11	0.49
57:DA:274:C:H2'	57:DA:275:C:O4'	2.13	0.49
22:BA:646:U:H5'	22:BA:647:G:H5''	1.95	0.49
8:AH:104:SER:HB2	8:AH:125:ILE:HD11	1.95	0.49
8:AH:75:GLN:O	8:AH:126:CYS:HB2	2.12	0.49
41:BT:27:SER:O	41:BT:28:ASN:OD1	2.31	0.49
22:BA:161:A:H3'	22:BA:162:U:H5''	1.94	0.49
53:CA:163:C:H2'	53:CA:164:G:O5'	2.13	0.49
53:CA:1422:G:C5'	32:DK:48:PRO:HB3	2.42	0.49
7:AG:29:LEU:C	7:AG:29:LEU:HD23	2.33	0.49
1:AA:143:A:N3	1:AA:143:A:H2'	2.26	0.49
22:BA:747:U:C5	22:BA:2613:U:C5	3.00	0.49
57:DA:1628:G:O2'	57:DA:1629:U:H5'	2.13	0.49
53:CA:423:G:H2'	53:CA:424:G:O4'	2.13	0.49
22:BA:2557:G:H2'	22:BA:2558:C:C6	2.47	0.49
57:DA:545:U:C2	57:DA:547:A:H5''	2.47	0.49
4:CD:60:VAL:CG2	4:CD:194:ILE:HG21	2.42	0.49
8:AH:44:PHE:HE2	8:AH:100:ILE:HG12	1.77	0.49
57:DA:1885:A:C6	57:DA:1886:U:C2	3.00	0.49
22:BA:1541:C:C2'	22:BA:1542:U:H5'	2.43	0.49
4:CD:97:LEU:HB2	4:CD:134:TYR:HB3	1.95	0.49
38:DQ:79:ILE:C	38:DQ:79:ILE:HD13	2.32	0.49
57:DA:1467:U:H2'	57:DA:1468:U:H5'	1.95	0.49
2:AB:222:GLU:OE1	2:AB:225:SER:HA	2.12	0.49
3:AC:151:GLU:HG2	3:AC:151:GLU:O	2.13	0.49
57:DA:598:U:H6	57:DA:598:U:O5'	1.96	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:49:ARG:HH11	38:BQ:49:ARG:HG3	1.78	0.49
1:AA:1340:A:H2'	1:AA:1341:U:O4'	2.13	0.49
1:AA:433:G:C2'	1:AA:434:U:H5'	2.43	0.49
1:AA:148:G:N3	1:AA:1446:A:H2	2.11	0.49
58:DB:62:C:H2'	58:DB:63:C:O4'	2.13	0.49
22:BA:2825:G:H5''	22:BA:2826:A:OP2	2.12	0.49
12:AL:49:ARG:CG	12:AL:49:ARG:HH11	1.95	0.49
44:BW:14:ASP:O	44:BW:15:SER:CB	2.61	0.49
44:BW:35:ILE:O	44:BW:37:VAL:N	2.41	0.49
21:CU:19:LYS:HB3	21:CU:24:LYS:HB2	1.94	0.49
53:CA:979:C:OP2	53:CA:981:U:O4	2.31	0.49
57:DA:2352:A:C6	44:DW:30:VAL:HG11	2.47	0.49
53:CA:1160:G:O6	53:CA:1181:G:O6	2.30	0.49
53:CA:1125:U:C6	10:CJ:40:ILE:HG12	2.47	0.49
57:DA:1204:A:N1	57:DA:1241:A:N1	2.60	0.49
31:DJ:45:THR:OG1	31:DJ:48:VAL:HB	2.13	0.49
4:CD:21:LYS:O	4:CD:21:LYS:HG2	2.13	0.49
57:DA:1080:A:H2'	57:DA:1081:U:C6	2.48	0.49
57:DA:1103:A:H8	57:DA:1103:A:O5'	1.96	0.49
2:CB:103:TRP:HZ2	2:CB:155:GLY:HA2	1.77	0.49
57:DA:1807:G:N2	57:DA:1809:A:H3'	2.28	0.49
1:AA:1006:G:H2'	1:AA:1007:U:O4'	2.13	0.49
53:CA:330:C:H6	53:CA:330:C:H5'	1.78	0.49
22:BA:2286:G:O6	49:B1:22:THR:HG21	2.13	0.49
53:CA:988:G:H2'	53:CA:989:U:O4'	2.13	0.49
12:CL:5:GLN:HG3	12:CL:9:LYS:HZ3	1.78	0.49
22:BA:739:A:H1'	22:BA:740:C:H5	1.78	0.49
43:DV:29:ILE:HG13	43:DV:88:HIS:CE1	2.48	0.49
21:CU:35:GLU:CG	21:CU:36:PHE:N	2.75	0.49
1:AA:977:A:H3'	1:AA:1362:A:H62	1.77	0.49
1:AA:532:A:N7	3:AC:192:TYR:HB3	2.28	0.49
57:DA:858:G:C6	57:DA:2268:A:C6	3.01	0.49
14:CN:89:ARG:HG3	14:CN:91:GLU:HG3	1.95	0.49
31:BJ:73:VAL:CG2	31:BJ:74:TYR:N	2.75	0.49
54:CG:14:ASP:HB3	54:CG:18:GLY:N	2.23	0.49
5:CE:33:THR:OG1	5:CE:49:TYR:CZ	2.66	0.49
22:BA:534:U:H2'	22:BA:535:G:C8	2.48	0.49
41:BT:73:ARG:NH2	41:BT:74:ILE:H	2.10	0.49
30:DI:57:VAL:HG12	30:DI:58:ILE:N	2.24	0.49
40:BS:2:GLU:O	40:BS:3:THR:O	2.30	0.49
1:AA:934:C:H4'	1:AA:935:A:OP1	2.11	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2014:A:H5'	40:DS:94:ASP:OD2	2.13	0.49
10:AJ:11:LYS:HB3	10:AJ:71:LEU:CD1	2.42	0.49
57:DA:465:G:H4'	50:D2:16:HIS:HD2	1.77	0.49
1:AA:1108:G:H5''	3:AC:175:HIS:CE1	2.48	0.49
1:AA:1348:U:H4'	9:AI:121:ARG:CG	2.42	0.49
3:CC:10:ARG:HH21	3:CC:181:ILE:HB	1.78	0.49
57:DA:3:U:C4	57:DA:4:U:C5	3.01	0.49
1:AA:1273:C:H2'	1:AA:1274:A:O4'	2.12	0.49
40:BS:43:ALA:O	40:BS:46:LEU:HB2	2.13	0.49
57:DA:426:C:O2'	57:DA:427:U:H5'	2.12	0.49
40:DS:47:VAL:HG12	40:DS:103:ILE:HG12	1.95	0.49
53:CA:1058:G:OP1	3:CC:198:LYS:HE2	2.13	0.49
38:DQ:111:LYS:CE	39:DR:48:LYS:HD3	2.43	0.49
2:CB:9:LEU:HB2	2:CB:11:ALA:H	1.77	0.49
53:CA:1417:G:N2	53:CA:1484:C:C4	2.81	0.49
57:DA:262:A:C2	57:DA:430:A:H1'	2.48	0.49
53:CA:922:G:O2'	53:CA:1398:A:N1	2.44	0.49
32:DK:27:GLY:HA3	32:DK:30:ARG:HG3	1.95	0.49
1:AA:663:A:N1	1:AA:743:A:C2	2.81	0.49
57:DA:417:C:H2'	57:DA:418:C:C6	2.48	0.49
12:CL:89:LEU:HB3	12:CL:92:VAL:HG21	1.95	0.49
22:BA:697:G:H2'	22:BA:698:C:C6	2.48	0.49
33:DL:85:VAL:O	33:DL:85:VAL:HG22	2.13	0.49
2:CB:31:PHE:HB2	2:CB:41:ASN:HB2	1.95	0.49
53:CA:833:G:O2'	53:CA:834:U:H5'	2.12	0.49
57:DA:377:G:C6	57:DA:378:C:C4	3.01	0.49
44:DW:17:ALA:HB1	44:DW:36:ILE:HA	1.94	0.49
57:DA:1139:G:O2'	57:DA:1140:C:H5'	2.13	0.49
17:AQ:45:VAL:O	17:AQ:47:ASP:OD1	2.31	0.49
56:CP:52:LEU:O	56:CP:53:ASP:CB	2.61	0.49
57:DA:740:C:C4	57:DA:1981:A:C2	3.01	0.49
12:AL:82:ARG:CG	12:AL:82:ARG:NH1	2.70	0.49
57:DA:30:G:OP1	38:DQ:4:LYS:HG3	2.12	0.49
57:DA:1342:A:OP1	41:DT:59:ASN:HB3	2.12	0.49
57:DA:1204:A:H4'	57:DA:1205:A:H5''	1.95	0.49
57:DA:303:G:C6	57:DA:315:G:C6	3.01	0.49
53:CA:577:G:C4'	53:CA:816:A:H2'	2.43	0.49
1:AA:201:G:H2'	1:AA:202:G:O4'	2.13	0.49
24:BC:229:HIS:HD2	24:BC:246:PRO:HB3	1.77	0.49
57:DA:2150:C:H2'	57:DA:2151:U:C6	2.48	0.49
58:DB:28:C:C2	58:DB:29:A:C8	3.01	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1509:A:C2	22:BA:1510:G:C8	3.00	0.49
57:DA:1613:G:C6	57:DA:1619:G:C6	3.00	0.49
16:AP:6:LEU:HG	16:AP:17:TYR:HB3	1.94	0.49
57:DA:2721:A:H2'	57:DA:2722:G:O4'	2.12	0.49
32:DK:87:LEU:N	32:DK:87:LEU:HD23	2.27	0.49
5:AE:76:ASN:CB	5:AE:81:GLN:HG3	2.43	0.49
57:DA:227:A:HO2'	57:DA:228:C:P	2.35	0.49
1:AA:74:A:C2	1:AA:75:G:C4	3.01	0.49
1:AA:1004:A:C2	1:AA:1005:A:H1'	2.47	0.49
22:BA:273:G:O2'	22:BA:274:C:O4'	2.31	0.49
57:DA:2346:A:C3'	57:DA:2347:C:H5''	2.35	0.49
57:DA:1656:C:OP1	25:DD:141:ARG:NH1	2.46	0.49
57:DA:143:C:C2'	57:DA:144:A:C8	2.91	0.49
38:DQ:46:TYR:CZ	38:DQ:50:ARG:NH1	2.81	0.49
4:AD:9:LYS:O	4:AD:12:ARG:HB2	2.12	0.49
1:AA:1320:C:H42	19:AS:35:ARG:HB2	1.78	0.49
57:DA:2415:G:H4'	33:DL:65:GLY:O	2.13	0.49
35:BN:70:THR:HG21	35:BN:75:ILE:HD11	1.95	0.49
44:DW:16:GLU:OE2	44:DW:16:GLU:HA	2.13	0.49
1:AA:113:G:H2'	1:AA:114:U:H6	1.78	0.49
53:CA:239:U:C6	53:CA:239:U:C5'	2.85	0.49
4:AD:196:GLU:HA	4:AD:199:ILE:HG22	1.95	0.49
57:DA:279:A:C6	57:DA:280:U:N3	2.81	0.49
1:AA:667:G:H4'	15:AO:50:HIS:ND1	2.28	0.49
56:CP:16:PHE:CZ	56:CP:38:PHE:HD1	2.31	0.49
1:AA:520:A:H2	1:AA:536:C:O2	1.96	0.49
22:BA:480:A:H2	22:BA:499:U:O2	1.96	0.49
22:BA:2210:U:C2	22:BA:2212:A:N7	2.81	0.49
3:CC:41:TYR:CE1	3:CC:89:VAL:HG12	2.47	0.49
57:DA:2013:A:OP1	40:DS:96:ILE:HA	2.13	0.49
6:AF:9:MET:HG2	6:AF:86:ARG:O	2.12	0.49
28:BG:15:ASP:CG	28:BG:16:VAL:N	2.66	0.49
3:AC:137:VAL:HG11	3:AC:169:GLU:HB3	1.95	0.49
32:BK:88:ASN:HD22	32:BK:91:SER:H	1.60	0.49
22:BA:619:G:O6	63:BA:3288:HOH:O	2.20	0.49
57:DA:14:A:N6	57:DA:526:A:C4	2.80	0.49
53:CA:994:A:N3	53:CA:995:C:C6	2.81	0.49
1:AA:1451:U:O5'	1:AA:1452:C:H5	1.96	0.49
26:BE:134:LEU:O	26:BE:138:LEU:HG	2.13	0.49
13:AM:89:ARG:HB3	13:AM:96:VAL:HG22	1.95	0.49
22:BA:1470:A:H2'	22:BA:1471:G:O4'	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1901:A:H4'	57:DA:1901:A:OP2	2.13	0.49
1:AA:860:A:H2'	1:AA:861:G:O4'	2.13	0.49
1:AA:71:A:HO2'	1:AA:72:A:P	2.36	0.49
22:BA:2842:G:H2'	22:BA:2843:G:H5'	1.95	0.49
1:AA:819:A:N7	1:AA:1529:G:C2	2.80	0.49
15:CO:69:LEU:CD1	15:CO:77:TYR:HA	2.43	0.49
22:BA:186:G:O2'	22:BA:187:G:H5'	2.13	0.49
22:BA:2648:G:H2'	22:BA:2649:C:C6	2.48	0.49
22:BA:1249:U:H5'	22:BA:1249:U:C6	2.48	0.49
14:CN:16:ALA:HA	14:CN:20:PHE:HD1	1.78	0.49
57:DA:2638:G:O2'	57:DA:2639:A:C8	2.66	0.49
22:BA:2524:G:H2'	22:BA:2525:G:O5'	2.13	0.49
1:AA:1293:C:H2'	1:AA:1294:G:H8	1.77	0.49
57:DA:295:G:H2'	57:DA:295:G:N3	2.27	0.49
14:AN:91:GLU:O	14:AN:93:PRO:HD3	2.13	0.49
1:AA:191:G:C4	1:AA:192:A:C8	3.00	0.49
53:CA:611:C:H2'	53:CA:612:C:H6	1.76	0.49
19:CS:57:VAL:HG21	19:CS:75:PRO:HD2	1.95	0.49
36:DO:51:ALA:HB3	36:DO:78:VAL:HG22	1.94	0.49
8:CH:104:SER:OG	8:CH:109:VAL:HG22	2.13	0.49
22:BA:1760:C:C2'	22:BA:1761:C:H5'	2.43	0.49
15:AO:54:GLY:O	15:AO:58:MET:HG3	2.13	0.49
45:BX:15:ASN:HA	45:BX:24:THR:O	2.13	0.49
34:DM:15:GLY:O	34:DM:16:ARG:HB3	2.13	0.49
53:CA:116:A:H2'	53:CA:117:G:H8	1.78	0.49
28:BG:37:ASN:OD1	28:BG:37:ASN:N	2.46	0.49
25:DD:131:ASP:N	25:DD:131:ASP:OD2	2.46	0.49
31:BJ:44:TYR:CE1	38:BQ:59:LEU:HD11	2.48	0.48
44:BW:49:ASN:HA	44:BW:61:LYS:H	1.78	0.48
58:DB:57:A:N7	59:DF:25:MET:SD	2.86	0.48
57:DA:2321:U:O2	57:DA:2321:U:O5'	2.30	0.48
44:DW:42:THR:O	44:DW:43:LYS:HG2	2.13	0.48
4:CD:190:LEU:O	4:CD:190:LEU:HD23	2.12	0.48
24:DC:13:ARG:HG2	24:DC:14:HIS:CD2	2.48	0.48
1:AA:282:A:H5''	1:AA:283:U:OP2	2.12	0.48
1:AA:1240:U:H3'	1:AA:1241:G:C5'	2.41	0.48
57:DA:1390:U:O2'	57:DA:1391:U:H5'	2.12	0.48
57:DA:315:G:H2'	57:DA:316:C:O4'	2.13	0.48
42:DU:81:ARG:HB2	42:DU:96:LYS:HD2	1.94	0.48
57:DA:647:G:C5	57:DA:648:G:N7	2.81	0.48
22:BA:1941:C:C5'	22:BA:1941:C:C6	2.90	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:CG:134:VAL:HB	54:CG:137:ARG:NH2	2.18	0.48
59:DF:65:LEU:HD11	59:DF:87:LYS:HZ1	1.78	0.48
5:CE:112:ALA:O	5:CE:113:VAL:C	2.52	0.48
53:CA:92:U:HO2'	53:CA:93:U:H6	1.60	0.48
1:AA:1441:A:N7	1:AA:1442:G:N7	2.61	0.48
57:DA:230:G:HO2'	57:DA:231:A:H8	1.59	0.48
57:DA:1552:A:N3	57:DA:1552:A:C2'	2.76	0.48
1:AA:302:G:N3	1:AA:556:C:H4'	2.28	0.48
24:BC:93:VAL:CG1	24:BC:94:LEU:N	2.75	0.48
57:DA:956:G:H1'	34:DM:82:MET:HE1	1.95	0.48
53:CA:653:U:P	8:CH:55:LYS:HZ2	2.36	0.48
57:DA:2681:C:H4'	57:DA:2682:A:O5'	2.13	0.48
24:BC:129:LEU:O	24:BC:134:ILE:HD11	2.13	0.48
53:CA:1049:U:H4'	53:CA:1050:G:OP2	2.12	0.48
1:AA:1151:A:H5''	10:AJ:44:THR:OG1	2.13	0.48
29:DH:147:VAL:O	29:DH:148:ALA:HB3	2.13	0.48
49:B1:49:LYS:O	49:B1:50:GLU:HB3	2.13	0.48
24:DC:28:PRO:HB3	24:DC:62:ARG:HH22	1.77	0.48
1:AA:198:G:O2'	1:AA:199:A:C5'	2.61	0.48
53:CA:1525:G:H5''	21:CU:37:TYR:CD1	2.48	0.48
25:DD:112:THR:O	25:DD:113:SER:HB2	2.13	0.48
14:AN:20:PHE:C	14:AN:22:LYS:H	2.16	0.48
26:BE:146:VAL:HA	26:BE:185:LYS:O	2.13	0.48
22:BA:1565:C:HO2'	22:BA:1566:A:P	2.36	0.48
24:DC:95:TYR:C	24:DC:97:ASP:H	2.14	0.48
57:DA:1635:A:C2'	57:DA:1636:U:H5'	2.43	0.48
22:BA:2580:U:C5	22:BA:2581:G:C6	3.00	0.48
1:AA:486:U:H2'	1:AA:487:A:C8	2.48	0.48
57:DA:1188:U:C2'	57:DA:1189:A:H5'	2.43	0.48
46:BY:45:GLN:O	46:BY:46:VAL:CB	2.55	0.48
53:CA:1138:G:H2'	53:CA:1139:G:OP1	2.13	0.48
53:CA:1004:A:H2'	53:CA:1005:A:H8	1.78	0.48
57:DA:155:A:C2	57:DA:172:A:C6	3.01	0.48
2:AB:22:TRP:CZ3	2:AB:24:PRO:HA	2.48	0.48
7:AG:94:ARG:O	7:AG:95:ARG:C	2.52	0.48
15:AO:2:LEU:O	15:AO:3:SER:C	2.51	0.48
9:AI:119:LYS:O	9:AI:120:ALA:HB3	2.12	0.48
41:BT:18:GLU:HA	41:BT:18:GLU:OE2	2.13	0.48
41:BT:29:THR:CG2	41:BT:86:THR:HG22	2.42	0.48
1:AA:1306:A:C2'	1:AA:1307:U:H5'	2.43	0.48
19:AS:30:LEU:O	19:AS:49:ALA:HB3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2548:U:C2'	22:BA:2549:G:O5'	2.61	0.48
27:BF:120:SER:O	27:BF:127:TYR:CD1	2.66	0.48
53:CA:542:G:N3	53:CA:543:U:C6	2.81	0.48
55:CM:68:LEU:HD22	55:CM:69:ARG:NH1	2.27	0.48
53:CA:1406:U:C2'	53:CA:1407:C:H5'	2.43	0.48
1:AA:1233:G:H2'	1:AA:1234:C:C6	2.48	0.48
1:AA:1481:U:O2'	1:AA:1482:G:H5'	2.13	0.48
1:AA:1184:G:O2'	1:AA:1185:G:H5'	2.12	0.48
1:AA:999:C:H2'	1:AA:1000:A:C8	2.48	0.48
57:DA:2818:U:H2'	57:DA:2819:G:C8	2.47	0.48
22:BA:823:C:C4	22:BA:824:U:C4	3.00	0.48
21:CU:9:GLU:HB3	21:CU:10:PRO:CD	2.42	0.48
57:DA:1223:G:O6	39:DR:71:LYS:NZ	2.46	0.48
50:B2:26:ASN:N	50:B2:26:ASN:HD22	2.11	0.48
53:CA:223:A:C6	53:CA:224:U:C4	3.01	0.48
57:DA:2095:A:H5'	57:DA:2096:C:OP2	2.13	0.48
57:DA:2216:G:O2'	57:DA:2217:G:O5'	2.32	0.48
22:BA:2092:U:C4'	22:BA:2093:G:O5'	2.61	0.48
57:DA:2386:A:C2	44:DW:38:ARG:HG2	2.47	0.48
57:DA:2755:C:HO2'	57:DA:2756:U:H6	1.59	0.48
57:DA:607:U:H5	57:DA:619:G:C5	2.31	0.48
1:AA:255:G:H2'	1:AA:256:U:C6	2.48	0.48
33:BL:109:LYS:HA	33:BL:126:ARG:O	2.13	0.48
57:DA:447:A:C8	57:DA:473:G:C5	3.01	0.48
57:DA:2810:A:H2'	57:DA:2811:G:O4'	2.13	0.48
22:BA:1179:G:C6	22:BA:1180:U:O2'	2.65	0.48
57:DA:335:C:O2'	57:DA:336:C:C5'	2.61	0.48
22:BA:263:G:H1'	22:BA:430:A:N3	2.27	0.48
57:DA:1286:A:C5	57:DA:1289:C:N3	2.81	0.48
8:CH:17:GLN:HE21	8:CH:71:VAL:HG23	1.78	0.48
30:BI:16:MET:O	30:BI:19:PRO:HD3	2.12	0.48
57:DA:1808:A:N6	45:DX:27:ARG:HD2	2.28	0.48
57:DA:117:G:OP1	57:DA:124:G:O6	2.31	0.48
57:DA:49:A:C8	57:DA:51:G:N2	2.81	0.48
2:CB:164:ASP:OD2	2:CB:203:ASP:HB2	2.13	0.48
25:BD:34:VAL:CG2	25:BD:91:THR:HA	2.43	0.48
57:DA:1906:G:N2	57:DA:1907:G:C4	2.81	0.48
57:DA:822:G:O6	57:DA:943:A:C2	2.54	0.48
22:BA:416:U:C4	22:BA:417:C:C4	3.02	0.48
24:DC:105:ALA:HA	24:DC:106:PRO:HD3	1.71	0.48
57:DA:2612:C:O2	48:D0:1:ALA:HB2	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:44:ARG:HH21	26:BE:44:ARG:CB	2.26	0.48
38:BQ:23:TYR:O	38:BQ:28:SER:HB3	2.13	0.48
57:DA:480:A:H5'	42:DU:43:LYS:NZ	2.28	0.48
57:DA:167:A:C2	57:DA:168:G:H1'	2.48	0.48
22:BA:475:C:C5	22:BA:481:G:O6	2.66	0.48
22:BA:2823:A:OP2	25:BD:118:PHE:CD1	2.66	0.48
57:DA:1573:G:H2'	57:DA:1574:C:H5'	1.95	0.48
57:DA:1427:A:H4'	57:DA:1428:C:O5'	2.12	0.48
5:CE:148:SER:O	5:CE:151:MET:N	2.42	0.48
22:BA:1340:U:C5	22:BA:1603:A:C8	3.01	0.48
57:DA:2657:A:O2'	57:DA:2658:C:C5'	2.60	0.48
1:AA:1202:U:O2'	1:AA:1203:C:H5'	2.13	0.48
22:BA:962:G:H21	22:BA:2250:G:H22	1.60	0.48
57:DA:273:G:H2'	57:DA:274:C:H6	1.78	0.48
22:BA:1945:G:C6	22:BA:1946:U:C4	3.01	0.48
31:DJ:105:VAL:O	31:DJ:105:VAL:HG22	2.13	0.48
24:DC:51:ARG:O	24:DC:53:ILE:HG22	2.13	0.48
57:DA:1435:G:C2	57:DA:1558:C:N4	2.80	0.48
57:DA:2351:G:N7	51:D3:42:HIS:CE1	2.81	0.48
1:AA:1016:A:H3'	1:AA:1017:U:O4'	2.13	0.48
53:CA:147:G:H2'	53:CA:148:G:H8	1.77	0.48
57:DA:187:G:N2	57:DA:210:C:H1'	2.28	0.48
14:CN:16:ALA:HA	14:CN:20:PHE:CD1	2.48	0.48
22:BA:1006:C:H2'	22:BA:1007:C:H5'	1.94	0.48
53:CA:946:A:H2'	53:CA:947:G:C8	2.48	0.48
22:BA:2898:U:O2	31:BJ:134:ALA:HB1	2.12	0.48
22:BA:151:C:H5'	22:BA:1360:G:OP1	2.13	0.48
1:AA:1421:G:C2	1:AA:1422:G:C8	3.01	0.48
57:DA:1083:U:H1'	57:DA:1086:A:C2	2.49	0.48
53:CA:224:U:H2'	53:CA:225:C:C6	2.48	0.48
1:AA:734:G:H2'	1:AA:735:C:H6	1.78	0.48
42:BU:12:VAL:O	42:BU:18:LYS:O	2.30	0.48
22:BA:2209:G:C2	22:BA:2216:G:C2	3.01	0.48
22:BA:2446:G:H3'	22:BA:2447:G:H5''	1.95	0.48
57:DA:2033:A:OP2	57:DA:2033:A:H8	1.96	0.48
2:CB:53:LEU:O	2:CB:57:ASN:HB2	2.13	0.48
2:CB:156:LEU:HD23	2:CB:156:LEU:H	1.77	0.48
22:BA:1255:U:C5	26:BE:68:ALA:HA	2.48	0.48
22:BA:992:C:H2'	22:BA:993:G:H8	1.78	0.48
57:DA:2093:G:O4'	57:DA:2093:G:OP1	2.30	0.48
17:CQ:17:GLU:O	17:CQ:18:LYS:HB2	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2269:G:C4	57:DA:2270:A:C8	3.01	0.48
6:AF:38:ARG:HG2	6:AF:38:ARG:NH1	2.27	0.48
6:AF:91:ARG:CG	6:AF:92:THR:H	2.23	0.48
57:DA:623:C:O2'	57:DA:624:C:O4'	2.21	0.48
26:DE:24:ASN:HB3	26:DE:27:LEU:HB3	1.95	0.48
57:DA:1829:A:C8	57:DA:1830:C:C6	3.02	0.48
2:AB:89:PHE:CE2	2:AB:153:MET:HB2	2.49	0.48
35:DN:16:HIS:O	35:DN:20:MET:N	2.34	0.48
57:DA:1388:G:N1	57:DA:1400:U:N3	2.62	0.48
26:DE:149:ILE:HG23	26:DE:188:MET:HA	1.96	0.48
34:DM:41:LEU:HD13	34:DM:96:ILE:HG12	1.94	0.48
51:B3:7:ARG:O	51:B3:11:LYS:HG3	2.13	0.48
1:AA:80:A:C2	1:AA:90:C:N3	2.80	0.48
11:CK:74:LYS:HE3	11:CK:78:ILE:O	2.13	0.48
57:DA:2305:U:O2'	59:DF:132:ARG:HA	2.14	0.48
45:DX:52:ALA:C	45:DX:54:GLY:H	2.16	0.48
53:CA:91:U:O2'	53:CA:92:U:H5''	2.13	0.48
22:BA:1731:G:C4	22:BA:1733:G:C8	3.01	0.48
22:BA:1998:A:OP2	25:BD:141:ARG:NH2	2.46	0.48
57:DA:945:A:C8	57:DA:2448:A:C2	3.01	0.48
11:CK:84:MET:HG2	11:CK:110:THR:OG1	2.13	0.48
1:AA:1001:C:H2'	1:AA:1002:G:H8	1.78	0.48
22:BA:2886:A:H2'	22:BA:2887:A:O4'	2.13	0.48
22:BA:2136:G:C2'	22:BA:2137:U:C5	2.97	0.48
1:AA:972:C:H4'	10:AJ:59:LYS:CG	2.43	0.48
12:AL:58:ASN:C	12:AL:58:ASN:OD1	2.51	0.48
22:BA:1028:A:H61	22:BA:1125:G:H2'	1.77	0.48
53:CA:66:A:C6	53:CA:67:C:C4	3.01	0.48
22:BA:2880:C:H1'	35:BN:92:GLY:H	1.78	0.48
45:DX:4:CYS:HA	45:DX:32:LEU:HD11	1.95	0.48
25:BD:9:VAL:CG2	25:BD:10:GLY:N	2.76	0.48
1:AA:1160:G:O6	1:AA:1181:G:O6	2.31	0.48
57:DA:2292:U:H2'	57:DA:2293:G:C8	2.48	0.48
57:DA:492:A:N1	40:DS:49:LYS:CE	2.76	0.48
34:BM:66:ARG:HD3	34:BM:104:GLU:OE1	2.13	0.48
57:DA:1190:G:H5''	33:DL:32:GLY:HA2	1.95	0.48
57:DA:481:G:HO2'	57:DA:507:A:H61	1.58	0.48
22:BA:95:A:O2'	46:BY:41:HIS:CD2	2.66	0.48
32:BK:107:LEU:C	32:BK:109:SER:H	2.17	0.48
47:BZ:22:THR:O	47:BZ:23:LEU:C	2.52	0.48
3:CC:29:ALA:CB	14:CN:64:ARG:HH12	2.26	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1394:A:H2'	53:CA:1501:C:O2'	2.13	0.48
53:CA:1504:G:OP1	53:CA:1507:A:H4'	2.13	0.48
19:AS:50:VAL:CG2	19:AS:70:LEU:HB3	2.43	0.48
1:AA:1093:A:C2	1:AA:1095:U:H5'	2.48	0.48
34:BM:1:MET:O	34:BM:2:LEU:CB	2.61	0.48
53:CA:998:C:C6	53:CA:999:C:H5	2.31	0.48
1:AA:725:G:O2'	1:AA:726:C:H5'	2.13	0.48
1:AA:953:G:H2'	1:AA:954:G:O4'	2.14	0.48
22:BA:2103:C:C2'	22:BA:2104:C:H5'	2.42	0.48
22:BA:2553:G:C2	22:BA:2554:U:O2	2.67	0.48
18:CR:39:VAL:CG1	18:CR:40:PRO:HD2	2.43	0.48
22:BA:2444:G:OP2	26:BE:63:LYS:HD2	2.13	0.48
5:AE:59:ILE:HG13	5:AE:60:GLN:N	2.29	0.48
57:DA:538:A:O2'	31:DJ:8:PRO:CG	2.61	0.48
22:BA:1039:A:H2'	22:BA:1040:A:O4'	2.13	0.48
57:DA:815:C:OP1	39:DR:85:LYS:HE2	2.14	0.48
54:CG:4:ARG:HG2	54:CG:4:ARG:NH1	2.28	0.48
51:B3:61:LEU:HB3	51:B3:64:ALA:HB2	1.95	0.48
3:AC:39:ARG:CD	3:AC:54:ILE:HD11	2.43	0.48
3:AC:18:ASN:HB3	3:AC:39:ARG:HH12	1.78	0.48
57:DA:1152:C:H5''	38:DQ:79:ILE:HD12	1.94	0.48
22:BA:1356:G:C6	22:BA:1357:C:C4	3.02	0.48
41:DT:12:ARG:HG3	46:DY:29:ARG:NH1	2.29	0.48
22:BA:2711:A:P	63:BA:3548:HOH:O	2.71	0.48
9:CI:115:VAL:HG21	10:CJ:61:ALA:O	2.12	0.48
57:DA:563:A:C4	57:DA:2018:G:C2	3.01	0.48
3:CC:124:GLU:CD	3:CC:124:GLU:N	2.67	0.48
53:CA:443:C:H6	53:CA:443:C:O5'	1.96	0.48
38:BQ:63:ARG:HH22	38:BQ:95:ALA:C	2.17	0.48
38:BQ:96:ASP:C	38:BQ:98:ALA:N	2.64	0.48
44:BW:18:LYS:HE3	44:BW:19:ARG:HG2	1.95	0.48
44:BW:8:SER:O	44:BW:9:THR:CB	2.61	0.48
57:DA:2331:G:O2'	44:DW:40:ARG:HB3	2.12	0.48
27:BF:151:LEU:C	27:BF:151:LEU:HD12	2.34	0.48
57:DA:616:A:O2'	57:DA:617:G:O5'	2.32	0.48
4:CD:187:ARG:HH21	4:CD:191:SER:HA	1.78	0.48
1:AA:254:G:O2'	1:AA:255:G:H5'	2.14	0.48
53:CA:1160:G:O2'	53:CA:1161:C:C5'	2.62	0.48
53:CA:1181:G:C2'	53:CA:1182:G:C8	2.95	0.48
57:DA:1773:A:N7	57:DA:1829:A:H1'	2.29	0.48
57:DA:704:G:C2'	57:DA:726:G:N2	2.76	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:200:U:O4	57:DA:248:G:C2	2.66	0.48
57:DA:2429:G:C8	33:DL:55:MET:HE3	2.48	0.48
35:DN:12:ARG:HB3	35:DN:16:HIS:ND1	2.27	0.48
57:DA:300:A:H2'	57:DA:301:G:H5'	1.95	0.48
57:DA:303:G:C6	57:DA:315:G:O6	2.66	0.48
34:DM:71:LYS:HB3	34:DM:93:VAL:O	2.14	0.48
8:CH:17:GLN:NE2	8:CH:71:VAL:HG23	2.29	0.48
1:AA:558:G:C4	1:AA:559:A:C2	3.02	0.48
1:AA:1152:A:H2'	1:AA:1153:G:C8	2.48	0.48
53:CA:366:A:H1'	53:CA:395:C:O2	2.13	0.48
24:DC:62:ARG:NH2	24:DC:62:ARG:CG	2.76	0.48
1:AA:352:C:H6	1:AA:352:C:H5''	1.77	0.48
36:BO:67:ASN:O	36:BO:68:LYS:C	2.51	0.48
26:DE:6:LYS:HE3	26:DE:7:ASP:OD2	2.14	0.48
24:DC:141:HIS:HB3	24:DC:190:THR:HB	1.95	0.48
22:BA:18:U:HO2'	22:BA:19:A:H5'	1.77	0.48
1:AA:1055:A:N6	1:AA:1206:G:C6	2.81	0.48
47:DZ:23:LEU:HD21	47:DZ:53:MET:HE1	1.95	0.48
32:DK:23:LYS:O	32:DK:25:LEU:HD23	2.12	0.48
34:BM:43:ALA:CA	34:BM:46:ILE:HG13	2.38	0.48
24:BC:257:ARG:NE	24:BC:269:ARG:NH2	2.62	0.48
24:DC:35:LYS:HB3	24:DC:35:LYS:NZ	2.28	0.48
46:BY:40:SER:O	46:BY:42:LEU:N	2.46	0.48
20:CT:34:VAL:HG12	20:CT:78:LEU:HD21	1.93	0.48
57:DA:2898:U:H2'	57:DA:2899:A:C8	2.48	0.48
17:CQ:59:GLU:HG3	17:CQ:59:GLU:O	2.12	0.48
1:AA:1118:U:P	9:AI:105:ARG:HE	2.37	0.48
40:BS:71:VAL:HG22	40:BS:71:VAL:O	2.13	0.48
57:DA:2597:G:H2'	57:DA:2598:A:C8	2.48	0.48
3:CC:120:THR:CG2	3:CC:120:THR:O	2.60	0.48
24:DC:221:GLY:O	24:DC:224:MET:HG2	2.13	0.48
1:AA:1248:A:H2	9:AI:71:ILE:HD11	1.79	0.48
22:BA:2673:G:H2'	22:BA:2674:G:H8	1.78	0.48
57:DA:700:G:C5	57:DA:701:G:C8	3.01	0.48
15:CO:66:LEU:HB3	15:CO:77:TYR:HE1	1.78	0.48
53:CA:486:U:O2	53:CA:486:U:C2'	2.62	0.48
25:BD:61:THR:CB	25:BD:63:PRO:HD2	2.44	0.48
58:DB:30:C:H2'	58:DB:31:C:H5'	1.94	0.48
22:BA:632:A:H2'	22:BA:633:A:C8	2.48	0.48
57:DA:709:U:O2'	57:DA:710:U:H5'	2.13	0.48
1:AA:692:U:H1'	1:AA:695:A:N7	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:DI:109:ALA:HB1	30:DI:125:THR:HG22	1.93	0.48
57:DA:347:A:H2'	57:DA:348:A:C8	2.47	0.48
26:DE:115:GLN:O	26:DE:117:ARG:N	2.46	0.48
53:CA:1097:C:H2'	53:CA:1098:C:C6	2.48	0.48
39:DR:2:TYR:H	39:DR:42:ALA:CB	2.26	0.48
3:AC:116:ALA:HB1	3:AC:186:SER:HB2	1.94	0.48
1:AA:1483:A:H2'	1:AA:1484:C:O4'	2.14	0.48
10:CJ:63:ASP:OD2	14:CN:84:ARG:NH1	2.45	0.48
22:BA:2594:C:N4	63:BA:3787:HOH:O	2.45	0.48
57:DA:1278:C:O2'	35:DN:27:SER:HB3	2.13	0.48
12:CL:56:LEU:HB2	12:CL:58:ASN:OD1	2.13	0.48
50:D2:10:LEU:O	50:D2:14:ARG:HB2	2.12	0.48
52:B4:13:ASN:ND2	52:B4:13:ASN:N	2.62	0.48
36:BO:24:THR:HG22	36:BO:42:PRO:HD3	1.96	0.48
53:CA:784:A:H2'	53:CA:785:G:C8	2.48	0.48
22:BA:1204:A:C2	22:BA:1240:U:N3	2.81	0.48
57:DA:2094:A:O2'	57:DA:2095:A:C5'	2.61	0.48
22:BA:1152:C:O2'	22:BA:1153:C:H5'	2.14	0.48
44:BW:25:PHE:O	44:BW:27:GLY:N	2.46	0.48
44:BW:30:VAL:HA	44:BW:60:ALA:O	2.12	0.48
53:CA:961:U:C4	53:CA:983:A:C6	3.02	0.48
45:BX:44:ARG:CG	45:BX:45:PHE:N	2.77	0.48
27:BF:129:MET:CE	27:BF:153:ILE:HD11	2.43	0.48
57:DA:2746:U:H2'	57:DA:2747:G:H5'	1.94	0.48
57:DA:602:A:H4'	57:DA:604:G:O3'	2.14	0.48
17:AQ:80:LYS:HB2	17:AQ:80:LYS:HZ3	1.78	0.48
22:BA:1062:G:C8	22:BA:1088:A:H8	2.30	0.48
9:CI:74:GLN:O	9:CI:78:ILE:HG13	2.14	0.48
22:BA:1179:G:N7	22:BA:1180:U:H1'	2.27	0.48
57:DA:303:G:H2'	57:DA:304:U:C5	2.48	0.48
31:DJ:5:THR:HA	31:DJ:44:TYR:CE2	2.48	0.48
57:DA:2310:C:H2'	57:DA:2311:A:C5'	2.43	0.48
26:DE:134:LEU:O	26:DE:138:LEU:HG	2.13	0.48
57:DA:1430:G:O2'	57:DA:1431:A:O4'	2.25	0.48
30:BI:19:PRO:HG2	30:BI:23:VAL:HG22	1.95	0.48
57:DA:1555:G:C2	57:DA:1556:C:C2	3.01	0.48
57:DA:82:U:H5''	57:DA:296:U:H5''	1.96	0.48
56:CP:1:MET:HG3	56:CP:1:MET:O	2.14	0.48
45:DX:70:LEU:HB2	45:DX:77:TYR:HE2	1.78	0.48
1:AA:251:G:N1	1:AA:266:G:O6	2.46	0.48
57:DA:2345:G:N2	57:DA:2382:G:C8	2.81	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BM:49:ALA:HB1	34:BM:120:ALA:HB1	1.96	0.48
34:BM:55:ARG:O	34:BM:56:ALA:HB2	2.13	0.48
1:AA:511:C:O2'	1:AA:512:U:C5'	2.55	0.48
22:BA:2134:A:C6	22:BA:2135:A:N6	2.82	0.48
48:B0:3:GLN:NE2	48:B0:7:PRO:HD3	2.29	0.48
1:AA:429:U:H3'	4:AD:8:LEU:HD23	1.95	0.48
22:BA:571:U:C5	22:BA:575:A:C5	3.02	0.48
41:DT:15:HIS:CE1	41:DT:80:TRP:CH2	3.01	0.48
8:AH:17:GLN:NE2	8:AH:71:VAL:H	2.12	0.48
22:BA:1429:G:O2'	22:BA:1430:G:C5'	2.58	0.48
53:CA:381:C:H2'	53:CA:381:C:O2	2.13	0.48
36:BO:35:ILE:HD11	36:BO:106:LEU:HD23	1.94	0.48
1:AA:57:G:C5	1:AA:58:C:C4	3.02	0.48
57:DA:479:A:H1'	57:DA:480:A:H5''	1.96	0.48
53:CA:185:U:H2'	53:CA:186:C:H6	1.79	0.48
57:DA:1354:A:OP1	24:DC:35:LYS:HE3	2.13	0.48
24:BC:250:GLN:NE2	24:BC:250:GLN:N	2.61	0.48
22:BA:2403:C:N3	22:BA:2415:G:C2	2.81	0.48
28:BG:61:TRP:O	28:BG:64:ALA:N	2.46	0.48
29:BH:49:ALA:HB3	29:BH:50:ARG:HH22	1.75	0.48
7:AG:25:PHE:CE1	7:AG:104:VAL:HG23	2.48	0.48
1:AA:896:C:H2'	1:AA:897:C:C6	2.47	0.48
57:DA:2264:C:H2'	57:DA:2265:U:O4'	2.14	0.48
2:AB:115:ASP:O	2:AB:119:GLN:HB3	2.12	0.48
1:AA:919:A:H8	1:AA:919:A:O5'	1.96	0.48
1:AA:71:A:O2'	1:AA:72:A:O5'	2.28	0.48
33:BL:62:PRO:HG2	51:B3:24:LYS:HB3	1.94	0.48
18:CR:32:ILE:O	18:CR:32:ILE:HD12	2.13	0.48
25:DD:99:GLU:HG3	25:DD:100:LEU:H	1.79	0.48
12:CL:46:SER:O	12:CL:47:ALA:HB2	2.13	0.48
57:DA:1153:C:H2'	57:DA:1154:G:H8	1.76	0.48
55:CM:69:ARG:HA	55:CM:72:ILE:CG2	2.44	0.48
22:BA:1291:C:O2'	22:BA:1292:G:H5'	2.14	0.48
49:D1:16:THR:HG21	49:D1:42:VAL:HG23	1.95	0.48
53:CA:223:A:H2'	53:CA:224:U:C6	2.48	0.48
25:DD:35:THR:HG21	25:DD:67:HIS:CD2	2.49	0.48
1:AA:1477:U:H2'	1:AA:1478:U:C6	2.48	0.48
35:BN:95:THR:HG21	35:BN:113:ILE:HD11	1.94	0.48
3:CC:155:ARG:NE	3:CC:159:ALA:O	2.45	0.48
10:AJ:66:GLU:HG2	14:AN:98:ALA:HB2	1.95	0.48
30:BI:61:TYR:CD2	30:BI:61:TYR:N	2.81	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DY:49:ASP:O	46:DY:52:ARG:HB2	2.13	0.48
53:CA:1370:G:H5''	9:CI:110:VAL:HG21	1.94	0.48
5:AE:29:ILE:HD12	5:AE:30:PHE:N	2.28	0.48
10:AJ:91:ASP:O	10:AJ:92:LEU:O	2.31	0.48
22:BA:2077:A:H2'	22:BA:2078:C:H6	1.79	0.48
12:AL:49:ARG:CG	12:AL:49:ARG:NH1	2.61	0.48
57:DA:2217:G:C4	57:DA:2218:G:C8	3.01	0.48
53:CA:972:C:H4'	10:CJ:59:LYS:HG2	1.95	0.48
14:CN:80:ARG:HG2	14:CN:81:ILE:N	2.29	0.48
53:CA:914:A:O2'	53:CA:915:A:O5'	2.31	0.48
57:DA:726:G:O2'	57:DA:727:A:P	2.71	0.48
1:AA:246:A:C4	1:AA:282:A:N6	2.82	0.48
57:DA:251:A:H4'	33:DL:47:ARG:HH22	1.77	0.48
57:DA:323:C:C4	57:DA:333:G:N7	2.82	0.48
42:DU:94:PHE:HD2	42:DU:94:PHE:O	1.95	0.48
34:DM:73:ILE:HG21	34:DM:91:TYR:CZ	2.49	0.48
25:BD:104:VAL:HA	25:BD:106:LYS:HZ2	1.77	0.48
57:DA:1669:A:O3'	57:DA:2549:G:H5'	2.13	0.48
57:DA:2873:A:H5''	57:DA:2874:C:OP2	2.14	0.48
5:AE:155:LYS:H	5:AE:155:LYS:CD	2.27	0.48
8:AH:63:LYS:C	8:AH:64:TYR:HD1	2.17	0.48
8:AH:98:LEU:N	8:AH:98:LEU:HD23	2.29	0.48
53:CA:522:C:H41	12:CL:49:ARG:NH2	1.93	0.48
57:DA:980:A:C4	57:DA:1136:G:O4'	2.67	0.48
57:DA:297:G:C2	57:DA:342:A:C2	3.01	0.48
11:AK:22:ILE:HD11	11:AK:85:VAL:HG22	1.95	0.48
18:CR:72:ARG:HA	21:CU:4:LYS:HE3	1.96	0.48
2:CB:163:ILE:HA	2:CB:185:ILE:HG12	1.96	0.48
28:DG:88:LEU:HG	28:DG:128:THR:O	2.13	0.48
24:BC:106:PRO:CG	24:BC:141:HIS:HE1	2.26	0.48
25:DD:118:PHE:O	25:DD:119:ALA:HB3	2.13	0.48
57:DA:1803:A:O2'	57:DA:1804:C:C5'	2.62	0.48
52:B4:36:ARG:HG2	52:B4:37:GLN:N	2.20	0.48
57:DA:2043:C:C2	57:DA:2044:C:C5	3.01	0.48
5:CE:95:MET:HB3	5:CE:124:ALA:CB	2.39	0.48
28:BG:68:ARG:HD2	28:BG:68:ARG:C	2.34	0.48
2:CB:35:ASN:O	2:CB:37:VAL:HG12	2.14	0.48
2:AB:134:LEU:HA	2:AB:137:THR:OG1	2.13	0.48
2:AB:138:ARG:HA	2:AB:141:GLU:OE2	2.13	0.48
53:CA:1431:A:C6	53:CA:1432:G:N1	2.82	0.48
10:AJ:11:LYS:HB3	10:AJ:71:LEU:HD13	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:994:A:HO2'	53:CA:995:C:H6	1.55	0.48
22:BA:1378:A:H2'	22:BA:1380:G:N7	2.29	0.48
40:DS:35:ILE:HA	48:D0:24:VAL:HG21	1.95	0.48
22:BA:990:A:H5'	22:BA:990:A:C8	2.45	0.48
40:BS:14:ALA:O	40:BS:15:GLN:C	2.51	0.48
37:BP:67:GLU:HA	37:BP:67:GLU:OE1	2.13	0.48
22:BA:2674:G:H2'	22:BA:2675:A:C8	2.48	0.48
57:DA:870:U:C2'	57:DA:871:U:H5'	2.43	0.48
57:DA:457:A:C2	57:DA:459:U:O4	2.67	0.48
57:DA:453:A:H4'	57:DA:472:A:H62	1.78	0.48
26:BE:170:ARG:NH2	26:BE:170:ARG:HG2	2.28	0.48
22:BA:686:U:H4'	22:BA:687:C:OP2	2.13	0.48
2:CB:9:LEU:O	2:CB:10:LYS:CB	2.62	0.48
12:CL:33:CYS:HA	12:CL:54:VAL:HG13	1.96	0.48
57:DA:1153:C:H2'	57:DA:1154:G:O4'	2.14	0.48
35:DN:103:ARG:HB2	35:DN:110:MET:HG3	1.94	0.48
11:CK:21:HIS:O	11:CK:22:ILE:HD12	2.13	0.48
22:BA:194:G:N7	63:BA:3759:HOH:O	2.35	0.48
3:AC:153:SER:CB	3:AC:164:THR:HA	2.44	0.48
57:DA:260:G:C6	57:DA:261:G:N7	2.81	0.48
37:DP:74:GLN:O	37:DP:77:SER:HB3	2.14	0.48
38:BQ:13:HIS:HD2	38:BQ:31:TYR:CD1	2.31	0.48
22:BA:1224:U:C4	22:BA:1225:G:C6	3.02	0.48
18:AR:25:ILE:HG21	18:AR:66:LEU:HB3	1.95	0.48
17:CQ:22:VAL:HG21	17:CQ:58:VAL:HG21	1.96	0.48
34:DM:28:PHE:HB2	34:DM:104:GLU:OE1	2.13	0.48
12:CL:83:GLY:HA2	12:CL:94:TYR:HA	1.95	0.48
34:DM:31:PHE:CE2	34:DM:110:GLU:HB3	2.48	0.48
3:CC:153:SER:HB3	3:CC:164:THR:HB	1.94	0.48
8:AH:13:ILE:HG22	8:AH:14:ARG:N	2.28	0.48
1:AA:1057:G:H4'	3:AC:196:GLY:H	1.79	0.48
57:DA:1421:G:H8	57:DA:1421:G:OP2	1.95	0.48
38:BQ:60:TRP:CH2	38:BQ:93:ILE:HB	2.48	0.48
22:BA:2354:C:O5'	44:BW:31:LEU:HD22	2.14	0.48
20:AT:47:GLN:HE21	20:AT:82:ILE:CD1	2.25	0.48
44:DW:39:GLN:O	44:DW:56:HIS:HB3	2.13	0.48
27:BF:134:GLN:O	27:BF:135:ILE:HB	2.13	0.48
17:AQ:7:LEU:HD22	17:AQ:72:TRP:CZ3	2.48	0.48
17:AQ:7:LEU:HD23	17:AQ:24:ILE:CD1	2.43	0.48
53:CA:1160:G:O2'	53:CA:1161:C:H5'	2.13	0.48
57:DA:1829:A:C8	57:DA:1830:C:C5	3.02	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1036:G:C6	57:DA:1120:G:C6	3.02	0.48
57:DA:828:U:H4'	57:DA:831:G:N1	2.29	0.48
26:DE:146:VAL:O	26:DE:167:VAL:HA	2.13	0.48
25:BD:106:LYS:HB2	25:BD:206:ALA:H	1.77	0.48
1:AA:466:A:H4'	1:AA:467:U:OP2	2.13	0.48
59:DF:76:PHE:CD2	59:DF:76:PHE:N	2.75	0.48
4:AD:145:ARG:HD2	4:AD:147:LYS:CE	2.41	0.48
53:CA:1146:A:O2'	53:CA:1147:C:C5'	2.61	0.48
4:AD:29:THR:HG22	4:AD:30:LYS:N	2.28	0.48
5:CE:132:PRO:HA	5:CE:135:VAL:HB	1.96	0.48
53:CA:1296:C:C4	53:CA:1297:G:N2	2.82	0.48
25:BD:34:VAL:CG2	25:BD:94:GLN:H	2.25	0.48
12:AL:24:GLU:O	12:AL:25:ALA:C	2.51	0.48
42:DU:14:THR:HG23	42:DU:15:GLY:N	2.27	0.48
57:DA:95:A:H2'	57:DA:96:C:H5''	1.96	0.48
22:BA:2148:G:C2'	22:BA:2149:U:O4'	2.59	0.48
53:CA:818:G:H3'	53:CA:819:A:H5'	1.95	0.48
53:CA:702:A:C8	53:CA:702:A:OP1	2.54	0.48
57:DA:90:U:H3'	57:DA:91:A:C5'	2.43	0.48
57:DA:1586:A:C4	57:DA:1587:G:C8	3.02	0.48
11:AK:87:GLY:H	11:AK:113:THR:CG2	2.25	0.48
57:DA:1112:G:O2'	57:DA:1113:U:C5'	2.62	0.48
2:AB:186:VAL:N	2:AB:199:ILE:O	2.46	0.48
57:DA:1706:C:C2	57:DA:1757:A:H5'	2.48	0.48
57:DA:595:C:O5'	57:DA:595:C:H6	1.96	0.48
53:CA:868:C:H2'	53:CA:869:G:O4'	2.13	0.48
5:CE:37:VAL:HG12	5:CE:38:VAL:H	1.78	0.48
57:DA:481:G:P	42:DU:43:LYS:HG3	2.54	0.48
57:DA:502:A:N6	57:DA:505:A:C6	2.82	0.48
57:DA:1380:G:H1'	57:DA:1569:A:H61	1.79	0.48
57:DA:1425:G:H2'	57:DA:1426:G:C8	2.49	0.48
57:DA:1426:G:H5''	57:DA:1427:A:H3'	1.96	0.48
57:DA:1428:C:HO2'	57:DA:1568:G:HO2'	1.61	0.48
40:DS:96:ILE:HG12	40:DS:96:ILE:O	2.14	0.48
6:AF:47:LEU:CD1	6:AF:51:ILE:HG22	2.43	0.48
12:CL:82:ARG:HB2	12:CL:97:VAL:CG1	2.44	0.48
22:BA:1826:G:H2'	22:BA:1827:U:O5'	2.14	0.48
20:CT:72:ALA:C	20:CT:74:HIS:H	2.17	0.48
25:DD:32:ASN:HA	25:DD:51:THR:O	2.13	0.48
32:DK:1:MET:HB2	32:DK:32:TYR:HB3	1.95	0.48
22:BA:1184:U:OP1	47:BZ:29:ARG:HD3	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2235:G:H2'	57:DA:2236:U:H6	1.78	0.48
47:DZ:43:ILE:HD12	47:DZ:44:ARG:N	2.29	0.48
1:AA:1371:G:C6	1:AA:1372:U:C4	3.02	0.48
16:AP:11:ALA:O	16:AP:12:LYS:C	2.52	0.48
26:BE:131:THR:HG22	26:BE:161:ALA:H	1.78	0.48
26:BE:5:LEU:HD23	26:BE:120:VAL:O	2.14	0.48
24:DC:239:PHE:HD1	24:DC:240:GLY:H	1.62	0.48
57:DA:2461:A:C5	57:DA:2462:C:C4	3.02	0.48
22:BA:2555:U:C5	22:BA:2556:C:N1	2.81	0.48
57:DA:1527:G:H1'	57:DA:1546:G:H22	1.79	0.48
22:BA:2569:G:C2	22:BA:2570:G:C8	3.01	0.48
2:AB:56:LEU:HB2	2:AB:183:PHE:CE1	2.48	0.48
2:CB:9:LEU:C	2:CB:11:ALA:H	2.16	0.48
36:DO:74:VAL:HB	36:DO:106:LEU:CD1	2.44	0.48
34:DM:57:VAL:HA	34:DM:112:LEU:HD11	1.95	0.48
32:BK:99:ILE:HG21	32:BK:119:ALA:HB2	1.96	0.48
53:CA:922:G:C2	53:CA:923:A:C4	3.02	0.48
57:DA:2774:C:N4	57:DA:2775:G:C6	2.82	0.48
12:AL:98:ARG:NH1	12:AL:106:VAL:HG22	2.29	0.48
22:BA:792:A:C5'	22:BA:793:A:H5'	2.43	0.48
3:CC:172:VAL:O	3:CC:174:LEU:N	2.47	0.48
22:BA:2215:C:H2'	22:BA:2216:G:C8	2.49	0.48
12:CL:56:LEU:CB	12:CL:58:ASN:OD1	2.62	0.48
33:DL:119:PRO:HB3	33:DL:139:GLY:O	2.13	0.48
32:DK:47:ILE:CG2	32:DK:49:ARG:HG3	2.43	0.48
59:DF:1:ALA:HB2	59:DF:93:GLU:O	2.14	0.48
59:DF:94:ARG:HA	59:DF:97:GLU:OE2	2.13	0.48
2:AB:61:SER:C	2:AB:63:LYS:H	2.16	0.48
1:AA:585:G:C6	1:AA:586:C:C4	3.01	0.48
2:AB:77:GLU:HB2	2:AB:80:LYS:HE2	1.94	0.48
57:DA:2769:U:H2'	57:DA:2770:G:H5'	1.96	0.48
38:BQ:86:SER:HB3	39:BR:51:VAL:HG13	1.95	0.48
53:CA:977:A:HO2'	53:CA:978:A:H5''	1.79	0.48
5:AE:121:ASN:ND2	5:AE:122:VAL:N	2.62	0.48
30:BI:85:ILE:HD13	30:BI:88:GLY:HA2	1.96	0.48
57:DA:703:U:H2'	57:DA:704:G:O4'	2.13	0.48
57:DA:532:A:N1	57:DA:2020:A:H1'	2.29	0.48
25:DD:61:THR:HB	25:DD:63:PRO:HD2	1.96	0.48
49:D1:7:LYS:HD3	51:D3:33:THR:CG2	2.38	0.48
57:DA:575:A:H2'	57:DA:576:U:H5	1.79	0.48
33:BL:95:LEU:CD1	33:BL:100:ILE:HD11	2.38	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:133:THR:HG23	25:BD:134:HIS:HD2	1.78	0.48
57:DA:321:U:O4'	26:DE:159:LEU:HG	2.14	0.48
1:AA:944:G:N1	1:AA:1338:G:OP2	2.47	0.48
58:DB:42:C:C5	59:DF:65:LEU:HD13	2.48	0.48
57:DA:1280:G:H2'	57:DA:1281:G:H5'	1.96	0.48
41:BT:32:LEU:H	41:BT:83:ALA:CB	2.18	0.48
53:CA:70:U:H2'	53:CA:94:G:N7	2.29	0.48
22:BA:1106:G:C4	22:BA:1107:G:C8	3.02	0.48
57:DA:1810:A:H3'	57:DA:1811:G:C8	2.41	0.48
42:DU:3:LYS:HG2	42:DU:84:PHE:CZ	2.49	0.48
50:D2:31:LEU:CA	50:D2:34:ARG:HB2	2.42	0.48
2:CB:163:ILE:CG2	2:CB:203:ASP:HA	2.44	0.48
26:BE:175:ILE:HD11	26:BE:180:LEU:HD11	1.95	0.48
33:DL:127:VAL:HG13	33:DL:132:ARG:HB2	1.96	0.48
1:AA:972:C:H4'	10:AJ:59:LYS:HG2	1.96	0.48
49:B1:33:LEU:N	49:B1:51:ALA:HB3	2.29	0.48
57:DA:1299:G:N2	57:DA:1640:A:H5'	2.27	0.48
43:DV:28:ALA:HA	43:DV:88:HIS:CE1	2.49	0.48
28:DG:120:ILE:O	28:DG:120:ILE:HD13	2.14	0.48
22:BA:2801:G:H2'	22:BA:2802:G:C8	2.49	0.48
22:BA:2801:G:H2'	22:BA:2802:G:H8	1.79	0.48
32:DK:21:CYS:HB2	32:DK:39:ILE:HG21	1.94	0.48
22:BA:2264:C:N4	44:BW:11:ASN:HD21	2.07	0.48
22:BA:1248:G:O2'	38:BQ:2:ARG:HA	2.14	0.48
53:CA:327:A:N1	53:CA:329:A:C2	2.82	0.48
57:DA:514:A:N3	57:DA:581:C:O2'	2.41	0.48
1:AA:181:A:H1'	1:AA:182:A:N7	2.29	0.48
53:CA:1003:G:N2	53:CA:1038:C:C2	2.81	0.48
1:AA:595:A:C5	1:AA:641:U:C5	3.01	0.48
2:AB:19:THR:HB	2:AB:37:VAL:HB	1.95	0.48
22:BA:1714:U:C2'	22:BA:1714:U:O2	2.62	0.48
29:BH:54:LEU:N	29:BH:57:LYS:HB3	2.28	0.48
57:DA:2582:G:O2'	57:DA:2583:G:H5'	2.12	0.48
53:CA:1265:C:C4	53:CA:1266:G:N7	2.82	0.48
51:D3:18:LYS:CD	51:D3:19:GLY:H	2.25	0.48
57:DA:2533:U:C4	57:DA:2534:A:C4	3.02	0.48
53:CA:770:C:H1'	53:CA:899:C:H42	1.78	0.48
17:AQ:30:HIS:N	17:AQ:35:LYS:O	2.42	0.48
3:AC:134:LYS:HE3	3:AC:138:GLN:HE22	1.77	0.48
42:BU:93:ARG:O	42:BU:94:PHE:HB3	2.14	0.48
57:DA:849:A:H2'	57:DA:850:U:C6	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2553:G:N1	22:BA:2554:U:O2	2.47	0.48
22:BA:1833:C:H2'	22:BA:1834:U:H6	1.77	0.48
1:AA:390:U:H2'	1:AA:391:G:H8	1.77	0.48
53:CA:542:G:C4	53:CA:543:U:C5	3.02	0.48
35:DN:9:GLN:O	35:DN:10:LEU:O	2.31	0.48
17:CQ:23:ALA:C	17:CQ:24:ILE:HD12	2.33	0.48
2:AB:27:LYS:HB3	2:AB:28:PRO:HD3	1.94	0.48
53:CA:583:A:H3'	53:CA:584:G:H8	1.79	0.48
57:DA:435:C:C5	57:DA:436:C:C5	3.01	0.48
53:CA:364:A:C2	53:CA:365:U:O4	2.67	0.48
22:BA:2532:G:C6	22:BA:2533:U:C4	3.01	0.48
10:CJ:32:THR:HG23	10:CJ:83:THR:OG1	2.13	0.48
11:AK:80:ASN:HB3	11:AK:105:ARG:HB3	1.96	0.48
22:BA:2400:G:C2'	22:BA:2401:U:H5'	2.44	0.48
8:CH:59:GLU:C	8:CH:60:LEU:HD12	2.34	0.48
57:DA:2862:G:C2	57:DA:2863:C:C2	3.01	0.48
52:D4:2:LYS:HZ3	52:D4:2:LYS:HA	1.79	0.48
53:CA:190:A:O5'	53:CA:190:A:H8	1.97	0.48
24:DC:63:ILE:O	24:DC:64:VAL:HB	2.14	0.48
57:DA:2195:U:O2'	57:DA:2196:C:H5'	2.14	0.48
53:CA:270:A:H2'	53:CA:271:C:C6	2.49	0.48
37:DP:113:LEU:HD23	37:DP:113:LEU:C	2.34	0.48
25:DD:61:THR:CB	25:DD:63:PRO:HD2	2.44	0.48
1:AA:1241:G:O2'	1:AA:1242:G:C8	2.56	0.48
33:BL:77:ILE:HG12	33:BL:95:LEU:CD1	2.43	0.48
53:CA:502:A:C1'	53:CA:550:G:H5'	2.43	0.48
10:CJ:11:LYS:HB3	10:CJ:71:LEU:CD1	2.41	0.48
57:DA:1203:U:C4	57:DA:1204:A:N7	2.81	0.48
22:BA:264:C:O2'	22:BA:265:A:H3'	2.14	0.48
58:DB:26:C:H1'	58:DB:117:G:C1'	2.43	0.48
57:DA:2448:A:O2'	57:DA:2449:U:C5	2.65	0.48
57:DA:982:C:H5''	57:DA:983:A:OP1	2.14	0.48
53:CA:935:A:O2'	53:CA:936:C:C6	2.66	0.48
22:BA:1419:A:C3'	22:BA:1420:A:H5''	2.44	0.48
26:BE:187:VAL:O	26:BE:188:MET:CB	2.60	0.48
57:DA:85:G:HO2'	57:DA:86:G:H8	1.62	0.48
1:AA:972:C:HO2'	1:AA:973:G:C5'	2.27	0.48
58:DB:75:G:H1'	43:DV:29:ILE:HG12	1.96	0.48
44:DW:23:LYS:HD2	44:DW:24:ARG:HB2	1.96	0.48
53:CA:722:G:N3	53:CA:722:G:H2'	2.28	0.48
1:AA:109:A:H4'	1:AA:110:C:OP2	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:190:LYS:O	25:BD:191:GLY:O	2.32	0.48
25:DD:107:VAL:HG11	25:DD:189:VAL:HG11	1.96	0.48
57:DA:2290:G:H2'	57:DA:2291:U:C6	2.49	0.48
2:AB:112:ARG:O	2:AB:116:LEU:HD23	2.13	0.48
53:CA:687:A:C2	53:CA:704:A:C5	3.02	0.48
22:BA:866:A:C8	22:BA:914:G:C6	3.02	0.48
53:CA:183:C:O2'	53:CA:184:G:C5'	2.59	0.48
59:DF:11:VAL:O	59:DF:12:VAL:HB	2.14	0.48
59:DF:8:LYS:HB2	59:DF:8:LYS:NZ	2.29	0.48
22:BA:311:A:C6	22:BA:328:U:C4	3.02	0.48
1:AA:683:G:N2	11:AK:39:ASN:HA	2.29	0.48
57:DA:641:U:C5	57:DA:642:U:C4	3.01	0.48
35:BN:33:ILE:HG12	35:BN:118:ARG:CZ	2.44	0.48
3:AC:6:PRO:CG	3:AC:183:TYR:CG	2.97	0.48
47:BZ:9:THR:CG2	47:BZ:10:ARG:N	2.69	0.48
40:BS:45:VAL:CG2	40:BS:46:LEU:N	2.76	0.48
5:AE:56:PRO:HG2	5:AE:57:ALA:H	1.79	0.48
12:CL:75:GLU:C	12:CL:77:SER:H	2.18	0.48
22:BA:2007:U:H2'	22:BA:2008:C:C6	2.48	0.48
11:AK:106:ILE:HD13	11:AK:106:ILE:O	2.13	0.48
22:BA:1249:U:H5'	22:BA:1249:U:H6	1.78	0.48
53:CA:148:G:C2	53:CA:149:A:C4	3.01	0.48
8:CH:12:ARG:NH1	8:CH:27:PRO:HD2	2.29	0.48
2:CB:146:SER:HB2	2:CB:147:LEU:HD12	1.96	0.48
57:DA:845:A:C2	57:DA:847:U:C6	3.01	0.48
22:BA:2520:C:H2'	22:BA:2521:C:H6	1.79	0.48
41:DT:7:LEU:O	41:DT:10:VAL:HG13	2.13	0.48
53:CA:865:A:H2	53:CA:918:A:H4'	1.78	0.48
22:BA:2545:G:C2'	22:BA:2546:U:H5'	2.44	0.48
57:DA:377:G:C6	57:DA:378:C:N3	2.82	0.48
22:BA:178:G:O2'	22:BA:179:C:H5'	2.13	0.48
22:BA:2239:G:H5'	24:BC:248:GLY:HA3	1.96	0.48
8:CH:39:LEU:HD23	8:CH:44:PHE:HD2	1.78	0.48
53:CA:355:C:C4	53:CA:356:A:N7	2.82	0.48
57:DA:957:C:OP2	34:DM:75:GLU:HA	2.14	0.48
23:BB:40:U:O2'	23:BB:43:C:C5	2.66	0.48
30:DI:36:GLU:HB2	30:DI:40:ALA:HB3	1.94	0.48
53:CA:211:G:H2'	53:CA:211:G:N3	2.29	0.48
57:DA:489:G:H4'	57:DA:490:C:OP1	2.14	0.48
22:BA:1336:A:H2'	22:BA:1337:G:O4'	2.14	0.48
30:BI:12:VAL:HG23	30:BI:13:ALA:H	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BF:3:LEU:HD23	27:BF:100:GLU:HB2	1.95	0.48
22:BA:995:C:O2'	22:BA:996:A:P	2.72	0.48
22:BA:2052:A:C2	22:BA:2053:G:C8	3.02	0.48
58:DB:54:G:N2	59:DF:25:MET:CE	2.77	0.48
44:DW:18:LYS:HZ3	44:DW:18:LYS:HB2	1.79	0.48
57:DA:2365:G:OP1	44:DW:54:ARG:HG3	2.14	0.48
53:CA:279:A:H4'	53:CA:280:C:O5'	2.14	0.48
32:BK:18:ARG:HB2	32:BK:45:GLU:CG	2.44	0.48
9:CI:58:GLU:HG3	9:CI:59:LYS:N	2.29	0.48
35:DN:35:LYS:HD3	35:DN:112:TYR:CZ	2.49	0.48
54:CG:74:VAL:HG11	54:CG:143:MET:HB2	1.95	0.48
53:CA:1278:G:OP2	53:CA:1278:G:H8	1.97	0.48
29:DH:42:LYS:NZ	29:DH:42:LYS:HB3	2.29	0.48
57:DA:1069:A:O2'	57:DA:1071:G:H5''	2.14	0.48
57:DA:1071:G:O2'	57:DA:1072:C:C5'	2.62	0.48
53:CA:1071:C:C5'	5:CE:53:ARG:HH11	2.27	0.48
53:CA:1130:A:N7	53:CA:1146:A:C6	2.82	0.48
5:CE:130:THR:HA	5:CE:135:VAL:CG2	2.44	0.48
22:BA:508:A:H4'	22:BA:509:C:OP2	2.13	0.48
20:CT:60:GLN:HA	20:CT:60:GLN:OE1	2.13	0.48
57:DA:1663:G:C6	57:DA:1998:A:N6	2.82	0.48
57:DA:2876:G:N2	57:DA:2877:G:H1'	2.29	0.48
53:CA:672:U:H2'	53:CA:673:A:C8	2.48	0.48
22:BA:1106:G:N2	22:BA:1107:G:H1'	2.27	0.48
57:DA:1807:G:H21	57:DA:1809:A:H2'	1.78	0.48
57:DA:1553:A:N7	57:DA:1555:G:C6	2.82	0.48
4:AD:103:ARG:NH1	4:AD:110:ARG:HH22	2.12	0.48
53:CA:739:C:H2'	53:CA:739:C:O2	2.14	0.48
37:BP:33:GLU:HG3	37:BP:34:GLY:H	1.78	0.48
9:AI:49:GLN:N	9:AI:50:PRO:HD2	2.28	0.48
26:BE:119:ILE:CD1	26:BE:187:VAL:HA	2.43	0.48
33:DL:79:LEU:HD12	33:DL:112:LEU:HB2	1.96	0.48
33:BL:74:THR:HA	33:BL:107:PHE:O	2.14	0.48
57:DA:135:U:H2'	57:DA:136:G:C8	2.49	0.48
3:CC:136:ALA:HA	3:CC:139:ASN:HD21	1.78	0.48
1:AA:1319:A:C8	1:AA:1323:G:C5	3.02	0.48
4:AD:52:VAL:CG2	4:AD:53:GLN:N	2.77	0.48
57:DA:28:A:C2	57:DA:29:U:H1'	2.49	0.48
53:CA:160:A:H4'	53:CA:344:A:N1	2.29	0.48
53:CA:320:A:C2	53:CA:334:C:C2	3.01	0.48
22:BA:303:G:C6	22:BA:315:G:C6	3.02	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:642:U:H4'	57:DA:2349:G:O2'	2.13	0.48
1:AA:1202:U:H2'	1:AA:1203:C:C6	2.49	0.48
43:DV:75:GLN:HG3	43:DV:92:VAL:CG1	2.44	0.48
22:BA:960:A:H5''	22:BA:961:C:OP2	2.13	0.48
25:DD:12:THR:OG1	37:DP:4:ILE:HG23	2.14	0.48
59:DF:103:ILE:H	59:DF:107:VAL:CG1	2.27	0.48
53:CA:767:A:H2'	53:CA:768:A:C8	2.48	0.48
22:BA:1026:G:C8	22:BA:1134:A:C4	3.02	0.48
22:BA:2722:G:H2'	22:BA:2723:C:H6	1.78	0.48
53:CA:888:G:H4'	53:CA:1488:G:O2'	2.14	0.48
1:AA:829:G:C6	1:AA:858:G:C2	3.01	0.48
5:CE:157:GLY:CA	8:CH:63:LYS:HZ2	2.26	0.48
41:BT:26:LYS:O	41:BT:27:SER:CB	2.60	0.48
57:DA:1527:G:C2	57:DA:1546:G:N1	2.82	0.48
45:BX:40:GLU:HG3	45:BX:43:LYS:NZ	2.28	0.48
57:DA:2351:G:N7	51:D3:42:HIS:NE2	2.62	0.48
22:BA:1513:U:C2'	22:BA:1514:G:H5'	2.44	0.48
53:CA:1008:U:C4	53:CA:1022:A:C2	3.02	0.48
1:AA:1087:G:N2	1:AA:1088:G:C4	2.82	0.48
53:CA:1409:C:H2'	53:CA:1410:A:C8	2.48	0.48
3:AC:153:SER:CB	3:AC:164:THR:HG22	2.44	0.48
29:DH:66:ASN:HA	29:DH:137:GLU:CD	2.34	0.48
22:BA:2714:G:H2'	22:BA:2715:C:H6	1.78	0.48
53:CA:223:A:C5	53:CA:224:U:C5	3.02	0.48
57:DA:2525:G:C2	57:DA:2539:C:C2	3.02	0.48
30:DI:16:MET:SD	30:DI:19:PRO:HG2	2.53	0.48
2:CB:176:ASN:C	2:CB:178:LEU:H	2.17	0.48
3:AC:59:PRO:O	3:AC:62:SER:HB3	2.14	0.48
25:DD:169:ARG:O	25:DD:170:VAL:O	2.32	0.48
1:AA:161:A:N1	1:AA:347:G:O2'	2.46	0.48
17:AQ:50:ASN:OD1	17:AQ:50:ASN:N	2.47	0.48
38:BQ:82:LEU:CD2	38:BQ:112:ALA:HB2	2.44	0.47
39:BR:49:ILE:CG2	39:BR:54:VAL:HG12	2.43	0.47
22:BA:2322:A:N6	22:BA:2333:A:N6	2.62	0.47
58:DB:55:U:H1'	59:DF:25:MET:HE1	1.95	0.47
58:DB:57:A:C6	59:DF:25:MET:SD	3.07	0.47
19:CS:38:THR:HG1	19:CS:40:PHE:HD1	1.61	0.47
17:AQ:6:THR:O	17:AQ:7:LEU:HD12	2.13	0.47
57:DA:181:A:H2	57:DA:434:U:C1'	2.25	0.47
57:DA:2838:G:H1'	35:DN:45:ARG:NH2	2.27	0.47
39:DR:51:VAL:HB	39:DR:52:PRO:HD2	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:19:LYS:O	41:DT:20:ALA:HB2	2.13	0.47
37:BP:4:ILE:HA	37:BP:7:LEU:HB2	1.95	0.47
57:DA:1553:A:N7	57:DA:1555:G:C5	2.82	0.47
57:DA:2025:C:OP1	25:DD:154:LYS:HE2	2.13	0.47
53:CA:15:G:H5'	53:CA:15:G:C8	2.48	0.47
28:BG:96:ALA:O	28:BG:97:VAL:HB	2.13	0.47
57:DA:629:G:O2'	57:DA:630:G:H5'	2.14	0.47
30:DI:52:LEU:HD12	30:DI:53:PRO:HD2	1.96	0.47
12:CL:2:THR:HG22	12:CL:4:ASN:H	1.77	0.47
22:BA:563:A:C2	22:BA:564:C:C2	3.02	0.47
24:DC:74:PRO:HA	24:DC:116:GLN:HG3	1.96	0.47
57:DA:861:A:O2'	57:DA:862:G:O4'	2.23	0.47
57:DA:1416:G:C4	57:DA:1417:C:C5	3.02	0.47
1:AA:1160:G:O2'	1:AA:1161:C:O5'	2.31	0.47
22:BA:251:A:O5'	22:BA:251:A:H8	1.97	0.47
27:BF:45:ASP:CB	27:BF:48:LEU:HB2	2.42	0.47
27:BF:39:VAL:H	27:BF:85:GLY:HA2	1.79	0.47
29:DH:80:ILE:HB	29:DH:101:ASP:HB3	1.95	0.47
1:AA:501:C:H1'	1:AA:549:C:H1'	1.96	0.47
22:BA:1561:C:H2'	22:BA:1562:U:C6	2.49	0.47
57:DA:1648:U:O2'	57:DA:1649:G:O4'	2.26	0.47
8:AH:82:LEU:HD22	8:AH:84:ILE:HD11	1.95	0.47
8:CH:85:TYR:CE2	8:CH:123:GLU:HB2	2.49	0.47
57:DA:565:C:H4'	57:DA:1253:A:N6	2.29	0.47
1:AA:595:A:C6	1:AA:641:U:C6	3.01	0.47
53:CA:1449:C:O2'	53:CA:1450:U:C5'	2.62	0.47
22:BA:2531:A:H5'	28:BG:156:TYR:CZ	2.49	0.47
17:CQ:4:ILE:HG22	17:CQ:5:ARG:N	2.27	0.47
43:DV:61:LEU:O	43:DV:72:VAL:HG22	2.14	0.47
1:AA:738:C:H2'	1:AA:739:C:H6	1.78	0.47
1:AA:506:G:C6	1:AA:507:C:C4	3.02	0.47
25:BD:121:THR:HG22	25:BD:125:TRP:HD1	1.79	0.47
57:DA:468:G:H4'	26:DE:57:LYS:CG	2.44	0.47
10:CJ:102:LEU:HD13	10:CJ:102:LEU:OXT	2.14	0.47
26:BE:127:GLU:N	26:BE:127:GLU:CD	2.68	0.47
22:BA:1006:C:O2'	22:BA:1007:C:H5'	2.14	0.47
53:CA:729:A:H2'	53:CA:730:G:O4'	2.14	0.47
38:BQ:13:HIS:HD2	38:BQ:31:TYR:CE1	2.32	0.47
51:D3:46:LYS:HD3	51:D3:46:LYS:O	2.14	0.47
7:AG:112:ASP:HB2	7:AG:118:ARG:CG	2.44	0.47
24:BC:259:ASN:C	24:BC:261:ARG:H	2.17	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:255:A:H2'	57:DA:256:A:O4'	2.14	0.47
43:DV:21:ARG:HE	43:DV:87:GLN:CB	2.27	0.47
35:BN:13:ASN:O	35:BN:14:SER:C	2.53	0.47
22:BA:1206:G:C6	22:BA:1207:C:C4	3.02	0.47
57:DA:2473:U:P	57:DA:2473:U:H6	2.37	0.47
57:DA:1497:U:C5	57:DA:1578:U:O5'	2.66	0.47
1:AA:1173:U:H2'	1:AA:1174:G:C8	2.49	0.47
22:BA:2720:U:OP1	37:BP:52:ARG:NH2	2.47	0.47
37:BP:56:SER:O	37:BP:75:THR:HG23	2.14	0.47
57:DA:1139:G:N3	57:DA:1143:A:H2	2.11	0.47
24:BC:252:LYS:NZ	24:BC:252:LYS:HB2	2.27	0.47
22:BA:1059:G:O2'	30:BI:128:ILE:HD13	2.14	0.47
9:CI:59:LYS:HE3	9:CI:60:LEU:CG	2.44	0.47
54:CG:21:LEU:O	54:CG:25:PHE:N	2.47	0.47
22:BA:1135:C:N4	22:BA:1139:G:C6	2.82	0.47
57:DA:833:A:H2'	57:DA:834:G:H8	1.79	0.47
25:BD:114:LYS:HD3	25:BD:116:LYS:HZ1	1.78	0.47
2:CB:101:THR:O	2:CB:102:ASN:HB2	2.14	0.47
2:CB:102:ASN:CG	2:CB:102:ASN:O	2.52	0.47
22:BA:1189:A:H2'	22:BA:1190:G:O4'	2.14	0.47
45:DX:26:ARG:HG3	45:DX:27:ARG:N	2.28	0.47
57:DA:948:C:H2'	57:DA:949:G:O4'	2.14	0.47
57:DA:99:U:H5'	57:DA:100:U:OP1	2.14	0.47
3:AC:154:GLY:H	3:AC:156:LEU:HD11	1.78	0.47
1:AA:1004:A:H2'	1:AA:1005:A:O4'	2.13	0.47
1:AA:1003:G:C6	1:AA:1036:A:N6	2.82	0.47
57:DA:85:G:O2'	57:DA:86:G:H8	1.97	0.47
29:BH:89:LYS:HG2	29:BH:90:LEU:N	2.19	0.47
28:DG:85:LYS:HG3	28:DG:163:TYR:HB2	1.96	0.47
57:DA:915:C:HO2'	57:DA:916:G:H5'	1.80	0.47
24:BC:170:TYR:HD2	24:BC:184:GLU:HA	1.75	0.47
57:DA:1418:G:H1'	57:DA:1580:A:H61	1.78	0.47
36:BO:105:ALA:O	36:BO:106:LEU:HB3	2.14	0.47
1:AA:502:A:H2'	1:AA:503:C:C6	2.49	0.47
59:DF:19:PHE:HB3	59:DF:21:TYR:CE2	2.49	0.47
30:BI:126:ARG:HA	30:BI:129:GLU:CD	2.35	0.47
57:DA:1721:G:H1'	57:DA:1739:A:H61	1.79	0.47
57:DA:672:C:H5'	57:DA:672:C:C6	2.49	0.47
22:BA:1806:C:O2	24:BC:43:ASN:OD1	2.32	0.47
53:CA:1314:C:H2'	53:CA:1315:U:O4'	2.15	0.47
22:BA:1820:U:H4'	22:BA:1821:A:OP2	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:4:LYS:O	20:AT:5:SER:C	2.52	0.47
33:DL:103:ILE:N	33:DL:103:ILE:HD12	2.29	0.47
46:DY:48:ARG:O	46:DY:51:ALA:HB3	2.14	0.47
53:CA:295:C:C6	53:CA:296:U:C5	3.02	0.47
22:BA:269:C:H2'	22:BA:270:A:C5'	2.43	0.47
57:DA:699:A:H2'	57:DA:700:G:O4'	2.15	0.47
5:AE:71:ILE:HG12	5:AE:72:ASN:H	1.79	0.47
28:DG:152:ARG:HD2	28:DG:153:PRO:HD2	1.96	0.47
55:CM:92:ARG:HD2	19:CS:79:TYR:OH	2.14	0.47
1:AA:1506:U:H3'	63:AA:1802:HOH:O	2.14	0.47
57:DA:1878:G:H2'	57:DA:1879:C:O4'	2.15	0.47
22:BA:814:C:H2'	22:BA:815:C:C6	2.49	0.47
22:BA:45:G:H5''	22:BA:46:G:OP1	2.14	0.47
25:DD:161:MET:O	25:DD:162:ALA:O	2.32	0.47
57:DA:486:C:O5'	57:DA:486:C:H6	1.96	0.47
57:DA:1213:A:H2'	57:DA:1214:A:H8	1.78	0.47
22:BA:2780:G:OP2	31:BJ:120:ARG:HD3	2.15	0.47
22:BA:1256:G:C2'	26:BE:77:ILE:HD11	2.44	0.47
3:AC:185:THR:HG22	3:AC:186:SER:N	2.29	0.47
22:BA:806:C:O5'	22:BA:806:C:H6	1.97	0.47
57:DA:1145:C:O2'	57:DA:1146:C:H5'	2.14	0.47
43:DV:64:VAL:HG13	43:DV:68:LYS:O	2.14	0.47
57:DA:1108:U:H2'	57:DA:1109:C:O4'	2.14	0.47
22:BA:2023:C:H5'	22:BA:2034:U:H1'	1.95	0.47
57:DA:1483:G:H2'	57:DA:1484:U:C6	2.48	0.47
30:BI:91:LYS:O	30:BI:97:VAL:HG21	2.14	0.47
9:CI:128:LYS:O	9:CI:129:ARG:HB2	2.13	0.47
4:AD:75:TYR:CD1	4:AD:75:TYR:C	2.87	0.47
59:DF:27:VAL:O	59:DF:27:VAL:HG23	2.15	0.47
16:AP:42:ILE:HG22	16:AP:43:ALA:N	2.28	0.47
57:DA:2760:C:O2	57:DA:2760:C:H2'	2.14	0.47
37:DP:83:ILE:O	37:DP:83:ILE:HD13	2.13	0.47
57:DA:2431:U:N3	57:DA:2434:A:OP2	2.41	0.47
57:DA:2214:C:HO2'	57:DA:2215:C:H5'	1.73	0.47
22:BA:748:G:OP2	40:BS:88:ARG:HG3	2.14	0.47
53:CA:255:G:O3'	17:CQ:18:LYS:HD2	2.14	0.47
53:CA:974:A:O2'	53:CA:975:A:P	2.72	0.47
14:CN:12:ARG:HB3	14:CN:59:GLN:HG2	1.95	0.47
57:DA:603:A:H4'	57:DA:604:G:C4'	2.44	0.47
37:DP:16:VAL:HG13	37:DP:19:PHE:HE2	1.79	0.47
57:DA:784:G:OP1	57:DA:2588:G:H5''	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1021:A:H2'	22:BA:1021:A:N3	2.29	0.47
42:BU:27:VAL:HG22	42:BU:28:LEU:N	2.29	0.47
53:CA:1254:A:H2'	53:CA:1255:G:H8	1.72	0.47
15:AO:69:LEU:HD22	15:AO:77:TYR:HB2	1.96	0.47
31:DJ:44:TYR:O	31:DJ:45:THR:CB	2.63	0.47
4:CD:24:VAL:HG23	4:CD:25:ARG:N	2.29	0.47
57:DA:1072:C:O2'	57:DA:1093:G:O6	2.25	0.47
58:DB:42:C:C4	58:DB:43:C:N4	2.83	0.47
58:DB:43:C:O3'	59:DF:91:ARG:NH2	2.47	0.47
57:DA:1282:U:C4	57:DA:1283:G:C5	3.02	0.47
55:CM:11:HIS:N	55:CM:44:ILE:HD12	2.29	0.47
25:BD:4:LEU:HD23	25:BD:29:VAL:HG11	1.96	0.47
14:AN:42:ASN:O	14:AN:44:VAL:N	2.47	0.47
57:DA:2487:G:H2'	57:DA:2488:G:C8	2.49	0.47
22:BA:273:G:O2'	22:BA:274:C:O5'	2.32	0.47
26:BE:124:PHE:CZ	26:BE:148:ILE:HD12	2.50	0.47
28:DG:103:ASN:HA	28:DG:112:VAL:HB	1.95	0.47
33:DL:62:PRO:O	51:D3:12:ARG:HB3	2.15	0.47
57:DA:527:C:H2'	57:DA:527:C:O2	2.13	0.47
57:DA:1245:G:OP1	33:DL:8:PRO:HG3	2.14	0.47
2:AB:95:TRP:CH2	2:AB:100:LEU:HB2	2.48	0.47
27:BF:67:THR:N	27:BF:85:GLY:O	2.38	0.47
30:BI:56:VAL:HG22	30:BI:57:VAL:N	2.29	0.47
32:DK:7:MET:CG	32:DK:17:ARG:HH12	2.27	0.47
57:DA:481:G:OP2	42:DU:43:LYS:HG3	2.14	0.47
24:BC:73:ILE:HG12	24:BC:73:ILE:H	1.47	0.47
22:BA:1835:G:N3	22:BA:1931:U:C5	2.82	0.47
22:BA:96:C:O2'	22:BA:97:C:H5'	2.13	0.47
32:DK:121:GLU:O	32:DK:122:VAL:C	2.53	0.47
22:BA:919:U:H2'	22:BA:920:A:O4'	2.14	0.47
13:AM:92:ARG:HB3	13:AM:92:ARG:CZ	2.44	0.47
22:BA:2403:C:H2'	22:BA:2404:U:H6	1.78	0.47
57:DA:2860:A:C8	57:DA:2860:A:O5'	2.63	0.47
57:DA:2667:C:H2'	57:DA:2668:G:H8	1.78	0.47
1:AA:1202:U:O2'	1:AA:1203:C:C5'	2.62	0.47
57:DA:2045:C:O2	48:D0:18:HIS:NE2	2.42	0.47
22:BA:962:G:O2'	22:BA:963:U:H5'	2.13	0.47
53:CA:1271:A:H5'	53:CA:1314:C:H5''	1.96	0.47
25:DD:49:GLN:NE2	25:DD:79:LEU:HB3	2.29	0.47
35:BN:3:HIS:O	35:BN:4:ARG:HB2	2.14	0.47
57:DA:265:A:C6	57:DA:428:A:O4'	2.68	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:145:ASP:OD1	26:DE:166:LYS:HG3	2.14	0.47
57:DA:732:C:N4	57:DA:733:G:C6	2.83	0.47
39:DR:48:LYS:H	39:DR:48:LYS:CD	2.24	0.47
31:DJ:8:PRO:HG2	31:DJ:9:GLU:N	2.29	0.47
54:CG:4:ARG:CZ	54:CG:6:ILE:HG22	2.45	0.47
53:CA:106:C:C2'	53:CA:107:G:H5'	2.44	0.47
22:BA:2140:G:C2	22:BA:2141:G:C4	3.02	0.47
57:DA:599:A:N3	57:DA:659:G:C2	2.83	0.47
55:CM:106:ARG:CZ	55:CM:112:ARG:HB3	2.44	0.47
12:AL:115:LYS:O	12:AL:116:TYR:HB2	2.15	0.47
59:DF:58:ALA:HB1	59:DF:139:GLU:CG	2.44	0.47
22:BA:2592:G:C6	22:BA:2593:U:C4	3.02	0.47
22:BA:2469:A:C6	22:BA:2482:A:C8	3.03	0.47
1:AA:1260:G:H4'	1:AA:1284:C:H5'	1.96	0.47
22:BA:820:A:H2'	22:BA:821:A:O4'	2.15	0.47
13:AM:22:TYR:CE2	13:AM:69:ARG:HG2	2.49	0.47
3:CC:8:GLY:HA3	14:CN:88:MET:SD	2.54	0.47
57:DA:438:G:C6	57:DA:439:A:C6	3.02	0.47
19:AS:62:THR:HB	19:AS:65:MET:HG3	1.96	0.47
13:AM:36:ALA:HB3	13:AM:38:ILE:HG12	1.95	0.47
22:BA:81:G:C6	22:BA:82:U:C2	3.02	0.47
57:DA:1199:U:H2'	57:DA:1200:C:C6	2.48	0.47
45:BX:19:HIS:C	45:BX:21:LEU:H	2.17	0.47
36:DO:56:LYS:HD3	36:DO:56:LYS:O	2.15	0.47
35:DN:120:GLU:OE1	35:DN:120:GLU:HA	2.14	0.47
28:BG:159:LYS:HE2	28:BG:159:LYS:HB3	1.70	0.47
57:DA:1221:C:C4	57:DA:1222:U:C5	3.02	0.47
38:BQ:85:ALA:HA	38:BQ:115:ALA:CB	2.44	0.47
28:BG:162:ARG:NH1	28:BG:168:VAL:HG21	2.29	0.47
57:DA:2214:C:H2'	57:DA:2215:C:C5	2.48	0.47
45:BX:34:SER:CA	45:BX:49:ARG:HA	2.44	0.47
27:BF:37:MET:HE3	27:BF:151:LEU:HB3	1.96	0.47
32:BK:72:PRO:O	32:BK:74:GLY:N	2.43	0.47
57:DA:1031:G:O2'	52:D4:7:VAL:HG12	2.14	0.47
33:BL:19:LEU:HA	33:BL:27:LEU:O	2.13	0.47
2:CB:80:LYS:HB3	2:CB:90:PHE:CE2	2.49	0.47
22:BA:1059:G:C8	22:BA:1060:U:H2'	2.49	0.47
53:CA:375:U:C4	53:CA:376:G:N7	2.83	0.47
24:DC:225:ASN:HB3	24:DC:226:PRO:HD2	1.96	0.47
57:DA:1275:A:O2'	57:DA:1276:A:H1'	2.14	0.47
57:DA:1345:C:H5''	57:DA:1396:U:O4	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:107:VAL:N	25:BD:206:ALA:H	1.98	0.47
57:DA:1536:C:H4'	57:DA:1537:G:C5'	2.44	0.47
58:DB:27:C:O2'	58:DB:28:C:H5'	2.15	0.47
58:DB:42:C:N4	59:DF:87:LYS:HZ2	2.11	0.47
58:DB:42:C:H5	59:DF:65:LEU:HD13	1.79	0.47
22:BA:1509:A:O2'	22:BA:1510:G:P	2.72	0.47
53:CA:89:U:O2'	53:CA:90:C:O4'	2.23	0.47
22:BA:558:U:P	31:BJ:113:PRO:HB2	2.54	0.47
53:CA:1350:A:C2	54:CG:33:GLY:HA3	2.49	0.47
57:DA:118:A:H1'	57:DA:178:G:O4'	2.13	0.47
22:BA:271:G:O2'	22:BA:272:A:C5'	2.62	0.47
57:DA:1567:G:H5"	24:DC:84:PRO:HB3	1.96	0.47
24:DC:183:VAL:HG13	24:DC:185:ALA:N	2.22	0.47
1:AA:979:C:OP2	1:AA:980:C:H5	1.96	0.47
22:BA:1429:G:H2'	22:BA:1430:G:C8	2.50	0.47
22:BA:1585:C:C2'	22:BA:1586:A:H5'	2.45	0.47
57:DA:558:U:OP1	31:DJ:113:PRO:HD2	2.13	0.47
22:BA:2262:U:H4'	22:BA:2328:A:C2	2.49	0.47
32:DK:35:VAL:HA	32:DK:62:VAL:HG12	1.96	0.47
51:D3:41:ARG:NH2	51:D3:41:ARG:CG	2.72	0.47
1:AA:1055:A:C6	1:AA:1206:G:C5	3.02	0.47
22:BA:250:G:C6	22:BA:251:A:C6	3.03	0.47
26:DE:158:PHE:HA	26:DE:169:VAL:HG11	1.96	0.47
5:CE:54:GLU:HG3	5:CE:56:PRO:HG2	1.95	0.47
57:DA:478:A:N6	57:DA:480:A:C6	2.83	0.47
57:DA:819:A:OP2	57:DA:1187:G:N2	2.48	0.47
22:BA:96:C:H4'	46:BY:41:HIS:ND1	2.29	0.47
1:AA:701:U:H5"	1:AA:703:G:O4'	2.14	0.47
28:BG:8:VAL:HG11	28:BG:49:LEU:HB2	1.96	0.47
53:CA:1508:A:H2'	53:CA:1509:C:O4'	2.15	0.47
57:DA:671:C:O2'	57:DA:672:C:H5'	2.14	0.47
57:DA:2668:G:C2	57:DA:2669:G:C4	3.03	0.47
1:AA:1049:U:H1'	1:AA:1201:A:N7	2.29	0.47
57:DA:2628:C:H1'	57:DA:2781:A:C4	2.50	0.47
26:BE:48:THR:OG1	26:BE:50:ALA:HB3	2.15	0.47
57:DA:1413:A:C6	57:DA:1414:C:N4	2.82	0.47
57:DA:165:A:H2'	57:DA:166:U:H6	1.80	0.47
29:BH:78:VAL:CG1	29:BH:145:ASN:HB3	2.42	0.47
22:BA:1912:A:N1	22:BA:1919:A:C5	2.82	0.47
53:CA:166:U:C2'	53:CA:167:A:H5'	2.44	0.47
22:BA:455:C:N3	22:BA:473:G:H5'	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:26:CYS:CB	12:CL:29:LYS:HE2	2.45	0.47
57:DA:1973:G:C6	57:DA:1974:C:C4	3.03	0.47
8:CH:111:THR:HG22	8:CH:113:ARG:H	1.79	0.47
25:BD:62:LYS:N	25:BD:63:PRO:CD	2.76	0.47
2:AB:49:PHE:CD1	2:AB:49:PHE:C	2.88	0.47
57:DA:1232:G:H2'	57:DA:1233:C:H6	1.80	0.47
25:BD:126:ASN:ND2	25:BD:126:ASN:N	2.63	0.47
54:CG:4:ARG:CG	54:CG:5:VAL:N	2.77	0.47
11:AK:100:ASN:HD22	11:AK:106:ILE:HG22	1.79	0.47
1:AA:307:C:H5''	1:AA:308:C:OP2	2.14	0.47
29:DH:6:LEU:HD13	29:DH:36:ALA:HA	1.95	0.47
37:DP:9:GLN:HA	37:DP:12:MET:HG3	1.95	0.47
23:BB:94:A:O2'	23:BB:95:U:H5'	2.15	0.47
57:DA:1213:A:N6	57:DA:1236:G:H1'	2.30	0.47
22:BA:1626:A:HO2'	22:BA:1627:G:P	2.37	0.47
22:BA:1445:G:C6	22:BA:1446:C:C4	3.02	0.47
23:BB:51:G:N2	23:BB:53:A:N6	2.63	0.47
43:DV:42:LEU:HD13	43:DV:47:VAL:HG21	1.97	0.47
59:DF:1:ALA:HA	59:DF:97:GLU:HB3	1.96	0.47
3:AC:81:GLU:O	3:AC:84:GLU:HB3	2.14	0.47
15:CO:65:LEU:O	15:CO:68:TYR:HB3	2.15	0.47
53:CA:815:A:C2	53:CA:1529:G:C4	3.03	0.47
2:AB:59:ILE:C	2:AB:59:ILE:HD12	2.35	0.47
17:CQ:9:GLY:O	17:CQ:57:VAL:HG13	2.14	0.47
22:BA:1296:G:O2'	22:BA:1297:C:H5'	2.14	0.47
22:BA:754:U:H2'	22:BA:755:U:C6	2.50	0.47
1:AA:510:A:N3	1:AA:543:U:H1'	2.28	0.47
28:BG:148:ARG:HA	28:BG:161:VAL:CG1	2.45	0.47
35:BN:47:VAL:O	35:BN:50:PRO:HD2	2.13	0.47
53:CA:690:G:H2'	53:CA:691:G:O4'	2.15	0.47
1:AA:538:G:OP1	12:AL:109:ARG:HD3	2.14	0.47
25:BD:151:THR:C	25:BD:153:GLY:H	2.17	0.47
44:BW:23:LYS:CD	44:BW:24:ARG:N	2.76	0.47
44:BW:39:GLN:O	44:BW:41:GLY:N	2.47	0.47
44:BW:50:VAL:HB	44:BW:51:GLY:H	1.46	0.47
53:CA:1221:G:C2	53:CA:1222:G:H1'	2.49	0.47
27:BF:134:GLN:CG	27:BF:135:ILE:N	2.74	0.47
5:AE:114:LEU:HD21	5:AE:122:VAL:CG2	2.45	0.47
57:DA:620:G:H4'	57:DA:621:A:O5'	2.14	0.47
4:CD:187:ARG:NH1	4:CD:196:GLU:OE2	2.47	0.47
9:CI:53:LEU:O	9:CI:54:VAL:HG13	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1670:C:C5	57:DA:1671:U:C4	3.02	0.47
57:DA:1671:U:O2	57:DA:1673:G:C8	2.67	0.47
57:DA:524:G:C5	57:DA:525:U:C5	3.02	0.47
57:DA:534:U:C1'	38:DQ:44:TYR:HB3	2.45	0.47
53:CA:37:U:O2	53:CA:548:G:C2	2.67	0.47
57:DA:1469:A:C2	57:DA:1470:A:C5	3.02	0.47
53:CA:1151:A:N6	53:CA:1152:A:N6	2.63	0.47
53:CA:1154:G:H2'	53:CA:1155:A:C8	2.46	0.47
53:CA:1258:G:H2'	53:CA:1259:C:C6	2.50	0.47
57:DA:1206:G:C6	57:DA:1207:C:N4	2.83	0.47
57:DA:307:G:N2	57:DA:310:A:C8	2.83	0.47
34:DM:71:LYS:HG3	34:DM:72:PRO:HD2	1.95	0.47
57:DA:2150:C:O2'	57:DA:2151:U:O4'	2.18	0.47
57:DA:1062:G:HO2'	57:DA:1063:G:H8	1.58	0.47
22:BA:1508:A:O2'	22:BA:1509:A:O5'	2.32	0.47
57:DA:2847:U:H3'	37:DP:94:ALA:HB2	1.95	0.47
53:CA:69:G:H2'	53:CA:70:U:C6	2.50	0.47
53:CA:1328:C:OP1	55:CM:27:THR:HG21	2.15	0.47
22:BA:1734:G:O2'	22:BA:1735:A:O4'	2.32	0.47
6:CF:2:ARG:NH2	6:CF:91:ARG:HB2	2.29	0.47
14:AN:40:ARG:NH2	14:AN:44:VAL:HG21	2.27	0.47
57:DA:103:A:H2'	57:DA:104:A:C8	2.49	0.47
10:AJ:42:LEU:HB3	10:AJ:43:PRO:CD	2.43	0.47
22:BA:2728:U:O2'	22:BA:2729:G:H8	1.97	0.47
49:B1:22:THR:OG1	49:B1:23:THR:N	2.47	0.47
35:DN:55:ALA:CB	35:DN:79:LEU:HD22	2.45	0.47
21:CU:39:LYS:O	21:CU:43:GLU:HB2	2.15	0.47
24:BC:185:ALA:C	24:BC:187:CYS:N	2.67	0.47
24:DC:93:VAL:HG13	24:DC:94:LEU:H	1.80	0.47
57:DA:1008:A:C5'	31:DJ:37:ARG:HH22	2.27	0.47
4:CD:71:PHE:O	4:CD:74:TYR:HB2	2.14	0.47
22:BA:570:G:OP1	22:BA:972:A:O2'	2.30	0.47
47:DZ:4:ILE:HG21	47:DZ:56:VAL:HG13	1.96	0.47
53:CA:1036:A:C2'	53:CA:1037:C:H5'	2.45	0.47
46:BY:39:GLN:HB2	46:BY:41:HIS:NE2	2.29	0.47
43:DV:4:ILE:HD11	43:DV:50:MET:CE	2.45	0.47
32:DK:118:LEU:O	32:DK:120:PRO:HD2	2.13	0.47
53:CA:564:C:H2'	53:CA:565:U:C6	2.50	0.47
53:CA:60:A:N3	53:CA:61:G:H1'	2.29	0.47
39:BR:67:GLY:HA3	39:BR:93:PHE:CZ	2.50	0.47
1:AA:1108:G:C5	1:AA:1109:C:C5	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1288:A:H2'	1:AA:1289:A:C8	2.49	0.47
57:DA:14:A:C5	57:DA:526:A:C2	3.02	0.47
53:CA:579:A:C2	53:CA:763:G:C4	3.03	0.47
1:AA:828:U:H2'	1:AA:829:G:O5'	2.14	0.47
23:BB:77:U:C2'	23:BB:78:A:H5'	2.45	0.47
22:BA:2425:A:H4'	22:BA:2426:A:O5'	2.15	0.47
4:AD:60:VAL:HA	4:AD:63:ILE:HG22	1.95	0.47
45:DX:19:HIS:C	45:DX:21:LEU:N	2.66	0.47
57:DA:1969:A:H2'	57:DA:1972:G:H21	1.80	0.47
57:DA:708:G:H2'	57:DA:709:U:C6	2.50	0.47
57:DA:9:G:H1	57:DA:2629:U:H2'	1.80	0.47
55:CM:82:LEU:HB2	19:CS:73:PHE:CE2	2.50	0.47
25:DD:174:SER:O	25:DD:175:LEU:O	2.32	0.47
57:DA:187:G:H2'	57:DA:1365:A:C2	2.49	0.47
30:DI:20:SER:N	30:DI:21:PRO:CD	2.77	0.47
1:AA:1103:C:H2'	1:AA:1104:G:O4'	2.15	0.47
53:CA:947:G:P	55:CM:106:ARG:HG3	2.54	0.47
59:DF:139:GLU:HB3	59:DF:142:TYR:HB3	1.97	0.47
1:AA:491:G:C6	1:AA:492:C:C4	3.03	0.47
3:AC:39:ARG:CZ	3:AC:54:ILE:HD11	2.44	0.47
57:DA:2819:G:H5''	63:DA:3799:HOH:O	2.13	0.47
24:BC:259:ASN:O	24:BC:260:LYS:HB2	2.13	0.47
22:BA:1728:C:O2'	22:BA:1729:U:C6	2.68	0.47
15:AO:27:GLN:O	15:AO:30:LEU:HB2	2.14	0.47
41:DT:64:LYS:N	41:DT:64:LYS:HD2	2.30	0.47
57:DA:2418:A:C6	57:DA:2419:U:C4	3.03	0.47
18:AR:33:THR:HG22	18:AR:37:LYS:O	2.15	0.47
22:BA:2364:C:C2'	22:BA:2365:G:H5'	2.45	0.47
44:BW:28:GLU:HB3	44:BW:31:LEU:HD11	1.97	0.47
58:DB:58:A:O2'	58:DB:59:A:C5'	2.62	0.47
57:DA:2210:U:C4'	57:DA:2211:A:H5'	2.45	0.47
53:CA:277:C:O2'	53:CA:278:G:H5'	2.15	0.47
5:AE:121:ASN:ND2	5:AE:122:VAL:H	2.12	0.47
57:DA:618:G:O2'	57:DA:619:G:H5'	2.14	0.47
56:CP:78:VAL:C	56:CP:80:LYS:H	2.18	0.47
57:DA:784:G:C2	24:DC:227:VAL:CG2	2.97	0.47
48:D0:54:ILE:O	48:D0:55:ALA:HB2	2.14	0.47
57:DA:2839:G:C2	57:DA:2880:C:C4	3.02	0.47
39:DR:39:LEU:HB2	39:DR:49:ILE:CD1	2.44	0.47
58:DB:110:C:H2'	58:DB:111:U:H6	1.79	0.47
51:D3:31:ILE:HG21	51:D3:34:LYS:HZ3	1.77	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DQ:4:LYS:HE3	38:DQ:7:VAL:HG22	1.97	0.47
53:CA:436:C:O2	53:CA:436:C:H2'	2.14	0.47
53:CA:1151:A:C4	53:CA:1152:A:N7	2.82	0.47
57:DA:1062:G:N2	57:DA:1077:A:H2	2.12	0.47
53:CA:25:C:H2'	53:CA:26:A:C8	2.49	0.47
24:BC:203:VAL:O	24:BC:204:LEU:HB2	2.14	0.47
2:CB:209:VAL:HG23	2:CB:210:THR:N	2.30	0.47
32:DK:94:PRO:HG3	32:DK:115:ILE:HD12	1.97	0.47
57:DA:2025:C:N4	57:DA:2037:A:H61	2.13	0.47
42:DU:86:PHE:CG	42:DU:87:GLU:N	2.82	0.47
53:CA:17:U:C2	53:CA:18:C:C5	3.03	0.47
22:BA:2887:A:H3'	22:BA:2888:C:H6	1.79	0.47
22:BA:1664:A:C2	22:BA:2726:A:C8	3.02	0.47
29:BH:8:LYS:O	29:BH:13:GLY:HA3	2.14	0.47
44:BW:46:ALA:HB3	44:BW:79:ILE:C	2.35	0.47
4:CD:144:ILE:HD12	4:CD:177:MET:SD	2.55	0.47
22:BA:1287:A:H3'	22:BA:1288:G:N2	2.29	0.47
57:DA:2356:U:C4'	44:DW:16:GLU:HG3	2.39	0.47
30:BI:40:ALA:HB3	30:BI:68:PHE:CE1	2.50	0.47
57:DA:511:U:H5''	57:DA:1235:G:H4'	1.97	0.47
1:AA:486:U:H2'	1:AA:487:A:H8	1.80	0.47
53:CA:513:C:HO2'	53:CA:514:C:H6	1.59	0.47
36:DO:17:LYS:O	36:DO:21:LEU:HG	2.15	0.47
57:DA:1353:A:O2'	57:DA:1354:A:H5'	2.15	0.47
22:BA:519:U:O2'	40:BS:73:LYS:HE2	2.15	0.47
32:DK:119:ALA:N	32:DK:120:PRO:HD2	2.30	0.47
1:AA:642:A:N7	8:AH:106:SER:HA	2.30	0.47
2:AB:20:ARG:O	2:AB:22:TRP:HB3	2.15	0.47
57:DA:992:C:C5'	39:DR:87:GLN:HE22	2.24	0.47
57:DA:2283:C:N4	57:DA:2389:G:C5	2.82	0.47
23:BB:66:A:H61	23:BB:107:G:H2'	1.80	0.47
25:DD:9:VAL:HG22	37:DP:4:ILE:HD11	1.95	0.47
22:BA:2842:G:C2	22:BA:2876:G:C2	3.03	0.47
25:BD:53:GLY:HA3	25:BD:77:ARG:H	1.80	0.47
11:CK:51:PHE:O	11:CK:52:ARG:HD2	2.14	0.47
57:DA:467:G:N1	57:DA:468:G:C5	2.83	0.47
9:AI:9:GLY:CA	9:AI:80:HIS:HD2	2.26	0.47
13:AM:68:LEU:HG	13:AM:72:ILE:CD1	2.45	0.47
33:DL:83:ALA:CB	33:DL:117:THR:HB	2.43	0.47
57:DA:223:A:H2	57:DA:407:G:N3	2.13	0.47
49:D1:10:LEU:HD22	49:D1:10:LEU:H	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:DG:139:VAL:HA	28:DG:142:GLN:CB	2.44	0.47
59:DF:36:ASN:HA	59:DF:86:CYS:O	2.15	0.47
24:DC:79:ARG:HG3	24:DC:92:LEU:HB2	1.97	0.47
45:DX:6:VAL:HG22	45:DX:7:THR:HG23	1.97	0.47
22:BA:1716:U:H2'	22:BA:1717:A:C8	2.49	0.47
6:CF:81:ASN:O	6:CF:82:ASP:C	2.53	0.47
36:DO:51:ALA:HB3	36:DO:78:VAL:CG2	2.44	0.47
1:AA:1060:U:H4'	10:AJ:54:SER:HB2	1.96	0.47
35:BN:83:LEU:O	35:BN:84:GLY:C	2.52	0.47
19:AS:47:THR:O	19:AS:48:ILE:C	2.53	0.47
57:DA:935:C:H2'	57:DA:936:A:H8	1.78	0.47
57:DA:1623:G:C5	57:DA:1624:U:C5	3.02	0.47
53:CA:647:C:H2'	53:CA:648:A:H8	1.80	0.47
2:AB:58:LYS:HZ1	2:AB:62:ARG:HG3	1.78	0.47
43:BV:29:ILE:O	43:BV:91:PHE:HB2	2.14	0.47
22:BA:1588:G:H2'	22:BA:1589:U:H6	1.80	0.47
13:AM:90:HIS:HA	13:AM:108:ARG:NH2	2.30	0.47
38:BQ:86:SER:HB3	39:BR:51:VAL:CG1	2.45	0.47
39:BR:49:ILE:HG21	39:BR:53:PHE:H	1.80	0.47
39:BR:49:ILE:HG22	39:BR:54:VAL:N	2.29	0.47
37:BP:50:ARG:HD3	37:BP:51:ASN:H	1.76	0.47
44:BW:19:ARG:HA	44:BW:34:SER:HA	1.96	0.47
22:BA:2353:G:O2'	44:BW:31:LEU:CD2	2.63	0.47
44:BW:30:VAL:CA	44:BW:60:ALA:HB3	2.39	0.47
22:BA:1268:A:C2	22:BA:2013:A:C4	3.03	0.47
17:CQ:46:HIS:NE2	17:CQ:48:GLU:HG2	2.28	0.47
22:BA:2013:A:H2	40:BS:88:ARG:HH12	1.61	0.47
53:CA:981:U:O4	53:CA:1222:G:O6	2.33	0.47
22:BA:2092:U:N3	22:BA:2225:A:O2'	2.48	0.47
22:BA:2231:U:OP1	45:BX:29:LEU:HD23	2.14	0.47
57:DA:2262:U:H1'	57:DA:2328:A:H1'	1.96	0.47
27:BF:131:VAL:C	27:BF:132:ARG:HG3	2.34	0.47
28:DG:138:GLN:HG2	28:DG:138:GLN:O	2.14	0.47
57:DA:2757:A:O2'	57:DA:2758:A:H5'	2.14	0.47
57:DA:1021:A:HO2'	57:DA:1022:G:P	2.36	0.47
4:CD:196:GLU:O	4:CD:199:ILE:HG12	2.14	0.47
17:AQ:16:MET:HG3	17:AQ:19:SER:C	2.35	0.47
22:BA:1063:G:C2'	22:BA:1064:C:O4'	2.62	0.47
56:CP:78:VAL:HG12	56:CP:78:VAL:O	2.15	0.47
56:CP:69:ASP:O	56:CP:70:ARG:C	2.53	0.47
56:CP:71:VAL:HA	56:CP:74:LEU:HB2	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1775:U:C2'	57:DA:1776:G:O5'	2.63	0.47
24:DC:16:VAL:N	24:DC:203:VAL:HG12	2.30	0.47
57:DA:17:G:C6	57:DA:524:G:C6	3.03	0.47
57:DA:33:C:H2'	57:DA:446:G:N2	2.30	0.47
57:DA:2816:G:C2	57:DA:2831:G:C2	3.03	0.47
10:CJ:5:ARG:CG	10:CJ:79:PRO:HG3	2.44	0.47
10:CJ:77:VAL:O	10:CJ:79:PRO:HD3	2.15	0.47
58:DB:16:G:O6	58:DB:69:G:C5	2.68	0.47
57:DA:2392:A:OP1	51:D3:30:HIS:ND1	2.46	0.47
33:BL:95:LEU:HB3	33:BL:100:ILE:CD1	2.44	0.47
53:CA:34:C:H2'	53:CA:35:G:C8	2.50	0.47
53:CA:32:A:C2	53:CA:33:A:C5	3.03	0.47
57:DA:1342:A:C6	57:DA:1397:U:C5	3.02	0.47
57:DA:1203:U:C2	57:DA:1204:A:C6	3.03	0.47
57:DA:298:G:OP1	42:DU:83:GLY:HA2	2.15	0.47
31:DJ:51:GLY:CA	31:DJ:121:LYS:HE3	2.45	0.47
57:DA:2151:U:C2	57:DA:2152:G:C8	3.02	0.47
4:CD:25:ARG:O	4:CD:26:ALA:O	2.33	0.47
57:DA:1090:A:C3'	57:DA:1091:G:H5''	2.45	0.47
57:DA:2313:C:O2'	57:DA:2314:A:C5'	2.62	0.47
53:CA:567:G:N2	63:CA:1819:HOH:O	2.43	0.47
53:CA:1146:A:H2'	53:CA:1147:C:C6	2.49	0.47
37:DP:91:VAL:HG22	37:DP:109:ILE:HD13	1.96	0.47
4:AD:34:GLU:O	4:AD:36:ALA:N	2.46	0.47
24:BC:15:VAL:HA	24:BC:203:VAL:CG1	2.45	0.47
53:CA:89:U:O2'	53:CA:90:C:O5'	2.32	0.47
53:CA:90:C:O2'	53:CA:91:U:H5'	2.15	0.47
55:CM:16:ILE:HD12	55:CM:16:ILE:N	2.30	0.47
1:AA:374:A:O2'	1:AA:375:U:H5'	2.13	0.47
1:AA:7:A:N6	5:AE:96:GLN:OE1	2.48	0.47
57:DA:1663:G:N2	57:DA:1998:A:C8	2.83	0.47
22:BA:1734:G:C4	22:BA:1735:A:C8	3.03	0.47
25:BD:101:PHE:O	25:BD:102:ALA:C	2.53	0.47
24:DC:17:LYS:HD3	24:DC:18:VAL:N	2.29	0.47
14:AN:42:ASN:HD21	14:AN:46:LYS:NZ	2.11	0.47
9:AI:56:MET:CE	9:AI:57:VAL:H	2.28	0.47
25:BD:91:THR:C	25:BD:93:GLY:N	2.67	0.47
25:BD:34:VAL:HG21	25:BD:91:THR:HA	1.97	0.47
53:CA:1050:G:O2'	53:CA:1051:C:H6	1.97	0.47
53:CA:1052:U:O2'	53:CA:1055:A:OP2	2.30	0.47
33:DL:112:LEU:O	33:DL:112:LEU:HD23	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DL:111:ILE:N	33:DL:111:ILE:HD13	2.30	0.47
1:AA:972:C:O2'	1:AA:973:G:H5'	2.15	0.47
12:AL:52:CYS:O	12:AL:54:VAL:HG23	2.15	0.47
24:DC:62:ARG:HB2	24:DC:83:ASP:OD2	2.15	0.47
57:DA:192:C:C4	57:DA:193:U:C2	3.03	0.47
43:DV:26:PHE:HA	43:DV:27:PRO:HD2	1.75	0.47
24:DC:171:VAL:H	24:DC:185:ALA:HB2	1.80	0.47
32:DK:77:ILE:HG23	37:DP:71:ARG:HD2	1.96	0.47
40:BS:56:ALA:O	40:BS:57:ASN:C	2.51	0.47
33:DL:66:PHE:CG	33:DL:67:THR:N	2.83	0.47
57:DA:858:G:C5	57:DA:2268:A:N1	2.83	0.47
24:BC:171:VAL:O	24:BC:182:LYS:HA	2.15	0.47
57:DA:64:A:H2'	57:DA:65:U:O4'	2.14	0.47
28:BG:33:THR:CA	28:BG:34:ARG:HH11	2.27	0.47
4:AD:114:ARG:O	4:AD:115:GLN:C	2.53	0.47
11:AK:124:LYS:O	21:AU:33:ARG:HG2	2.14	0.47
25:DD:109:VAL:O	25:DD:109:VAL:HG12	2.13	0.47
1:AA:1158:C:O2'	1:AA:1160:G:OP1	2.33	0.47
57:DA:1238:G:H2'	57:DA:1239:G:H8	1.78	0.47
25:BD:186:LEU:CD1	37:BP:3:ILE:HD11	2.37	0.47
2:AB:95:TRP:HZ3	2:AB:98:GLY:H	1.61	0.47
3:CC:7:ASN:HD22	14:CN:89:ARG:HA	1.80	0.47
42:DU:54:PRO:CG	42:DU:55:GLY:H	2.23	0.47
57:DA:1171:G:N2	57:DA:1179:G:H1'	2.30	0.47
2:CB:116:LEU:HD13	2:CB:140:LEU:HB2	1.96	0.47
15:AO:50:HIS:O	15:AO:53:ARG:HB3	2.15	0.47
47:DZ:29:ARG:O	47:DZ:30:ARG:O	2.33	0.47
30:BI:60:VAL:HG22	30:BI:66:PHE:CB	2.45	0.47
1:AA:515:G:N1	1:AA:537:G:C6	2.83	0.47
57:DA:475:C:H4'	57:DA:509:C:O2'	2.14	0.47
57:DA:240:C:H3'	57:DA:241:A:H5''	1.96	0.47
53:CA:184:G:N2	53:CA:185:U:C2	2.83	0.47
27:BF:82:TYR:HA	27:BF:83:PRO:HD2	1.73	0.47
57:DA:1380:G:N2	57:DA:1381:G:H1'	2.30	0.47
26:BE:32:VAL:HG23	26:BE:33:VAL:N	2.29	0.47
57:DA:874:G:C2	57:DA:904:G:C2	3.03	0.47
1:AA:68:G:C6	1:AA:69:G:H1'	2.49	0.47
28:DG:116:LEU:HA	28:DG:117:PRO:HD3	1.70	0.47
42:BU:80:ASP:O	42:BU:81:ARG:HB2	2.14	0.47
22:BA:163:C:OP1	22:BA:163:C:C6	2.61	0.47
57:DA:1890:A:H2	57:DA:2235:G:O4'	1.98	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:45:ARG:O	6:AF:56:LYS:HA	2.15	0.47
6:AF:46:GLN:HE22	6:AF:55:HIS:HB2	1.80	0.47
57:DA:2508:G:H2'	57:DA:2509:G:O4'	2.15	0.47
1:AA:666:G:C2	1:AA:741:G:C4	3.02	0.47
51:D3:18:LYS:CG	51:D3:19:GLY:N	2.78	0.47
1:AA:1169:A:H2'	1:AA:1170:A:C8	2.49	0.47
57:DA:2623:G:C4'	57:DA:2825:G:H8	2.28	0.47
53:CA:1090:U:C2	53:CA:1091:U:C5	3.03	0.47
31:BJ:30:THR:HG22	31:BJ:31:GLU:N	2.29	0.47
22:BA:1113:U:H2'	22:BA:1114:C:C6	2.46	0.47
53:CA:995:C:N3	53:CA:1046:A:O2'	2.43	0.47
14:CN:30:ILE:O	14:CN:40:ARG:HA	2.14	0.47
35:BN:65:LEU:O	35:BN:65:LEU:HD12	2.14	0.47
22:BA:1739:A:H2'	22:BA:1740:G:O4'	2.14	0.47
20:AT:4:LYS:O	20:AT:6:ALA:N	2.48	0.47
57:DA:1754:A:N6	57:DA:1755:A:C6	2.83	0.47
57:DA:72:U:O2	46:DY:51:ALA:HB1	2.15	0.47
57:DA:812:C:O2'	57:DA:813:U:H5'	2.15	0.47
1:AA:829:G:O2'	1:AA:830:G:H5'	2.15	0.47
1:AA:1314:C:C6	19:AS:5:LYS:HD3	2.50	0.47
22:BA:1812:U:H2'	22:BA:1813:G:C8	2.49	0.47
37:BP:79:VAL:HG23	37:BP:79:VAL:O	2.14	0.47
3:CC:84:GLU:C	3:CC:86:LEU:N	2.68	0.47
53:CA:1480:A:C5	53:CA:1481:U:C5	3.03	0.47
29:DH:143:ILE:O	29:DH:144:VAL:HG13	2.14	0.47
57:DA:467:G:O2'	57:DA:796:C:O3'	2.33	0.47
8:CH:91:LEU:HB3	8:CH:112:ASP:OD2	2.15	0.47
5:AE:56:PRO:O	5:AE:59:ILE:HG13	2.15	0.47
22:BA:1040:A:H2	22:BA:1115:G:H22	1.63	0.47
56:CP:20:VAL:HG22	56:CP:21:VAL:N	2.30	0.47
22:BA:118:A:C8	22:BA:119:A:C8	3.02	0.47
27:BF:173:ASP:O	27:BF:174:PHE:C	2.53	0.47
33:BL:127:VAL:HG23	33:BL:131:ALA:HB3	1.96	0.47
53:CA:55:A:OP2	53:CA:352:C:N4	2.47	0.47
29:DH:6:LEU:HD13	29:DH:36:ALA:CA	2.44	0.47
47:DZ:32:GLY:C	47:DZ:34:THR:H	2.18	0.47
22:BA:1322:A:C2'	22:BA:1323:C:H5'	2.45	0.47
22:BA:1954:G:O2'	22:BA:1956:U:O4	2.28	0.47
22:BA:2418:A:C6	22:BA:2419:U:C4	3.02	0.47
22:BA:2544:G:O2'	22:BA:2545:G:H5'	2.15	0.47
19:AS:79:TYR:CG	19:AS:80:ARG:N	2.81	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2469:A:H2'	22:BA:2470:G:H5'	1.95	0.47
19:AS:62:THR:HG22	19:AS:63:ASP:N	2.30	0.47
7:AG:119:LEU:CD2	7:AG:123:LEU:HD23	2.45	0.47
18:CR:27:THR:O	18:CR:30:ASN:HB3	2.15	0.47
59:DF:3:LEU:HG	59:DF:100:GLU:CD	2.35	0.47
26:BE:154:ASP:C	26:BE:154:ASP:OD2	2.52	0.47
53:CA:386:C:C4	53:CA:387:U:C5	3.03	0.47
57:DA:2854:G:C2	57:DA:2864:G:C2	3.03	0.47
1:AA:605:U:O2'	1:AA:606:G:H5'	2.15	0.47
8:AH:21:LYS:HA	8:AH:21:LYS:HE2	1.96	0.47
40:DS:2:GLU:OE2	40:DS:2:GLU:HA	2.15	0.47
51:B3:51:LYS:N	51:B3:51:LYS:HD2	2.30	0.47
1:AA:1014:A:H4'	19:AS:13:HIS:CD2	2.49	0.47
2:CB:214:GLY:HA2	2:CB:217:ALA:HB3	1.95	0.47
18:CR:28:LEU:C	18:CR:30:ASN:H	2.17	0.47
9:AI:3:ASN:ND2	9:AI:4:GLN:H	2.12	0.47
22:BA:2316:G:C4	22:BA:2317:A:C8	3.03	0.47
11:AK:116:PRO:C	11:AK:118:ASN:H	2.17	0.47
53:CA:775:G:C2'	53:CA:776:G:H5'	2.45	0.47
4:AD:123:MET:HA	4:AD:128:VAL:HA	1.96	0.47
18:CR:25:ILE:O	18:CR:25:ILE:HG13	2.14	0.47
42:DU:85:ARG:HE	42:DU:85:ARG:HA	1.79	0.47
34:DM:133:LYS:NZ	34:DM:133:LYS:HB3	2.30	0.47
57:DA:2201:G:C5	57:DA:2223:G:C2	3.03	0.47
38:BQ:91:ARG:HD3	39:BR:11:GLN:HG3	1.95	0.47
19:CS:50:VAL:CG1	19:CS:70:LEU:HB3	2.45	0.47
57:DA:2748:A:C2	57:DA:2749:A:C4	3.03	0.47
37:DP:112:ARG:HD2	37:DP:114:ASN:HD21	1.80	0.47
2:AB:179:GLY:O	2:AB:180:ILE:HD13	2.15	0.47
53:CA:1150:A:N6	53:CA:1151:A:N6	2.62	0.47
38:DQ:59:LEU:O	38:DQ:63:ARG:HD3	2.15	0.47
3:AC:35:ASP:O	3:AC:38:VAL:HG22	2.15	0.47
57:DA:1075:C:O2'	57:DA:1076:C:H6	1.98	0.47
26:DE:130:LYS:H	26:DE:160:ALA:HB2	1.80	0.47
53:CA:1303:C:N4	53:CA:1304:G:C2	2.83	0.47
2:CB:206:ILE:C	2:CB:208:ALA:H	2.18	0.47
22:BA:780:G:H2'	22:BA:782:A:N7	2.30	0.47
32:BK:24:VAL:HG21	32:BK:31:ARG:O	2.15	0.47
21:AU:18:PHE:C	21:AU:19:LYS:HE2	2.34	0.47
22:BA:1083:U:H2'	22:BA:1084:A:O5'	2.15	0.47
8:AH:63:LYS:CB	8:AH:70:VAL:HG21	2.45	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1348:U:C2'	53:CA:1349:A:H8	2.27	0.47
57:DA:959:A:H4'	57:DA:959:A:OP2	2.14	0.47
57:DA:2563:U:H1'	57:DA:2566:A:C6	2.49	0.47
53:CA:14:U:H2'	53:CA:16:A:OP2	2.15	0.47
57:DA:2728:U:O2'	57:DA:2729:G:C8	2.48	0.47
33:DL:79:LEU:CA	33:DL:82:LEU:HD11	2.38	0.47
38:BQ:97:ILE:HD11	38:BQ:105:PHE:HA	1.95	0.47
38:DQ:46:TYR:CD2	38:DQ:46:TYR:C	2.87	0.47
32:DK:76:VAL:HG12	32:DK:77:ILE:N	2.29	0.47
53:CA:575:G:C6	53:CA:821:G:C5	3.02	0.47
42:DU:33:VAL:O	42:DU:34:ILE:CG1	2.59	0.47
2:AB:138:ARG:HG3	2:AB:139:GLU:N	2.29	0.47
31:BJ:73:VAL:CG2	31:BJ:74:TYR:H	2.22	0.47
28:DG:162:ARG:HB2	28:DG:166:GLU:CB	2.45	0.47
26:DE:153:LEU:HD22	26:DE:158:PHE:HD2	1.79	0.47
57:DA:975:A:H2'	57:DA:976:G:H8	1.80	0.47
34:BM:41:LEU:O	34:BM:93:VAL:CG2	2.63	0.47
53:CA:598:U:H4'	8:CH:85:TYR:CG	2.49	0.47
1:AA:967:C:C1'	9:AI:129:ARG:HH22	2.26	0.47
22:BA:1275:A:H4'	22:BA:1276:A:OP1	2.09	0.47
15:AO:3:SER:OG	15:AO:5:GLU:HG2	2.14	0.47
1:AA:1095:U:O2'	1:AA:1096:C:C5'	2.63	0.47
22:BA:2019:A:H2'	22:BA:2020:A:O5'	2.15	0.47
1:AA:1348:U:H4'	9:AI:121:ARG:HG2	1.96	0.47
9:CI:106:ASP:N	9:CI:106:ASP:OD1	2.48	0.47
3:CC:14:VAL:HG12	3:CC:14:VAL:O	2.15	0.47
53:CA:1342:C:H2'	53:CA:1343:G:H8	1.78	0.47
53:CA:1513:A:C6	53:CA:1514:G:C6	3.03	0.47
23:BB:77:U:H2'	23:BB:78:A:H5'	1.96	0.47
22:BA:1385:A:C2	22:BA:1386:C:C4	3.03	0.47
22:BA:1385:A:N3	22:BA:1386:C:C5	2.83	0.47
53:CA:171:A:C6	53:CA:172:A:N1	2.83	0.47
22:BA:1164:C:H2'	22:BA:1165:A:C8	2.50	0.47
39:DR:21:ARG:HB2	39:DR:93:PHE:CD1	2.50	0.47
6:CF:6:ILE:HD12	6:CF:6:ILE:N	2.29	0.47
57:DA:752:A:C6	57:DA:1781:U:H1'	2.50	0.47
57:DA:1690:A:H2'	57:DA:1691:C:O4'	2.14	0.47
22:BA:1725:U:H2'	22:BA:1726:C:H6	1.80	0.47
29:BH:100:ALA:O	29:BH:102:ALA:N	2.48	0.47
24:DC:143:VAL:HB	24:DC:153:LEU:HB3	1.95	0.47
22:BA:399:U:C2'	22:BA:400:G:H5'	2.45	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:D1:29:LYS:HE2	49:D1:31:GLU:OE2	2.15	0.47
16:AP:48:GLU:CD	16:AP:49:GLY:H	2.17	0.47
22:BA:2630:G:H2'	22:BA:2631:G:H8	1.79	0.47
22:BA:2071:A:H2'	22:BA:2072:C:C6	2.50	0.47
15:AO:68:TYR:O	15:AO:71:ARG:HG2	2.15	0.47
57:DA:2091:C:N4	57:DA:2092:U:C5	2.83	0.47
38:BQ:82:LEU:O	38:BQ:85:ALA:HB3	2.14	0.47
28:BG:86:LEU:H	28:BG:86:LEU:HD12	1.79	0.47
58:DB:59:A:H2'	58:DB:60:C:O4'	2.15	0.47
53:CA:248:C:O2'	53:CA:249:U:O5'	2.32	0.47
53:CA:249:U:H5'	53:CA:250:A:OP2	2.15	0.47
53:CA:254:G:O2'	53:CA:255:G:H5'	2.14	0.47
53:CA:977:A:H8	53:CA:1223:C:N3	2.13	0.47
53:CA:973:G:O2'	14:CN:68:ARG:NH2	2.46	0.47
57:DA:623:C:H2'	57:DA:624:C:C6	2.50	0.47
17:AQ:11:VAL:HB	17:AQ:55:GLY:H	1.80	0.47
53:CA:375:U:C2	53:CA:376:G:C8	3.03	0.47
57:DA:2837:A:N6	57:DA:2882:A:N6	2.63	0.47
49:D1:24:LYS:HE2	49:D1:52:LYS:HZ2	1.80	0.47
41:DT:18:GLU:HB2	41:DT:19:LYS:H	1.50	0.47
57:DA:1064:C:O2'	57:DA:1065:U:H5'	2.15	0.47
57:DA:1075:C:HO2'	57:DA:1076:C:H6	1.57	0.47
57:DA:1075:C:O2'	57:DA:1076:C:C6	2.67	0.47
22:BA:1507:C:C4	22:BA:1508:A:C2	3.03	0.47
57:DA:1323:C:C4	57:DA:1324:G:N7	2.83	0.47
57:DA:1312:U:O2	57:DA:1603:A:C2	2.67	0.47
24:DC:147:PRO:CD	24:DC:184:GLU:HG3	2.45	0.47
18:CR:59:LYS:O	18:CR:63:TYR:HD1	1.98	0.47
57:DA:830:G:P	57:DA:830:G:H8	2.38	0.47
10:AJ:57:VAL:CG2	10:AJ:58:ASN:H	2.18	0.47
1:AA:557:G:C6	1:AA:558:G:N1	2.82	0.47
1:AA:252:U:H5''	1:AA:252:U:H6	1.79	0.47
57:DA:1566:A:C2	24:DC:212:TRP:HB2	2.49	0.47
9:AI:25:GLY:N	9:AI:58:GLU:HA	2.30	0.47
9:AI:49:GLN:C	9:AI:51:LEU:H	2.17	0.47
51:B3:21:PHE:O	51:B3:22:LYS:HG2	2.14	0.47
53:CA:382:A:N7	53:CA:383:A:N6	2.63	0.47
53:CA:701:U:H4'	53:CA:702:A:C5'	2.42	0.47
23:BB:49:C:O3'	36:BO:68:LYS:HE2	2.14	0.47
11:AK:126:ARG:CA	21:AU:33:ARG:HH12	2.28	0.47
24:BC:20:ASN:HA	24:BC:21:PRO:HD2	1.71	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:579:G:H2'	22:BA:580:U:C6	2.50	0.47
27:BF:84:ILE:O	27:BF:84:ILE:HG23	2.15	0.47
57:DA:1700:A:H2'	57:DA:1701:A:O4'	2.14	0.47
57:DA:475:C:C2'	57:DA:476:G:C8	2.97	0.47
47:BZ:35:VAL:HG21	47:BZ:37:ARG:CZ	2.45	0.47
57:DA:1186:G:H2'	57:DA:1187:G:O4'	2.15	0.47
8:AH:78:SER:HB2	8:AH:84:ILE:HB	1.97	0.47
32:DK:99:ILE:HG13	32:DK:118:LEU:HD12	1.97	0.47
28:BG:8:VAL:HG12	28:BG:9:VAL:N	2.30	0.47
22:BA:2311:A:H5'	22:BA:2312:U:OP2	2.15	0.47
23:BB:66:A:N6	23:BB:107:G:H2'	2.29	0.47
57:DA:2857:G:N2	57:DA:2860:A:OP2	2.48	0.47
57:DA:2666:C:O2	57:DA:2666:C:O4'	2.33	0.47
53:CA:1190:G:H5'	3:CC:175:HIS:CE1	2.50	0.47
53:CA:309:A:O2'	53:CA:607:A:C2	2.68	0.47
26:BE:48:THR:H	26:BE:51:GLU:CG	2.28	0.47
28:BG:136:ASP:O	28:BG:140:ILE:HG13	2.15	0.47
33:DL:90:VAL:HG13	33:DL:95:LEU:HD21	1.95	0.47
20:CT:58:ASP:O	20:CT:61:ALA:HB3	2.15	0.47
53:CA:580:C:H2'	53:CA:581:G:O4'	2.15	0.47
37:BP:88:ARG:HG2	37:BP:112:ARG:NH1	2.30	0.47
1:AA:1040:U:H2'	1:AA:1041:G:C8	2.50	0.47
53:CA:295:C:C4	53:CA:296:U:C5	3.03	0.47
37:BP:19:PHE:CD2	37:BP:19:PHE:N	2.82	0.47
29:BH:147:VAL:CG1	29:BH:149:GLU:HG3	2.44	0.47
57:DA:515:A:H2'	57:DA:516:C:H5'	1.95	0.47
6:CF:67:PRO:O	6:CF:68:GLN:C	2.52	0.47
3:CC:148:ILE:HD12	3:CC:149:LYS:H	1.80	0.47
56:CP:32:PHE:C	56:CP:32:PHE:HD1	2.17	0.47
57:DA:635:C:OP2	33:DL:126:ARG:NH1	2.48	0.47
22:BA:1381:G:C2'	22:BA:1382:G:H5'	2.44	0.47
22:BA:2716:C:O2'	22:BA:2717:C:H5'	2.15	0.47
9:AI:3:ASN:O	9:AI:4:GLN:HG2	2.15	0.47
15:CO:10:ILE:HA	15:CO:13:GLU:HB2	1.97	0.47
3:AC:147:GLY:HA3	3:AC:171:ARG:O	2.14	0.47
57:DA:1529:G:H2'	57:DA:1530:G:O4'	2.15	0.47
45:DX:65:THR:O	45:DX:68:ALA:HB3	2.15	0.47
22:BA:2696:U:C2	22:BA:2697:G:C8	3.03	0.47
57:DA:2107:G:H2'	57:DA:2108:A:C8	2.50	0.47
22:BA:1321:A:H8	22:BA:1321:A:H5''	1.80	0.47
25:BD:67:HIS:HD1	25:BD:67:HIS:C	2.18	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2072:C:H6	57:DA:2072:C:OP2	1.97	0.47
4:CD:7:LYS:O	4:CD:10:LEU:HB2	2.15	0.47
22:BA:2639:A:H2'	22:BA:2640:G:O4'	2.14	0.47
36:BO:55:GLU:O	36:BO:56:LYS:C	2.52	0.47
1:AA:1428:A:H2'	1:AA:1429:A:O4'	2.15	0.47
44:BW:24:ARG:O	44:BW:25:PHE:HB2	2.15	0.47
57:DA:2135:A:H2'	57:DA:2136:G:C8	2.49	0.47
57:DA:2263:C:H4'	57:DA:2329:U:H4'	1.97	0.47
5:AE:100:GLU:HB2	5:AE:103:GLY:CA	2.45	0.47
33:BL:19:LEU:HB2	33:BL:27:LEU:HB2	1.97	0.47
57:DA:763:G:H8	57:DA:763:G:H2'	1.48	0.47
58:DB:18:G:C2	58:DB:67:G:C6	3.03	0.47
57:DA:574:A:H2	57:DA:2032:G:O2'	1.96	0.47
38:DQ:8:ILE:O	38:DQ:8:ILE:HG12	2.13	0.47
33:BL:94:THR:CG2	33:BL:95:LEU:H	2.28	0.47
53:CA:666:G:C5	53:CA:741:G:N1	2.83	0.47
15:AO:16:ARG:O	15:AO:17:ASP:CB	2.62	0.47
38:DQ:57:ARG:C	38:DQ:59:LEU:H	2.17	0.47
25:DD:146:ILE:O	25:DD:155:VAL:HG13	2.15	0.47
11:CK:78:ILE:HD13	11:CK:78:ILE:H	1.79	0.47
57:DA:1282:U:H2'	57:DA:1283:G:O4'	2.15	0.47
22:BA:558:U:OP1	31:BJ:113:PRO:HB2	2.15	0.47
53:CA:671:G:N1	53:CA:672:U:C2	2.83	0.47
32:DK:92:GLU:O	32:DK:93:GLN:O	2.33	0.47
5:AE:76:ASN:HB3	5:AE:81:GLN:HG3	1.97	0.47
8:AH:63:LYS:C	8:AH:64:TYR:CD1	2.88	0.47
37:BP:32:VAL:O	37:BP:33:GLU:O	2.32	0.47
1:AA:1005:A:H2'	1:AA:1006:G:O4'	2.14	0.47
53:CA:652:U:O2'	53:CA:653:U:H6	1.97	0.47
22:BA:1419:A:H2'	22:BA:1421:G:C8	2.50	0.47
34:BM:52:ALA:O	34:BM:53:MET:C	2.52	0.47
22:BA:2615:U:H2'	22:BA:2616:C:H6	1.80	0.47
15:CO:23:SER:HB3	15:CO:26:VAL:CG2	2.45	0.47
22:BA:1334:G:C6	22:BA:1335:C:C4	3.04	0.47
59:DF:39:VAL:HG13	59:DF:49:LEU:CD2	2.45	0.47
57:DA:528:A:H8	57:DA:528:A:H2'	1.55	0.47
2:AB:130:LYS:NZ	2:AB:130:LYS:HA	2.29	0.47
24:BC:20:ASN:O	24:BC:23:LEU:HB2	2.15	0.47
1:AA:488:C:O2'	1:AA:489:C:H5'	2.15	0.47
5:CE:14:LEU:HD22	5:CE:59:ILE:CD1	2.43	0.47
57:DA:973:A:H1'	57:DA:1188:U:C5	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:B2:25:LYS:HA	50:B2:28:ARG:NH2	2.30	0.47
35:BN:2:ARG:HA	35:BN:5:LYS:HD2	1.96	0.47
22:BA:1858:A:H8	22:BA:1858:A:OP2	1.97	0.47
57:DA:1378:A:H2'	57:DA:1380:G:N7	2.30	0.47
57:DA:1427:A:C2	57:DA:1570:A:OP2	2.68	0.47
57:DA:173:A:H2'	57:DA:174:U:C6	2.42	0.47
57:DA:587:C:N3	33:DL:33:ARG:NH2	2.62	0.47
57:DA:756:A:H2'	57:DA:757:G:O4'	2.15	0.47
22:BA:962:G:H2'	22:BA:963:U:C6	2.50	0.47
45:BX:70:LEU:O	45:BX:71:ARG:C	2.53	0.47
57:DA:1518:C:H2'	57:DA:1519:G:O4'	2.15	0.47
33:BL:101:ILE:HG22	33:BL:102:GLY:H	1.80	0.47
22:BA:646:U:C3'	22:BA:647:G:H5''	2.44	0.47
22:BA:2292:U:H2'	22:BA:2293:G:H8	1.79	0.47
41:BT:29:THR:HA	41:BT:86:THR:H	1.80	0.47
57:DA:425:G:H2'	57:DA:426:C:H6	1.80	0.47
22:BA:2109:U:N3	22:BA:2181:U:C4	2.83	0.47
29:DH:24:GLY:O	29:DH:26:ALA:O	2.33	0.47
22:BA:226:A:C6	22:BA:227:A:C6	3.03	0.47
57:DA:1832:C:H2'	57:DA:1833:C:O4'	2.15	0.47
57:DA:1006:C:C2	57:DA:1138:G:C2	3.03	0.47
57:DA:365:U:H2'	57:DA:366:C:O4'	2.14	0.47
1:AA:469:C:H2'	1:AA:470:C:C6	2.50	0.47
12:CL:120:ARG:HG2	12:CL:121:PRO:O	2.15	0.47
22:BA:2023:C:O2	22:BA:2023:C:H2'	2.09	0.47
32:BK:29:HIS:O	32:BK:30:ARG:C	2.53	0.47
22:BA:2788:C:H2'	22:BA:2789:C:C6	2.50	0.47
63:BA:3796:HOH:O	33:BL:37:GLY:HA3	2.14	0.47
53:CA:836:G:C6	53:CA:851:G:C5	3.03	0.47
9:CI:83:THR:HG21	9:CI:102:PHE:HB3	1.96	0.47
28:DG:87:GLN:HA	28:DG:129:GLU:HA	1.96	0.47
9:CI:119:LYS:O	9:CI:119:LYS:HG3	2.14	0.47
53:CA:1397:C:P	53:CA:1397:C:H6	2.38	0.47
27:BF:53:ALA:O	27:BF:55:ASP:N	2.48	0.47
45:DX:24:THR:O	45:DX:25:LYS:C	2.53	0.47
44:BW:22:VAL:O	44:BW:25:PHE:HB2	2.15	0.46
44:BW:39:GLN:O	44:BW:40:ARG:C	2.53	0.46
19:CS:35:ARG:NH2	19:CS:53:GLY:H	2.12	0.46
57:DA:2324:U:O2	57:DA:2385:C:C5	2.68	0.46
44:DW:25:PHE:O	44:DW:65:LYS:HA	2.15	0.46
27:BF:37:MET:SD	27:BF:56:LEU:HG	2.55	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:242:G:C2	1:AA:245:U:C5	3.04	0.46
53:CA:1279:G:H2'	10:CJ:45:ARG:HH21	1.79	0.46
57:DA:1205:A:H5''	57:DA:1206:G:C8	2.50	0.46
53:CA:764:C:N4	53:CA:812:G:H1	2.12	0.46
22:BA:2680:U:OP2	25:BD:114:LYS:CE	2.50	0.46
30:DI:118:GLY:O	30:DI:123:ALA:HB3	2.15	0.46
57:DA:2311:A:H1'	59:DF:78:ILE:HD11	1.96	0.46
57:DA:1742:U:H2'	57:DA:1743:G:H8	1.77	0.46
53:CA:1146:A:C6	53:CA:1147:C:C4	3.03	0.46
57:DA:2846:G:C6	57:DA:2847:U:N3	2.83	0.46
57:DA:1441:G:C6	57:DA:1442:U:C4	3.03	0.46
57:DA:2566:A:O2'	57:DA:2567:G:P	2.73	0.46
57:DA:126:A:OP2	50:D2:19:ARG:HB2	2.15	0.46
26:BE:188:MET:HG2	26:BE:193:VAL:HG22	1.97	0.46
28:DG:92:GLY:O	28:DG:93:TYR:C	2.52	0.46
24:BC:104:LEU:O	24:BC:105:ALA:CB	2.56	0.46
22:BA:2282:G:H5''	22:BA:2283:C:O4'	2.15	0.46
1:AA:1468:A:C3'	1:AA:1469:C:C5'	2.90	0.46
39:BR:28:ALA:O	39:BR:63:VAL:CG2	2.56	0.46
29:DH:90:LEU:CD2	29:DH:91:PHE:H	2.28	0.46
51:B3:14:LYS:O	51:B3:21:PHE:O	2.32	0.46
22:BA:575:A:OP2	22:BA:2055:C:H5	1.98	0.46
24:DC:173:LEU:HD11	24:DC:183:VAL:HB	1.97	0.46
57:DA:95:A:O2'	46:DY:40:SER:N	2.48	0.46
29:BH:97:ARG:HG2	29:BH:111:ALA:HB1	1.97	0.46
29:BH:96:THR:C	29:BH:97:ARG:HG3	2.35	0.46
57:DA:2415:G:C6	57:DA:2416:C:C4	3.03	0.46
57:DA:2356:U:C5'	44:DW:16:GLU:HG3	2.46	0.46
24:DC:94:LEU:HB2	24:DC:100:ARG:HD2	1.95	0.46
2:AB:138:ARG:HA	2:AB:141:GLU:CD	2.35	0.46
57:DA:189:G:P	45:DX:13:THR:HG21	2.56	0.46
3:CC:137:VAL:O	3:CC:138:GLN:C	2.53	0.46
10:AJ:35:GLN:CG	10:AJ:77:VAL:HB	2.41	0.46
22:BA:569:U:H1'	22:BA:947:A:O4'	2.15	0.46
3:AC:107:LYS:HB2	3:AC:107:LYS:NZ	2.30	0.46
22:BA:323:C:C4	22:BA:333:G:C8	3.04	0.46
57:DA:513:A:C2	57:DA:514:A:C5	3.03	0.46
35:DN:31:HIS:C	35:DN:33:ILE:H	2.17	0.46
22:BA:1653:G:H3'	35:BN:2:ARG:HG3	1.98	0.46
10:AJ:26:VAL:O	10:AJ:30:LYS:HG2	2.16	0.46
2:CB:52:ALA:O	2:CB:56:LEU:HB2	2.14	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1226:C:N4	13:AM:102:LYS:HG3	2.29	0.46
57:DA:2074:U:N3	57:DA:2075:U:C4	2.83	0.46
57:DA:2267:A:H8	57:DA:2267:A:H2'	1.37	0.46
42:BU:25:LYS:HG2	42:BU:36:GLU:HB3	1.97	0.46
53:CA:177:G:O2'	53:CA:1448:C:C5'	2.62	0.46
43:DV:61:LEU:N	43:DV:61:LEU:HD23	2.28	0.46
57:DA:2626:C:H2'	57:DA:2627:G:O4'	2.15	0.46
1:AA:1373:G:C5'	7:AG:35:LYS:HB2	2.44	0.46
32:DK:22:ILE:HD11	32:DK:40:LYS:HG3	1.96	0.46
22:BA:974:G:C8	22:BA:989:G:C2	3.03	0.46
57:DA:1796:U:H2'	57:DA:1797:G:H8	1.78	0.46
57:DA:2437:G:O4'	57:DA:2598:A:C2	2.68	0.46
57:DA:1519:G:N1	57:DA:1520:U:C2	2.83	0.46
31:DJ:105:VAL:O	31:DJ:109:LEU:HG	2.15	0.46
57:DA:849:A:H2'	57:DA:850:U:H6	1.81	0.46
21:CU:13:VAL:HG22	21:CU:15:LEU:HD23	1.97	0.46
57:DA:1349:C:H2'	57:DA:1350:C:C6	2.50	0.46
53:CA:1057:G:H2'	53:CA:1058:G:O4'	2.15	0.46
13:AM:45:SER:O	13:AM:46:GLU:CB	2.62	0.46
54:CG:75:LYS:CE	54:CG:76:SER:H	2.29	0.46
1:AA:994:A:N7	1:AA:1216:A:H4'	2.30	0.46
48:D0:37:HIS:CB	48:D0:43:THR:HG22	2.45	0.46
29:DH:104:THR:O	29:DH:104:THR:HG23	2.15	0.46
19:AS:4:LEU:N	19:AS:4:LEU:HD12	2.28	0.46
53:CA:909:A:H2'	53:CA:910:C:O4'	2.15	0.46
57:DA:121:G:N3	57:DA:131:A:C2	2.83	0.46
1:AA:11:G:H2'	1:AA:12:U:H6	1.80	0.46
22:BA:1688:U:H5''	22:BA:1689:A:OP1	2.15	0.46
57:DA:1161:C:H2'	57:DA:1162:G:C8	2.51	0.46
31:BJ:122:LEU:C	31:BJ:123:LYS:HD2	2.36	0.46
9:AI:90:ASP:OD2	9:AI:93:LEU:HG	2.15	0.46
22:BA:287:G:C2	22:BA:354:A:C2	3.03	0.46
22:BA:709:U:H2'	22:BA:710:U:C6	2.51	0.46
1:AA:437:U:H4'	4:AD:153:ARG:NH2	2.30	0.46
55:CM:75:SER:C	55:CM:77:LYS:H	2.18	0.46
22:BA:1824:G:C6	22:BA:1825:U:C4	3.03	0.46
22:BA:458:G:O2'	50:B2:39:ARG:HD2	2.15	0.46
22:BA:1952:A:C6	22:BA:1953:A:N1	2.83	0.46
1:AA:238:A:C2'	1:AA:239:U:H5'	2.45	0.46
30:BI:18:ASN:ND2	30:BI:38:CYS:HB3	2.29	0.46
40:DS:5:ALA:HB3	40:DS:54:ALA:HB2	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:40:HIS:C	31:BJ:41:LYS:CG	2.83	0.46
53:CA:974:A:OP1	14:CN:68:ARG:NH2	2.48	0.46
27:BF:107:VAL:HG13	27:BF:113:PHE:CZ	2.50	0.46
27:BF:107:VAL:N	27:BF:108:PRO:CD	2.78	0.46
5:AE:100:GLU:HB2	5:AE:103:GLY:HA2	1.98	0.46
30:BI:79:LEU:HD11	30:BI:132:ALA:HA	1.96	0.46
57:DA:702:U:C2	57:DA:703:U:C6	3.03	0.46
57:DA:729:G:N3	57:DA:729:G:H2'	2.30	0.46
57:DA:764:A:C2	57:DA:781:A:C4	3.02	0.46
24:DC:52:HIS:HB3	24:DC:216:ARG:O	2.15	0.46
57:DA:2428:G:C2	33:DL:54:GLN:NE2	2.84	0.46
57:DA:1387:A:C4	57:DA:1388:G:N7	2.83	0.46
41:DT:19:LYS:HA	41:DT:19:LYS:HD3	1.67	0.46
57:DA:312:G:C2	57:DA:313:G:C8	3.04	0.46
59:DF:35:LEU:HD11	59:DF:153:ILE:HG23	1.97	0.46
22:BA:784:G:O6	24:BC:227:VAL:HG11	2.11	0.46
57:DA:373:U:O2'	57:DA:374:A:H8	1.97	0.46
8:AH:62:LEU:HD13	8:AH:62:LEU:HA	1.77	0.46
57:DA:1553:A:C8	57:DA:1555:G:C5	3.02	0.46
57:DA:83:A:P	42:DU:91:LYS:HZ2	2.39	0.46
10:AJ:57:VAL:O	10:AJ:58:ASN:HB2	2.15	0.46
22:BA:859:G:N2	22:BA:916:G:C4	2.82	0.46
43:BV:10:LYS:H	43:BV:10:LYS:CD	2.09	0.46
57:DA:116:C:O2'	57:DA:117:G:H5'	2.15	0.46
57:DA:2729:G:H5''	25:DD:190:LYS:NZ	2.29	0.46
49:B1:24:LYS:NZ	49:B1:51:ALA:O	2.40	0.46
22:BA:1450:G:O6	22:BA:1451:C:N4	2.48	0.46
1:AA:428:G:C1'	1:AA:430:A:N7	2.79	0.46
24:DC:175:LEU:HD12	24:DC:179:GLU:HB3	1.97	0.46
59:DF:45:ASP:HB3	59:DF:48:LEU:CD2	2.46	0.46
57:DA:92:U:C6	57:DA:93:G:C8	3.03	0.46
22:BA:1416:G:O2'	22:BA:1417:C:P	2.74	0.46
57:DA:1683:U:H2'	57:DA:1684:G:H8	1.80	0.46
22:BA:2581:G:C2	22:BA:2610:C:C6	3.03	0.46
56:CP:48:GLU:CD	56:CP:51:ARG:HE	2.18	0.46
24:BC:257:ARG:HG3	24:BC:269:ARG:HH22	1.79	0.46
6:AF:49:TYR:HA	18:AR:73:HIS:HB3	1.98	0.46
1:AA:967:C:H6	1:AA:967:C:O5'	1.98	0.46
1:AA:212:G:H2'	1:AA:213:G:C8	2.50	0.46
3:AC:21:TRP:CB	3:AC:58:ARG:HG2	2.44	0.46
57:DA:2652:C:C4	57:DA:2653:U:C4	3.02	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1090:U:H2'	53:CA:1091:U:C6	2.45	0.46
53:CA:1215:G:C4	53:CA:1216:A:N7	2.83	0.46
57:DA:2887:A:H1'	48:D0:39:ARG:NH2	2.30	0.46
22:BA:1737:G:C2	22:BA:1738:G:N2	2.83	0.46
53:CA:471:U:H2'	53:CA:472:U:H6	1.77	0.46
44:DW:11:ASN:OD1	44:DW:11:ASN:O	2.33	0.46
57:DA:2489:U:C4	57:DA:2490:G:C6	3.03	0.46
7:AG:144:ALA:C	7:AG:146:ALA:H	2.17	0.46
32:BK:58:LEU:N	32:BK:58:LEU:HD23	2.31	0.46
1:AA:1071:C:H2'	1:AA:1072:G:H8	1.79	0.46
1:AA:119:A:C4	1:AA:240:G:N7	2.83	0.46
22:BA:2532:G:C5	22:BA:2533:U:C5	3.04	0.46
18:AR:33:THR:CG2	18:AR:37:LYS:HB2	2.46	0.46
22:BA:1725:U:H2'	22:BA:1726:C:C6	2.50	0.46
9:CI:76:GLY:O	9:CI:79:ARG:HB3	2.15	0.46
18:AR:44:THR:OG1	18:AR:46:THR:HG22	2.16	0.46
9:AI:53:LEU:HD12	9:AI:53:LEU:N	2.30	0.46
57:DA:2082:A:H2'	57:DA:2083:G:O4'	2.15	0.46
22:BA:817:C:H2'	22:BA:818:G:O4'	2.15	0.46
22:BA:1095:A:H2'	22:BA:1096:A:C8	2.50	0.46
57:DA:460:A:H2'	57:DA:461:C:O4'	2.14	0.46
3:AC:71:ARG:O	3:AC:74:ILE:HG22	2.15	0.46
3:AC:61:LYS:HA	3:AC:61:LYS:HD2	1.73	0.46
37:BP:29:VAL:HG12	37:BP:30:TRP:O	2.15	0.46
43:BV:78:GLN:HB2	43:BV:88:HIS:HB3	1.96	0.46
31:BJ:40:HIS:H	31:BJ:40:HIS:CD2	2.34	0.46
25:BD:152:PRO:O	25:BD:154:LYS:HG2	2.15	0.46
58:DB:60:C:H2'	58:DB:61:G:C8	2.51	0.46
53:CA:986:U:C2'	53:CA:987:G:C8	2.78	0.46
27:BF:134:GLN:HE22	27:BF:149:ARG:HB3	1.80	0.46
4:CD:187:ARG:C	4:CD:189:ASP:N	2.67	0.46
53:CA:1213:A:HO2'	53:CA:1214:C:H5'	1.76	0.46
53:CA:1161:C:O2	53:CA:1176:A:C2	2.68	0.46
57:DA:1037:G:C6	57:DA:1119:U:O2	2.68	0.46
57:DA:2889:C:C4	57:DA:2890:G:C5	3.03	0.46
2:AB:153:MET:CE	2:AB:157:PRO:HG3	2.46	0.46
57:DA:1346:G:O2'	57:DA:1347:A:O5'	2.34	0.46
57:DA:1388:G:HO2'	57:DA:1389:G:H5'	1.78	0.46
57:DA:1532:A:H2'	57:DA:1533:C:C6	2.51	0.46
57:DA:1087:G:H1'	57:DA:1089:A:H1'	1.98	0.46
53:CA:347:G:H2'	53:CA:348:G:H8	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:CR:63:TYR:CE2	18:CR:69:TYR:OH	2.69	0.46
18:AR:35:SER:HB3	21:AU:3:ILE:HG13	1.97	0.46
20:CT:3:ILE:H	20:CT:3:ILE:HD12	1.79	0.46
1:AA:258:G:H4'	20:AT:81:GLN:HE22	1.80	0.46
57:DA:2516:A:C2	57:DA:2569:G:C2	3.03	0.46
57:DA:2729:G:H2'	57:DA:2730:C:C6	2.50	0.46
57:DA:1799:G:N1	57:DA:1819:A:OP2	2.42	0.46
24:DC:42:ARG:CZ	24:DC:48:ILE:HD11	2.46	0.46
21:CU:36:PHE:CB	21:CU:40:PRO:HD3	2.40	0.46
57:DA:1416:G:O2'	57:DA:1417:C:P	2.74	0.46
46:DY:57:LEU:O	46:DY:60:LYS:HB3	2.15	0.46
42:DU:40:LEU:HA	42:DU:61:GLU:HA	1.97	0.46
57:DA:1003:G:N3	57:DA:1010:A:H2	2.14	0.46
53:CA:1018:G:H2'	53:CA:1019:A:O4'	2.14	0.46
2:AB:185:ILE:CG1	2:AB:185:ILE:O	2.63	0.46
57:DA:1650:A:O2'	35:DN:108:ALA:HB1	2.16	0.46
57:DA:975:A:O2'	57:DA:976:G:C5'	2.63	0.46
38:DQ:96:ASP:C	38:DQ:96:ASP:OD1	2.54	0.46
2:AB:20:ARG:HH11	2:AB:20:ARG:HA	1.80	0.46
57:DA:1740:G:H2'	57:DA:1741:C:C6	2.51	0.46
41:DT:8:LEU:HD22	41:DT:46:ALA:HA	1.95	0.46
57:DA:2581:G:H2'	57:DA:2610:C:N4	2.30	0.46
38:DQ:16:ILE:HG23	38:DQ:38:VAL:HG21	1.97	0.46
14:CN:63:CYS:HB3	14:CN:67:GLY:H	1.81	0.46
16:AP:75:ILE:C	16:AP:77:GLU:H	2.18	0.46
57:DA:2624:G:C2	57:DA:2625:G:H1'	2.51	0.46
26:BE:48:THR:N	26:BE:51:GLU:HG3	2.31	0.46
53:CA:1270:G:H2'	53:CA:1271:A:C8	2.50	0.46
57:DA:1308:A:H2'	57:DA:1309:G:O4'	2.15	0.46
29:DH:57:LYS:HD2	29:DH:57:LYS:O	2.15	0.46
24:BC:49:THR:HG22	24:BC:50:THR:N	2.31	0.46
22:BA:1537:G:HO2'	22:BA:1538:G:P	2.38	0.46
2:AB:32:GLY:HA3	2:AB:39:ILE:CG1	2.45	0.46
25:DD:98:VAL:HG23	25:DD:180:VAL:CG1	2.45	0.46
33:BL:14:LYS:O	33:BL:15:ALA:O	2.33	0.46
25:DD:208:LYS:O	25:DD:209:ALA:HB3	2.15	0.46
22:BA:1150:C:C2'	22:BA:1151:A:O5'	2.63	0.46
25:BD:33:ARG:NH2	25:BD:74:GLU:HB3	2.31	0.46
59:DF:36:ASN:O	59:DF:37:MET:CB	2.64	0.46
18:AR:70:THR:OG1	18:AR:72:ARG:HG2	2.15	0.46
19:CS:39:ILE:HG12	19:CS:68:HIS:O	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:688:G:C8	53:CA:688:G:H5''	2.50	0.46
22:BA:1548:A:H2'	22:BA:1549:A:H8	1.81	0.46
19:AS:79:TYR:CZ	19:AS:80:ARG:HB2	2.50	0.46
1:AA:585:G:N3	1:AA:879:C:H4'	2.30	0.46
52:D4:2:LYS:NZ	52:D4:2:LYS:HA	2.30	0.46
9:AI:52:GLU:HB3	9:AI:53:LEU:HD12	1.97	0.46
8:CH:29:SER:OG	8:CH:32:LYS:HB3	2.15	0.46
19:AS:69:LYS:HB2	19:AS:72:GLU:HG3	1.97	0.46
59:DF:73:VAL:HG12	59:DF:73:VAL:O	2.15	0.46
22:BA:1398:C:H2'	22:BA:1399:C:C6	2.50	0.46
2:AB:132:GLU:HG3	2:AB:132:GLU:O	2.14	0.46
22:BA:2617:U:C4	22:BA:2618:G:N7	2.83	0.46
57:DA:1383:A:C2	57:DA:1384:A:C4	3.03	0.46
4:AD:19:PHE:CD1	4:AD:19:PHE:N	2.84	0.46
40:BS:36:LEU:HA	40:BS:36:LEU:HD12	1.66	0.46
39:DR:79:ARG:O	39:DR:80:ARG:CB	2.63	0.46
57:DA:911:A:H8	57:DA:911:A:O5'	1.98	0.46
25:DD:17:GLU:H	25:DD:17:GLU:CD	2.19	0.46
57:DA:2200:C:O2	57:DA:2226:C:N4	2.48	0.46
22:BA:1000:A:H62	22:BA:1154:G:H2'	1.80	0.46
37:BP:51:ASN:C	37:BP:52:ARG:HG2	2.35	0.46
11:CK:111:ASP:HB3	21:CU:3:ILE:N	2.31	0.46
57:DA:1420:A:C4	57:DA:2211:A:N7	2.84	0.46
53:CA:250:A:H1'	53:CA:252:U:C4	2.50	0.46
57:DA:2331:G:N1	57:DA:2385:C:C4	2.84	0.46
52:D4:7:VAL:HG22	52:D4:25:VAL:CG2	2.45	0.46
8:CH:11:THR:CG2	8:CH:14:ARG:HH12	2.06	0.46
53:CA:1178:G:OP2	9:CI:98:ARG:NH2	2.49	0.46
57:DA:2813:A:C2	57:DA:2888:C:O2	2.68	0.46
38:DQ:87:VAL:HG11	39:DR:52:PRO:CG	2.41	0.46
57:DA:575:A:N3	57:DA:576:U:C5	2.84	0.46
57:DA:303:G:O2'	57:DA:304:U:O5'	2.33	0.46
57:DA:333:G:O2'	57:DA:334:C:C5'	2.64	0.46
34:DM:41:LEU:C	34:DM:93:VAL:HG23	2.35	0.46
43:BV:80:HIS:HD2	43:BV:83:LYS:CA	2.26	0.46
22:BA:729:G:C6	24:BC:206:LYS:HB2	2.51	0.46
57:DA:1062:G:C4	57:DA:1063:G:N7	2.83	0.46
54:CG:68:VAL:O	54:CG:70:PRO:HD3	2.15	0.46
57:DA:1605:C:O2'	57:DA:1610:A:H2'	2.14	0.46
57:DA:1429:G:O2'	57:DA:1430:G:O5'	2.33	0.46
1:AA:449:G:O2'	1:AA:450:G:H5'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:375:G:H5'	57:DA:375:G:H8	1.74	0.46
57:DA:410:G:C6	57:DA:2407:A:N6	2.83	0.46
53:CA:6:G:H1	5:CE:102:THR:HG21	1.80	0.46
32:BK:118:LEU:N	32:BK:118:LEU:CD1	2.78	0.46
57:DA:53:A:C2	50:D2:35:ARG:NH1	2.83	0.46
1:AA:439:U:H4'	4:AD:120:LYS:HG3	1.97	0.46
22:BA:603:A:H4'	22:BA:604:G:O5'	2.16	0.46
1:AA:1152:A:O2'	1:AA:1153:G:C5'	2.64	0.46
48:B0:3:GLN:HG3	48:B0:3:GLN:O	2.15	0.46
4:CD:144:ILE:HD12	4:CD:177:MET:CB	2.44	0.46
1:AA:173:U:H1'	1:AA:197:A:C5	2.50	0.46
53:CA:880:C:C2'	53:CA:881:G:H5'	2.46	0.46
28:DG:120:ILE:HG12	28:DG:134:GLY:HA3	1.98	0.46
34:BM:71:LYS:HA	34:BM:72:PRO:HD3	1.71	0.46
53:CA:701:U:O2'	53:CA:702:A:P	2.73	0.46
57:DA:859:G:N2	57:DA:916:G:C2'	2.78	0.46
22:BA:2746:U:H2'	22:BA:2747:G:H5'	1.97	0.46
28:BG:33:THR:H	28:BG:34:ARG:HD3	1.80	0.46
1:AA:597:G:C2	1:AA:644:U:C2	3.04	0.46
22:BA:581:C:OP1	38:BQ:32:ARG:HB2	2.15	0.46
12:AL:43:LYS:HB2	12:AL:43:LYS:NZ	2.30	0.46
34:BM:66:ARG:NH1	34:BM:101:VAL:CG1	2.76	0.46
53:CA:511:C:HO2'	53:CA:512:U:H6	1.61	0.46
57:DA:973:A:OP1	57:DA:973:A:C8	2.62	0.46
22:BA:64:A:O2'	41:BT:70:HIS:HE1	1.97	0.46
3:CC:39:ARG:CG	3:CC:54:ILE:HD13	2.41	0.46
30:BI:126:ARG:CA	30:BI:129:GLU:HB2	2.43	0.46
1:AA:933:G:OP2	7:AG:2:ARG:HB3	2.14	0.46
20:CT:81:GLN:O	20:CT:82:ILE:HG23	2.16	0.46
1:AA:209:U:C5'	1:AA:210:C:OP2	2.63	0.46
22:BA:1871:A:H8	22:BA:1872:A:C5	2.33	0.46
57:DA:2657:A:O2'	57:DA:2658:C:H5'	2.14	0.46
57:DA:2233:U:H2'	57:DA:2234:G:C8	2.51	0.46
19:AS:50:VAL:HG22	19:AS:70:LEU:HD13	1.97	0.46
57:DA:2250:G:OP1	57:DA:2275:C:H2'	2.15	0.46
34:DM:76:LYS:NZ	34:DM:84:LYS:H	2.13	0.46
34:DM:136:MET:HE1	43:DV:75:GLN:O	2.15	0.46
3:CC:10:ARG:O	3:CC:13:ILE:O	2.32	0.46
53:CA:632:U:O2	53:CA:632:U:H2'	2.13	0.46
1:AA:1261:A:C2	1:AA:1274:A:C2	3.02	0.46
22:BA:2332:C:OP1	44:BW:44:PHE:HZ	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BG:23:ILE:HG21	28:BG:71:LEU:CD1	2.44	0.46
57:DA:2459:A:H2'	57:DA:2459:A:N3	2.30	0.46
49:D1:47:ILE:N	49:D1:47:ILE:HD12	2.31	0.46
37:DP:102:ARG:O	37:DP:103:THR:CB	2.64	0.46
55:CM:86:ARG:HH11	55:CM:90:HIS:HD2	1.64	0.46
23:BB:109:A:O2'	23:BB:110:C:H5'	2.15	0.46
2:AB:161:PHE:HA	2:AB:183:PHE:O	2.15	0.46
53:CA:1409:C:H2'	53:CA:1410:A:H8	1.79	0.46
2:AB:187:ASP:HB2	2:AB:203:ASP:CG	2.36	0.46
22:BA:1243:C:H1'	33:BL:4:ASN:O	2.15	0.46
22:BA:2870:C:N4	22:BA:2871:U:C4	2.84	0.46
22:BA:1411:U:H2'	22:BA:1412:U:O4'	2.15	0.46
57:DA:2774:C:N4	57:DA:2775:G:C5	2.83	0.46
51:D3:23:HIS:ND1	51:D3:24:LYS:O	2.44	0.46
1:AA:668:G:O2'	1:AA:669:G:H5'	2.15	0.46
23:BB:53:A:C2	23:BB:54:G:C8	3.03	0.46
18:CR:41:SER:HA	18:CR:46:THR:HG22	1.97	0.46
22:BA:2591:C:H2'	22:BA:2592:G:C8	2.50	0.46
22:BA:754:U:H2'	22:BA:755:U:H6	1.80	0.46
18:AR:37:LYS:HE2	18:AR:37:LYS:HB3	1.78	0.46
43:BV:30:ILE:HG12	43:BV:91:PHE:HB2	1.98	0.46
43:BV:30:ILE:HA	43:BV:91:PHE:O	2.14	0.46
55:CM:85:TYR:HE2	55:CM:96:VAL:HG13	1.80	0.46
57:DA:2693:G:H2'	57:DA:2694:G:H8	1.79	0.46
13:AM:78:ARG:O	13:AM:82:LEU:HG	2.16	0.46
23:BB:48:U:O2'	36:BO:100:HIS:HE1	1.97	0.46
53:CA:649:A:H2'	53:CA:650:G:O4'	2.16	0.46
57:DA:39:G:N2	57:DA:441:U:C2	2.84	0.46
24:DC:244:VAL:HG12	24:DC:250:GLN:HA	1.97	0.46
4:CD:170:LEU:HA	4:CD:182:LYS:HB2	1.96	0.46
28:BG:51:PHE:CD2	28:BG:51:PHE:N	2.83	0.46
58:DB:7:G:N2	36:DO:47:VAL:HG21	2.30	0.46
41:DT:53:VAL:HG21	41:DT:92:ASN:HD22	1.79	0.46
22:BA:998:C:OP2	38:BQ:57:ARG:NH2	2.48	0.46
38:BQ:111:LYS:HZ3	39:BR:48:LYS:HD3	1.81	0.46
53:CA:254:G:OP1	17:CQ:69:THR:OG1	2.33	0.46
17:CQ:68:LYS:HG2	17:CQ:69:THR:HG23	1.96	0.46
27:BF:134:GLN:HE22	27:BF:150:GLY:H	1.63	0.46
25:BD:12:THR:HG22	25:BD:13:ARG:O	2.16	0.46
57:DA:622:G:O2'	57:DA:623:C:C5'	2.64	0.46
22:BA:763:G:O2'	22:BA:765:C:H5'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:39:GLY:O	9:CI:40:ARG:HB2	2.15	0.46
57:DA:784:G:O6	24:DC:227:VAL:HG11	2.16	0.46
54:CG:59:GLU:C	54:CG:61:PHE:H	2.17	0.46
57:DA:2503:A:H5'	57:DA:2503:A:N3	2.30	0.46
53:CA:38:G:N1	53:CA:397:A:OP1	2.42	0.46
57:DA:301:G:O2'	57:DA:302:C:P	2.73	0.46
34:DM:95:LEU:H	34:DM:95:LEU:HD13	1.80	0.46
15:AO:69:LEU:HD21	15:AO:76:ARG:HB2	1.96	0.46
15:AO:67:ASP:OD1	15:AO:87:ARG:NH2	2.48	0.46
57:DA:1533:C:C2'	57:DA:1534:U:H5'	2.45	0.46
41:BT:50:LEU:CD1	41:BT:50:LEU:H	2.23	0.46
5:CE:114:LEU:O	5:CE:119:VAL:HG23	2.16	0.46
5:CE:80:LEU:HB3	5:CE:97:PRO:HB3	1.98	0.46
53:CA:535:A:H4'	53:CA:536:C:OP1	2.12	0.46
57:DA:1441:G:H2'	57:DA:1442:U:H6	1.78	0.46
57:DA:1441:G:C4	57:DA:1551:A:H2	2.34	0.46
42:DU:92:VAL:CB	42:DU:101:THR:HG21	2.45	0.46
1:AA:275:G:H5''	1:AA:275:G:C8	2.51	0.46
57:DA:2344:U:H4'	57:DA:2345:G:OP1	2.15	0.46
57:DA:1655:A:N7	57:DA:1656:C:C4	2.83	0.46
53:CA:669:G:C2	53:CA:670:G:C4	3.03	0.46
22:BA:656:G:H2'	22:BA:657:U:H6	1.77	0.46
57:DA:800:A:C2	57:DA:802:A:C8	3.03	0.46
57:DA:1455:G:HO2'	57:DA:1456:G:H8	1.59	0.46
53:CA:575:G:HO2'	53:CA:576:C:P	2.39	0.46
25:BD:169:ARG:C	25:BD:170:VAL:CG1	2.83	0.46
3:CC:67:ILE:H	3:CC:102:ILE:HA	1.81	0.46
11:AK:126:ARG:CB	21:AU:33:ARG:HH12	2.28	0.46
1:AA:1181:G:C2	1:AA:1182:G:N2	2.83	0.46
57:DA:745:G:H5''	57:DA:746:U:OP2	2.16	0.46
36:DO:57:ALA:C	36:DO:58:ILE:HD12	2.36	0.46
22:BA:913:U:H4'	22:BA:914:G:OP1	2.16	0.46
30:BI:105:LEU:HA	30:BI:108:ILE:HD12	1.97	0.46
41:DT:45:ALA:HA	41:DT:48:GLN:HG2	1.95	0.46
56:CP:38:PHE:CE2	56:CP:51:ARG:HB3	2.50	0.46
30:BI:56:VAL:HG11	30:BI:68:PHE:HD2	1.79	0.46
42:DU:12:VAL:HG21	42:DU:38:ILE:HG12	1.97	0.46
41:BT:4:GLU:HG3	41:BT:6:ARG:HE	1.80	0.46
22:BA:2340:A:H2'	22:BA:2341:G:H8	1.81	0.46
1:AA:704:A:O2'	1:AA:705:G:H5'	2.16	0.46
57:DA:2658:C:H5''	28:DG:157:LYS:CD	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:30:LYS:HG3	10:CJ:36:VAL:HG22	1.97	0.46
57:DA:1738:G:O2'	57:DA:1739:A:P	2.74	0.46
21:CU:28:LEU:C	21:CU:28:LEU:HD23	2.35	0.46
22:BA:2860:A:O5'	22:BA:2860:A:H8	1.98	0.46
22:BA:2457:U:O2	22:BA:2495:G:C2	2.68	0.46
34:BM:62:LYS:O	34:BM:105:MET:HA	2.16	0.46
59:DF:103:ILE:HG12	59:DF:175:PRO:HD3	1.97	0.46
7:AG:96:ASN:O	7:AG:100:MET:HG3	2.15	0.46
22:BA:638:G:C5	22:BA:651:G:C2	3.04	0.46
57:DA:1755:A:C2	57:DA:1758:U:H5	2.33	0.46
22:BA:2294:G:H5''	36:BO:10:ARG:HD3	1.97	0.46
1:AA:815:A:H4'	1:AA:817:C:C4	2.50	0.46
22:BA:589:U:H2'	22:BA:590:A:C8	2.50	0.46
57:DA:732:C:C4	57:DA:733:G:C5	3.04	0.46
53:CA:216:U:H4'	53:CA:464:U:H4'	1.97	0.46
1:AA:157:U:O2'	1:AA:158:G:H5'	2.16	0.46
57:DA:633:A:C5	57:DA:634:C:H1'	2.50	0.46
24:BC:61:TYR:HD2	24:BC:85:ASN:ND2	2.14	0.46
11:AK:109:ILE:HG22	11:AK:110:THR:N	2.30	0.46
37:BP:37:LYS:HD3	37:BP:37:LYS:N	2.30	0.46
1:AA:1312:G:N7	19:AS:2:ARG:HA	2.31	0.46
22:BA:634:C:O5'	22:BA:634:C:H6	1.99	0.46
10:CJ:48:ARG:HB3	14:CN:100:TRP:HZ2	1.79	0.46
22:BA:777:G:H2'	22:BA:778:G:H8	1.80	0.46
57:DA:2603:G:C6	57:DA:2604:U:C4	3.04	0.46
54:CG:49:LEU:HD13	54:CG:49:LEU:O	2.16	0.46
53:CA:761:G:C2	53:CA:762:U:C2	3.04	0.46
1:AA:1478:U:H2'	1:AA:1479:C:C6	2.51	0.46
2:AB:59:ILE:HD12	2:AB:60:ALA:N	2.30	0.46
28:BG:1:SER:HB3	28:BG:5:LYS:NZ	2.30	0.46
35:DN:7:GLY:O	35:DN:8:ARG:HB2	2.15	0.46
59:DF:118:ALA:HB2	59:DF:176:PHE:HB3	1.98	0.46
37:DP:44:GLY:HA3	37:DP:60:VAL:HG12	1.98	0.46
22:BA:2796:U:H3	22:BA:2799:A:H61	1.62	0.46
22:BA:2607:G:C6	22:BA:2608:G:C6	3.03	0.46
30:DI:69:VAL:O	30:DI:69:VAL:HG13	2.16	0.46
19:AS:10:ILE:HD11	19:AS:15:LEU:HD22	1.97	0.46
5:AE:77:ASN:CG	5:AE:78:GLY:N	2.67	0.46
22:BA:2458:G:O2'	22:BA:2460:U:O4	2.26	0.46
38:BQ:93:ILE:HG23	38:BQ:94:LEU:N	2.31	0.46
14:CN:79:SER:O	14:CN:83:VAL:HG23	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:38:THR:OG1	19:CS:67:GLY:HA2	2.16	0.46
52:D4:7:VAL:HG22	52:D4:25:VAL:HG23	1.98	0.46
37:DP:16:VAL:HA	37:DP:17:PRO:HD3	1.51	0.46
53:CA:1184:G:C2	53:CA:1185:G:C8	3.04	0.46
57:DA:1830:C:H5'	24:DC:14:HIS:HE1	1.80	0.46
31:BJ:64:VAL:CG1	31:BJ:65:THR:N	2.78	0.46
31:BJ:64:VAL:O	31:BJ:65:THR:CB	2.54	0.46
57:DA:455:C:N3	57:DA:473:G:C4'	2.79	0.46
1:AA:407:U:H2'	1:AA:408:A:O4'	2.16	0.46
51:D3:35:LYS:HB2	51:D3:40:LYS:CD	2.44	0.46
57:DA:1385:A:H4'	57:DA:1386:C:OP1	2.16	0.46
57:DA:1204:A:O4'	57:DA:1206:G:N7	2.49	0.46
57:DA:2305:U:H4'	59:DF:132:ARG:CG	2.45	0.46
59:DF:131:VAL:O	59:DF:132:ARG:HB2	2.16	0.46
57:DA:665:U:O2'	57:DA:666:A:H5'	2.16	0.46
41:BT:34:VAL:O	41:BT:34:VAL:HG23	2.15	0.46
53:CA:80:A:C6	53:CA:81:A:O2'	2.65	0.46
57:DA:2544:G:H5'	57:DA:2645:G:N7	2.30	0.46
55:CM:11:HIS:CE1	55:CM:43:LYS:HD2	2.49	0.46
25:BD:100:LEU:HB3	25:BD:101:PHE:HD1	1.78	0.46
25:BD:99:GLU:HG2	25:BD:100:LEU:H	1.78	0.46
32:BK:108:ARG:HH21	37:BP:34:GLY:CA	2.28	0.46
22:BA:2420:C:O2'	22:BA:2421:G:H5'	2.15	0.46
10:AJ:52:LEU:H	14:AN:80:ARG:HD2	1.80	0.46
57:DA:137:U:C4	57:DA:138:U:C2	3.03	0.46
57:DA:2798:U:H5''	57:DA:2799:A:OP1	2.16	0.46
30:DI:49:GLU:OE2	30:DI:54:ILE:HG13	2.16	0.46
22:BA:573:U:H4'	22:BA:574:A:OP1	2.16	0.46
35:DN:73:ASN:CA	35:DN:76:VAL:HG22	2.45	0.46
11:CK:127:ARG:HG2	11:CK:127:ARG:O	2.15	0.46
53:CA:879:C:H2'	53:CA:880:C:O5'	2.15	0.46
28:DG:84:LYS:O	28:DG:85:LYS:CB	2.63	0.46
1:AA:977:A:O2'	1:AA:978:A:H5''	2.15	0.46
22:BA:704:G:HO2'	22:BA:705:A:P	2.38	0.46
1:AA:33:A:H2'	1:AA:34:C:C6	2.51	0.46
53:CA:198:G:O2'	53:CA:199:A:P	2.74	0.46
46:DY:58:ASN:C	46:DY:60:LYS:N	2.69	0.46
1:AA:1159:U:H4'	1:AA:1160:G:OP1	2.15	0.46
22:BA:2638:G:C2'	22:BA:2775:G:H22	2.29	0.46
1:AA:1052:U:H5''	1:AA:1053:G:OP2	2.16	0.46
1:AA:1055:A:H8	1:AA:1055:A:O5'	1.99	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:137:VAL:O	3:CC:140:ALA:HB3	2.15	0.46
44:DW:14:ASP:O	44:DW:15:SER:HB2	2.16	0.46
31:BJ:21:THR:C	31:BJ:23:LYS:N	2.69	0.46
46:BY:40:SER:C	46:BY:42:LEU:N	2.69	0.46
22:BA:1746:A:C2	22:BA:1747:U:C4	3.04	0.46
29:BH:66:ASN:C	29:BH:68:ARG:N	2.69	0.46
3:AC:181:ILE:HD13	3:AC:202:PHE:HA	1.98	0.46
57:DA:2348:U:O2'	57:DA:2349:G:H8	1.97	0.46
1:AA:1049:U:O2'	1:AA:1050:G:P	2.74	0.46
14:CN:50:LEU:HB2	14:CN:51:PRO:HD3	1.96	0.46
40:DS:66:ILE:CD1	40:DS:66:ILE:H	2.27	0.46
1:AA:1521:C:C2	1:AA:1522:U:C6	3.04	0.46
24:DC:255:LYS:C	24:DC:256:THR:HG23	2.35	0.46
29:DH:68:ARG:CG	29:DH:71:LYS:HD3	2.45	0.46
11:AK:51:PHE:HE1	11:AK:60:PHE:HE2	1.63	0.46
32:DK:28:SER:O	32:DK:29:HIS:HB2	2.16	0.46
57:DA:2061:G:C2	57:DA:2063:C:C4	3.03	0.46
29:BH:81:ALA:HB2	29:BH:147:VAL:HG23	1.96	0.46
5:AE:60:GLN:C	5:AE:62:ALA:N	2.68	0.46
53:CA:1086:U:H6	53:CA:1086:U:C5'	2.29	0.46
51:B3:41:ARG:HG3	51:B3:44:ARG:HH22	1.79	0.46
57:DA:749:A:C4	57:DA:750:A:C8	3.04	0.46
20:CT:57:VAL:HG12	20:CT:71:ALA:CB	2.46	0.46
3:AC:25:THR:HG23	14:AN:75:LYS:HD3	1.96	0.46
22:BA:897:C:H5''	22:BA:898:C:OP2	2.16	0.46
22:BA:848:C:H1'	22:BA:934:U:O4'	2.15	0.46
22:BA:286:U:H2'	22:BA:287:G:H8	1.80	0.46
22:BA:2832:U:O2'	22:BA:2833:U:P	2.74	0.46
22:BA:1760:C:H2'	22:BA:1761:C:H5'	1.96	0.46
12:CL:22:ALA:O	12:CL:58:ASN:ND2	2.48	0.46
1:AA:1154:G:C2	1:AA:1155:A:C8	3.04	0.46
23:BB:34:A:N6	23:BB:44:G:O2'	2.49	0.46
26:BE:31:VAL:HG21	26:BE:104:ALA:HB2	1.98	0.46
22:BA:969:G:C6	22:BA:970:U:C4	3.04	0.46
12:AL:120:ARG:C	12:AL:122:LYS:H	2.19	0.46
43:BV:55:GLU:HG3	43:BV:55:GLU:H	1.47	0.46
26:BE:97:ASN:N	26:BE:97:ASN:HD22	2.13	0.46
25:BD:42:ASN:O	25:BD:42:ASN:ND2	2.49	0.46
57:DA:1129:A:C4	57:DA:2570:G:H1'	2.51	0.46
44:BW:40:ARG:HD3	44:BW:45:HIS:CE1	2.50	0.46
53:CA:252:U:O4	53:CA:253:A:N6	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:78:LEU:O	20:AT:82:ILE:HG23	2.16	0.46
57:DA:2386:A:O2'	57:DA:2387:U:C6	2.66	0.46
2:CB:92:ASN:OD1	2:CB:93:HIS:ND1	2.49	0.46
30:BI:79:LEU:HD22	30:BI:137:LEU:CD1	2.46	0.46
37:DP:20:ARG:HG2	37:DP:112:ARG:NH1	2.03	0.46
57:DA:533:G:C2	57:DA:534:U:C2	3.04	0.46
57:DA:1036:G:N1	57:DA:1037:G:N7	2.64	0.46
35:DN:96:ARG:CG	35:DN:98:LEU:HD13	2.45	0.46
57:DA:2392:A:C2	33:DL:55:MET:HG2	2.51	0.46
53:CA:35:G:H21	12:CL:114:SER:CB	2.28	0.46
52:B4:25:VAL:O	52:B4:26:ILE:HD13	2.15	0.46
42:DU:96:LYS:O	42:DU:97:SER:HB3	2.15	0.46
57:DA:998:C:OP2	38:DQ:57:ARG:NH2	2.49	0.46
36:DO:31:THR:HG23	36:DO:34:HIS:O	2.15	0.46
4:CD:11:SER:O	4:CD:12:ARG:C	2.53	0.46
1:AA:1126:U:O2'	1:AA:1127:G:H5'	2.15	0.46
2:CB:78:ALA:O	2:CB:213:LEU:HD23	2.16	0.46
22:BA:1999:C:O2	22:BA:2687:U:O2'	2.30	0.46
21:AU:18:PHE:HB3	21:AU:19:LYS:HE2	1.96	0.46
57:DA:1807:G:H1'	57:DA:1810:A:H62	1.79	0.46
5:AE:149:PRO:HA	5:AE:152:VAL:HG13	1.98	0.46
5:AE:81:GLN:H	5:AE:81:GLN:NE2	2.14	0.46
1:AA:258:G:H5''	63:AA:1701:HOH:O	2.16	0.46
2:CB:185:ILE:HA	2:CB:199:ILE:HG13	1.98	0.46
34:BM:109:PRO:O	34:BM:110:GLU:C	2.53	0.46
32:BK:69:VAL:O	32:BK:76:VAL:HA	2.16	0.46
32:BK:70:ARG:CD	32:BK:76:VAL:HG22	2.39	0.46
57:DA:139:U:H3	41:DT:1:MET:HA	1.81	0.46
28:DG:112:VAL:HG13	28:DG:150:TYR:CE1	2.42	0.46
20:AT:53:MET:CE	20:AT:57:VAL:HG21	2.46	0.46
21:CU:35:GLU:OE2	21:CU:35:GLU:CA	2.64	0.46
53:CA:821:G:H4'	63:CA:1740:HOH:O	2.16	0.46
22:BA:726:G:O2'	22:BA:727:A:OP2	2.33	0.46
41:DT:74:ILE:HG23	41:DT:75:GLY:N	2.30	0.46
32:DK:35:VAL:HG23	32:DK:36:GLY:N	2.23	0.46
41:BT:68:LYS:O	41:BT:69:ARG:O	2.34	0.46
42:DU:22:GLY:HA3	42:DU:36:GLU:HB3	1.97	0.46
57:DA:1848:A:C2	57:DA:1849:G:C4	3.04	0.46
57:DA:990:A:H61	39:DR:78:ARG:NH1	2.14	0.46
53:CA:1001:C:H2'	53:CA:1002:G:O4'	2.16	0.46
1:AA:1380:U:C5	7:AG:2:ARG:HA	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2074:U:H2'	57:DA:2075:U:C6	2.50	0.46
40:BS:69:LEU:HD12	40:BS:108:SER:O	2.14	0.46
32:DK:119:ALA:O	32:DK:120:PRO:C	2.54	0.46
27:BF:87:LYS:O	27:BF:88:VAL:HG23	2.15	0.46
25:DD:51:THR:HG21	25:DD:76:GLY:HA3	1.95	0.46
1:AA:211:G:C2	1:AA:212:G:H1'	2.51	0.46
57:DA:2237:G:H5''	57:DA:2238:G:OP1	2.16	0.46
31:DJ:54:ILE:O	31:DJ:122:LEU:HD12	2.15	0.46
29:DH:1:MET:HE3	29:DH:23:ALA:HB2	1.97	0.46
14:CN:63:CYS:SG	14:CN:82:LYS:HG3	2.56	0.46
53:CA:1095:U:H2'	53:CA:1096:C:C6	2.50	0.46
33:BL:78:ARG:CZ	33:BL:113:ALA:HB1	2.45	0.46
57:DA:1300:G:OP2	57:DA:1300:G:H8	1.99	0.46
12:AL:3:VAL:HG23	12:AL:4:ASN:H	1.81	0.46
35:BN:33:ILE:HD11	35:BN:118:ARG:HH21	1.80	0.46
57:DA:1713:A:O2'	57:DA:1715:G:H5'	2.16	0.46
57:DA:2461:A:C2	57:DA:2490:G:N2	2.83	0.46
1:AA:570:G:C6	1:AA:873:A:C2	3.04	0.46
11:CK:22:ILE:HG22	11:CK:22:ILE:O	2.15	0.46
57:DA:2187:U:N3	57:DA:2188:U:C5	2.84	0.46
26:BE:43:THR:O	26:BE:43:THR:OG1	2.33	0.46
49:D1:34:GLU:HG3	49:D1:49:LYS:CB	2.46	0.46
57:DA:2550:G:C6	57:DA:2551:C:C4	3.03	0.46
47:BZ:6:ILE:CD1	47:BZ:47:ILE:HD11	2.46	0.46
22:BA:286:U:H2'	22:BA:287:G:C8	2.51	0.46
53:CA:212:G:HO2'	53:CA:213:G:P	2.39	0.46
22:BA:1256:G:H2'	26:BE:77:ILE:HD11	1.97	0.46
22:BA:350:G:H2'	22:BA:351:C:H6	1.80	0.46
26:BE:97:ASN:ND2	26:BE:97:ASN:N	2.62	0.46
33:DL:120:VAL:HG12	33:DL:121:THR:N	2.31	0.46
1:AA:369:G:C4	1:AA:393:A:C2	3.03	0.46
22:BA:2836:U:C4	22:BA:2883:A:N6	2.84	0.46
38:DQ:84:LYS:C	38:DQ:86:SER:H	2.18	0.46
22:BA:14:A:H8	22:BA:14:A:O5'	1.99	0.46
26:DE:9:GLN:O	26:DE:9:GLN:HG3	2.16	0.46
31:BJ:15:TRP:HA	31:BJ:53:TYR:O	2.16	0.46
31:BJ:44:TYR:CD2	38:BQ:63:ARG:HG2	2.51	0.46
28:BG:162:ARG:CZ	28:BG:168:VAL:HG21	2.46	0.46
44:DW:65:LYS:HD2	44:DW:65:LYS:N	2.31	0.46
57:DA:740:C:H6	57:DA:740:C:O5'	1.98	0.46
57:DA:35:G:O4'	57:DA:454:A:H1'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2815:C:C2	57:DA:2816:G:C8	3.04	0.46
57:DA:2882:A:H5'	35:DN:96:ARG:HD3	1.97	0.46
38:DQ:78:PHE:CE1	38:DQ:82:LEU:HD11	2.51	0.46
33:BL:93:ASN:ND2	33:BL:94:THR:H	2.14	0.46
57:DA:1341:G:C2	41:DT:84:TYR:HE2	2.34	0.46
53:CA:666:G:C6	53:CA:741:G:C6	3.04	0.46
53:CA:577:G:O2'	53:CA:578:C:C5'	2.64	0.46
25:BD:104:VAL:HG12	25:BD:104:VAL:O	2.16	0.46
53:CA:1072:G:C2	53:CA:1073:U:C2	3.04	0.46
59:DF:65:LEU:HG	59:DF:67:THR:HG23	1.98	0.46
53:CA:557:G:C6	53:CA:558:G:N1	2.84	0.46
57:DA:229:C:HO2'	57:DA:230:G:C4'	2.28	0.46
57:DA:2054:A:C2	57:DA:2616:C:N3	2.84	0.46
1:AA:563:A:C1'	1:AA:566:G:O2'	2.61	0.46
57:DA:2487:G:H2'	57:DA:2488:G:H8	1.81	0.46
57:DA:1128:G:O6	57:DA:2491:U:C5	2.69	0.46
37:BP:33:GLU:N	37:BP:36:LYS:O	2.49	0.46
57:DA:1654:A:N3	57:DA:1655:A:C8	2.84	0.46
3:AC:76:ILE:C	3:AC:82:ASP:HB2	2.36	0.46
38:BQ:104:ALA:O	38:BQ:107:ALA:HB3	2.14	0.46
57:DA:788:A:H5''	57:DA:789:A:OP1	2.16	0.46
57:DA:1905:C:O4'	57:DA:1928:A:H2	1.95	0.46
57:DA:191:A:O2'	57:DA:192:C:H5'	2.15	0.46
1:AA:67:C:H4'	1:AA:172:A:O4'	2.16	0.46
57:DA:65:U:H5'	41:DT:75:GLY:HA3	1.96	0.46
57:DA:91:A:O2'	57:DA:92:U:C5'	2.57	0.46
22:BA:25:U:C5	22:BA:26:G:C5	3.03	0.46
57:DA:1270:C:C2'	57:DA:1648:U:H5''	2.43	0.46
57:DA:2808:G:O2'	57:DA:2809:A:C8	2.64	0.46
30:DI:58:ILE:HG23	30:DI:66:PHE:CD2	2.51	0.46
24:DC:35:LYS:O	24:DC:36:ASN:CB	2.64	0.46
57:DA:172:A:O2'	57:DA:173:A:H5'	2.16	0.46
53:CA:259:G:H2'	53:CA:260:G:H8	1.81	0.46
43:DV:80:HIS:HD2	43:DV:82:TYR:N	2.13	0.46
57:DA:2896:C:O2'	57:DA:2897:U:C5'	2.62	0.46
2:AB:30:ILE:HD11	2:AB:38:HIS:CG	2.51	0.46
12:AL:86:VAL:O	12:AL:86:VAL:CG1	2.62	0.46
57:DA:40:U:C4	57:DA:41:C:N4	2.84	0.46
28:DG:51:PHE:HE2	28:DG:68:ARG:HA	1.80	0.46
16:AP:67:ILE:HG13	16:AP:71:VAL:HG12	1.97	0.46
53:CA:1343:G:H4'	9:CI:123:ARG:HB3	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:DF:107:VAL:N	59:DF:108:PRO:HD2	2.31	0.46
53:CA:1202:U:O2'	53:CA:1203:C:C5'	2.64	0.46
26:BE:158:PHE:O	26:BE:160:ALA:O	2.33	0.46
26:BE:5:LEU:CD1	26:BE:10:SER:HB3	2.45	0.46
1:AA:920:U:O4'	1:AA:1080:A:C2	2.69	0.46
1:AA:829:G:C2	1:AA:830:G:C8	3.03	0.46
57:DA:2006:C:H6	57:DA:2006:C:O5'	1.98	0.46
4:AD:88:ASN:HA	4:AD:91:ALA:CB	2.46	0.46
1:AA:785:G:O2'	1:AA:786:G:H5'	2.16	0.46
57:DA:265:A:N7	57:DA:427:U:O2'	2.48	0.46
22:BA:892:A:H2'	22:BA:893:C:C6	2.51	0.46
57:DA:1034:G:H2'	57:DA:1035:U:C6	2.51	0.46
22:BA:2548:U:H2'	22:BA:2549:G:O5'	2.16	0.46
2:AB:53:LEU:HD21	2:AB:212:TYR:OH	2.15	0.46
53:CA:1105:A:H2'	53:CA:1106:G:H8	1.80	0.46
22:BA:1744:A:H5''	22:BA:1745:A:OP2	2.15	0.46
37:BP:37:LYS:HD3	37:BP:37:LYS:H	1.80	0.46
20:AT:60:GLN:HE21	20:AT:65:LEU:HD21	1.79	0.46
53:CA:1406:U:H1'	53:CA:1518:A:H4'	1.97	0.46
22:BA:2417:C:C2	22:BA:2418:A:C8	3.03	0.46
8:CH:37:ASN:O	8:CH:41:GLU:HG2	2.16	0.46
25:BD:39:ASP:OD1	25:BD:40:LEU:HD12	2.16	0.46
22:BA:1911:U:C4	22:BA:1918:A:C5	3.04	0.46
23:BB:74:U:O2	43:BV:29:ILE:CD1	2.64	0.46
43:DV:3:THR:HA	43:DV:62:THR:O	2.16	0.46
1:AA:986:U:H2'	1:AA:987:G:O4'	2.16	0.46
63:BA:3286:HOH:O	26:BE:98:LYS:HE2	2.15	0.46
22:BA:1001:A:P	63:BA:3737:HOH:O	2.72	0.46
30:DI:28:GLY:O	30:DI:29:GLN:C	2.54	0.46
1:AA:131:A:O2'	1:AA:132:C:O4'	2.33	0.46
40:BS:70:LYS:N	40:BS:70:LYS:HD2	2.31	0.46
22:BA:2643:G:H2'	22:BA:2644:G:O4'	2.15	0.46
28:BG:122:ALA:HB2	28:BG:132:LEU:HB3	1.98	0.46
22:BA:2053:G:H5''	25:BD:150:GLN:HA	1.98	0.46
53:CA:266:G:O2'	53:CA:267:C:H3'	2.15	0.46
5:CE:22:LYS:H	5:CE:29:ILE:HG22	1.80	0.46
32:BK:74:GLY:HA3	37:BP:74:GLN:HE21	1.79	0.46
57:DA:1914:C:H2'	57:DA:1915:U:C6	2.51	0.46
6:AF:6:ILE:HD13	6:AF:74:LEU:CD2	2.46	0.46
57:DA:1142:A:C8	57:DA:1144:A:C5	3.04	0.46
53:CA:885:G:H1'	53:CA:914:A:N1	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:763:G:C4	57:DA:765:C:C6	3.03	0.46
39:DR:5:PHE:HA	39:DR:39:LEU:HD23	1.98	0.46
58:DB:15:A:C8	58:DB:109:A:N6	2.83	0.46
57:DA:247:G:C4	57:DA:249:C:H1'	2.50	0.46
53:CA:1123:U:O3'	10:CJ:38:GLY:HA3	2.16	0.46
57:DA:319:G:C6	57:DA:333:G:N1	2.84	0.46
57:DA:299:A:C2	57:DA:319:G:N3	2.84	0.46
1:AA:656:G:N2	15:AO:22:GLY:HA3	2.31	0.46
3:AC:35:ASP:C	3:AC:37:LYS:H	2.18	0.46
53:CA:560:A:N7	53:CA:566:G:C5	2.84	0.46
22:BA:1482:G:H1'	22:BA:1509:A:H61	1.80	0.46
53:CA:1297:G:H5'	53:CA:1299:A:N7	2.31	0.46
57:DA:2722:G:C2	57:DA:2723:C:C2	3.04	0.46
53:CA:505:G:C6	53:CA:535:A:C2	3.04	0.46
1:AA:27:G:H2'	1:AA:28:A:C8	2.50	0.46
1:AA:565:U:C4	1:AA:566:G:C5	3.04	0.46
24:DC:209:ALA:HA	24:DC:212:TRP:CE2	2.50	0.46
53:CA:754:C:H3'	53:CA:755:G:H8	1.80	0.46
28:DG:91:VAL:O	28:DG:93:TYR:N	2.48	0.46
24:BC:190:THR:HG22	24:BC:191:LEU:N	2.30	0.46
22:BA:2394:C:P	51:B3:29:ARG:HH21	2.39	0.46
22:BA:1462:C:H2'	22:BA:1463:C:H6	1.81	0.46
1:AA:198:G:O2'	1:AA:199:A:O5'	2.33	0.46
57:DA:944:C:H2'	63:DA:3352:HOH:O	2.16	0.46
25:DD:10:GLY:HA3	25:DD:26:VAL:HB	1.98	0.46
22:BA:548:G:H3'	22:BA:548:G:C8	2.51	0.46
22:BA:2880:C:O2'	22:BA:2881:U:H5'	2.16	0.46
37:BP:95:LYS:HG2	37:BP:97:TYR:OH	2.15	0.46
4:AD:67:LEU:HD23	4:AD:67:LEU:HA	1.81	0.46
57:DA:510:C:H6	57:DA:510:C:O5'	1.99	0.46
1:AA:185:U:H2'	1:AA:186:C:C6	2.48	0.46
26:BE:23:PHE:CZ	26:BE:28:VAL:HG11	2.50	0.46
57:DA:1265:A:H4'	57:DA:1266:G:H4'	1.98	0.46
32:DK:2:ILE:CG2	32:DK:3:GLN:N	2.76	0.46
37:BP:28:LYS:N	37:BP:28:LYS:HE3	2.29	0.46
57:DA:672:C:H6	57:DA:672:C:C5'	2.29	0.46
10:AJ:14:ASP:HB2	10:AJ:17:LEU:HB3	1.98	0.46
1:AA:1452:C:H5'	1:AA:1453:G:C5	2.51	0.46
22:BA:1279:G:O2'	22:BA:1280:G:H5'	2.15	0.46
22:BA:988:A:P	47:BZ:11:SER:CB	3.04	0.46
33:DL:122:VAL:O	33:DL:122:VAL:HG23	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:272:A:C2	57:DA:273:G:C5	3.03	0.46
22:BA:637:A:N1	22:BA:651:G:O2'	2.43	0.46
40:BS:55:ILE:O	40:BS:58:ALA:HB3	2.16	0.46
57:DA:1754:A:C2	57:DA:1755:A:C4	3.03	0.46
28:BG:23:ILE:HD12	28:BG:23:ILE:N	2.31	0.46
1:AA:1407:C:O2'	22:BA:1912:A:N1	2.40	0.46
1:AA:872:A:C5	1:AA:874:G:C8	3.04	0.46
22:BA:2243:U:O2	22:BA:2434:A:C2	2.69	0.46
57:DA:734:A:C2	57:DA:735:A:H1'	2.51	0.46
29:DH:28:ASN:HA	29:DH:28:ASN:HD22	1.58	0.46
29:DH:127:GLU:HA	29:DH:144:VAL:HG23	1.98	0.46
8:CH:111:THR:HG22	8:CH:112:ASP:N	2.31	0.46
1:AA:865:A:H2'	1:AA:866:C:C6	2.51	0.46
25:BD:74:GLU:O	25:BD:75:ALA:C	2.53	0.46
57:DA:2638:G:H2'	57:DA:2775:G:H22	1.80	0.46
26:BE:153:LEU:HD12	26:BE:153:LEU:C	2.37	0.46
57:DA:1838:C:N4	57:DA:1899:A:O4'	2.49	0.46
55:CM:106:ARG:HH21	55:CM:112:ARG:NE	2.13	0.46
57:DA:2028:U:H2'	57:DA:2029:G:C8	2.50	0.46
22:BA:993:G:C6	22:BA:1162:G:C6	3.04	0.46
23:BB:75:G:O2'	43:BV:88:HIS:HE1	1.99	0.46
19:AS:10:ILE:HG13	19:AS:10:ILE:O	2.15	0.46
48:B0:10:SER:O	48:B0:14:MET:HG3	2.15	0.46
8:CH:30:LYS:O	8:CH:33:VAL:N	2.49	0.46
57:DA:1850:G:C2	57:DA:1893:C:O2	2.69	0.46
57:DA:2480:C:N4	57:DA:2481:G:C6	2.84	0.46
57:DA:270:A:N1	57:DA:369:U:H1'	2.30	0.46
22:BA:1215:G:C4	22:BA:1216:G:C8	3.04	0.46
53:CA:1236:A:H2'	53:CA:1237:C:C6	2.51	0.46
26:BE:113:VAL:CG1	26:BE:114:ARG:N	2.78	0.46
26:BE:113:VAL:HG12	26:BE:114:ARG:N	2.30	0.46
22:BA:2284:A:O2'	22:BA:2285:C:H5'	2.16	0.46
39:BR:49:ILE:CB	39:BR:51:VAL:O	2.63	0.46
44:BW:16:GLU:O	44:BW:17:ALA:HB3	2.16	0.46
44:BW:22:VAL:O	44:BW:25:PHE:CD2	2.69	0.46
22:BA:2231:U:OP1	45:BX:29:LEU:CD2	2.64	0.46
45:BX:48:LEU:HD11	45:BX:67:LEU:CD2	2.45	0.46
57:DA:2353:G:H1'	44:DW:30:VAL:CG1	2.41	0.46
57:DA:37:C:O2'	26:DE:45:ALA:CB	2.64	0.46
38:DQ:82:LEU:HB3	38:DQ:88:GLU:OE2	2.15	0.46
57:DA:1198:U:O4'	38:DQ:8:ILE:HD12	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1131:G:C8	31:BJ:77:HIS:CE1	3.03	0.46
53:CA:765:G:C8	53:CA:812:G:N3	2.84	0.46
15:AO:23:SER:O	15:AO:24:THR:C	2.54	0.46
22:BA:221:A:H4'	22:BA:222:A:O5'	2.15	0.46
1:AA:91:U:C2'	1:AA:92:U:O4'	2.64	0.46
57:DA:372:G:P	45:DX:61:LYS:NZ	2.88	0.46
53:CA:1243:C:C2	53:CA:1244:G:N7	2.84	0.46
5:AE:123:LEU:H	5:AE:123:LEU:HD12	1.81	0.46
53:CA:1167:A:O2'	53:CA:1168:U:OP1	2.25	0.46
30:BI:24:GLY:O	30:BI:34:ILE:HD12	2.17	0.46
20:CT:2:ASN:O	20:CT:3:ILE:C	2.54	0.46
57:DA:1808:A:C5	45:DX:27:ARG:NH1	2.82	0.46
5:AE:152:VAL:HG11	8:AH:98:LEU:HB3	1.98	0.46
53:CA:1346:A:N6	54:CG:9:ARG:HH22	2.14	0.46
1:AA:257:G:C2	1:AA:258:G:C5	3.04	0.46
53:CA:655:A:N6	53:CA:752:G:N2	2.63	0.46
22:BA:2813:A:H2	22:BA:2887:A:H62	1.59	0.46
57:DA:103:A:O2'	57:DA:104:A:H5'	2.16	0.46
29:BH:89:LYS:O	29:BH:90:LEU:HD12	2.16	0.46
57:DA:1799:G:C4'	57:DA:1800:C:O5'	2.61	0.46
1:AA:66:A:C2'	1:AA:67:C:H5'	2.47	0.46
21:CU:35:GLU:O	21:CU:36:PHE:HD2	1.96	0.46
29:BH:95:GLY:C	29:BH:97:ARG:H	2.19	0.46
57:DA:1317:G:H2'	57:DA:1318:U:O4'	2.16	0.46
22:BA:548:G:H3'	22:BA:548:G:H8	1.81	0.46
28:BG:29:ASN:CG	28:BG:30:GLY:H	2.19	0.46
29:BH:48:GLU:HA	29:BH:51:ARG:HG3	1.98	0.46
57:DA:1114:C:HO2'	57:DA:1115:G:C1'	2.29	0.46
57:DA:201:C:C5	57:DA:202:U:C5	3.03	0.46
22:BA:2638:G:O2'	22:BA:2775:G:N2	2.49	0.46
57:DA:492:A:N1	40:DS:49:LYS:HE2	2.31	0.46
53:CA:704:A:C2'	53:CA:705:G:C8	2.97	0.46
22:BA:28:A:C4	22:BA:513:A:N7	2.84	0.46
57:DA:1179:G:H2'	57:DA:1180:U:C6	2.50	0.46
57:DA:1964:G:O2'	57:DA:1967:C:OP1	2.34	0.46
57:DA:975:A:N3	57:DA:976:G:C8	2.84	0.46
47:DZ:51:SER:C	47:DZ:53:MET:H	2.19	0.46
57:DA:329:G:H5'	57:DA:477:A:H4'	1.97	0.46
57:DA:1845:G:C4	57:DA:1846:G:C8	3.04	0.46
1:AA:184:G:O4'	1:AA:224:U:H4'	2.16	0.46
29:BH:40:THR:O	29:BH:42:LYS:N	2.45	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:13:ARG:HD3	31:BJ:51:GLY:O	2.15	0.46
40:BS:73:LYS:HE3	40:BS:74:ILE:N	2.29	0.46
40:BS:39:THR:O	40:BS:39:THR:HG22	2.16	0.46
31:BJ:140:LEU:HD13	31:BJ:140:LEU:C	2.36	0.46
53:CA:1375:A:O2'	54:CG:101:ARG:NH2	2.48	0.46
57:DA:2654:A:N6	57:DA:2667:C:N4	2.63	0.46
1:AA:1387:G:H2'	1:AA:1388:C:C6	2.52	0.46
53:CA:1064:G:N2	53:CA:1190:G:O2'	2.49	0.46
32:DK:40:LYS:HZ2	32:DK:89:ASN:HD21	1.64	0.46
24:DC:239:PHE:HD1	24:DC:241:LYS:H	1.64	0.46
22:BA:2815:C:H1'	48:B0:39:ARG:HD3	1.98	0.46
57:DA:2461:A:C6	57:DA:2462:C:C4	3.04	0.46
22:BA:1812:U:H2'	22:BA:1813:G:H8	1.81	0.46
57:DA:2506:U:H3'	57:DA:2506:U:H6	1.81	0.46
1:AA:821:G:H2'	1:AA:822:U:C6	2.51	0.46
10:AJ:22:THR:HG22	10:AJ:23:ALA:N	2.30	0.46
57:DA:1593:A:C5	57:DA:1594:U:C4	3.04	0.46
53:CA:1480:A:C4	53:CA:1481:U:C6	3.04	0.46
54:CG:17:PHE:HB2	54:CG:43:TYR:OH	2.16	0.46
1:AA:753:A:H4'	1:AA:754:C:H5''	1.97	0.46
31:BJ:84:ILE:O	31:BJ:84:ILE:HG13	2.16	0.46
29:DH:8:LYS:HD2	29:DH:9:VAL:N	2.31	0.46
3:AC:150:VAL:HG12	3:AC:199:VAL:HB	1.98	0.46
53:CA:1097:C:O2'	53:CA:1098:C:H5'	2.16	0.46
31:BJ:120:ARG:O	31:BJ:123:LYS:HE2	2.16	0.46
8:CH:41:GLU:C	8:CH:43:GLY:H	2.20	0.46
3:AC:41:TYR:OH	3:AC:89:VAL:HG21	2.16	0.46
1:AA:1131:G:C2'	1:AA:1132:C:O5'	2.63	0.46
34:BM:70:ASP:C	34:BM:70:ASP:OD1	2.54	0.46
20:CT:11:ILE:C	20:CT:13:SER:H	2.18	0.46
29:BH:119:ASN:C	29:BH:121:VAL:H	2.18	0.46
53:CA:1463:U:H2'	53:CA:1464:U:C6	2.50	0.46
30:DI:105:LEU:O	30:DI:105:LEU:HD23	2.16	0.46
44:BW:70:VAL:HG13	44:BW:70:VAL:O	2.16	0.46
15:CO:2:LEU:HD13	15:CO:34:GLN:HE21	1.81	0.46
22:BA:923:G:H4'	44:BW:25:PHE:CZ	2.51	0.45
44:BW:53:GLY:O	44:BW:56:HIS:N	2.49	0.45
29:BH:32:PRO:HB3	45:BX:38:TRP:CD1	2.51	0.45
45:BX:5:GLN:HE21	45:BX:49:ARG:CB	2.30	0.45
57:DA:2269:G:O2'	44:DW:18:LYS:HG2	2.16	0.45
17:AQ:45:VAL:CG2	17:AQ:60:ILE:HD13	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:251:THR:CG2	24:BC:252:LYS:N	2.70	0.45
9:CI:44:ARG:O	9:CI:48:ARG:HG2	2.17	0.45
57:DA:1776:G:C2	57:DA:1789:A:N3	2.84	0.45
57:DA:1783:A:C2	57:DA:2588:G:O4'	2.69	0.45
58:DB:109:A:O2'	58:DB:110:C:O5'	2.34	0.45
58:DB:110:C:H2'	58:DB:111:U:C6	2.51	0.45
57:DA:804:A:H5''	57:DA:805:G:OP1	2.16	0.45
33:BL:93:ASN:C	33:BL:93:ASN:HD22	2.17	0.45
53:CA:1278:G:H1'	53:CA:1279:G:C5	2.52	0.45
15:AO:25:GLU:HG3	15:AO:69:LEU:HD11	1.98	0.45
1:AA:842:U:HO2'	1:AA:846:G:H1	1.61	0.45
2:CB:73:ARG:HG3	2:CB:74:ALA:N	2.31	0.45
57:DA:221:A:H5''	57:DA:222:A:OP1	2.16	0.45
57:DA:1441:G:N2	57:DA:1442:U:C2	2.84	0.45
57:DA:949:G:C2	57:DA:969:G:C2	3.04	0.45
59:DF:101:ARG:HH11	59:DF:138:PRO:CB	2.29	0.45
26:BE:119:ILE:HD11	26:BE:187:VAL:CG2	2.42	0.45
51:B3:30:HIS:ND1	51:B3:31:ILE:HG22	2.32	0.45
57:DA:86:G:N2	57:DA:87:U:C4	2.84	0.45
57:DA:687:C:H2'	57:DA:688:U:H6	1.80	0.45
57:DA:2851:A:O2'	57:DA:2852:G:O4'	2.33	0.45
12:AL:21:PRO:O	12:AL:23:LEU:N	2.50	0.45
22:BA:1459:G:H8	22:BA:1459:G:H2'	1.58	0.45
24:DC:180:MET:HE1	24:DC:268:ARG:HE	1.80	0.45
11:CK:121:ARG:HH21	21:CU:35:GLU:HB2	1.81	0.45
53:CA:879:C:C2'	53:CA:880:C:O5'	2.64	0.45
1:AA:1323:G:H4'	1:AA:1362:A:C2	2.51	0.45
14:CN:92:ILE:HA	14:CN:93:PRO:HD3	1.83	0.45
22:BA:2757:A:N1	28:BG:66:THR:CG2	2.76	0.45
1:AA:1258:G:C4	1:AA:1259:C:C5	3.04	0.45
57:DA:1014:A:O2'	57:DA:1015:U:H5'	2.17	0.45
2:AB:70:GLY:HA2	2:AB:163:ILE:HG22	1.98	0.45
57:DA:1510:G:C2	57:DA:1511:G:C5	3.04	0.45
57:DA:1511:G:O2'	57:DA:1512:C:C6	2.49	0.45
1:AA:1053:G:N2	1:AA:1056:U:C4	2.84	0.45
57:DA:1168:G:C6	57:DA:1182:G:C6	3.04	0.45
12:AL:42:LYS:O	12:AL:43:LYS:C	2.55	0.45
1:AA:1253:G:N3	1:AA:1254:A:C8	2.85	0.45
5:CE:13:LYS:CE	5:CE:13:LYS:HA	2.43	0.45
57:DA:505:A:O2'	57:DA:506:G:H5'	2.16	0.45
42:DU:16:LYS:HB3	42:DU:17:ASP:H	1.54	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:25:TYR:HA	6:CF:28:ALA:HB3	1.98	0.45
57:DA:155:A:H2'	57:DA:156:A:C8	2.52	0.45
32:DK:121:GLU:HB3	32:DK:122:VAL:H	1.44	0.45
57:DA:465:G:C4'	50:D2:16:HIS:HD2	2.30	0.45
28:DG:116:LEU:HD13	28:DG:121:THR:HA	1.98	0.45
2:AB:22:TRP:HA	2:AB:188:THR:O	2.16	0.45
13:AM:10:ASP:CG	13:AM:44:ILE:HB	2.37	0.45
57:DA:673:C:H4'	26:DE:77:ILE:HG13	1.98	0.45
57:DA:1750:G:C6	57:DA:1751:U:C4	3.04	0.45
22:BA:960:A:C5'	22:BA:961:C:OP2	2.64	0.45
53:CA:769:G:O2'	53:CA:770:C:H5'	2.16	0.45
57:DA:2635:A:H2'	57:DA:2636:C:O4'	2.15	0.45
11:AK:52:ARG:HA	11:AK:56:LYS:HB3	1.97	0.45
3:AC:13:ILE:H	3:AC:13:ILE:HD13	1.81	0.45
11:AK:51:PHE:HB2	11:AK:55:ARG:HB3	1.97	0.45
41:BT:65:GLY:N	41:BT:79:ASP:OD1	2.41	0.45
53:CA:580:C:H2'	53:CA:581:G:C8	2.51	0.45
57:DA:848:C:H2'	57:DA:849:A:C8	2.51	0.45
8:AH:10:LEU:HD22	8:AH:74:ILE:CG1	2.46	0.45
33:BL:57:LEU:C	33:BL:59:ARG:H	2.19	0.45
1:AA:821:G:H4'	63:AA:1740:HOH:O	2.16	0.45
22:BA:2298:A:H2'	22:BA:2299:U:O4'	2.16	0.45
12:AL:73:LEU:HD11	12:AL:79:ILE:CG2	2.44	0.45
53:CA:328:C:C2'	53:CA:328:C:O2	2.63	0.45
22:BA:2243:U:H2'	22:BA:2244:U:H6	1.78	0.45
45:DX:42:GLU:HG2	45:DX:44:ARG:HE	1.80	0.45
22:BA:749:A:N7	22:BA:1618:A:C6	2.85	0.45
1:AA:1216:A:OP1	14:AN:2:LYS:HE2	2.15	0.45
57:DA:709:U:H2'	57:DA:710:U:C6	2.51	0.45
14:AN:53:ASP:HA	14:AN:58:ARG:HH11	1.81	0.45
25:BD:119:ALA:HB1	25:BD:124:ARG:HB2	1.97	0.45
53:CA:191:G:H2'	53:CA:192:A:C8	2.50	0.45
57:DA:1838:C:C4	57:DA:1899:A:C4	3.04	0.45
57:DA:910:A:C2	34:DM:13:HIS:CE1	3.04	0.45
33:BL:87:GLY:O	33:BL:88:GLY:C	2.55	0.45
23:BB:54:G:H2'	23:BB:55:U:C6	2.51	0.45
16:AP:42:ILE:O	16:AP:43:ALA:HB3	2.16	0.45
22:BA:81:G:C2	22:BA:106:C:C2	3.05	0.45
57:DA:1485:U:C2	57:DA:1505:A:C2	3.04	0.45
23:BB:17:C:H2'	23:BB:18:G:O4'	2.17	0.45
42:BU:13:LEU:HD11	42:BU:70:ALA:HB2	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:22:PHE:CD2	10:CJ:97:ASP:HB2	2.51	0.45
1:AA:1310:G:H2'	1:AA:1311:A:O4'	2.15	0.45
40:BS:85:ILE:HG22	40:BS:86:MET:N	2.31	0.45
22:BA:2076:U:O2	22:BA:2076:U:O4'	2.34	0.45
9:AI:27:ILE:N	9:AI:27:ILE:HD12	2.31	0.45
26:BE:159:LEU:HA	26:BE:159:LEU:HD12	1.56	0.45
22:BA:608:A:N1	22:BA:609:A:C2	2.84	0.45
25:DD:196:ALA:O	25:DD:197:THR:C	2.55	0.45
38:BQ:90:ASP:O	38:BQ:91:ARG:O	2.33	0.45
22:BA:994:C:H1'	39:BR:10:LYS:HZ3	1.81	0.45
44:BW:23:LYS:HZ1	44:BW:24:ARG:HG3	1.81	0.45
19:CS:4:LEU:HB3	19:CS:5:LYS:H	1.53	0.45
45:BX:32:LEU:O	45:BX:33:HIS:CD2	2.69	0.45
5:AE:104:ILE:HD11	5:AE:114:LEU:HB3	1.99	0.45
5:AE:117:ALA:HB3	5:AE:119:VAL:HG13	1.98	0.45
57:DA:1139:G:N2	57:DA:1140:C:C2	2.84	0.45
22:BA:1063:G:O2'	22:BA:1064:C:O4'	2.33	0.45
22:BA:1079:C:C4	22:BA:1088:A:C2	3.01	0.45
37:DP:88:ARG:HH11	37:DP:112:ARG:NH2	2.14	0.45
57:DA:1276:A:C2	57:DA:1277:G:C5	3.04	0.45
57:DA:1398:C:O2'	57:DA:1399:C:C6	2.70	0.45
34:DM:126:ILE:O	34:DM:128:THR:HG23	2.17	0.45
15:AO:24:THR:CG2	15:AO:69:LEU:HD12	2.45	0.45
43:BV:80:HIS:CE1	43:BV:81:PRO:HD2	2.51	0.45
11:CK:70:ALA:HB1	11:CK:104:PHE:CZ	2.51	0.45
59:DF:35:LEU:O	59:DF:87:LYS:HA	2.15	0.45
37:DP:52:ARG:HA	37:DP:52:ARG:HD3	1.77	0.45
53:CA:90:C:H2'	53:CA:91:U:C5	2.51	0.45
45:DX:63:ILE:O	45:DX:67:LEU:HD12	2.16	0.45
2:AB:66:ILE:CG1	2:AB:220:VAL:HG11	2.47	0.45
2:AB:74:ALA:O	2:AB:75:ALA:CB	2.64	0.45
53:CA:969:A:O2'	53:CA:970:C:C5'	2.62	0.45
24:BC:80:LEU:CD1	24:BC:109:LEU:HG	2.47	0.45
57:DA:85:G:OP1	42:DU:5:ARG:HA	2.16	0.45
57:DA:85:G:OP2	42:DU:6:ARG:HB2	2.16	0.45
57:DA:2798:U:O4'	57:DA:2800:A:N6	2.48	0.45
53:CA:120:A:C3'	53:CA:121:U:C5'	2.88	0.45
53:CA:822:U:C2	53:CA:823:C:C5	3.05	0.45
24:DC:68:ARG:HH12	24:DC:115:ILE:CD1	2.22	0.45
25:DD:46:ARG:HB3	25:DD:84:LEU:HD12	1.99	0.45
57:DA:529:A:OP2	31:DJ:113:PRO:HG3	2.15	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:186:LEU:HD21	37:BP:3:ILE:HD11	1.99	0.45
25:DD:73:VAL:O	25:DD:74:GLU:HB2	2.15	0.45
22:BA:580:U:H4'	38:BQ:30:VAL:HG11	1.97	0.45
22:BA:569:U:H4'	22:BA:946:C:O2	2.16	0.45
1:AA:518:C:H4'	1:AA:519:C:C5'	2.46	0.45
25:DD:187:LEU:O	25:DD:188:LEU:HD23	2.16	0.45
34:BM:45:GLN:O	34:BM:46:ILE:C	2.54	0.45
53:CA:181:A:N6	53:CA:195:A:OP2	2.50	0.45
30:BI:123:ALA:HA	30:BI:126:ARG:CZ	2.46	0.45
46:BY:39:GLN:HG3	46:BY:42:LEU:HD22	1.98	0.45
12:CL:98:ARG:CZ	12:CL:106:VAL:HG22	2.46	0.45
57:DA:174:U:H2'	57:DA:174:U:O2	2.16	0.45
22:BA:1046:A:H3'	22:BA:1047:G:H5'	1.96	0.45
57:DA:2689:U:H5''	57:DA:2690:U:O5'	2.15	0.45
57:DA:1723:G:C4	57:DA:1724:G:C8	3.04	0.45
1:AA:885:G:H1'	1:AA:914:A:N1	2.32	0.45
57:DA:2667:C:O2'	57:DA:2668:G:O4'	2.34	0.45
57:DA:2581:G:C6	57:DA:2610:C:C2	3.04	0.45
1:AA:724:G:O2'	1:AA:725:G:H5'	2.16	0.45
24:BC:43:ASN:C	24:BC:45:ASN:N	2.70	0.45
57:DA:2259:U:C6	57:DA:2427:C:C4	3.04	0.45
22:BA:1260:A:H2'	22:BA:1261:C:H6	1.81	0.45
59:DF:105:ILE:C	59:DF:108:PRO:HD2	2.37	0.45
46:BY:12:GLU:O	46:BY:15:ASN:HB2	2.15	0.45
15:CO:81:ILE:O	15:CO:85:GLY:N	2.49	0.45
48:D0:39:ARG:O	48:D0:40:HIS:HB2	2.16	0.45
33:DL:100:ILE:O	33:DL:101:ILE:CB	2.64	0.45
22:BA:1984:G:O2'	22:BA:1985:C:H5'	2.16	0.45
57:DA:1797:G:H4'	24:DC:254:LYS:O	2.16	0.45
22:BA:1945:G:C5	22:BA:1946:U:C5	3.04	0.45
57:DA:849:A:C6	57:DA:850:U:C4	3.04	0.45
1:AA:1210:C:C2'	1:AA:1211:U:H5'	2.46	0.45
57:DA:682:G:N2	57:DA:796:C:C2	2.85	0.45
57:DA:468:G:H4'	26:DE:57:LYS:HG2	1.98	0.45
5:AE:55:VAL:O	5:AE:59:ILE:HG23	2.16	0.45
2:CB:9:LEU:HD12	2:CB:12:GLY:N	2.31	0.45
22:BA:117:G:C6	22:BA:119:A:C6	3.04	0.45
24:BC:63:ILE:O	24:BC:64:VAL:HB	2.15	0.45
1:AA:613:C:H2'	1:AA:614:C:C6	2.50	0.45
9:AI:88:GLU:HG3	9:AI:89:TYR:N	2.31	0.45
41:DT:7:LEU:O	41:DT:7:LEU:HD23	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:DG:154:GLU:C	28:DG:156:TYR:H	2.19	0.45
28:DG:154:GLU:HA	28:DG:155:PRO:HD2	1.82	0.45
49:D1:16:THR:CG2	49:D1:42:VAL:HG23	2.46	0.45
22:BA:2714:G:H2'	22:BA:2715:C:C6	2.51	0.45
2:CB:27:LYS:HD3	2:CB:27:LYS:O	2.16	0.45
7:AG:112:ASP:HB2	7:AG:118:ARG:HG3	1.99	0.45
21:CU:9:GLU:HB3	21:CU:10:PRO:HD2	1.98	0.45
30:DI:28:GLY:O	30:DI:30:GLN:HG3	2.16	0.45
22:BA:2046:G:OP1	48:B0:11:LYS:HE3	2.16	0.45
53:CA:21:G:H2'	53:CA:22:G:C8	2.52	0.45
22:BA:769:U:C2	22:BA:770:G:C8	3.04	0.45
22:BA:597:G:C2	22:BA:661:A:C2	3.04	0.45
22:BA:1229:C:H2'	22:BA:1230:A:C8	2.52	0.45
22:BA:2808:G:N2	22:BA:2891:U:C6	2.83	0.45
43:BV:68:LYS:O	43:BV:69:GLU:C	2.54	0.45
22:BA:348:A:H2'	22:BA:349:U:O4'	2.16	0.45
28:BG:83:THR:C	28:BG:84:LYS:HD3	2.37	0.45
58:DB:55:U:H5'	59:DF:24:VAL:HG21	1.98	0.45
57:DA:2214:C:HO2'	57:DA:2215:C:C5'	2.28	0.45
25:BD:13:ARG:NE	25:BD:15:PHE:CZ	2.84	0.45
6:AF:6:ILE:HB	6:AF:62:MET:HB3	1.98	0.45
17:AQ:12:VAL:HG12	17:AQ:21:VAL:O	2.16	0.45
56:CP:75:ILE:HA	56:CP:78:VAL:CG2	2.45	0.45
57:DA:728:G:C2	57:DA:730:A:C4	3.05	0.45
57:DA:2020:A:H5'	48:D0:8:THR:CG2	2.46	0.45
39:DR:49:ILE:HG22	39:DR:54:VAL:N	2.32	0.45
57:DA:1398:C:C2	57:DA:1399:C:C5	3.04	0.45
41:DT:58:VAL:HG22	41:DT:59:ASN:N	2.30	0.45
57:DA:1206:G:C6	57:DA:1207:C:C4	3.05	0.45
34:DM:95:LEU:H	34:DM:95:LEU:CD1	2.28	0.45
53:CA:577:G:C8	53:CA:816:A:N1	2.85	0.45
25:BD:105:LYS:HA	25:BD:177:VAL:CG2	2.46	0.45
53:CA:954:G:H1	53:CA:1228:C:N4	2.13	0.45
53:CA:86:G:HO2'	53:CA:87:C:P	2.38	0.45
53:CA:91:U:O2'	53:CA:92:U:C6	2.52	0.45
57:DA:1555:G:HO2'	57:DA:1556:C:H5'	1.81	0.45
57:DA:830:G:C2	57:DA:2448:A:N7	2.84	0.45
54:CG:10:LYS:N	54:CG:10:LYS:HE3	2.31	0.45
1:AA:275:G:C4	1:AA:276:G:C8	3.04	0.45
9:AI:56:MET:SD	9:AI:57:VAL:N	2.90	0.45
22:BA:1498:C:O2'	22:BA:1499:C:C6	2.67	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:112:LEU:HD13	26:BE:186:VAL:CG1	2.40	0.45
57:DA:2858:C:H2'	57:DA:2859:G:O4'	2.15	0.45
22:BA:2136:G:O2'	22:BA:2137:U:C6	2.67	0.45
22:BA:752:A:C5	22:BA:1781:U:O4'	2.69	0.45
22:BA:2727:A:H2'	22:BA:2728:U:C6	2.52	0.45
49:B1:35:LEU:O	49:B1:35:LEU:HD23	2.17	0.45
8:CH:82:LEU:CD1	12:CL:3:VAL:HG11	2.46	0.45
53:CA:1102:A:O2'	53:CA:1103:C:H5'	2.16	0.45
41:DT:69:ARG:HG3	41:DT:70:HIS:N	2.30	0.45
1:AA:112:G:C6	1:AA:330:C:N4	2.85	0.45
36:BO:105:ALA:O	36:BO:107:ALA:N	2.49	0.45
1:AA:1160:G:N2	1:AA:1161:C:C2	2.85	0.45
31:DJ:20:ALA:HA	31:DJ:23:LYS:CG	2.39	0.45
1:AA:502:A:C2	1:AA:544:G:C2	3.05	0.45
1:AA:579:A:H2'	1:AA:580:C:H6	1.81	0.45
57:DA:28:A:H2'	57:DA:29:U:C6	2.51	0.45
32:DK:16:ALA:HB3	32:DK:46:ALA:N	2.32	0.45
57:DA:974:G:H8	57:DA:975:A:N7	2.14	0.45
53:CA:1004:A:N3	53:CA:1026:G:C5	2.84	0.45
18:AR:63:TYR:CD1	18:AR:69:TYR:OH	2.70	0.45
38:BQ:8:ILE:C	38:BQ:8:ILE:CD1	2.79	0.45
4:AD:22:SER:O	4:AD:23:GLY:C	2.55	0.45
12:AL:87:LYS:O	12:AL:88:ASP:CB	2.65	0.45
22:BA:142:A:C5	22:BA:143:C:C4	3.04	0.45
1:AA:957:U:O2	1:AA:959:A:C8	2.68	0.45
53:CA:1113:C:H4'	3:CC:13:ILE:HD12	1.99	0.45
53:CA:1046:A:H2'	53:CA:1047:G:O4'	2.17	0.45
16:AP:10:GLY:O	16:AP:11:ALA:CB	2.64	0.45
22:BA:1818:U:OP2	24:BC:155:ARG:NH1	2.49	0.45
22:BA:651:G:C6	22:BA:652:U:C4	3.03	0.45
57:DA:1522:A:H1'	57:DA:1524:G:C4	2.51	0.45
57:DA:810:U:O2'	57:DA:811:U:H5	1.99	0.45
20:AT:16:ALA:O	20:AT:17:ARG:C	2.55	0.45
1:AA:1306:A:H2'	1:AA:1307:U:H5'	1.97	0.45
1:AA:1329:A:H5''	13:AM:25:GLY:N	2.30	0.45
57:DA:467:G:O3'	57:DA:797:G:H5'	2.16	0.45
53:CA:1336:C:H1'	53:CA:1337:G:N1	2.31	0.45
53:CA:1104:G:H2'	53:CA:1105:A:O4'	2.16	0.45
57:DA:223:A:C4	57:DA:408:G:H1'	2.51	0.45
22:BA:1816:C:C5	24:BC:61:TYR:CE1	3.05	0.45
24:BC:39:SER:C	24:BC:41:GLY:N	2.69	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:149:A:H2'	53:CA:150:U:C6	2.52	0.45
53:CA:604:G:C2	53:CA:635:A:C2	3.05	0.45
28:DG:28:LYS:H	28:DG:79:THR:HG22	1.80	0.45
22:BA:1487:U:C2	22:BA:1503:A:C2	3.04	0.45
53:CA:1461:G:C6	53:CA:1462:C:C4	3.04	0.45
57:DA:1355:G:C2	57:DA:1356:G:C8	3.04	0.45
22:BA:1612:C:H4'	50:B2:5:PHE:O	2.16	0.45
1:AA:1416:G:H2'	1:AA:1417:G:H5'	1.98	0.45
53:CA:168:G:C2'	53:CA:169:C:H5'	2.45	0.45
54:CG:105:GLU:O	54:CG:109:LYS:HD3	2.17	0.45
57:DA:24:G:C5	57:DA:25:U:C5	3.05	0.45
11:AK:64:VAL:O	11:AK:67:GLU:HB2	2.16	0.45
22:BA:1989:G:O5'	22:BA:1989:G:H8	2.00	0.45
22:BA:12:U:H2'	22:BA:12:U:O2	2.16	0.45
26:BE:83:VAL:HG12	26:BE:83:VAL:O	2.16	0.45
22:BA:592:A:O2'	51:B3:2:LYS:HA	2.16	0.45
3:AC:63:ILE:O	3:AC:98:ALA:HA	2.16	0.45
59:DF:160:LYS:HD3	59:DF:161:SER:N	2.31	0.45
55:CM:53:ASP:HA	55:CM:56:ARG:CZ	2.47	0.45
53:CA:1231:G:C5	53:CA:1232:U:C5	3.05	0.45
28:DG:15:ASP:HB3	28:DG:26:LYS:H	1.81	0.45
44:BW:51:GLY:O	44:BW:52:CYS:C	2.55	0.45
53:CA:276:G:OP1	17:CQ:13:SER:OG	2.24	0.45
45:BX:31:ASN:O	45:BX:51:SER:HA	2.17	0.45
25:BD:12:THR:CG2	25:BD:13:ARG:N	2.49	0.45
4:CD:186:GLU:O	4:CD:187:ARG:CB	2.65	0.45
57:DA:1982:U:C6	57:DA:1982:U:O5'	2.69	0.45
54:CG:19:SER:HB3	54:CG:22:LEU:HB3	1.99	0.45
57:DA:15:G:O2'	57:DA:16:C:H5'	2.16	0.45
57:DA:531:C:O5'	57:DA:532:A:H8	1.99	0.45
31:BJ:65:THR:O	31:BJ:68:LYS:HG3	2.16	0.45
58:DB:11:C:C5	58:DB:12:C:C5	3.05	0.45
58:DB:16:G:H2'	58:DB:17:C:C6	2.51	0.45
37:DP:90:ALA:HB3	37:DP:110:LYS:CB	2.46	0.45
57:DA:1608:A:O2'	57:DA:1610:A:OP1	2.34	0.45
41:BT:40:LYS:N	41:BT:43:ILE:HG23	2.31	0.45
57:DA:2874:C:O2'	57:DA:2875:C:C6	2.67	0.45
18:AR:35:SER:HA	18:AR:71:ASP:HB3	1.98	0.45
38:BQ:40:LYS:HB2	38:BQ:40:LYS:NZ	2.31	0.45
1:AA:557:G:C6	1:AA:558:G:C2	3.05	0.45
59:DF:135:ILE:O	59:DF:137:PHE:N	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:271:G:C4	22:BA:272:A:N7	2.85	0.45
22:BA:1499:C:O2'	22:BA:1500:G:C5'	2.59	0.45
24:BC:151:GLY:O	24:BC:152:GLN:HG3	2.16	0.45
29:BH:86:ASP:HB3	29:BH:89:LYS:HB3	1.98	0.45
33:DL:132:ARG:HA	33:DL:135:ILE:HG22	1.97	0.45
49:B1:8:ILE:N	49:B1:22:THR:O	2.49	0.45
20:AT:26:MET:HE1	20:AT:56:ILE:HD11	1.98	0.45
57:DA:1817:G:H3'	24:DC:155:ARG:HH21	1.81	0.45
1:AA:748:G:C6	1:AA:749:A:C6	3.04	0.45
53:CA:198:G:O2'	53:CA:199:A:O5'	2.35	0.45
1:AA:707:U:H2'	1:AA:708:C:C6	2.51	0.45
53:CA:282:A:H2'	53:CA:283:U:C6	2.51	0.45
4:CD:3:TYR:CZ	4:CD:5:GLY:HA3	2.52	0.45
1:AA:982:U:H4'	1:AA:983:A:C5'	2.47	0.45
4:AD:2:ARG:HB2	4:AD:4:LEU:CD1	2.47	0.45
1:AA:1157:A:H1'	1:AA:1181:G:N1	2.32	0.45
24:BC:20:ASN:HD21	24:BC:22:GLU:CG	2.30	0.45
38:DQ:96:ASP:C	38:DQ:98:ALA:H	2.20	0.45
22:BA:2210:U:H4'	22:BA:2211:A:H5'	1.97	0.45
57:DA:1187:G:C8	57:DA:1187:G:OP2	2.70	0.45
29:BH:67:ALA:C	29:BH:69:ALA:N	2.69	0.45
22:BA:812:C:H4'	38:BQ:12:ARG:HH22	1.82	0.45
22:BA:1872:A:C2'	22:BA:1873:G:O4'	2.64	0.45
57:DA:2283:C:C5	57:DA:2389:G:C4	3.04	0.45
47:BZ:30:ARG:O	47:BZ:31:ILE:C	2.55	0.45
57:DA:2235:G:H2'	57:DA:2236:U:C6	2.52	0.45
42:DU:10:VAL:HG12	42:DU:71:ILE:HG22	1.98	0.45
22:BA:2020:A:H5'	48:B0:8:THR:HG22	1.98	0.45
1:AA:1343:G:H4'	9:AI:123:ARG:HB3	1.98	0.45
39:DR:81:LYS:O	39:DR:82:HIS:C	2.55	0.45
20:CT:42:ASP:O	20:CT:43:LYS:C	2.55	0.45
22:BA:669:G:C5	22:BA:801:G:C6	3.04	0.45
33:DL:94:THR:O	33:DL:98:ALA:N	2.48	0.45
57:DA:2443:C:H2'	57:DA:2444:G:O4'	2.17	0.45
57:DA:458:G:N2	57:DA:469:G:H2'	2.31	0.45
1:AA:903:G:H2'	1:AA:904:U:C6	2.48	0.45
58:DB:48:U:O2'	36:DO:100:HIS:CE1	2.70	0.45
53:CA:552:U:C4	53:CA:553:A:N7	2.85	0.45
20:AT:60:GLN:HE21	20:AT:65:LEU:CD2	2.30	0.45
1:AA:126:G:H2'	1:AA:127:G:O5'	2.17	0.45
22:BA:1753:G:H5"	37:BP:92:ARG:HE	1.80	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1627:G:C2	22:BA:1628:G:C8	3.05	0.45
57:DA:2418:A:C6	57:DA:2419:U:N3	2.85	0.45
18:CR:28:LEU:C	18:CR:30:ASN:N	2.69	0.45
59:DF:71:LYS:HG3	59:DF:73:VAL:H	1.79	0.45
45:DX:37:PHE:O	45:DX:45:PHE:HD2	1.98	0.45
57:DA:1767:G:N2	57:DA:1986:C:C2	2.84	0.45
14:AN:25:GLU:CG	14:AN:26:LEU:HD12	2.47	0.45
14:AN:25:GLU:HG2	14:AN:26:LEU:HD12	1.98	0.45
57:DA:2686:G:H2'	57:DA:2687:U:C6	2.52	0.45
43:DV:13:GLY:O	43:DV:17:SER:HB2	2.15	0.45
31:DJ:55:ILE:HG13	31:DJ:55:ILE:O	2.15	0.45
24:BC:79:ARG:NH2	24:BC:81:GLU:OE2	2.50	0.45
31:BJ:44:TYR:C	31:BJ:45:THR:HG22	2.36	0.45
38:BQ:96:ASP:OD2	38:BQ:96:ASP:C	2.55	0.45
44:BW:8:SER:C	44:BW:9:THR:HG22	2.35	0.45
29:BH:25:TYR:O	29:BH:29:PHE:HB3	2.16	0.45
45:BX:32:LEU:O	45:BX:33:HIS:CG	2.69	0.45
57:DA:1142:A:H4'	31:DJ:27:ARG:HH22	1.82	0.45
57:DA:616:A:N3	57:DA:617:G:C8	2.85	0.45
57:DA:600:G:C5'	26:DE:27:LEU:HD22	2.45	0.45
17:AQ:56:ASP:OD2	17:AQ:80:LYS:HA	2.17	0.45
22:BA:1074:G:N3	22:BA:1074:G:H2'	2.32	0.45
56:CP:75:ILE:CG2	56:CP:80:LYS:HD2	2.46	0.45
1:AA:894:G:O2'	1:AA:895:G:H5'	2.17	0.45
57:DA:1206:G:C2	57:DA:1207:C:C2	3.04	0.45
44:DW:9:THR:OG1	44:DW:10:ARG:N	2.49	0.45
1:AA:750:C:O2'	15:AO:20:ASP:OD1	2.34	0.45
22:BA:2680:U:OP1	25:BD:113:SER:HA	2.17	0.45
24:BC:245:THR:OG1	24:BC:249:VAL:HB	2.17	0.45
57:DA:1060:U:H4'	57:DA:1061:U:C5'	2.46	0.45
54:CG:70:PRO:HD2	54:CG:95:ARG:O	2.17	0.45
53:CA:559:A:H4'	53:CA:560:A:H5''	1.98	0.45
37:DP:91:VAL:HG11	37:DP:96:LEU:CD1	2.41	0.45
4:CD:80:ARG:HB2	4:CD:80:ARG:HE	1.43	0.45
5:CE:103:GLY:O	5:CE:104:ILE:CG2	2.52	0.45
57:DA:2843:G:N2	57:DA:2875:C:N3	2.65	0.45
1:AA:74:A:C6	1:AA:97:G:C6	3.05	0.45
1:AA:345:C:O2	32:BK:117:SER:HA	2.16	0.45
33:DL:79:LEU:CB	33:DL:113:ALA:H	2.22	0.45
49:B1:33:LEU:C	49:B1:33:LEU:HD12	2.37	0.45
17:CQ:30:HIS:CG	17:CQ:31:PRO:HD2	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1802:A:N6	57:DA:1817:G:N2	2.65	0.45
43:BV:63:ILE:HD12	43:BV:72:VAL:HG21	1.99	0.45
57:DA:915:C:O2	58:DB:100:G:H4'	2.17	0.45
35:DN:56:LYS:CD	35:DN:88:ALA:HA	2.44	0.45
57:DA:1588:G:H2'	57:DA:1589:U:C6	2.52	0.45
22:BA:1416:G:O2'	22:BA:1417:C:C5'	2.64	0.45
10:AJ:53:ILE:HG13	14:AN:84:ARG:CZ	2.46	0.45
3:CC:63:ILE:O	3:CC:63:ILE:HG23	2.15	0.45
22:BA:2197:U:C6	22:BA:2224:G:C6	3.04	0.45
45:DX:29:LEU:HB2	45:DX:30:PRO:HD2	1.97	0.45
22:BA:1050:A:N1	22:BA:2751:G:C5	2.84	0.45
25:DD:159:LYS:HE2	25:DD:160:LYS:N	2.27	0.45
24:DC:125:PRO:HA	24:DC:191:LEU:HB2	1.98	0.45
55:CM:64:VAL:O	55:CM:65:GLU:C	2.55	0.45
53:CA:1381:U:O2'	53:CA:1382:C:O5'	2.30	0.45
57:DA:69:C:H2'	57:DA:70:G:H8	1.80	0.45
57:DA:511:U:C4'	57:DA:1235:G:H4'	2.46	0.45
25:DD:179:ARG:H	25:DD:188:LEU:HB2	1.82	0.45
42:BU:73:ASN:HD22	42:BU:76:THR:N	2.10	0.45
1:AA:363:A:O2'	1:AA:364:A:H5'	2.16	0.45
31:BJ:12:LYS:O	31:BJ:13:ARG:HB2	2.16	0.45
26:BE:29:HIS:O	26:BE:33:VAL:HG23	2.16	0.45
32:DK:104:THR:C	32:DK:106:GLU:N	2.69	0.45
13:AM:7:ASN:HD22	13:AM:8:ILE:N	2.15	0.45
57:DA:2654:A:N6	57:DA:2667:C:H41	2.15	0.45
22:BA:2019:A:C2'	22:BA:2020:A:O5'	2.65	0.45
1:AA:577:G:O2'	1:AA:578:C:C5'	2.64	0.45
57:DA:712:G:C2	57:DA:720:U:O2	2.69	0.45
1:AA:1371:G:OP1	9:AI:69:GLY:HA2	2.17	0.45
12:AL:2:THR:HG22	12:AL:4:ASN:H	1.81	0.45
22:BA:1476:U:C6	22:BA:1476:U:OP2	2.69	0.45
18:CR:57:ALA:O	18:CR:60:ARG:HB2	2.16	0.45
53:CA:295:C:H2'	53:CA:296:U:C6	2.47	0.45
22:BA:871:U:H2'	22:BA:872:U:C6	2.51	0.45
1:AA:1216:A:OP1	14:AN:4:SER:HB3	2.16	0.45
1:AA:1112:C:N4	3:AC:177:LEU:HD22	2.32	0.45
57:DA:223:A:C6	57:DA:422:A:C5	3.04	0.45
12:CL:31:GLY:HA3	12:CL:54:VAL:HG12	1.98	0.45
22:BA:1164:C:H2'	22:BA:1165:A:H8	1.80	0.45
57:DA:845:A:H2	57:DA:934:U:O2	2.00	0.45
59:DF:32:LYS:HD2	59:DF:156:THR:HG21	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:48:ARG:HB2	10:CJ:48:ARG:CZ	2.46	0.45
57:DA:2011:U:H2'	57:DA:2012:G:H5'	1.98	0.45
53:CA:289:G:C6	53:CA:290:C:N4	2.85	0.45
25:BD:140:HIS:CD2	25:BD:140:HIS:N	2.84	0.45
23:BB:52:A:H4'	23:BB:53:A:OP1	2.16	0.45
22:BA:1911:U:C4	22:BA:1918:A:C4	3.05	0.45
54:CG:148:LYS:HD3	54:CG:148:LYS:O	2.17	0.45
1:AA:162:A:C8	1:AA:163:C:H1'	2.51	0.45
1:AA:1154:G:C2	1:AA:1155:A:C5	3.05	0.45
30:DI:102:ARG:HH11	30:DI:105:LEU:HD13	1.82	0.45
22:BA:1624:U:H2'	22:BA:1625:C:H6	1.81	0.45
5:CE:83:PRO:HB3	5:CE:96:GLN:HG2	1.98	0.45
1:AA:665:A:N3	1:AA:732:C:H2'	2.32	0.45
53:CA:859:G:H2'	53:CA:860:A:C8	2.52	0.45
36:BO:85:LYS:HB3	36:BO:85:LYS:HE3	1.80	0.45
24:BC:124:LYS:O	24:BC:125:PRO:C	2.53	0.45
22:BA:855:G:N3	44:BW:23:LYS:CD	2.76	0.45
20:AT:74:HIS:O	20:AT:78:LEU:HB2	2.16	0.45
29:BH:21:VAL:HG22	29:BH:22:LYS:N	2.32	0.45
32:BK:71:ARG:HD2	32:BK:106:GLU:HG3	1.98	0.45
1:AA:1138:G:C2'	1:AA:1138:G:N3	2.71	0.45
17:AQ:12:VAL:CB	17:AQ:21:VAL:HG22	2.46	0.45
53:CA:1067:A:C4'	53:CA:1068:G:O5'	2.63	0.45
37:DP:16:VAL:CG1	37:DP:19:PHE:HE2	2.30	0.45
57:DA:524:G:C4	57:DA:525:U:C5	3.05	0.45
57:DA:2814:A:C5	57:DA:2815:C:C5	3.05	0.45
57:DA:2839:G:C2	57:DA:2880:C:N3	2.85	0.45
58:DB:68:C:HO2'	58:DB:69:G:P	2.40	0.45
57:DA:2391:G:O2'	57:DA:2392:A:P	2.75	0.45
53:CA:666:G:H1'	53:CA:741:G:N2	2.31	0.45
57:DA:335:C:O2'	57:DA:336:C:O5'	2.35	0.45
58:DB:90:C:H4'	34:DM:38:ARG:NH1	2.32	0.45
34:DM:17:ASN:O	34:DM:18:ARG:HG2	2.17	0.45
31:BJ:81:ILE:CG2	31:BJ:82:GLY:H	2.03	0.45
2:CB:103:TRP:CA	2:CB:106:VAL:HB	2.43	0.45
57:DA:1281:G:C2	57:DA:1290:C:N3	2.85	0.45
5:CE:136:VAL:O	5:CE:140:ILE:HG13	2.17	0.45
2:CB:71:THR:O	2:CB:72:LYS:C	2.55	0.45
24:BC:67:LYS:HG2	24:BC:150:GLY:HA2	1.98	0.45
57:DA:1709:U:O2'	57:DA:1710:G:H5'	2.17	0.45
2:AB:110:ILE:HD11	2:AB:147:LEU:HD13	1.91	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:56:LYS:O	6:CF:57:ALA:HB2	2.16	0.45
1:AA:414:A:N6	1:AA:431:A:C4	2.84	0.45
32:DK:13:ASN:H	32:DK:13:ASN:ND2	2.14	0.45
53:CA:1372:U:C5'	9:CI:71:ILE:HD11	2.47	0.45
21:CU:41:THR:O	21:CU:45:LYS:HB2	2.16	0.45
57:DA:2415:G:C2	57:DA:2416:C:C2	3.05	0.45
57:DA:1417:C:H4'	57:DA:1587:G:N2	2.30	0.45
11:AK:124:LYS:HE2	21:AU:33:ARG:HH21	1.80	0.45
57:DA:1238:G:H2'	57:DA:1239:G:C8	2.51	0.45
55:CM:22:TYR:HB2	55:CM:65:GLU:HG2	1.99	0.45
57:DA:1760:C:H2'	57:DA:1761:C:O4'	2.17	0.45
31:DJ:95:ARG:O	31:DJ:96:ARG:C	2.54	0.45
2:CB:115:ASP:O	2:CB:119:GLN:CB	2.65	0.45
4:CD:141:VAL:HG12	4:CD:142:VAL:N	2.31	0.45
34:BM:42:THR:O	34:BM:43:ALA:HB3	2.15	0.45
57:DA:495:G:H4'	40:DS:4:ILE:O	2.16	0.45
22:BA:1045:C:H5''	22:BA:1046:A:C5'	2.43	0.45
53:CA:1394:A:N6	53:CA:1501:C:H5'	2.32	0.45
57:DA:2249:U:H1'	57:DA:2275:C:N4	2.32	0.45
28:DG:8:VAL:HA	28:DG:68:ARG:HH21	1.82	0.45
47:DZ:40:THR:C	47:DZ:42:ALA:N	2.68	0.45
1:AA:577:G:H2'	1:AA:578:C:C6	2.52	0.45
35:BN:30:ARG:HG2	35:BN:31:HIS:ND1	2.32	0.45
45:BX:70:LEU:HD23	45:BX:73:ARG:HH11	1.82	0.45
26:BE:131:THR:HG22	26:BE:164:LEU:HD13	1.98	0.45
53:CA:579:A:C6	53:CA:763:G:C6	3.04	0.45
6:AF:53:LYS:HG3	6:AF:54:LEU:N	2.32	0.45
31:BJ:88:THR:CG2	31:BJ:91:GLU:H	2.30	0.45
1:AA:1248:A:C2	9:AI:71:ILE:HD11	2.51	0.45
57:DA:1408:G:H22	57:DA:1595:C:H1'	1.82	0.45
49:D1:46:VAL:HG22	49:D1:47:ILE:N	2.29	0.45
53:CA:1084:G:C6	53:CA:1085:U:O4	2.70	0.45
58:DB:48:U:O2'	36:DO:100:HIS:HE1	2.00	0.45
22:BA:1513:U:O2'	22:BA:1514:G:H5'	2.17	0.45
22:BA:60:G:HO2'	22:BA:61:C:P	2.39	0.45
22:BA:2428:G:H5''	22:BA:2429:G:OP1	2.17	0.45
57:DA:413:C:H4'	57:DA:1880:U:H4'	1.98	0.45
39:DR:68:ARG:CZ	39:DR:90:ARG:HG2	2.47	0.45
1:AA:550:G:C2'	1:AA:551:U:H5'	2.46	0.45
28:DG:25:ILE:CG2	28:DG:78:VAL:HG21	2.47	0.45
1:AA:332:G:H2'	1:AA:333:U:H6	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2715:C:C4	22:BA:2716:C:C5	3.05	0.45
57:DA:1361:G:C5	57:DA:1362:C:C5	3.05	0.45
22:BA:2853:C:H2'	22:BA:2854:G:C8	2.52	0.45
2:AB:132:GLU:O	2:AB:136:ARG:CB	2.65	0.45
22:BA:2619:C:H5'	25:BD:155:VAL:O	2.16	0.45
22:BA:718:A:H2'	22:BA:719:C:H5'	1.98	0.45
8:CH:20:ASN:ND2	8:CH:20:ASN:O	2.49	0.45
22:BA:2186:G:C6	22:BA:2187:U:C2	3.04	0.45
1:AA:807:A:H2'	1:AA:808:C:C6	2.51	0.45
57:DA:2093:G:C4'	57:DA:2093:G:OP1	2.64	0.45
39:BR:49:ILE:O	39:BR:51:VAL:O	2.35	0.45
37:BP:53:GLY:O	37:BP:56:SER:OG	2.28	0.45
58:DB:55:U:H5'	59:DF:24:VAL:CG2	2.47	0.45
53:CA:274:A:O2'	53:CA:275:G:C8	2.59	0.45
53:CA:1319:A:H5''	19:CS:4:LEU:CD1	2.47	0.45
45:BX:5:GLN:HE21	45:BX:49:ARG:HB3	1.81	0.45
57:DA:2758:A:C2'	57:DA:2759:G:H5'	2.46	0.45
17:AQ:16:MET:O	17:AQ:17:GLU:C	2.54	0.45
17:AQ:47:ASP:C	17:AQ:51:GLU:OE2	2.55	0.45
57:DA:46:G:C2	57:DA:47:C:C5	3.05	0.45
37:DP:88:ARG:HE	37:DP:112:ARG:NH2	1.99	0.45
57:DA:783:A:H2	57:DA:1778:U:H4'	1.82	0.45
57:DA:1785:A:H2'	57:DA:1787:A:N7	2.31	0.45
57:DA:1774:C:H4'	57:DA:1979:U:O2	2.17	0.45
24:DC:226:PRO:O	24:DC:227:VAL:C	2.55	0.45
54:CG:25:PHE:CZ	54:CG:61:PHE:HZ	2.34	0.45
53:CA:502:A:P	12:CL:114:SER:HG	2.39	0.45
57:DA:300:A:C5	57:DA:334:C:H4'	2.51	0.45
34:DM:19:GLY:N	34:DM:38:ARG:HH21	1.96	0.45
31:BJ:80:HIS:HB3	31:BJ:81:ILE:HG22	1.98	0.45
38:DQ:57:ARG:CZ	38:DQ:92:LYS:HE2	2.46	0.45
57:DA:1536:C:C2	57:DA:1536:C:OP2	2.69	0.45
57:DA:1080:A:HO2'	57:DA:1081:U:H6	1.62	0.45
57:DA:1717:A:N6	57:DA:1744:A:C8	2.85	0.45
1:AA:1124:G:H3'	1:AA:1145:A:N6	2.31	0.45
1:AA:1125:U:O2'	1:AA:1126:U:H2'	2.17	0.45
53:CA:335:C:O2	53:CA:1433:A:H2	2.00	0.45
53:CA:76:G:N2	53:CA:95:C:C2	2.85	0.45
3:AC:131:ARG:O	3:AC:135:ARG:HG2	2.16	0.45
22:BA:1731:G:C2	22:BA:1733:G:C5	3.04	0.45
57:DA:970:U:H1'	57:DA:985:C:OP1	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:DF:146:ASP:HB3	59:DF:147:ARG:H	1.61	0.45
53:CA:1078:U:C5	53:CA:1079:G:C5	3.04	0.45
32:BK:4:GLU:O	32:BK:5:GLN:CB	2.64	0.45
24:DC:156:SER:HB3	24:DC:159:THR:CG2	2.47	0.45
1:AA:199:A:O2'	1:AA:200:G:O4'	2.22	0.45
54:CG:41:ILE:O	54:CG:45:ALA:HB3	2.17	0.45
1:AA:1322:C:O4'	1:AA:1322:C:O2	2.32	0.45
29:DH:96:THR:O	29:DH:97:ARG:HG3	2.17	0.45
57:DA:90:U:C4	57:DA:91:A:C5	3.05	0.45
1:AA:1258:G:O2'	1:AA:1259:C:H5'	2.16	0.45
53:CA:1285:A:C4'	53:CA:1286:U:OP1	2.60	0.45
27:BF:43:ILE:HG22	27:BF:82:TYR:CD1	2.52	0.45
20:AT:8:LYS:HA	20:AT:11:ILE:CG2	2.44	0.45
57:DA:2894:G:O2'	57:DA:2895:G:P	2.75	0.45
57:DA:1734:G:C2'	57:DA:1735:A:C8	2.96	0.45
16:AP:37:GLY:HA2	16:AP:51:ARG:HH11	1.82	0.45
29:BH:46:PHE:O	29:BH:50:ARG:NH2	2.44	0.45
34:DM:81:ARG:HH21	34:DM:84:LYS:NZ	2.15	0.45
53:CA:1191:A:H8	53:CA:1191:A:OP2	2.00	0.45
1:AA:1371:G:C5	1:AA:1372:U:C4	3.05	0.45
35:BN:69:ARG:HG2	35:BN:69:ARG:H	1.41	0.45
6:AF:98:GLU:HG3	6:AF:99:ALA:N	2.31	0.45
57:DA:2:G:H2'	57:DA:3:U:O4'	2.17	0.45
22:BA:642:U:H4'	22:BA:2349:G:O2'	2.17	0.45
1:AA:917:G:H2'	1:AA:918:A:C8	2.52	0.45
41:BT:28:ASN:HA	41:BT:91:GLN:CD	2.37	0.45
33:BL:56:PRO:HB2	33:BL:58:TYR:CE2	2.52	0.45
1:AA:322:C:H41	1:AA:328:C:H6	1.64	0.45
40:DS:53:SER:O	40:DS:56:ALA:HB3	2.16	0.45
26:DE:5:LEU:CD1	26:DE:10:SER:HB2	2.47	0.45
11:CK:51:PHE:CE2	11:CK:64:VAL:HG21	2.51	0.45
57:DA:2834:G:C4	57:DA:2879:A:N6	2.84	0.45
3:CC:149:LYS:CG	3:CC:168:ARG:HB2	2.46	0.45
53:CA:449:G:N1	53:CA:450:G:C5	2.85	0.45
57:DA:364:C:H2'	57:DA:365:U:O4'	2.16	0.45
22:BA:1660:G:N2	22:BA:2001:C:C2	2.85	0.45
25:BD:36:GLN:HB3	25:BD:49:GLN:HB3	1.99	0.45
53:CA:386:C:C5	53:CA:387:U:C5	3.05	0.45
57:DA:133:U:H2'	57:DA:134:G:O4'	2.16	0.45
9:AI:10:ARG:HB2	9:AI:14:SER:O	2.16	0.45
40:BS:37:THR:HG22	40:BS:38:TYR:CD1	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CQ:49:ASN:HB3	17:CQ:51:GLU:HG2	1.99	0.45
22:BA:384:A:H2'	22:BA:385:C:H5'	1.99	0.45
2:AB:64:GLY:HA3	2:AB:158:ASP:OD2	2.17	0.45
53:CA:41:G:H2'	53:CA:42:G:C8	2.51	0.45
22:BA:1766:G:N2	22:BA:1986:C:O2	2.45	0.45
35:BN:19:ALA:O	35:BN:22:ARG:HB2	2.16	0.45
53:CA:1060:U:O2'	10:CJ:54:SER:HB2	2.17	0.45
22:BA:327:G:N2	22:BA:336:C:C2	2.85	0.45
22:BA:2526:G:C2	22:BA:2538:C:O2	2.69	0.45
22:BA:885:C:H6	22:BA:885:C:O5'	1.99	0.45
9:CI:126:PHE:O	9:CI:126:PHE:CG	2.69	0.45
18:AR:24:ASP:O	18:AR:27:THR:N	2.40	0.45
55:CM:5:GLY:C	55:CM:6:ILE:HG13	2.37	0.45
36:BO:7:ARG:HG3	36:BO:96:GLY:HA3	1.98	0.45
38:BQ:91:ARG:HD3	39:BR:11:GLN:CB	2.47	0.45
22:BA:2365:G:OP1	44:BW:53:GLY:HA2	2.17	0.45
22:BA:923:G:N2	44:BW:23:LYS:HZ3	2.13	0.45
18:CR:70:THR:OG1	18:CR:71:ASP:N	2.48	0.45
53:CA:986:U:O2'	53:CA:987:G:O5'	2.35	0.45
57:DA:623:C:O2'	57:DA:624:C:H5'	2.17	0.45
17:AQ:24:ILE:HG22	17:AQ:24:ILE:O	2.17	0.45
57:DA:45:G:N2	57:DA:434:U:C2	2.85	0.45
9:CI:45:MET:CE	9:CI:48:ARG:HG3	2.47	0.45
53:CA:374:A:C5'	53:CA:452:A:N1	2.75	0.45
53:CA:482:A:N3	53:CA:482:A:H2'	2.31	0.45
57:DA:1828:G:O2'	57:DA:1829:A:H5'	2.17	0.45
57:DA:706:A:H2'	57:DA:707:G:O4'	2.17	0.45
57:DA:727:A:H2'	57:DA:728:G:H8	1.81	0.45
57:DA:2816:G:O3'	35:DN:99:LYS:HE3	2.16	0.45
1:AA:1241:G:N2	1:AA:1242:G:C5	2.84	0.45
53:CA:435:A:C5	53:CA:436:C:C5	3.05	0.45
57:DA:300:A:H1'	57:DA:333:G:N2	2.31	0.45
1:AA:751:U:H2'	1:AA:752:G:O4'	2.15	0.45
9:CI:5:TYR:O	9:CI:19:PHE:HA	2.16	0.45
1:AA:1126:U:O4'	1:AA:1281:C:O2	2.34	0.45
57:DA:1312:U:O2'	57:DA:1313:U:OP2	2.35	0.45
53:CA:533:A:O2'	53:CA:535:A:OP2	2.25	0.45
57:DA:1439:A:H5''	57:DA:1440:U:OP2	2.17	0.45
1:AA:260:G:H2'	1:AA:261:U:C6	2.51	0.45
37:BP:33:GLU:CG	37:BP:34:GLY:N	2.76	0.45
57:DA:1654:A:O2'	57:DA:1655:A:C8	2.48	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:118:PHE:CE1	25:DD:119:ALA:O	2.70	0.45
57:DA:996:A:C6	57:DA:1160:G:C2	3.05	0.45
3:AC:76:ILE:HA	3:AC:83:VAL:CG2	2.38	0.45
33:DL:110:VAL:O	33:DL:111:ILE:HG12	2.17	0.45
22:BA:2727:A:H2'	22:BA:2728:U:H6	1.82	0.45
30:DI:52:LEU:HD11	30:DI:78:LEU:CD2	2.47	0.45
46:DY:37:LEU:HD13	46:DY:42:LEU:CD1	2.47	0.45
32:DK:76:VAL:CG1	32:DK:77:ILE:N	2.80	0.45
1:AA:1320:C:O2'	1:AA:1321:U:O4'	2.35	0.45
59:DF:46:LYS:HE2	59:DF:83:PRO:HG3	1.97	0.45
11:AK:113:THR:HB	21:AU:28:LEU:HD11	1.98	0.45
31:DJ:30:THR:HG23	31:DJ:31:GLU:N	2.31	0.45
1:AA:1157:A:C6	1:AA:1180:A:C5	3.05	0.45
30:BI:52:LEU:HD12	30:BI:52:LEU:N	2.32	0.45
1:AA:500:G:C6	1:AA:546:A:C2	3.04	0.45
57:DA:362:A:C5	57:DA:363:G:C8	3.04	0.45
56:CP:40:ASN:HA	56:CP:41:PRO:HD3	1.77	0.45
8:CH:1:SER:O	8:CH:3:GLN:N	2.49	0.45
22:BA:2603:G:H2'	22:BA:2604:U:H6	1.82	0.45
1:AA:791:G:C5	1:AA:792:A:N7	2.84	0.45
22:BA:2823:A:C2'	22:BA:2824:C:H5'	2.47	0.45
22:BA:1654:A:O2'	25:BD:118:PHE:CD2	2.64	0.45
46:BY:56:LEU:O	46:BY:57:LEU:CB	2.55	0.45
9:AI:129:ARG:HA	9:AI:129:ARG:NH1	2.32	0.45
57:DA:1984:G:C6	57:DA:1985:C:C4	3.04	0.45
54:CG:124:SER:C	54:CG:126:ALA:H	2.19	0.45
4:CD:154:VAL:O	4:CD:157:ALA:HB3	2.16	0.45
16:AP:67:ILE:HG23	16:AP:72:ALA:HB2	1.99	0.45
22:BA:957:C:O2'	22:BA:959:A:O5'	2.35	0.45
29:DH:31:VAL:CB	29:DH:32:PRO:HD3	2.46	0.45
22:BA:1818:U:HO2'	22:BA:1819:A:P	2.39	0.45
57:DA:18:U:O2	57:DA:554:U:H5''	2.17	0.45
40:DS:59:GLU:OE2	40:DS:66:ILE:HD12	2.17	0.45
45:BX:70:LEU:O	45:BX:74:GLY:N	2.49	0.45
45:BX:71:ARG:HE	45:BX:77:TYR:HE2	1.64	0.45
57:DA:2595:G:N1	57:DA:2599:G:C6	2.85	0.45
57:DA:271:G:C6	57:DA:272:A:N6	2.85	0.45
25:DD:36:GLN:HE21	25:DD:38:LYS:NZ	2.14	0.45
33:BL:81:ASP:O	33:BL:82:LEU:CB	2.64	0.45
26:DE:29:HIS:HA	26:DE:32:VAL:CG2	2.45	0.45
57:DA:1526:C:N4	57:DA:1527:G:C6	2.85	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:49:PHE:CB	2:AB:212:TYR:OH	2.65	0.45
53:CA:1484:C:H2'	53:CA:1485:U:H6	1.81	0.45
22:BA:1535:A:O2'	22:BA:1536:C:OP1	2.34	0.45
55:CM:28:ARG:HA	55:CM:31:ALA:HB3	1.98	0.45
22:BA:1405:U:C2	22:BA:1406:U:C5	3.05	0.45
57:DA:2620:C:H2'	57:DA:2621:G:O4'	2.17	0.45
53:CA:293:G:C2	53:CA:305:G:N3	2.85	0.45
22:BA:1957:C:O2'	22:BA:1958:C:H5'	2.17	0.45
1:AA:1077:G:N1	1:AA:1081:A:C6	2.85	0.45
33:BL:89:VAL:HA	33:BL:121:THR:O	2.17	0.45
12:CL:89:LEU:HA	12:CL:90:PRO:HD2	1.60	0.45
9:CI:46:VAL:O	9:CI:79:ARG:HG3	2.16	0.45
41:BT:19:LYS:O	41:BT:20:ALA:C	2.54	0.45
57:DA:1601:G:H2'	57:DA:1602:U:O4'	2.17	0.45
1:AA:293:G:H2'	1:AA:294:U:H6	1.82	0.45
22:BA:1551:A:H2'	22:BA:1552:A:O4'	2.17	0.45
18:CR:31:TYR:CG	18:CR:54:LEU:HD21	2.51	0.45
22:BA:1577:C:H2'	22:BA:1578:U:O4'	2.16	0.45
2:CB:192:PRO:HB2	2:CB:198:VAL:HG11	1.98	0.45
48:D0:4:GLN:HG2	48:D0:4:GLN:O	2.16	0.45
40:DS:74:ILE:HG12	40:DS:74:ILE:O	2.17	0.45
31:BJ:128:ASN:ND2	31:BJ:128:ASN:O	2.50	0.45
38:BQ:88:GLU:C	38:BQ:88:GLU:OE1	2.54	0.45
44:BW:36:ILE:C	44:BW:37:VAL:O	2.53	0.45
57:DA:2218:G:H2'	57:DA:2219:U:C6	2.52	0.45
57:DA:600:G:N2	57:DA:605:G:O3'	2.49	0.45
53:CA:913:A:OP1	12:CL:43:LYS:HE3	2.17	0.45
22:BA:1059:G:C6	22:BA:1080:A:C6	3.05	0.45
57:DA:1671:U:O2	57:DA:1673:G:H8	1.99	0.45
57:DA:1673:G:C2'	57:DA:1674:G:H5'	2.47	0.45
57:DA:1992:G:N2	57:DA:1995:U:C5	2.84	0.45
54:CG:61:PHE:O	54:CG:63:VAL:N	2.48	0.45
57:DA:2836:U:HO2'	57:DA:2837:A:P	2.39	0.45
35:DN:45:ARG:HG2	35:DN:95:THR:HG21	1.99	0.45
53:CA:397:A:H3'	53:CA:397:A:N3	2.32	0.45
57:DA:1338:G:O2'	57:DA:1393:A:N1	2.45	0.45
57:DA:1087:G:C4	57:DA:1089:A:C2	3.05	0.45
57:DA:2314:A:H5''	59:DF:34:THR:OG1	2.17	0.45
57:DA:1716:U:O2'	57:DA:1717:A:C5'	2.65	0.45
57:DA:60:G:O2'	57:DA:61:C:P	2.75	0.45
57:DA:1607:C:C4'	57:DA:1608:A:C8	3.00	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:28:ASP:OD1	4:AD:33:ILE:HG12	2.17	0.45
41:BT:31:VAL:C	41:BT:32:LEU:HD23	2.37	0.45
53:CA:522:C:N4	12:CL:49:ARG:HH22	1.95	0.45
57:DA:1441:G:C2	57:DA:1551:A:C2	3.05	0.45
53:CA:1346:A:N1	54:CG:9:ARG:NH2	2.65	0.45
25:BD:98:VAL:O	25:BD:99:GLU:C	2.54	0.45
20:AT:72:ALA:O	20:AT:73:ARG:C	2.55	0.45
4:AD:97:LEU:HD22	4:AD:117:VAL:HG11	1.98	0.45
6:CF:92:THR:C	6:CF:93:LYS:HG2	2.36	0.45
14:AN:44:VAL:HG23	14:AN:45:LEU:N	2.26	0.45
57:DA:116:C:H2'	57:DA:117:G:O4'	2.17	0.45
1:AA:1001:C:H2'	1:AA:1002:G:C8	2.51	0.45
37:DP:64:SER:O	37:DP:66:GLY:N	2.50	0.45
23:BB:30:C:C5	23:BB:31:C:C6	3.05	0.45
38:BQ:67:ALA:HB1	38:BQ:105:PHE:CE1	2.52	0.45
57:DA:685:A:C2	57:DA:689:A:C6	3.05	0.45
57:DA:464:U:C1'	57:DA:686:U:C5	2.98	0.45
8:AH:9:MET:HG3	8:AH:26:MET:SD	2.57	0.45
22:BA:1450:G:C6	22:BA:1451:C:C4	3.04	0.45
1:AA:1322:C:O2'	1:AA:1323:G:H5'	2.17	0.45
35:DN:2:ARG:HD2	35:DN:5:LYS:HB3	1.99	0.45
59:DF:45:ASP:OD2	59:DF:47:LYS:HB2	2.17	0.45
35:BN:75:ILE:HD12	35:BN:79:LEU:HD12	1.99	0.45
57:DA:396:G:O2'	57:DA:397:U:C5'	2.65	0.45
4:AD:98:ASP:HB3	4:AD:114:ARG:HG2	1.99	0.45
2:AB:143:LEU:HA	2:AB:146:SER:OG	2.16	0.45
4:AD:57:LYS:NZ	4:AD:61:ARG:HD3	2.32	0.45
15:AO:29:ALA:CA	15:AO:84:LEU:HD21	2.42	0.45
22:BA:568:U:O5'	22:BA:945:A:N6	2.50	0.45
3:AC:107:LYS:HA	3:AC:108:PRO:HD2	1.79	0.45
24:BC:71:ASP:OD1	24:BC:188:ARG:NH1	2.47	0.45
34:BM:47:GLU:O	34:BM:48:ALA:C	2.54	0.45
2:AB:202:ASN:HB3	2:AB:208:ALA:CB	2.47	0.45
53:CA:1133:G:C6	53:CA:1134:G:N7	2.85	0.45
22:BA:2822:G:H2'	22:BA:2823:A:H5''	1.98	0.45
53:CA:1434:A:H2'	53:CA:1435:G:O4'	2.17	0.45
48:B0:48:TYR:O	48:B0:49:ARG:HB2	2.17	0.45
56:CP:44:SER:HB2	56:CP:46:LYS:CG	2.46	0.45
51:B3:54:LEU:HD12	51:B3:54:LEU:HA	1.69	0.45
57:DA:2266:A:H4'	57:DA:2267:A:O5'	2.17	0.45
40:BS:20:VAL:HG11	40:BS:44:ALA:HA	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1292:G:C6	53:CA:1293:C:C4	3.05	0.45
24:BC:242:HIS:O	24:BC:244:VAL:HG13	2.16	0.45
28:DG:43:LYS:HB2	28:DG:50:THR:O	2.17	0.45
51:D3:18:LYS:HD2	51:D3:19:GLY:H	1.82	0.45
22:BA:669:G:N3	22:BA:669:G:C2'	2.80	0.45
57:DA:1303:G:O2'	57:DA:1304:A:C5'	2.65	0.45
51:B3:35:LYS:O	51:B3:40:LYS:HE2	2.17	0.45
42:BU:3:LYS:O	42:BU:82:VAL:HG21	2.16	0.45
29:BH:78:VAL:CG2	29:BH:145:ASN:HD22	2.29	0.45
57:DA:2432:A:N1	45:DX:20:ALA:HA	2.32	0.45
57:DA:1666:G:O3'	32:DK:6:THR:HA	2.17	0.45
22:BA:2515:C:O2'	22:BA:2516:A:H5'	2.17	0.45
22:BA:749:A:H2	22:BA:753:A:HO2'	1.64	0.45
1:AA:1215:G:O2'	1:AA:1216:A:H5'	2.17	0.45
57:DA:2744:G:C4	57:DA:2761:A:C2	3.04	0.45
57:DA:749:A:H2'	57:DA:750:A:H8	1.82	0.45
57:DA:365:U:H2'	57:DA:366:C:C6	2.52	0.45
57:DA:1320:C:O2'	57:DA:1321:A:H8	2.00	0.45
57:DA:21:A:H2'	57:DA:22:C:H6	1.82	0.45
53:CA:46:G:O2'	53:CA:365:U:H1'	2.17	0.45
22:BA:2836:U:H2'	22:BA:2837:A:C8	2.52	0.45
7:AG:128:GLU:O	7:AG:129:ASN:C	2.56	0.45
57:DA:2511:U:O4	57:DA:2575:C:N3	2.49	0.45
22:BA:1231:U:O5'	22:BA:1231:U:H6	1.99	0.45
22:BA:880:G:C6	22:BA:881:G:N7	2.85	0.45
4:CD:150:LYS:HA	4:CD:150:LYS:HD3	1.82	0.45
57:DA:2885:G:N2	48:D0:31:LYS:HG2	2.31	0.45
43:DV:36:ALA:HB1	43:DV:37:PRO:HD2	1.98	0.45
28:BG:168:VAL:O	28:BG:170:THR:HG23	2.17	0.45
25:BD:152:PRO:O	25:BD:154:LYS:N	2.50	0.45
53:CA:980:C:O3'	14:CN:12:ARG:NH2	2.50	0.45
53:CA:1319:A:OP2	19:CS:4:LEU:HD21	2.17	0.45
57:DA:2353:G:H4'	44:DW:28:GLU:HG2	1.98	0.45
57:DA:1135:C:N4	57:DA:1139:G:O6	2.50	0.45
32:BK:18:ARG:HD2	32:BK:18:ARG:HA	1.72	0.45
12:AL:82:ARG:HH11	12:AL:82:ARG:CG	2.06	0.45
22:BA:1019:U:C4	22:BA:1020:A:N6	2.85	0.45
57:DA:445:C:H2'	57:DA:446:G:C8	2.51	0.45
10:CJ:80:THR:C	10:CJ:84:VAL:HG22	2.37	0.45
57:DA:1205:A:N7	26:DE:165:HIS:ND1	2.65	0.45
22:BA:2026:U:H2'	22:BA:2027:G:O4'	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2052:A:OP1	25:DD:146:ILE:HG12	2.17	0.45
57:DA:1536:C:H5''	57:DA:1537:G:O5'	2.17	0.45
4:CD:29:THR:C	4:CD:31:CYS:N	2.71	0.45
4:CD:8:LEU:HD13	4:CD:8:LEU:HA	1.75	0.45
53:CA:1071:C:C5'	5:CE:53:ARG:NH1	2.80	0.45
57:DA:1607:C:N4	57:DA:1622:G:N7	2.65	0.45
54:CG:100:MET:HE2	54:CG:100:MET:H	1.81	0.45
57:DA:1883:U:H3'	57:DA:1884:G:H8	1.82	0.45
24:DC:83:ASP:HA	24:DC:84:PRO:HD2	1.79	0.45
22:BA:564:C:O2'	22:BA:565:C:H5'	2.17	0.45
57:DA:1817:G:H5''	24:DC:86:ARG:NH1	2.32	0.45
24:DC:161:VAL:CG1	24:DC:173:LEU:HB2	2.47	0.45
53:CA:1526:G:OP2	21:CU:38:GLU:HB2	2.17	0.45
25:DD:113:SER:HB2	25:DD:168:GLU:OE1	2.16	0.45
35:BN:71:ARG:NH2	35:BN:71:ARG:CG	2.62	0.45
22:BA:703:U:H2'	22:BA:704:G:H5'	1.98	0.45
1:AA:367:U:O2'	1:AA:368:U:H4'	2.17	0.45
53:CA:919:A:C2	53:CA:920:U:C5	3.05	0.45
1:AA:106:C:H2'	1:AA:107:G:O4'	2.17	0.45
1:AA:1258:G:C2	1:AA:1259:C:C5	3.05	0.45
2:CB:17:HIS:CG	2:CB:18:GLN:N	2.84	0.45
22:BA:2223:G:H2'	22:BA:2224:G:H5'	1.98	0.45
10:AJ:49:PHE:CE1	10:AJ:67:ILE:HG13	2.38	0.45
1:AA:1196:A:O2'	1:AA:1197:A:P	2.75	0.45
22:BA:249:C:HO2'	22:BA:250:G:P	2.40	0.45
57:DA:1171:G:C2	57:DA:1179:G:N3	2.84	0.45
2:CB:116:LEU:HD23	2:CB:119:GLN:OE1	2.17	0.45
2:CB:119:GLN:HE22	2:CB:136:ARG:HH12	1.65	0.45
42:DU:43:LYS:HE3	42:DU:45:GLN:CD	2.38	0.45
22:BA:480:A:H3'	22:BA:481:G:H5''	1.99	0.45
28:BG:9:VAL:HA	28:BG:47:ASN:O	2.17	0.45
1:AA:69:G:H2'	1:AA:69:G:N3	2.30	0.45
31:BJ:18:VAL:HG22	31:BJ:140:LEU:CD1	2.47	0.45
22:BA:1432:G:C2'	22:BA:1433:A:H5'	2.46	0.45
22:BA:1842:G:H2'	22:BA:1843:C:H6	1.78	0.45
53:CA:71:A:C2	53:CA:72:A:C5	3.05	0.45
53:CA:71:A:O2'	53:CA:72:A:O4'	2.23	0.45
53:CA:518:C:H2'	53:CA:530:G:C8	2.52	0.45
57:DA:2283:C:N4	57:DA:2389:G:C6	2.85	0.45
43:DV:61:LEU:CD2	43:DV:61:LEU:H	2.24	0.45
22:BA:801:G:C8	26:BE:50:ALA:HB2	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1215:G:N3	53:CA:1216:A:C8	2.85	0.45
16:AP:16:PHE:O	16:AP:16:PHE:CD1	2.70	0.45
22:BA:1380:G:N3	22:BA:1380:G:H2'	2.31	0.45
45:BX:73:ARG:HG2	45:BX:75:GLU:HG3	1.98	0.45
3:AC:13:ILE:HD13	3:AC:13:ILE:N	2.32	0.45
22:BA:642:U:O2	22:BA:644:A:C8	2.70	0.45
51:B3:56:LEU:N	51:B3:56:LEU:HD22	2.31	0.45
3:CC:183:TYR:HE1	3:CC:198:LYS:HB3	1.82	0.45
26:DE:5:LEU:HD13	26:DE:122:GLU:HB2	1.98	0.45
57:DA:1594:U:H2'	57:DA:1595:C:H6	1.82	0.45
25:BD:159:LYS:HZ2	25:BD:160:LYS:N	2.15	0.45
34:DM:112:LEU:O	34:DM:112:LEU:HD13	2.17	0.45
22:BA:6:A:C2'	22:BA:7:G:H5'	2.47	0.45
31:BJ:37:ARG:HA	31:BJ:118:MET:CE	2.46	0.45
57:DA:263:G:H2'	57:DA:264:C:O4'	2.16	0.45
57:DA:1867:G:O6	57:DA:1875:G:N2	2.49	0.45
57:DA:195:A:C5	57:DA:198:C:C5	3.05	0.45
53:CA:554:A:H2'	53:CA:555:U:H6	1.82	0.45
17:CQ:47:ASP:OD1	17:CQ:74:LEU:HD23	2.17	0.45
17:CQ:47:ASP:HB3	17:CQ:74:LEU:HB3	1.99	0.45
1:AA:161:A:N6	1:AA:162:A:C6	2.85	0.45
24:BC:261:ARG:HG2	24:BC:261:ARG:O	2.17	0.45
57:DA:2107:G:C2	57:DA:2183:A:C2	3.05	0.45
22:BA:770:G:H5''	50:B2:10:LEU:HD23	1.99	0.45
22:BA:441:U:H2'	22:BA:442:G:C8	2.52	0.45
1:AA:1374:A:H2'	1:AA:1375:A:H8	1.82	0.45
5:CE:74:ALA:O	5:CE:75:LEU:HB2	2.16	0.45
14:CN:72:PHE:HB2	14:CN:78:LEU:O	2.16	0.45
57:DA:843:G:C6	57:DA:844:A:N6	2.85	0.45
22:BA:191:A:H2'	22:BA:192:C:C6	2.52	0.45
22:BA:2849:U:C6	22:BA:2867:G:N2	2.85	0.45
1:AA:603:U:H2'	1:AA:604:G:H8	1.81	0.45
27:BF:103:ILE:HG12	27:BF:103:ILE:H	1.55	0.45
57:DA:145:C:H6	57:DA:145:C:O5'	2.00	0.45
22:BA:2819:G:H5''	63:BA:3807:HOH:O	2.17	0.45
43:DV:32:GLY:O	43:DV:33:GLY:C	2.55	0.45
1:AA:1176:A:H2'	1:AA:1177:G:C8	2.52	0.45
22:BA:1615:C:H2'	22:BA:1617:C:C6	2.52	0.45
53:CA:234:C:O2'	53:CA:235:C:H5'	2.16	0.45
25:BD:151:THR:O	25:BD:153:GLY:N	2.50	0.44
58:DB:54:G:C2	59:DF:25:MET:HE1	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1359:A:OP1	57:DA:1360:G:OP2	2.35	0.44
57:DA:2207:C:C4	57:DA:2218:G:N1	2.86	0.44
44:DW:43:LYS:HD3	44:DW:43:LYS:HA	1.62	0.44
22:BA:1062:G:C6	22:BA:1063:G:C6	3.05	0.44
9:CI:51:LEU:HD11	9:CI:82:ILE:HG22	1.99	0.44
8:CH:28:SER:HA	8:CH:58:LEU:CD1	2.26	0.44
57:DA:455:C:N3	57:DA:473:G:C5'	2.79	0.44
57:DA:2360:G:H1'	33:DL:60:ARG:HD3	1.99	0.44
57:DA:584:C:H2'	57:DA:585:G:H8	1.81	0.44
41:DT:29:THR:OG1	41:DT:85:VAL:HB	2.17	0.44
15:CO:38:LEU:HD12	15:CO:41:HIS:CB	2.47	0.44
57:DA:1206:G:O2'	57:DA:1207:C:C5'	2.65	0.44
1:AA:206:C:H2'	1:AA:207:C:C4'	2.46	0.44
57:DA:1056:G:H1'	57:DA:1103:A:C6	2.52	0.44
57:DA:1099:G:H5''	57:DA:1100:C:OP2	2.16	0.44
2:CB:103:TRP:HA	2:CB:106:VAL:CB	2.44	0.44
53:CA:1229:A:O2'	53:CA:1230:C:O4'	2.35	0.44
1:AA:1279:G:H1'	1:AA:1282:C:H42	1.77	0.44
57:DA:1288:G:C8	57:DA:1327:A:N6	2.85	0.44
24:DC:147:PRO:HD3	24:DC:184:GLU:CG	2.47	0.44
55:CM:11:HIS:HA	55:CM:44:ILE:HB	1.99	0.44
55:CM:18:LEU:N	55:CM:18:LEU:HD12	2.32	0.44
1:AA:1336:C:HO2'	1:AA:1337:G:P	2.35	0.44
35:DN:38:LEU:HB3	35:DN:39:PRO:CD	2.42	0.44
57:DA:1429:G:N3	57:DA:1430:G:C8	2.85	0.44
57:DA:374:A:C6	57:DA:401:A:N7	2.85	0.44
5:AE:149:PRO:C	5:AE:151:MET:H	2.19	0.44
45:DX:63:ILE:HD13	45:DX:64:ASP:OD2	2.17	0.44
1:AA:258:G:H2'	1:AA:259:G:O4'	2.17	0.44
57:DA:1565:C:O3'	24:DC:17:LYS:HE2	2.16	0.44
24:BC:75:ALA:HB2	24:BC:95:TYR:CD2	2.52	0.44
57:DA:2513:A:C6	57:DA:2514:U:C4	3.05	0.44
57:DA:128:C:H2'	57:DA:129:C:C5	2.52	0.44
22:BA:1419:A:C2	22:BA:1421:G:H1'	2.53	0.44
26:BE:112:LEU:HD11	26:BE:180:LEU:O	2.17	0.44
26:BE:172:ALA:C	26:BE:174:GLY:H	2.20	0.44
24:BC:106:PRO:O	24:BC:109:LEU:HD13	2.17	0.44
15:CO:44:GLU:O	15:CO:45:HIS:C	2.55	0.44
20:AT:24:ARG:O	20:AT:27:MET:HB3	2.18	0.44
57:DA:1817:G:O2'	57:DA:1818:U:C5'	2.61	0.44
54:CG:116:ALA:O	54:CG:120:ALA:HB3	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:22:GLY:O	15:CO:23:SER:C	2.56	0.44
22:BA:1964:G:C2	22:BA:1967:C:C5	3.05	0.44
11:CK:125:LYS:C	21:CU:33:ARG:HE	2.21	0.44
1:AA:531:U:C4'	1:AA:532:A:O5'	2.59	0.44
22:BA:1866:A:H2'	22:BA:1867:G:O4'	2.17	0.44
28:BG:26:LYS:HA	28:BG:78:VAL:HG11	1.98	0.44
21:AU:33:ARG:HE	21:AU:34:ARG:HG3	1.83	0.44
24:DC:66:PHE:HA	24:DC:142:ASN:HD21	1.82	0.44
57:DA:492:A:N6	40:DS:49:LYS:HD2	2.32	0.44
12:AL:43:LYS:HZ2	12:AL:44:PRO:HD2	1.83	0.44
57:DA:476:G:HO2'	57:DA:477:A:P	2.39	0.44
57:DA:503:A:C5	57:DA:506:G:C6	3.04	0.44
22:BA:1943:U:O2	22:BA:1943:U:O4'	2.33	0.44
22:BA:1798:U:P	24:BC:255:LYS:HA	2.56	0.44
12:CL:97:VAL:O	12:CL:98:ARG:C	2.56	0.44
29:BH:67:ALA:HA	29:BH:138:VAL:CB	2.44	0.44
53:CA:259:G:H2'	53:CA:260:G:O4'	2.17	0.44
22:BA:2778:A:H4'	22:BA:2779:U:OP2	2.14	0.44
57:DA:1734:G:N3	57:DA:1735:A:C8	2.85	0.44
57:DA:586:A:H5'	26:DE:84:THR:HG21	1.99	0.44
1:AA:738:C:O2'	1:AA:739:C:H5'	2.17	0.44
53:CA:607:A:H2'	53:CA:608:A:C8	2.52	0.44
1:AA:1067:A:H1'	1:AA:1068:G:C8	2.52	0.44
13:AM:86:ARG:NH2	13:AM:97:ARG:HA	2.32	0.44
57:DA:2436:G:C2	57:DA:2437:G:C8	3.05	0.44
8:AH:125:ILE:O	8:AH:126:CYS:HB3	2.16	0.44
8:AH:74:ILE:CD1	8:AH:128:VAL:HG22	2.47	0.44
22:BA:2378:A:C5	22:BA:2379:G:H1'	2.52	0.44
53:CA:552:U:H2'	53:CA:553:A:H8	1.82	0.44
53:CA:1106:G:O2'	3:CC:168:ARG:NH1	2.50	0.44
36:DO:67:ASN:H	36:DO:70:ALA:HB3	1.80	0.44
12:CL:72:ASN:HD21	12:CL:104:SER:H	1.65	0.44
53:CA:892:A:H2'	53:CA:893:C:H6	1.82	0.44
10:AJ:89:ARG:O	10:AJ:90:LEU:HD23	2.17	0.44
22:BA:1165:A:H2'	22:BA:1166:G:C8	2.50	0.44
36:BO:3:LYS:CG	36:BO:4:LYS:H	2.30	0.44
1:AA:1435:G:H2'	1:AA:1436:U:H6	1.82	0.44
12:CL:51:VAL:HG12	12:CL:52:CYS:N	2.32	0.44
15:CO:58:MET:O	15:CO:61:GLN:HB2	2.16	0.44
25:BD:140:HIS:NE2	63:BD:301:HOH:O	2.36	0.44
22:BA:1442:U:H2'	22:BA:1443:U:H6	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:773:G:C4	1:AA:774:G:C8	3.05	0.44
2:CB:23:ASN:HB2	2:CB:189:ASN:C	2.37	0.44
21:CU:8:ASN:ND2	21:CU:9:GLU:H	2.15	0.44
57:DA:438:G:O6	57:DA:439:A:N6	2.50	0.44
43:BV:88:HIS:CG	43:BV:89:ILE:N	2.85	0.44
40:DS:7:HIS:CE1	40:DS:10:ALA:HA	2.53	0.44
54:CG:48:THR:O	54:CG:52:ARG:HD3	2.18	0.44
22:BA:453:A:H5'	63:BA:3242:HOH:O	2.17	0.44
22:BA:188:G:H2'	22:BA:189:G:O4'	2.17	0.44
40:BS:8:ARG:O	40:BS:9:HIS:HB2	2.17	0.44
19:AS:54:ARG:HG3	19:AS:54:ARG:H	1.62	0.44
19:CS:33:TRP:H	19:CS:33:TRP:HE3	1.62	0.44
3:CC:11:LEU:HA	3:CC:11:LEU:HD23	1.72	0.44
47:DZ:5:LYS:HE3	47:DZ:5:LYS:HB2	1.73	0.44
53:CA:659:U:H6	53:CA:659:U:O5'	1.99	0.44
5:AE:46:GLY:HA3	5:AE:70:MET:HA	1.98	0.44
27:BF:1:ALA:O	27:BF:2:LYS:HB3	2.17	0.44
37:BP:52:ARG:O	37:BP:53:GLY:C	2.55	0.44
44:BW:28:GLU:O	44:BW:29:SER:C	2.55	0.44
57:DA:2213:U:O2'	57:DA:2214:C:H5'	2.16	0.44
22:BA:2013:A:N3	40:BS:88:ARG:NH1	2.65	0.44
53:CA:1217:C:H2'	53:CA:1218:C:C6	2.52	0.44
57:DA:2336:A:C8	44:DW:40:ARG:NH2	2.85	0.44
57:DA:1022:G:C6	57:DA:1140:C:C5	3.04	0.44
21:AU:10:PRO:O	21:AU:11:PHE:CB	2.63	0.44
53:CA:1119:C:OP1	9:CI:10:ARG:NH2	2.51	0.44
57:DA:783:A:O3'	57:DA:2588:G:H4'	2.17	0.44
1:AA:244:U:C6	1:AA:894:G:N2	2.85	0.44
57:DA:33:C:HO2'	57:DA:34:U:H5'	1.73	0.44
49:D1:7:LYS:C	49:D1:8:ILE:HD13	2.38	0.44
57:DA:2060:A:C2'	26:DE:63:LYS:NZ	2.67	0.44
34:BM:33:LEU:HD21	34:BM:128:THR:HB	1.99	0.44
1:AA:1363:A:C8	1:AA:1365:G:C5	3.06	0.44
57:DA:1400:U:O2'	57:DA:1401:G:O4'	2.18	0.44
57:DA:1062:G:C8	57:DA:1088:A:H8	2.34	0.44
22:BA:1507:C:H5''	22:BA:1508:A:OP2	2.17	0.44
57:DA:2845:U:C2	57:DA:2846:G:C8	3.05	0.44
33:BL:30:THR:O	33:BL:32:GLY:N	2.49	0.44
1:AA:450:G:N7	1:AA:481:G:C6	2.85	0.44
1:AA:555:U:H2'	1:AA:556:C:C6	2.52	0.44
1:AA:554:A:O2'	1:AA:555:U:H5'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:960:A:O2'	57:DA:962:G:H5'	2.17	0.44
22:BA:1421:G:O2'	22:BA:1494:A:N6	2.50	0.44
57:DA:2345:G:C5	57:DA:2381:A:C2	3.05	0.44
26:BE:147:LEU:HD13	26:BE:147:LEU:O	2.17	0.44
24:BC:90:ILE:HA	24:BC:104:LEU:O	2.18	0.44
57:DA:873:C:C4'	34:DM:64:TRP:CD1	2.95	0.44
57:DA:627:A:O2'	57:DA:628:G:O5'	2.36	0.44
57:DA:638:G:H2'	57:DA:639:U:C5	2.52	0.44
22:BA:1664:A:H1'	22:BA:2726:A:N1	2.33	0.44
32:BK:69:VAL:O	32:BK:76:VAL:HG13	2.17	0.44
57:DA:139:U:N3	41:DT:1:MET:HA	2.33	0.44
20:AT:28:ARG:O	20:AT:31:ILE:HB	2.17	0.44
22:BA:563:A:C6	22:BA:564:C:C4	3.05	0.44
35:DN:72:ASP:O	35:DN:75:ILE:HG13	2.17	0.44
57:DA:776:G:H1'	57:DA:793:A:C6	2.52	0.44
28:DG:83:THR:O	28:DG:140:ILE:HD12	2.18	0.44
22:BA:1333:G:C2	22:BA:1334:G:C8	3.05	0.44
2:CB:34:ARG:HD3	2:CB:35:ASN:N	2.32	0.44
1:AA:596:A:N3	1:AA:597:G:C8	2.85	0.44
21:AU:33:ARG:HE	21:AU:34:ARG:CG	2.30	0.44
57:DA:188:G:C6	57:DA:189:G:C4	3.06	0.44
38:BQ:24:TYR:CG	38:BQ:25:GLY:N	2.85	0.44
38:BQ:25:GLY:O	38:BQ:29:ARG:HG3	2.17	0.44
33:DL:17:LYS:HE2	33:DL:19:LEU:HD13	2.00	0.44
57:DA:1967:C:C5'	57:DA:1967:C:H6	2.24	0.44
39:BR:24:LYS:HE2	39:BR:24:LYS:HB3	1.82	0.44
53:CA:491:G:HO2'	53:CA:492:C:H5'	1.80	0.44
47:BZ:52:PHE:C	47:BZ:52:PHE:CD2	2.89	0.44
57:DA:2658:C:H5''	28:DG:157:LYS:HD3	1.99	0.44
29:BH:57:LYS:O	29:BH:61:VAL:HG23	2.17	0.44
1:AA:473:U:H2'	1:AA:474:G:C8	2.44	0.44
29:DH:21:VAL:HG22	29:DH:22:LYS:H	1.81	0.44
1:AA:1348:U:C2'	1:AA:1349:A:H8	2.30	0.44
9:CI:117:LEU:HD23	9:CI:123:ARG:HD3	1.99	0.44
53:CA:1046:A:O2'	53:CA:1047:G:H5'	2.16	0.44
20:AT:29:THR:O	20:AT:33:LYS:HE2	2.17	0.44
40:DS:41:LYS:C	40:DS:43:ALA:N	2.69	0.44
42:BU:91:LYS:O	42:BU:92:VAL:HB	2.18	0.44
7:AG:3:ARG:HG3	7:AG:4:ARG:N	2.31	0.44
22:BA:644:A:H2'	22:BA:645:C:C4'	2.47	0.44
57:DA:1034:G:O6	57:DA:1122:G:C6	2.71	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:52:VAL:O	26:DE:74:LYS:NZ	2.46	0.44
53:CA:487:A:H3'	53:CA:488:C:H6	1.81	0.44
7:AG:92:PRO:C	7:AG:93:VAL:HG22	2.38	0.44
36:DO:26:LEU:HB3	36:DO:92:PHE:CD1	2.52	0.44
25:BD:35:THR:CG2	25:BD:51:THR:HG22	2.47	0.44
53:CA:131:A:C6	53:CA:232:G:C6	3.06	0.44
33:BL:39:LYS:C	33:BL:40:SER:O	2.55	0.44
57:DA:563:A:N3	38:DQ:36:GLN:NE2	2.62	0.44
8:CH:36:ALA:O	8:CH:45:ILE:HD11	2.18	0.44
53:CA:647:C:H2'	53:CA:648:A:C8	2.53	0.44
24:DC:250:GLN:HG2	24:DC:250:GLN:H	1.46	0.44
1:AA:482:A:H2'	1:AA:483:C:O4'	2.17	0.44
22:BA:1229:C:H2'	22:BA:1230:A:H8	1.82	0.44
36:BO:7:ARG:CG	36:BO:96:GLY:HA3	2.47	0.44
8:AH:66:GLN:HB3	8:AH:67:GLY:H	1.52	0.44
10:AJ:63:ASP:OD2	14:AN:97:LYS:NZ	2.50	0.44
29:BH:132:PHE:CG	29:BH:133:GLN:N	2.85	0.44
1:AA:1418:A:H2'	1:AA:1419:G:O4'	2.16	0.44
22:BA:2596:U:H6	22:BA:2596:U:O5'	1.99	0.44
22:BA:2454:G:H1'	63:BA:3531:HOH:O	2.17	0.44
31:BJ:44:TYR:O	31:BJ:45:THR:CG2	2.63	0.44
25:BD:149:ASN:CG	25:BD:150:GLN:N	2.68	0.44
44:BW:21:GLY:O	44:BW:22:VAL:HB	2.17	0.44
22:BA:2013:A:OP1	40:BS:97:LEU:N	2.39	0.44
53:CA:983:A:O2'	53:CA:984:C:C5'	2.59	0.44
57:DA:782:A:OP1	57:DA:782:A:H8	1.99	0.44
24:DC:16:VAL:O	24:DC:202:ARG:HA	2.18	0.44
4:CD:2:ARG:HH21	4:CD:114:ARG:CD	2.09	0.44
57:DA:571:U:O2'	57:DA:573:U:H6	1.99	0.44
53:CA:39:G:C4	53:CA:404:G:N2	2.86	0.44
1:AA:976:G:OP1	14:AN:70:HIS:ND1	2.48	0.44
10:CJ:44:THR:HG23	10:CJ:70:HIS:CG	2.53	0.44
44:DW:9:THR:HG23	44:DW:10:ARG:CG	2.31	0.44
57:DA:1531:C:H2'	57:DA:1532:A:O4'	2.17	0.44
57:DA:1059:G:N1	57:DA:1088:A:C2	2.86	0.44
53:CA:1072:G:H2'	53:CA:1073:U:O4'	2.17	0.44
57:DA:372:G:N2	57:DA:400:G:H2'	2.32	0.44
57:DA:1286:A:N9	57:DA:1289:C:N4	2.65	0.44
57:DA:1325:U:O2'	57:DA:1326:U:H5'	2.18	0.44
57:DA:1611:C:O2'	57:DA:1612:C:O5'	2.35	0.44
57:DA:1429:G:O2'	57:DA:1430:G:P	2.75	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1731:G:C5	22:BA:1733:G:N7	2.85	0.44
5:AE:153:ALA:O	5:AE:154:ALA:C	2.56	0.44
57:DA:2053:G:H2'	57:DA:2054:A:O4'	2.17	0.44
57:DA:2568:U:H2'	57:DA:2569:G:O4'	2.18	0.44
32:BK:108:ARG:HG3	32:BK:108:ARG:O	2.18	0.44
37:BP:33:GLU:CG	37:BP:36:LYS:HD2	2.47	0.44
24:BC:109:LEU:CD2	24:BC:110:LYS:N	2.80	0.44
25:DD:141:ARG:HB3	25:DD:141:ARG:NH1	2.33	0.44
22:BA:2390:U:OP2	51:B3:34:LYS:HE2	2.17	0.44
57:DA:636:G:O5'	33:DL:128:THR:HG23	2.16	0.44
57:DA:1297:C:N3	57:DA:1298:C:C5	2.84	0.44
21:AU:14:ALA:O	21:AU:15:LEU:HD12	2.17	0.44
36:BO:53:THR:HB	36:BO:65:THR:CG2	2.44	0.44
46:DY:57:LEU:O	46:DY:60:LYS:HE3	2.17	0.44
57:DA:716:A:H2'	57:DA:717:C:O4'	2.17	0.44
45:DX:4:CYS:CB	45:DX:9:LYS:H	2.28	0.44
21:AU:39:LYS:N	21:AU:40:PRO:CD	2.80	0.44
25:DD:106:LYS:CB	25:DD:206:ALA:HB3	2.43	0.44
33:DL:17:LYS:HZ1	33:DL:19:LEU:HD22	1.82	0.44
47:BZ:35:VAL:CG2	47:BZ:37:ARG:NH1	2.79	0.44
53:CA:1137:C:H4'	53:CA:1138:G:C2	2.52	0.44
12:CL:80:LEU:HB3	12:CL:97:VAL:HG22	1.99	0.44
8:AH:77:VAL:O	8:AH:78:SER:C	2.56	0.44
1:AA:878:A:C5'	8:AH:80:PRO:HG2	2.47	0.44
27:BF:87:LYS:HG3	27:BF:88:VAL:N	2.31	0.44
11:AK:39:ASN:O	11:AK:40:ALA:CB	2.65	0.44
24:BC:250:GLN:N	24:BC:250:GLN:HE21	2.15	0.44
43:DV:44:HIS:NE2	43:DV:85:LYS:HD3	2.32	0.44
57:DA:2282:G:O2'	57:DA:2283:C:OP2	2.28	0.44
1:AA:1049:U:H4'	1:AA:1050:G:OP2	2.16	0.44
29:DH:21:VAL:HG22	29:DH:22:LYS:N	2.33	0.44
53:CA:995:C:O2'	53:CA:996:A:O5'	2.33	0.44
57:DA:3:U:C5	57:DA:4:U:C5	3.04	0.44
27:BF:8:LYS:O	27:BF:12:VAL:CG1	2.64	0.44
22:BA:2332:C:OP1	44:BW:44:PHE:CZ	2.70	0.44
22:BA:2841:C:H2'	22:BA:2842:G:H8	1.82	0.44
57:DA:1244:A:O2'	26:DE:29:HIS:CE1	2.70	0.44
3:CC:86:LEU:O	3:CC:90:VAL:HG22	2.17	0.44
29:DH:24:GLY:O	29:DH:25:TYR:C	2.55	0.44
22:BA:794:A:H2'	22:BA:795:C:H6	1.79	0.44
53:CA:461:A:O5'	53:CA:462:G:OP2	2.36	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:686:U:O4	50:B2:12:ARG:NH2	2.50	0.44
57:DA:749:A:C2	57:DA:750:A:C8	3.06	0.44
6:CF:45:ARG:HG2	6:CF:46:GLN:N	2.32	0.44
22:BA:395:U:O2'	22:BA:396:G:C8	2.70	0.44
22:BA:396:G:O5'	22:BA:396:G:H8	2.00	0.44
1:AA:1136:C:H4'	1:AA:1137:C:OP1	2.17	0.44
21:AU:38:GLU:OE2	21:AU:41:THR:HG21	2.17	0.44
56:CP:6:LEU:HD13	56:CP:17:TYR:CD2	2.53	0.44
53:CA:179:A:H2'	53:CA:180:U:H6	1.81	0.44
29:DH:136:SER:C	29:DH:137:GLU:HG3	2.38	0.44
34:BM:13:HIS:O	34:BM:14:LYS:CB	2.63	0.44
1:AA:1234:C:C2'	1:AA:1235:U:H5'	2.48	0.44
22:BA:1361:G:C5	22:BA:1371:G:N2	2.86	0.44
57:DA:2550:G:N2	57:DA:2559:C:H1'	2.32	0.44
22:BA:1442:U:H2'	22:BA:1443:U:C6	2.52	0.44
1:AA:1294:G:C6	1:AA:1295:U:C4	3.05	0.44
33:DL:84:LYS:O	33:DL:85:VAL:HB	2.17	0.44
57:DA:2473:U:OP2	57:DA:2473:U:H6	2.00	0.44
57:DA:2693:G:O2'	57:DA:2694:G:H5'	2.18	0.44
22:BA:1215:G:C5	22:BA:1216:G:N7	2.85	0.44
22:BA:1220:G:H2'	22:BA:1221:C:O4'	2.17	0.44
41:DT:78:SER:OG	41:DT:79:ASP:N	2.51	0.44
22:BA:282:A:H2'	22:BA:283:G:C8	2.52	0.44
22:BA:1193:G:O2'	22:BA:1194:A:H5'	2.17	0.44
48:D0:16:ARG:O	48:D0:19:ASP:N	2.48	0.44
10:CJ:49:PHE:CE2	14:CN:73:LEU:HD13	2.52	0.44
1:AA:137:U:H1'	1:AA:227:G:N2	2.31	0.44
57:DA:544:C:N4	57:DA:550:C:N4	2.65	0.44
57:DA:1370:C:H2'	57:DA:1371:G:C8	2.52	0.44
15:AO:40:GLY:O	15:AO:43:ALA:HB3	2.18	0.44
24:DC:43:ASN:ND2	24:DC:44:ASN:H	2.15	0.44
2:CB:83:ALA:O	2:CB:85:SER:N	2.51	0.44
28:BG:116:LEU:HG	28:BG:120:ILE:HD12	1.98	0.44
28:BG:168:VAL:HG23	28:BG:168:VAL:O	2.17	0.44
44:BW:30:VAL:HG23	44:BW:59:PHE:CD1	2.53	0.44
44:BW:37:VAL:C	44:BW:38:ARG:CG	2.82	0.44
53:CA:976:G:O5'	53:CA:1358:U:O2'	2.34	0.44
53:CA:977:A:H4'	53:CA:981:U:O2	2.17	0.44
14:CN:8:ARG:HH11	14:CN:12:ARG:NH2	2.14	0.44
2:CB:141:GLU:HG2	2:CB:145:ASN:HD21	1.82	0.44
57:DA:16:C:O3'	48:D0:10:SER:OG	2.36	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:571:U:C6	57:DA:575:A:N6	2.86	0.44
53:CA:502:A:C4'	53:CA:550:G:H4'	2.47	0.44
53:CA:1153:G:C6	53:CA:1154:G:N7	2.85	0.44
31:DJ:35:ARG:HH12	31:DJ:140:LEU:HD21	1.82	0.44
58:DB:24:G:H4'	58:DB:26:C:H5	1.81	0.44
57:DA:1331:G:C4	57:DA:1333:G:N7	2.85	0.44
2:CB:13:VAL:HG23	2:CB:211:LEU:HD22	2.00	0.44
1:AA:452:A:H2'	1:AA:453:G:O4'	2.18	0.44
53:CA:522:C:O4'	53:CA:536:C:H4'	2.17	0.44
28:DG:91:VAL:N	28:DG:93:TYR:CD2	2.85	0.44
57:DA:1710:G:H2'	57:DA:1711:A:O4'	2.17	0.44
25:DD:119:ALA:CB	25:DD:163:GLY:C	2.86	0.44
30:DI:11:GLN:OE1	30:DI:74:PRO:HG2	2.18	0.44
29:BH:9:VAL:HG12	29:BH:9:VAL:O	2.17	0.44
22:BA:575:A:OP2	22:BA:2055:C:C5	2.69	0.44
1:AA:198:G:N3	1:AA:199:A:C8	2.85	0.44
28:DG:84:LYS:HB2	28:DG:132:LEU:H	1.82	0.44
59:DF:48:LEU:HG	59:DF:49:LEU:CD2	2.47	0.44
53:CA:219:U:H2'	53:CA:220:G:C8	2.47	0.44
24:DC:75:ALA:HB1	24:DC:93:VAL:HG22	1.99	0.44
25:BD:11:MET:H	25:BD:26:VAL:H	1.65	0.44
25:DD:124:ARG:NH1	25:DD:125:TRP:CZ2	2.85	0.44
51:D3:41:ARG:HB3	51:D3:41:ARG:CZ	2.47	0.44
57:DA:2056:G:C2	57:DA:2057:G:N7	2.85	0.44
57:DA:443:A:C4	26:DE:40:ARG:HD3	2.52	0.44
3:AC:155:ARG:HG2	3:AC:159:ALA:O	2.16	0.44
22:BA:948:C:H6	22:BA:948:C:O5'	1.99	0.44
30:BI:30:GLN:NE2	30:BI:32:VAL:HB	2.32	0.44
5:CE:14:LEU:HD12	5:CE:15:ILE:H	1.82	0.44
1:AA:363:A:C2	1:AA:364:A:C4	3.06	0.44
12:CL:82:ARG:HB2	12:CL:97:VAL:HG12	1.99	0.44
22:BA:2340:A:H2'	22:BA:2341:G:C8	2.51	0.44
2:AB:209:VAL:O	2:AB:211:LEU:N	2.50	0.44
22:BA:163:C:O2'	22:BA:164:C:P	2.76	0.44
37:DP:28:LYS:HB2	37:DP:28:LYS:NZ	2.28	0.44
22:BA:141:G:C5'	22:BA:142:A:C8	3.01	0.44
22:BA:142:A:H8	22:BA:142:A:H5''	1.81	0.44
57:DA:2653:U:C4	57:DA:2654:A:C5	3.05	0.44
1:AA:1108:G:C5	1:AA:1109:C:C6	3.06	0.44
57:DA:411:G:H4'	57:DA:412:A:OP1	2.16	0.44
20:CT:64:GLY:O	20:CT:67:HIS:HB2	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:29:PHE:CZ	24:BC:31:PRO:HG2	2.52	0.44
22:BA:1912:A:N1	22:BA:1919:A:N7	2.66	0.44
41:BT:24:MET:HE2	41:BT:27:SER:O	2.17	0.44
33:BL:56:PRO:HB2	33:BL:58:TYR:CD2	2.52	0.44
22:BA:2102:G:H2'	22:BA:2103:C:C6	2.52	0.44
57:DA:1526:C:H2'	57:DA:1527:G:C8	2.53	0.44
57:DA:2061:G:C8	57:DA:2501:C:H4'	2.53	0.44
27:BF:127:TYR:O	27:BF:128:SER:CB	2.65	0.44
53:CA:1009:U:H2'	53:CA:1010:U:H6	1.80	0.44
15:AO:42:PHE:CD1	15:AO:55:LEU:HD22	2.53	0.44
57:DA:1865:U:O4	57:DA:1875:G:N3	2.50	0.44
22:BA:898:C:C2'	22:BA:899:A:H5'	2.48	0.44
43:BV:2:PHE:HD1	43:BV:50:MET:CE	2.31	0.44
57:DA:597:G:C2	57:DA:661:A:C2	3.05	0.44
53:CA:398:U:H2'	53:CA:399:G:C8	2.52	0.44
52:B4:13:ASN:H	52:B4:13:ASN:HD22	1.65	0.44
26:BE:154:ASP:OD2	26:BE:157:LEU:HB3	2.17	0.44
57:DA:1528:A:N6	57:DA:1529:G:C2	2.85	0.44
48:D0:16:ARG:O	48:D0:17:SER:C	2.56	0.44
1:AA:1430:A:C2	1:AA:1471:U:C2	3.05	0.44
15:CO:60:SER:O	15:CO:64:LYS:HG3	2.18	0.44
5:AE:31:SER:O	5:AE:32:PHE:CD2	2.70	0.44
57:DA:1465:G:C6	57:DA:1466:U:C4	3.05	0.44
57:DA:289:G:H2'	57:DA:290:U:O4'	2.18	0.44
28:DG:122:ALA:O	28:DG:123:GLU:HB2	2.16	0.44
22:BA:1773:A:H2'	22:BA:1774:C:H5'	1.98	0.44
11:CK:86:LYS:HA	11:CK:113:THR:OG1	2.18	0.44
32:DK:100:PHE:N	32:DK:100:PHE:CD1	2.84	0.44
5:CE:100:GLU:CD	5:CE:100:GLU:H	2.21	0.44
13:AM:21:ILE:H	13:AM:21:ILE:HD12	1.82	0.44
4:AD:54:LEU:C	4:AD:54:LEU:CD2	2.86	0.44
3:CC:179:ALA:HB1	3:CC:202:PHE:CE1	2.52	0.44
57:DA:2199:A:C6	57:DA:2225:A:C4	3.06	0.44
39:BR:51:VAL:HB	39:BR:52:PRO:HD3	1.90	0.44
37:BP:50:ARG:HG2	37:BP:57:ALA:CA	2.48	0.44
22:BA:2366:A:H2'	22:BA:2367:G:O4'	2.17	0.44
57:DA:2209:G:C6	57:DA:2216:G:N1	2.86	0.44
53:CA:959:A:N6	53:CA:1222:G:H4'	2.32	0.44
53:CA:979:C:O2'	53:CA:980:C:H5'	2.16	0.44
27:BF:131:VAL:CG2	27:BF:151:LEU:H	2.31	0.44
4:CD:89:LEU:HD23	4:CD:199:ILE:HD11	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1078:U:H5''	22:BA:1079:C:O5'	2.17	0.44
57:DA:533:G:O2'	57:DA:534:U:H5'	2.18	0.44
22:BA:1022:G:N2	22:BA:1142:A:H2	2.06	0.44
58:DB:17:C:N3	58:DB:68:C:N3	2.65	0.44
57:DA:2446:G:H3'	57:DA:2447:G:H5''	1.98	0.44
57:DA:584:C:C2	57:DA:585:G:C8	3.05	0.44
33:BL:93:ASN:HD22	33:BL:94:THR:HB	1.82	0.44
1:AA:1363:A:O2'	1:AA:1365:G:N7	2.41	0.44
57:DA:1338:G:H4'	41:DT:18:GLU:CG	2.48	0.44
41:DT:55:VAL:HG22	41:DT:56:GLU:N	2.32	0.44
34:DM:72:PRO:O	34:DM:73:ILE:CB	2.61	0.44
57:DA:1059:G:C6	57:DA:1080:A:N1	2.86	0.44
54:CG:91:ARG:NH2	54:CG:92:PRO:HB2	2.31	0.44
57:DA:61:C:O2'	57:DA:62:U:C5'	2.54	0.44
22:BA:1509:A:O2'	22:BA:1510:G:OP2	2.35	0.44
26:DE:135:ALA:C	26:DE:137:LYS:H	2.20	0.44
55:CM:16:ILE:H	55:CM:16:ILE:HD12	1.83	0.44
1:AA:376:G:H4'	16:AP:5:ARG:HD2	1.99	0.44
22:BA:1733:G:N2	22:BA:1734:G:C4	2.86	0.44
8:AH:64:TYR:N	8:AH:64:TYR:CD1	2.85	0.44
57:DA:1440:U:C2	57:DA:1441:G:C8	3.05	0.44
57:DA:1731:G:C4'	57:DA:1732:C:OP1	2.63	0.44
57:DA:2040:G:C6	57:DA:2041:U:C4	3.06	0.44
31:DJ:81:ILE:HB	31:DJ:82:GLY:H	1.44	0.44
28:DG:90:GLY:HA3	28:DG:93:TYR:CZ	2.52	0.44
1:AA:923:A:O2'	1:AA:924:C:H5'	2.17	0.44
57:DA:1926:U:C2	57:DA:1929:G:C2	3.05	0.44
1:AA:427:U:OP1	4:AD:12:ARG:NH2	2.50	0.44
54:CG:116:ALA:C	54:CG:120:ALA:HB3	2.38	0.44
37:DP:59:THR:OG1	37:DP:72:VAL:HG12	2.17	0.44
22:BA:1287:A:OP2	35:BN:103:ARG:HG3	2.17	0.44
57:DA:2413:G:O2'	57:DA:2414:G:H5'	2.15	0.44
35:DN:2:ARG:CD	35:DN:5:LYS:HB3	2.48	0.44
36:BO:103:VAL:O	36:BO:105:ALA:O	2.36	0.44
3:CC:52:SER:HB3	3:CC:53:ARG:H	1.64	0.44
53:CA:406:G:N7	53:CA:495:A:H2'	2.32	0.44
29:BH:16:GLY:C	29:BH:51:ARG:HH21	2.21	0.44
1:AA:1180:A:H5''	1:AA:1181:G:OP2	2.17	0.44
57:DA:1761:C:H2'	57:DA:1762:A:O4'	2.18	0.44
4:AD:57:LYS:HZ2	4:AD:61:ARG:HD3	1.81	0.44
57:DA:1967:C:H2'	57:DA:1968:G:C8	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2581:G:C4	22:BA:2610:C:C5	3.05	0.44
41:BT:68:LYS:HG2	41:BT:69:ARG:H	1.83	0.44
57:DA:481:G:HO2'	57:DA:507:A:N6	2.15	0.44
22:BA:1654:A:O2'	25:BD:118:PHE:CG	2.57	0.44
12:CL:80:LEU:HB3	12:CL:97:VAL:CG2	2.47	0.44
22:BA:62:U:C4'	22:BA:63:A:OP1	2.63	0.44
57:DA:1596:A:C6	57:DA:1597:A:C6	3.05	0.44
42:BU:25:LYS:HD2	42:BU:25:LYS:HA	1.82	0.44
4:CD:154:VAL:O	4:CD:158:LEU:HD12	2.18	0.44
31:BJ:31:GLU:O	31:BJ:32:LEU:C	2.54	0.44
22:BA:2276:G:H4'	22:BA:2276:G:OP2	2.17	0.44
22:BA:1984:G:C2	22:BA:1985:C:C6	3.05	0.44
22:BA:1739:A:C2	22:BA:1740:G:H1'	2.53	0.44
3:CC:161:ILE:CD1	3:CC:161:ILE:H	2.27	0.44
18:CR:19:GLU:CG	18:CR:20:ILE:N	2.80	0.44
1:AA:859:G:H2'	1:AA:860:A:C8	2.53	0.44
3:CC:116:ALA:HB2	3:CC:199:VAL:CG2	2.46	0.44
57:DA:265:A:N6	57:DA:428:A:O4'	2.51	0.44
28:DG:126:THR:HG22	28:DG:127:GLN:N	2.32	0.44
10:AJ:18:ILE:HG13	10:AJ:96:VAL:CG1	2.47	0.44
22:BA:2425:A:H1'	22:BA:2427:C:C4	2.53	0.44
25:BD:121:THR:O	25:BD:122:VAL:HG23	2.17	0.44
57:DA:1972:G:H2'	57:DA:1973:G:C8	2.53	0.44
57:DA:1972:G:O2'	57:DA:1973:G:H5'	2.18	0.44
57:DA:422:A:C2	57:DA:423:A:C5	3.05	0.44
22:BA:2649:C:H2'	22:BA:2650:U:C6	2.52	0.44
7:AG:16:LYS:HB3	7:AG:43:TYR:CE1	2.52	0.44
27:BF:21:TYR:HB3	27:BF:26:GLN:HB3	1.99	0.44
37:BP:92:ARG:O	37:BP:93:LYS:HB2	2.17	0.44
53:CA:729:A:H2'	53:CA:730:G:H8	1.82	0.44
22:BA:1443:U:H2'	22:BA:1444:G:C8	2.53	0.44
22:BA:2853:C:O2'	22:BA:2854:G:H5'	2.17	0.44
53:CA:117:G:H2'	53:CA:118:U:O4'	2.17	0.44
2:AB:63:LYS:HD3	2:AB:63:LYS:C	2.38	0.44
43:BV:29:ILE:HD13	43:BV:31:TYR:HD2	1.82	0.44
57:DA:2182:U:H2'	57:DA:2183:A:C8	2.53	0.44
57:DA:2464:G:H2'	57:DA:2465:C:O4'	2.17	0.44
57:DA:1451:C:H4'	57:DA:1452:G:O5'	2.17	0.44
23:BB:5:U:H2'	23:BB:6:G:H8	1.82	0.44
19:AS:42:ASN:ND2	19:AS:42:ASN:C	2.70	0.44
25:DD:202:ILE:HD12	25:DD:202:ILE:N	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:4:U:H2'	1:AA:4:U:O2	2.16	0.44
37:BP:48:ALA:O	37:BP:49:ILE:HG12	2.18	0.44
28:BG:85:LYS:HG2	28:BG:131:VAL:CB	2.47	0.44
44:BW:50:VAL:HB	44:BW:61:LYS:HZ2	1.82	0.44
21:CU:25:ALA:O	21:CU:26:GLY:C	2.55	0.44
53:CA:977:A:H8	53:CA:1223:C:C4	2.36	0.44
44:DW:37:VAL:CG2	44:DW:38:ARG:NH1	2.81	0.44
57:DA:657:U:O2'	57:DA:658:U:H5'	2.18	0.44
17:AQ:20:ILE:CB	17:AQ:47:ASP:OD1	2.65	0.44
53:CA:1160:G:O6	53:CA:1181:G:C6	2.70	0.44
57:DA:325:G:H2'	57:DA:326:G:H8	1.82	0.44
57:DA:324:A:N6	57:DA:338:G:O2'	2.47	0.44
53:CA:765:G:C5	53:CA:812:G:C5	3.06	0.44
31:DJ:43:GLU:C	31:DJ:45:THR:HG22	2.37	0.44
38:DQ:64:ILE:HD12	38:DQ:95:ALA:HB1	1.98	0.44
36:DO:30:ARG:NH1	36:DO:102:ARG:HB2	2.31	0.44
11:CK:103:GLY:O	11:CK:104:PHE:C	2.56	0.44
4:CD:24:VAL:HG23	4:CD:25:ARG:CB	2.44	0.44
22:BA:1190:G:P	33:BL:32:GLY:HA2	2.57	0.44
53:CA:86:G:O2'	53:CA:87:C:P	2.76	0.44
9:AI:60:LEU:H	9:AI:60:LEU:HD23	1.83	0.44
32:DK:61:VAL:HG13	32:DK:87:LEU:CD2	2.47	0.44
57:DA:227:A:H61	57:DA:410:G:H1'	1.81	0.44
20:AT:73:ARG:O	20:AT:76:ALA:HB3	2.18	0.44
4:AD:116:LEU:HB3	4:AD:122:ILE:CD1	2.47	0.44
4:AD:97:LEU:C	4:AD:97:LEU:HD23	2.37	0.44
43:BV:10:LYS:NZ	43:BV:10:LYS:HB2	2.32	0.44
9:AI:49:GLN:C	9:AI:51:LEU:N	2.70	0.44
2:CB:164:ASP:HB3	2:CB:167:HIS:CB	2.47	0.44
26:BE:147:LEU:O	26:BE:148:ILE:C	2.54	0.44
20:CT:26:MET:CE	20:CT:56:ILE:HD13	2.43	0.44
53:CA:1226:C:H5	55:CM:102:LYS:HA	1.79	0.44
32:BK:2:ILE:O	32:BK:3:GLN:HB3	2.18	0.44
57:DA:2800:A:N3	57:DA:2801:G:H1'	2.32	0.44
22:BA:1263:U:O2'	48:B0:7:PRO:HD2	2.17	0.44
12:CL:2:THR:HG22	12:CL:4:ASN:N	2.33	0.44
35:DN:72:ASP:O	35:DN:76:VAL:HG13	2.17	0.44
53:CA:1372:U:H5''	9:CI:71:ILE:CD1	2.48	0.44
53:CA:1372:U:H5''	9:CI:71:ILE:HD11	1.98	0.44
52:B4:4:ARG:HH11	52:B4:4:ARG:CB	2.29	0.44
57:DA:529:A:C8	57:DA:2042:A:N1	2.86	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:57:LYS:HE3	4:CD:61:ARG:HD2	2.00	0.44
2:AB:138:ARG:HH11	2:AB:138:ARG:HB2	1.83	0.44
24:DC:106:PRO:CB	24:DC:141:HIS:HE1	2.26	0.44
24:BC:21:PRO:C	24:BC:23:LEU:H	2.20	0.44
4:AD:50:TYR:O	4:AD:53:GLN:HB3	2.18	0.44
5:CE:14:LEU:CD1	5:CE:36:THR:HG22	2.48	0.44
35:DN:33:ILE:HA	35:DN:114:GLU:HB2	2.00	0.44
24:DC:30:ALA:N	24:DC:31:PRO:CD	2.81	0.44
22:BA:2820:A:HO2'	22:BA:2821:A:P	2.41	0.44
22:BA:1858:A:O2'	22:BA:1859:U:O5'	2.36	0.44
24:BC:140:VAL:HG11	24:BC:189:ALA:HB1	1.97	0.44
57:DA:1268:A:O2'	57:DA:1269:A:O4'	2.23	0.44
48:B0:42:ILE:CD1	48:B0:48:TYR:HB2	2.48	0.44
22:BA:1746:A:C2	22:BA:1747:U:N3	2.85	0.44
22:BA:303:G:C5	22:BA:304:U:C5	3.05	0.44
22:BA:2403:C:N4	22:BA:2415:G:C6	2.85	0.44
57:DA:78:U:H2'	57:DA:79:C:C6	2.52	0.44
23:BB:65:U:H3'	23:BB:108:A:N6	2.33	0.44
37:BP:28:LYS:HB2	37:BP:82:SER:HB3	2.00	0.44
22:BA:136:G:C6	22:BA:142:A:N6	2.85	0.44
57:DA:2654:A:N3	57:DA:2656:U:C4	2.86	0.44
39:DR:25:LEU:H	39:DR:94:THR:HG21	1.82	0.44
9:AI:111:GLU:HG2	9:AI:120:ALA:HB1	1.99	0.44
57:DA:2533:U:H2'	57:DA:2534:A:O4'	2.17	0.44
57:DA:2663:G:H2'	57:DA:2664:G:C8	2.52	0.44
32:DK:59:LYS:CG	32:DK:89:ASN:HA	2.47	0.44
57:DA:2015:A:H5"	57:DA:2016:U:OP2	2.17	0.44
8:AH:10:LEU:HA	8:AH:10:LEU:HD23	1.71	0.44
8:AH:10:LEU:HD11	8:AH:126:CYS:HB2	1.98	0.44
57:DA:370:G:H8	57:DA:370:G:OP2	2.01	0.44
57:DA:1594:U:H2'	57:DA:1595:C:O4'	2.17	0.44
57:DA:732:C:H2'	57:DA:733:G:O4'	2.18	0.44
18:CR:39:VAL:HG12	18:CR:40:PRO:CD	2.47	0.44
27:BF:174:PHE:CD1	27:BF:176:PHE:CE1	3.05	0.44
29:DH:9:VAL:HG13	29:DH:10:ALA:H	1.83	0.44
22:BA:2691:C:H6	22:BA:2691:C:O5'	1.99	0.44
11:AK:24:ALA:CA	11:AK:29:THR:HG23	2.46	0.44
53:CA:889:A:O2'	53:CA:890:G:O5'	2.35	0.44
22:BA:38:A:N3	26:BE:43:THR:HB	2.33	0.44
57:DA:2674:G:H4'	32:DK:30:ARG:HD2	1.99	0.44
1:AA:1097:C:H2'	1:AA:1098:C:C6	2.51	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:522:A:C6	22:BA:523:C:N4	2.85	0.44
53:CA:759:A:H2'	53:CA:760:G:H5'	2.00	0.44
22:BA:2079:U:C2	22:BA:2080:A:C8	3.06	0.44
30:DI:18:ASN:HB3	30:DI:19:PRO:HD3	1.99	0.44
1:AA:542:G:O2'	1:AA:543:U:H5'	2.17	0.44
15:AO:68:TYR:HA	15:AO:71:ARG:CZ	2.47	0.44
57:DA:460:A:OP2	50:D2:41:ARG:NH1	2.50	0.44
32:BK:101:GLY:O	32:BK:120:PRO:HD2	2.17	0.44
34:BM:21:ALA:CB	34:BM:100:LYS:N	2.81	0.44
22:BA:2037:A:H2'	22:BA:2038:G:O4'	2.17	0.44
57:DA:2482:A:H2'	57:DA:2483:C:H6	1.83	0.44
1:AA:222:C:O2'	1:AA:223:A:H5'	2.18	0.44
24:BC:142:ASN:CG	24:BC:142:ASN:O	2.55	0.44
57:DA:1506:U:O5'	57:DA:1506:U:H6	1.99	0.44
21:AU:44:ARG:HD2	21:AU:44:ARG:N	2.33	0.44
25:DD:140:HIS:CD2	25:DD:140:HIS:N	2.85	0.44
41:BT:52:GLU:HG3	41:BT:52:GLU:O	2.17	0.44
22:BA:1136:G:N2	22:BA:1137:G:C4	2.86	0.44
57:DA:1686:C:H2'	57:DA:1687:G:O4'	2.17	0.44
31:BJ:40:HIS:C	31:BJ:41:LYS:HG2	2.38	0.44
44:BW:49:ASN:CA	44:BW:61:LYS:HB2	2.39	0.44
14:CN:8:ARG:NH1	14:CN:12:ARG:HH22	2.16	0.44
45:BX:42:GLU:OE2	45:BX:44:ARG:NH2	2.50	0.44
44:DW:36:ILE:HG22	44:DW:37:VAL:O	2.17	0.44
5:AE:45:VAL:CG2	5:AE:117:ALA:HA	2.47	0.44
5:AE:100:GLU:HB3	5:AE:121:ASN:CB	2.48	0.44
6:AF:3:HIS:CB	6:AF:92:THR:HG23	2.48	0.44
57:DA:211:C:H2'	57:DA:212:G:O4'	2.18	0.44
57:DA:669:G:N3	57:DA:669:G:H2'	2.33	0.44
57:DA:1829:A:H2'	57:DA:1830:C:O4'	2.18	0.44
1:AA:282:A:N3	1:AA:282:A:H2'	2.33	0.44
57:DA:1117:C:C2'	57:DA:1118:C:O5'	2.66	0.44
38:DQ:78:PHE:CE2	38:DQ:109:VAL:HG22	2.53	0.44
35:DN:20:MET:C	35:DN:22:ARG:H	2.21	0.44
41:DT:29:THR:HA	41:DT:87:LEU:HB2	2.00	0.44
52:B4:33:HIS:O	52:B4:35:GLN:HG3	2.17	0.44
57:DA:304:U:HO2'	57:DA:305:C:H6	1.64	0.44
34:DM:96:ILE:CD1	34:DM:102:LEU:HD11	2.43	0.44
25:BD:106:LYS:CB	25:BD:206:ALA:H	2.30	0.44
53:CA:1071:C:H5'	5:CE:53:ARG:NH1	2.33	0.44
9:CI:6:TYR:CE2	9:CI:17:ARG:HA	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:CM:12:LYS:CE	55:CM:12:LYS:HA	2.44	0.44
22:BA:1082:U:C2	22:BA:1083:U:O2	2.71	0.44
57:DA:1476:U:C5	57:DA:1514:G:C2	3.05	0.44
32:BK:116:ILE:O	32:BK:118:LEU:O	2.35	0.44
57:DA:466:A:H2	57:DA:795:C:O2	2.00	0.44
9:AI:39:GLY:O	9:AI:40:ARG:HB2	2.17	0.44
57:DA:627:A:N6	33:DL:111:ILE:HB	2.33	0.44
12:CL:9:LYS:HB2	12:CL:9:LYS:HE2	1.68	0.44
20:AT:27:MET:SD	20:AT:66:ILE:HD13	2.57	0.44
57:DA:192:C:OP1	57:DA:2243:U:OP1	2.35	0.44
57:DA:801:G:H4'	63:DA:3336:HOH:O	2.18	0.44
32:DK:13:ASN:N	32:DK:13:ASN:HD22	2.08	0.44
1:AA:173:U:H1'	1:AA:197:A:C6	2.53	0.44
29:BH:110:VAL:O	29:BH:111:ALA:HB2	2.18	0.44
1:AA:1322:C:O2'	1:AA:1323:G:O5'	2.36	0.44
22:BA:2059:A:N6	22:BA:2503:A:H2'	2.33	0.44
41:DT:74:ILE:HG13	41:DT:75:GLY:H	1.82	0.44
29:BH:41:LYS:O	29:BH:44:ILE:HG12	2.18	0.44
57:DA:1048:A:C2	57:DA:1049:C:N3	2.85	0.44
26:DE:153:LEU:HD12	26:DE:170:ARG:O	2.18	0.44
22:BA:65:U:O2'	22:BA:66:C:H5'	2.17	0.44
8:AH:4:ASP:OD1	8:AH:76:ARG:NH1	2.51	0.44
1:AA:129:A:O2'	1:AA:130:A:C5'	2.63	0.44
27:BF:64:PRO:HA	27:BF:88:VAL:CG2	2.44	0.44
4:AD:21:LYS:O	4:AD:23:GLY:N	2.51	0.44
53:CA:1507:A:C6	53:CA:1530:G:C5	3.05	0.44
53:CA:71:A:N3	53:CA:72:A:C8	2.86	0.44
57:DA:1721:G:HO2'	57:DA:1722:A:P	2.41	0.44
34:DM:76:LYS:HG2	34:DM:80:VAL:HG11	2.00	0.44
1:AA:1093:A:N3	1:AA:1095:U:H5'	2.32	0.44
59:DF:169:LEU:HB3	59:DF:174:PHE:HB2	2.00	0.44
12:AL:1:ALA:HB3	12:AL:5:GLN:OE1	2.18	0.44
40:BS:24:ILE:CG2	40:BS:71:VAL:HG11	2.47	0.44
57:DA:1712:U:C4	57:DA:1713:A:C6	3.06	0.44
53:CA:1031:C:H5'	53:CA:1032:G:C5'	2.44	0.44
1:AA:760:G:N7	1:AA:761:G:C8	2.85	0.44
24:DC:224:MET:O	24:DC:232:GLY:HA2	2.17	0.44
1:AA:321:A:N7	1:AA:328:C:O2'	2.43	0.44
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.51	0.44
22:BA:2439:A:H4'	22:BA:2440:C:O5'	2.18	0.44
24:BC:159:THR:OG1	24:BC:194:VAL:HG11	2.16	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:24:THR:HA	31:BJ:63:ALA:HB3	1.99	0.44
1:AA:1216:A:C2	1:AA:1217:C:C4	3.06	0.44
4:CD:116:LEU:HD21	4:CD:153:ARG:HD3	1.98	0.44
22:BA:1163:G:C2	22:BA:1164:C:C5	3.05	0.44
22:BA:2649:C:H2'	22:BA:2650:U:H6	1.83	0.44
2:AB:187:ASP:HB2	2:AB:203:ASP:CB	2.47	0.44
36:BO:3:LYS:HG3	36:BO:4:LYS:N	2.33	0.44
1:AA:1505:G:P	63:AA:1872:HOH:O	2.76	0.44
57:DA:2590:A:H5''	24:DC:237:ARG:HE	1.82	0.44
22:BA:958:U:H5'	34:BM:14:LYS:HZ2	1.82	0.44
22:BA:2140:G:OP2	22:BA:2140:G:H8	2.01	0.44
57:DA:1867:G:H2'	57:DA:1868:C:C6	2.53	0.44
30:BI:107:GLU:HA	30:BI:110:GLN:HB3	1.98	0.44
26:DE:80:SER:O	26:DE:81:GLY:O	2.36	0.44
2:CB:148:GLY:O	2:CB:150:ILE:N	2.50	0.44
39:BR:74:ILE:HB	39:BR:87:GLN:HB3	1.99	0.44
1:AA:492:C:H2'	1:AA:493:A:C8	2.52	0.44
57:DA:2476:A:C2'	57:DA:2477:U:H5'	2.48	0.44
34:DM:32:GLY:HA2	34:DM:104:GLU:HA	2.00	0.44
53:CA:356:A:H2'	53:CA:357:G:O4'	2.18	0.44
2:AB:132:GLU:O	2:AB:136:ARG:HB2	2.17	0.44
22:BA:1008:A:N6	22:BA:1136:G:C6	2.86	0.44
53:CA:1420:U:H2'	53:CA:1421:G:O4'	2.17	0.44
9:CI:4:GLN:HG2	9:CI:4:GLN:H	1.54	0.44
57:DA:1840:G:H2'	57:DA:1841:U:H6	1.83	0.44
57:DA:519:U:H5''	40:DS:25:ARG:NH2	2.32	0.44
57:DA:1560:G:H2'	57:DA:1561:C:H6	1.83	0.44
54:CG:20:GLU:O	54:CG:23:ALA:HB3	2.18	0.44
57:DA:2199:A:N6	57:DA:2225:A:C8	2.86	0.44
38:BQ:82:LEU:HD23	38:BQ:112:ALA:HB2	2.00	0.44
22:BA:2365:G:H2'	22:BA:2366:A:C8	2.53	0.44
44:BW:25:PHE:C	44:BW:27:GLY:H	2.22	0.44
57:DA:2209:G:C5	57:DA:2210:U:C4	3.06	0.44
53:CA:1217:C:H2'	53:CA:1218:C:H6	1.82	0.44
53:CA:982:U:H4'	53:CA:983:A:C5'	2.47	0.44
57:DA:2135:A:C8	57:DA:2135:A:OP2	2.57	0.44
45:BX:10:ARG:CZ	45:BX:10:ARG:HB3	2.47	0.44
57:DA:2353:G:N3	44:DW:30:VAL:HG13	2.33	0.44
57:DA:455:C:C3'	57:DA:456:C:H5'	2.45	0.44
57:DA:2500:U:O2	57:DA:2504:U:C4	2.71	0.44
33:BL:95:LEU:HB3	33:BL:100:ILE:HG13	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:20:ALA:O	41:DT:31:VAL:HG13	2.18	0.44
53:CA:1125:U:C5	10:CJ:40:ILE:HG21	2.53	0.44
53:CA:577:G:HO2'	53:CA:578:C:H6	1.66	0.44
53:CA:1146:A:H2'	53:CA:1147:C:C5	2.52	0.44
9:CI:16:ALA:HA	9:CI:65:THR:O	2.18	0.44
57:DA:2848:G:O2'	57:DA:2849:U:P	2.76	0.44
41:BT:83:ALA:O	41:BT:84:TYR:HB2	2.18	0.44
5:CE:81:GLN:OE1	5:CE:149:PRO:HD3	2.18	0.44
57:DA:2408:U:O2'	57:DA:2409:G:H5'	2.17	0.44
57:DA:969:G:H2'	57:DA:970:U:C6	2.53	0.44
42:DU:3:LYS:O	42:DU:4:ILE:C	2.56	0.44
1:AA:560:A:OP2	1:AA:566:G:N2	2.50	0.44
55:CM:14:ALA:HB1	55:CM:33:LEU:CD1	2.47	0.44
39:BR:46:GLU:HG2	39:BR:47:VAL:N	2.32	0.44
1:AA:1062:U:H2'	1:AA:1063:C:C5	2.52	0.44
1:AA:924:C:H2'	1:AA:925:G:H8	1.83	0.44
57:DA:628:G:H2'	57:DA:629:G:H8	1.82	0.44
57:DA:136:G:O5'	57:DA:136:G:H8	2.00	0.44
57:DA:136:G:N2	57:DA:144:A:C2	2.86	0.44
38:BQ:97:ILE:HD11	38:BQ:104:ALA:C	2.38	0.44
2:AB:103:TRP:NE1	2:AB:150:ILE:HD11	2.32	0.44
22:BA:571:U:C4	22:BA:575:A:C4	3.05	0.44
57:DA:1820:U:O2	24:DC:199:HIS:HD2	2.01	0.44
38:DQ:13:HIS:O	38:DQ:17:LEU:HB2	2.18	0.44
1:AA:886:G:H2'	1:AA:887:G:O4'	2.18	0.44
35:DN:5:LYS:HG2	35:DN:6:SER:N	2.23	0.44
57:DA:858:G:C5	57:DA:2268:A:C2	3.06	0.44
23:BB:28:C:OP1	36:BO:36:TYR:OH	2.33	0.44
3:CC:76:ILE:HG12	3:CC:83:VAL:CG1	2.47	0.44
11:AK:124:LYS:HE3	21:AU:34:ARG:HG2	2.00	0.44
53:CA:948:C:H5''	55:CM:104:ASN:CB	2.41	0.44
22:BA:359:G:C6	22:BA:360:U:C2	3.06	0.44
22:BA:360:U:C4	22:BA:361:G:C6	3.06	0.44
27:BF:41:GLU:HB2	27:BF:48:LEU:HD23	2.00	0.44
29:DH:80:ILE:HB	29:DH:101:ASP:CG	2.39	0.44
22:BA:1560:G:H2'	22:BA:1561:C:H6	1.83	0.44
53:CA:327:A:C2	53:CA:329:A:C4	3.06	0.44
57:DA:2788:C:H2'	57:DA:2789:C:H6	1.83	0.44
57:DA:2788:C:H1'	57:DA:2809:A:H2	1.83	0.44
5:CE:15:ILE:HD11	5:CE:37:VAL:CG2	2.48	0.44
57:DA:975:A:O2'	57:DA:976:G:H5'	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:DF:12:VAL:HG12	59:DF:16:MET:HG3	2.00	0.44
22:BA:1075:C:C4	22:BA:1076:C:N4	2.86	0.44
37:BP:25:VAL:HG11	37:BP:46:VAL:HG23	1.98	0.44
44:BW:71:LYS:HB3	44:BW:72:GLY:H	1.66	0.44
27:BF:142:TYR:HA	27:BF:145:VAL:HG13	2.00	0.44
13:AM:10:ASP:O	13:AM:11:HIS:HB2	2.18	0.44
53:CA:1206:G:H2'	53:CA:1207:G:O4'	2.18	0.44
42:BU:85:ARG:HG3	42:BU:86:PHE:O	2.18	0.44
3:AC:138:GLN:C	3:AC:140:ALA:H	2.22	0.44
1:AA:272:C:H2'	1:AA:273:U:C6	2.47	0.44
57:DA:3:U:H2'	57:DA:4:U:H6	1.82	0.44
1:AA:1261:A:C2	1:AA:1275:A:C6	3.05	0.44
37:BP:19:PHE:O	37:BP:20:ARG:CB	2.64	0.44
40:DS:103:ILE:HD12	40:DS:103:ILE:N	2.32	0.44
11:AK:76:TYR:HD1	11:AK:76:TYR:N	2.15	0.44
36:BO:54:VAL:O	36:BO:54:VAL:HG22	2.17	0.44
25:DD:110:THR:HG23	25:DD:171:THR:HG22	1.98	0.44
25:BD:125:TRP:CE3	25:BD:160:LYS:HD3	2.53	0.44
57:DA:468:G:H5''	26:DE:55:SER:CB	2.48	0.44
22:BA:89:A:O2'	22:BA:90:U:H5'	2.17	0.44
57:DA:413:C:N4	63:DA:3593:HOH:O	2.50	0.44
1:AA:45:G:H5''	1:AA:307:C:O2'	2.17	0.44
1:AA:125:U:C2'	1:AA:126:G:H5'	2.47	0.44
22:BA:2870:C:C4	22:BA:2871:U:C4	3.06	0.44
6:AF:10:VAL:CG1	6:AF:11:HIS:N	2.80	0.44
57:DA:845:A:N3	57:DA:847:U:H1'	2.32	0.44
12:CL:36:VAL:HA	12:CL:52:CYS:HA	1.99	0.44
53:CA:110:C:H2'	53:CA:111:G:O4'	2.18	0.44
27:BF:19:PHE:HB2	27:BF:21:TYR:CE1	2.53	0.44
6:CF:38:ARG:HH11	6:CF:63:ASN:ND2	2.16	0.44
1:AA:189:A:H2'	1:AA:190:A:C8	2.53	0.44
2:CB:26:MET:HG2	2:CB:188:THR:HA	1.99	0.44
57:DA:1361:G:O2'	57:DA:1362:C:H5'	2.18	0.44
24:DC:103:ILE:HD12	24:DC:104:LEU:H	1.83	0.44
22:BA:734:A:C4	22:BA:735:A:C8	3.06	0.44
14:AN:86:ALA:O	14:AN:91:GLU:HB2	2.18	0.44
22:BA:2400:G:O2'	22:BA:2401:U:H5'	2.18	0.44
14:CN:78:LEU:N	14:CN:78:LEU:HD12	2.33	0.44
57:DA:2482:A:H2'	57:DA:2483:C:C6	2.52	0.44
22:BA:55:G:H2'	22:BA:56:A:H8	1.83	0.44
4:CD:198:LEU:HD23	4:CD:198:LEU:HA	1.68	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1191:A:C8	1:AA:1191:A:H5'	2.53	0.44
57:DA:2221:G:C5	57:DA:2222:C:C5	3.06	0.44
57:DA:2199:A:N6	57:DA:2225:A:N9	2.66	0.44
38:BQ:94:LEU:C	38:BQ:94:LEU:HD13	2.38	0.44
39:BR:49:ILE:CG1	39:BR:49:ILE:O	2.56	0.44
44:BW:16:GLU:HA	44:BW:16:GLU:OE2	2.18	0.44
58:DB:57:A:C5	59:DF:25:MET:CG	3.01	0.44
11:CK:92:ARG:NH2	11:CK:111:ASP:OD1	2.51	0.44
57:DA:2216:G:C2'	57:DA:2217:G:C8	2.99	0.44
57:DA:2262:U:H5''	44:DW:38:ARG:NH2	2.33	0.44
5:AE:100:GLU:HB3	5:AE:121:ASN:CA	2.46	0.44
57:DA:669:G:N2	57:DA:670:A:C2	2.86	0.44
57:DA:1672:A:C2'	57:DA:1673:G:H5'	2.48	0.44
57:DA:702:U:C4	57:DA:703:U:C5	3.05	0.44
1:AA:247:G:C5	1:AA:278:G:N2	2.85	0.44
57:DA:250:G:H2'	57:DA:251:A:C8	2.53	0.44
57:DA:1275:A:C4	35:DN:16:HIS:HD2	2.35	0.44
53:CA:812:G:O2'	53:CA:813:U:C6	2.65	0.44
38:DQ:63:ARG:O	38:DQ:64:ILE:C	2.56	0.44
22:BA:729:G:C4	22:BA:1775:U:C2	3.06	0.44
1:AA:92:U:O2'	1:AA:93:U:C5'	2.65	0.44
4:CD:11:SER:O	4:CD:14:GLU:N	2.51	0.44
22:BA:1507:C:N3	22:BA:1508:A:C2	2.86	0.44
53:CA:1130:A:C6	53:CA:1131:G:N7	2.86	0.44
1:AA:1124:G:O2'	1:AA:1125:U:C6	2.71	0.44
22:BA:784:G:P	63:BA:3310:HOH:O	2.76	0.44
22:BA:1733:G:C2	22:BA:1734:G:N7	2.86	0.44
57:DA:229:C:O2'	57:DA:230:G:O5'	2.35	0.44
53:CA:1346:A:C8	53:CA:1348:U:C2	3.06	0.44
1:AA:258:G:C6	1:AA:259:G:C5	3.06	0.44
22:BA:915:C:O2	23:BB:100:G:H4'	2.18	0.44
57:DA:2514:U:H2'	57:DA:2515:C:H6	1.81	0.44
25:DD:148:GLN:CD	25:DD:148:GLN:N	2.71	0.44
57:DA:2345:G:H4'	57:DA:2346:A:O5'	2.18	0.44
26:BE:196:VAL:HG13	26:BE:200:LEU:HD23	2.00	0.44
34:BM:54:THR:O	34:BM:57:VAL:HG22	2.18	0.44
24:BC:129:LEU:HB3	24:BC:134:ILE:HD11	2.00	0.44
53:CA:1226:C:H41	55:CM:102:LYS:CA	2.19	0.44
57:DA:2850:A:N7	57:DA:2868:A:O2'	2.51	0.44
41:DT:39:THR:OG1	41:DT:42:GLU:HG3	2.18	0.44
35:DN:57:THR:O	35:DN:80:PHE:HD1	2.01	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1287:A:H2'	22:BA:1288:G:N3	2.33	0.44
3:AC:158:GLY:HA2	3:AC:192:TYR:CE1	2.53	0.44
57:DA:388:G:C5	57:DA:390:U:H2'	2.53	0.44
57:DA:1317:G:C2	57:DA:1336:A:C2	3.05	0.44
53:CA:245:U:H5''	53:CA:245:U:C6	2.46	0.44
22:BA:545:U:H2'	22:BA:546:U:O3'	2.17	0.44
24:DC:93:VAL:CG1	24:DC:94:LEU:H	2.31	0.44
1:AA:981:U:C2	1:AA:982:U:C5	3.06	0.44
57:DA:379:G:C6	57:DA:380:G:N7	2.86	0.44
1:AA:1180:A:H8	1:AA:1180:A:O5'	2.01	0.44
57:DA:747:U:H3'	57:DA:748:G:C5'	2.48	0.44
57:DA:663:G:O6	57:DA:664:G:C6	2.71	0.44
53:CA:867:G:C4	53:CA:868:C:C5	3.06	0.44
34:BM:66:ARG:HB2	34:BM:101:VAL:O	2.17	0.44
57:DA:1649:G:C6	57:DA:2009:A:N1	2.86	0.44
1:AA:486:U:H6	1:AA:486:U:H5''	1.76	0.44
57:DA:972:A:H3'	57:DA:973:A:H5''	2.00	0.44
15:CO:47:LYS:N	15:CO:47:LYS:HD2	2.27	0.44
41:BT:69:ARG:NH2	41:BT:70:HIS:HA	2.33	0.44
57:DA:995:C:O2'	38:DQ:93:ILE:HD12	2.18	0.44
38:DQ:96:ASP:C	38:DQ:98:ALA:N	2.70	0.44
57:DA:1494:A:H3'	57:DA:1494:A:OP2	2.17	0.44
44:DW:49:ASN:OD1	44:DW:80:SER:HA	2.17	0.44
6:AF:49:TYR:HB2	18:AR:73:HIS:CD2	2.52	0.44
53:CA:596:A:H2'	53:CA:596:A:N3	2.32	0.44
22:BA:919:U:H6	22:BA:919:U:C5'	2.31	0.44
56:CP:44:SER:O	56:CP:46:LYS:HG3	2.18	0.44
20:AT:67:HIS:HB3	20:AT:68:LYS:NZ	2.32	0.44
1:AA:210:C:H4'	1:AA:211:G:C2	2.52	0.44
22:BA:302:C:H2'	22:BA:303:G:H8	1.83	0.44
22:BA:1673:G:C3'	22:BA:1674:G:H5'	2.47	0.44
46:DY:23:ARG:HB3	46:DY:27:ASN:OD1	2.18	0.44
42:DU:10:VAL:HB	42:DU:70:ALA:O	2.17	0.44
43:DV:57:TYR:N	43:DV:57:TYR:CD1	2.86	0.44
1:AA:737:C:C2	1:AA:738:C:C5	3.06	0.44
53:CA:996:A:C2	53:CA:1046:A:H5'	2.53	0.44
53:CA:768:A:C4	53:CA:769:G:C8	3.06	0.44
12:AL:2:THR:HB	12:AL:5:GLN:HG3	2.00	0.44
7:AG:25:PHE:O	7:AG:28:ILE:HB	2.18	0.44
22:BA:804:A:H5''	22:BA:805:G:OP1	2.18	0.44
58:DB:81:G:H2'	58:DB:82:U:C6	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:76:C:H5''	46:DY:48:ARG:HB3	2.00	0.44
22:BA:491:G:H2'	22:BA:492:A:H8	1.83	0.44
12:AL:78:VAL:O	12:AL:101:LEU:HB3	2.17	0.44
57:DA:2835:A:C6	57:DA:2879:A:C4	3.05	0.44
1:AA:1084:G:C6	1:AA:1085:U:C4	3.06	0.44
53:CA:1087:G:H2'	53:CA:1088:G:C8	2.50	0.44
57:DA:2552:U:N3	57:DA:2554:U:H5'	2.32	0.44
1:AA:864:A:C3'	1:AA:865:A:C8	3.00	0.44
25:DD:21:SER:HB2	32:DK:73:ASP:O	2.18	0.44
12:CL:31:GLY:HA3	12:CL:54:VAL:CG1	2.47	0.44
1:AA:127:G:N2	1:AA:235:C:C2	2.86	0.44
53:CA:1098:C:C4	53:CA:1099:G:N7	2.86	0.44
22:BA:1290:C:H2'	22:BA:1291:C:H6	1.82	0.44
38:DQ:15:LYS:HD2	38:DQ:19:GLN:HE21	1.83	0.44
25:BD:85:ALA:O	25:BD:86:GLU:CB	2.65	0.44
53:CA:728:A:C8	15:CO:53:ARG:NH2	2.86	0.44
47:BZ:7:THR:OG1	47:BZ:34:THR:HG23	2.18	0.44
22:BA:1837:C:C2	22:BA:1899:A:N6	2.86	0.44
22:BA:1838:C:N4	22:BA:1899:A:C4	2.86	0.44
1:AA:769:G:C2'	1:AA:770:C:H5'	2.48	0.44
3:AC:39:ARG:NE	3:AC:54:ILE:HD11	2.33	0.44
57:DA:1057:A:C8	57:DA:1086:A:H2'	2.52	0.44
1:AA:1117:A:C6	1:AA:1184:G:O6	2.71	0.44
22:BA:966:G:C5	22:BA:967:U:C4	3.05	0.44
38:BQ:49:ARG:HG3	38:BQ:49:ARG:NH1	2.33	0.44
35:BN:93:GLY:C	35:BN:95:THR:H	2.21	0.44
23:BB:33:G:O2'	23:BB:34:A:H5'	2.17	0.44
1:AA:807:A:C5	1:AA:808:C:C5	3.06	0.44
9:CI:85:ALA:HA	9:CI:88:GLU:OE1	2.18	0.44
57:DA:1881:C:H2'	57:DA:1882:U:O4'	2.18	0.44
3:CC:31:ASN:O	3:CC:35:ASP:HB2	2.18	0.44
27:BF:66:ILE:O	27:BF:66:ILE:HG13	2.17	0.44
22:BA:2416:C:H6	22:BA:2416:C:O5'	2.01	0.44
22:BA:2331:G:N2	22:BA:2385:C:C2	2.86	0.43
53:CA:962:C:HO2'	53:CA:963:G:H8	1.56	0.43
10:CJ:52:LEU:CD2	10:CJ:62:ARG:HG2	2.48	0.43
36:DO:20:GLU:HG3	44:DW:50:VAL:HG11	1.99	0.43
27:BF:135:ILE:C	27:BF:137:PHE:N	2.71	0.43
27:BF:153:ILE:HG13	27:BF:153:ILE:H	1.68	0.43
2:CB:151:LYS:HG3	2:CB:152:ASP:N	2.33	0.43
22:BA:1098:A:H3'	22:BA:1099:G:C8	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1251:A:H2	53:CA:1369:C:O2	2.02	0.43
57:DA:1791:A:N6	57:DA:1828:G:O2'	2.51	0.43
57:DA:781:A:H2'	57:DA:1777:U:C1'	2.46	0.43
39:DR:51:VAL:HB	39:DR:52:PRO:CD	2.49	0.43
57:DA:806:C:H2'	57:DA:807:U:C6	2.52	0.43
53:CA:664:G:P	18:CR:52:ARG:HH21	2.41	0.43
57:DA:323:C:H2'	26:DE:163:ASN:CG	2.39	0.43
22:BA:1130:U:HO2'	22:BA:1131:G:H8	1.64	0.43
31:DJ:43:GLU:CG	31:DJ:43:GLU:O	2.66	0.43
31:DJ:43:GLU:O	31:DJ:44:TYR:C	2.57	0.43
54:CG:69:ARG:HH11	54:CG:95:ARG:NH1	2.16	0.43
58:DB:42:C:O2'	58:DB:43:C:C5'	2.64	0.43
37:DP:92:ARG:HG2	37:DP:92:ARG:O	2.17	0.43
4:CD:80:ARG:HB2	4:CD:81:LEU:H	1.45	0.43
31:BJ:1:MET:O	31:BJ:2:LYS:C	2.56	0.43
57:DA:228:C:C5'	57:DA:229:C:C5	3.01	0.43
22:BA:858:G:H3'	22:BA:859:G:C8	2.53	0.43
6:CF:3:HIS:CG	6:CF:92:THR:HG23	2.53	0.43
57:DA:2515:C:O2'	57:DA:2516:A:H5'	2.18	0.43
57:DA:2741:A:C8	57:DA:2742:G:C8	3.06	0.43
24:BC:104:LEU:HA	24:BC:104:LEU:HD12	1.69	0.43
24:BC:68:ARG:NH2	24:BC:126:GLY:O	2.51	0.43
1:AA:1396:A:H4'	1:AA:1397:C:O5'	2.17	0.43
57:DA:628:G:HO2'	57:DA:629:G:H8	1.65	0.43
57:DA:636:G:H3'	33:DL:128:THR:CG2	2.48	0.43
53:CA:696:A:H2'	53:CA:697:U:H6	1.82	0.43
4:CD:176:LYS:O	4:CD:177:MET:HB2	2.18	0.43
35:DN:51:LEU:HA	35:DN:54:LEU:HD21	2.00	0.43
1:AA:199:A:N3	1:AA:200:G:C8	2.86	0.43
54:CG:119:LEU:HD23	54:CG:120:ALA:N	2.33	0.43
53:CA:881:G:C6	53:CA:882:C:C4	3.06	0.43
22:BA:869:G:C6	22:BA:870:U:C4	3.06	0.43
22:BA:1430:G:C4	22:BA:1431:A:C8	3.06	0.43
50:B2:43:THR:C	50:B2:44:VAL:HG23	2.37	0.43
11:AK:86:LYS:HG2	11:AK:114:PRO:HD3	2.00	0.43
25:DD:10:GLY:O	25:DD:11:MET:CB	2.61	0.43
22:BA:2223:G:C2'	22:BA:2224:G:H5'	2.48	0.43
29:BH:18:GLN:HE21	29:BH:18:GLN:CA	2.16	0.43
10:AJ:67:ILE:HG12	14:AN:95:LEU:HD13	1.99	0.43
1:AA:1055:A:C8	1:AA:1055:A:O5'	2.71	0.43
4:AD:196:GLU:C	4:AD:198:LEU:N	2.71	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:57:G:C2	1:AA:356:A:C2	3.06	0.43
41:DT:48:GLN:HA	41:DT:48:GLN:NE2	2.31	0.43
57:DA:2788:C:H1'	57:DA:2809:A:C2	2.53	0.43
5:CE:17:VAL:HG22	5:CE:17:VAL:O	2.17	0.43
57:DA:995:C:H5''	38:DQ:53:LYS:HG2	2.00	0.43
6:CF:24:ARG:O	6:CF:28:ALA:HB2	2.17	0.43
1:AA:1227:A:HO2'	1:AA:1228:C:P	2.40	0.43
57:DA:1351:C:O3'	57:DA:1571:A:O2'	2.35	0.43
57:DA:1568:G:H21	24:DC:57:HIS:HE1	1.64	0.43
8:AH:78:SER:OG	8:AH:83:ARG:HA	2.19	0.43
26:BE:73:ILE:CG1	26:BE:73:ILE:O	2.63	0.43
39:BR:21:ARG:NH2	39:BR:93:PHE:CZ	2.86	0.43
22:BA:1341:G:H3'	22:BA:1397:U:O2	2.18	0.43
33:BL:66:PHE:CD1	33:BL:66:PHE:C	2.89	0.43
22:BA:164:C:H2'	22:BA:165:A:O4'	2.17	0.43
31:DJ:110:PRO:CG	31:DJ:111:LYS:HG2	2.46	0.43
16:AP:10:GLY:HA2	16:AP:16:PHE:HB3	2.00	0.43
22:BA:1279:G:H5'	35:BN:34:ILE:HG22	2.00	0.43
33:DL:98:ALA:O	33:DL:100:ILE:HG22	2.18	0.43
22:BA:641:U:H5''	22:BA:642:U:OP2	2.17	0.43
1:AA:1080:A:OP1	5:AE:51:LYS:HD2	2.18	0.43
1:AA:1305:G:N2	1:AA:1331:G:H2'	2.33	0.43
26:DE:144:GLU:O	26:DE:145:ASP:C	2.56	0.43
57:DA:2184:A:O5'	57:DA:2184:A:H8	2.00	0.43
48:D0:38:LEU:H	48:D0:41:HIS:CE1	2.36	0.43
22:BA:1014:A:O2'	22:BA:1015:U:H5'	2.17	0.43
22:BA:1015:U:O2'	22:BA:1016:G:H5'	2.16	0.43
29:DH:8:LYS:HD2	29:DH:9:VAL:O	2.19	0.43
22:BA:31:C:O3'	22:BA:1238:G:H5''	2.18	0.43
1:AA:1269:A:C2	1:AA:1312:G:N3	2.85	0.43
14:CN:15:LEU:O	14:CN:54:SER:HB2	2.18	0.43
53:CA:1261:A:N7	53:CA:1274:A:C2	2.85	0.43
57:DA:293:U:H5''	57:DA:294:A:OP2	2.18	0.43
1:AA:192:A:C6	1:AA:193:C:C4	3.06	0.43
22:BA:2590:A:H2'	22:BA:2591:C:C6	2.53	0.43
53:CA:363:A:N6	53:CA:364:A:C6	2.86	0.43
41:DT:53:VAL:CG2	41:DT:92:ASN:HD22	2.30	0.43
34:BM:4:PRO:CG	34:BM:70:ASP:HA	2.48	0.43
22:BA:1575:C:H2'	22:BA:1576:U:O4'	2.17	0.43
57:DA:1465:G:H2'	57:DA:1466:U:O4'	2.18	0.43
40:DS:22:ASP:HA	40:DS:25:ARG:HH12	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:1:MET:HG2	29:BH:23:ALA:HA	2.00	0.43
7:AG:83:THR:O	7:AG:84:TYR:C	2.55	0.43
1:AA:477:C:H2'	1:AA:478:A:C8	2.53	0.43
53:CA:28:A:H2'	53:CA:29:U:O4'	2.18	0.43
39:DR:19:THR:HG22	39:DR:20:VAL:H	1.82	0.43
57:DA:2560:A:C6	57:DA:2561:U:C4	3.05	0.43
53:CA:477:C:H5'	53:CA:478:A:OP1	2.18	0.43
57:DA:1549:A:C6	57:DA:1550:C:N3	2.86	0.43
57:DA:1471:G:C5	57:DA:1472:C:C5	3.06	0.43
10:CJ:81:GLU:O	10:CJ:86:ALA:HB3	2.17	0.43
53:CA:1310:G:C6	53:CA:1311:A:C6	3.06	0.43
39:BR:54:VAL:O	39:BR:55:ASP:C	2.56	0.43
22:BA:2356:U:H5''	44:BW:16:GLU:HG3	2.00	0.43
21:CU:24:LYS:CE	21:CU:25:ALA:H	2.32	0.43
57:DA:2216:G:C2'	57:DA:2217:G:H8	2.22	0.43
53:CA:1366:C:O2'	53:CA:1367:C:H6	1.96	0.43
57:DA:1914:C:O2'	57:DA:1915:U:C5'	2.66	0.43
6:AF:90:MET:HB3	6:AF:91:ARG:H	1.49	0.43
57:DA:183:C:O2'	57:DA:432:A:H1'	2.17	0.43
22:BA:1061:U:H6	22:BA:1070:A:C1'	2.31	0.43
22:BA:1059:G:C2	22:BA:1080:A:N3	2.86	0.43
53:CA:375:U:N3	53:CA:376:G:N7	2.66	0.43
57:DA:247:G:H4'	57:DA:386:G:C6	2.53	0.43
53:CA:32:A:C2'	53:CA:33:A:C8	2.84	0.43
57:DA:1273:U:O3'	57:DA:1274:A:H3'	2.18	0.43
53:CA:1255:G:H2'	53:CA:1278:G:H21	1.82	0.43
58:DB:89:U:H3'	58:DB:90:C:C6	2.53	0.43
1:AA:77:A:N6	1:AA:90:C:C4	2.85	0.43
11:CK:74:LYS:HD2	11:CK:104:PHE:CE1	2.53	0.43
4:AD:35:GLN:O	4:AD:36:ALA:HB2	2.18	0.43
5:CE:82:HIS:HB2	8:CH:95:MET:O	2.18	0.43
53:CA:1303:C:O2	53:CA:1303:C:H2'	2.18	0.43
55:CM:19:THR:HA	55:CM:25:GLY:O	2.18	0.43
57:DA:1667:G:O2'	57:DA:1668:A:P	2.76	0.43
32:DK:105:ARG:HB2	32:DK:108:ARG:HD2	2.00	0.43
5:AE:155:LYS:HD2	5:AE:155:LYS:N	2.33	0.43
1:AA:251:G:O4'	1:AA:252:U:H5''	2.18	0.43
57:DA:956:G:C1'	34:DM:82:MET:HE1	2.46	0.43
8:CH:54:THR:C	8:CH:56:PRO:HD3	2.39	0.43
26:BE:174:GLY:O	26:BE:175:ILE:O	2.36	0.43
53:CA:1051:C:O2'	53:CA:1052:U:O4'	2.36	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:61:ASN:HA	14:AN:61:ASN:HD22	1.54	0.43
57:DA:802:A:C2	57:DA:803:U:C2	3.06	0.43
24:DC:166:ARG:HB2	24:DC:171:VAL:CG2	2.39	0.43
24:DC:161:VAL:HG22	24:DC:175:LEU:HA	2.00	0.43
22:BA:2741:A:H2'	22:BA:2742:G:O4'	2.18	0.43
53:CA:821:G:H2'	53:CA:822:U:H6	1.77	0.43
1:AA:32:A:C2	1:AA:33:A:C5	3.06	0.43
24:DC:93:VAL:HG11	24:DC:95:TYR:CE2	2.53	0.43
4:CD:57:LYS:HE3	4:CD:61:ARG:CD	2.48	0.43
21:AU:33:ARG:HD3	21:AU:34:ARG:HG3	2.00	0.43
57:DA:1048:A:C4	57:DA:1049:C:N4	2.86	0.43
24:DC:67:LYS:HB3	24:DC:150:GLY:CA	2.45	0.43
57:DA:2057:G:C6	57:DA:2612:C:N3	2.86	0.43
14:CN:89:ARG:HG3	14:CN:91:GLU:CG	2.48	0.43
57:DA:919:U:C2	57:DA:920:A:N7	2.86	0.43
53:CA:1381:U:N3	54:CG:77:ARG:CZ	2.81	0.43
22:BA:25:U:C5	22:BA:26:G:C6	3.06	0.43
2:CB:116:LEU:HA	2:CB:119:GLN:HB3	2.00	0.43
39:BR:18:GLN:O	39:BR:97:LYS:O	2.36	0.43
53:CA:160:A:H1'	53:CA:344:A:C5	2.53	0.43
34:BM:45:GLN:NE2	34:BM:125:PRO:HD3	2.33	0.43
9:AI:79:ARG:O	9:AI:83:THR:HG23	2.17	0.43
24:BC:257:ARG:HG3	24:BC:269:ARG:HH12	1.82	0.43
57:DA:818:G:H4'	57:DA:838:C:O3'	2.18	0.43
1:AA:715:A:H8	1:AA:715:A:O5'	2.01	0.43
1:AA:674:G:OP1	6:AF:51:ILE:HG13	2.19	0.43
39:BR:89:HIS:NE2	39:BR:91:GLN:HB2	2.33	0.43
57:DA:1723:G:H2'	57:DA:1724:G:C8	2.43	0.43
18:CR:66:LEU:HD23	18:CR:66:LEU:N	2.33	0.43
19:AS:39:ILE:HD11	19:AS:70:LEU:HD23	1.99	0.43
57:DA:2683:C:OP1	37:DP:55:HIS:HB3	2.18	0.43
53:CA:781:A:H2	53:CA:1514:G:H4'	1.83	0.43
53:CA:768:A:C5	53:CA:769:G:N7	2.86	0.43
40:DS:36:LEU:C	40:DS:38:TYR:N	2.71	0.43
40:DS:36:LEU:HA	40:DS:39:THR:OG1	2.18	0.43
35:BN:10:LEU:HA	35:BN:10:LEU:HD13	1.85	0.43
57:DA:1308:A:N6	57:DA:1309:G:C2	2.86	0.43
33:BL:101:ILE:HA	33:BL:101:ILE:HD12	1.69	0.43
25:DD:38:LYS:NZ	25:DD:38:LYS:HB3	2.33	0.43
24:DC:123:ILE:HD12	24:DC:123:ILE:HA	1.93	0.43
1:AA:327:A:H4'	1:AA:328:C:OP1	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:465:A:C8	53:CA:467:U:OP1	2.71	0.43
22:BA:2673:G:N3	22:BA:2674:G:C8	2.87	0.43
57:DA:735:A:C6	57:DA:736:C:C2	3.06	0.43
57:DA:470:A:C2	57:DA:471:A:C4	3.07	0.43
5:AE:38:VAL:HG22	5:AE:66:ALA:HB1	2.00	0.43
14:CN:20:PHE:HE1	14:CN:54:SER:CB	2.31	0.43
6:AF:11:HIS:HA	6:AF:12:PRO:HD2	1.83	0.43
1:AA:626:G:H2'	1:AA:627:G:O4'	2.19	0.43
57:DA:2064:C:H2'	57:DA:2065:C:H6	1.81	0.43
57:DA:1228:G:H2'	57:DA:1229:C:C6	2.53	0.43
22:BA:1446:C:H2'	22:BA:1447:C:C6	2.53	0.43
1:AA:782:A:C8	1:AA:783:C:C5	3.07	0.43
3:AC:41:TYR:CZ	3:AC:89:VAL:HG21	2.53	0.43
22:BA:354:A:C5	22:BA:355:U:C5	3.06	0.43
53:CA:760:G:C6	53:CA:761:G:C4	3.06	0.43
19:AS:62:THR:O	19:AS:63:ASP:C	2.56	0.43
9:CI:79:ARG:O	9:CI:83:THR:HG22	2.18	0.43
43:DV:8:VAL:HG13	43:DV:66:ASP:OD2	2.19	0.43
4:CD:123:MET:CE	4:CD:126:GLY:O	2.67	0.43
53:CA:949:A:H4'	53:CA:1364:U:O4	2.18	0.43
28:DG:58:ALA:O	28:DG:59:ASP:C	2.56	0.43
41:DT:21:SER:C	41:DT:25:GLU:HB3	2.38	0.43
50:D2:11:LYS:NZ	63:D2:101:HOH:O	2.52	0.43
10:AJ:28:THR:HG22	10:AJ:28:THR:O	2.18	0.43
57:DA:2179:C:H6	57:DA:2179:C:H5'	1.83	0.43
24:BC:35:LYS:HB3	24:BC:35:LYS:HE3	1.36	0.43
53:CA:1402:C:H2'	53:CA:1403:C:O4'	2.17	0.43
35:BN:60:VAL:O	35:BN:61:ALA:C	2.56	0.43
38:BQ:84:LYS:O	38:BQ:85:ALA:C	2.56	0.43
22:BA:2051:A:H4'	22:BA:2052:A:OP1	2.17	0.43
25:BD:149:ASN:C	25:BD:151:THR:N	2.70	0.43
44:BW:19:ARG:CZ	44:BW:22:VAL:HB	2.49	0.43
44:BW:26:GLY:O	44:BW:27:GLY:O	2.36	0.43
57:DA:2216:G:O2'	57:DA:2217:G:C5'	2.65	0.43
53:CA:255:G:O2'	53:CA:256:U:H5'	2.18	0.43
5:CE:22:LYS:O	5:CE:29:ILE:HB	2.19	0.43
57:DA:1992:G:H4'	57:DA:1993:U:OP1	2.17	0.43
8:CH:57:GLU:HG3	8:CH:58:LEU:N	2.21	0.43
22:BA:1142:A:C4	22:BA:1144:A:N7	2.86	0.43
58:DB:13:G:H5''	58:DB:13:G:C8	2.51	0.43
57:DA:1215:G:OP1	38:DQ:7:VAL:HG11	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:636:G:H3'	33:BL:128:THR:CG2	2.47	0.43
57:DA:1203:U:N3	57:DA:1204:A:C6	2.86	0.43
53:CA:814:A:H5'	53:CA:1511:G:C4'	2.42	0.43
1:AA:81:A:O2'	1:AA:89:U:O2	2.31	0.43
57:DA:1055:G:H2'	57:DA:1056:G:H5'	2.00	0.43
57:DA:1056:G:H1'	57:DA:1103:A:N1	2.33	0.43
2:CB:96:LEU:H	2:CB:99:MET:CE	2.32	0.43
57:DA:1609:A:O2'	57:DA:1610:A:H5''	2.17	0.43
24:BC:12:ARG:HA	24:BC:15:VAL:CG2	2.48	0.43
53:CA:82:G:H2'	53:CA:83:C:H4'	2.01	0.43
53:CA:1302:C:H5''	55:CM:16:ILE:HG23	2.00	0.43
1:AA:1461:G:H2'	1:AA:1462:C:H6	1.83	0.43
32:DK:93:GLN:HA	32:DK:94:PRO:HD2	1.79	0.43
22:BA:1106:G:N3	22:BA:1107:G:C8	2.86	0.43
57:DA:2229:U:H2'	57:DA:2230:G:H8	1.83	0.43
5:AE:81:GLN:N	5:AE:81:GLN:NE2	2.66	0.43
53:CA:1348:U:H2'	53:CA:1349:A:H8	1.84	0.43
1:AA:556:C:H2'	1:AA:557:G:O4'	2.18	0.43
22:BA:278:A:H2'	22:BA:278:A:N3	2.32	0.43
25:BD:90:PHE:N	25:BD:90:PHE:CD1	2.86	0.43
22:BA:1419:A:C5	22:BA:1421:G:C4	3.07	0.43
24:BC:103:ILE:HG23	24:BC:104:LEU:N	2.33	0.43
39:DR:9:GLY:H	39:DR:10:LYS:NZ	2.16	0.43
57:DA:84:A:H2	57:DA:98:G:N3	2.16	0.43
1:AA:923:A:OP1	5:AE:25:LYS:CG	2.66	0.43
3:AC:75:VAL:O	3:AC:82:ASP:HB3	2.18	0.43
37:DP:62:LYS:HD3	37:DP:64:SER:HB2	1.99	0.43
57:DA:2868:A:C2	57:DA:2869:G:C4	3.06	0.43
57:DA:2706:A:C2	57:DA:2707:U:C2	3.06	0.43
9:CI:71:ILE:HD12	9:CI:72:SER:N	2.20	0.43
53:CA:119:A:H5'	53:CA:120:A:O5'	2.19	0.43
1:AA:978:A:O2'	1:AA:979:C:H5'	2.18	0.43
57:DA:1493:C:O2	57:DA:1493:C:H2'	2.17	0.43
22:BA:1287:A:H3'	22:BA:1288:G:H21	1.82	0.43
57:DA:1586:A:H2'	57:DA:1587:G:C8	2.38	0.43
32:DK:41:ILE:HG22	32:DK:58:LEU:O	2.19	0.43
57:DA:2103:C:H2'	57:DA:2104:C:O4'	2.18	0.43
35:BN:24:MET:HG2	35:BN:44:LEU:CD2	2.44	0.43
57:DA:492:A:O2'	57:DA:493:G:O4'	2.36	0.43
1:AA:499:A:O2'	1:AA:500:G:C8	2.62	0.43
4:AD:57:LYS:HG2	4:AD:202:LEU:HD22	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:27:G:H1'	57:DA:513:A:N6	2.34	0.43
8:AH:78:SER:CB	8:AH:84:ILE:H	2.30	0.43
25:DD:32:ASN:HB2	25:DD:50:VAL:HB	2.00	0.43
12:AL:87:LYS:HG3	12:AL:87:LYS:O	2.18	0.43
28:DG:157:LYS:HB2	28:DG:157:LYS:HE2	1.87	0.43
22:BA:2531:A:OP1	28:BG:174:LYS:CG	2.62	0.43
13:AM:10:ASP:OD1	13:AM:11:HIS:N	2.34	0.43
34:DM:61:GLY:CA	34:DM:107:GLY:HA3	2.45	0.43
1:AA:766:A:OP2	1:AA:812:G:N2	2.50	0.43
57:DA:2624:G:H2'	57:DA:2625:G:O4'	2.19	0.43
3:CC:10:ARG:O	3:CC:15:LYS:HB2	2.18	0.43
1:AA:381:C:H2'	1:AA:382:A:O4'	2.18	0.43
46:BY:9:LYS:CB	46:BY:12:GLU:HG3	2.46	0.43
25:DD:49:GLN:HE21	25:DD:79:LEU:HB3	1.83	0.43
57:DA:2597:G:H5'	24:DC:240:GLY:O	2.18	0.43
21:CU:14:ALA:O	21:CU:15:LEU:C	2.57	0.43
57:DA:2069:G:O2'	57:DA:2070:A:H5'	2.18	0.43
1:AA:507:C:OP2	1:AA:508:U:H3'	2.19	0.43
53:CA:614:C:C4	53:CA:615:G:N7	2.87	0.43
28:DG:145:ALA:O	28:DG:149:ALA:HB2	2.18	0.43
57:DA:457:A:C4	57:DA:459:U:C4	3.06	0.43
14:AN:50:LEU:O	14:AN:52:ARG:N	2.51	0.43
22:BA:61:C:H6	22:BA:61:C:O5'	2.00	0.43
34:DM:108:VAL:HG21	34:DM:112:LEU:HB3	2.00	0.43
8:CH:94:VAL:HG21	8:CH:127:TYR:CB	2.49	0.43
5:CE:52:ALA:HB2	5:CE:61:LYS:CE	2.48	0.43
30:DI:106:GLN:O	30:DI:106:GLN:HG3	2.18	0.43
6:CF:98:GLU:O	6:CF:99:ALA:CB	2.66	0.43
22:BA:1901:A:H2'	22:BA:1902:C:H6	1.83	0.43
32:DK:64:ARG:HB2	32:DK:83:ALA:HB3	2.00	0.43
22:BA:1243:C:H2'	22:BA:1244:A:O4'	2.18	0.43
22:BA:2462:C:H2'	22:BA:2463:C:H6	1.81	0.43
22:BA:976:G:N3	22:BA:977:G:C8	2.85	0.43
57:DA:1376:C:H5''	63:DA:3408:HOH:O	2.18	0.43
57:DA:1866:A:C4	57:DA:1876:A:N6	2.86	0.43
1:AA:1233:G:H2'	1:AA:1234:C:H6	1.82	0.43
22:BA:1523:U:C3'	22:BA:1524:G:H5'	2.48	0.43
8:CH:38:VAL:HA	8:CH:41:GLU:HG3	1.99	0.43
36:DO:4:LYS:HG3	36:DO:8:ILE:CD1	2.48	0.43
22:BA:1374:G:C2'	22:BA:1375:U:H5'	2.47	0.43
57:DA:2525:G:N2	57:DA:2539:C:C2	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:100:ALA:O	29:BH:101:ASP:C	2.57	0.43
1:AA:131:A:C2	1:AA:132:C:C4	3.07	0.43
22:BA:1644:C:C2'	22:BA:1645:G:H5'	2.47	0.43
57:DA:2660:A:C2	57:DA:2661:G:C5	3.05	0.43
5:CE:93:VAL:O	5:CE:93:VAL:HG23	2.18	0.43
22:BA:71:A:H3'	22:BA:71:A:OP2	2.17	0.43
36:BO:26:LEU:C	36:BO:26:LEU:HD12	2.39	0.43
15:CO:32:THR:O	15:CO:33:ALA:C	2.57	0.43
57:DA:2097:A:H2'	57:DA:2098:U:C6	2.53	0.43
31:BJ:38:GLY:O	31:BJ:40:HIS:N	2.52	0.43
22:BA:2572:A:O2'	22:BA:2573:C:P	2.77	0.43
57:DA:197:A:C5	57:DA:2430:A:C4	3.07	0.43
11:CK:85:VAL:HG11	11:CK:92:ARG:HH11	1.84	0.43
57:DA:1360:G:C6	57:DA:1372:U:C2	3.07	0.43
57:DA:1373:A:C5'	57:DA:2212:A:H1'	2.49	0.43
53:CA:247:G:OP1	53:CA:247:G:H4'	2.18	0.43
14:CN:13:VAL:HG22	14:CN:59:GLN:OE1	2.19	0.43
44:DW:40:ARG:NH1	44:DW:40:ARG:CG	2.59	0.43
57:DA:1915:U:O2'	57:DA:1916:A:C5'	2.65	0.43
9:CI:51:LEU:C	9:CI:53:LEU:N	2.71	0.43
57:DA:591:U:H2'	57:DA:592:A:C8	2.53	0.43
4:CD:2:ARG:NE	4:CD:114:ARG:HD2	2.34	0.43
54:CG:63:VAL:HG11	54:CG:127:ALA:CB	2.48	0.43
57:DA:826:U:H5'	57:DA:2428:G:O2'	2.18	0.43
57:DA:1469:A:C2	57:DA:1470:A:C6	3.06	0.43
41:DT:59:ASN:O	41:DT:84:TYR:HB2	2.17	0.43
41:DT:55:VAL:HG21	41:DT:85:VAL:O	2.19	0.43
10:CJ:11:LYS:HA	10:CJ:18:ILE:HD11	2.00	0.43
34:DM:72:PRO:O	34:DM:92:TRP:HA	2.19	0.43
31:DJ:49:ASP:HB2	31:DJ:121:LYS:HZ2	1.83	0.43
53:CA:1145:A:O2'	53:CA:1146:A:C5'	2.66	0.43
26:DE:128:ALA:O	26:DE:130:LYS:HG2	2.19	0.43
41:BT:40:LYS:HA	41:BT:43:ILE:HG23	2.00	0.43
53:CA:84:U:H3	53:CA:87:C:H1'	1.80	0.43
57:DA:1476:U:O2	57:DA:1516:G:C2	2.72	0.43
57:DA:2571:U:H6	57:DA:2571:U:O5'	2.00	0.43
1:AA:877:G:H21	8:AH:1:SER:CB	2.19	0.43
53:CA:951:G:H1'	53:CA:970:C:O2'	2.18	0.43
37:DP:67:GLU:OE1	37:DP:68:GLY:N	2.52	0.43
1:AA:425:G:C6	1:AA:426:U:C2	3.07	0.43
53:CA:65:A:C4	53:CA:200:G:O2'	2.72	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:866:A:N7	57:DA:914:G:N7	2.66	0.43
28:BG:66:THR:O	28:BG:70:LEU:HG	2.18	0.43
28:BG:30:GLY:O	28:BG:78:VAL:HG12	2.18	0.43
11:AK:125:LYS:O	11:AK:126:ARG:CB	2.64	0.43
57:DA:2751:G:H2'	57:DA:2751:G:N3	2.33	0.43
24:DC:128:THR:HA	24:DC:190:THR:HA	2.01	0.43
53:CA:112:G:N2	53:CA:113:G:HI'	2.33	0.43
22:BA:2638:G:H2'	22:BA:2775:G:H22	1.83	0.43
1:AA:1054:C:O2	1:AA:1054:C:O4'	2.33	0.43
33:BL:130:GLY:O	33:BL:133:ALA:HB3	2.18	0.43
53:CA:705:G:H2'	53:CA:706:A:H8	1.82	0.43
27:BF:39:VAL:C	27:BF:41:GLU:H	2.21	0.43
57:DA:510:C:O2'	57:DA:511:U:H5'	2.18	0.43
35:DN:31:HIS:O	35:DN:33:ILE:HG13	2.17	0.43
22:BA:1926:U:H2'	22:BA:1928:A:N7	2.34	0.43
57:DA:502:A:C6	57:DA:505:A:C5	3.06	0.43
57:DA:506:G:H4'	57:DA:507:A:H5'	1.99	0.43
22:BA:307:G:N2	22:BA:309:A:H3'	2.33	0.43
59:DF:8:LYS:HG3	59:DF:12:VAL:HG21	1.99	0.43
59:DF:28:PRO:HB2	59:DF:168:LEU:HD11	2.01	0.43
53:CA:1026:G:N2	53:CA:1036:A:H61	2.16	0.43
2:CB:212:TYR:HD2	2:CB:216:VAL:HG23	1.82	0.43
1:AA:933:G:C5	1:AA:935:A:C8	3.06	0.43
57:DA:1570:A:C6	57:DA:1571:A:N1	2.87	0.43
57:DA:1267:U:HO2'	57:DA:1268:A:C5'	2.31	0.43
31:BJ:54:ILE:HD12	31:BJ:55:ILE:C	2.39	0.43
57:DA:2283:C:C4	57:DA:2389:G:C4	3.07	0.43
3:AC:139:ASN:ND2	3:AC:139:ASN:C	2.71	0.43
1:AA:1090:U:H2'	1:AA:1091:U:H6	1.83	0.43
14:CN:1:ALA:HA	14:CN:67:GLY:O	2.18	0.43
25:DD:28:GLU:OE2	25:DD:30:GLU:HG3	2.19	0.43
22:BA:2275:C:O3'	34:BM:83:GLY:O	2.36	0.43
22:BA:1279:G:H4'	35:BN:31:HIS:CD2	2.53	0.43
22:BA:1474:U:C2'	22:BA:1475:G:H5'	2.48	0.43
57:DA:2884:U:O2	48:D0:49:ARG:NE	2.51	0.43
1:AA:1272:G:O2'	1:AA:1273:C:H5'	2.18	0.43
44:DW:20:LEU:N	44:DW:20:LEU:HD12	2.33	0.43
22:BA:1483:G:C6	22:BA:1484:U:C4	3.07	0.43
53:CA:155:A:C6	53:CA:156:C:C4	3.06	0.43
22:BA:1607:C:H4'	22:BA:1608:A:O5'	2.18	0.43
32:BK:8:LEU:N	32:BK:8:LEU:CD2	2.80	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:640:A:C2'	8:CH:106:SER:HB2	2.48	0.43
57:DA:699:A:C2	57:DA:734:A:H1'	2.53	0.43
57:DA:2061:G:C4	57:DA:2063:C:N4	2.86	0.43
18:CR:32:ILE:HA	18:CR:39:VAL:HG23	2.00	0.43
22:BA:2516:A:O2'	22:BA:2517:C:H5'	2.18	0.43
22:BA:686:U:O4	50:B2:12:ARG:HB3	2.19	0.43
53:CA:992:U:H1'	53:CA:993:G:N2	2.33	0.43
57:DA:2733:A:O2'	57:DA:2734:A:H5'	2.18	0.43
59:DF:37:MET:HE3	59:DF:56:LEU:HB2	2.01	0.43
7:AG:68:VAL:HG21	7:AG:103:ILE:CG1	2.49	0.43
22:BA:2014:A:H2'	22:BA:2015:A:C8	2.54	0.43
57:DA:1629:U:H2'	57:DA:1630:A:O4'	2.19	0.43
22:BA:1658:C:H5'	25:BD:138:LEU:CD2	2.49	0.43
37:DP:65:ASN:N	37:DP:65:ASN:ND2	2.66	0.43
57:DA:1793:C:H2'	57:DA:1794:A:O4'	2.18	0.43
2:CB:187:ASP:O	2:CB:189:ASN:N	2.51	0.43
26:BE:31:VAL:HG21	26:BE:104:ALA:CB	2.48	0.43
22:BA:9:G:C6	22:BA:2629:U:C6	3.07	0.43
57:DA:1465:G:C5	57:DA:1466:U:C5	3.06	0.43
22:BA:1773:A:H2'	22:BA:1774:C:C5'	2.49	0.43
15:AO:39:GLN:OE1	22:BA:716:A:H1'	2.18	0.43
45:DX:33:HIS:O	45:DX:34:SER:O	2.36	0.43
1:AA:118:U:C4	1:AA:288:A:C2	3.06	0.43
34:DM:74:THR:OG1	34:DM:86:LYS:NZ	2.52	0.43
37:DP:47:ILE:HD11	37:DP:70:GLU:HG2	1.98	0.43
24:BC:36:ASN:O	24:BC:37:SER:HB3	2.18	0.43
1:AA:862:C:C2'	1:AA:863:U:H5'	2.48	0.43
48:D0:42:ILE:HD13	48:D0:42:ILE:HA	1.73	0.43
2:CB:67:LEU:HD23	2:CB:67:LEU:HA	1.84	0.43
57:DA:56:A:C2	57:DA:115:C:C2	3.07	0.43
28:BG:83:THR:O	28:BG:84:LYS:HB3	2.19	0.43
53:CA:1319:A:C6	53:CA:1323:G:C4	3.06	0.43
57:DA:2269:G:C5	57:DA:2270:A:N7	2.86	0.43
4:CD:190:LEU:C	4:CD:190:LEU:HD23	2.38	0.43
22:BA:1069:A:N1	22:BA:1073:A:N6	2.66	0.43
37:DP:19:PHE:O	37:DP:20:ARG:HB3	2.18	0.43
57:DA:704:G:H1'	57:DA:727:A:H61	1.82	0.43
48:D0:53:VAL:O	48:D0:54:ILE:O	2.37	0.43
35:DN:97:ILE:HD11	35:DN:99:LYS:HZ2	1.84	0.43
39:DR:37:GLU:HB2	39:DR:53:PHE:CG	2.53	0.43
57:DA:250:G:O6	57:DA:386:G:N2	2.44	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:976:G:N1	1:AA:1363:A:C2	2.86	0.43
57:DA:301:G:C8	57:DA:334:C:C2	3.05	0.43
25:BD:104:VAL:HG13	25:BD:106:LYS:HD2	2.00	0.43
25:BD:114:LYS:CE	25:BD:114:LYS:O	2.66	0.43
53:CA:428:G:H1'	53:CA:430:A:C8	2.53	0.43
57:DA:2303:G:N1	57:DA:2314:A:C5	2.86	0.43
57:DA:1745:A:N3	57:DA:1746:A:C8	2.86	0.43
37:DP:51:ASN:O	37:DP:52:ARG:HD3	2.19	0.43
57:DA:1312:U:C2	57:DA:1603:A:N1	2.86	0.43
1:AA:842:U:O2'	1:AA:846:G:N1	2.50	0.43
22:BA:1187:G:HO2'	22:BA:1188:U:H6	1.63	0.43
5:CE:80:LEU:N	5:CE:121:ASN:HD21	2.16	0.43
5:CE:114:LEU:HD13	5:CE:122:VAL:HG11	2.00	0.43
1:AA:481:G:H3'	1:AA:481:G:C8	2.53	0.43
57:DA:1999:C:H4'	57:DA:2723:C:O2	2.18	0.43
32:DK:87:LEU:HB3	32:DK:94:PRO:HA	2.01	0.43
53:CA:36:C:OP1	12:CL:119:LYS:HE3	2.19	0.43
57:DA:2407:A:C6	57:DA:2408:U:O4	2.71	0.43
4:AD:110:ARG:O	4:AD:113:ALA:HB3	2.17	0.43
57:DA:2563:U:C1'	57:DA:2566:A:N6	2.81	0.43
37:BP:33:GLU:OE2	37:BP:38:ARG:NH1	2.51	0.43
57:DA:775:G:O6	57:DA:787:C:H2'	2.19	0.43
2:AB:88:GLN:HG3	2:AB:88:GLN:H	1.62	0.43
1:AA:1022:A:H2'	1:AA:1023:U:O4'	2.17	0.43
34:BM:53:MET:O	34:BM:56:ALA:HB3	2.18	0.43
1:AA:15:G:N7	1:AA:1396:A:C2	2.87	0.43
53:CA:780:A:C2	53:CA:803:G:C6	3.07	0.43
1:AA:748:G:C6	1:AA:749:A:C5	3.07	0.43
26:BE:142:ALA:O	26:BE:143:LEU:HD23	2.19	0.43
22:BA:1430:G:O2'	22:BA:1431:A:H5'	2.18	0.43
57:DA:91:A:H1'	57:DA:92:U:C6	2.53	0.43
53:CA:1012:A:C5	53:CA:1013:G:N7	2.86	0.43
2:AB:185:ILE:HA	2:AB:199:ILE:O	2.19	0.43
57:DA:2104:C:O2	57:DA:2105:U:C5	2.56	0.43
57:DA:203:A:H3'	57:DA:204:A:C8	2.53	0.43
2:AB:98:GLY:C	2:AB:100:LEU:H	2.21	0.43
54:CG:77:ARG:HA	54:CG:77:ARG:HD3	1.70	0.43
4:AD:48:SER:O	4:AD:52:VAL:HG13	2.18	0.43
2:CB:133:ALA:HA	2:CB:137:THR:CG2	2.48	0.43
22:BA:983:A:N6	22:BA:984:A:N1	2.67	0.43
36:DO:41:ALA:O	36:DO:43:ASN:N	2.45	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2507:C:H5''	22:BA:2508:G:OP2	2.19	0.43
57:DA:1649:G:N1	57:DA:2009:A:C6	2.86	0.43
22:BA:64:A:H2'	22:BA:65:U:C6	2.53	0.43
57:DA:995:C:C2	31:DJ:3:THR:HG23	2.52	0.43
53:CA:182:A:C4	53:CA:184:G:N7	2.87	0.43
24:BC:257:ARG:CG	24:BC:269:ARG:HH22	2.32	0.43
22:BA:1858:A:N6	22:BA:1884:G:H1'	2.34	0.43
47:BZ:52:PHE:CE2	47:BZ:53:MET:SD	3.11	0.43
2:AB:22:TRP:HA	2:AB:189:ASN:HA	2.01	0.43
37:BP:47:ILE:HA	37:BP:96:LEU:HB2	1.99	0.43
22:BA:434:U:C4'	22:BA:435:C:OP1	2.65	0.43
32:BK:88:ASN:ND2	32:BK:90:ASN:N	2.66	0.43
53:CA:1108:G:OP1	3:CC:175:HIS:ND1	2.44	0.43
31:DJ:111:LYS:HB2	31:DJ:115:GLY:CA	2.48	0.43
22:BA:1820:U:O2	24:BC:200:MET:N	2.51	0.43
20:CT:61:ALA:O	20:CT:67:HIS:HA	2.18	0.43
57:DA:2:G:C2	57:DA:3:U:C2	3.06	0.43
22:BA:2722:G:H8	22:BA:2722:G:O5'	2.02	0.43
42:BU:24:VAL:HG22	42:BU:35:VAL:HG22	2.01	0.43
41:BT:29:THR:N	41:BT:91:GLN:HE22	2.16	0.43
41:BT:29:THR:CB	41:BT:86:THR:HG22	2.47	0.43
22:BA:2319:G:O2'	22:BA:2320:U:C5	2.70	0.43
53:CA:642:A:HO2'	53:CA:643:C:H6	1.49	0.43
22:BA:41:C:H2'	22:BA:42:A:O4'	2.19	0.43
31:BJ:25:LEU:HB2	31:BJ:62:VAL:CG2	2.48	0.43
34:BM:78:LEU:O	34:BM:80:VAL:N	2.51	0.43
50:B2:12:ARG:HG3	50:B2:13:ASN:ND2	2.34	0.43
53:CA:1410:A:H2'	53:CA:1411:C:C6	2.53	0.43
32:DK:63:VAL:HG12	32:DK:64:ARG:CD	2.47	0.43
36:BO:2:ASP:O	36:BO:3:LYS:CB	2.66	0.43
57:DA:2648:G:C4	57:DA:2673:G:N2	2.86	0.43
24:DC:79:ARG:HD3	24:DC:81:GLU:OE1	2.19	0.43
1:AA:801:U:H2'	1:AA:802:A:C8	2.54	0.43
47:BZ:6:ILE:O	47:BZ:34:THR:HA	2.19	0.43
22:BA:2446:G:H5''	22:BA:2447:G:OP2	2.18	0.43
53:CA:355:C:H2'	53:CA:356:A:O4'	2.18	0.43
43:DV:21:ARG:HD3	43:DV:87:GLN:HG2	2.01	0.43
43:BV:29:ILE:HG12	43:BV:30:ILE:N	2.34	0.43
22:BA:2617:U:C2'	22:BA:2618:G:H5'	2.48	0.43
57:DA:1045:C:H4'	57:DA:1047:G:C4	2.53	0.43
2:AB:191:ASP:HA	2:AB:192:PRO:HD2	1.77	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:373:U:H2'	22:BA:374:A:C8	2.54	0.43
53:CA:1281:C:H5'	53:CA:1282:C:H5	1.83	0.43
53:CA:830:G:H5'	2:CB:22:TRP:HE1	1.84	0.43
24:BC:196:ASN:OD1	24:BC:197:ALA:N	2.51	0.43
1:AA:418:C:N4	63:AA:1716:HOH:O	2.51	0.43
55:CM:47:LEU:HD23	55:CM:48:SER:N	2.33	0.43
22:BA:1072:C:H6	22:BA:1072:C:H2'	1.35	0.43
16:AP:46:LYS:HB2	16:AP:47:GLU:H	1.60	0.43
57:DA:2094:A:H2'	57:DA:2095:A:H8	1.83	0.43
22:BA:2572:A:HO2'	22:BA:2573:C:P	2.41	0.43
44:BW:28:GLU:HB3	44:BW:31:LEU:CG	2.48	0.43
53:CA:255:G:H4'	17:CQ:18:LYS:HB2	1.99	0.43
53:CA:276:G:O2'	53:CA:277:C:C5'	2.67	0.43
53:CA:960:U:C4'	53:CA:961:U:H5''	2.48	0.43
30:BI:79:LEU:HD21	30:BI:132:ALA:HB1	2.00	0.43
57:DA:590:A:C4	57:DA:591:U:C5	3.06	0.43
1:AA:282:A:C2	1:AA:283:U:H1'	2.54	0.43
57:DA:2440:C:C2	57:DA:2441:U:H1'	2.53	0.43
38:DQ:43:GLN:O	38:DQ:44:TYR:C	2.57	0.43
57:DA:448:U:H4'	57:DA:449:A:OP2	2.18	0.43
57:DA:455:C:N3	57:DA:473:G:H4'	2.33	0.43
57:DA:828:U:P	57:DA:2068:U:C5	3.12	0.43
57:DA:1345:C:C5'	57:DA:1396:U:O4	2.66	0.43
57:DA:2303:G:C6	57:DA:2314:A:N6	2.86	0.43
57:DA:2314:A:H2'	57:DA:2315:G:C8	2.53	0.43
58:DB:42:C:O2	59:DF:89:THR:N	2.52	0.43
53:CA:953:G:C6	53:CA:954:G:C6	3.06	0.43
1:AA:1123:U:H5''	1:AA:1124:G:OP2	2.19	0.43
57:DA:1285:A:C6	57:DA:1329:U:C5	3.06	0.43
53:CA:78:A:C6	53:CA:79:G:C6	3.07	0.43
2:AB:67:LEU:HB3	2:AB:160:LEU:HD12	2.00	0.43
22:BA:1055:G:H3'	22:BA:1056:G:H8	1.83	0.43
45:DX:10:ARG:HB3	45:DX:11:PRO:HD2	2.00	0.43
39:DR:33:VAL:O	39:DR:61:ALA:HB3	2.18	0.43
57:DA:297:G:H5''	42:DU:84:PHE:CB	2.36	0.43
53:CA:1308:U:OP1	55:CM:95:PRO:HB3	2.18	0.43
57:DA:116:C:H5''	57:DA:128:C:N4	2.33	0.43
53:CA:754:C:C2'	53:CA:755:G:H5'	2.48	0.43
22:BA:1498:C:O2'	22:BA:1499:C:H6	2.00	0.43
24:BC:67:LYS:O	24:BC:68:ARG:HB2	2.18	0.43
57:DA:1654:A:O2'	57:DA:1655:A:O5'	2.36	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:996:A:C5	57:DA:1160:G:C2	3.06	0.43
1:AA:173:U:C2	1:AA:197:A:N1	2.86	0.43
59:DF:43:ILE:HG23	59:DF:44:ALA:N	2.25	0.43
35:DN:52:ILE:O	35:DN:56:LYS:HB2	2.17	0.43
53:CA:282:A:H2'	53:CA:283:U:H6	1.83	0.43
24:DC:69:ASN:O	24:DC:70:LYS:C	2.57	0.43
57:DA:1363:C:H2'	57:DA:1364:G:O4'	2.19	0.43
57:DA:1512:C:C4	57:DA:1513:U:C4	3.07	0.43
4:CD:96:ARG:O	4:CD:100:VAL:HG23	2.18	0.43
30:BI:3:LYS:HD2	30:BI:4:VAL:H	1.82	0.43
27:BF:39:VAL:HG13	27:BF:40:GLY:N	2.34	0.43
40:DS:28:LYS:HA	40:DS:70:LYS:HA	1.99	0.43
40:DS:28:LYS:O	40:DS:29:VAL:HG23	2.19	0.43
22:BA:1343:G:C4	22:BA:1344:U:C5	3.06	0.43
48:B0:48:TYR:CD2	48:B0:49:ARG:HG3	2.52	0.43
14:CN:64:ARG:HD3	14:CN:77:GLY:O	2.18	0.43
1:AA:701:U:O2'	1:AA:702:A:P	2.76	0.43
32:DK:2:ILE:HB	32:DK:33:ALA:HB3	2.00	0.43
57:DA:753:A:O2'	57:DA:754:U:H5'	2.19	0.43
1:AA:737:C:H2'	1:AA:738:C:H6	1.83	0.43
57:DA:2425:A:H1'	57:DA:2427:C:C4	2.54	0.43
16:AP:71:VAL:O	16:AP:75:ILE:HG13	2.18	0.43
22:BA:959:A:C6	22:BA:960:A:N1	2.87	0.43
9:CI:117:LEU:CD2	9:CI:123:ARG:HD3	2.49	0.43
1:AA:1371:G:OP2	9:AI:12:LYS:HD3	2.17	0.43
8:AH:93:LYS:HE3	8:AH:116:ARG:NH1	2.32	0.43
22:BA:1696:G:H5''	22:BA:1696:G:C8	2.48	0.43
22:BA:1392:A:N6	22:BA:1393:A:N6	2.67	0.43
29:DH:50:ARG:HG3	29:DH:54:LEU:HG	2.01	0.43
40:BS:45:VAL:HG22	40:BS:46:LEU:N	2.33	0.43
24:DC:123:ILE:O	24:DC:123:ILE:HG23	2.18	0.43
57:DA:2460:U:H2'	57:DA:2461:A:O4'	2.19	0.43
57:DA:426:C:C2'	57:DA:427:U:H5'	2.48	0.43
22:BA:2298:A:N6	22:BA:2318:G:H1'	2.32	0.43
40:DS:50:VAL:O	40:DS:53:SER:HB3	2.19	0.43
32:BK:85:VAL:HG11	32:BK:115:ILE:HD11	1.99	0.43
22:BA:2554:U:C4	22:BA:2555:U:O4	2.71	0.43
53:CA:216:U:C5'	53:CA:464:U:H4'	2.48	0.43
22:BA:2380:C:H2'	22:BA:2381:A:H8	1.84	0.43
56:CP:4:ILE:HA	56:CP:20:VAL:O	2.19	0.43
28:DG:11:PRO:HD2	28:DG:14:VAL:HG11	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:193:VAL:O	25:DD:194:PRO:O	2.36	0.43
38:BQ:13:HIS:HD2	38:BQ:31:TYR:CZ	2.36	0.43
22:BA:2592:G:C5	22:BA:2593:U:C4	3.07	0.43
53:CA:1370:G:H2'	53:CA:1371:G:C8	2.53	0.43
57:DA:2108:A:C8	57:DA:2108:A:OP2	2.72	0.43
57:DA:2686:G:C5	57:DA:2687:U:C4	3.06	0.43
57:DA:1839:G:O2'	57:DA:1840:G:H5'	2.19	0.43
35:DN:36:THR:HG23	35:DN:41:ALA:HB2	2.01	0.43
57:DA:824:U:C4	57:DA:825:A:N7	2.86	0.43
53:CA:661:G:C2	53:CA:662:U:C6	3.07	0.43
28:BG:175:LYS:HD3	28:BG:175:LYS:HA	1.81	0.43
34:DM:51:ARG:HB2	34:DM:51:ARG:HE	1.65	0.43
43:DV:79:ARG:CZ	43:DV:79:ARG:HB3	2.48	0.43
2:AB:84:LEU:HG	2:AB:84:LEU:O	2.18	0.43
28:BG:45:ALA:O	28:BG:46:ASP:CB	2.66	0.43
57:DA:2342:C:O2'	57:DA:2374:C:H5''	2.18	0.43
17:AQ:58:VAL:HG22	17:AQ:59:GLU:N	2.33	0.43
17:AQ:58:VAL:HG23	17:AQ:77:VAL:HG22	2.00	0.43
50:D2:1:MET:HG3	50:D2:2:LYS:N	2.34	0.43
38:BQ:91:ARG:HD3	39:BR:11:GLN:HB2	2.00	0.43
44:BW:28:GLU:CG	44:BW:29:SER:N	2.81	0.43
57:DA:2217:G:H2'	57:DA:2218:G:C8	2.47	0.43
53:CA:257:G:C2	53:CA:270:A:N1	2.87	0.43
53:CA:1217:C:O2'	53:CA:1218:C:C5'	2.67	0.43
10:CJ:59:LYS:H	10:CJ:59:LYS:HG3	1.64	0.43
29:BH:33:GLN:HE21	29:BH:33:GLN:HB2	1.59	0.43
53:CA:1408:A:N1	53:CA:1494:G:C5	2.87	0.43
6:AF:91:ARG:HG3	6:AF:92:THR:N	2.26	0.43
22:BA:1079:C:C2	22:BA:1080:A:C8	3.07	0.43
57:DA:1036:G:C5	57:DA:1120:G:C6	3.07	0.43
53:CA:547:A:OP2	4:CD:1:ALA:HB3	2.19	0.43
35:DN:24:MET:HG2	35:DN:44:LEU:CD2	2.43	0.43
57:DA:327:G:H2'	57:DA:328:U:O4'	2.18	0.43
9:CI:17:ARG:NH1	9:CI:65:THR:HG21	2.33	0.43
39:BR:83:TYR:C	39:BR:83:TYR:CD1	2.91	0.43
53:CA:80:A:H3'	53:CA:81:A:C4'	2.49	0.43
54:CG:113:LYS:HE2	54:CG:113:LYS:HB3	1.88	0.43
55:CM:41:ASP:O	55:CM:42:VAL:HB	2.18	0.43
57:DA:2843:G:C2	57:DA:2875:C:N3	2.87	0.43
31:BJ:49:ASP:HB2	31:BJ:114:LEU:HD21	2.00	0.43
53:CA:673:A:H1'	18:CR:63:TYR:HE2	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:228:C:H4'	57:DA:229:C:H6	1.83	0.43
57:DA:1136:G:O2'	57:DA:2038:G:O2'	2.32	0.43
1:AA:558:G:C5	1:AA:559:A:C2	3.07	0.43
22:BA:858:G:C4	22:BA:2268:A:C2	3.06	0.43
57:DA:1027:A:N6	57:DA:1126:A:H1'	2.33	0.43
57:DA:54:G:C6	57:DA:117:G:N2	2.87	0.43
57:DA:627:A:O2'	57:DA:628:G:P	2.76	0.43
57:DA:629:G:N2	57:DA:639:U:O3'	2.51	0.43
57:DA:779:U:OP1	24:DC:48:ILE:HG13	2.19	0.43
22:BA:2149:U:C2'	22:BA:2150:C:O5'	2.67	0.43
53:CA:794:A:C8	53:CA:794:A:H5''	2.44	0.43
22:BA:417:C:H2'	22:BA:418:C:C6	2.54	0.43
13:AM:3:ILE:O	13:AM:5:GLY:N	2.52	0.43
57:DA:203:A:H3'	57:DA:204:A:H8	1.84	0.43
22:BA:28:A:C4	22:BA:513:A:C5	3.06	0.43
16:AP:33:ILE:O	16:AP:34:GLU:HB3	2.19	0.43
57:DA:279:A:N6	57:DA:280:U:N3	2.67	0.43
30:BI:56:VAL:CG2	30:BI:68:PHE:HB2	2.49	0.43
1:AA:517:G:O2'	1:AA:530:G:H4'	2.19	0.43
1:AA:792:A:C4	1:AA:794:A:C6	3.07	0.43
2:AB:202:ASN:HB3	2:AB:208:ALA:HB2	2.00	0.43
22:BA:2823:A:H2'	22:BA:2824:C:H5'	2.01	0.43
53:CA:1026:G:H22	53:CA:1036:A:H61	1.66	0.43
57:DA:465:G:O4'	50:D2:16:HIS:CD2	2.71	0.43
2:AB:209:VAL:HG23	2:AB:210:THR:N	2.31	0.43
1:AA:787:A:C5	1:AA:788:U:C5	3.07	0.43
57:DA:1737:G:N7	57:DA:1738:G:O6	2.52	0.43
1:AA:1108:G:OP1	3:AC:175:HIS:HB2	2.18	0.43
43:DV:56:PHE:CE1	43:DV:61:LEU:HD13	2.54	0.43
14:CN:1:ALA:HA	14:CN:67:GLY:C	2.39	0.43
22:BA:669:G:C4	22:BA:801:G:C6	3.07	0.43
35:BN:116:VAL:HG22	35:BN:116:VAL:O	2.17	0.43
29:DH:68:ARG:HD3	29:DH:71:LYS:HB2	2.00	0.43
22:BA:675:A:C4	22:BA:804:A:C2	3.07	0.43
22:BA:666:A:H4'	33:BL:48:ARG:HD2	2.01	0.43
53:CA:295:C:C6	53:CA:296:U:H5	2.37	0.43
33:BL:55:MET:HE2	33:BL:56:PRO:HD3	1.99	0.43
22:BA:2438:U:O2'	22:BA:2440:C:OP1	2.31	0.43
12:AL:101:LEU:C	12:AL:103:CYS:H	2.22	0.43
54:CG:85:GLN:HE21	54:CG:85:GLN:HB3	1.56	0.43
53:CA:861:G:C6	53:CA:862:C:C4	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:854:U:H3'	53:CA:871:U:H3	1.84	0.43
53:CA:1008:U:C4	53:CA:1009:U:C4	3.07	0.43
14:AN:62:ARG:O	14:AN:63:CYS:C	2.55	0.43
57:DA:1287:A:OP1	35:DN:103:ARG:HD2	2.17	0.43
3:CC:113:LYS:HE3	3:CC:184:ASN:HD21	1.83	0.43
57:DA:2638:G:H1'	57:DA:2778:A:H62	1.83	0.43
36:DO:2:ASP:O	36:DO:4:LYS:N	2.51	0.43
22:BA:735:A:H3'	22:BA:736:C:H6	1.83	0.43
7:AG:108:ARG:HH21	7:AG:118:ARG:HH22	1.67	0.43
27:BF:3:LEU:HD13	27:BF:3:LEU:HA	1.53	0.43
28:BG:1:SER:HA	28:BG:5:LYS:HG3	2.00	0.43
30:DI:102:ARG:HG2	30:DI:141:ASP:O	2.17	0.43
43:BV:68:LYS:O	43:BV:69:GLU:O	2.36	0.43
53:CA:168:G:C6	53:CA:169:C:C5	3.07	0.43
22:BA:24:G:O2'	40:BS:77:ASP:HB3	2.19	0.43
23:BB:22:U:H2'	23:BB:23:G:C8	2.53	0.43
53:CA:825:A:H2'	53:CA:826:C:H6	1.82	0.43
53:CA:825:A:H2'	53:CA:826:C:C6	2.54	0.43
22:BA:1851:U:C4	22:BA:1852:U:C4	3.07	0.43
25:DD:172:VAL:HG12	25:DD:172:VAL:O	2.18	0.43
20:AT:15:LYS:HD3	20:AT:15:LYS:C	2.38	0.43
57:DA:1409:U:H6	57:DA:1409:U:O5'	2.02	0.43
24:BC:18:VAL:O	24:BC:18:VAL:HG13	2.18	0.43
47:BZ:39:ASP:OD2	47:BZ:44:ARG:NH1	2.52	0.43
53:CA:247:G:C6	53:CA:278:G:C6	3.06	0.43
53:CA:1366:C:O2'	53:CA:1367:C:C5'	2.67	0.43
53:CA:1494:G:C6	53:CA:1495:U:C4	3.07	0.43
57:DA:2756:U:H1'	57:DA:2757:A:C5'	2.49	0.43
22:BA:1061:U:H6	22:BA:1070:A:N9	2.17	0.43
57:DA:1782:U:O2'	57:DA:1783:A:H5'	2.18	0.43
57:DA:1792:G:N2	57:DA:1828:G:H1'	2.33	0.43
31:BJ:65:THR:HG22	31:BJ:68:LYS:CE	2.30	0.43
57:DA:2839:G:N1	57:DA:2880:C:N4	2.67	0.43
57:DA:2358:A:H8	57:DA:2358:A:P	2.41	0.43
57:DA:1389:G:O2'	57:DA:1390:U:H5'	2.19	0.43
53:CA:1255:G:H21	53:CA:1258:G:N2	2.16	0.43
57:DA:300:A:H1'	57:DA:333:G:H21	1.83	0.43
34:DM:41:LEU:HD11	34:DM:126:ILE:HD11	2.00	0.43
29:DH:2:GLN:O	29:DH:3:VAL:O	2.37	0.43
11:CK:104:PHE:N	11:CK:104:PHE:CD1	2.84	0.43
57:DA:2316:G:H2'	57:DA:2317:A:C8	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1130:A:N7	53:CA:1146:A:N6	2.67	0.43
41:BT:48:GLN:NE2	41:BT:53:VAL:O	2.52	0.43
53:CA:86:G:O2'	53:CA:87:C:OP2	2.30	0.43
23:BB:90:C:OP1	34:BM:16:ARG:HB3	2.18	0.43
1:AA:479:U:O2'	1:AA:480:U:H5'	2.19	0.43
16:AP:17:TYR:CD1	16:AP:17:TYR:N	2.86	0.43
22:BA:783:A:H2'	22:BA:783:A:H8	1.35	0.43
57:DA:375:G:N3	57:DA:375:G:H2'	2.34	0.43
22:BA:1057:A:N3	22:BA:1082:U:C2	2.87	0.43
5:AE:148:SER:HA	5:AE:149:PRO:HD2	1.83	0.43
53:CA:1345:U:H5''	53:CA:1346:A:OP1	2.19	0.43
1:AA:342:C:H2'	1:AA:343:U:H5'	1.99	0.43
32:BK:116:ILE:HD12	32:BK:116:ILE:C	2.39	0.43
2:AB:68:PHE:CD2	2:AB:83:ALA:HB1	2.53	0.43
53:CA:17:U:H4'	53:CA:1080:A:O4'	2.19	0.43
8:CH:54:THR:HG23	8:CH:55:LYS:N	2.29	0.43
57:DA:2344:U:HO2'	57:DA:2345:G:C5'	2.31	0.43
38:DQ:91:ARG:NH2	39:DR:11:GLN:O	2.51	0.43
22:BA:750:A:C3'	22:BA:751:A:H5''	2.48	0.43
8:AH:8:ASP:O	8:AH:9:MET:C	2.57	0.43
51:B3:21:PHE:O	51:B3:22:LYS:O	2.36	0.43
57:DA:1156:A:C8	38:DQ:50:ARG:HG2	2.54	0.43
4:CD:149:LYS:HZ3	4:CD:176:LYS:HD2	1.84	0.43
1:AA:429:U:C3'	4:AD:8:LEU:HD23	2.49	0.43
57:DA:854:C:H2'	57:DA:855:G:C8	2.54	0.43
57:DA:387:U:O2	57:DA:388:G:N7	2.51	0.43
1:AA:115:G:H4'	1:AA:116:A:O5'	2.18	0.43
22:BA:1585:C:O5'	22:BA:1585:C:H6	2.01	0.43
46:DY:58:ASN:C	46:DY:60:LYS:H	2.22	0.43
22:BA:544:C:H2'	22:BA:544:C:O2	2.17	0.43
28:BG:31:GLU:O	28:BG:32:LEU:C	2.56	0.43
42:DU:39:ASN:O	42:DU:40:LEU:C	2.57	0.43
45:DX:32:LEU:HD22	45:DX:32:LEU:N	2.33	0.43
57:DA:1113:U:O2'	57:DA:1114:C:C6	2.66	0.43
2:AB:141:GLU:O	2:AB:144:GLU:HB2	2.19	0.43
12:AL:43:LYS:CB	12:AL:44:PRO:CD	2.90	0.43
57:DA:1965:C:H2'	57:DA:1966:A:H8	1.79	0.43
53:CA:1138:G:C2'	53:CA:1139:G:OP1	2.66	0.43
1:AA:184:G:H2'	1:AA:185:U:C6	2.54	0.43
26:BE:28:VAL:O	26:BE:32:VAL:HG13	2.19	0.43
57:DA:156:A:H2'	57:DA:157:C:O4'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:85:TYR:HD2	8:CH:123:GLU:HB2	1.78	0.43
43:DV:4:ILE:HD11	43:DV:50:MET:HE2	2.01	0.43
22:BA:2778:A:HO2'	22:BA:2779:U:P	2.41	0.43
34:DM:36:VAL:O	34:DM:127:LYS:O	2.37	0.43
46:DY:4:LYS:HB2	46:DY:4:LYS:HZ2	1.84	0.43
22:BA:1713:A:H4'	22:BA:1714:U:OP1	2.18	0.43
53:CA:64:G:N7	53:CA:99:C:C4	2.86	0.43
53:CA:71:A:C2	53:CA:72:A:N7	2.87	0.43
57:DA:77:G:N2	57:DA:110:G:HI1'	2.34	0.43
57:DA:77:G:H2'	57:DA:78:U:C6	2.54	0.43
37:BP:99:LEU:HD12	37:BP:99:LEU:HA	1.62	0.43
1:AA:1093:A:N3	1:AA:1109:C:O2'	2.49	0.43
28:DG:48:THR:O	28:DG:49:LEU:CB	2.64	0.43
59:DF:102:LEU:HB3	59:DF:103:ILE:HD12	2.01	0.43
14:CN:30:ILE:O	14:CN:45:LEU:HD11	2.18	0.43
57:DA:2884:U:P	48:D0:40:HIS:HE2	2.41	0.43
22:BA:2702:G:C6	22:BA:2703:C:C4	3.07	0.43
22:BA:1640:A:H2'	22:BA:1641:A:C8	2.53	0.43
25:DD:36:GLN:NE2	25:DD:38:LYS:HZ1	2.17	0.43
23:BB:24:G:C6	23:BB:56:G:C2	3.07	0.43
1:AA:335:C:H2'	1:AA:336:A:C8	2.54	0.43
7:AG:144:ALA:C	7:AG:146:ALA:N	2.72	0.43
53:CA:166:U:OP2	53:CA:166:U:C6	2.70	0.43
37:BP:24:THR:HG22	37:BP:87:ARG:N	2.31	0.43
22:BA:749:A:C5	22:BA:1618:A:N1	2.86	0.43
5:AE:60:GLN:C	5:AE:62:ALA:H	2.21	0.43
57:DA:634:C:OP2	33:DL:70:LYS:HD3	2.19	0.43
1:AA:753:A:H4'	1:AA:754:C:C5'	2.49	0.43
25:DD:174:SER:O	25:DD:175:LEU:C	2.57	0.43
30:DI:98:GLY:HA3	30:DI:137:LEU:HA	2.01	0.43
53:CA:604:G:C5	53:CA:605:U:C4	3.07	0.43
57:DA:2049:G:C6	57:DA:2050:C:C4	3.06	0.43
39:DR:2:TYR:CD2	39:DR:42:ALA:HB2	2.54	0.43
54:CG:103:ILE:HG22	54:CG:103:ILE:O	2.19	0.43
49:D1:42:VAL:HG12	49:D1:42:VAL:O	2.18	0.43
22:BA:847:U:H2'	22:BA:848:C:H6	1.83	0.43
8:CH:104:SER:HA	8:CH:109:VAL:HG13	2.00	0.43
17:AQ:49:ASN:O	17:AQ:50:ASN:C	2.56	0.43
22:BA:1728:C:O2'	22:BA:1729:U:C5	2.71	0.43
16:AP:48:GLU:CG	16:AP:49:GLY:N	2.82	0.43
57:DA:1383:A:C2	57:DA:1384:A:C5	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BV:75:GLN:HA	43:BV:75:GLN:OE1	2.19	0.43
43:BV:75:GLN:HB2	43:BV:92:VAL:HG23	2.00	0.43
27:BF:30:VAL:HG13	27:BF:30:VAL:O	2.18	0.43
32:BK:49:ARG:O	32:BK:50:GLY:O	2.36	0.43
31:DJ:29:ALA:HA	31:DJ:32:LEU:HD12	1.99	0.43
49:B1:42:VAL:HG12	49:B1:44:GLN:HB2	2.01	0.43
35:BN:28:LEU:HD23	35:BN:48:VAL:HG11	2.00	0.43
28:DG:143:VAL:HA	28:DG:146:ASP:OD2	2.18	0.43
9:CI:87:MET:SD	9:CI:87:MET:N	2.91	0.43
33:DL:76:GLU:O	33:DL:76:GLU:HG3	2.18	0.43
22:BA:994:C:O2	39:BR:10:LYS:NZ	2.51	0.43
53:CA:960:U:O2'	53:CA:1223:C:C5'	2.65	0.43
14:CN:8:ARG:HD2	14:CN:12:ARG:NH2	2.34	0.43
19:CS:35:ARG:NH2	19:CS:51:HIS:CD2	2.84	0.43
52:D4:16:ILE:HA	52:D4:24:ARG:O	2.19	0.43
57:DA:601:C:H2'	57:DA:602:A:O4'	2.18	0.43
53:CA:374:A:H5''	53:CA:452:A:C6	2.51	0.43
57:DA:727:A:O2'	57:DA:728:G:O5'	2.37	0.43
24:DC:52:HIS:CD2	24:DC:217:PRO:O	2.68	0.43
57:DA:2882:A:H4'	35:DN:97:ILE:HG12	2.00	0.43
1:AA:1239:A:H1'	1:AA:1241:G:C4	2.54	0.43
57:DA:248:G:H5'	57:DA:250:G:N7	2.33	0.43
33:DL:55:MET:HG3	33:DL:59:ARG:HB3	2.01	0.43
57:DA:1388:G:HO2'	57:DA:1389:G:C5'	2.31	0.43
57:DA:305:C:C2	57:DA:313:G:C2	3.06	0.43
31:DJ:38:GLY:O	31:DJ:40:HIS:N	2.52	0.43
57:DA:2142:A:H2'	57:DA:2144:G:P	2.59	0.43
2:CB:99:MET:O	2:CB:103:TRP:CB	2.67	0.43
57:DA:1716:U:N3	57:DA:1745:A:N6	2.67	0.43
4:AD:101:VAL:HG13	4:AD:106:PHE:HB2	2.00	0.43
53:CA:1333:A:N6	53:CA:1334:G:C2	2.87	0.43
57:DA:1808:A:H3'	57:DA:1809:A:H8	1.81	0.43
57:DA:233:A:O2'	57:DA:234:U:C6	2.67	0.43
57:DA:962:G:O2'	57:DA:963:U:O5'	2.37	0.43
37:BP:32:VAL:O	37:BP:33:GLU:C	2.57	0.43
57:DA:126:A:P	50:D2:19:ARG:HG3	2.59	0.43
57:DA:117:G:H4'	57:DA:126:A:C2	2.54	0.43
9:AI:51:LEU:HA	9:AI:54:VAL:HG23	2.01	0.43
1:AA:15:G:H2'	1:AA:16:A:C8	2.54	0.43
10:AJ:52:LEU:HB2	14:AN:80:ARG:HD2	1.99	0.43
57:DA:2800:A:C2'	57:DA:2801:G:C4'	2.97	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1134:G:N1	1:AA:1141:C:C4	2.87	0.43
22:BA:1450:G:C2	22:BA:1462:C:C2	3.07	0.43
35:DN:51:LEU:HD23	35:DN:51:LEU:HA	1.88	0.43
35:DN:55:ALA:O	35:DN:80:PHE:HA	2.19	0.43
57:DA:922:C:H2'	57:DA:923:G:C8	2.52	0.43
36:BO:34:HIS:CD2	36:BO:53:THR:OG1	2.69	0.43
22:BA:2756:U:H4'	22:BA:2757:A:O5'	2.17	0.43
26:BE:79:ARG:O	26:BE:80:SER:C	2.56	0.43
11:AK:124:LYS:HE3	21:AU:34:ARG:NE	2.33	0.43
57:DA:1637:A:H5'	57:DA:1760:C:O2'	2.19	0.43
12:CL:73:LEU:HD11	12:CL:79:ILE:HG21	2.01	0.43
4:AD:172:VAL:HG22	4:AD:173:ASP:N	2.25	0.43
53:CA:867:G:H2'	53:CA:868:C:H6	1.84	0.43
22:BA:503:A:C6	22:BA:506:G:C6	3.07	0.43
53:CA:181:A:HO2'	53:CA:182:A:H2	1.66	0.43
53:CA:391:G:H5''	56:CP:8:ARG:NE	2.34	0.43
22:BA:2820:A:C8	22:BA:2820:A:C3'	3.01	0.43
10:AJ:36:VAL:HA	10:AJ:76:ILE:HA	2.00	0.43
2:CB:56:LEU:HD23	2:CB:183:PHE:CE1	2.54	0.43
57:DA:1571:A:H3'	57:DA:1571:A:C8	2.54	0.43
53:CA:259:G:O2'	53:CA:260:G:H5'	2.19	0.43
52:D4:3:VAL:O	52:D4:4:ARG:CB	2.65	0.43
2:AB:30:ILE:HD11	2:AB:38:HIS:CD2	2.53	0.43
53:CA:927:G:OP2	53:CA:927:G:H4'	2.19	0.43
1:AA:765:G:H2'	1:AA:812:G:N2	2.34	0.43
57:DA:2249:U:H4'	57:DA:2275:C:C5	2.54	0.43
1:AA:1285:A:H5'	1:AA:1286:U:O4	2.19	0.43
14:CN:46:LYS:CE	19:CS:10:ILE:HB	2.47	0.43
53:CA:996:A:H2'	53:CA:997:U:C5	2.54	0.43
59:DF:174:PHE:CG	59:DF:175:PRO:HD2	2.54	0.43
24:BC:154:ALA:HB2	24:BC:161:VAL:HG23	2.01	0.43
57:DA:1519:G:N3	57:DA:1519:G:H2'	2.33	0.43
1:AA:917:G:C6	1:AA:918:A:C6	3.06	0.43
1:AA:857:C:H2'	1:AA:858:G:O4'	2.18	0.43
7:AG:145:GLU:HA	7:AG:148:LYS:HD2	2.00	0.43
53:CA:675:A:H1'	11:CK:117:HIS:CE1	2.54	0.43
3:CC:5:HIS:HA	3:CC:6:PRO:HD2	1.83	0.43
22:BA:2244:U:C2'	22:BA:2245:U:H5'	2.49	0.43
57:DA:1593:A:C6	57:DA:1594:U:C4	3.07	0.43
22:BA:2393:U:H5''	33:BL:62:PRO:HB3	2.00	0.43
45:DX:19:HIS:O	45:DX:20:ALA:HB3	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1332:G:H2'	22:BA:1332:G:N3	2.34	0.43
29:DH:82:SER:O	29:DH:83:LYS:HB3	2.19	0.43
49:D1:10:LEU:CD2	49:D1:20:TYR:HB3	2.47	0.43
30:DI:96:LYS:HD2	30:DI:96:LYS:HA	1.95	0.43
45:BX:12:VAL:HG22	45:BX:28:PHE:HB2	2.00	0.43
22:BA:1405:U:N3	22:BA:1406:U:C4	2.87	0.43
21:AU:37:TYR:HB3	21:AU:38:GLU:H	1.63	0.43
25:BD:56:LYS:O	25:BD:57:ALA:C	2.57	0.43
22:BA:1906:G:C2'	22:BA:1907:G:O5'	2.67	0.43
6:CF:6:ILE:HD13	6:CF:62:MET:HG2	2.00	0.43
57:DA:2371:G:O3'	49:D1:44:GLN:NE2	2.51	0.43
25:BD:39:ASP:CG	25:BD:40:LEU:HD12	2.38	0.43
53:CA:399:G:C6	53:CA:400:C:C4	3.06	0.43
30:BI:59:THR:HG22	30:BI:61:TYR:CE2	2.53	0.43
28:BG:148:ARG:HA	28:BG:161:VAL:HG11	2.00	0.43
53:CA:386:C:C4	53:CA:387:U:C4	3.07	0.43
53:CA:589:U:H5''	8:CH:29:SER:HB3	2.00	0.43
1:AA:1154:G:N1	1:AA:1155:A:C5	2.87	0.43
30:DI:102:ARG:HD2	30:DI:105:LEU:HB3	2.01	0.43
24:DC:44:ASN:C	24:DC:46:GLY:N	2.72	0.43
11:CK:86:LYS:HB3	11:CK:112:VAL:O	2.18	0.43
53:CA:1276:G:H21	53:CA:1282:C:H1'	1.84	0.43
1:AA:103:U:H2'	1:AA:103:U:O2	2.18	0.43
1:AA:647:C:H2'	1:AA:648:A:H8	1.84	0.43
3:AC:57:GLU:HG2	3:AC:64:ARG:HB3	2.00	0.43
5:CE:11:GLN:HB3	5:CE:116:VAL:HB	2.01	0.43
19:AS:19:GLU:HA	19:AS:19:GLU:OE2	2.19	0.43
7:AG:105:GLU:HG2	7:AG:105:GLU:O	2.18	0.43
28:BG:2:ARG:HH21	28:BG:2:ARG:HG3	1.83	0.43
22:BA:1042:G:O2'	22:BA:1043:C:H5'	2.19	0.43
57:DA:1768:C:H2'	57:DA:1769:U:O4'	2.19	0.43
22:BA:2550:G:H2'	22:BA:2551:C:C6	2.54	0.43
31:BJ:4:PHE:CG	31:BJ:5:THR:N	2.87	0.43
22:BA:2335:A:O2'	22:BA:2336:A:C8	2.72	0.43
22:BA:2364:C:O2'	22:BA:2365:G:H5'	2.19	0.43
58:DB:23:G:N2	58:DB:61:G:C2	2.87	0.43
57:DA:1358:G:H1'	57:DA:1374:G:N2	2.34	0.43
53:CA:981:U:OP2	53:CA:982:U:H3'	2.18	0.43
53:CA:1494:G:N1	53:CA:1495:U:C4	2.87	0.43
57:DA:1776:G:N2	57:DA:1789:A:H1'	2.34	0.43
57:DA:705:A:H2'	57:DA:706:A:H8	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DC:9:SER:HA	24:DC:10:PRO:HD2	1.89	0.43
57:DA:1279:G:OP1	35:DN:35:LYS:HG3	2.18	0.43
58:DB:69:G:C3'	58:DB:70:C:H6	2.14	0.43
57:DA:2060:A:O4'	57:DA:2502:G:H1'	2.19	0.43
2:AB:89:PHE:CE1	2:AB:153:MET:HG3	2.54	0.43
57:DA:1337:G:N2	57:DA:1338:G:H1'	2.33	0.43
57:DA:1387:A:N6	57:DA:1401:G:N1	2.67	0.43
41:DT:29:THR:HB	41:DT:86:THR:CA	2.49	0.43
53:CA:666:G:C2	53:CA:667:G:C8	3.07	0.43
57:DA:319:G:C6	57:DA:333:G:C6	3.07	0.43
25:BD:184:ARG:HH11	37:BP:6:GLN:CD	2.23	0.43
38:DQ:64:ILE:HD12	38:DQ:95:ALA:HB3	2.01	0.43
57:DA:2052:A:C8	25:DD:146:ILE:HD11	2.54	0.43
57:DA:1060:U:H5''	57:DA:1061:U:OP1	2.19	0.43
59:DF:65:LEU:HD11	59:DF:87:LYS:NZ	2.34	0.43
34:DM:100:LYS:HD3	34:DM:100:LYS:HA	1.88	0.43
53:CA:560:A:H4'	53:CA:561:U:C5'	2.35	0.43
53:CA:1230:C:H5''	53:CA:1230:C:H6	1.83	0.43
57:DA:1286:A:N6	57:DA:1329:U:C2	2.87	0.43
55:CM:11:HIS:O	55:CM:12:LYS:HG2	2.19	0.43
53:CA:1328:C:H2'	53:CA:1329:A:H8	1.84	0.43
1:AA:481:G:C3'	1:AA:481:G:C8	3.01	0.43
2:AB:162:VAL:HG22	2:AB:184:ALA:HB2	2.01	0.43
57:DA:224:U:C5	57:DA:420:C:H4'	2.50	0.43
57:DA:946:C:O2'	57:DA:947:A:H5'	2.18	0.43
57:DA:82:U:C2	57:DA:83:A:C8	3.07	0.43
25:BD:29:VAL:HB	25:BD:98:VAL:CG2	2.49	0.43
1:AA:263:A:P	20:AT:73:ARG:HH11	2.42	0.43
1:AA:620:C:N3	4:AD:131:ILE:HG21	2.33	0.43
57:DA:956:G:C2	57:DA:962:G:O6	2.72	0.43
22:BA:275:C:N4	22:BA:276:U:C6	2.87	0.43
57:DA:994:C:OP1	38:DQ:52:ARG:NH2	2.52	0.43
57:DA:637:A:P	33:DL:128:THR:HG21	2.59	0.43
57:DA:143:C:O2'	57:DA:144:A:O4'	2.32	0.43
1:AA:431:A:N3	1:AA:431:A:H2'	2.34	0.43
57:DA:855:G:C2'	44:DW:23:LYS:HD3	2.49	0.43
53:CA:570:G:H2'	53:CA:570:G:N3	2.34	0.43
59:DF:48:LEU:O	59:DF:52:ALA:HB2	2.19	0.43
57:DA:1587:G:H21	57:DA:1588:G:H1'	1.83	0.43
2:CB:17:HIS:HB2	2:CB:37:VAL:HG21	2.01	0.43
45:DX:2:ARG:CD	45:DX:32:LEU:HD23	2.49	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:33:ARG:NE	21:AU:34:ARG:HG3	2.34	0.43
2:AB:165:ALA:CB	2:AB:186:VAL:HG12	2.48	0.43
25:BD:186:LEU:HD12	25:BD:186:LEU:HA	1.74	0.43
57:DA:1636:U:H2'	57:DA:1637:A:C8	2.54	0.43
22:BA:26:G:C5	22:BA:27:G:C6	3.06	0.43
12:CL:66:ILE:HD13	12:CL:73:LEU:CD1	2.47	0.43
7:AG:107:ALA:CA	7:AG:122:GLU:HG3	2.49	0.43
47:DZ:29:ARG:HH22	47:DZ:30:ARG:NH2	2.16	0.43
26:DE:170:ARG:CZ	26:DE:176:ASP:OD2	2.66	0.43
22:BA:1348:C:H2'	22:BA:1349:C:C5'	2.46	0.43
4:CD:125:ASN:N	4:CD:141:VAL:O	2.48	0.43
4:CD:141:VAL:CG1	4:CD:142:VAL:N	2.82	0.43
1:AA:601:G:O2'	1:AA:602:A:H5'	2.18	0.43
22:BA:1343:G:O2'	22:BA:1384:A:N1	2.52	0.43
59:DF:12:VAL:CG1	59:DF:16:MET:HG3	2.49	0.43
22:BA:2822:G:P	25:BD:115:GLY:HA3	2.58	0.43
22:BA:2823:A:OP2	25:BD:118:PHE:HD1	2.01	0.43
29:BH:24:GLY:O	29:BH:28:ASN:HB2	2.19	0.43
32:BK:63:VAL:HG13	32:BK:103:VAL:HG12	1.97	0.43
22:BA:2043:C:C4	22:BA:2777:G:C2	3.07	0.43
57:DA:1734:G:O2'	57:DA:1735:A:H8	2.00	0.43
22:BA:372:G:P	45:BX:61:LYS:NZ	2.91	0.43
53:CA:71:A:C6	53:CA:100:G:C5	3.06	0.43
22:BA:962:G:P	63:BA:3353:HOH:O	2.77	0.43
1:AA:1451:U:HO2'	1:AA:1452:C:P	2.41	0.43
16:AP:56:ARG:HD2	16:AP:56:ARG:HA	1.82	0.43
23:BB:77:U:P	43:BV:21:ARG:HH22	2.42	0.43
29:DH:116:ARG:HH21	29:DH:118:PRO:HA	1.83	0.43
45:DX:44:ARG:NH1	45:DX:44:ARG:HB3	2.34	0.43
1:AA:1111:A:N1	3:AC:176:THR:HG23	2.34	0.43
53:CA:1105:A:H2'	53:CA:1106:G:C8	2.54	0.43
22:BA:2786:U:H2'	22:BA:2787:C:C6	2.52	0.43
27:BF:172:PHE:O	27:BF:173:ASP:C	2.57	0.43
22:BA:2564:A:OP1	22:BA:2648:G:H4'	2.19	0.43
14:AN:81:ILE:O	14:AN:85:GLU:HG2	2.19	0.43
53:CA:600:A:OP2	8:CH:87:ARG:HG2	2.19	0.43
1:AA:675:A:H2'	1:AA:676:A:O4'	2.19	0.43
57:DA:2188:U:C4	57:DA:2189:U:C4	3.07	0.43
53:CA:293:G:H22	53:CA:305:G:H1'	1.83	0.43
32:DK:30:ARG:HB3	32:DK:31:ARG:H	1.65	0.43
38:BQ:75:TYR:CE2	38:BQ:79:ILE:HG13	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1909:C:C2	22:BA:1922:G:C2	3.07	0.43
53:CA:223:A:H2'	53:CA:224:U:H6	1.83	0.43
22:BA:1206:G:H2'	22:BA:1207:C:C6	2.54	0.43
53:CA:774:G:N2	53:CA:775:G:H1'	2.34	0.43
37:DP:44:GLY:HA3	37:DP:60:VAL:CG1	2.49	0.43
22:BA:1783:A:H5'	22:BA:2608:G:H4'	2.01	0.43
53:CA:1401:G:H2'	53:CA:1402:C:H6	1.84	0.43
17:AQ:58:VAL:HG23	17:AQ:76:ARG:O	2.19	0.43
31:DJ:132:HIS:O	31:DJ:135:GLN:HB2	2.18	0.43
36:BO:116:GLN:O	36:BO:117:PHE:HB3	2.18	0.43
6:CF:8:PHE:CZ	6:CF:60:VAL:HB	2.54	0.43
26:BE:46:GLN:HG3	26:BE:86:ALA:HA	2.01	0.43
37:DP:54:LEU:HD12	37:DP:76:HIS:CB	2.48	0.43
22:BA:756:A:H2'	22:BA:757:G:O4'	2.19	0.43
22:BA:1599:U:H2'	22:BA:1600:C:C6	2.54	0.43
57:DA:2592:G:C5	57:DA:2593:U:C5	3.07	0.43
59:DF:141:ASP:C	59:DF:143:ASP:H	2.23	0.43
22:BA:985:C:H6	22:BA:985:C:O5'	2.01	0.43
31:DJ:123:LYS:N	31:DJ:123:LYS:HD2	2.34	0.43
1:AA:1302:C:H6	1:AA:1302:C:H2'	1.29	0.43
41:BT:8:LEU:N	41:BT:8:LEU:HD23	2.33	0.43
22:BA:370:G:C6	22:BA:424:G:C8	3.07	0.43
25:BD:149:ASN:O	25:BD:151:THR:N	2.51	0.42
25:BD:151:THR:CG2	25:BD:152:PRO:N	2.82	0.42
36:BO:8:ILE:O	36:BO:12:THR:N	2.49	0.42
44:BW:28:GLU:CB	44:BW:31:LEU:HD11	2.48	0.42
53:CA:960:U:H4'	53:CA:961:U:O5'	2.18	0.42
57:DA:621:A:C2'	57:DA:622:G:O5'	2.66	0.42
22:BA:1091:G:O2'	22:BA:1092:C:O5'	2.37	0.42
53:CA:1157:A:C6	53:CA:1180:A:C6	3.07	0.42
9:CI:49:GLN:HA	9:CI:52:GLU:HG2	1.99	0.42
57:DA:1779:U:C5	57:DA:1784:A:N7	2.82	0.42
57:DA:1783:A:C5'	57:DA:2608:G:H4'	2.49	0.42
38:DQ:23:TYR:HB2	38:DQ:28:SER:HB3	2.01	0.42
1:AA:407:U:H2'	1:AA:408:A:H8	1.83	0.42
2:AB:40:ILE:O	2:AB:41:ASN:HB2	2.18	0.42
53:CA:1150:A:O3'	10:CJ:43:PRO:HA	2.19	0.42
37:BP:9:GLN:C	37:BP:11:GLN:H	2.22	0.42
3:AC:33:ASP:O	3:AC:37:LYS:CB	2.67	0.42
4:CD:8:LEU:O	4:CD:12:ARG:HB2	2.19	0.42
57:DA:1063:G:O2'	57:DA:1064:C:H6	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:77:A:H2'	53:CA:78:A:O4'	2.19	0.42
57:DA:2724:U:H5''	25:DD:123:LYS:NZ	2.34	0.42
30:BI:19:PRO:HB2	30:BI:22:PRO:HD2	2.01	0.42
2:AB:69:VAL:HG23	2:AB:160:LEU:HD11	2.02	0.42
8:AH:63:LYS:HB2	8:AH:70:VAL:HG21	2.01	0.42
53:CA:515:G:N2	53:CA:537:G:C4	2.87	0.42
53:CA:1348:U:O2'	53:CA:1349:A:H5'	2.19	0.42
1:AA:27:G:C5	1:AA:557:G:C2	3.07	0.42
4:AD:130:ASN:HB3	4:AD:131:ILE:H	1.73	0.42
6:CF:2:ARG:HG2	6:CF:4:TYR:OH	2.19	0.42
14:AN:40:ARG:NH1	14:AN:44:VAL:HG21	2.33	0.42
57:DA:962:G:O2'	57:DA:963:U:C5'	2.66	0.42
26:BE:119:ILE:HD13	26:BE:119:ILE:H	1.83	0.42
26:BE:180:LEU:HA	26:BE:180:LEU:HD23	1.73	0.42
10:AJ:52:LEU:HD22	10:AJ:59:LYS:HA	2.00	0.42
2:AB:103:TRP:HE1	2:AB:150:ILE:HD11	1.84	0.42
32:BK:43:ILE:N	32:BK:43:ILE:HD13	2.33	0.42
35:DN:80:PHE:O	35:DN:85:PRO:HD3	2.19	0.42
1:AA:104:G:O2'	1:AA:105:G:H5'	2.19	0.42
57:DA:63:A:C8	57:DA:64:A:N7	2.87	0.42
57:DA:864:G:C6	57:DA:865:C:C4	3.07	0.42
26:BE:79:ARG:O	26:BE:81:GLY:N	2.52	0.42
24:DC:75:ALA:HB2	24:DC:95:TYR:CG	2.53	0.42
28:DG:1:SER:C	28:DG:3:VAL:N	2.72	0.42
59:DF:177:ARG:CD	59:DF:178:LYS:H	2.30	0.42
1:AA:1160:G:O2'	1:AA:1161:C:H6	2.02	0.42
22:BA:18:U:C2'	22:BA:19:A:H5'	2.48	0.42
1:AA:1055:A:N6	1:AA:1206:G:C5	2.87	0.42
22:BA:26:G:C6	22:BA:27:G:C6	3.07	0.42
57:DA:1168:G:C2	57:DA:1182:G:C2	3.07	0.42
39:BR:61:ALA:HB2	39:BR:98:ILE:HA	2.00	0.42
56:CP:38:PHE:HE2	56:CP:51:ARG:HB3	1.84	0.42
5:CE:15:ILE:HD11	5:CE:37:VAL:HG21	2.00	0.42
22:BA:1349:C:O5'	22:BA:1349:C:H6	2.02	0.42
34:BM:43:ALA:HA	34:BM:46:ILE:HG12	2.00	0.42
1:AA:723:U:H5''	21:AU:48:LYS:HG2	1.99	0.42
18:AR:53:GLN:O	18:AR:56:ARG:HB3	2.19	0.42
5:CE:148:SER:H	5:CE:151:MET:CE	2.32	0.42
57:DA:2236:U:H2'	57:DA:2237:G:O4'	2.18	0.42
57:DA:2653:U:N3	57:DA:2654:A:N6	2.66	0.42
43:DV:75:GLN:HG3	43:DV:92:VAL:HG11	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:32:LEU:O	31:BJ:36:LEU:HB2	2.19	0.42
37:DP:4:ILE:O	37:DP:4:ILE:HG22	2.19	0.42
26:BE:48:THR:HG23	26:BE:51:GLU:CD	2.39	0.42
12:AL:6:LEU:HB3	17:AQ:33:TYR:CZ	2.54	0.42
22:BA:1810:A:H2'	22:BA:1811:G:O4'	2.18	0.42
22:BA:974:G:H8	22:BA:990:A:H62	1.65	0.42
22:BA:541:A:H2'	22:BA:542:C:O4'	2.19	0.42
57:DA:355:U:H2'	57:DA:356:G:H8	1.84	0.42
1:AA:335:C:O2'	1:AA:1433:A:N3	2.42	0.42
41:BT:88:LYS:O	41:BT:89:GLU:HG2	2.19	0.42
22:BA:2839:G:C5	22:BA:2840:C:C5	3.07	0.42
40:DS:17:VAL:HG21	40:DS:103:ILE:HD11	2.00	0.42
32:BK:38:ILE:CD1	32:BK:112:PHE:HZ	2.30	0.42
53:CA:1480:A:H2'	53:CA:1481:U:H6	1.84	0.42
15:CO:69:LEU:HD11	15:CO:77:TYR:HA	2.01	0.42
25:BD:125:TRP:CG	25:BD:160:LYS:HB3	2.53	0.42
57:DA:1972:G:H2'	57:DA:1973:G:H8	1.84	0.42
18:CR:33:THR:C	18:CR:35:SER:H	2.23	0.42
4:AD:191:SER:O	4:AD:192:ALA:CB	2.67	0.42
57:DA:2835:A:N6	57:DA:2879:A:C4	2.87	0.42
22:BA:2548:U:O2	32:BK:23:LYS:NZ	2.50	0.42
22:BA:1115:G:O2'	22:BA:1116:G:P	2.76	0.42
34:BM:78:LEU:C	34:BM:80:VAL:H	2.22	0.42
8:AH:85:TYR:CE2	8:AH:123:GLU:HB2	2.53	0.42
2:CB:8:MET:HB2	2:CB:9:LEU:HD23	2.00	0.42
36:DO:69:ASP:O	36:DO:70:ALA:C	2.57	0.42
33:BL:131:ALA:O	33:BL:132:ARG:C	2.55	0.42
39:DR:15:SER:OG	39:DR:16:GLU:N	2.52	0.42
11:AK:24:ALA:HB2	11:AK:29:THR:HG23	2.01	0.42
57:DA:2004:G:N7	57:DA:2005:A:N7	2.67	0.42
22:BA:2847:U:C2'	22:BA:2848:G:H5'	2.49	0.42
22:BA:1840:G:C2	22:BA:1841:U:C2	3.07	0.42
29:DH:109:GLU:HB3	29:DH:110:VAL:H	1.59	0.42
7:AG:78:ARG:HA	7:AG:82:SER:O	2.18	0.42
23:BB:53:A:O2'	23:BB:54:G:H5'	2.19	0.42
2:AB:77:GLU:HA	2:AB:80:LYS:HB3	2.00	0.42
1:AA:591:U:H2'	1:AA:592:G:H8	1.83	0.42
37:DP:30:TRP:HD1	37:DP:39:LEU:HD12	1.83	0.42
53:CA:444:G:C2	53:CA:445:G:C8	3.07	0.42
24:BC:27:LYS:HA	24:BC:28:PRO:HD2	1.88	0.42
57:DA:1479:G:H2'	57:DA:1480:C:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:14:ASP:OD2	7:AG:14:ASP:C	2.58	0.42
30:DI:72:THR:HA	30:DI:73:PRO:HD2	1.86	0.42
3:CC:93:ILE:HG13	3:CC:93:ILE:O	2.19	0.42
55:CM:80:MET:HE2	55:CM:80:MET:HB2	1.89	0.42
1:AA:1045:C:OP2	1:AA:1045:C:H6	2.01	0.42
57:DA:48:G:N3	57:DA:48:G:H2'	2.33	0.42
57:DA:2092:U:O2	57:DA:2092:U:O5'	2.37	0.42
39:BR:49:ILE:HG22	39:BR:53:PHE:C	2.39	0.42
57:DA:197:A:N7	57:DA:2430:A:C4	2.87	0.42
57:DA:197:A:C8	57:DA:2430:A:C5	3.07	0.42
53:CA:275:G:HO2'	53:CA:276:G:H8	1.66	0.42
17:CQ:46:HIS:CE1	17:CQ:48:GLU:HG2	2.54	0.42
53:CA:978:A:O2'	53:CA:979:C:H5'	2.19	0.42
57:DA:2385:C:O2'	57:DA:2386:A:O5'	2.37	0.42
57:DA:46:G:N1	57:DA:47:C:C4	2.86	0.42
53:CA:1182:G:C3'	53:CA:1183:U:H5'	2.49	0.42
9:CI:56:MET:O	9:CI:58:GLU:HG2	2.19	0.42
54:CG:60:ALA:O	54:CG:61:PHE:HD2	2.01	0.42
57:DA:2881:U:O3'	35:DN:96:ARG:NE	2.52	0.42
39:DR:39:LEU:HA	39:DR:49:ILE:CG2	2.34	0.42
58:DB:15:A:C4	58:DB:109:A:C6	3.06	0.42
58:DB:17:C:O2'	58:DB:18:G:O4'	2.37	0.42
57:DA:2360:G:O2'	33:DL:60:ARG:HB3	2.20	0.42
35:DN:13:ASN:OD1	35:DN:14:SER:N	2.52	0.42
57:DA:1395:A:H4'	57:DA:1397:U:C4	2.54	0.42
53:CA:664:G:N2	53:CA:666:G:C8	2.87	0.42
53:CA:1151:A:OP1	10:CJ:43:PRO:HA	2.19	0.42
57:DA:1208:C:O2'	57:DA:1209:U:H5'	2.19	0.42
24:BC:245:THR:C	24:BC:247:TRP:H	2.22	0.42
57:DA:2145:C:H6	57:DA:2145:C:H2'	1.65	0.42
36:DO:31:THR:HG21	36:DO:36:TYR:HE2	1.83	0.42
22:BA:2063:C:O2	22:BA:2451:A:C2	2.72	0.42
4:CD:20:LEU:HD23	4:CD:20:LEU:N	2.33	0.42
57:DA:1324:G:N2	57:DA:1328:A:N1	2.67	0.42
57:DA:1607:C:H4'	57:DA:1608:A:H8	1.82	0.42
5:CE:131:ASN:ND2	5:CE:132:PRO:HD2	2.27	0.42
53:CA:77:A:C2	53:CA:93:U:C2	3.07	0.42
53:CA:1296:C:H1'	53:CA:1302:C:C2	2.54	0.42
1:AA:375:U:C4	1:AA:376:G:N7	2.87	0.42
57:DA:2877:G:N2	57:DA:2878:U:H1'	2.35	0.42
32:DK:115:ILE:HG22	32:DK:116:ILE:N	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:558:G:O5'	1:AA:558:G:H8	2.02	0.42
11:CK:110:THR:HG22	21:CU:4:LYS:HA	2.02	0.42
39:BR:43:ASN:HA	39:BR:43:ASN:HD22	1.57	0.42
26:BE:124:PHE:C	26:BE:124:PHE:HD1	2.22	0.42
26:BE:145:ASP:HB3	26:BE:184:ASP:HB2	2.00	0.42
1:AA:923:A:C4	1:AA:924:C:C5	3.08	0.42
22:BA:2136:G:O6	22:BA:2156:G:C2	2.72	0.42
57:DA:629:G:H21	57:DA:640:C:P	2.42	0.42
53:CA:490:C:OP1	4:CD:145:ARG:NH2	2.52	0.42
35:DN:64:ARG:O	35:DN:67:PHE:HB3	2.19	0.42
24:DC:264:LYS:HG3	24:DC:265:PHE:CD2	2.54	0.42
52:B4:1:MET:HE1	52:B4:24:ARG:NH2	2.34	0.42
53:CA:1523:G:P	11:CK:124:LYS:NZ	2.92	0.42
53:CA:575:G:C6	53:CA:821:G:N7	2.87	0.42
57:DA:64:A:OP1	41:DT:77:ARG:HA	2.18	0.42
22:BA:2199:A:H3'	22:BA:2200:C:C6	2.53	0.42
10:AJ:65:TYR:HB3	14:AN:95:LEU:CD1	2.48	0.42
30:BI:53:PRO:HB2	30:BI:74:PRO:CG	2.49	0.42
27:BF:84:ILE:HG13	27:BF:84:ILE:O	2.20	0.42
31:BJ:74:TYR:OH	31:BJ:100:VAL:HG13	2.18	0.42
4:AD:89:LEU:HD21	4:AD:199:ILE:CD1	2.49	0.42
22:BA:341:C:C2	22:BA:342:A:C8	3.07	0.42
22:BA:329:G:H4'	22:BA:330:A:OP1	2.19	0.42
22:BA:478:A:N6	22:BA:480:A:N6	2.66	0.42
34:DM:7:THR:C	34:DM:9:PHE:H	2.22	0.42
22:BA:2210:U:O2	22:BA:2212:A:C8	2.72	0.42
39:DR:83:TYR:CD2	39:DR:83:TYR:C	2.92	0.42
53:CA:1005:A:C4	53:CA:1006:G:H1'	2.53	0.42
40:BS:73:LYS:CA	40:BS:73:LYS:HE3	2.49	0.42
8:AH:78:SER:HA	8:AH:84:ILE:HG12	2.01	0.42
57:DA:73:A:O5'	57:DA:73:A:C8	2.62	0.42
22:BA:165:A:H2'	22:BA:166:U:C6	2.54	0.42
31:DJ:56:VAL:CG2	31:DJ:124:VAL:HG23	2.49	0.42
29:BH:50:ARG:O	29:BH:54:LEU:HB2	2.19	0.42
9:AI:121:ARG:O	9:AI:122:ARG:C	2.55	0.42
57:DA:2478:A:C8	57:DA:2529:G:C6	3.08	0.42
53:CA:781:A:O2'	53:CA:1522:U:O2	2.35	0.42
14:CN:30:ILE:C	14:CN:40:ARG:HA	2.39	0.42
1:AA:1026:G:C6	1:AA:1027:C:N4	2.87	0.42
40:DS:59:GLU:CD	40:DS:66:ILE:HG23	2.40	0.42
22:BA:1737:G:C6	22:BA:1738:G:N1	2.87	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:61:ALA:O	20:CT:67:HIS:CG	2.72	0.42
3:CC:187:GLU:O	3:CC:188:ALA:HB2	2.20	0.42
57:DA:1758:U:O2	57:DA:1758:U:O4'	2.37	0.42
33:BL:55:MET:HE2	33:BL:56:PRO:CD	2.49	0.42
53:CA:493:A:H2'	53:CA:494:G:O4'	2.19	0.42
12:AL:79:ILE:HD12	12:AL:96:THR:CG2	2.49	0.42
29:DH:53:GLU:C	29:DH:55:GLU:N	2.72	0.42
57:DA:404:A:N3	57:DA:406:G:C6	2.88	0.42
57:DA:1130:U:HO2'	57:DA:1131:G:H8	1.59	0.42
1:AA:695:A:C6	1:AA:696:A:C6	3.08	0.42
22:BA:1166:G:O2'	22:BA:1167:C:H5'	2.19	0.42
14:AN:11:LYS:HB2	14:AN:11:LYS:HZ3	1.84	0.42
1:AA:126:G:C2'	1:AA:127:G:O5'	2.67	0.42
6:CF:46:GLN:OE1	6:CF:55:HIS:O	2.37	0.42
52:D4:9:LYS:HD3	52:D4:9:LYS:C	2.40	0.42
22:BA:1006:C:P	63:BA:3781:HOH:O	2.77	0.42
53:CA:864:A:H5''	5:CE:89:THR:HB	2.01	0.42
22:BA:151:C:C5'	22:BA:1360:G:OP1	2.67	0.42
17:CQ:47:ASP:HB3	17:CQ:74:LEU:HB2	2.01	0.42
22:BA:792:A:C4'	22:BA:793:A:H5'	2.49	0.42
22:BA:312:G:H2'	22:BA:313:G:H8	1.84	0.42
53:CA:1186:G:N2	53:CA:1187:G:H1'	2.33	0.42
4:CD:60:VAL:CG2	4:CD:194:ILE:CG2	2.97	0.42
57:DA:2029:G:C2	57:DA:2033:A:N7	2.87	0.42
23:BB:40:U:O2'	23:BB:43:C:H5	2.01	0.42
22:BA:1759:A:C8	22:BA:2696:U:H1'	2.54	0.42
50:B2:34:ARG:NH1	50:B2:39:ARG:HG2	2.34	0.42
30:DI:105:LEU:HD21	30:DI:129:GLU:CD	2.39	0.42
57:DA:2274:A:C5	57:DA:2276:G:C8	3.07	0.42
1:AA:1009:U:O2'	1:AA:1010:U:H5'	2.19	0.42
22:BA:2219:U:H2'	22:BA:2220:U:O5'	2.19	0.42
53:CA:683:G:C2	53:CA:684:U:C2	3.08	0.42
33:BL:73:ILE:C	33:BL:105:ILE:HD13	2.40	0.42
15:CO:84:LEU:HA	15:CO:84:LEU:HD23	1.92	0.42
22:BA:2144:G:H3'	22:BA:2144:G:N3	2.35	0.42
37:BP:15:ASP:C	37:BP:15:ASP:OD1	2.57	0.42
57:DA:1805:A:O2'	24:DC:49:THR:HA	2.20	0.42
38:BQ:94:LEU:C	38:BQ:96:ASP:N	2.70	0.42
44:BW:19:ARG:NH1	44:BW:22:VAL:CG1	2.79	0.42
44:BW:49:ASN:ND2	44:BW:50:VAL:N	2.67	0.42
53:CA:276:G:O2'	53:CA:277:C:O5'	2.37	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1367:C:O2'	53:CA:1368:A:O4'	2.29	0.42
57:DA:2353:G:H21	44:DW:30:VAL:CG2	2.32	0.42
37:DP:19:PHE:CD2	37:DP:19:PHE:N	2.85	0.42
53:CA:1157:A:C5	53:CA:1180:A:C6	3.07	0.42
53:CA:1162:C:C2	53:CA:1175:G:N2	2.88	0.42
53:CA:1157:A:C6	53:CA:1180:A:C5	3.07	0.42
54:CG:22:LEU:O	54:CG:26:VAL:HG22	2.18	0.42
35:DN:97:ILE:HG13	35:DN:98:LEU:N	2.34	0.42
38:DQ:87:VAL:HG12	38:DQ:88:GLU:H	1.84	0.42
49:D1:51:ALA:O	49:D1:52:LYS:CB	2.63	0.42
57:DA:2030:A:C2	57:DA:2499:C:H5''	2.54	0.42
57:DA:1275:A:C8	35:DN:16:HIS:CD2	3.08	0.42
15:CO:42:PHE:HB3	15:CO:52:ARG:NH2	2.35	0.42
57:DA:301:G:C2	57:DA:317:G:C4	3.07	0.42
37:BP:5:LYS:O	37:BP:9:GLN:HG2	2.20	0.42
1:AA:652:U:O4	1:AA:752:G:C2'	2.67	0.42
11:CK:18:GLY:O	11:CK:81:LEU:HA	2.19	0.42
57:DA:1091:G:H2'	57:DA:1092:C:C6	2.53	0.42
57:DA:1330:C:O2'	57:DA:1331:G:H8	2.02	0.42
1:AA:844:G:H5''	1:AA:845:A:OP1	2.20	0.42
57:DA:373:U:C2	57:DA:374:A:N7	2.87	0.42
22:BA:1108:U:H2'	22:BA:1109:C:O4'	2.19	0.42
57:DA:2229:U:H2'	57:DA:2230:G:C8	2.54	0.42
25:BD:109:VAL:HG22	25:BD:203:VAL:HB	1.99	0.42
6:CF:2:ARG:HG2	6:CF:4:TYR:CZ	2.55	0.42
25:BD:34:VAL:HG22	25:BD:94:GLN:N	2.27	0.42
26:BE:172:ALA:O	26:BE:175:ILE:HG22	2.19	0.42
57:DA:1655:A:C6	57:DA:1656:C:C2	3.07	0.42
57:DA:104:A:O2'	57:DA:105:C:O4'	2.30	0.42
53:CA:692:U:O2'	53:CA:694:A:N7	2.42	0.42
8:AH:8:ASP:HA	8:AH:11:THR:HG22	2.01	0.42
49:B1:24:LYS:HE2	49:B1:52:LYS:CB	2.42	0.42
1:AA:199:A:C2	1:AA:200:G:C4	3.07	0.42
57:DA:2414:G:C2'	57:DA:2415:G:H5'	2.49	0.42
14:AN:20:PHE:C	14:AN:22:LYS:N	2.73	0.42
22:BA:1568:G:H4'	24:BC:58:LYS:CG	2.49	0.42
53:CA:218:U:H2'	53:CA:219:U:O4'	2.19	0.42
43:DV:77:VAL:HG13	43:DV:77:VAL:O	2.19	0.42
13:AM:59:VAL:HG22	13:AM:59:VAL:O	2.18	0.42
25:DD:108:ASP:O	25:DD:109:VAL:HB	2.20	0.42
57:DA:206:U:H2'	57:DA:207:A:C8	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1682:G:C2	57:DA:1757:A:O4'	2.73	0.42
1:AA:579:A:H2'	1:AA:580:C:C6	2.54	0.42
57:DA:582:A:H2'	57:DA:583:G:C8	2.54	0.42
5:CE:13:LYS:HD3	5:CE:14:LEU:N	2.33	0.42
57:DA:974:G:C8	57:DA:975:A:N7	2.87	0.42
22:BA:478:A:N6	22:BA:480:A:C6	2.87	0.42
22:BA:2820:A:H3'	22:BA:2820:A:C8	2.54	0.42
1:AA:181:A:C6	1:AA:195:A:N7	2.88	0.42
53:CA:1006:G:N2	53:CA:1007:U:H1'	2.35	0.42
1:AA:723:U:O2	1:AA:855:U:O3'	2.37	0.42
9:AI:128:LYS:HD2	9:AI:129:ARG:N	2.34	0.42
34:DM:34:LYS:HB2	34:DM:131:VAL:HG23	2.01	0.42
2:AB:35:ASN:O	2:AB:37:VAL:HG12	2.19	0.42
13:AM:9:PRO:O	13:AM:10:ASP:HB2	2.20	0.42
4:CD:106:PHE:CE1	4:CD:158:LEU:HD21	2.54	0.42
1:AA:1348:U:O2'	1:AA:1349:A:H5'	2.19	0.42
57:DA:1303:G:O2'	57:DA:1304:A:O5'	2.37	0.42
35:BN:116:VAL:O	35:BN:117:ASP:CB	2.66	0.42
46:BY:9:LYS:HB3	46:BY:12:GLU:CG	2.45	0.42
13:AM:89:ARG:CB	13:AM:96:VAL:HG22	2.49	0.42
57:DA:3:U:C4	57:DA:4:U:C4	3.07	0.42
1:AA:1271:A:C2	1:AA:1272:G:C5	3.07	0.42
1:AA:1272:G:C5	1:AA:1273:C:C4	3.07	0.42
27:BF:4:HIS:O	27:BF:7:TYR:HB3	2.19	0.42
5:CE:155:LYS:HB3	8:CH:70:VAL:CG2	2.48	0.42
5:AE:37:VAL:CG1	5:AE:116:VAL:HG21	2.49	0.42
22:BA:1354:A:C8	22:BA:1355:G:C8	3.07	0.42
24:BC:158:GLY:N	24:BC:194:VAL:HG13	2.32	0.42
28:DG:151:ARG:HB3	28:DG:161:VAL:HG23	2.01	0.42
57:DA:1971:U:H6	57:DA:1971:U:H2'	1.34	0.42
31:BJ:25:LEU:HB2	31:BJ:62:VAL:HG22	2.01	0.42
22:BA:950:G:C5	22:BA:951:C:C4	3.07	0.42
8:AH:85:TYR:C	8:AH:86:LYS:HD2	2.39	0.42
31:DJ:1:MET:SD	31:DJ:2:LYS:HE3	2.59	0.42
56:CP:32:PHE:HD1	56:CP:32:PHE:O	2.03	0.42
53:CA:853:C:C4	53:CA:854:U:C5	3.08	0.42
22:BA:2786:U:O2'	22:BA:2787:C:H5'	2.19	0.42
27:BF:116:LEU:O	27:BF:176:PHE:HA	2.19	0.42
1:AA:1087:G:O2'	1:AA:1088:G:C5'	2.68	0.42
14:AN:63:CYS:HB2	14:AN:79:SER:CB	2.49	0.42
22:BA:699:A:H4'	22:BA:1634:A:N7	2.33	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BK:89:ASN:HA	32:BK:89:ASN:HD22	1.57	0.42
1:AA:524:G:C6	1:AA:525:C:C4	3.08	0.42
53:CA:54:C:H2'	53:CA:352:C:H41	1.84	0.42
57:DA:1365:A:H3'	57:DA:1366:A:C8	2.54	0.42
14:CN:20:PHE:CE1	14:CN:54:SER:HB2	2.53	0.42
8:CH:37:ASN:HA	8:CH:48:PHE:CE1	2.54	0.42
22:BA:1612:C:H5'	50:B2:7:PRO:HG3	2.00	0.42
33:DL:85:VAL:O	33:DL:86:GLU:HB2	2.18	0.42
57:DA:377:G:N1	57:DA:378:C:C2	2.87	0.42
22:BA:2618:G:H2'	22:BA:2619:C:C6	2.54	0.42
22:BA:608:A:C6	22:BA:609:A:C6	3.07	0.42
1:AA:604:G:C2	1:AA:635:A:C2	3.08	0.42
57:DA:1862:G:C2	57:DA:1881:C:C2	3.06	0.42
53:CA:525:C:N4	53:CA:526:C:N4	2.68	0.42
57:DA:2740:A:N6	57:DA:2764:A:C8	2.87	0.42
22:BA:648:G:O2'	22:BA:2351:G:OP1	2.34	0.42
2:AB:123:GLY:O	2:AB:125:PHE:CD2	2.72	0.42
25:DD:166:GLY:O	25:DD:167:ASN:CB	2.67	0.42
15:AO:57:ARG:HB3	15:AO:57:ARG:HH11	1.85	0.42
2:AB:10:LYS:HG3	2:AB:10:LYS:H	1.68	0.42
24:BC:175:LEU:N	24:BC:175:LEU:HD13	2.34	0.42
22:BA:2334:U:O4'	36:BO:12:THR:HG22	2.19	0.42
57:DA:197:A:N3	57:DA:197:A:H2'	2.33	0.42
53:CA:275:G:H2'	53:CA:276:G:C8	2.54	0.42
53:CA:1222:G:H5'	19:CS:77:ARG:HH21	1.83	0.42
53:CA:971:G:H5''	53:CA:972:C:H5''	2.01	0.42
14:CN:68:ARG:HG3	14:CN:69:PRO:HD2	2.01	0.42
44:DW:33:GLY:O	44:DW:34:SER:HB2	2.18	0.42
22:BA:1073:A:H2'	22:BA:1074:G:C5'	2.41	0.42
53:CA:1184:G:HO2'	53:CA:1185:G:C5'	2.32	0.42
53:CA:1118:U:H5'	9:CI:10:ARG:HH21	1.84	0.42
53:CA:1250:A:O3'	9:CI:68:GLY:HA2	2.19	0.42
57:DA:1036:G:C2	57:DA:1037:G:N7	2.87	0.42
22:BA:1142:A:C5	22:BA:1144:A:C5	3.07	0.42
57:DA:2068:U:H5''	57:DA:2068:U:H6	1.84	0.42
57:DA:585:G:H2'	57:DA:1254:A:N6	2.34	0.42
57:DA:1392:A:N6	57:DA:1393:A:N1	2.67	0.42
53:CA:666:G:C5	53:CA:741:G:C6	3.07	0.42
57:DA:302:C:O2'	57:DA:303:G:O5'	2.37	0.42
57:DA:333:G:HO2'	57:DA:334:C:C5'	2.32	0.42
1:AA:205:A:H3'	1:AA:206:C:C6	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1537:G:C3'	57:DA:1538:G:H4'	2.48	0.42
22:BA:2063:C:O2'	22:BA:2064:C:H5'	2.19	0.42
53:CA:429:U:H4'	53:CA:430:A:O5'	2.18	0.42
4:CD:20:LEU:O	4:CD:21:LYS:C	2.56	0.42
57:DA:1716:U:O2	57:DA:1717:A:C8	2.73	0.42
22:BA:1507:C:C2	22:BA:1508:A:C2	3.07	0.42
57:DA:1620:G:C6	57:DA:1621:U:C4	3.07	0.42
57:DA:1619:G:O2'	57:DA:1620:G:H5'	2.20	0.42
26:DE:126:VAL:HG13	26:DE:127:GLU:N	2.33	0.42
31:DJ:97:PRO:C	31:DJ:99:ARG:H	2.23	0.42
57:DA:2721:A:C8	57:DA:2722:G:C8	3.07	0.42
57:DA:2875:C:O2'	57:DA:2876:G:O5'	2.37	0.42
57:DA:2231:U:H2'	57:DA:2232:C:C6	2.54	0.42
57:DA:1476:U:H1'	57:DA:1732:C:O2	2.19	0.42
53:CA:1308:U:H5	55:CM:97:ARG:CZ	2.32	0.42
54:CG:9:ARG:C	54:CG:10:LYS:HG3	2.39	0.42
22:BA:2791:G:H8	22:BA:2791:G:H5''	1.84	0.42
25:BD:93:GLY:O	25:BD:94:GLN:C	2.57	0.42
57:DA:994:C:OP2	38:DQ:49:ARG:CG	2.67	0.42
49:B1:49:LYS:HG2	49:B1:50:GLU:N	2.24	0.42
29:BH:9:VAL:HG12	29:BH:12:LEU:HG	2.01	0.42
37:DP:72:VAL:O	37:DP:72:VAL:HG23	2.20	0.42
53:CA:880:C:H2'	53:CA:881:G:H5'	2.00	0.42
1:AA:1221:G:H2'	1:AA:1222:G:C8	2.53	0.42
57:DA:1500:G:N1	57:DA:1501:G:C5	2.87	0.42
57:DA:860:U:O4'	57:DA:2268:A:H5'	2.19	0.42
23:BB:49:C:OP1	36:BO:102:ARG:CG	2.67	0.42
37:BP:105:LYS:HA	37:BP:105:LYS:HD3	1.79	0.42
53:CA:495:A:C2	53:CA:496:A:N6	2.88	0.42
31:DJ:37:ARG:HG3	31:DJ:118:MET:CE	2.49	0.42
57:DA:1048:A:H2'	57:DA:1049:C:C5	2.54	0.42
2:AB:186:VAL:O	2:AB:186:VAL:HG23	2.18	0.42
40:BS:17:VAL:CG1	40:BS:76:VAL:HG11	2.41	0.42
57:DA:206:U:H2'	57:DA:207:A:H8	1.84	0.42
57:DA:1681:G:H3'	57:DA:1757:A:N1	2.34	0.42
33:BL:112:LEU:CD1	33:BL:130:GLY:HA3	2.41	0.42
31:DJ:89:PHE:CZ	31:DJ:93:ILE:HD11	2.54	0.42
57:DA:1167:C:O2'	57:DA:1168:G:H5'	2.18	0.42
1:AA:499:A:C6	1:AA:547:A:C8	3.08	0.42
24:DC:131:MET:CG	24:DC:134:ILE:HD11	2.47	0.42
57:DA:976:G:C2'	57:DA:977:G:H8	2.24	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:DF:5:ASP:C	59:DF:7:TYR:N	2.72	0.42
22:BA:2820:A:H2'	25:BD:196:ALA:HB2	2.00	0.42
24:BC:257:ARG:NH1	24:BC:263:ASP:OD2	2.53	0.42
1:AA:933:G:C4	1:AA:935:A:C8	3.07	0.42
57:DA:1568:G:H8	57:DA:1568:G:H2'	1.57	0.42
57:DA:966:G:H5'	57:DA:2272:U:O2	2.19	0.42
22:BA:246:C:H2'	22:BA:247:G:H5'	2.02	0.42
57:DA:2897:U:H2'	57:DA:2898:U:O4'	2.19	0.42
57:DA:1598:A:C2	57:DA:1599:U:C2	3.08	0.42
57:DA:2076:U:H5''	57:DA:2238:G:N2	2.30	0.42
57:DA:2233:U:H2'	57:DA:2234:G:H8	1.84	0.42
1:AA:1516:G:N2	1:AA:1519:A:OP2	2.51	0.42
15:AO:34:GLN:O	15:AO:35:ILE:C	2.58	0.42
57:DA:2668:G:N3	57:DA:2669:G:C8	2.87	0.42
42:DU:20:LYS:HD3	42:DU:21:ARG:O	2.19	0.42
1:AA:1348:U:O2'	1:AA:1349:A:C5'	2.67	0.42
22:BA:1259:G:C2'	22:BA:1260:A:H5'	2.49	0.42
1:AA:1372:U:H2'	1:AA:1373:G:O4'	2.19	0.42
59:DF:103:ILE:H	59:DF:107:VAL:HG13	1.84	0.42
22:BA:651:G:C5	22:BA:652:U:C5	3.07	0.42
28:DG:164:ALA:O	28:DG:165:ASP:CB	2.67	0.42
1:AA:829:G:N3	1:AA:830:G:C8	2.88	0.42
57:DA:2492:U:H6	57:DA:2492:U:O5'	2.02	0.42
22:BA:2840:C:O2'	22:BA:2841:C:H5'	2.18	0.42
22:BA:2440:C:H2'	22:BA:2441:U:C4'	2.49	0.42
57:DA:452:G:C6	57:DA:453:A:C6	3.08	0.42
31:BJ:62:VAL:HG22	31:BJ:63:ALA:N	2.34	0.42
37:BP:27:VAL:HG22	37:BP:83:ILE:HG12	2.01	0.42
26:BE:168:ASP:OD1	26:BE:169:VAL:N	2.52	0.42
2:CB:9:LEU:O	2:CB:10:LYS:HB3	2.20	0.42
5:AE:131:ASN:O	5:AE:135:VAL:HG12	2.18	0.42
24:BC:30:ALA:HA	24:BC:33:LEU:HD12	2.01	0.42
57:DA:484:C:O2'	57:DA:485:C:C5'	2.68	0.42
22:BA:1127:A:N1	22:BA:2463:C:O2'	2.46	0.42
57:DA:121:G:N3	57:DA:131:A:N1	2.67	0.42
39:DR:41:ILE:HG22	39:DR:42:ALA:N	2.34	0.42
57:DA:547:A:C8	57:DA:549:G:N2	2.88	0.42
9:AI:90:ASP:CG	9:AI:92:SER:HB3	2.39	0.42
22:BA:1838:C:N3	22:BA:1899:A:C2	2.87	0.42
49:D1:16:THR:HG21	49:D1:41:VAL:HB	2.02	0.42
57:DA:1497:U:H5''	57:DA:1498:C:OP2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2106:U:C4	57:DA:2107:G:N7	2.88	0.42
53:CA:168:G:H2'	53:CA:169:C:H5'	2.01	0.42
53:CA:683:G:H2'	53:CA:684:U:O4'	2.19	0.42
22:BA:833:A:H2'	22:BA:834:G:C8	2.55	0.42
53:CA:307:C:H5''	53:CA:308:C:OP2	2.19	0.42
32:DK:14:SER:OG	32:DK:51:LYS:N	2.50	0.42
39:BR:70:GLU:O	39:BR:71:LYS:C	2.58	0.42
4:CD:165:GLU:O	4:CD:166:LYS:HB3	2.19	0.42
57:DA:562:U:H2'	57:DA:572:A:O4'	2.19	0.42
22:BA:1293:C:O5'	22:BA:1293:C:H6	2.01	0.42
9:CI:112:ARG:HG3	9:CI:112:ARG:O	2.18	0.42
57:DA:1765:U:O2'	57:DA:1766:G:H5'	2.19	0.42
53:CA:1227:A:O5'	55:CM:109:LYS:HE3	2.18	0.42
1:AA:421:U:H5'	1:AA:422:C:H6	1.84	0.42
22:BA:2365:G:C2'	22:BA:2366:A:C8	3.03	0.42
53:CA:987:G:H8	53:CA:987:G:O5'	2.02	0.42
19:CS:40:PHE:CB	19:CS:41:PRO:CD	2.96	0.42
57:DA:2319:G:O2'	57:DA:2320:U:O5'	2.38	0.42
44:DW:18:LYS:N	44:DW:36:ILE:HG12	2.27	0.42
57:DA:1025:G:H1'	57:DA:1135:C:O4'	2.19	0.42
17:AQ:12:VAL:HB	17:AQ:21:VAL:HG22	2.01	0.42
2:CB:93:HIS:CG	2:CB:145:ASN:O	2.72	0.42
22:BA:1091:G:O2'	22:BA:1092:C:C5'	2.68	0.42
37:DP:20:ARG:HD2	37:DP:21:PRO:CD	2.47	0.42
53:CA:376:G:O3'	56:CP:5:ARG:HD2	2.19	0.42
1:AA:281:G:O2'	1:AA:282:A:OP2	2.38	0.42
57:DA:2440:C:C4	57:DA:2441:U:H1'	2.55	0.42
57:DA:1255:U:H6	26:DE:68:ALA:HB2	1.84	0.42
35:DN:12:ARG:HG2	35:DN:16:HIS:CG	2.54	0.42
35:DN:34:ILE:HB	35:DN:113:ILE:HG23	2.01	0.42
41:DT:58:VAL:HG22	41:DT:59:ASN:H	1.83	0.42
57:DA:307:G:N1	57:DA:310:A:OP2	2.53	0.42
26:DE:164:LEU:HD12	26:DE:167:VAL:HG12	2.02	0.42
29:DH:3:VAL:O	29:DH:3:VAL:HG23	2.19	0.42
1:AA:77:A:H8	1:AA:77:A:OP2	2.02	0.42
9:CI:17:ARG:HB3	9:CI:19:PHE:CE2	2.55	0.42
37:DP:22:GLY:H	37:DP:46:VAL:HB	1.84	0.42
57:DA:1314:C:OP1	57:DA:1332:G:OP1	2.37	0.42
24:DC:184:GLU:HB2	24:DC:187:CYS:SG	2.59	0.42
30:BI:49:GLU:HG2	30:BI:50:LYS:H	1.83	0.42
1:AA:841:C:H3'	1:AA:843:U:OP2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BL:30:THR:O	33:BL:31:GLY:C	2.58	0.42
2:AB:9:LEU:HD23	2:AB:9:LEU:C	2.39	0.42
5:AE:155:LYS:CB	8:AH:70:VAL:HG13	2.50	0.42
1:AA:266:G:O3'	17:AQ:68:LYS:HB2	2.19	0.42
6:CF:44:ARG:HA	6:CF:58:HIS:HA	2.01	0.42
57:DA:52:A:H2	57:DA:179:C:O4'	2.02	0.42
25:BD:34:VAL:HG21	25:BD:90:PHE:O	2.19	0.42
1:AA:1064:G:H1'	1:AA:1066:C:C5	2.54	0.42
12:AL:113:ARG:CB	12:AL:118:VAL:HB	2.41	0.42
57:DA:2706:A:N6	63:DA:3667:HOH:O	2.45	0.42
57:DA:193:U:O3'	57:DA:803:U:H4'	2.20	0.42
24:DC:165:ALA:O	24:DC:171:VAL:HG13	2.19	0.42
54:CG:41:ILE:HD13	54:CG:115:MET:HB3	2.02	0.42
53:CA:120:A:O5'	53:CA:120:A:C8	2.72	0.42
57:DA:943:A:C6	57:DA:944:C:C5	3.08	0.42
53:CA:1524:C:OP2	11:CK:124:LYS:NZ	2.47	0.42
22:BA:1327:A:N6	22:BA:1328:A:C2	2.87	0.42
53:CA:1373:G:H5''	54:CG:35:LYS:HB3	2.01	0.42
41:DT:68:LYS:HB2	41:DT:68:LYS:NZ	2.34	0.42
1:AA:109:A:N6	1:AA:324:G:H1'	2.34	0.42
1:AA:330:C:O2'	1:AA:331:G:H5'	2.19	0.42
1:AA:1258:G:N3	1:AA:1259:C:C5	2.88	0.42
57:DA:1112:G:O2'	57:DA:1113:U:H5'	2.18	0.42
24:DC:124:LYS:HG3	24:DC:125:PRO:O	2.20	0.42
24:DC:141:HIS:HB3	24:DC:142:ASN:H	1.50	0.42
1:AA:1055:A:C5	1:AA:1206:G:C2	3.07	0.42
25:DD:68:PHE:HB2	25:DD:73:VAL:HG23	2.01	0.42
31:DJ:24:THR:O	31:DJ:25:LEU:HB3	2.19	0.42
57:DA:1963:U:O2'	57:DA:1964:G:H5'	2.19	0.42
57:DA:582:A:H2'	57:DA:583:G:H8	1.85	0.42
57:DA:475:C:H2'	57:DA:476:G:N7	2.35	0.42
1:AA:1250:A:H2'	1:AA:1251:A:O4'	2.19	0.42
10:AJ:26:VAL:O	10:AJ:29:ALA:HB3	2.19	0.42
53:CA:1005:A:N7	53:CA:1006:G:H1'	2.34	0.42
57:DA:1263:U:O4'	48:D0:6:LYS:HE3	2.20	0.42
43:DV:2:PHE:CD1	43:DV:50:MET:HE3	2.54	0.42
20:CT:78:LEU:O	20:CT:82:ILE:HG12	2.20	0.42
20:AT:8:LYS:CA	20:AT:11:ILE:HG23	2.45	0.42
29:DH:62:LEU:HD12	29:DH:63:ALA:H	1.83	0.42
22:BA:1872:A:O2'	22:BA:1873:G:O4'	2.35	0.42
4:AD:69:ARG:NE	4:AD:69:ARG:HA	2.29	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:44:ILE:N	13:AM:44:ILE:HD12	2.35	0.42
33:DL:93:ASN:O	33:DL:95:LEU:N	2.42	0.42
22:BA:627:A:C5	22:BA:637:A:C8	3.08	0.42
53:CA:579:A:N1	53:CA:763:G:C5	2.87	0.42
1:AA:947:G:C6	1:AA:948:C:C4	3.08	0.42
57:DA:2506:U:H5	57:DA:2576:G:O6	2.02	0.42
1:AA:10:A:HO2'	1:AA:507:C:HO2'	1.66	0.42
57:DA:2520:C:O2'	57:DA:2521:C:C5'	2.67	0.42
39:BR:27:ILE:HG13	39:BR:33:VAL:HG11	2.01	0.42
22:BA:41:C:H2'	22:BA:42:A:O5'	2.19	0.42
15:CO:28:VAL:HG11	15:CO:66:LEU:HD21	2.00	0.42
57:DA:1833:C:C4	57:DA:1834:U:C5	3.08	0.42
20:CT:9:ARG:HD2	20:CT:12:GLN:HB3	2.02	0.42
53:CA:449:G:O2'	53:CA:450:G:H5'	2.19	0.42
56:CP:7:ALA:O	56:CP:17:TYR:HA	2.20	0.42
6:AF:12:PRO:HA	6:AF:15:SER:HB2	2.02	0.42
9:CI:29:ILE:HG13	9:CI:64:ILE:HG22	2.02	0.42
25:BD:86:GLU:OE1	25:BD:86:GLU:HA	2.18	0.42
1:AA:810:C:O2'	1:AA:811:C:H5'	2.19	0.42
57:DA:2371:G:C2	57:DA:2372:U:C6	3.08	0.42
25:DD:16:THR:HG23	25:DD:19:GLY:H	1.85	0.42
28:DG:71:LEU:O	28:DG:71:LEU:HD13	2.19	0.42
10:AJ:91:ASP:C	10:AJ:92:LEU:HD23	2.39	0.42
22:BA:2078:C:C2	22:BA:2079:U:C5	3.08	0.42
22:BA:2023:C:O2	22:BA:2023:C:C2'	2.63	0.42
9:CI:129:ARG:CZ	9:CI:129:ARG:HA	2.50	0.42
22:BA:2470:G:N2	22:BA:2471:A:C4	2.87	0.42
22:BA:2470:G:O2'	22:BA:2471:A:H5'	2.19	0.42
53:CA:386:C:N4	53:CA:387:U:O4	2.52	0.42
27:BF:53:ALA:C	27:BF:55:ASP:N	2.73	0.42
53:CA:650:G:N3	53:CA:650:G:H2'	2.35	0.42
19:AS:10:ILE:HD11	19:AS:15:LEU:HB2	2.00	0.42
53:CA:1231:G:H2'	53:CA:1232:U:O4'	2.20	0.42
53:CA:1231:G:C4	53:CA:1232:U:C6	3.07	0.42
57:DA:1369:G:C6	57:DA:1370:C:C4	3.07	0.42
15:AO:88:ARG:NH1	22:BA:716:A:OP1	2.52	0.42
2:AB:176:ASN:HD21	2:AB:194:GLY:CA	2.33	0.42
1:AA:460:A:O3'	1:AA:462:G:OP2	2.38	0.42
1:AA:965:U:OP1	1:AA:1198:G:H5'	2.19	0.42
5:CE:110:MET:HG2	5:CE:139:THR:HG21	2.00	0.42
43:BV:8:VAL:CG1	43:BV:38:LEU:HD11	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:182:A:H2'	22:BA:183:C:C6	2.54	0.42
57:DA:1615:C:C5	57:DA:1617:C:C4	3.07	0.42
42:BU:33:VAL:O	42:BU:64:ILE:HG22	2.20	0.42
3:CC:20:THR:HG23	3:CC:57:GLU:HG2	2.00	0.42
22:BA:941:A:H2'	22:BA:942:G:C8	2.55	0.42
53:CA:7:A:H5'	53:CA:298:A:O4'	2.20	0.42
29:BH:129:GLU:HG2	29:BH:142:VAL:O	2.19	0.42
22:BA:1033:U:H4'	22:BA:1034:G:OP1	2.18	0.42
42:BU:2:ALA:O	42:BU:5:ARG:NH2	2.53	0.42
22:BA:1916:A:H8	22:BA:1916:A:O5'	2.03	0.42
48:D0:21:LEU:HD23	48:D0:21:LEU:HA	1.89	0.42
22:BA:2270:A:H2'	22:BA:2271:G:O4'	2.18	0.42
29:DH:125:THR:HB	29:DH:146:VAL:HG11	2.01	0.42
44:BW:18:LYS:HG3	44:BW:19:ARG:HG3	2.02	0.42
11:CK:92:ARG:NH2	21:CU:19:LYS:HD2	2.33	0.42
27:BF:110:ILE:O	27:BF:113:PHE:HB2	2.19	0.42
1:AA:256:U:H6	1:AA:256:U:O5'	2.02	0.42
17:AQ:60:ILE:CG2	17:AQ:61:ARG:N	2.81	0.42
9:CI:51:LEU:O	9:CI:53:LEU:N	2.52	0.42
38:DQ:39:ILE:O	38:DQ:40:LYS:C	2.58	0.42
57:DA:1117:C:HO2'	57:DA:1118:C:H5'	1.73	0.42
35:DN:96:ARG:HH12	35:DN:116:VAL:HG13	1.83	0.42
57:DA:1255:U:H6	57:DA:1255:U:H2'	1.34	0.42
57:DA:2358:A:OP1	57:DA:2358:A:H8	2.03	0.42
1:AA:1365:G:H2'	1:AA:1366:C:H6	1.82	0.42
10:CJ:42:LEU:HB3	10:CJ:43:PRO:HD2	2.02	0.42
53:CA:765:G:O6	53:CA:811:C:N4	2.52	0.42
51:B3:7:ARG:HD2	51:B3:7:ARG:HA	1.44	0.42
31:DJ:4:PHE:CG	31:DJ:5:THR:N	2.88	0.42
25:DD:146:ILE:HD12	25:DD:155:VAL:HG21	2.02	0.42
3:AC:42:LEU:HD12	3:AC:42:LEU:HA	1.79	0.42
57:DA:1070:A:H61	30:DI:8:VAL:CG1	2.33	0.42
53:CA:1296:C:C5	53:CA:1297:G:N2	2.87	0.42
53:CA:519:C:C2'	53:CA:520:A:C8	2.91	0.42
8:AH:112:ASP:O	8:AH:113:ARG:C	2.57	0.42
22:BA:857:G:H2'	22:BA:858:G:O4'	2.20	0.42
8:AH:1:SER:C	8:AH:3:GLN:H	2.22	0.42
22:BA:1498:C:O2'	22:BA:1499:C:C5'	2.67	0.42
53:CA:951:G:OP2	55:CM:100:ARG:NH2	2.52	0.42
53:CA:1226:C:C4	55:CM:102:LYS:HA	2.53	0.42
24:BC:90:ILE:HG21	24:BC:102:TYR:CD1	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DL:79:LEU:HD23	33:DL:82:LEU:CD1	2.50	0.42
57:DA:137:U:H6	57:DA:137:U:O5'	2.03	0.42
22:BA:2727:A:C4	22:BA:2728:U:C5	3.08	0.42
57:DA:1155:A:H5''	38:DQ:54:ARG:CZ	2.49	0.42
22:BA:1784:A:H4'	22:BA:1785:A:H5''	2.02	0.42
22:BA:572:A:N7	63:BA:3570:HOH:O	2.50	0.42
57:DA:1820:U:O2	24:DC:199:HIS:CD2	2.72	0.42
24:DC:61:TYR:CE2	24:DC:86:ARG:NH2	2.88	0.42
11:CK:123:PRO:O	21:CU:34:ARG:N	2.51	0.42
53:CA:878:A:C5	53:CA:879:C:C5	3.08	0.42
25:DD:113:SER:HB3	25:DD:168:GLU:H	1.85	0.42
57:DA:1317:G:C5	57:DA:1318:U:C4	3.08	0.42
28:BG:70:LEU:O	28:BG:74:MET:HG3	2.19	0.42
4:CD:57:LYS:HE2	4:CD:58:GLN:OE1	2.19	0.42
4:CD:100:VAL:O	4:CD:101:VAL:C	2.57	0.42
31:DJ:92:MET:CE	31:DJ:95:ARG:HD2	2.49	0.42
53:CA:858:G:N7	53:CA:869:G:C5	2.88	0.42
53:CA:512:U:O2'	53:CA:513:C:C5'	2.68	0.42
25:DD:179:ARG:HD2	25:DD:188:LEU:HD12	2.00	0.42
57:DA:1845:G:C5	57:DA:1846:G:N7	2.88	0.42
54:CG:112:ASP:HB3	54:CG:117:LEU:CB	2.49	0.42
24:BC:269:ARG:HA	24:BC:269:ARG:HD3	1.70	0.42
2:CB:216:VAL:O	2:CB:220:VAL:HG23	2.20	0.42
57:DA:1428:C:C5	57:DA:1569:A:H5'	2.54	0.42
6:AF:86:ARG:HD2	18:AR:63:TYR:O	2.20	0.42
22:BA:919:U:H6	22:BA:919:U:C4'	2.33	0.42
1:AA:705:G:H2'	1:AA:706:A:C5'	2.49	0.42
53:CA:72:A:H2'	53:CA:73:C:C6	2.54	0.42
53:CA:1446:A:H2'	53:CA:1447:A:H5''	2.01	0.42
28:BG:174:LYS:C	28:BG:174:LYS:HD2	2.40	0.42
53:CA:940:C:H2'	53:CA:941:G:O4'	2.19	0.42
1:AA:1342:C:H2'	1:AA:1343:G:H8	1.84	0.42
19:AS:51:HIS:CD2	19:AS:53:GLY:N	2.83	0.42
3:CC:190:THR:HG22	3:CC:191:THR:N	2.29	0.42
4:AD:55:ARG:HH12	4:AD:58:GLN:CG	2.28	0.42
1:AA:72:A:H2'	1:AA:73:C:H6	1.83	0.42
41:BT:87:LEU:O	41:BT:89:GLU:N	2.53	0.42
22:BA:2243:U:C2	22:BA:2244:U:C5	3.08	0.42
37:DP:25:VAL:HG23	37:DP:25:VAL:O	2.19	0.42
22:BA:749:A:C5	22:BA:1618:A:C2	3.07	0.42
57:DA:1218:G:C2	57:DA:1232:G:C5	3.07	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:2744:G:C6	57:DA:2761:A:C6	3.07	0.42
22:BA:2870:C:C4	22:BA:2871:U:C5	3.08	0.42
28:DG:78:VAL:HG23	28:DG:79:THR:HG23	2.02	0.42
57:DA:2048:G:C6	57:DA:2049:G:C5	3.07	0.42
57:DA:2638:G:N1	57:DA:2775:G:H2'	2.35	0.42
1:AA:1358:U:C6	1:AA:1359:C:C5	3.08	0.42
1:AA:433:G:H2'	1:AA:434:U:H5'	2.02	0.42
53:CA:785:G:H2'	53:CA:785:G:N3	2.34	0.42
1:AA:1057:G:H4'	3:AC:196:GLY:N	2.35	0.42
9:CI:80:HIS:O	9:CI:83:THR:HG23	2.20	0.42
5:CE:73:VAL:HG12	5:CE:74:ALA:O	2.20	0.42
23:BB:5:U:H2'	23:BB:6:G:C8	2.55	0.42
24:BC:195:GLY:O	24:BC:196:ASN:HB3	2.20	0.42
41:BT:8:LEU:CD2	41:BT:8:LEU:N	2.83	0.42
57:DA:1480:C:H2'	57:DA:1481:U:O4'	2.18	0.42
26:BE:122:GLU:O	26:BE:123:LYS:O	2.38	0.42
1:AA:471:U:H2'	1:AA:472:U:O4'	2.20	0.42
53:CA:544:G:C5	53:CA:545:C:C5	3.08	0.42
57:DA:1801:A:C5	57:DA:2203:U:C5	3.07	0.42
15:AO:65:LEU:N	15:AO:65:LEU:CD2	2.83	0.42
22:BA:1934:C:O5'	22:BA:1934:C:H6	2.02	0.42
1:AA:160:A:O2'	1:AA:344:A:C6	2.71	0.42
59:DF:14:LYS:HA	59:DF:18:GLU:HB2	2.01	0.42
7:AG:7:GLY:O	7:AG:8:GLN:HB3	2.19	0.42
25:BD:78:GLY:O	25:BD:80:TRP:CZ3	2.72	0.42
28:BG:84:LYS:HE2	28:BG:84:LYS:N	2.35	0.42
53:CA:277:C:OP1	17:CQ:44:HIS:CE1	2.66	0.42
53:CA:962:C:O2'	53:CA:963:G:O4'	2.37	0.42
57:DA:2759:G:H21	28:DG:138:GLN:CD	2.23	0.42
57:DA:601:C:H4'	26:DE:99:LYS:HE2	2.01	0.42
57:DA:216:A:N6	57:DA:432:A:H1'	2.35	0.42
22:BA:1060:U:C5'	22:BA:1061:U:H5'	2.49	0.42
37:DP:19:PHE:HE1	37:DP:58:PHE:CE1	2.37	0.42
53:CA:373:A:C5'	53:CA:373:A:C8	3.01	0.42
53:CA:372:C:HO2'	53:CA:373:A:P	2.41	0.42
57:DA:1981:A:O2'	57:DA:1982:U:H5''	2.20	0.42
57:DA:762:U:O2'	57:DA:763:G:H5''	2.20	0.42
57:DA:444:C:O2'	57:DA:445:C:O5'	2.37	0.42
57:DA:2838:G:H2'	57:DA:2839:G:O4'	2.19	0.42
57:DA:2499:C:C4	57:DA:2500:U:O4	2.73	0.42
57:DA:1387:A:O2'	57:DA:1388:G:P	2.78	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:323:C:C6	26:DE:165:HIS:NE2	2.88	0.42
38:DQ:61:ILE:HD12	38:DQ:61:ILE:N	2.35	0.42
1:AA:92:U:C2'	1:AA:93:U:C6	2.88	0.42
34:DM:23:GLY:N	34:DM:100:LYS:HZ3	2.18	0.42
53:CA:1129:C:H1'	53:CA:1146:A:N6	2.25	0.42
57:DA:2845:U:H2'	57:DA:2846:G:O4'	2.20	0.42
57:DA:2846:G:P	37:DP:51:ASN:HB2	2.60	0.42
5:AE:152:VAL:O	5:AE:155:LYS:HD2	2.19	0.42
57:DA:233:A:HO2'	57:DA:234:U:H6	1.58	0.42
57:DA:2025:C:H42	57:DA:2037:A:H61	1.67	0.42
57:DA:2036:C:O2'	57:DA:2037:A:H8	1.99	0.42
57:DA:962:G:O2'	57:DA:963:U:H6	1.99	0.42
57:DA:775:G:C2	57:DA:794:A:C8	3.07	0.42
53:CA:668:G:O2'	53:CA:669:G:H5'	2.19	0.42
22:BA:605:G:H1'	22:BA:657:U:H1'	2.02	0.42
22:BA:1780:A:H3'	22:BA:1781:U:H2'	2.02	0.42
22:BA:751:A:C6	22:BA:789:A:C6	3.07	0.42
49:B1:9:LYS:N	49:B1:9:LYS:HD3	2.34	0.42
57:DA:1455:G:O2'	57:DA:1456:G:H8	2.01	0.42
35:DN:55:ALA:HA	35:DN:80:PHE:CE1	2.54	0.42
22:BA:2742:G:P	52:B4:24:ARG:HH12	2.42	0.42
57:DA:855:G:N3	44:DW:23:LYS:HG2	2.35	0.42
28:DG:83:THR:HB	28:DG:84:LYS:H	1.72	0.42
59:DF:82:TYR:HA	59:DF:83:PRO:HD2	1.84	0.42
53:CA:197:A:H4'	53:CA:198:G:O5'	2.17	0.42
29:BH:14:SER:C	29:BH:16:GLY:H	2.23	0.42
32:DK:19:VAL:CG1	32:DK:41:ILE:HG12	2.50	0.42
53:CA:1011:C:N3	53:CA:1019:A:C2	2.88	0.42
57:DA:2750:A:O2'	57:DA:2751:G:OP1	2.34	0.42
53:CA:948:C:OP2	55:CM:104:ASN:HB3	2.20	0.42
24:BC:20:ASN:HD22	24:BC:21:PRO:N	2.18	0.42
16:AP:20:VAL:HG22	16:AP:32:PHE:HB2	2.01	0.42
3:AC:108:PRO:C	3:AC:110:LEU:H	2.23	0.42
34:BM:40:ARG:HB2	34:BM:93:VAL:HG22	1.99	0.42
46:BY:57:LEU:O	46:BY:57:LEU:HD12	2.19	0.42
53:CA:1026:G:H22	53:CA:1036:A:N6	2.18	0.42
22:BA:1827:U:H2'	22:BA:1828:G:O4'	2.20	0.42
57:DA:1936:A:H4'	57:DA:1937:A:OP2	2.19	0.42
40:DS:87:PRO:HG2	40:DS:87:PRO:O	2.20	0.42
1:AA:208:U:H3	1:AA:212:G:H21	1.67	0.42
22:BA:2816:G:C4	22:BA:2831:G:C2	3.08	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:1:MET:HA	32:DK:33:ALA:O	2.20	0.42
57:DA:1853:A:H1'	57:DA:2234:G:O4'	2.19	0.42
46:DY:22:LEU:HG	46:DY:23:ARG:NH1	2.34	0.42
1:AA:1409:C:C2'	1:AA:1410:A:H5'	2.49	0.42
1:AA:1091:U:O2	1:AA:1093:A:C8	2.73	0.42
1:AA:1349:A:O2'	1:AA:1350:A:H5'	2.20	0.42
53:CA:995:C:HO2'	53:CA:996:A:P	2.42	0.42
28:BG:124:CYS:HA	28:BG:125:PRO:HD2	1.78	0.42
42:BU:3:LYS:HZ3	42:BU:82:VAL:H	1.68	0.42
57:DA:370:G:C8	57:DA:370:G:OP2	2.73	0.42
57:DA:1525:A:C6	57:DA:1526:C:N3	2.88	0.42
37:BP:24:THR:HG22	37:BP:86:LYS:HB2	2.01	0.42
22:BA:2425:A:H5'	22:BA:2427:C:O4'	2.20	0.42
22:BA:2109:U:H2'	22:BA:2110:G:H5'	2.02	0.42
26:DE:5:LEU:HD23	26:DE:120:VAL:HG13	2.00	0.42
53:CA:644:U:H2'	53:CA:645:G:C8	2.52	0.42
15:CO:62:ARG:NH2	15:CO:88:ARG:HH21	2.18	0.42
57:DA:1435:G:N2	57:DA:1558:C:N4	2.67	0.42
22:BA:2345:G:N3	22:BA:2381:A:H2'	2.35	0.42
57:DA:223:A:N6	57:DA:408:G:H5'	2.35	0.42
36:BO:59:ALA:HA	36:BO:62:LEU:CD1	2.48	0.42
1:AA:926:G:C6	1:AA:1505:G:C5	3.06	0.42
57:DA:1954:G:O2'	57:DA:1955:U:OP2	2.37	0.42
53:CA:193:C:H1'	20:CT:54:GLN:HE21	1.84	0.42
57:DA:2774:C:C4	57:DA:2775:G:C5	3.07	0.42
34:DM:97:GLN:HB2	34:DM:98:PRO:CD	2.48	0.42
22:BA:2524:G:C2'	22:BA:2525:G:O5'	2.66	0.42
7:AG:88:VAL:HG22	7:AG:89:GLU:N	2.35	0.42
57:DA:957:C:N4	57:DA:2494:G:H21	2.18	0.42
29:BH:101:ASP:C	29:BH:104:THR:HB	2.39	0.42
24:DC:44:ASN:C	24:DC:46:GLY:H	2.23	0.42
53:CA:1309:G:H2'	53:CA:1310:G:H8	1.84	0.42
1:AA:102:G:C4	1:AA:103:U:C5	3.08	0.42
1:AA:1246:A:N1	1:AA:1292:G:C6	2.88	0.42
22:BA:851:C:O2'	47:BZ:45:GLY:HA3	2.20	0.42
53:CA:433:G:C2'	53:CA:434:U:H5'	2.49	0.42
57:DA:1652:A:H3'	57:DA:1653:G:C8	2.55	0.42
37:BP:26:GLU:O	37:BP:26:GLU:HG2	2.17	0.42
22:BA:1235:G:H8	22:BA:1235:G:O5'	2.03	0.42
3:AC:11:LEU:HA	3:AC:11:LEU:HD23	1.84	0.42
13:AM:32:ILE:HA	13:AM:32:ILE:HD13	1.90	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DU:48:VAL:HA	42:DU:49:PRO:HD3	1.88	0.42
22:BA:1528:A:H2'	22:BA:1529:G:O4'	2.19	0.42
36:BO:8:ILE:O	36:BO:11:ALA:HB3	2.20	0.42
22:BA:2269:G:C4'	44:BW:18:LYS:HE2	2.36	0.42
53:CA:254:G:H5''	17:CQ:70:LYS:HD2	1.98	0.42
45:BX:39:VAL:HG13	45:BX:46:VAL:HG22	2.02	0.42
27:BF:109:ARG:HH11	27:BF:138:PRO:N	2.18	0.42
17:AQ:11:VAL:HG23	17:AQ:56:ASP:O	2.19	0.42
53:CA:1177:G:N7	53:CA:1178:G:C5	2.88	0.42
53:CA:374:A:H2'	53:CA:375:U:C6	2.55	0.42
57:DA:741:U:O2'	57:DA:1676:A:OP1	2.37	0.42
57:DA:1787:A:O5'	57:DA:1787:A:C8	2.72	0.42
1:AA:243:A:C2	1:AA:246:A:C8	3.08	0.42
57:DA:34:U:HO2'	57:DA:35:G:P	2.41	0.42
57:DA:446:G:H4'	57:DA:447:A:OP1	2.20	0.42
58:DB:18:G:C6	58:DB:19:C:C4	3.07	0.42
57:DA:571:U:C4	57:DA:2030:A:C6	3.08	0.42
26:DE:165:HIS:O	26:DE:167:VAL:N	2.53	0.42
22:BA:2027:G:H2'	22:BA:2028:U:H6	1.84	0.42
57:DA:1532:A:N1	57:DA:1540:G:C6	2.88	0.42
57:DA:2305:U:H5	57:DA:2312:U:C4	2.38	0.42
57:DA:665:U:C5	57:DA:666:A:N7	2.87	0.42
4:AD:145:ARG:C	4:AD:147:LYS:N	2.70	0.42
57:DA:2848:G:O2'	57:DA:2849:U:C6	2.64	0.42
57:DA:1290:C:C2	57:DA:1291:C:C5	3.08	0.42
57:DA:1312:U:O2'	57:DA:1313:U:P	2.77	0.42
4:AD:29:THR:O	4:AD:30:LYS:HB2	2.20	0.42
1:AA:6:G:C6	5:AE:98:ALA:HB1	2.52	0.42
31:BJ:111:LYS:HE2	31:BJ:115:GLY:H	1.83	0.42
20:CT:4:LYS:HB3	20:CT:4:LYS:HE3	1.72	0.42
22:BA:1106:G:C2	22:BA:1107:G:N9	2.87	0.42
57:DA:1126:A:OP1	57:DA:1126:A:C8	2.70	0.42
32:BK:113:MET:O	32:BK:114:LYS:C	2.58	0.42
2:CB:69:VAL:HB	2:CB:162:VAL:HB	2.01	0.42
57:DA:1910:G:N2	57:DA:1921:G:C4	2.87	0.42
49:B1:35:LEU:HD23	49:B1:35:LEU:C	2.40	0.42
53:CA:1454:G:O2'	53:CA:1455:G:C5'	2.68	0.42
43:DV:9:ARG:HD2	43:DV:40:ILE:O	2.20	0.42
1:AA:198:G:C6	1:AA:220:G:C4	3.08	0.42
22:BA:1283:G:N1	22:BA:1286:A:OP2	2.53	0.42
22:BA:2058:A:H5''	22:BA:2059:A:P	2.60	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1418:G:H2'	22:BA:1579:A:N6	2.35	0.42
31:DJ:19:ASP:HA	31:DJ:57:LEU:HB3	2.01	0.42
40:DS:49:LYS:NZ	40:DS:49:LYS:CB	2.81	0.42
1:AA:1054:C:P	1:AA:1197:A:OP2	2.78	0.42
57:DA:1171:G:C4	57:DA:1179:G:N2	2.87	0.42
22:BA:340:A:H2'	22:BA:341:C:O4'	2.19	0.42
2:CB:119:GLN:O	2:CB:119:GLN:HG2	2.20	0.42
44:DW:13:ARG:HG3	44:DW:14:ASP:N	2.27	0.42
40:DS:70:LYS:O	40:DS:72:THR:N	2.53	0.42
56:CP:38:PHE:CE2	56:CP:51:ARG:CB	3.03	0.42
22:BA:64:A:O2'	41:BT:70:HIS:CE1	2.72	0.42
53:CA:181:A:H1'	53:CA:182:A:H2	1.80	0.42
53:CA:185:U:H2'	53:CA:186:C:C6	2.54	0.42
59:DF:12:VAL:O	59:DF:16:MET:HB2	2.20	0.42
39:DR:83:TYR:CD2	39:DR:84:ARG:N	2.87	0.42
2:CB:212:TYR:CD2	2:CB:216:VAL:HG23	2.54	0.42
39:BR:68:ARG:HH11	39:BR:90:ARG:HD3	1.84	0.42
57:DA:2618:G:H2'	57:DA:2619:C:H6	1.84	0.42
22:BA:184:C:O2'	22:BA:217:A:N3	2.50	0.42
31:BJ:57:LEU:HA	31:BJ:57:LEU:HD12	1.88	0.42
57:DA:2077:A:C2	57:DA:2244:U:O2	2.73	0.42
28:BG:59:ASP:O	28:BG:60:GLY:C	2.58	0.42
37:DP:28:LYS:HA	37:DP:40:GLN:O	2.20	0.42
1:AA:1350:A:H2	7:AG:33:GLY:HA3	1.84	0.42
28:BG:82:PHE:CE2	28:BG:137:LYS:HB2	2.55	0.42
24:BC:6:LYS:HB3	24:BC:7:PRO:HD2	2.01	0.42
48:D0:28:SER:HB3	48:D0:39:ARG:CZ	2.49	0.42
6:AF:97:THR:HG22	6:AF:98:GLU:N	2.34	0.42
22:BA:409:G:C2'	22:BA:410:G:H5'	2.49	0.42
1:AA:762:U:O2	1:AA:763:G:C8	2.73	0.42
57:DA:1902:C:H2'	57:DA:1903:G:O4'	2.19	0.42
48:B0:33:SER:OG	48:B0:35:GLU:CG	2.65	0.42
22:BA:2295:C:H2'	22:BA:2296:U:C6	2.54	0.42
57:DA:2458:G:O2'	57:DA:2459:A:N7	2.53	0.42
32:DK:28:SER:O	32:DK:29:HIS:HB3	2.19	0.42
41:BT:28:ASN:HA	41:BT:91:GLN:HE22	1.81	0.42
57:DA:2443:C:C4	57:DA:2444:G:N7	2.88	0.42
24:DC:213:ARG:HB3	24:DC:214:GLY:H	1.66	0.42
12:CL:29:LYS:O	12:CL:81:ILE:HG22	2.19	0.42
22:BA:2516:A:C5	22:BA:2517:C:C4	3.07	0.42
57:DA:1232:G:C4	57:DA:1233:C:C5	3.07	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:6:A:O2'	22:BA:7:G:H5'	2.20	0.42
6:CF:97:THR:O	6:CF:98:GLU:HG3	2.20	0.42
26:DE:42:GLY:HA3	26:DE:90:GLN:O	2.20	0.42
57:DA:121:G:O2'	57:DA:122:G:H5'	2.20	0.42
15:CO:27:GLN:O	15:CO:31:LEU:HG	2.20	0.42
53:CA:1518:A:C2	53:CA:1519:A:C2	3.07	0.42
57:DA:2046:G:OP1	48:D0:11:LYS:HE3	2.19	0.42
22:BA:2140:G:H2'	22:BA:2141:G:H8	1.81	0.42
19:CS:68:HIS:HB3	19:CS:72:GLU:HG3	2.01	0.42
33:BL:40:SER:O	33:BL:41:ARG:CB	2.66	0.42
1:AA:444:G:C2	1:AA:491:G:C4	3.08	0.42
22:BA:522:A:C5	22:BA:523:C:C4	3.07	0.42
28:DG:22:VAL:HG12	28:DG:23:ILE:N	2.34	0.42
8:CH:104:SER:O	8:CH:122:GLY:HA3	2.20	0.42
22:BA:1205:A:H3'	22:BA:1206:G:H5'	2.02	0.42
57:DA:1107:G:H2'	57:DA:1108:U:H5'	2.02	0.42
9:AI:3:ASN:CG	9:AI:4:GLN:H	2.23	0.42
22:BA:400:G:C8	22:BA:400:G:H3'	2.54	0.42
22:BA:1001:A:H2'	22:BA:1002:G:C5'	2.49	0.42
30:DI:105:LEU:HD21	30:DI:129:GLU:OE2	2.20	0.42
1:AA:222:C:H2'	1:AA:223:A:H8	1.85	0.42
1:AA:965:U:OP1	1:AA:1198:G:C5'	2.67	0.42
26:BE:136:GLN:O	26:BE:137:LYS:C	2.58	0.42
1:AA:930:C:H2'	1:AA:931:C:O4'	2.19	0.42
28:BG:93:TYR:O	28:BG:94:ARG:O	2.38	0.42
25:BD:180:VAL:HG12	25:BD:181:ASP:N	2.35	0.42
57:DA:1940:U:O2	57:DA:1940:U:H5'	2.19	0.42
35:BN:54:LEU:HD11	35:BN:62:ASN:CG	2.40	0.42
38:BQ:91:ARG:CD	39:BR:11:GLN:HB2	2.50	0.42
44:BW:39:GLN:CG	44:BW:41:GLY:H	2.07	0.42
44:BW:47:GLY:C	44:BW:49:ASN:N	2.71	0.42
17:CQ:68:LYS:O	17:CQ:69:THR:OG1	2.37	0.42
20:AT:34:VAL:O	20:AT:38:ILE:HG12	2.19	0.42
53:CA:1225:A:N3	53:CA:1225:A:H2'	2.35	0.42
53:CA:979:C:C5	53:CA:1318:A:N1	2.88	0.42
17:AQ:12:VAL:CG1	17:AQ:21:VAL:O	2.68	0.42
22:BA:1070:A:C2	30:BI:9:LYS:CG	2.99	0.42
53:CA:1069:C:O2'	53:CA:1192:C:H1'	2.20	0.42
53:CA:372:C:H4'	53:CA:373:A:H5'	2.01	0.42
57:DA:1825:U:C6	57:DA:1825:U:H3'	2.55	0.42
57:DA:1792:G:H22	57:DA:1828:G:H1'	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:534:U:H2'	57:DA:535:G:H8	1.84	0.42
12:AL:82:ARG:CZ	12:AL:95:HIS:HB2	2.50	0.42
39:DR:38:VAL:O	39:DR:53:PHE:HA	2.19	0.42
57:DA:805:G:O2'	57:DA:831:G:H4'	2.20	0.42
41:DT:29:THR:HB	41:DT:86:THR:N	2.35	0.42
53:CA:764:C:C4	53:CA:812:G:O6	2.73	0.42
22:BA:244:A:OP2	51:B3:7:ARG:NH2	2.53	0.42
53:CA:415:A:H3'	53:CA:416:G:C8	2.53	0.42
2:CB:103:TRP:CB	2:CB:106:VAL:HB	2.48	0.42
58:DB:40:U:N3	58:DB:43:C:OP2	2.53	0.42
58:DB:42:C:C2	59:DF:88:VAL:HA	2.55	0.42
57:DA:1285:A:H2'	57:DA:1286:A:H5''	2.01	0.42
57:DA:1324:G:O2'	57:DA:1616:A:N6	2.52	0.42
4:AD:34:GLU:C	4:AD:36:ALA:H	2.23	0.42
8:CH:124:ILE:HG22	8:CH:125:ILE:H	1.84	0.42
32:DK:61:VAL:HG23	32:DK:61:VAL:O	2.20	0.42
57:DA:2408:U:O2'	57:DA:2409:G:P	2.78	0.42
57:DA:1438:U:H5''	63:DA:3639:HOH:O	2.20	0.42
45:DX:64:ASP:HA	45:DX:67:LEU:HD12	2.02	0.42
14:AN:30:ILE:HG23	14:AN:44:VAL:CG1	2.48	0.42
2:AB:218:ALA:HA	2:AB:221:ARG:NH2	2.29	0.42
28:BG:112:VAL:CG2	28:BG:113:ASP:N	2.82	0.42
24:BC:90:ILE:HD12	24:BC:103:ILE:O	2.19	0.42
57:DA:1655:A:H5'	25:DD:118:PHE:CD1	2.55	0.42
53:CA:330:C:H4'	53:CA:330:C:OP2	2.20	0.42
22:BA:2134:A:OP1	22:BA:2134:A:H8	2.03	0.42
12:AL:94:TYR:CD2	12:AL:94:TYR:N	2.87	0.42
57:DA:1926:U:H2'	57:DA:1928:A:N7	2.34	0.42
2:AB:148:GLY:C	2:AB:150:ILE:N	2.73	0.42
57:DA:2699:C:N4	57:DA:2700:A:N6	2.68	0.42
22:BA:740:C:H5'	22:BA:1784:A:C3'	2.47	0.42
1:AA:425:G:C6	1:AA:426:U:N3	2.88	0.42
24:DC:196:ASN:O	24:DC:197:ALA:CB	2.67	0.42
1:AA:66:A:C8	1:AA:66:A:O5'	2.73	0.42
11:CK:126:ARG:HB2	21:CU:33:ARG:CD	2.45	0.42
1:AA:1323:G:C2'	1:AA:1324:A:C8	3.02	0.42
40:BS:57:ASN:O	40:BS:61:ASN:HB2	2.20	0.42
1:AA:532:A:H4'	1:AA:533:A:OP2	2.19	0.42
57:DA:2415:G:C5	57:DA:2416:C:C4	3.08	0.42
22:BA:415:A:H1'	22:BA:1865:U:H5''	2.02	0.42
11:AK:124:LYS:O	21:AU:33:ARG:NE	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:39:ILE:HD11	32:DK:62:VAL:CG2	2.49	0.42
57:DA:1050:A:H2'	57:DA:1051:G:C8	2.55	0.42
1:AA:1157:A:C2	1:AA:1181:G:C4	3.07	0.42
57:DA:204:A:C4	57:DA:206:U:C4	3.08	0.42
57:DA:204:A:O4'	57:DA:206:U:C6	2.73	0.42
22:BA:359:G:H3'	22:BA:360:U:H6	1.85	0.42
22:BA:866:A:N7	22:BA:914:G:C6	2.88	0.42
22:BA:570:G:C4	22:BA:2030:A:N7	2.87	0.42
36:DO:24:THR:H	36:DO:90:VAL:HG12	1.84	0.42
22:BA:323:C:N4	22:BA:333:G:N7	2.68	0.42
34:BM:42:THR:H	34:BM:45:GLN:HB2	1.85	0.42
24:DC:30:ALA:C	24:DC:32:LEU:H	2.23	0.42
1:AA:182:A:H1'	1:AA:183:C:C6	2.55	0.42
2:CB:161:PHE:HA	2:CB:183:PHE:O	2.20	0.42
1:AA:1381:U:H2'	1:AA:1382:C:C6	2.55	0.42
57:DA:1571:A:O5'	57:DA:1571:A:H8	2.01	0.42
6:AF:49:TYR:CE2	6:AF:51:ILE:HB	2.53	0.42
6:AF:51:ILE:HD13	6:AF:86:ARG:HG3	2.01	0.42
40:BS:4:ILE:HG22	40:BS:106:VAL:HG13	2.02	0.42
25:DD:101:PHE:HD2	25:DD:104:VAL:HG11	1.85	0.42
36:BO:78:VAL:O	36:BO:79:ALA:C	2.58	0.42
1:AA:211:G:H2'	1:AA:212:G:O5'	2.20	0.42
1:AA:203:G:C2	1:AA:215:C:N3	2.88	0.42
22:BA:332:A:C4	22:BA:335:C:N4	2.88	0.42
57:DA:2244:U:H6	57:DA:2244:U:O5'	2.03	0.42
41:DT:5:GLU:CD	46:DY:18:LEU:HD21	2.40	0.42
34:DM:76:LYS:O	34:DM:77:PRO:O	2.38	0.42
28:DG:6:ALA:HA	28:DG:7:PRO:HD3	1.66	0.42
53:CA:994:A:N6	53:CA:1216:A:H5'	2.35	0.42
53:CA:1515:G:H2'	53:CA:1516:G:C8	2.55	0.42
51:D3:7:ARG:HA	51:D3:7:ARG:HD2	1.85	0.42
26:BE:5:LEU:HD11	26:BE:12:LEU:HD23	2.01	0.42
22:BA:1437:C:H2'	22:BA:1438:U:C6	2.55	0.42
3:AC:174:LEU:HD12	3:AC:174:LEU:O	2.20	0.42
1:AA:322:C:H5	1:AA:328:C:C5	2.38	0.42
1:AA:872:A:C4	1:AA:874:G:C8	3.07	0.42
1:AA:873:A:H4'	1:AA:874:G:OP2	2.18	0.42
6:AF:40:GLU:HB2	6:AF:42:TRP:NE1	2.35	0.42
53:CA:206:C:O5'	53:CA:207:C:OP2	2.38	0.42
26:DE:5:LEU:HD12	26:DE:10:SER:HB2	2.00	0.42
54:CG:37:THR:HA	54:CG:40:SER:CB	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:86:ALA:O	10:AJ:90:LEU:HD12	2.20	0.42
57:DA:223:A:O2'	57:DA:408:G:N3	2.53	0.42
6:CF:99:ALA:O	6:CF:100:SER:CB	2.68	0.42
57:DA:2649:C:H2'	57:DA:2650:U:C6	2.54	0.42
21:AU:38:GLU:CD	21:AU:41:THR:HG21	2.40	0.42
24:DC:92:LEU:HD12	24:DC:92:LEU:HA	1.95	0.42
6:CF:38:ARG:HD3	6:CF:39:LEU:N	2.35	0.42
57:DA:2530:A:C8	28:DG:156:TYR:OH	2.68	0.42
53:CA:539:A:N6	53:CA:540:G:O6	2.53	0.42
36:DO:39:VAL:HB	36:DO:49:VAL:H	1.85	0.42
1:AA:832:G:C2	1:AA:833:G:C8	3.08	0.42
38:DQ:26:ALA:O	38:DQ:30:VAL:HB	2.19	0.42
3:AC:59:PRO:O	3:AC:60:ALA:O	2.37	0.42
36:BO:92:PHE:HB2	36:BO:117:PHE:CD1	2.55	0.42
31:BJ:7:LYS:HA	31:BJ:8:PRO:HD3	1.85	0.42
30:DI:93:ASN:HA	30:DI:93:ASN:HD22	1.66	0.42
12:CL:14:LYS:C	12:CL:14:LYS:HE3	2.40	0.42
6:CF:32:ALA:O	6:CF:33:GLU:HB2	2.18	0.42
13:AM:95:PRO:CG	13:AM:101:THR:HG22	2.49	0.42
38:BQ:94:LEU:HD22	38:BQ:94:LEU:HA	1.29	0.42
58:DB:57:A:C2'	58:DB:58:A:C8	3.01	0.42
44:DW:17:ALA:CB	44:DW:36:ILE:HA	2.50	0.42
27:BF:102:LEU:O	27:BF:107:VAL:HB	2.20	0.42
52:D4:15:LYS:O	52:D4:16:ILE:HB	2.19	0.42
57:DA:1142:A:N7	57:DA:1144:A:C5	2.87	0.42
17:AQ:12:VAL:HG11	17:AQ:21:VAL:HG22	2.01	0.42
22:BA:763:G:H8	22:BA:763:G:H2'	1.37	0.42
56:CP:52:LEU:CD2	56:CP:75:ILE:HG23	2.49	0.42
24:DC:12:ARG:O	24:DC:14:HIS:N	2.53	0.42
22:BA:1141:U:C5	31:BJ:65:THR:CG2	3.03	0.42
31:BJ:64:VAL:HG13	31:BJ:65:THR:N	2.34	0.42
57:DA:2811:G:H2'	57:DA:2812:G:O4'	2.19	0.42
35:DN:97:ILE:HD12	35:DN:99:LYS:HD3	2.01	0.42
57:DA:196:A:N6	57:DA:831:G:H21	2.17	0.42
57:DA:584:C:OP1	38:DQ:5:ARG:HD3	2.19	0.42
57:DA:1295:C:H1'	35:DN:23:ASN:HD21	1.85	0.42
57:DA:321:U:C1'	26:DE:159:LEU:HG	2.49	0.42
42:DU:94:PHE:CD2	42:DU:94:PHE:O	2.73	0.42
53:CA:1072:G:C5	53:CA:1073:U:C5	3.08	0.42
53:CA:1146:A:C2	53:CA:1147:C:C2	3.08	0.42
37:DP:91:VAL:HG21	37:DP:96:LEU:HD21	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BT:33:LYS:HG3	41:BT:80:TRP:HE3	1.85	0.42
53:CA:1242:G:N2	53:CA:1302:C:O2	2.53	0.42
2:CB:72:LYS:O	2:CB:74:ALA:N	2.53	0.42
1:AA:372:C:C4'	1:AA:373:A:OP1	2.64	0.42
2:AB:184:ALA:HB3	2:AB:195:VAL:CG2	2.50	0.42
21:AU:16:ARG:HG2	21:AU:19:LYS:HG2	2.02	0.42
25:BD:98:VAL:C	25:BD:100:LEU:N	2.73	0.42
37:BP:33:GLU:HG3	37:BP:34:GLY:N	2.35	0.42
9:AI:25:GLY:HA3	9:AI:57:VAL:O	2.20	0.42
24:BC:109:LEU:CD2	24:BC:110:LYS:H	2.28	0.42
39:DR:10:LYS:N	39:DR:10:LYS:HD2	2.35	0.42
8:AH:9:MET:CE	8:AH:32:LYS:HA	2.47	0.42
21:CU:31:VAL:O	21:CU:32:ARG:C	2.58	0.42
28:DG:84:LYS:HB3	28:DG:132:LEU:O	2.20	0.42
22:BA:418:C:H2'	22:BA:419:U:O4'	2.20	0.42
29:DH:94:ILE:HG13	29:DH:98:ASP:HB3	2.01	0.42
57:DA:861:A:O2'	57:DA:862:G:C5'	2.68	0.42
3:CC:53:ARG:HB2	3:CC:53:ARG:NH1	2.35	0.42
53:CA:496:A:O2'	53:CA:497:G:H8	1.98	0.42
24:DC:76:VAL:O	24:DC:76:VAL:HG23	2.19	0.42
22:BA:2199:A:H5'	22:BA:2200:C:C5	2.50	0.42
57:DA:2102:G:C5	57:DA:2103:C:C5	3.08	0.42
57:DA:1210:G:N7	57:DA:1237:A:N6	2.68	0.42
22:BA:28:A:H2'	22:BA:29:U:H6	1.85	0.42
31:DJ:64:VAL:O	31:DJ:68:LYS:HE2	2.20	0.42
1:AA:501:C:O2'	1:AA:502:A:H5'	2.20	0.42
57:DA:1965:C:C5'	57:DA:1966:A:H5''	2.46	0.42
30:BI:56:VAL:CG2	30:BI:57:VAL:N	2.83	0.42
5:AE:10:LEU:H	5:AE:10:LEU:HD23	1.84	0.42
42:DU:16:LYS:HA	42:DU:16:LYS:HD3	1.77	0.42
24:DC:33:LEU:O	24:DC:34:GLU:CB	2.64	0.42
41:BT:4:GLU:OE1	41:BT:6:ARG:HG3	2.20	0.42
1:AA:181:A:N1	1:AA:195:A:C8	2.88	0.42
22:BA:1858:A:C8	22:BA:1858:A:OP2	2.73	0.42
8:AH:79:ARG:HB2	8:AH:80:PRO:HD2	2.02	0.42
40:DS:20:VAL:HG23	40:DS:23:LEU:CD1	2.44	0.42
22:BA:332:A:C5	22:BA:335:C:C4	3.08	0.42
22:BA:2830:C:C2'	22:BA:2831:G:H5'	2.49	0.42
18:CR:61:ALA:HB1	18:CR:66:LEU:HB2	2.02	0.42
57:DA:1854:A:O4'	57:DA:2233:U:H4'	2.20	0.42
57:DA:2235:G:C4	57:DA:2236:U:C5	3.08	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DY:23:ARG:O	46:DY:27:ASN:HB2	2.20	0.42
1:AA:1089:G:C2	1:AA:1090:U:H1'	2.54	0.42
42:DU:10:VAL:O	42:DU:21:ARG:HA	2.19	0.42
10:AJ:17:LEU:C	10:AJ:17:LEU:HD23	2.40	0.42
53:CA:1200:C:O2'	53:CA:1201:A:P	2.78	0.42
4:AD:167:PRO:HB2	4:AD:170:LEU:CD1	2.47	0.42
3:AC:15:LYS:HG3	3:AC:16:PRO:HD2	2.02	0.42
22:BA:675:A:H4'	26:BE:62:GLN:NE2	2.35	0.42
1:AA:575:G:C5	1:AA:881:G:C2	3.08	0.42
22:BA:2425:A:H5'	22:BA:2427:C:H5'	2.02	0.42
19:CS:43:MET:O	19:CS:61:VAL:HG11	2.20	0.42
57:DA:469:G:OP2	26:DE:55:SER:HB3	2.20	0.42
53:CA:102:G:H2'	53:CA:103:U:H6	1.83	0.42
40:BS:48:LYS:HD3	40:BS:52:GLU:CD	2.41	0.42
22:BA:2517:C:H2'	22:BA:2542:A:N7	2.35	0.42
6:CF:66:ALA:HA	6:CF:67:PRO:HD2	1.94	0.42
1:AA:123:U:H2'	1:AA:124:C:C6	2.55	0.42
19:CS:62:THR:HG22	19:CS:63:ASP:N	2.32	0.42
29:DH:9:VAL:HG13	29:DH:10:ALA:N	2.35	0.42
30:DI:132:ALA:HB1	30:DI:137:LEU:HB2	2.02	0.42
17:CQ:45:VAL:HG21	17:CQ:60:ILE:HG21	2.02	0.42
4:CD:203:TYR:C	4:CD:205:LYS:H	2.22	0.42
1:AA:42:G:C6	1:AA:43:C:C4	3.08	0.42
22:BA:1910:G:O2'	22:BA:1911:U:H5'	2.20	0.42
7:AG:108:ARG:HH21	7:AG:118:ARG:NH2	2.17	0.42
57:DA:1109:C:N4	57:DA:1110:G:N1	2.68	0.42
18:AR:33:THR:HG21	18:AR:37:LYS:HB2	2.02	0.42
20:CT:11:ILE:C	20:CT:13:SER:N	2.74	0.42
22:BA:769:U:N3	22:BA:770:G:N7	2.68	0.42
22:BA:1765:U:C2'	22:BA:1766:G:H5'	2.50	0.42
1:AA:1374:A:H2'	1:AA:1375:A:C8	2.55	0.42
35:BN:51:LEU:HD12	35:BN:51:LEU:HA	1.68	0.42
22:BA:2574:G:C6	22:BA:2575:C:C4	3.08	0.42
28:DG:40:VAL:HB	28:DG:41:GLU:H	1.69	0.42
1:AA:1048:G:OP1	14:AN:3:GLN:N	2.48	0.42
1:AA:693:G:C2'	1:AA:694:A:H5'	2.50	0.42
22:BA:2599:G:C2	22:BA:2600:A:C4	3.08	0.42
10:CJ:13:PHE:CE2	10:CJ:69:THR:HG23	2.55	0.42
34:DM:78:LEU:HA	34:DM:78:LEU:HD23	1.80	0.42
57:DA:498:G:C6	57:DA:499:U:C4	3.07	0.42
9:AI:33:SER:OG	9:AI:35:GLU:HG2	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1253:A:C5	63:BA:3330:HOH:O	2.72	0.42
38:BQ:63:ARG:NH2	38:BQ:96:ASP:CA	2.83	0.41
52:D4:19:ARG:HH12	52:D4:26:ILE:CG1	2.34	0.41
57:DA:604:G:N1	57:DA:605:G:C6	2.88	0.41
22:BA:1061:U:C5	30:BI:9:LYS:HG3	2.54	0.41
9:CI:35:GLU:CA	9:CI:39:GLY:HA3	2.49	0.41
57:DA:763:G:O2'	57:DA:764:A:H3'	2.20	0.41
57:DA:729:G:O6	24:DC:206:LYS:HB2	2.20	0.41
57:DA:33:C:H4'	57:DA:34:U:OP1	2.16	0.41
22:BA:1177:G:C5	22:BA:1178:C:C5	3.08	0.41
22:BA:1179:G:C5	22:BA:1180:U:C1'	2.90	0.41
58:DB:67:G:O2'	58:DB:68:C:O5'	2.38	0.41
34:DM:41:LEU:HB3	34:DM:46:ILE:CG2	2.50	0.41
11:CK:42:GLY:HA3	11:CK:73:VAL:HB	2.02	0.41
53:CA:428:G:C2	53:CA:430:A:N6	2.88	0.41
54:CG:70:PRO:HB3	54:CG:98:LEU:HD12	2.01	0.41
57:DA:1745:A:C2	57:DA:1746:A:C8	3.08	0.41
53:CA:566:G:C4'	53:CA:567:G:OP1	2.67	0.41
57:DA:1329:U:O2'	57:DA:1330:C:P	2.78	0.41
8:CH:124:ILE:HG22	8:CH:125:ILE:N	2.35	0.41
1:AA:945:G:N3	1:AA:945:G:H2'	2.35	0.41
5:AE:147:ASN:O	5:AE:149:PRO:HD3	2.19	0.41
57:DA:1439:A:C2	57:DA:1553:A:C8	3.08	0.41
54:CG:10:LYS:HE3	54:CG:10:LYS:H	1.85	0.41
1:AA:564:C:H2'	1:AA:565:U:C6	2.55	0.41
25:DD:148:GLN:HG2	25:DD:152:PRO:CG	2.50	0.41
9:AI:44:ARG:HB2	9:AI:45:MET:HE3	2.01	0.41
1:AA:15:G:C5	1:AA:1396:A:C2	3.08	0.41
6:CF:11:HIS:HD2	6:CF:54:LEU:HD21	1.79	0.41
1:AA:429:U:H1'	1:AA:430:A:C5'	2.50	0.41
57:DA:1821:A:H5'	24:DC:156:SER:OG	2.19	0.41
24:DC:174:ARG:HA	24:DC:180:MET:HG2	2.02	0.41
24:DC:115:ILE:O	24:DC:116:GLN:HG3	2.20	0.41
22:BA:1319:C:O2	22:BA:1334:G:C2	2.73	0.41
22:BA:1324:G:H1'	22:BA:1616:A:N6	2.35	0.41
40:BS:54:ALA:O	40:BS:57:ASN:HB2	2.20	0.41
59:DF:69:ALA:HB2	59:DF:82:TYR:O	2.20	0.41
57:DA:527:C:O2'	57:DA:528:A:O5'	2.38	0.41
13:AM:5:GLY:HA3	13:AM:65:GLU:HG3	2.02	0.41
45:DX:1:SER:C	45:DX:3:VAL:N	2.74	0.41
2:AB:116:LEU:HB3	2:AB:140:LEU:HG	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:503:C:H6	1:AA:503:C:O5'	2.02	0.41
1:AA:269:C:N4	1:AA:270:A:H62	2.18	0.41
30:BI:58:ILE:HG22	30:BI:60:VAL:CG2	2.50	0.41
57:DA:481:G:O2'	57:DA:482:A:P	2.77	0.41
55:CM:78:ARG:HH11	55:CM:78:ARG:HG2	1.84	0.41
46:BY:56:LEU:HA	46:BY:59:GLU:CG	2.50	0.41
30:BI:123:ALA:C	30:BI:125:THR:N	2.72	0.41
24:BC:257:ARG:NE	24:BC:269:ARG:HH22	2.17	0.41
57:DA:818:G:C2'	57:DA:819:A:H5''	2.50	0.41
22:BA:920:A:H2'	22:BA:921:C:O4'	2.20	0.41
22:BA:1712:U:C4	22:BA:1713:A:C5	3.08	0.41
57:DA:2654:A:H62	57:DA:2667:C:N4	2.18	0.41
42:DU:59:GLU:C	42:DU:60:LYS:HD2	2.41	0.41
31:BJ:141:ASP:HB3	31:BJ:142:ILE:H	1.49	0.41
53:CA:1215:G:O2'	53:CA:1216:A:H5'	2.19	0.41
28:BG:139:VAL:HG12	28:BG:140:ILE:N	2.35	0.41
22:BA:229:C:H2'	22:BA:230:G:O4'	2.20	0.41
21:CU:13:VAL:CG2	21:CU:15:LEU:HD23	2.49	0.41
22:BA:2293:G:H2'	22:BA:2294:G:O4'	2.20	0.41
37:BP:24:THR:CG2	37:BP:86:LYS:HB2	2.50	0.41
19:CS:45:GLY:N	19:CS:61:VAL:HB	2.32	0.41
53:CA:264:C:H1'	17:CQ:65:PRO:HG2	2.01	0.41
56:CP:20:VAL:HG21	56:CP:32:PHE:CB	2.50	0.41
25:DD:22:ILE:HA	25:DD:23:PRO:HD2	1.91	0.41
3:AC:5:HIS:O	3:AC:9:ILE:HG22	2.20	0.41
11:AK:110:THR:HG22	21:AU:4:LYS:HB3	2.01	0.41
6:AF:11:HIS:CD2	6:AF:12:PRO:HD2	2.54	0.41
22:BA:1303:G:H2'	22:BA:1304:A:H8	1.85	0.41
30:DI:112:LYS:NZ	30:DI:128:ILE:HD12	2.34	0.41
53:CA:284:C:H6	53:CA:284:C:O5'	2.03	0.41
57:DA:294:A:H2'	57:DA:295:G:O5'	2.20	0.41
57:DA:1886:U:H6	57:DA:1886:U:O5'	2.02	0.41
53:CA:45:G:O2'	53:CA:46:G:H5'	2.20	0.41
22:BA:2532:G:C5	22:BA:2533:U:C4	3.08	0.41
22:BA:1588:G:N3	22:BA:1589:U:C6	2.87	0.41
37:DP:45:VAL:O	37:DP:60:VAL:HA	2.19	0.41
58:DB:76:G:H5''	43:DV:17:SER:OG	2.21	0.41
3:CC:35:ASP:CG	3:CC:56:ILE:HD12	2.40	0.41
55:CM:46:GLU:O	55:CM:47:LEU:HB2	2.19	0.41
1:AA:592:G:C6	1:AA:648:A:C6	3.08	0.41
24:BC:175:LEU:HD12	24:BC:175:LEU:HA	1.81	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:538:A:H2'	22:BA:539:G:O4'	2.20	0.41
57:DA:2456:C:H2'	57:DA:2457:U:O4'	2.20	0.41
24:DC:135:PRO:HG2	24:DC:138:SER:OG	2.19	0.41
22:BA:377:G:H2'	22:BA:378:C:O4'	2.20	0.41
57:DA:1702:G:C6	57:DA:1703:G:N7	2.88	0.41
10:AJ:78:GLU:HA	10:AJ:79:PRO:HD2	1.91	0.41
1:AA:404:G:H2'	1:AA:405:U:O4'	2.20	0.41
22:BA:2297:A:H2'	22:BA:2297:A:N3	2.35	0.41
16:AP:70:ARG:O	16:AP:70:ARG:HG3	2.20	0.41
2:AB:57:ASN:HD22	2:AB:57:ASN:C	2.23	0.41
42:BU:31:GLY:O	42:BU:66:VAL:HB	2.20	0.41
32:DK:114:LYS:O	32:DK:117:SER:HB2	2.20	0.41
57:DA:2092:U:C2'	57:DA:2093:G:C8	2.82	0.41
38:BQ:91:ARG:HE	39:BR:11:GLN:HB2	1.85	0.41
37:BP:71:ARG:HD3	37:BP:73:PHE:CZ	2.55	0.41
44:BW:39:GLN:HG2	44:BW:40:ARG:N	2.33	0.41
53:CA:254:G:O2'	17:CQ:17:GLU:O	2.36	0.41
53:CA:1316:G:H22	53:CA:1318:A:H3'	1.85	0.41
53:CA:1082:A:OP1	5:CE:22:LYS:HE3	2.21	0.41
44:DW:18:LYS:CD	44:DW:19:ARG:HG2	2.47	0.41
44:DW:37:VAL:CG2	44:DW:38:ARG:HH11	2.33	0.41
53:CA:1179:A:H2'	53:CA:1180:A:O4'	2.20	0.41
56:CP:19:VAL:HG13	56:CP:37:GLY:CA	2.50	0.41
57:DA:2428:G:H4'	57:DA:2429:G:C5	2.55	0.41
57:DA:1386:C:HO2'	57:DA:1387:A:P	2.43	0.41
57:DA:1388:G:C2	57:DA:1389:G:C8	3.08	0.41
22:BA:263:G:H2'	22:BA:264:C:O5'	2.20	0.41
31:DJ:51:GLY:HA3	31:DJ:121:LYS:HE3	2.01	0.41
29:DH:40:THR:O	29:DH:42:LYS:N	2.47	0.41
57:DA:1540:G:H2'	57:DA:1541:C:C6	2.55	0.41
4:CD:33:ILE:HD12	4:CD:33:ILE:HA	1.84	0.41
57:DA:2307:G:H1	59:DF:38:GLY:HA3	1.85	0.41
46:BY:47:ARG:NH2	46:BY:47:ARG:CG	2.72	0.41
41:BT:21:SER:HA	41:BT:31:VAL:HG11	2.01	0.41
23:BB:89:U:OP2	23:BB:89:U:C4'	2.67	0.41
53:CA:1241:G:H2'	53:CA:1242:G:C8	2.39	0.41
55:CM:15:VAL:O	55:CM:19:THR:HG23	2.19	0.41
31:BJ:114:LEU:O	31:BJ:115:GLY:C	2.59	0.41
45:DX:16:ASN:N	45:DX:26:ARG:HB3	2.35	0.41
57:DA:946:C:O2'	57:DA:947:A:C5'	2.68	0.41
57:DA:985:C:H6	57:DA:985:C:O5'	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:CG:27:ASN:O	54:CG:30:MET:HB2	2.20	0.41
1:AA:252:U:O2'	1:AA:275:G:N2	2.53	0.41
57:DA:2516:A:C2	57:DA:2569:G:N3	2.89	0.41
9:AI:49:GLN:O	9:AI:51:LEU:N	2.54	0.41
2:AB:81:ASP:OD1	2:AB:83:ALA:N	2.48	0.41
57:DA:1298:C:H2'	57:DA:1299:G:O4'	2.20	0.41
57:DA:1455:G:N7	35:DN:64:ARG:NH1	2.68	0.41
57:DA:1802:A:P	57:DA:1815:A:H61	2.42	0.41
11:AK:113:THR:HA	11:AK:114:PRO:HD3	1.82	0.41
22:BA:2197:U:O2'	22:BA:2198:A:C2'	2.68	0.41
57:DA:379:G:N1	57:DA:380:G:C4	2.88	0.41
25:BD:191:GLY:O	25:BD:192:ALA:CB	2.68	0.41
22:BA:1049:C:H2'	22:BA:1050:A:H5'	2.02	0.41
2:AB:140:LEU:O	2:AB:141:GLU:C	2.59	0.41
55:CM:23:GLY:HA3	55:CM:64:VAL:HG13	2.01	0.41
22:BA:866:A:O2'	22:BA:867:C:H5'	2.20	0.41
1:AA:499:A:H4'	1:AA:500:G:O5'	2.20	0.41
57:DA:581:C:H2'	57:DA:582:A:C8	2.55	0.41
50:B2:24:THR:O	50:B2:25:LYS:C	2.58	0.41
57:DA:1845:G:C6	57:DA:1846:G:N7	2.89	0.41
3:CC:39:ARG:C	3:CC:41:TYR:H	2.23	0.41
22:BA:1655:A:H5'	25:BD:118:PHE:CD2	2.55	0.41
22:BA:86:G:C2	22:BA:97:C:C2	3.08	0.41
39:BR:68:ARG:HH11	39:BR:90:ARG:HH11	1.68	0.41
40:BS:4:ILE:CG2	40:BS:106:VAL:HG13	2.50	0.41
38:BQ:8:ILE:O	38:BQ:12:ARG:HG3	2.21	0.41
32:BK:107:LEU:HD12	32:BK:107:LEU:HA	1.79	0.41
47:BZ:23:LEU:HD21	47:BZ:53:MET:HE2	2.01	0.41
1:AA:687:A:C2	1:AA:704:A:C5	3.07	0.41
25:DD:33:ARG:NH2	25:DD:51:THR:HG22	2.35	0.41
1:AA:1108:G:N7	1:AA:1109:C:C5	2.88	0.41
3:AC:137:VAL:HA	3:AC:148:ILE:CD1	2.48	0.41
28:DG:7:PRO:HB3	28:DG:48:THR:HB	2.01	0.41
31:BJ:93:ILE:O	31:BJ:97:PRO:HG3	2.19	0.41
57:DA:2529:G:C4'	28:DG:174:LYS:HD3	2.46	0.41
35:BN:33:ILE:N	35:BN:33:ILE:HD12	2.35	0.41
57:DA:2635:A:H5''	25:DD:79:LEU:O	2.20	0.41
24:DC:130:PRO:C	24:DC:132:ARG:N	2.74	0.41
11:AK:55:ARG:O	11:AK:58:THR:HG23	2.19	0.41
31:DJ:106:LYS:HD2	31:DJ:119:PHE:HD2	1.84	0.41
6:CF:80:PHE:N	6:CF:80:PHE:CD1	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1039:G:C2'	1:AA:1040:U:H5'	2.49	0.41
57:DA:1000:A:N1	57:DA:1001:A:C2	2.89	0.41
1:AA:1046:A:H2'	1:AA:1047:G:H8	1.85	0.41
53:CA:321:A:O3'	53:CA:1436:U:H5'	2.20	0.41
4:AD:191:SER:OG	4:AD:192:ALA:N	2.48	0.41
22:BA:686:U:O4	50:B2:12:ARG:CB	2.68	0.41
22:BA:2645:G:C3'	22:BA:2646:C:H5'	2.50	0.41
22:BA:2732:G:H8	22:BA:2732:G:OP2	2.03	0.41
27:BF:170:ALA:O	27:BF:172:PHE:O	2.38	0.41
39:BR:102:SER:O	39:BR:103:ALA:O	2.38	0.41
53:CA:62:U:O2'	53:CA:379:C:O2	2.31	0.41
30:DI:95:ASP:CG	30:DI:96:LYS:H	2.23	0.41
45:BX:68:ALA:C	45:BX:69:GLU:O	2.58	0.41
26:BE:95:LYS:O	26:BE:96:VAL:CB	2.67	0.41
17:AQ:32:ILE:N	17:AQ:32:ILE:HD12	2.35	0.41
30:DI:24:GLY:HA3	30:DI:25:PRO:HD3	1.91	0.41
34:DM:1:MET:HB3	34:DM:2:LEU:H	1.67	0.41
57:DA:1875:G:H8	57:DA:1875:G:OP2	2.03	0.41
30:BI:111:THR:O	30:BI:113:ALA:N	2.47	0.41
59:DF:122:ASP:HB2	59:DF:126:ASN:CB	2.49	0.41
4:CD:117:VAL:O	4:CD:130:ASN:HA	2.20	0.41
53:CA:116:A:H2'	53:CA:117:G:C8	2.54	0.41
22:BA:2593:U:H2'	22:BA:2594:C:H6	1.85	0.41
2:AB:27:LYS:N	2:AB:28:PRO:CD	2.83	0.41
22:BA:125:A:C6	50:B2:10:LEU:HD13	2.55	0.41
9:CI:4:GLN:HB3	9:CI:21:LYS:CG	2.51	0.41
10:AJ:33:GLY:O	10:AJ:34:ALA:HB2	2.20	0.41
26:BE:129:PRO:HG3	26:BE:156:ASN:OD1	2.20	0.41
46:BY:6:LEU:O	46:BY:7:ARG:HB3	2.19	0.41
1:AA:370:C:O2'	1:AA:371:A:H5'	2.20	0.41
53:CA:674:G:H5''	6:CF:49:TYR:CE2	2.55	0.41
1:AA:1488:G:O2'	1:AA:1489:G:H5'	2.21	0.41
31:BJ:101:ILE:O	31:BJ:105:VAL:CG1	2.69	0.41
12:CL:37:TYR:O	12:CL:38:THR:HG23	2.21	0.41
22:BA:1770:G:C4'	63:BA:3730:HOH:O	2.68	0.41
11:AK:92:ARG:O	11:AK:92:ARG:HG2	2.20	0.41
24:BC:115:ILE:HA	24:BC:115:ILE:HD12	1.78	0.41
53:CA:203:G:H8	53:CA:203:G:O5'	2.03	0.41
39:BR:49:ILE:CG2	39:BR:53:PHE:N	2.82	0.41
44:BW:16:GLU:CA	44:BW:16:GLU:OE2	2.67	0.41
44:DW:37:VAL:HA	44:DW:55:ASP:O	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:D4:7:VAL:O	52:D4:8:LYS:O	2.38	0.41
6:AF:62:MET:O	6:AF:63:ASN:HB2	2.20	0.41
17:AQ:11:VAL:HG12	17:AQ:13:SER:H	1.85	0.41
22:BA:763:G:O2'	22:BA:764:A:H5''	2.20	0.41
22:BA:1098:A:H5'	22:BA:1099:G:OP2	2.20	0.41
57:DA:575:A:C4	57:DA:576:U:C5	3.07	0.41
1:AA:974:A:C4'	1:AA:975:A:H5'	2.44	0.41
25:BD:133:THR:O	25:BD:134:HIS:HB2	2.20	0.41
57:DA:301:G:O5'	42:DU:81:ARG:NH1	2.53	0.41
22:BA:1131:G:N7	22:BA:2025:C:H4'	2.36	0.41
1:AA:652:U:H1'	1:AA:653:U:C6	2.55	0.41
15:AO:17:ASP:O	15:AO:20:ASP:HB3	2.19	0.41
22:BA:430:A:H5''	22:BA:431:U:OP2	2.20	0.41
57:DA:2141:G:H2'	57:DA:2142:A:H8	1.84	0.41
53:CA:427:U:C4	53:CA:428:G:C6	3.08	0.41
53:CA:558:G:O5'	53:CA:559:A:H3'	2.20	0.41
41:BT:13:ALA:HB3	41:BT:33:LYS:HB3	2.02	0.41
53:CA:83:C:C4	53:CA:85:U:N3	2.88	0.41
53:CA:79:G:N2	53:CA:91:U:C2	2.88	0.41
1:AA:7:A:H3'	5:AE:105:ILE:HD12	2.02	0.41
2:AB:67:LEU:O	2:AB:160:LEU:HD12	2.20	0.41
57:DA:980:A:O5'	57:DA:982:C:N4	2.53	0.41
57:DA:984:A:O2'	57:DA:985:C:P	2.78	0.41
42:DU:91:LYS:O	42:DU:92:VAL:HG22	2.19	0.41
6:CF:43:GLY:HA2	6:CF:58:HIS:HE1	1.83	0.41
57:DA:2567:G:H2'	57:DA:2568:U:C6	2.55	0.41
22:BA:272:A:O2'	22:BA:273:G:P	2.78	0.41
53:CA:751:U:H2'	53:CA:752:G:O4'	2.20	0.41
26:BE:119:ILE:O	26:BE:119:ILE:HG12	2.21	0.41
1:AA:439:U:C6	4:AD:119:HIS:CD2	3.05	0.41
10:AJ:51:VAL:CG1	14:AN:80:ARG:HB2	2.50	0.41
53:CA:803:G:H2'	53:CA:804:U:C6	2.55	0.41
57:DA:464:U:C6	57:DA:788:A:C2	3.08	0.41
3:CC:119:ILE:HD11	3:CC:136:ALA:CB	2.50	0.41
1:AA:428:G:C5	1:AA:430:A:C6	3.08	0.41
57:DA:822:G:H2'	57:DA:823:C:H6	1.85	0.41
22:BA:2145:C:OP1	22:BA:2148:G:C5	2.73	0.41
11:CK:124:LYS:O	21:CU:33:ARG:CZ	2.69	0.41
1:AA:1322:C:O2'	1:AA:1323:G:C5'	2.68	0.41
1:AA:977:A:C2'	1:AA:977:A:N3	2.73	0.41
1:AA:978:A:HO2'	1:AA:1322:C:H5	1.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:14:PRO:HG2	41:DT:15:HIS:H	1.85	0.41
1:AA:338:A:H2'	1:AA:339:C:O4'	2.21	0.41
21:AU:13:VAL:HG13	21:AU:15:LEU:CG	2.41	0.41
57:DA:916:G:HO2'	57:DA:917:A:P	2.42	0.41
57:DA:1335:C:H2'	57:DA:1336:A:C1'	2.51	0.41
36:BO:104:GLN:C	36:BO:105:ALA:O	2.57	0.41
53:CA:497:G:O2'	53:CA:498:A:H8	1.99	0.41
53:CA:831:A:OP1	2:CB:20:ARG:HG3	2.20	0.41
29:BH:41:LYS:HA	29:BH:44:ILE:CG1	2.48	0.41
29:BH:44:ILE:O	29:BH:48:GLU:HB2	2.20	0.41
57:DA:1512:C:H2'	57:DA:1513:U:H6	1.83	0.41
53:CA:1386:G:N2	53:CA:1387:G:C4	2.89	0.41
2:CB:130:LYS:HD3	2:CB:130:LYS:HA	1.83	0.41
1:AA:55:A:C5	1:AA:56:U:C5	3.08	0.41
7:AG:110:ARG:HB2	7:AG:110:ARG:NH1	2.35	0.41
22:BA:64:A:C5	22:BA:65:U:C4	3.08	0.41
41:BT:69:ARG:NE	41:BT:70:HIS:H	2.19	0.41
57:DA:506:G:H4'	57:DA:509:C:O2	2.20	0.41
30:BI:115:ASP:C	30:BI:115:ASP:OD1	2.59	0.41
53:CA:1140:C:H2'	53:CA:1141:C:H5	1.84	0.41
22:BA:1655:A:H61	22:BA:2005:A:H1'	1.85	0.41
53:CA:1002:G:C6	53:CA:1003:G:C6	3.08	0.41
8:CH:85:TYR:CE1	17:CQ:36:PHE:HE2	2.38	0.41
22:BA:387:U:C5	22:BA:388:G:C6	3.08	0.41
57:DA:2898:U:H2'	57:DA:2899:A:H8	1.85	0.41
53:CA:1294:G:C8	53:CA:1294:G:OP2	2.74	0.41
28:DG:100:ASN:O	28:DG:115:GLN:HB2	2.19	0.41
32:DK:2:ILE:HD11	32:DK:65:THR:HG22	2.03	0.41
27:BF:121:PHE:HD1	27:BF:126:ASN:O	2.02	0.41
57:DA:2665:A:C2	57:DA:2666:C:N3	2.89	0.41
34:DM:136:MET:HE2	43:DV:57:TYR:CD2	2.52	0.41
31:BJ:36:LEU:HD12	31:BJ:36:LEU:HA	1.60	0.41
16:AP:15:PRO:HG2	16:AP:41:PRO:HG3	2.02	0.41
40:DS:41:LYS:O	40:DS:44:ALA:N	2.44	0.41
26:BE:150:THR:HA	26:BE:189:THR:CG2	2.50	0.41
22:BA:1474:U:H2'	22:BA:1475:G:H5'	2.02	0.41
57:DA:579:G:C8	57:DA:2017:U:O4	2.74	0.41
26:BE:134:LEU:CD2	26:BE:161:ALA:HB2	2.49	0.41
1:AA:1261:A:N3	1:AA:1275:A:C6	2.89	0.41
53:CA:749:A:C2	53:CA:750:C:C2	3.08	0.41
22:BA:2840:C:H2'	22:BA:2841:C:C6	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:18:ILE:CG2	10:AJ:19:ASP:N	2.82	0.41
37:BP:24:THR:O	37:BP:44:GLY:O	2.38	0.41
53:CA:637:C:H2'	53:CA:638:U:H6	1.82	0.41
1:AA:158:G:C2'	1:AA:159:G:H5''	2.49	0.41
53:CA:553:A:O4'	12:CL:27:PRO:HA	2.21	0.41
5:AE:12:GLU:CB	5:AE:38:VAL:HG12	2.49	0.41
36:BO:3:LYS:HG3	36:BO:4:LYS:H	1.85	0.41
25:DD:175:LEU:HB3	25:DD:176:ASP:H	1.48	0.41
53:CA:605:U:H2'	53:CA:606:G:C8	2.56	0.41
43:BV:5:ASN:N	43:BV:5:ASN:ND2	2.64	0.41
24:DC:259:ASN:O	24:DC:260:LYS:CB	2.67	0.41
22:BA:2075:U:H2'	22:BA:2238:G:N2	2.35	0.41
1:AA:772:U:O2'	1:AA:773:G:H5'	2.21	0.41
12:CL:89:LEU:HB3	12:CL:92:VAL:CG2	2.51	0.41
32:BK:65:THR:OG1	32:BK:68:GLY:N	2.44	0.41
43:BV:66:ASP:CG	43:BV:66:ASP:O	2.58	0.41
19:AS:79:TYR:O	19:AS:80:ARG:HB3	2.20	0.41
46:DY:52:ARG:C	46:DY:54:LYS:N	2.73	0.41
2:CB:178:LEU:HD12	2:CB:178:LEU:HA	1.80	0.41
24:BC:259:ASN:C	24:BC:261:ARG:N	2.73	0.41
53:CA:836:G:C5	53:CA:851:G:C6	3.08	0.41
30:DI:102:ARG:NH1	30:DI:105:LEU:HD13	2.35	0.41
57:DA:2373:G:C6	57:DA:2374:C:C4	3.08	0.41
35:BN:87:PHE:O	35:BN:89:SER:N	2.53	0.41
22:BA:2486:C:C2'	22:BA:2487:G:O5'	2.68	0.41
25:DD:5:VAL:HG21	25:DD:80:TRP:CG	2.55	0.41
3:AC:188:ALA:O	3:AC:194:VAL:HA	2.20	0.41
4:AD:138:PRO:HA	4:AD:181:PHE:HD2	1.85	0.41
24:DC:245:THR:HG23	24:DC:249:VAL:O	2.19	0.41
30:BI:93:ASN:OD1	30:BI:136:GLY:HA2	2.21	0.41
22:BA:1316:U:H2'	22:BA:1317:G:H8	1.85	0.41
22:BA:470:A:H61	41:BT:72:GLN:HE22	1.68	0.41
24:DC:198:GLU:O	24:DC:198:GLU:HG3	2.20	0.41
22:BA:253:C:H2'	22:BA:253:C:O2	2.20	0.41
19:CS:32:THR:O	19:CS:32:THR:HG23	2.19	0.41
22:BA:1855:U:H6	22:BA:1855:U:O5'	2.03	0.41
57:DA:2097:A:C6	57:DA:2098:U:C4	3.08	0.41
39:BR:11:GLN:C	39:BR:12:HIS:CG	2.93	0.41
39:BR:48:LYS:HD2	39:BR:48:LYS:O	2.20	0.41
22:BA:2365:G:H4'	44:BW:59:PHE:CE2	2.55	0.41
57:DA:2209:G:C4	57:DA:2210:U:C5	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:273:U:C2'	53:CA:274:A:H5'	2.50	0.41
53:CA:275:G:H2'	53:CA:276:G:H8	1.86	0.41
19:CS:35:ARG:HA	19:CS:70:LEU:CB	2.46	0.41
5:AE:108:GLY:O	5:AE:109:ALA:CB	2.69	0.41
57:DA:617:G:H2'	57:DA:618:G:H8	1.85	0.41
53:CA:1250:A:C2	53:CA:1287:A:C6	3.08	0.41
38:DQ:31:TYR:O	38:DQ:33:VAL:N	2.54	0.41
39:DR:37:GLU:HB2	39:DR:53:PHE:CD2	2.56	0.41
58:DB:66:A:OP2	58:DB:108:A:N6	2.54	0.41
49:D1:8:ILE:O	49:D1:21:THR:HA	2.21	0.41
51:D3:29:ARG:CZ	51:D3:29:ARG:CB	2.98	0.41
57:DA:2391:G:O2'	57:DA:2392:A:O5'	2.39	0.41
53:CA:408:A:C2	53:CA:435:A:C2	3.08	0.41
52:B4:9:LYS:HB2	52:B4:9:LYS:HE2	1.83	0.41
57:DA:1203:U:H2'	57:DA:1204:A:C2	2.55	0.41
57:DA:1203:U:H3	57:DA:1204:A:N6	2.18	0.41
57:DA:338:G:C2'	57:DA:339:U:H5'	2.50	0.41
26:DE:105:LEU:HD13	26:DE:105:LEU:O	2.19	0.41
34:DM:73:ILE:HA	34:DM:73:ILE:HD13	1.71	0.41
4:CD:11:SER:HA	4:CD:18:LEU:CD1	2.50	0.41
4:CD:21:LYS:O	4:CD:21:LYS:CG	2.68	0.41
2:CB:100:LEU:C	2:CB:102:ASN:H	2.24	0.41
57:DA:1718:G:N2	57:DA:1743:G:H1'	2.35	0.41
4:AD:147:LYS:N	4:AD:147:LYS:CD	2.84	0.41
57:DA:1331:G:C4	57:DA:1333:G:C8	3.08	0.41
57:DA:1333:G:O2'	57:DA:1334:G:H5'	2.20	0.41
2:CB:209:VAL:CG2	2:CB:210:THR:N	2.83	0.41
53:CA:1328:C:H2'	53:CA:1329:A:C8	2.56	0.41
8:AH:45:ILE:CG2	8:AH:62:LEU:HD13	2.51	0.41
57:DA:1515:A:H4'	57:DA:1556:C:O2'	2.21	0.41
45:DX:76:LYS:HB2	45:DX:76:LYS:HE3	1.85	0.41
2:CB:164:ASP:CB	2:CB:167:HIS:HB3	2.50	0.41
59:DF:134:GLN:HG3	59:DF:149:ARG:O	2.20	0.41
57:DA:1710:G:H4'	57:DA:2858:C:O2	2.20	0.41
2:AB:106:VAL:O	2:AB:110:ILE:HD13	2.20	0.41
1:AA:511:C:O2'	1:AA:512:U:P	2.79	0.41
25:DD:119:ALA:O	25:DD:120:GLY:O	2.37	0.41
57:DA:996:A:OP1	39:DR:10:LYS:HG2	2.20	0.41
33:DL:128:THR:HG22	33:DL:129:LYS:N	2.36	0.41
57:DA:1930:G:O2'	57:DA:1931:U:P	2.78	0.41
57:DA:802:A:O2'	57:DA:803:U:H5'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:414:A:HO2'	1:AA:415:A:H8	1.68	0.41
53:CA:66:A:C6	53:CA:67:C:N4	2.88	0.41
29:DH:98:ASP:O	29:DH:99:ILE:HG12	2.19	0.41
1:AA:330:C:H5''	1:AA:330:C:C6	2.53	0.41
57:DA:1585:C:H3'	57:DA:1586:A:C8	2.56	0.41
57:DA:1245:G:H4'	26:DE:33:VAL:CG1	2.41	0.41
24:DC:70:LYS:HD3	24:DC:101:ARG:NH1	2.32	0.41
57:DA:1010:A:H4'	38:DQ:75:TYR:CD2	2.56	0.41
22:BA:2682:A:C8	25:BD:11:MET:HG2	2.55	0.41
57:DA:1050:A:H2'	57:DA:1051:G:H8	1.85	0.41
57:DA:1510:G:OP2	57:DA:1510:G:H3'	2.20	0.41
25:DD:127:PHE:CZ	25:DD:160:LYS:HD2	2.55	0.41
2:AB:113:LEU:HB2	2:AB:143:LEU:HD12	2.02	0.41
42:DU:47:PRO:HB3	42:DU:54:PRO:HG2	2.02	0.41
30:BI:78:LEU:HD13	30:BI:108:ILE:CG2	2.46	0.41
22:BA:497:A:H2'	22:BA:498:G:O4'	2.20	0.41
1:AA:1250:A:H2	1:AA:1370:G:H1'	1.85	0.41
53:CA:1026:G:H1	53:CA:1036:A:H61	1.65	0.41
57:DA:1568:G:N2	24:DC:57:HIS:CE1	2.89	0.41
54:CG:64:ALA:HB2	54:CG:126:ALA:CB	2.47	0.41
12:AL:85:ARG:HA	12:AL:93:ARG:HA	2.02	0.41
53:CA:926:G:H5'	53:CA:927:G:O5'	2.20	0.41
29:BH:72:ILE:O	29:BH:72:ILE:HG23	2.20	0.41
57:DA:1343:G:N2	57:DA:1344:U:C2	2.88	0.41
57:DA:2235:G:C6	57:DA:2236:U:C4	3.09	0.41
4:CD:107:GLY:N	4:CD:157:ALA:CB	2.83	0.41
26:DE:77:ILE:H	26:DE:77:ILE:HG12	1.51	0.41
31:BJ:97:PRO:O	31:BJ:99:ARG:N	2.53	0.41
57:DA:526:A:C6	57:DA:2626:C:H4'	2.55	0.41
28:BG:82:PHE:HB2	28:BG:134:GLY:O	2.21	0.41
13:AM:76:ILE:O	13:AM:79:LEU:HB2	2.20	0.41
3:CC:127:VAL:O	3:CC:128:MET:HB2	2.20	0.41
22:BA:1299:G:O6	22:BA:1639:C:H5''	2.20	0.41
8:CH:46:GLU:N	8:CH:63:LYS:HG3	2.35	0.41
57:DA:999:U:C2'	57:DA:1000:A:H5'	2.50	0.41
22:BA:1919:A:C2'	22:BA:1920:C:H5'	2.49	0.41
33:BL:56:PRO:O	33:BL:57:LEU:C	2.59	0.41
57:DA:1034:G:O2'	57:DA:1035:U:O4'	2.25	0.41
53:CA:1479:C:C2	53:CA:1480:A:C8	3.09	0.41
15:CO:62:ARG:HH22	15:CO:88:ARG:NH2	2.18	0.41
57:DA:1666:G:C4'	32:DK:6:THR:HG23	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1462:C:C1'	57:DA:2702:G:H21	2.33	0.41
22:BA:1535:A:H4'	22:BA:1536:C:OP2	2.18	0.41
57:DA:122:G:O2'	57:DA:123:G:C5'	2.68	0.41
57:DA:121:G:N2	57:DA:131:A:C4	2.88	0.41
11:AK:24:ALA:CB	11:AK:29:THR:HG23	2.50	0.41
24:DC:77:VAL:HA	24:DC:92:LEU:O	2.21	0.41
57:DA:910:A:H62	34:DM:12:MET:C	2.24	0.41
48:B0:9:ARG:HB3	48:B0:9:ARG:CZ	2.51	0.41
57:DA:2770:G:O5'	57:DA:2770:G:H8	2.02	0.41
22:BA:1001:A:OP2	63:BA:3737:HOH:O	2.22	0.41
2:CB:191:ASP:HA	2:CB:192:PRO:HD2	1.89	0.41
5:AE:46:GLY:CA	5:AE:70:MET:HA	2.50	0.41
27:BF:30:VAL:HG12	27:BF:96:TRP:CH2	2.56	0.41
9:AI:18:VAL:HG11	9:AI:82:ILE:HG12	2.02	0.41
28:BG:109:SER:O	28:BG:110:HIS:HB3	2.21	0.41
22:BA:375:G:C4	22:BA:376:G:C8	3.07	0.41
1:AA:1030:U:OP2	1:AA:1031:C:O2	2.39	0.41
35:BN:15:SER:O	35:BN:16:HIS:C	2.58	0.41
49:B1:38:PHE:CZ	49:B1:43:ARG:HA	2.56	0.41
22:BA:1862:G:C2	22:BA:1863:G:C8	3.09	0.41
22:BA:861:A:H5''	22:BA:862:G:OP2	2.21	0.41
18:AR:43:ILE:HD13	18:AR:43:ILE:HA	1.83	0.41
44:BW:76:ARG:HH21	44:BW:76:ARG:HG3	1.85	0.41
26:DE:195:GLN:H	26:DE:195:GLN:CD	2.24	0.41
47:DZ:31:ILE:O	47:DZ:31:ILE:HG13	2.21	0.41
57:DA:653:U:H2'	57:DA:653:U:O2	2.20	0.41
22:BA:155:A:H2'	22:BA:156:A:C8	2.55	0.41
57:DA:2093:G:N2	57:DA:2094:A:C8	2.88	0.41
57:DA:1374:G:H2'	57:DA:1375:U:C6	2.55	0.41
45:BX:48:LEU:HD11	45:BX:67:LEU:HD21	2.02	0.41
44:DW:45:HIS:O	44:DW:46:ALA:HB2	2.20	0.41
5:AE:109:ALA:O	5:AE:110:MET:CG	2.55	0.41
17:AQ:74:LEU:CD1	17:AQ:74:LEU:C	2.88	0.41
22:BA:1059:G:C6	22:BA:1080:A:N1	2.89	0.41
57:DA:764:A:C2	57:DA:781:A:C6	3.08	0.41
22:BA:1139:G:C2'	22:BA:1140:C:H5'	2.50	0.41
57:DA:35:G:C5	57:DA:454:A:C2	3.08	0.41
57:DA:37:C:H1'	26:DE:45:ALA:HB2	2.02	0.41
39:DR:39:LEU:O	39:DR:40:MET:CB	2.66	0.41
22:BA:1176:U:H2'	22:BA:1177:G:C4	2.55	0.41
2:AB:89:PHE:CE1	2:AB:153:MET:HB2	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:148:ILE:CD1	26:DE:187:VAL:HG21	2.42	0.41
42:DU:82:VAL:O	42:DU:96:LYS:HG3	2.20	0.41
4:CD:29:THR:HG22	4:CD:30:LYS:CD	2.50	0.41
57:DA:1071:G:O6	57:DA:1089:A:C2	2.73	0.41
57:DA:2312:U:C2'	57:DA:2312:U:O2	2.68	0.41
57:DA:2307:G:N1	59:DF:38:GLY:HA3	2.36	0.41
57:DA:1717:A:C6	57:DA:1744:A:C5	3.08	0.41
5:CE:81:GLN:HB3	5:CE:82:HIS:H	1.71	0.41
2:CB:213:LEU:HD12	2:CB:213:LEU:HA	1.87	0.41
57:DA:2232:C:OP2	45:DX:26:ARG:NH1	2.53	0.41
53:CA:934:C:N3	53:CA:1345:U:C5	2.88	0.41
38:BQ:40:LYS:HA	38:BQ:43:GLN:HB2	2.03	0.41
14:AN:46:LYS:C	14:AN:48:GLN:H	2.24	0.41
53:CA:652:U:O2'	53:CA:653:U:P	2.76	0.41
1:AA:439:U:H1'	4:AD:118:SER:O	2.21	0.41
41:DT:38:ALA:C	41:DT:39:THR:HG22	2.40	0.41
41:DT:3:ARG:O	41:DT:4:GLU:C	2.59	0.41
30:DI:78:LEU:O	30:DI:81:LYS:HG2	2.21	0.41
53:CA:1453:G:C2'	53:CA:1453:G:N3	2.82	0.41
57:DA:777:G:C2	57:DA:778:G:C8	3.07	0.41
53:CA:931:C:H2'	53:CA:932:C:H6	1.84	0.41
28:BG:36:LEU:HD13	28:BG:36:LEU:HA	1.73	0.41
57:DA:2414:G:H2'	57:DA:2415:G:H5'	2.01	0.41
57:DA:2356:U:H2'	57:DA:2357:G:O4'	2.21	0.41
22:BA:2504:U:H6	22:BA:2504:U:O5'	2.03	0.41
14:CN:76:PHE:CZ	14:CN:95:LEU:HD22	2.55	0.41
22:BA:2748:A:H1'	28:BG:66:THR:HG23	2.02	0.41
28:BG:26:LYS:CB	28:BG:32:LEU:HA	2.49	0.41
57:DA:1009:A:O2'	57:DA:1010:A:C8	2.58	0.41
53:CA:687:A:C2	53:CA:700:G:N2	2.84	0.41
42:DU:47:PRO:HB3	42:DU:54:PRO:HG3	2.02	0.41
57:DA:1171:G:H8	57:DA:1171:G:O5'	2.03	0.41
30:BI:57:VAL:HG12	30:BI:58:ILE:N	2.35	0.41
57:DA:1649:G:O6	57:DA:2009:A:N6	2.53	0.41
57:DA:988:A:C2	57:DA:989:G:C2	3.08	0.41
1:AA:935:A:C2	1:AA:936:C:C2	3.09	0.41
22:BA:96:C:H4'	46:BY:41:HIS:CE1	2.55	0.41
35:BN:98:LEU:HB3	48:B0:42:ILE:HG12	2.01	0.41
57:DA:904:G:C6	57:DA:905:A:C5	3.09	0.41
35:DN:92:GLY:N	35:DN:94:TYR:HE1	2.11	0.41
31:BJ:18:VAL:HG11	31:BJ:28:LEU:HD11	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:177:G:H2'	53:CA:178:C:H5'	2.03	0.41
1:AA:787:A:C6	1:AA:788:U:C4	3.09	0.41
43:BV:40:ILE:HG22	43:BV:41:GLU:H	1.82	0.41
1:AA:22:G:C6	1:AA:23:C:C4	3.08	0.41
57:DA:2478:A:C8	57:DA:2529:G:C5	3.08	0.41
19:CS:10:ILE:N	19:CS:10:ILE:HD12	2.36	0.41
19:CS:11:ASP:H	19:CS:14:LEU:HD21	1.85	0.41
1:AA:1533:C:C3'	1:AA:1534:A:H5''	2.48	0.41
24:BC:7:PRO:C	24:BC:9:SER:H	2.24	0.41
48:D0:28:SER:O	48:D0:36:LYS:HA	2.20	0.41
29:BH:78:VAL:HG11	29:BH:145:ASN:CB	2.48	0.41
5:CE:157:GLY:CA	8:CH:63:LYS:NZ	2.81	0.41
5:AE:37:VAL:HG12	5:AE:116:VAL:HG21	2.02	0.41
33:BL:82:LEU:CD2	33:BL:82:LEU:C	2.89	0.41
1:AA:1528:U:H4'	1:AA:1529:G:H5'	2.01	0.41
37:DP:103:THR:HG22	37:DP:104:GLY:N	2.35	0.41
5:AE:132:PRO:HA	5:AE:135:VAL:CG1	2.49	0.41
53:CA:171:A:C6	53:CA:172:A:C6	3.09	0.41
22:BA:616:A:H2'	22:BA:617:G:C8	2.56	0.41
57:DA:496:G:C2	57:DA:497:A:H1'	2.56	0.41
55:CM:82:LEU:HD12	55:CM:82:LEU:N	2.36	0.41
55:CM:35:ALA:HB3	55:CM:55:LEU:HD22	2.03	0.41
25:BD:144:GLY:O	25:BD:145:SER:HB3	2.19	0.41
4:AD:84:ASN:O	4:AD:85:THR:C	2.59	0.41
56:CP:6:LEU:O	56:CP:6:LEU:HD12	2.21	0.41
53:CA:1412:C:H2'	53:CA:1413:A:C8	2.55	0.41
57:DA:2639:A:C2	57:DA:2778:A:O4'	2.74	0.41
46:BY:24:GLU:O	46:BY:28:LEU:HB2	2.21	0.41
22:BA:1121:C:H2'	22:BA:1122:G:O4'	2.21	0.41
33:DL:88:GLY:O	33:DL:89:VAL:O	2.38	0.41
35:DN:9:GLN:O	35:DN:17:ARG:CD	2.68	0.41
7:AG:108:ARG:HH21	7:AG:118:ARG:HH12	1.69	0.41
18:AR:33:THR:OG1	18:AR:34:GLU:N	2.53	0.41
42:DU:85:ARG:NE	42:DU:85:ARG:HA	2.36	0.41
1:AA:393:A:H5'	1:AA:483:C:O2'	2.21	0.41
4:AD:54:LEU:HD23	4:AD:54:LEU:C	2.41	0.41
35:BN:52:ILE:O	35:BN:54:LEU:N	2.54	0.41
40:BS:28:LYS:O	40:BS:29:VAL:C	2.59	0.41
22:BA:900:A:H2'	22:BA:901:C:O4'	2.20	0.41
51:D3:54:LEU:O	51:D3:58:ILE:HG13	2.21	0.41
22:BA:1630:A:H2'	22:BA:1631:G:H5'	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DL:108:ALA:HB3	33:DL:125:LEU:HD22	2.03	0.41
22:BA:556:A:H5''	22:BA:557:C:OP2	2.21	0.41
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.54	0.41
25:BD:163:GLY:O	25:BD:164:GLN:C	2.58	0.41
13:AM:84:CYS:HA	19:AS:73:PHE:CD2	2.55	0.41
26:BE:3:LEU:O	26:BE:11:ALA:HA	2.19	0.41
10:AJ:81:GLU:HA	10:AJ:84:VAL:HG12	2.03	0.41
22:BA:1217:U:OP2	38:BQ:14:LYS:NZ	2.49	0.41
38:BQ:14:LYS:O	38:BQ:15:LYS:C	2.59	0.41
1:AA:346:G:N3	1:AA:346:G:H2'	2.35	0.41
19:CS:20:LYS:C	19:CS:20:LYS:HD3	2.40	0.41
36:DO:63:LYS:C	36:DO:63:LYS:HD3	2.41	0.41
57:DA:2474:U:O4'	57:DA:2474:U:O2	2.38	0.41
24:BC:32:LEU:HA	24:BC:32:LEU:HD23	1.64	0.41
22:BA:610:C:H2'	22:BA:611:C:H6	1.85	0.41
22:BA:2280:G:C2	22:BA:2281:A:C8	3.09	0.41
9:CI:7:GLY:HA3	9:CI:84:ARG:O	2.20	0.41
57:DA:2196:C:N3	57:DA:2197:U:C4	2.89	0.41
57:DA:151:C:OP1	57:DA:1359:A:O2'	2.26	0.41
53:CA:978:A:C8	53:CA:1319:A:C2	3.08	0.41
14:CN:79:SER:HB2	14:CN:81:ILE:HD11	2.03	0.41
57:DA:2324:U:O2	57:DA:2385:C:N4	2.54	0.41
27:BF:134:GLN:HG3	27:BF:140:ILE:HG12	2.01	0.41
4:CD:187:ARG:O	4:CD:189:ASP:N	2.54	0.41
24:DC:211:ARG:CD	24:DC:217:PRO:HD3	2.50	0.41
57:DA:533:G:OP1	38:DQ:23:TYR:HB3	2.20	0.41
57:DA:35:G:O2'	57:DA:36:G:O5'	2.35	0.41
57:DA:2360:G:H1'	33:DL:60:ARG:NH2	2.32	0.41
57:DA:807:U:C2	57:DA:808:G:C8	3.08	0.41
2:AB:149:GLY:O	2:AB:153:MET:HE3	2.20	0.41
52:B4:9:LYS:HB3	52:B4:14:CYS:CB	2.51	0.41
53:CA:1124:G:O2'	53:CA:1127:G:O6	2.39	0.41
57:DA:301:G:C5	57:DA:302:C:N4	2.89	0.41
57:DA:303:G:H2'	57:DA:304:U:C6	2.55	0.41
57:DA:323:C:O4'	57:DA:323:C:O2	2.38	0.41
37:BP:7:LEU:HD12	37:BP:7:LEU:HA	1.70	0.41
53:CA:577:G:C8	53:CA:816:A:C2	3.08	0.41
57:DA:2144:G:N2	57:DA:2148:G:O6	2.53	0.41
4:AD:144:ILE:O	4:AD:145:ARG:C	2.59	0.41
4:AD:147:LYS:H	4:AD:147:LYS:HE2	1.86	0.41
57:DA:1289:C:H1'	57:DA:1330:C:H5'	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:50:LYS:HE2	30:BI:50:LYS:HB2	1.88	0.41
30:BI:49:GLU:HG2	30:BI:50:LYS:N	2.35	0.41
53:CA:83:C:N4	53:CA:85:U:C4	2.88	0.41
53:CA:1333:A:H2'	53:CA:1334:G:O4'	2.20	0.41
2:CB:208:ALA:O	2:CB:211:LEU:HB3	2.20	0.41
57:DA:2878:U:O5'	57:DA:2878:U:H6	2.03	0.41
2:AB:9:LEU:HD21	2:AB:11:ALA:O	2.20	0.41
22:BA:1083:U:C5	22:BA:1085:A:OP2	2.74	0.41
45:DX:26:ARG:O	45:DX:27:ARG:HB3	2.21	0.41
5:AE:149:PRO:C	5:AE:151:MET:N	2.74	0.41
5:AE:152:VAL:CA	5:AE:155:LYS:NZ	2.84	0.41
57:DA:230:G:HO2'	57:DA:231:A:C5'	2.33	0.41
57:DA:1515:A:H2'	57:DA:1516:G:O4'	2.20	0.41
57:DA:1551:A:H2'	57:DA:1552:A:O4'	2.20	0.41
2:AB:68:PHE:HE2	2:AB:88:GLN:HB2	1.84	0.41
22:BA:231:A:C6	22:BA:232:G:C2	3.08	0.41
53:CA:1049:U:H2'	53:CA:1049:U:O2	2.21	0.41
22:BA:2394:C:OP1	51:B3:29:ARG:NH2	2.53	0.41
33:DL:131:ALA:O	33:DL:135:ILE:HG22	2.20	0.41
57:DA:136:G:H2'	57:DA:137:U:C6	2.54	0.41
22:BA:1780:A:OP1	63:BA:3693:HOH:O	2.21	0.41
57:DA:139:U:H2'	57:DA:139:U:O2	2.19	0.41
57:DA:856:G:N2	57:DA:922:C:C2	2.89	0.41
1:AA:1323:G:HO2'	1:AA:1324:A:H8	1.63	0.41
51:D3:11:LYS:C	51:D3:12:ARG:HD3	2.41	0.41
33:DL:63:LYS:HB3	51:D3:12:ARG:CD	2.48	0.41
25:DD:47:ALA:HA	25:DD:84:LEU:HG	2.02	0.41
34:DM:42:THR:HB	34:DM:45:GLN:CD	2.40	0.41
57:DA:716:A:H2'	57:DA:717:C:H5''	2.02	0.41
3:CC:76:ILE:HD11	3:CC:102:ILE:CD1	2.45	0.41
57:DA:1210:G:H5'	57:DA:1212:G:O4'	2.20	0.41
57:DA:189:G:C2'	57:DA:190:A:O5'	2.67	0.41
57:DA:1680:U:H2'	57:DA:1681:G:O4'	2.21	0.41
57:DA:1760:C:C2'	57:DA:1761:C:H5'	2.51	0.41
57:DA:1760:C:H3'	57:DA:1761:C:H6	1.85	0.41
53:CA:1386:G:N3	53:CA:1387:G:C8	2.88	0.41
42:DU:54:PRO:CG	42:DU:55:GLY:N	2.81	0.41
8:CH:75:GLN:OE1	8:CH:75:GLN:HA	2.20	0.41
7:AG:107:ALA:HB2	7:AG:122:GLU:HG3	2.02	0.41
22:BA:2579:C:C2'	22:BA:2580:U:H5'	2.51	0.41
56:CP:50:THR:O	56:CP:51:ARG:CZ	2.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:29:VAL:O	35:DN:30:ARG:HB2	2.20	0.41
25:DD:177:VAL:CG1	25:DD:187:LEU:HD11	2.51	0.41
47:BZ:36:GLU:C	47:BZ:37:ARG:HD2	2.41	0.41
34:BM:43:ALA:O	34:BM:47:GLU:HB2	2.20	0.41
53:CA:195:A:C5	53:CA:196:A:C6	3.08	0.41
29:BH:27:ARG:NH1	45:BX:59:ASP:O	2.53	0.41
24:DC:35:LYS:O	24:DC:36:ASN:HB3	2.21	0.41
22:BA:96:C:H4'	46:BY:41:HIS:CG	2.56	0.41
2:AB:128:LEU:HB3	2:AB:129:THR:H	1.79	0.41
22:BA:246:C:C2'	22:BA:247:G:H5'	2.50	0.41
1:AA:409:U:H2'	1:AA:410:G:C8	2.56	0.41
47:DZ:26:LEU:HG	47:DZ:46:MET:HE2	2.03	0.41
4:AD:104:MET:HG2	4:AD:170:LEU:HD22	2.03	0.41
40:DS:31:GLN:O	40:DS:35:ILE:HG12	2.20	0.41
22:BA:638:G:H2'	22:BA:639:U:H6	1.84	0.41
57:DA:166:U:O2	57:DA:166:U:H2'	2.20	0.41
26:BE:58:LYS:O	26:BE:59:PRO:C	2.57	0.41
42:BU:35:VAL:HB	42:BU:38:ILE:CG1	2.50	0.41
43:BV:20:LEU:HD23	43:BV:25:LYS:HB2	2.02	0.41
57:DA:457:A:N3	57:DA:459:U:O4	2.54	0.41
53:CA:552:U:N3	53:CA:553:A:N7	2.69	0.41
57:DA:496:G:H2'	57:DA:497:A:O4'	2.21	0.41
31:BJ:37:ARG:HG3	31:BJ:118:MET:HE1	2.03	0.41
8:CH:23:ALA:HA	8:CH:62:LEU:CD2	2.51	0.41
33:BL:132:ARG:HA	33:BL:142:ILE:HD11	2.03	0.41
36:BO:2:ASP:OD1	36:BO:3:LYS:HG2	2.20	0.41
47:DZ:32:GLY:C	47:DZ:34:THR:N	2.73	0.41
59:DF:37:MET:N	59:DF:151:LEU:HB3	2.35	0.41
53:CA:923:A:C6	53:CA:924:C:C4	3.09	0.41
39:DR:16:GLU:HA	39:DR:98:ILE:HG22	2.01	0.41
7:AG:68:VAL:HG21	7:AG:103:ILE:HD11	2.01	0.41
2:AB:170:ILE:HG12	2:AB:170:ILE:H	1.45	0.41
15:CO:11:VAL:O	15:CO:15:GLY:CA	2.69	0.41
57:DA:1923:U:O2'	57:DA:1924:C:H5'	2.20	0.41
4:CD:204:SER:HB2	5:CE:105:ILE:HD11	2.03	0.41
53:CA:828:U:OP1	8:CH:21:LYS:HD3	2.19	0.41
17:AQ:48:GLU:O	17:AQ:49:ASN:C	2.58	0.41
22:BA:1578:U:OP2	22:BA:1578:U:H6	2.03	0.41
57:DA:2660:A:C2	57:DA:2661:G:N7	2.88	0.41
22:BA:71:A:N3	22:BA:71:A:C5'	2.84	0.41
1:AA:1030:U:H5'	1:AA:1031:C:O2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:927:G:N1	1:AA:1391:U:C2	2.89	0.41
9:CI:81:GLY:HA2	9:CI:84:ARG:HB2	2.03	0.41
22:BA:237:C:N4	22:BA:261:G:C6	2.88	0.41
22:BA:1720:U:H2'	22:BA:1721:G:O4'	2.20	0.41
57:DA:918:A:H5''	58:DB:97:C:O2'	2.21	0.41
26:BE:92:HIS:O	26:BE:93:SER:C	2.59	0.41
3:AC:28:PHE:HE2	3:AC:32:LEU:HD22	1.84	0.41
44:DW:73:PRO:O	44:DW:74:LYS:C	2.58	0.41
15:AO:10:ILE:HG23	15:AO:14:PHE:CE1	2.56	0.41
22:BA:2527:C:C2'	22:BA:2528:U:H5'	2.51	0.41
57:DA:958:U:H2'	57:DA:958:U:H6	1.49	0.41
27:BF:90:LEU:HA	27:BF:90:LEU:HD12	1.76	0.41
57:DA:2891:U:C2'	57:DA:2892:G:H5'	2.51	0.41
22:BA:1155:A:C2	22:BA:1157:G:C8	3.08	0.41
22:BA:996:A:N3	22:BA:997:G:C8	2.88	0.41
31:BJ:44:TYR:HA	38:BQ:59:LEU:CD2	2.51	0.41
44:BW:28:GLU:H	44:BW:31:LEU:CD1	2.34	0.41
17:CQ:68:LYS:O	17:CQ:69:THR:HG23	2.20	0.41
19:CS:36:ARG:O	19:CS:36:ARG:HG2	2.20	0.41
5:AE:114:LEU:HG	5:AE:119:VAL:CG2	2.50	0.41
57:DA:1019:U:O2'	57:DA:1021:A:N1	2.32	0.41
57:DA:614:A:C4'	57:DA:616:A:H62	2.33	0.41
53:CA:885:G:OP2	53:CA:885:G:H8	2.03	0.41
22:BA:1059:G:C6	22:BA:1060:U:C4	3.09	0.41
53:CA:374:A:OP1	53:CA:452:A:N1	2.53	0.41
57:DA:33:C:O2'	57:DA:34:U:C5'	2.47	0.41
57:DA:2499:C:N4	57:DA:2500:U:O4	2.53	0.41
33:DL:57:LEU:HA	33:DL:60:ARG:HG3	2.02	0.41
22:BA:100:U:HO2'	22:BA:101:A:P	2.42	0.41
53:CA:1151:A:C2'	53:CA:1152:A:O5'	2.69	0.41
36:DO:30:ARG:NH1	36:DO:102:ARG:HE	2.19	0.41
22:BA:729:G:H5''	22:BA:730:A:H5''	2.01	0.41
57:DA:1053:C:H42	57:DA:1054:A:N6	2.18	0.41
57:DA:1068:G:H2'	57:DA:1069:A:C8	2.56	0.41
57:DA:1059:G:O2'	30:DI:131:THR:HG21	2.21	0.41
2:CB:91:VAL:HG11	2:CB:95:TRP:HD1	1.85	0.41
57:DA:1329:U:O2'	57:DA:1330:C:OP1	2.37	0.41
41:BT:43:ILE:CD1	41:BT:58:VAL:HG21	2.51	0.41
53:CA:79:G:N1	53:CA:80:A:N6	2.68	0.41
1:AA:372:C:H2'	1:AA:387:U:O4	2.21	0.41
57:DA:2725:A:C4	57:DA:2727:A:C8	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:112:GLY:O	31:BJ:113:PRO:C	2.58	0.41
57:DA:980:A:H2	57:DA:2038:G:O4'	2.03	0.41
57:DA:1026:G:O2'	57:DA:1027:A:C5'	2.56	0.41
57:DA:49:A:N6	57:DA:177:G:C5	2.88	0.41
1:AA:587:G:C2	1:AA:755:G:C5	3.09	0.41
9:AI:54:VAL:O	9:AI:55:ASP:O	2.39	0.41
53:CA:754:C:H5''	53:CA:754:C:O2	2.20	0.41
34:BM:108:VAL:CG1	34:BM:112:LEU:HB3	2.51	0.41
28:DG:88:LEU:N	28:DG:128:THR:O	2.53	0.41
53:CA:695:A:H2'	53:CA:696:A:O4'	2.20	0.41
29:DH:89:LYS:HB2	29:DH:90:LEU:H	1.77	0.41
57:DA:1904:G:H2'	57:DA:1905:C:H5'	2.03	0.41
22:BA:1331:G:C5	22:BA:1333:G:N7	2.89	0.41
53:CA:200:G:N1	53:CA:201:G:C5	2.88	0.41
35:BN:70:THR:CG2	35:BN:75:ILE:HD11	2.50	0.41
22:BA:2502:G:C5'	22:BA:2503:A:H5''	2.43	0.41
57:DA:2484:G:OP1	34:DM:44:ARG:HD3	2.20	0.41
41:DT:68:LYS:HB3	41:DT:69:ARG:H	1.53	0.41
57:DA:2043:C:H2'	57:DA:2044:C:H6	1.85	0.41
46:DY:57:LEU:HD13	46:DY:60:LYS:HE3	2.03	0.41
57:DA:2192:U:H2'	57:DA:2192:U:O2	2.20	0.41
22:BA:2198:A:C2'	22:BA:2198:A:P	3.05	0.41
45:DX:2:ARG:HA	45:DX:2:ARG:HD3	1.92	0.41
57:DA:2751:G:H5'	28:DG:2:ARG:HD2	2.01	0.41
59:DF:177:ARG:CZ	59:DF:178:LYS:HB3	2.51	0.41
57:DA:1510:G:C2	57:DA:1511:G:C4	3.08	0.41
57:DA:2611:C:O2'	57:DA:2612:C:C5'	2.68	0.41
53:CA:704:A:O2'	53:CA:705:G:C5'	2.68	0.41
12:AL:42:LYS:HB3	12:AL:42:LYS:HE2	1.89	0.41
2:CB:124:THR:HG23	2:CB:125:PHE:H	1.85	0.41
57:DA:279:A:C6	57:DA:361:G:O2'	2.74	0.41
33:DL:20:GLY:CA	33:DL:28:GLY:HA2	2.43	0.41
30:BI:41:PHE:CE2	30:BI:45:THR:HG21	2.56	0.41
1:AA:515:G:N2	1:AA:537:G:C4	2.89	0.41
47:DZ:23:LEU:HD12	47:DZ:28:LEU:HD11	2.01	0.41
22:BA:477:A:C6	22:BA:478:A:C6	3.09	0.41
29:BH:27:ARG:O	29:BH:28:ASN:CB	2.68	0.41
1:AA:674:G:N2	1:AA:717:U:O2	2.54	0.41
43:DV:63:ILE:O	43:DV:63:ILE:HG22	2.21	0.41
22:BA:2341:G:H2'	22:BA:2342:C:H6	1.83	0.41
53:CA:1505:G:H2'	53:CA:1505:G:H8	1.66	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:301:G:C6	22:BA:317:G:C6	3.09	0.41
22:BA:2403:C:N4	22:BA:2415:G:N1	2.68	0.41
43:BV:40:ILE:CG2	43:BV:41:GLU:H	2.33	0.41
1:AA:1109:C:C2	1:AA:1110:A:C8	3.08	0.41
1:AA:1348:U:O2'	1:AA:1349:A:H8	2.04	0.41
57:DA:2259:U:C5	57:DA:2427:C:N4	2.89	0.41
9:CI:61:ASP:C	9:CI:62:LEU:HD22	2.41	0.41
42:DU:58:VAL:HG12	42:DU:59:GLU:N	2.36	0.41
3:AC:120:THR:C	3:AC:122:GLN:H	2.23	0.41
1:AA:1288:A:H1'	1:AA:1352:C:O2'	2.20	0.41
57:DA:2624:G:H1'	48:D0:18:HIS:CE1	2.56	0.41
57:DA:2627:G:O2'	57:DA:2781:A:N1	2.46	0.41
22:BA:669:G:N2	22:BA:670:A:C2	2.89	0.41
40:DS:40:ASN:OD1	40:DS:41:LYS:N	2.54	0.41
22:BA:987:C:N4	22:BA:988:A:C6	2.89	0.41
7:AG:25:PHE:HA	7:AG:100:MET:HE3	2.02	0.41
3:AC:10:ARG:HH12	3:AC:174:LEU:HD12	1.85	0.41
1:AA:1272:G:C6	1:AA:1273:C:C4	3.08	0.41
57:DA:1754:A:C6	57:DA:1755:A:C5	3.08	0.41
22:BA:1646:C:H5''	22:BA:1647:U:C5'	2.51	0.41
8:AH:104:SER:HB2	8:AH:125:ILE:CD1	2.50	0.41
5:CE:48:GLY:CA	5:CE:66:ALA:HB2	2.47	0.41
53:CA:642:A:O2'	53:CA:643:C:C5'	2.68	0.41
24:BC:156:SER:O	24:BC:157:ALA:C	2.59	0.41
57:DA:682:G:C2	57:DA:796:C:C2	3.08	0.41
53:CA:852:G:H2'	53:CA:853:C:O4'	2.21	0.41
57:DA:1218:G:C6	57:DA:1232:G:C6	3.09	0.41
22:BA:115:C:C2'	22:BA:116:C:H5'	2.51	0.41
22:BA:2373:G:H2'	22:BA:2374:C:H6	1.84	0.41
1:AA:633:G:H2'	1:AA:634:C:C6	2.54	0.41
1:AA:675:A:H1'	11:AK:117:HIS:CD2	2.56	0.41
22:BA:1487:U:N3	22:BA:1503:A:C2	2.89	0.41
48:D0:11:LYS:HD2	48:D0:14:MET:HB2	2.02	0.41
25:BD:119:ALA:HB2	25:BD:165:MET:HB2	2.03	0.41
4:CD:160:LEU:HA	4:CD:160:LEU:HD13	1.78	0.41
15:CO:7:THR:O	15:CO:11:VAL:N	2.51	0.41
57:DA:1838:C:N4	57:DA:1898:U:H2'	2.35	0.41
57:DA:2423:U:H5''	57:DA:2424:C:OP1	2.20	0.41
57:DA:1083:U:H1'	57:DA:1086:A:N1	2.35	0.41
22:BA:1760:C:H3'	22:BA:1761:C:H6	1.85	0.41
57:DA:2493:U:H2'	57:DA:2494:G:H5''	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:8:ARG:HB2	35:DN:43:GLU:OE1	2.21	0.41
20:CT:11:ILE:H	20:CT:11:ILE:HG13	1.46	0.41
57:DA:24:G:O2'	40:DS:77:ASP:HB3	2.21	0.41
22:BA:1773:A:C2'	22:BA:1774:C:H5'	2.51	0.41
22:BA:1850:G:C6	22:BA:1851:U:C4	3.09	0.41
53:CA:444:G:C2'	53:CA:445:G:H5'	2.51	0.41
46:BY:7:ARG:HG3	46:BY:7:ARG:O	2.20	0.41
23:BB:42:C:OP1	27:BF:63:LYS:HE2	2.20	0.41
19:AS:55:GLN:CD	19:AS:56:HIS:H	2.24	0.41
29:DH:37:VAL:CG2	29:DH:43:ASN:HD22	2.34	0.41
29:DH:103:VAL:C	29:DH:105:ALA:H	2.23	0.41
13:AM:100:ARG:NH1	13:AM:103:THR:OG1	2.54	0.41
30:BI:130:GLY:HA2	30:BI:133:ARG:HB3	2.01	0.41
22:BA:1665:A:H5"	32:BK:66:LYS:HG3	2.02	0.41
38:DQ:72:GLY:HA3	38:DQ:113:LYS:NZ	2.36	0.41
32:DK:34:GLY:H	32:DK:37:ASP:HB2	1.86	0.41
22:BA:650:C:O5'	22:BA:650:C:H6	2.03	0.41
37:BP:12:MET:HB3	37:BP:12:MET:HE2	1.83	0.41
31:BJ:4:PHE:CD1	31:BJ:5:THR:N	2.89	0.41
44:BW:50:VAL:C	44:BW:52:CYS:N	2.73	0.41
53:CA:976:G:C2	53:CA:1363:A:C2	3.08	0.41
44:DW:54:ARG:C	44:DW:56:HIS:H	2.24	0.41
27:BF:148:VAL:O	27:BF:150:GLY:N	2.52	0.41
53:CA:1495:U:O2'	53:CA:1496:C:H5'	2.20	0.41
57:DA:13:A:C2	57:DA:525:U:C2	3.08	0.41
57:DA:455:C:N4	57:DA:473:G:OP2	2.52	0.41
1:AA:1241:G:C2	1:AA:1242:G:N7	2.89	0.41
10:CJ:74:VAL:HG12	10:CJ:75:ASP:N	2.36	0.41
57:DA:332:A:O2'	57:DA:334:C:OP2	2.34	0.41
26:DE:146:VAL:HG13	26:DE:187:VAL:HG23	2.03	0.41
1:AA:655:A:C2	1:AA:656:G:C4	3.09	0.41
24:BC:246:PRO:HG2	24:BC:247:TRP:CE3	2.51	0.41
53:CA:415:A:N1	53:CA:428:G:O6	2.54	0.41
57:DA:1071:G:N2	57:DA:1090:A:OP2	2.53	0.41
53:CA:1129:C:C1'	53:CA:1146:A:H61	2.24	0.41
37:DP:91:VAL:O	37:DP:92:ARG:HB3	2.21	0.41
55:CM:13:HIS:HB3	55:CM:16:ILE:CB	2.45	0.41
22:BA:1733:G:C2	22:BA:1734:G:C8	3.08	0.41
22:BA:1085:A:H1'	22:BA:1105:U:H1'	2.03	0.41
10:AJ:56:HIS:O	10:AJ:57:VAL:HG12	2.21	0.41
4:AD:116:LEU:HA	4:AD:116:LEU:HD23	1.91	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:75:ALA:HB1	24:BC:93:VAL:HG13	2.02	0.41
22:BA:274:C:H2'	22:BA:275:C:O4'	2.21	0.41
39:BR:1:MET:HB2	39:BR:43:ASN:HD21	1.85	0.41
28:BG:102:ILE:N	28:BG:114:HIS:O	2.53	0.41
1:AA:512:U:O5'	4:AD:40:HIS:CE1	2.74	0.41
33:DL:128:THR:HG22	33:DL:130:GLY:H	1.85	0.41
22:BA:601:C:O2	22:BA:605:G:H4'	2.21	0.41
57:DA:1929:G:C4'	57:DA:1930:G:OP1	2.61	0.41
24:DC:62:ARG:HD3	24:DC:83:ASP:OD1	2.21	0.41
24:DC:140:VAL:HG22	24:DC:161:VAL:O	2.20	0.41
24:DC:159:THR:N	24:DC:194:VAL:HG13	2.35	0.41
22:BA:1125:G:H5'	52:B4:37:GLN:HG3	2.03	0.41
53:CA:796:C:H4'	11:CK:126:ARG:NH2	2.35	0.41
1:AA:1319:A:C5	1:AA:1323:G:C4	3.09	0.41
25:BD:47:ALA:N	25:BD:84:LEU:HD12	2.35	0.41
24:BC:171:VAL:CG2	24:BC:185:ALA:HA	2.51	0.41
11:AK:122:PRO:HG2	21:AU:33:ARG:O	2.21	0.41
57:DA:2289:G:O2'	57:DA:2290:G:H5'	2.20	0.41
57:DA:2290:G:C6	57:DA:2291:U:C4	3.09	0.41
1:AA:1219:A:H2'	1:AA:1220:G:C8	2.55	0.41
22:BA:285:G:C5	22:BA:356:G:C2	3.09	0.41
57:DA:509:C:H2'	57:DA:509:C:H6	1.59	0.41
1:AA:601:G:C2	1:AA:602:A:C4	3.08	0.41
2:CB:161:PHE:CZ	2:CB:216:VAL:HG21	2.55	0.41
8:AH:82:LEU:HD22	8:AH:84:ILE:CD1	2.50	0.41
22:BA:527:C:C2	22:BA:2779:U:H2'	2.54	0.41
1:AA:523:A:H61	12:AL:88:ASP:CB	2.34	0.41
22:BA:1714:U:H5'	22:BA:1715:G:H5'	2.03	0.41
53:CA:1449:C:O2'	53:CA:1450:U:O4'	2.30	0.41
57:DA:2235:G:C5	57:DA:2236:U:C5	3.09	0.41
4:CD:107:GLY:N	4:CD:157:ALA:HB1	2.36	0.41
22:BA:1275:A:C2	22:BA:1295:C:O2	2.73	0.41
53:CA:1215:G:C2'	53:CA:1216:A:H8	2.34	0.41
59:DF:102:LEU:C	59:DF:103:ILE:HD12	2.41	0.41
12:AL:2:THR:HB	12:AL:5:GLN:H	1.85	0.41
20:AT:33:LYS:HE2	20:AT:33:LYS:H	1.85	0.41
29:DH:58:LEU:HD12	29:DH:58:LEU:HA	1.87	0.41
57:DA:850:U:O2'	47:DZ:22:THR:HG22	2.20	0.41
22:BA:2294:G:H2'	22:BA:2295:C:C6	2.56	0.41
43:BV:43:ASP:OD1	43:BV:43:ASP:C	2.59	0.41
53:CA:204:G:C6	53:CA:465:A:C2	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1426:G:H2'	1:AA:1427:C:O4'	2.20	0.41
12:AL:101:LEU:HB3	12:AL:102:ASP:H	1.69	0.41
53:CA:1476:A:H2'	53:CA:1477:U:O4'	2.20	0.41
29:DH:77:THR:HG22	29:DH:143:ILE:HD11	2.03	0.41
8:CH:93:LYS:H	8:CH:93:LYS:HD3	1.83	0.41
1:AA:995:C:H4'	14:AN:7:ALA:HB2	2.03	0.41
57:DA:708:G:C4	57:DA:709:U:C5	3.09	0.41
11:AK:110:THR:HG22	21:AU:4:LYS:HB2	2.02	0.41
57:DA:413:C:H2'	57:DA:414:C:C6	2.55	0.41
22:BA:2641:G:H5''	31:BJ:78:THR:HB	2.03	0.41
53:CA:542:G:H2'	53:CA:543:U:C6	2.53	0.41
22:BA:1907:G:C2	22:BA:1924:C:C2	3.09	0.41
57:DA:1628:G:H2'	57:DA:1629:U:C6	2.52	0.41
53:CA:890:G:O2'	53:CA:906:A:N6	2.54	0.41
4:CD:72:ARG:O	4:CD:75:TYR:HB3	2.21	0.41
1:AA:628:G:N2	1:AA:629:A:N3	2.68	0.41
49:D1:41:VAL:HG12	49:D1:41:VAL:O	2.21	0.41
1:AA:768:A:H2'	1:AA:769:G:O4'	2.21	0.41
28:DG:70:LEU:HD12	28:DG:71:LEU:N	2.35	0.41
57:DA:1989:G:C2'	57:DA:1990:C:H5'	2.50	0.41
59:DF:100:GLU:O	59:DF:100:GLU:HG2	2.20	0.41
57:DA:460:A:H5'	41:DT:72:GLN:O	2.21	0.41
55:CM:96:VAL:HG12	55:CM:96:VAL:O	2.20	0.41
1:AA:1154:G:N3	1:AA:1155:A:C8	2.89	0.41
22:BA:1193:G:C2'	22:BA:1194:A:H5'	2.49	0.41
57:DA:1549:A:H2'	57:DA:1550:C:O4'	2.21	0.41
37:DP:54:LEU:HA	37:DP:76:HIS:CD2	2.55	0.41
22:BA:832:U:H2'	22:BA:833:A:C8	2.56	0.41
42:BU:5:ARG:O	42:BU:8:ASP:HB2	2.20	0.41
24:DC:245:THR:C	24:DC:247:TRP:H	2.24	0.41
3:CC:88:LYS:HA	3:CC:91:ALA:HB3	2.02	0.41
1:AA:1213:A:HO2'	1:AA:1214:C:P	2.43	0.41
17:CQ:77:VAL:HG12	17:CQ:78:VAL:N	2.35	0.41
31:BJ:72:LYS:HB2	31:BJ:89:PHE:HB2	2.02	0.41
38:BQ:10:ARG:HH11	38:BQ:10:ARG:HB2	1.86	0.41
34:BM:119:LEU:HD23	34:BM:119:LEU:HA	1.92	0.41
35:BN:106:ASP:OD1	35:BN:106:ASP:C	2.59	0.41
22:BA:2766:A:N3	22:BA:2766:A:H2'	2.35	0.41
53:CA:933:G:O5'	53:CA:933:G:H8	2.04	0.41
37:BP:50:ARG:HG3	37:BP:50:ARG:H	1.50	0.41
44:BW:23:LYS:CG	44:BW:24:ARG:N	2.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:151:C:H2'	57:DA:152:A:H8	1.85	0.41
40:BS:83:LYS:O	40:BS:84:ARG:HD3	2.21	0.41
53:CA:978:A:C6	53:CA:1319:A:C5	3.08	0.41
19:CS:38:THR:N	19:CS:69:LYS:HD3	2.36	0.41
53:CA:1318:A:H4'	19:CS:9:PHE:CE1	2.56	0.41
29:BH:21:VAL:HG21	29:BH:25:TYR:HD2	1.85	0.41
45:BX:33:HIS:O	45:BX:34:SER:O	2.39	0.41
44:DW:27:GLY:HA3	44:DW:31:LEU:HD11	1.99	0.41
53:CA:1496:C:H2'	53:CA:1497:G:O4'	2.20	0.41
57:DA:1914:C:O4'	57:DA:1914:C:O2	2.39	0.41
57:DA:600:G:C5	57:DA:601:C:C4	3.09	0.41
4:CD:187:ARG:CZ	4:CD:191:SER:OG	2.69	0.41
17:AQ:16:MET:SD	17:AQ:20:ILE:HD12	2.61	0.41
21:AU:8:ASN:N	21:AU:8:ASN:ND2	2.67	0.41
2:CB:84:LEU:O	2:CB:84:LEU:HG	2.21	0.41
22:BA:1070:A:HO2'	22:BA:1071:G:P	2.43	0.41
53:CA:1184:G:N3	53:CA:1185:G:C8	2.89	0.41
9:CI:45:MET:O	9:CI:49:GLN:HG3	2.20	0.41
57:DA:1670:C:H1'	57:DA:1993:U:O2	2.20	0.41
57:DA:1778:U:O4	57:DA:1784:A:H1'	2.21	0.41
1:AA:248:C:H4'	1:AA:283:U:O2'	2.21	0.41
12:AL:82:ARG:HG3	12:AL:82:ARG:O	2.20	0.41
12:AL:82:ARG:HB2	12:AL:97:VAL:CG2	2.51	0.41
22:BA:1141:U:C5	31:BJ:65:THR:HG23	2.55	0.41
1:AA:1239:A:H1'	1:AA:1241:G:C5	2.55	0.41
57:DA:2420:C:N4	51:D3:29:ARG:O	2.52	0.41
57:DA:2358:A:OP1	57:DA:2358:A:C8	2.74	0.41
57:DA:30:G:C5	57:DA:31:C:N3	2.89	0.41
57:DA:249:C:C2'	57:DA:249:C:O2	2.64	0.41
57:DA:567:U:H2'	57:DA:568:U:O4'	2.20	0.41
41:DT:28:ASN:O	41:DT:29:THR:CG2	2.69	0.41
53:CA:1279:G:OP2	53:CA:1279:G:N2	2.54	0.41
10:CJ:12:ALA:N	10:CJ:18:ILE:HD12	2.36	0.41
10:CJ:38:GLY:HA2	10:CJ:39:PRO:HD2	1.89	0.41
57:DA:1206:G:C5	57:DA:1207:C:C4	3.09	0.41
57:DA:332:A:C4	57:DA:335:C:N4	2.89	0.41
26:DE:109:LEU:HA	26:DE:109:LEU:HD12	1.74	0.41
53:CA:1511:G:O2'	53:CA:1512:U:H5'	2.21	0.41
22:BA:221:A:C8	22:BA:266:G:C6	3.09	0.41
31:DJ:51:GLY:O	31:DJ:121:LYS:HE3	2.21	0.41
22:BA:2680:U:H5'	25:BD:194:PRO:HA	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2065:C:H1'	22:BA:2449:U:O2	2.20	0.41
4:CD:11:SER:HB3	4:CD:16:THR:O	2.21	0.41
4:CD:29:THR:HB	4:CD:30:LYS:HE3	2.03	0.41
57:DA:1069:A:H4'	57:DA:1070:A:C5'	2.50	0.41
57:DA:1070:A:C5	57:DA:1097:U:H4'	2.55	0.41
57:DA:1098:A:H2'	57:DA:1099:G:O4'	2.20	0.41
45:DX:52:ALA:C	45:DX:54:GLY:N	2.75	0.41
22:BA:1506:U:H2'	22:BA:1507:C:H6	1.83	0.41
1:AA:1125:U:OP2	1:AA:1145:A:N6	2.54	0.41
1:AA:1127:G:O2'	1:AA:1128:C:C5'	2.65	0.41
1:AA:1125:U:HO2'	1:AA:1126:U:H2'	1.86	0.41
57:DA:1314:C:OP1	57:DA:1332:G:H5''	2.21	0.41
5:AE:94:PHE:CZ	5:AE:96:GLN:HG2	2.56	0.41
57:DA:2843:G:N2	57:DA:2875:C:C2	2.89	0.41
57:DA:2725:A:C4	57:DA:2727:A:N7	2.89	0.41
22:BA:1997:C:O2'	22:BA:1998:A:H5'	2.20	0.41
5:AE:156:ARG:HH12	8:AH:113:ARG:HH12	1.68	0.41
57:DA:983:A:N6	57:DA:984:A:C2	2.89	0.41
54:CG:29:LEU:O	54:CG:30:MET:O	2.39	0.41
4:AD:103:ARG:HH12	4:AD:110:ARG:HH22	1.68	0.41
14:AN:48:GLN:HE21	14:AN:48:GLN:HA	1.86	0.41
57:DA:119:A:C5'	57:DA:120:U:OP1	2.69	0.41
25:DD:151:THR:HB	25:DD:152:PRO:HD3	2.02	0.41
57:DA:176:A:O5'	57:DA:176:A:H8	2.04	0.41
1:AA:1004:A:C6	1:AA:1005:A:C4	3.09	0.41
22:BA:273:G:N2	22:BA:365:U:C2	2.89	0.41
51:B3:30:HIS:O	51:B3:31:ILE:C	2.59	0.41
57:DA:996:A:C2	57:DA:997:G:C8	3.09	0.41
1:AA:15:G:C4	1:AA:16:A:C8	3.09	0.41
53:CA:990:C:C2'	53:CA:991:U:O4'	2.59	0.41
29:BH:8:LYS:O	29:BH:13:GLY:CA	2.69	0.41
57:DA:800:A:C4	57:DA:802:A:H5'	2.56	0.41
22:BA:571:U:O3'	39:BR:80:ARG:NH2	2.54	0.41
24:DC:159:THR:N	24:DC:194:VAL:CG1	2.84	0.41
57:DA:1799:G:O2'	57:DA:1800:C:P	2.79	0.41
1:AA:198:G:O6	1:AA:220:G:C6	2.73	0.41
46:DY:31:GLN:C	46:DY:33:ALA:N	2.73	0.41
53:CA:821:G:O2'	53:CA:822:U:C5'	2.68	0.41
1:AA:1324:A:H2'	1:AA:1325:C:H6	1.83	0.41
34:BM:71:LYS:HD3	34:BM:95:LEU:HD13	2.03	0.41
22:BA:1326:U:O2'	22:BA:1327:A:H5'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1333:G:OP2	63:BA:3392:HOH:O	2.22	0.41
33:DL:58:TYR:O	51:D3:12:ARG:CZ	2.69	0.41
14:AN:20:PHE:HA	14:AN:24:ALA:CB	2.50	0.41
35:BN:67:PHE:O	35:BN:71:ARG:HD2	2.21	0.41
59:DF:42:ALA:HB2	59:DF:48:LEU:HD11	2.03	0.41
59:DF:49:LEU:N	59:DF:49:LEU:HD13	2.35	0.41
59:DF:49:LEU:N	59:DF:49:LEU:HD22	2.23	0.41
53:CA:1075:U:H4'	53:CA:1101:A:N6	2.36	0.41
46:DY:53:VAL:O	46:DY:57:LEU:HB2	2.21	0.41
37:DP:95:LYS:HB3	37:DP:97:TYR:CE1	2.55	0.41
28:BG:27:GLY:O	28:BG:29:ASN:O	2.39	0.41
57:DA:1011:G:C2	57:DA:1013:C:C2	3.09	0.41
57:DA:1760:C:H2'	57:DA:1761:C:H5'	2.03	0.41
2:AB:95:TRP:CZ2	2:AB:100:LEU:HD23	2.45	0.41
14:CN:85:GLU:O	14:CN:89:ARG:HD3	2.20	0.41
53:CA:319:G:H5'	53:CA:1468:A:H4'	2.03	0.41
22:BA:1252:G:C2	38:BQ:32:ARG:HG2	2.56	0.41
31:DJ:89:PHE:HA	31:DJ:92:MET:HB2	2.03	0.41
22:BA:2508:G:C2	22:BA:2582:G:C6	3.09	0.41
40:DS:70:LYS:HD2	40:DS:110:ARG:O	2.21	0.41
5:CE:33:THR:OG1	5:CE:49:TYR:OH	2.36	0.41
5:CE:56:PRO:O	5:CE:59:ILE:HG23	2.21	0.41
22:BA:533:G:O3'	38:BQ:23:TYR:HE2	2.04	0.41
32:DK:16:ALA:HB1	32:DK:45:GLU:HG3	2.03	0.41
25:DD:179:ARG:HH12	37:DP:7:LEU:HD11	1.86	0.41
24:BC:128:THR:HG22	24:BC:188:ARG:HD2	2.01	0.41
57:DA:309:A:C2	57:DA:329:G:O2'	2.67	0.41
57:DA:160:A:C6	57:DA:167:A:H1'	2.56	0.41
22:BA:329:G:O4'	22:BA:477:A:H1'	2.20	0.41
57:DA:1847:A:O2'	57:DA:1848:A:O5'	2.39	0.41
53:CA:195:A:C6	53:CA:196:A:N1	2.89	0.41
57:DA:818:G:H5'	57:DA:839:U:OP1	2.20	0.41
11:AK:15:VAL:CG1	11:AK:78:ILE:HG23	2.44	0.41
1:AA:1381:U:H2'	1:AA:1382:C:C5	2.56	0.41
22:BA:1826:G:C2'	22:BA:1827:U:O5'	2.68	0.41
8:CH:85:TYR:HA	8:CH:123:GLU:HA	2.03	0.41
57:DA:1957:C:H5'	57:DA:1984:G:O2'	2.21	0.41
57:DA:2466:C:OP1	52:D4:4:ARG:HD2	2.21	0.41
2:AB:20:ARG:CZ	2:AB:20:ARG:HA	2.50	0.41
41:BT:61:LEU:HD11	41:BT:82:LYS:HB2	2.03	0.41
53:CA:98:A:H2'	53:CA:99:C:C6	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:176:C:H3'	53:CA:177:G:H21	1.86	0.41
56:CP:54:LEU:O	56:CP:57:ILE:HB	2.21	0.41
43:BV:40:ILE:HG22	43:BV:42:LEU:HD23	2.02	0.41
22:BA:137:U:OP2	22:BA:137:U:C5	2.74	0.41
28:DG:44:HIS:HE1	28:DG:46:ASP:O	2.04	0.41
24:BC:43:ASN:C	24:BC:45:ASN:H	2.24	0.41
53:CA:1189:U:O2'	3:CC:175:HIS:HD2	2.04	0.41
1:AA:1167:A:N7	1:AA:1169:A:C6	2.88	0.41
16:AP:77:GLU:C	16:AP:79:ASN:N	2.72	0.41
53:CA:1091:U:H2'	53:CA:1093:A:OP2	2.21	0.41
22:BA:963:U:H2'	22:BA:964:C:H6	1.84	0.41
22:BA:1260:A:C5	22:BA:1261:C:C5	3.09	0.41
22:BA:1113:U:N3	22:BA:1114:C:C5	2.89	0.41
53:CA:1200:C:HO2'	53:CA:1201:A:P	2.42	0.41
35:BN:73:ASN:HA	35:BN:76:VAL:CG1	2.49	0.41
3:AC:10:ARG:O	3:AC:13:ILE:N	2.54	0.41
57:DA:1413:A:H2'	57:DA:1414:C:C5	2.56	0.41
1:AA:1261:A:N1	1:AA:1274:A:N3	2.68	0.41
57:DA:272:A:N3	57:DA:273:G:N7	2.69	0.41
57:DA:164:C:H2'	57:DA:165:A:O4'	2.20	0.41
58:DB:81:G:C5	58:DB:82:U:C4	3.09	0.41
1:AA:335:C:H2'	1:AA:336:A:H8	1.86	0.41
37:BP:112:ARG:O	37:BP:113:LEU:C	2.58	0.41
28:BG:25:ILE:HD11	28:BG:71:LEU:HD12	2.01	0.41
57:DA:2489:U:C4	57:DA:2490:G:N1	2.88	0.41
33:BL:61:LEU:HG	51:B3:23:HIS:ND1	2.36	0.41
28:DG:152:ARG:CD	28:DG:153:PRO:HD2	2.50	0.41
1:AA:582:C:C4	1:AA:583:A:N7	2.89	0.41
57:DA:2335:A:C4	57:DA:2337:G:N7	2.89	0.41
1:AA:1507:A:H2'	1:AA:1508:A:C8	2.56	0.41
22:BA:2380:C:H2'	22:BA:2381:A:C8	2.56	0.41
22:BA:2784:U:H2'	22:BA:2785:C:C6	2.56	0.41
12:CL:33:CYS:CA	12:CL:54:VAL:HG13	2.51	0.41
11:AK:110:THR:HA	21:AU:4:LYS:HA	2.03	0.41
1:AA:969:A:H2'	1:AA:970:C:H6	1.86	0.41
43:BV:14:LYS:HD2	63:BV:101:HOH:O	2.20	0.41
39:BR:62:GLU:O	39:BR:62:GLU:HG3	2.20	0.41
22:BA:1489:C:C2	22:BA:1501:G:N2	2.88	0.41
43:BV:5:ASN:N	43:BV:5:ASN:HD22	2.18	0.41
6:AF:11:HIS:CD2	6:AF:13:ASP:H	2.39	0.41
29:DH:65:ALA:O	29:DH:66:ASN:C	2.58	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:293:G:N2	53:CA:305:G:H1'	2.36	0.41
4:CD:84:ASN:C	4:CD:84:ASN:ND2	2.74	0.41
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.56	0.41
53:CA:115:G:C2	53:CA:289:G:C5	3.09	0.41
22:BA:2897:U:H2'	22:BA:2898:U:H6	1.84	0.41
22:BA:1837:C:N3	22:BA:1899:A:C6	2.89	0.41
57:DA:2603:G:C5	57:DA:2604:U:C5	3.08	0.41
57:DA:146:A:C6	57:DA:147:C:C4	3.09	0.41
23:BB:51:G:N2	23:BB:53:A:H62	2.19	0.41
19:AS:79:TYR:CE1	19:AS:80:ARG:HB2	2.55	0.41
57:DA:1085:A:H2'	57:DA:1086:A:N3	2.36	0.41
22:BA:1593:A:H2'	22:BA:1594:U:O4'	2.21	0.41
7:AG:108:ARG:HH21	7:AG:118:ARG:NH1	2.18	0.41
22:BA:291:G:H1'	22:BA:350:G:N2	2.35	0.41
8:CH:109:VAL:C	8:CH:110:MET:HG3	2.41	0.41
2:CB:57:ASN:OD1	2:CB:219:THR:O	2.39	0.41
52:B4:13:ASN:HD22	52:B4:13:ASN:N	2.19	0.41
57:DA:957:C:H42	57:DA:2494:G:N2	2.18	0.41
1:AA:162:A:N7	1:AA:163:C:H1'	2.36	0.41
22:BA:806:C:C2	22:BA:807:U:C5	3.09	0.41
53:CA:386:C:N4	53:CA:387:U:C4	2.89	0.41
57:DA:270:A:N1	57:DA:369:U:O2'	2.42	0.41
53:CA:168:G:C6	53:CA:169:C:C4	3.09	0.41
35:BN:48:VAL:O	35:BN:51:LEU:HB2	2.20	0.41
53:CA:444:G:O2'	53:CA:445:G:H5'	2.20	0.41
9:AI:35:GLU:HG2	9:AI:35:GLU:H	1.62	0.41
28:DG:38:ASP:O	28:DG:39:ALA:HB2	2.20	0.41
28:BG:54:ARG:HG3	28:BG:57:TYR:HD1	1.85	0.41
24:BC:199:HIS:O	24:BC:202:ARG:HG3	2.20	0.41
37:BP:90:ALA:HB3	37:BP:110:LYS:HB2	2.03	0.41
26:DE:2:GLU:HA	26:DE:13:THR:HA	2.03	0.41
6:AF:41:ASP:C	6:AF:43:GLY:H	2.24	0.41
41:DT:61:LEU:C	41:DT:61:LEU:HD12	2.41	0.41
31:BJ:16:TYR:CD1	31:BJ:16:TYR:N	2.89	0.41
2:CB:42:LEU:HG	2:CB:42:LEU:H	1.44	0.41
3:CC:104:GLU:HG2	3:CC:105:VAL:N	2.36	0.41
22:BA:2488:G:O2'	22:BA:2489:U:H5'	2.21	0.41
34:DM:114:ARG:HA	34:DM:130:PHE:CE1	2.56	0.41
7:AG:134:VAL:O	7:AG:137:ARG:HB3	2.21	0.41
50:B2:1:MET:CE	50:B2:2:LYS:H	2.34	0.41
49:B1:39:ASP:HA	49:B1:40:PRO:HD2	1.92	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:45:HIS:C	15:AO:47:LYS:H	2.24	0.41
4:CD:183:ARG:HE	4:CD:183:ARG:HB2	1.48	0.41
53:CA:227:G:H2'	53:CA:228:A:O4'	2.21	0.41
53:CA:872:A:C4	53:CA:874:G:N7	2.89	0.41
8:CH:97:GLY:O	8:CH:98:LEU:HB2	2.21	0.41
57:DA:1952:A:H5'	32:DK:42:THR:HG23	2.02	0.41
56:CP:25:ARG:O	56:CP:26:ASN:ND2	2.54	0.41
57:DA:2093:G:H2'	57:DA:2093:G:N3	2.35	0.41
57:DA:1358:G:H8	57:DA:1358:G:O5'	2.03	0.41
53:CA:1366:C:O2'	53:CA:1367:C:H5'	2.20	0.41
44:DW:37:VAL:O	44:DW:38:ARG:HB2	2.21	0.41
27:BF:137:PHE:HA	27:BF:138:PRO:HD3	1.93	0.41
57:DA:2748:A:C6	57:DA:2749:A:C5	3.08	0.41
6:AF:92:THR:HG22	6:AF:93:LYS:N	2.35	0.41
57:DA:600:G:H1'	26:DE:100:MET:HG2	2.03	0.41
57:DA:186:G:N2	57:DA:211:C:C2	2.89	0.41
57:DA:47:C:H6	57:DA:47:C:O5'	2.04	0.41
57:DA:727:A:O2'	57:DA:728:G:C8	2.69	0.41
57:DA:782:A:O2'	24:DC:223:ALA:O	2.38	0.41
51:D3:30:HIS:HB3	51:D3:31:ILE:H	1.37	0.41
57:DA:570:G:H2'	57:DA:571:U:H5'	2.03	0.41
26:DE:63:LYS:HA	26:DE:63:LYS:HE2	2.03	0.41
57:DA:320:A:N7	26:DE:132:LYS:HB2	2.36	0.41
37:BP:4:ILE:CG2	37:BP:5:LYS:N	2.64	0.41
31:DJ:38:GLY:O	31:DJ:43:GLU:HB2	2.21	0.41
31:DJ:45:THR:C	31:DJ:47:HIS:N	2.74	0.41
53:CA:1074:G:H4'	2:CB:102:ASN:CB	2.35	0.41
5:CE:113:VAL:HG12	5:CE:114:LEU:N	2.35	0.41
53:CA:95:C:O2'	53:CA:96:U:H5'	2.20	0.41
53:CA:1238:A:N6	53:CA:1302:C:N4	2.69	0.41
3:AC:131:ARG:HH21	3:AC:135:ARG:HH21	1.68	0.41
57:DA:1997:C:P	25:DD:129:THR:HG1	2.42	0.41
22:BA:1107:G:H2'	22:BA:1108:U:C6	2.56	0.41
5:AE:155:LYS:HB3	8:AH:70:VAL:HG13	2.03	0.41
57:DA:1478:G:C6	57:DA:1514:G:C2	3.09	0.41
22:BA:1885:A:O2'	22:BA:1886:U:H5'	2.21	0.41
4:AD:116:LEU:C	4:AD:122:ILE:HD11	2.40	0.41
2:AB:79:VAL:O	2:AB:83:ALA:HB3	2.21	0.41
59:DF:149:ARG:HA	59:DF:149:ARG:HD3	1.80	0.41
39:BR:46:GLU:C	39:BR:46:GLU:OE1	2.59	0.41
53:CA:669:G:N1	53:CA:670:G:C5	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:636:G:H5'	57:DA:639:U:OP1	2.21	0.41
57:DA:1884:G:N3	57:DA:1884:G:H2'	2.36	0.41
22:BA:786:C:H5''	22:BA:1780:A:C8	2.56	0.41
57:DA:1567:G:H5''	24:DC:84:PRO:CG	2.50	0.41
44:BW:58:LEU:N	44:BW:58:LEU:CD1	2.84	0.41
53:CA:1453:G:H2'	53:CA:1454:G:O4'	2.21	0.41
24:DC:161:VAL:HG13	24:DC:174:ARG:O	2.20	0.41
52:B4:3:VAL:O	52:B4:37:GLN:HB3	2.21	0.41
11:CK:125:LYS:HB3	11:CK:126:ARG:H	1.48	0.41
53:CA:757:U:O2'	53:CA:879:C:H1'	2.21	0.41
57:DA:1500:G:C6	57:DA:1501:G:N7	2.89	0.41
53:CA:201:G:N2	53:CA:217:C:H1'	2.36	0.41
53:CA:66:A:C6	53:CA:67:C:C5	3.09	0.41
53:CA:1100:C:O2'	53:CA:1101:A:H5'	2.21	0.41
22:BA:1246:A:H4'	26:BE:40:ARG:NH2	2.36	0.41
28:BG:32:LEU:O	28:BG:33:THR:HG23	2.20	0.41
22:BA:2197:U:C5	22:BA:2224:G:C6	3.08	0.41
57:DA:1112:G:H2'	57:DA:1113:U:C6	2.55	0.41
57:DA:1681:G:O2'	57:DA:1762:A:H2'	2.20	0.41
53:CA:1432:G:H1'	53:CA:1468:A:N6	2.36	0.41
22:BA:1563:U:H2'	22:BA:1564:C:H6	1.85	0.41
56:CP:16:PHE:CD2	56:CP:40:ASN:HB2	2.56	0.41
1:AA:518:C:H4'	1:AA:519:C:O5'	2.21	0.41
5:CE:17:VAL:HA	5:CE:33:THR:O	2.20	0.41
47:DZ:51:SER:HA	47:DZ:54:VAL:HG22	2.01	0.41
53:CA:824:G:H1'	8:CH:1:SER:N	2.35	0.41
22:BA:919:U:C4'	22:BA:919:U:C6	3.03	0.41
22:BA:2308:G:C5	27:BF:76:PHE:HE2	2.39	0.41
22:BA:1847:A:O2'	22:BA:1848:A:OP1	2.33	0.41
57:DA:102:U:H3	46:DY:2:LYS:HG2	1.86	0.41
46:DY:1:MET:H2	46:DY:5:GLU:CG	2.34	0.41
13:AM:11:HIS:C	13:AM:12:LYS:HG3	2.40	0.41
31:DJ:18:VAL:CG1	31:DJ:54:ILE:HD11	2.51	0.41
22:BA:1277:G:H4'	35:BN:20:MET:CE	2.51	0.41
42:DU:21:ARG:H	42:DU:21:ARG:HG2	1.63	0.41
1:AA:725:G:H2'	1:AA:726:C:H6	1.86	0.41
57:DA:2683:C:OP1	37:DP:55:HIS:CB	2.69	0.41
53:CA:1095:U:H2'	53:CA:1096:C:H6	1.86	0.41
53:CA:1270:G:H2'	53:CA:1271:A:H8	1.86	0.41
1:AA:1532:U:H2'	1:AA:1534:A:H5'	2.03	0.41
20:AT:33:LYS:HD3	20:AT:33:LYS:HA	1.81	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:68:ARG:HG2	29:DH:71:LYS:HD3	2.03	0.41
53:CA:750:C:O2'	15:CO:20:ASP:HB2	2.21	0.41
58:DB:32:U:C2	58:DB:51:G:N2	2.89	0.41
57:DA:2506:U:C5	57:DA:2576:G:O6	2.74	0.41
1:AA:575:G:H4'	1:AA:576:C:O5'	2.19	0.41
1:AA:1305:G:H21	1:AA:1332:A:H2	1.69	0.41
22:BA:161:A:P	22:BA:162:U:H3'	2.61	0.41
17:CQ:37:ILE:HD11	17:CQ:39:ARG:CZ	2.51	0.41
57:DA:700:G:H2'	57:DA:701:G:O4'	2.21	0.41
15:CO:70:LYS:HD2	15:CO:77:TYR:CE2	2.55	0.41
57:DA:633:A:H5''	33:DL:70:LYS:HD3	2.03	0.41
32:DK:73:ASP:OD1	32:DK:73:ASP:N	2.36	0.41
4:CD:115:GLN:HE21	4:CD:153:ARG:HH22	1.66	0.41
22:BA:2647:U:O2'	22:BA:2648:G:H5'	2.21	0.41
1:AA:854:U:H3'	1:AA:871:U:O4	2.21	0.41
30:DI:22:PRO:HB2	30:DI:23:VAL:H	1.56	0.41
53:CA:9:G:H4'	5:CE:108:GLY:H	1.86	0.41
53:CA:304:U:H2'	53:CA:305:G:H8	1.83	0.41
48:D0:33:SER:HB3	48:D0:34:GLY:H	1.62	0.41
57:DA:546:U:H5'	57:DA:547:A:OP1	2.20	0.41
35:DN:10:LEU:HA	35:DN:10:LEU:HD13	1.81	0.41
57:DA:2494:G:O2'	34:DM:79:ALA:HA	2.21	0.41
9:CI:128:LYS:HG3	9:CI:128:LYS:O	2.21	0.41
30:DI:102:ARG:CZ	30:DI:105:LEU:HD22	2.50	0.41
22:BA:2849:U:H5''	22:BA:2867:G:N2	2.36	0.41
57:DA:289:G:C2	57:DA:352:A:C2	3.09	0.41
28:DG:39:ALA:O	28:DG:40:VAL:HG13	2.21	0.41
25:BD:197:THR:HG22	25:BD:198:GLY:N	2.36	0.41
26:BE:35:TYR:O	26:BE:37:ALA:O	2.39	0.41
3:AC:125:ARG:O	3:AC:126:ARG:CB	2.69	0.41
57:DA:569:U:H5''	57:DA:821:A:C2	2.56	0.41
31:DJ:98:GLU:HG2	31:DJ:98:GLU:H	1.64	0.41
10:CJ:92:LEU:O	10:CJ:94:ALA:N	2.54	0.41
53:CA:790:A:H2'	53:CA:791:G:O4'	2.21	0.41
53:CA:886:G:H2'	53:CA:887:G:O4'	2.21	0.41
38:BQ:91:ARG:HB3	38:BQ:93:ILE:HG23	2.03	0.40
39:BR:49:ILE:C	39:BR:51:VAL:O	2.59	0.40
22:BA:2386:A:C2	44:BW:38:ARG:HD2	2.55	0.40
22:BA:923:G:H5'	44:BW:25:PHE:CZ	2.56	0.40
53:CA:1357:A:C5	53:CA:1358:U:C4	3.09	0.40
53:CA:1363:A:C6	53:CA:1365:G:O6	2.73	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:985:C:HO2'	53:CA:986:U:C5'	2.34	0.40
57:DA:1914:C:O2'	57:DA:1915:U:H5''	2.21	0.40
6:AF:6:ILE:HD13	6:AF:74:LEU:HD23	2.03	0.40
57:DA:603:A:H4'	57:DA:604:G:O5'	2.21	0.40
17:AQ:11:VAL:HG12	17:AQ:12:VAL:HG12	2.03	0.40
22:BA:1071:G:C5	22:BA:1089:A:C6	3.08	0.40
53:CA:1252:A:H4'	53:CA:1369:C:H4'	2.03	0.40
57:DA:2811:G:OP1	25:DD:61:THR:HB	2.21	0.40
57:DA:2831:G:H1'	57:DA:2883:A:C2	2.56	0.40
57:DA:313:G:H2'	57:DA:314:C:C6	2.56	0.40
26:DE:147:LEU:CB	26:DE:186:VAL:HG23	2.51	0.40
34:DM:17:ASN:CB	34:DM:38:ARG:HH22	2.25	0.40
15:AO:23:SER:HB3	15:AO:26:VAL:CG2	2.51	0.40
57:DA:1612:C:N4	57:DA:1620:G:C6	2.89	0.40
5:AE:82:HIS:HB2	5:AE:83:PRO:HD2	2.02	0.40
53:CA:734:G:N2	18:CR:63:TYR:HH	2.18	0.40
22:BA:1999:C:O2'	22:BA:2000:C:H5'	2.20	0.40
57:DA:228:C:H4'	57:DA:229:C:C6	2.56	0.40
57:DA:231:A:O2'	57:DA:232:G:C5'	2.69	0.40
1:AA:75:G:N3	1:AA:76:G:H1'	2.37	0.40
1:AA:76:G:N1	1:AA:95:C:N4	2.68	0.40
57:DA:970:U:O5'	57:DA:970:U:H6	2.04	0.40
53:CA:1348:U:O2'	53:CA:1349:A:C5'	2.70	0.40
1:AA:27:G:H2'	1:AA:28:A:H8	1.85	0.40
1:AA:343:U:H2'	1:AA:345:C:C5	2.56	0.40
37:BP:33:GLU:HG2	37:BP:36:LYS:HD2	2.02	0.40
22:BA:1493:C:H5''	22:BA:1494:A:OP2	2.21	0.40
26:BE:196:VAL:O	26:BE:197:GLU:C	2.57	0.40
24:BC:89:ASN:O	24:BC:90:ILE:HD13	2.21	0.40
22:BA:2887:A:C5	22:BA:2888:C:C5	3.09	0.40
37:DP:63:ILE:CA	37:DP:68:GLY:HA2	2.40	0.40
53:CA:331:G:O2'	53:CA:332:G:P	2.79	0.40
39:BR:28:ALA:HB3	39:BR:31:GLU:HG3	2.02	0.40
8:AH:5:PRO:O	8:AH:8:ASP:HB3	2.20	0.40
22:BA:1459:G:C6	22:BA:1461:C:C4	3.09	0.40
22:BA:565:C:P	39:BR:80:ARG:H	2.44	0.40
57:DA:856:G:O4'	44:DW:23:LYS:HB3	2.22	0.40
22:BA:2149:U:O2'	22:BA:2150:C:O4'	2.39	0.40
53:CA:821:G:C4	53:CA:822:U:C5	3.09	0.40
1:AA:979:C:H1'	1:AA:1317:C:N4	2.36	0.40
53:CA:65:A:N1	53:CA:381:C:C5	2.90	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:89:THR:CG2	5:AE:90:GLY:N	2.67	0.40
21:AU:24:LYS:O	21:AU:28:LEU:HB2	2.21	0.40
22:BA:2801:G:O2'	22:BA:2802:G:C5'	2.60	0.40
3:CC:65:VAL:HG12	3:CC:67:ILE:HD11	2.04	0.40
57:DA:2287:A:C8	57:DA:2289:G:C8	3.09	0.40
25:DD:121:THR:HG21	25:DD:127:PHE:CD1	2.55	0.40
24:DC:67:LYS:CG	24:DC:150:GLY:HA2	2.51	0.40
57:DA:1707:G:O2'	57:DA:1708:C:H5'	2.22	0.40
53:CA:687:A:C2	53:CA:704:A:C6	3.09	0.40
57:DA:280:U:H2'	57:DA:281:C:C6	2.55	0.40
1:AA:57:G:H2'	1:AA:58:C:O4'	2.21	0.40
5:CE:37:VAL:HA	5:CE:47:PHE:HA	2.02	0.40
53:CA:511:C:O2'	53:CA:512:U:C5'	2.63	0.40
1:AA:792:A:N3	1:AA:794:A:C6	2.88	0.40
47:BZ:2:LYS:O	47:BZ:3:THR:O	2.39	0.40
47:BZ:35:VAL:CG2	47:BZ:37:ARG:CZ	2.99	0.40
22:BA:289:G:H2'	22:BA:290:U:C6	2.56	0.40
53:CA:182:A:O2'	53:CA:183:C:H2'	2.22	0.40
30:DI:27:LEU:HD13	30:DI:32:VAL:HG11	2.03	0.40
24:DC:29:PHE:O	24:DC:32:LEU:N	2.51	0.40
1:AA:1130:A:C5	1:AA:1146:A:C6	3.09	0.40
1:AA:184:G:H2'	1:AA:185:U:H5	1.83	0.40
1:AA:181:A:N6	1:AA:195:A:C8	2.89	0.40
53:CA:1035:A:H2'	53:CA:1036:A:C8	2.56	0.40
57:DA:1568:G:HO2'	57:DA:1569:A:P	2.44	0.40
57:DA:2266:A:N3	57:DA:2272:U:C4	2.88	0.40
1:AA:210:C:C4'	1:AA:211:G:N2	2.82	0.40
53:CA:71:A:C2'	53:CA:72:A:O5'	2.69	0.40
37:DP:81:ASP:HB3	37:DP:82:SER:H	1.65	0.40
45:DX:66:VAL:O	45:DX:66:VAL:HG12	2.20	0.40
24:DC:15:VAL:HG13	24:DC:204:LEU:O	2.21	0.40
22:BA:1276:A:O2'	35:BN:20:MET:HE3	2.21	0.40
57:DA:673:C:H5''	26:DE:75:SER:HB2	2.03	0.40
53:CA:1189:U:O2'	3:CC:175:HIS:CD2	2.74	0.40
11:AK:32:THR:HG23	11:AK:42:GLY:O	2.20	0.40
57:DA:14:A:N7	57:DA:526:A:C6	2.89	0.40
53:CA:1215:G:C2	53:CA:1216:A:C5	3.08	0.40
53:CA:1271:A:H2'	53:CA:1272:G:C8	2.56	0.40
1:AA:625:U:H4'	16:AP:16:PHE:CZ	2.56	0.40
32:DK:59:LYS:HE3	32:DK:89:ASN:OD1	2.21	0.40
12:AL:6:LEU:HB3	17:AQ:33:TYR:CE1	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:30:ARG:HE	35:BN:30:ARG:HB2	1.26	0.40
57:DA:244:A:C2'	57:DA:245:G:O4'	2.68	0.40
22:BA:1338:G:O2'	22:BA:1393:A:N1	2.44	0.40
57:DA:1517:G:C6	57:DA:1518:C:C4	3.10	0.40
1:AA:858:G:O2'	1:AA:859:G:H5'	2.21	0.40
49:B1:46:VAL:HG12	49:B1:47:ILE:H	1.86	0.40
1:AA:698:G:H1'	1:AA:798:U:O2'	2.21	0.40
1:AA:574:A:H1'	1:AA:883:C:O4'	2.21	0.40
53:CA:1360:A:C2	53:CA:1361:G:H1'	2.56	0.40
12:AL:72:ASN:OD1	12:AL:104:SER:CB	2.69	0.40
37:BP:24:THR:HG21	37:BP:87:ARG:HB3	2.03	0.40
4:AD:93:LEU:HD23	4:AD:93:LEU:HA	1.70	0.40
19:AS:52:ASN:HB3	19:AS:74:ALA:HB1	2.03	0.40
22:BA:2232:C:C4	22:BA:2233:U:C5	3.09	0.40
53:CA:68:G:H5'	53:CA:171:A:O2'	2.20	0.40
32:BK:80:ASP:OD2	37:BP:61:ARG:NH1	2.53	0.40
57:DA:262:A:H2	57:DA:430:A:H1'	1.85	0.40
57:DA:2240:U:C2	57:DA:2241:A:C8	3.09	0.40
36:BO:3:LYS:CG	36:BO:4:LYS:N	2.84	0.40
53:CA:922:G:C6	53:CA:923:A:C6	3.09	0.40
22:BA:465:G:H2'	22:BA:466:A:C8	2.56	0.40
57:DA:2823:A:C6	57:DA:2824:C:C4	3.09	0.40
59:DF:113:PHE:CZ	59:DF:116:LEU:HD22	2.56	0.40
22:BA:2001:C:H4'	22:BA:2689:U:C2'	2.51	0.40
57:DA:1356:G:N2	57:DA:1357:C:H1'	2.36	0.40
26:DE:79:ARG:HG2	26:DE:80:SER:H	1.86	0.40
22:BA:999:U:P	63:BA:3357:HOH:O	2.78	0.40
38:DQ:26:ALA:HB1	38:DQ:30:VAL:HB	2.03	0.40
57:DA:1082:U:H2'	57:DA:1083:U:H5'	2.03	0.40
57:DA:2819:G:N3	57:DA:2828:G:C2	2.89	0.40
46:DY:52:ARG:C	46:DY:54:LYS:H	2.24	0.40
46:DY:49:ASP:HA	46:DY:52:ARG:HD2	2.03	0.40
55:CM:77:LYS:C	55:CM:77:LYS:HD3	2.42	0.40
22:BA:2617:U:H2'	22:BA:2618:G:H5'	2.02	0.40
22:BA:2038:G:H2'	22:BA:2039:U:O4'	2.21	0.40
22:BA:1644:C:O2'	22:BA:1645:G:H5'	2.21	0.40
50:D2:1:MET:CG	50:D2:2:LYS:N	2.85	0.40
7:AG:14:ASP:OD1	7:AG:17:PHE:HB2	2.21	0.40
22:BA:2350:C:C2'	22:BA:2351:G:H5'	2.51	0.40
1:AA:462:G:H3'	1:AA:463:U:C6	2.55	0.40
22:BA:182:A:C6	22:BA:183:C:C4	3.09	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:123:LYS:HB2	26:BE:123:LYS:HE3	1.87	0.40
56:CP:26:ASN:HD22	56:CP:26:ASN:HA	1.63	0.40
22:BA:2476:A:C2'	22:BA:2477:U:H5'	2.51	0.40
1:AA:155:A:H2'	1:AA:156:C:C6	2.56	0.40
22:BA:35:G:N2	22:BA:36:G:H1'	2.36	0.40
22:BA:2413:G:C4	22:BA:2414:G:C8	3.09	0.40
24:BC:186:ASP:OD1	4:CD:173:ASP:OD2	2.39	0.40
35:BN:32:GLU:HA	35:BN:115:LEU:HD12	2.03	0.40
30:DI:64:ARG:HB2	30:DI:64:ARG:CZ	2.51	0.40
2:CB:21:TYR:CD1	2:CB:21:TYR:N	2.89	0.40
36:DO:27:VAL:O	36:DO:37:ALA:HA	2.21	0.40
58:DB:56:G:H5'	59:DF:23:SER:OG	2.20	0.40
22:BA:2261:C:N4	44:BW:10:ARG:HB3	2.37	0.40
53:CA:253:A:O2'	53:CA:254:G:O5'	2.38	0.40
53:CA:985:C:H2'	53:CA:986:U:C5	2.56	0.40
5:AE:79:THR:HB	5:AE:121:ASN:HD21	1.79	0.40
53:CA:1493:A:H2'	53:CA:1494:G:OP1	2.21	0.40
2:CB:141:GLU:O	2:CB:145:ASN:N	2.53	0.40
22:BA:1097:U:O2'	30:BI:8:VAL:HG12	2.21	0.40
57:DA:1677:A:C8	63:DA:3747:HOH:O	2.73	0.40
57:DA:2586:U:O2'	57:DA:2587:A:H5'	2.20	0.40
57:DA:2586:U:C5	57:DA:2608:G:N2	2.89	0.40
41:DT:73:ARG:HA	41:DT:73:ARG:HD3	1.96	0.40
1:AA:1365:G:O2'	1:AA:1366:C:H5'	2.22	0.40
57:DA:1395:A:C4	57:DA:1398:C:C5	3.08	0.40
26:DE:112:LEU:HD13	26:DE:112:LEU:O	2.22	0.40
26:DE:187:VAL:HG12	26:DE:188:MET:N	2.36	0.40
44:DW:8:SER:O	44:DW:9:THR:CB	2.68	0.40
15:AO:74:VAL:O	15:AO:77:TYR:N	2.54	0.40
34:DM:22:GLN:HB2	34:DM:100:LYS:HZ3	1.87	0.40
53:CA:87:C:O2'	53:CA:88:U:C4'	2.67	0.40
11:AK:111:ASP:CB	21:AU:19:LYS:HD2	2.51	0.40
39:DR:33:VAL:O	39:DR:33:VAL:HG23	2.21	0.40
42:DU:86:PHE:HB2	42:DU:92:VAL:HG22	2.02	0.40
1:AA:877:G:N3	8:AH:1:SER:N	2.62	0.40
2:CB:162:VAL:CG2	2:CB:163:ILE:N	2.85	0.40
24:BC:131:MET:HA	24:BC:134:ILE:CD1	2.49	0.40
24:BC:103:ILE:O	24:BC:104:LEU:O	2.39	0.40
25:DD:119:ALA:HB2	25:DD:163:GLY:O	2.21	0.40
46:BY:36:GLN:O	46:BY:37:LEU:O	2.39	0.40
43:DV:40:ILE:N	43:DV:40:ILE:HD13	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1814:G:C6	57:DA:1815:A:C6	3.09	0.40
1:AA:198:G:O2'	1:AA:199:A:H5'	2.22	0.40
1:AA:199:A:C2	1:AA:200:G:C8	3.09	0.40
37:DP:59:THR:HG23	37:DP:72:VAL:CG1	2.51	0.40
53:CA:757:U:H5''	53:CA:822:U:O2	2.20	0.40
22:BA:1288:G:C5	22:BA:1327:A:C2	3.10	0.40
22:BA:1328:A:C2	22:BA:1330:C:O2	2.74	0.40
10:CJ:64:GLN:CB	14:CN:98:ALA:HB3	2.42	0.40
1:AA:1256:A:H1'	1:AA:1258:G:C6	2.55	0.40
24:DC:75:ALA:HA	24:DC:95:TYR:HA	2.03	0.40
29:BH:4:ILE:O	29:BH:37:VAL:HG12	2.21	0.40
28:DG:1:SER:HG	28:DG:61:TRP:HE3	1.66	0.40
4:CD:66:VAL:CG1	4:CD:70:GLN:HB3	2.51	0.40
49:D1:3:GLY:C	49:D1:5:ARG:H	2.24	0.40
57:DA:201:C:H6	57:DA:201:C:O5'	2.04	0.40
57:DA:201:C:OP1	45:DX:17:ARG:NH1	2.54	0.40
2:CB:124:THR:C	2:CB:126:ASP:H	2.24	0.40
57:DA:1965:C:H5''	57:DA:1966:A:H2'	2.03	0.40
30:BI:41:PHE:N	30:BI:68:PHE:HZ	2.19	0.40
22:BA:64:A:C6	22:BA:65:U:C4	3.10	0.40
57:DA:481:G:H1'	57:DA:506:G:H21	1.86	0.40
53:CA:346:G:N3	53:CA:346:G:C2'	2.85	0.40
53:CA:391:G:H2'	53:CA:392:C:O4'	2.21	0.40
59:DF:28:PRO:HB2	59:DF:168:LEU:CG	2.51	0.40
44:DW:81:ILE:HD12	44:DW:81:ILE:C	2.41	0.40
24:BC:255:LYS:C	24:BC:257:ARG:N	2.74	0.40
1:AA:49:U:C5	1:AA:364:A:C6	3.09	0.40
1:AA:1381:U:O2'	1:AA:1382:C:H6	2.04	0.40
1:AA:723:U:OP1	21:AU:48:LYS:HD3	2.21	0.40
1:AA:716:A:N3	11:AK:119:GLY:HA2	2.36	0.40
53:CA:259:G:C4	53:CA:260:G:C8	3.09	0.40
32:DK:104:THR:O	32:DK:106:GLU:N	2.54	0.40
22:BA:1076:C:C2	22:BA:1077:A:C8	3.09	0.40
22:BA:2043:C:N3	22:BA:2777:G:C2	2.89	0.40
53:CA:1528:U:O2'	53:CA:1530:G:H5''	2.21	0.40
22:BA:163:C:O2'	22:BA:164:C:C5'	2.68	0.40
46:DY:23:ARG:H	46:DY:23:ARG:HG2	1.70	0.40
53:CA:1215:G:H2'	53:CA:1216:A:H8	1.87	0.40
27:BF:72:SER:CB	27:BF:80:GLN:HB2	2.50	0.40
11:AK:55:ARG:HE	11:AK:55:ARG:HA	1.87	0.40
22:BA:2702:G:C5	22:BA:2703:C:C4	3.09	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:195:ASN:O	4:CD:197:HIS:N	2.55	0.40
41:BT:28:ASN:CA	41:BT:91:GLN:HE22	2.34	0.40
22:BA:2555:U:C5	22:BA:2556:C:C6	3.09	0.40
44:DW:44:PHE:HB2	44:DW:78:PHE:H	1.85	0.40
57:DA:742:A:H2'	57:DA:743:A:H8	1.84	0.40
42:BU:50:ALA:O	42:BU:51:LEU:O	2.38	0.40
57:DA:1034:G:C6	57:DA:1122:G:C6	3.09	0.40
15:CO:66:LEU:O	15:CO:67:ASP:C	2.59	0.40
6:CF:9:MET:HB2	6:CF:85:ILE:HG13	2.03	0.40
22:BA:116:C:H2'	22:BA:117:G:O4'	2.22	0.40
32:BK:58:LEU:HB2	32:BK:59:LYS:H	1.46	0.40
49:D1:37:LYS:O	49:D1:48:TYR:CD2	2.74	0.40
26:DE:119:ILE:CD1	26:DE:143:LEU:HD21	2.51	0.40
37:DP:9:GLN:HB3	37:DP:12:MET:HE3	2.02	0.40
23:BB:94:A:H2'	23:BB:95:U:H6	1.85	0.40
57:DA:1228:G:H2'	57:DA:1229:C:H6	1.86	0.40
57:DA:1229:C:H2'	57:DA:1230:A:H8	1.86	0.40
22:BA:2273:A:H2'	22:BA:2274:A:C8	2.56	0.40
38:DQ:26:ALA:HA	38:DQ:29:ARG:CG	2.51	0.40
54:CG:148:LYS:HD2	11:CK:60:PHE:CD1	2.55	0.40
8:CH:104:SER:CA	8:CH:109:VAL:HG13	2.51	0.40
43:BV:29:ILE:HG22	43:BV:90:ASP:HA	2.02	0.40
11:AK:61:ALA:O	11:AK:64:VAL:HG13	2.20	0.40
57:DA:1653:G:H8	57:DA:1653:G:OP2	2.04	0.40
49:D1:38:PHE:CD2	49:D1:39:ASP:N	2.88	0.40
57:DA:1147:A:H2'	57:DA:1148:U:C6	2.56	0.40
22:BA:2667:C:H2'	22:BA:2668:G:O4'	2.21	0.40
7:AG:74:VAL:HG21	7:AG:143:MET:HG2	2.03	0.40
28:BG:90:GLY:O	28:BG:91:VAL:C	2.60	0.40
6:AF:1:MET:SD	6:AF:67:PRO:HD3	2.62	0.40
22:BA:1233:C:C4	22:BA:1234:U:C5	3.08	0.40
4:CD:90:LEU:HD13	4:CD:90:LEU:HA	1.82	0.40
53:CA:1111:A:H3'	53:CA:1111:A:C8	2.56	0.40
55:CM:8:ILE:N	55:CM:9:PRO:CD	2.84	0.40
22:BA:996:A:C2	22:BA:997:G:N9	2.89	0.40
22:BA:2353:G:O2'	44:BW:31:LEU:HD23	2.21	0.40
10:CJ:51:VAL:CB	14:CN:80:ARG:HB2	2.48	0.40
57:DA:2135:A:C3'	57:DA:2136:G:C5'	2.89	0.40
57:DA:2748:A:C6	57:DA:2749:A:C6	3.10	0.40
22:BA:1071:G:C4	22:BA:1089:A:C6	3.10	0.40
53:CA:1158:C:H2'	53:CA:1158:C:O2	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DA:1117:C:H2'	57:DA:1118:C:H6	1.83	0.40
31:BJ:64:VAL:HG13	31:BJ:65:THR:O	2.21	0.40
10:CJ:76:ILE:HG22	10:CJ:77:VAL:N	2.36	0.40
1:AA:974:A:H5'	1:AA:975:A:H5'	2.03	0.40
41:DT:18:GLU:HA	41:DT:22:THR:HG21	2.02	0.40
53:CA:1125:U:C2	53:CA:1127:G:N7	2.89	0.40
1:AA:652:U:H1'	1:AA:653:U:C5	2.55	0.40
15:AO:23:SER:O	15:AO:26:VAL:N	2.52	0.40
57:DA:2314:A:N3	57:DA:2315:G:C8	2.89	0.40
24:BC:16:VAL:N	24:BC:203:VAL:HG11	2.36	0.40
29:DH:48:GLU:HA	29:DH:51:ARG:HE	1.86	0.40
26:DE:134:LEU:HA	26:DE:137:LYS:HB2	2.03	0.40
41:BT:30:ILE:HG12	41:BT:32:LEU:HD22	2.02	0.40
5:CE:132:PRO:C	5:CE:134:ASN:N	2.74	0.40
53:CA:76:G:N2	53:CA:95:C:N3	2.69	0.40
53:CA:261:U:O2'	53:CA:263:A:N7	2.39	0.40
18:AR:35:SER:HB3	21:AU:3:ILE:CG1	2.51	0.40
57:DA:2021:C:H4'	57:DA:2022:U:OP2	2.21	0.40
53:CA:1346:A:H5''	9:CI:121:ARG:HH22	1.86	0.40
1:AA:257:G:C2	1:AA:258:G:N7	2.90	0.40
53:CA:737:C:H2'	53:CA:738:C:C6	2.56	0.40
57:DA:2515:C:H2'	57:DA:2516:A:C8	2.56	0.40
52:D4:37:GLN:HG2	52:D4:38:GLY:N	2.36	0.40
32:BK:114:LYS:HE2	32:BK:114:LYS:HA	2.04	0.40
59:DF:147:ARG:HG2	59:DF:149:ARG:NH1	2.34	0.40
22:BA:276:U:O2	22:BA:276:U:H2'	2.20	0.40
25:BD:34:VAL:HA	25:BD:50:VAL:HG12	2.02	0.40
57:DA:104:A:O2'	57:DA:105:C:H5'	2.21	0.40
12:AL:62:VAL:CG2	12:AL:94:TYR:CE2	2.93	0.40
41:DT:39:THR:C	41:DT:41:ALA:H	2.25	0.40
49:B1:32:LYS:HG2	49:B1:52:LYS:OXT	2.22	0.40
57:DA:1925:C:C6	57:DA:1925:C:H3'	2.56	0.40
1:AA:429:U:O3'	4:AD:8:LEU:HD23	2.20	0.40
57:DA:1456:G:O2'	57:DA:1457:U:H5'	2.21	0.40
35:DN:75:ILE:O	35:DN:79:LEU:HB2	2.21	0.40
57:DA:1813:G:H2'	57:DA:1814:G:O4'	2.22	0.40
57:DA:779:U:H5''	24:DC:42:ARG:NH2	2.36	0.40
22:BA:2149:U:O2'	22:BA:2150:C:C4'	2.69	0.40
22:BA:1429:G:N3	22:BA:1568:G:C2	2.90	0.40
59:DF:43:ILE:HG12	59:DF:77:LYS:CD	2.46	0.40
29:DH:94:ILE:HB	29:DH:98:ASP:HB2	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:184:GLU:O	24:BC:185:ALA:HB3	2.22	0.40
1:AA:112:G:C2	1:AA:113:G:C8	3.10	0.40
36:BO:31:THR:CG2	36:BO:34:HIS:N	2.78	0.40
28:DG:5:LYS:HZ1	28:DG:61:TRP:HZ3	1.68	0.40
4:AD:115:GLN:HE21	4:AD:115:GLN:HA	1.85	0.40
22:BA:579:G:H2'	22:BA:580:U:H6	1.87	0.40
22:BA:1252:G:N2	38:BQ:36:GLN:OE1	2.54	0.40
27:BF:42:ALA:HA	27:BF:45:ASP:O	2.22	0.40
30:BI:52:LEU:HD11	30:BI:81:LYS:HE2	2.03	0.40
31:DJ:64:VAL:HG22	31:DJ:68:LYS:HG3	2.02	0.40
57:DA:1180:U:C4	57:DA:1181:U:C4	3.10	0.40
10:AJ:35:GLN:HE21	10:AJ:35:GLN:CA	2.34	0.40
22:BA:971:G:C2'	22:BA:972:A:H5'	2.51	0.40
30:BI:56:VAL:HG22	30:BI:68:PHE:HB2	2.03	0.40
53:CA:807:A:C5	53:CA:808:C:C4	3.09	0.40
5:AE:10:LEU:HG	5:AE:11:GLN:N	2.36	0.40
22:BA:498:G:C4	22:BA:499:U:C5	3.10	0.40
44:DW:67:LYS:CB	44:DW:80:SER:HB2	2.50	0.40
30:BI:126:ARG:HD3	30:BI:126:ARG:H	1.86	0.40
53:CA:1004:A:C8	53:CA:1025:U:O2'	2.75	0.40
11:AK:16:SER:C	11:AK:78:ILE:HG22	2.42	0.40
57:DA:1569:A:N1	57:DA:1570:A:C2	2.89	0.40
57:DA:1267:U:O2'	57:DA:1268:A:H8	2.04	0.40
57:DA:155:A:H2'	57:DA:156:A:H8	1.87	0.40
22:BA:1046:A:H3'	22:BA:1047:G:C5'	2.51	0.40
36:BO:76:LYS:O	36:BO:79:ALA:HB3	2.21	0.40
23:BB:66:A:C2	23:BB:108:A:C2	3.09	0.40
1:AA:21:G:N2	1:AA:22:G:C6	2.89	0.40
1:AA:1348:U:H2'	1:AA:1349:A:C8	2.55	0.40
22:BA:669:G:C6	22:BA:801:G:O6	2.74	0.40
53:CA:1215:G:O2'	53:CA:1216:A:C5'	2.69	0.40
28:BG:140:ILE:HD12	28:BG:141:GLY:N	2.37	0.40
57:DA:243:U:H3'	51:D3:7:ARG:HH22	1.87	0.40
57:DA:243:U:O2'	57:DA:244:A:H5'	2.22	0.40
16:AP:56:ARG:NH1	16:AP:59:HIS:CD2	2.90	0.40
57:DA:271:G:O2'	57:DA:272:A:O4'	2.38	0.40
57:DA:163:C:H2'	57:DA:164:C:C6	2.56	0.40
29:DH:46:PHE:CD2	29:DH:50:ARG:NH2	2.89	0.40
28:BG:25:ILE:HD11	28:BG:71:LEU:CD1	2.51	0.40
22:BA:1813:G:H1'	24:BC:49:THR:HG21	2.02	0.40
22:BA:1789:A:P	24:BC:220:ARG:HD3	2.61	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2440:C:H2'	22:BA:2441:U:O4'	2.21	0.40
53:CA:158:G:N2	53:CA:162:A:N6	2.69	0.40
53:CA:676:A:C4	53:CA:677:U:C5	3.09	0.40
22:BA:1:G:N3	22:BA:1:G:C2'	2.81	0.40
57:DA:458:G:H22	57:DA:469:G:H2'	1.85	0.40
57:DA:471:A:H2'	57:DA:472:A:O4'	2.22	0.40
22:BA:2515:C:O5'	22:BA:2515:C:H6	2.05	0.40
57:DA:1379:U:C2'	57:DA:1379:U:O2	2.68	0.40
26:BE:8:ALA:O	26:BE:9:GLN:C	2.60	0.40
12:CL:35:ARG:O	12:CL:53:ARG:N	2.54	0.40
29:DH:8:LYS:HB3	29:DH:15:LEU:CD1	2.51	0.40
57:DA:2735:G:C4	57:DA:2736:A:C8	3.09	0.40
9:AI:41:GLU:HB3	9:AI:42:THR:H	1.58	0.40
22:BA:2870:C:H2'	22:BA:2871:U:H5'	2.03	0.40
28:BG:164:ALA:C	28:BG:166:GLU:H	2.25	0.40
57:DA:2187:U:O2'	57:DA:2188:U:H5'	2.22	0.40
57:DA:845:A:C2	57:DA:847:U:N1	2.89	0.40
23:BB:94:A:H2'	23:BB:95:U:C6	2.56	0.40
6:AF:14:GLN:OE1	6:AF:17:GLN:HB2	2.22	0.40
22:BA:2848:G:H8	37:BP:94:ALA:HB2	1.86	0.40
37:BP:92:ARG:O	37:BP:92:ARG:CG	2.67	0.40
9:AI:86:LEU:O	9:AI:93:LEU:HD11	2.22	0.40
22:BA:2544:G:C2'	22:BA:2545:G:H5'	2.52	0.40
57:DA:2422:C:C2'	57:DA:2423:U:H5''	2.51	0.40
26:DE:34:ALA:O	26:DE:37:ALA:HB3	2.22	0.40
6:CF:81:ASN:O	6:CF:84:VAL:HG12	2.22	0.40
22:BA:2765:A:C2'	22:BA:2765:A:N3	2.85	0.40
22:BA:1410:G:C2	22:BA:1593:A:C2	3.09	0.40
22:BA:2024:G:OP2	22:BA:2034:U:H4'	2.21	0.40
22:BA:399:U:H2'	22:BA:400:G:H5'	2.03	0.40
49:B1:42:VAL:CG1	49:B1:42:VAL:O	2.69	0.40
22:BA:2575:C:H5''	22:BA:2576:G:OP2	2.21	0.40
1:AA:1489:G:C2'	1:AA:1490:U:H5'	2.51	0.40
57:DA:1869:G:C2	57:DA:1873:G:C6	3.09	0.40
39:BR:75:VAL:HG22	39:BR:86:GLN:HG3	2.02	0.40
5:CE:125:LYS:HB2	5:CE:125:LYS:HE3	1.63	0.40
3:AC:113:LYS:HD2	3:AC:113:LYS:HA	1.83	0.40
38:DQ:69:ARG:HH21	38:DQ:69:ARG:HB2	1.87	0.40
53:CA:1487:G:O5'	53:CA:1487:G:H8	2.04	0.40
44:BW:23:LYS:HD2	44:BW:24:ARG:CB	2.51	0.40
53:CA:248:C:O2'	53:CA:249:U:O4'	2.31	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:1221:G:N2	53:CA:1222:G:H1'	2.36	0.40
57:DA:216:A:N6	57:DA:432:A:C1'	2.84	0.40
22:BA:1070:A:C2	22:BA:1097:U:H4'	2.57	0.40
53:CA:1067:A:O2'	53:CA:1094:G:H3'	2.20	0.40
57:DA:591:U:H2'	57:DA:592:A:H8	1.86	0.40
57:DA:764:A:C2	57:DA:781:A:C5	3.10	0.40
24:DC:14:HIS:O	24:DC:16:VAL:HG23	2.20	0.40
57:DA:1255:U:O2'	57:DA:1256:G:P	2.78	0.40
57:DA:30:G:N7	57:DA:31:C:C4	2.88	0.40
57:DA:31:C:O5'	57:DA:31:C:H6	2.04	0.40
53:CA:408:A:C5	53:CA:409:U:C5	3.09	0.40
57:DA:1401:G:H2'	57:DA:1402:U:C5	2.52	0.40
57:DA:324:A:O2'	57:DA:325:G:O4'	2.37	0.40
26:DE:159:LEU:HA	26:DE:159:LEU:HD12	1.84	0.40
26:DE:146:VAL:HG12	26:DE:167:VAL:HG23	2.03	0.40
57:DA:1099:G:C6	57:DA:1100:C:C2	3.09	0.40
34:DM:21:ALA:HB1	34:DM:100:LYS:HG2	2.04	0.40
57:DA:1330:C:HO2'	57:DA:1331:G:P	2.45	0.40
57:DA:1612:C:O2'	57:DA:1613:G:O5'	2.39	0.40
26:DE:134:LEU:HA	26:DE:137:LYS:CB	2.52	0.40
26:DE:154:ASP:C	26:DE:156:ASN:H	2.24	0.40
53:CA:91:U:O2'	53:CA:92:U:C5'	2.69	0.40
57:DA:2542:A:H4'	57:DA:2543:G:H5''	1.98	0.40
53:CA:1243:C:N4	53:CA:1244:G:O6	2.54	0.40
53:CA:1300:G:N2	53:CA:1334:G:H2'	2.32	0.40
1:AA:372:C:H5'	1:AA:373:A:OP1	2.21	0.40
22:BA:1731:G:N1	22:BA:1733:G:C6	2.89	0.40
22:BA:1733:G:O2'	22:BA:1734:G:O5'	2.39	0.40
5:AE:148:SER:O	5:AE:152:VAL:HG13	2.21	0.40
1:AA:258:G:C2	1:AA:259:G:N9	2.90	0.40
1:AA:258:G:C5	1:AA:259:G:C8	3.10	0.40
14:AN:46:LYS:C	14:AN:48:GLN:N	2.74	0.40
12:AL:35:ARG:HB3	12:AL:37:TYR:CZ	2.57	0.40
57:DA:2547:A:C8	57:DA:2566:A:C8	3.10	0.40
57:DA:117:G:H4'	57:DA:126:A:H2	1.86	0.40
34:BM:108:VAL:HG13	34:BM:112:LEU:HB3	2.04	0.40
57:DA:1911:U:H2'	57:DA:1918:A:C2	2.56	0.40
29:BH:86:ASP:CB	29:BH:89:LYS:HB3	2.51	0.40
57:DA:628:G:O6	57:DA:636:G:N1	2.54	0.40
51:B3:21:PHE:CB	51:B3:49:VAL:CG1	2.94	0.40
22:BA:1460:U:H2'	22:BA:1460:U:H6	1.54	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:414:A:C2	1:AA:415:A:C8	3.09	0.40
43:DV:6:ALA:HB1	43:DV:40:ILE:HB	2.03	0.40
57:DA:1802:A:H2'	57:DA:1803:A:C8	2.56	0.40
53:CA:818:G:O2'	53:CA:820:U:C5	2.73	0.40
53:CA:243:A:H4'	53:CA:244:U:OP2	2.21	0.40
57:DA:2717:C:H2'	57:DA:2718:G:O4'	2.21	0.40
31:DJ:37:ARG:HG3	31:DJ:118:MET:SD	2.61	0.40
29:BH:4:ILE:HG12	29:BH:18:GLN:HE22	1.87	0.40
57:DA:381:G:H5''	45:DX:15:ASN:ND2	2.36	0.40
4:AD:2:ARG:CZ	4:AD:114:ARG:CD	2.98	0.40
57:DA:206:U:C2'	57:DA:207:A:H8	2.35	0.40
31:DJ:22:GLY:O	31:DJ:23:LYS:C	2.59	0.40
57:DA:1171:G:C6	57:DA:1179:G:C2	3.10	0.40
4:AD:71:PHE:O	4:AD:74:TYR:HB2	2.21	0.40
2:CB:122:ASP:OD1	2:CB:124:THR:HG22	2.22	0.40
8:CH:80:PRO:HA	8:CH:83:ARG:NE	2.36	0.40
30:DI:32:VAL:HG13	30:DI:58:ILE:HD12	2.03	0.40
57:DA:989:G:OP2	47:DZ:13:ILE:HD11	2.21	0.40
8:AH:4:ASP:OD1	8:AH:7:ALA:HB2	2.22	0.40
32:DK:103:VAL:O	32:DK:104:THR:HB	2.21	0.40
56:CP:44:SER:HB2	56:CP:46:LYS:HG3	2.04	0.40
53:CA:1394:A:C5	53:CA:1501:C:H4'	2.57	0.40
22:BA:1604:C:H2'	22:BA:1605:C:C6	2.57	0.40
20:CT:49:ALA:O	20:CT:52:GLU:HB3	2.21	0.40
22:BA:1277:G:C5'	35:BN:20:MET:HE1	2.46	0.40
57:DA:2652:C:N4	57:DA:2653:U:C4	2.90	0.40
57:DA:552:U:C4	57:DA:553:G:N7	2.90	0.40
22:BA:826:U:O2'	33:BL:53:GLY:CA	2.67	0.40
42:BU:86:PHE:HB3	42:BU:87:GLU:H	1.53	0.40
57:DA:1411:U:H2'	57:DA:1412:U:O4'	2.22	0.40
22:BA:1338:G:O2'	41:BT:18:GLU:HG2	2.20	0.40
29:DH:57:LYS:HE3	29:DH:58:LEU:HD13	2.04	0.40
1:AA:858:G:H2'	1:AA:859:G:H5'	2.02	0.40
42:BU:48:VAL:O	42:BU:53:GLN:HB3	2.22	0.40
22:BA:2259:U:O2'	22:BA:2260:C:H5'	2.21	0.40
22:BA:2671:G:C6	22:BA:2672:U:C4	3.09	0.40
53:CA:158:G:H22	53:CA:162:A:N6	2.20	0.40
15:CO:70:LYS:HG3	15:CO:77:TYR:CD2	2.57	0.40
28:DG:145:ALA:HA	28:DG:148:ARG:HG2	2.03	0.40
28:DG:152:ARG:HA	28:DG:152:ARG:HD2	1.95	0.40
28:DG:152:ARG:HD2	28:DG:153:PRO:CD	2.52	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:950:G:C5	22:BA:951:C:C5	3.09	0.40
22:BA:1464:G:O2'	22:BA:1465:G:H5'	2.21	0.40
58:DB:31:C:C5'	59:DF:29:ARG:HH12	2.32	0.40
53:CA:1087:G:C2	53:CA:1088:G:C5	3.10	0.40
1:AA:994:A:O2'	1:AA:995:C:H5'	2.21	0.40
57:DA:901:C:C6	57:DA:902:C:H5	2.39	0.40
3:CC:148:ILE:CD1	3:CC:201:ILE:HG12	2.49	0.40
22:BA:49:A:N6	22:BA:177:G:N9	2.70	0.40
22:BA:659:G:C6	22:BA:660:C:C4	3.10	0.40
1:AA:233:C:C2	1:AA:234:C:C5	3.10	0.40
53:CA:846:G:H2'	53:CA:847:G:H8	1.86	0.40
28:DG:25:ILE:HG22	28:DG:78:VAL:HG11	2.03	0.40
39:DR:2:TYR:H	39:DR:42:ALA:HB3	1.85	0.40
57:DA:487:C:C2'	57:DA:488:G:H5'	2.51	0.40
11:CK:17:ASP:HA	11:CK:80:ASN:O	2.21	0.40
3:CC:37:LYS:HD3	3:CC:37:LYS:HA	1.97	0.40
57:DA:545:U:H6	57:DA:545:U:H3'	1.87	0.40
8:CH:38:VAL:O	8:CH:41:GLU:HB2	2.20	0.40
1:AA:833:G:H2'	1:AA:834:U:H6	1.86	0.40
32:DK:107:LEU:C	32:DK:109:SER:N	2.75	0.40
57:DA:1082:U:H4'	30:DI:117:THR:O	2.21	0.40
22:BA:2078:C:H2'	22:BA:2079:U:C6	2.57	0.40
59:DF:97:GLU:HG2	59:DF:97:GLU:O	2.20	0.40
8:CH:39:LEU:HB2	8:CH:45:ILE:HD11	2.02	0.40
53:CA:1060:U:C5'	10:CJ:53:ILE:HG12	2.51	0.40
26:BE:46:GLN:CG	26:BE:86:ALA:HA	2.51	0.40
1:AA:420:U:C2'	1:AA:421:U:H5''	2.51	0.40
24:BC:145:MET:SD	24:BC:153:LEU:HD21	2.62	0.40
53:CA:527:G:C2	53:CA:528:C:C6	3.09	0.40
1:AA:1121:U:O2'	1:AA:1122:U:H5'	2.20	0.40
10:CJ:87:LEU:HD22	10:CJ:87:LEU:HA	1.92	0.40
26:DE:175:ILE:HG23	26:DE:175:ILE:O	2.20	0.40
22:BA:1426:G:H8	22:BA:1426:G:O5'	2.05	0.40
15:CO:72:LYS:HA	15:CO:72:LYS:HD3	1.81	0.40
1:AA:814:A:P	63:AA:1758:HOH:O	2.79	0.40
31:BJ:44:TYR:O	31:BJ:45:THR:CB	2.69	0.40
31:BJ:45:THR:HA	31:BJ:46:PRO:HD3	1.72	0.40
44:BW:18:LYS:O	44:BW:20:LEU:HG	2.21	0.40
11:CK:92:ARG:HB3	11:CK:93:GLU:H	1.63	0.40
53:CA:255:G:H5'	17:CQ:17:GLU:O	2.22	0.40
17:CQ:13:SER:CB	17:CQ:21:VAL:HB	2.50	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CA:960:U:C4	53:CA:1225:A:H1'	2.56	0.40
53:CA:1076:U:N3	53:CA:1082:A:C2	2.89	0.40
57:DA:2297:A:HO2'	57:DA:2298:A:H8	1.63	0.40
22:BA:2092:U:O2'	22:BA:2093:G:OP2	2.39	0.40
27:BF:111:ARG:HB3	27:BF:112:ASP:H	1.38	0.40
53:CA:1408:A:C2	53:CA:1494:G:C4	3.09	0.40
57:DA:1020:A:C2	57:DA:1141:U:H2'	2.56	0.40
57:DA:656:G:O2'	57:DA:657:U:C5'	2.70	0.40
17:AQ:15:LYS:O	17:AQ:16:MET:SD	2.79	0.40
58:DB:65:U:H3'	58:DB:108:A:H61	1.83	0.40
38:DQ:4:LYS:O	38:DQ:5:ARG:CB	2.70	0.40
34:BM:126:ILE:O	34:BM:128:THR:HG23	2.22	0.40
57:DA:1346:G:O2'	57:DA:1347:A:P	2.80	0.40
53:CA:1277:C:O2'	53:CA:1279:G:C8	2.66	0.40
58:DB:90:C:H6	58:DB:90:C:C5'	2.33	0.40
57:DA:1540:G:H2'	57:DA:1541:C:H6	1.86	0.40
30:DI:127:SER:O	30:DI:131:THR:HG23	2.21	0.40
55:CM:17:ALA:HB3	55:CM:18:LEU:HD12	2.04	0.40
31:DJ:97:PRO:C	31:DJ:99:ARG:N	2.75	0.40
22:BA:1996:C:C4'	22:BA:1997:C:OP1	2.54	0.40
53:CA:537:G:H2'	53:CA:538:G:H8	1.84	0.40
57:DA:1133:A:C8	57:DA:2026:U:H4'	2.57	0.40
54:CG:8:GLN:NE2	54:CG:9:ARG:HG2	2.36	0.40
38:BQ:40:LYS:HG2	38:BQ:44:TYR:CE1	2.56	0.40
9:AI:44:ARG:HG3	9:AI:45:MET:CE	2.51	0.40
53:CA:16:A:O4'	5:CE:21:SER:HB3	2.21	0.40
24:BC:119:VAL:HG12	24:BC:130:PRO:HG2	2.02	0.40
57:DA:996:A:C4'	38:DQ:91:ARG:HD2	2.47	0.40
57:DA:137:U:H2'	57:DA:138:U:O4'	2.22	0.40
57:DA:686:U:OP2	63:DA:3705:HOH:O	2.22	0.40
43:DV:40:ILE:HD13	43:DV:40:ILE:H	1.87	0.40
57:DA:792:A:H3'	57:DA:793:A:H5'	2.03	0.40
53:CA:722:G:H4'	53:CA:723:U:H5	1.87	0.40
57:DA:2413:G:H2'	57:DA:2414:G:C8	2.56	0.40
53:CA:198:G:C4	53:CA:199:A:N7	2.89	0.40
22:BA:415:A:C2	22:BA:2409:G:C2	3.09	0.40
22:BA:2802:G:H2'	22:BA:2803:G:O4'	2.21	0.40
28:BG:26:LYS:HD2	28:BG:32:LEU:CD2	2.52	0.40
42:DU:64:ILE:HG23	42:DU:64:ILE:O	2.21	0.40
45:DX:2:ARG:HD3	45:DX:32:LEU:HD23	2.02	0.40
57:DA:2102:G:H2'	57:DA:2103:C:H5'	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:CM:65:GLU:H	55:CM:65:GLU:HG3	1.70	0.40
22:BA:18:U:P	38:BQ:29:ARG:HH22	2.43	0.40
57:DA:1683:U:H2'	57:DA:1684:G:C8	2.56	0.40
53:CA:704:A:O2'	53:CA:705:G:O5'	2.39	0.40
22:BA:513:A:HO2'	22:BA:514:A:H5'	1.85	0.40
31:DJ:64:VAL:HG11	31:DJ:69:ARG:CA	2.50	0.40
56:CP:51:ARG:HD3	56:CP:51:ARG:HA	1.88	0.40
5:CE:17:VAL:HG21	5:CE:55:VAL:HG13	2.03	0.40
27:BF:82:TYR:CD2	27:BF:83:PRO:HD2	2.54	0.40
41:BT:4:GLU:CD	41:BT:5:GLU:H	2.25	0.40
57:DA:1426:G:H5'	57:DA:1427:A:OP2	2.21	0.40
1:AA:723:U:H5'	21:AU:48:LYS:HE2	2.03	0.40
25:DD:101:PHE:HA	25:DD:104:VAL:HB	2.04	0.40
2:AB:20:ARG:HD3	2:AB:20:ARG:HA	1.84	0.40
1:AA:208:U:H5	1:AA:210:C:C6	2.39	0.40
1:AA:212:G:C2	1:AA:213:G:C5	3.09	0.40
1:AA:213:G:C8	1:AA:214:C:C5	3.09	0.40
22:BA:1870:C:H3'	22:BA:1871:A:C2	2.56	0.40
57:DA:1723:G:O2'	57:DA:1724:G:H5'	2.22	0.40
7:AG:69:ARG:CG	7:AG:95:ARG:HG2	2.48	0.40
22:BA:141:G:H5'	22:BA:142:A:N7	2.36	0.40
22:BA:142:A:O2'	22:BA:143:C:O5'	2.39	0.40
33:DL:38:GLN:C	33:DL:40:SER:H	2.25	0.40
57:DA:2654:A:N3	57:DA:2656:U:O4	2.55	0.40
1:AA:892:A:O2'	1:AA:893:C:H5'	2.22	0.40
32:BK:88:ASN:HD22	32:BK:91:SER:N	2.20	0.40
43:DV:56:PHE:CD1	43:DV:56:PHE:C	2.95	0.40
3:AC:119:ILE:HA	3:AC:122:GLN:HG3	2.03	0.40
57:DA:391:A:C2	57:DA:411:G:C4	3.09	0.40
22:BA:960:A:O4'	22:BA:2457:U:H4'	2.21	0.40
57:DA:1304:A:HO2'	57:DA:1305:C:C5'	2.34	0.40
53:CA:1271:A:O2'	14:CN:33:VAL:HG21	2.22	0.40
4:AD:104:MET:SD	4:AD:179:GLY:HA3	2.62	0.40
35:BN:8:ARG:HB2	35:BN:43:GLU:CD	2.42	0.40
7:AG:3:ARG:HB2	7:AG:3:ARG:HH11	1.86	0.40
53:CA:369:G:H2'	53:CA:370:C:C6	2.57	0.40
13:AM:113:LYS:N	13:AM:114:PRO:CD	2.77	0.40
1:AA:920:U:O4'	1:AA:1080:A:N1	2.54	0.40
53:CA:1361:G:C2'	53:CA:1362:A:H5'	2.50	0.40
12:AL:73:LEU:HD13	12:AL:73:LEU:HA	1.86	0.40
57:DA:1526:C:C4	57:DA:1527:G:C5	3.09	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:78:VAL:HG11	29:DH:144:VAL:HG12	2.03	0.40
40:BS:33:LEU:HD11	40:BS:52:GLU:HG2	2.04	0.40
48:D0:32:THR:HG21	48:D0:47:TYR:CD2	2.56	0.40
22:BA:2444:G:P	26:BE:63:LYS:HD2	2.61	0.40
57:DA:538:A:O2'	31:DJ:8:PRO:CD	2.69	0.40
33:BL:80:SER:HB3	33:BL:115:GLU:CD	2.41	0.40
48:D0:37:HIS:HB3	48:D0:43:THR:HG22	2.03	0.40
53:CA:992:U:H1'	53:CA:993:G:C2	2.56	0.40
57:DA:9:G:C6	57:DA:2629:U:C5	3.10	0.40
1:AA:901:A:N7	1:AA:902:G:C1'	2.83	0.40
1:AA:135:C:C2'	1:AA:136:C:H5'	2.51	0.40
22:BA:2560:A:C5	22:BA:2561:U:C5	3.10	0.40
59:DF:60:SER:C	59:DF:62:GLN:N	2.75	0.40
22:BA:77:G:C2	22:BA:110:G:N3	2.90	0.40
26:BE:42:GLY:C	26:BE:43:THR:HG23	2.42	0.40
37:BP:64:SER:HB3	37:BP:69:VAL:CG1	2.52	0.40
1:AA:627:G:C4	1:AA:628:G:C8	3.09	0.40
1:AA:627:G:H2'	1:AA:628:G:H8	1.87	0.40
1:AA:771:G:H2'	1:AA:772:U:H6	1.86	0.40
22:BA:312:G:O2'	22:BA:313:G:H5'	2.21	0.40
39:BR:87:GLN:HG2	39:BR:88:GLY:N	2.37	0.40
22:BA:1210:G:OP1	22:BA:1212:G:H5'	2.21	0.40
53:CA:833:G:C5	53:CA:834:U:C5	3.10	0.40
12:CL:20:VAL:C	12:CL:22:ALA:H	2.25	0.40
45:BX:21:LEU:HD23	45:BX:21:LEU:HA	1.84	0.40
53:CA:815:A:H4'	53:CA:817:C:C4	2.57	0.40
2:AB:58:LYS:C	2:AB:58:LYS:HD3	2.42	0.40
22:BA:1576:U:O2'	22:BA:1577:C:H5'	2.21	0.40
14:CN:72:PHE:CD1	14:CN:72:PHE:C	2.94	0.40
25:DD:166:GLY:O	25:DD:167:ASN:HB3	2.21	0.40
25:DD:78:GLY:C	25:DD:80:TRP:CZ3	2.95	0.40
24:DC:246:PRO:HB2	24:DC:247:TRP:CZ3	2.57	0.40
27:BF:62:GLN:HB3	27:BF:63:LYS:H	1.56	0.40
53:CA:1165:U:H2'	53:CA:1166:G:H5'	2.04	0.40
1:AA:1114:C:C4	1:AA:1115:U:C5	3.09	0.40
57:DA:349:U:H2'	57:DA:350:G:H8	1.87	0.40
15:AO:38:LEU:O	15:AO:41:HIS:HB3	2.21	0.40
22:BA:598:U:H2'	22:BA:599:A:C8	2.56	0.40
57:DA:1293:C:H2'	57:DA:1294:U:O4'	2.21	0.40
20:CT:63:LYS:O	20:CT:63:LYS:HG3	2.21	0.40
37:DP:99:LEU:HD23	37:DP:99:LEU:HA	1.92	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:235:U:H2'	22:BA:236:C:H6	1.87	0.40
22:BA:2665:A:N3	22:BA:2665:A:H2'	2.36	0.40
28:BG:17:LYS:HE3	28:BG:17:LYS:HB2	1.95	0.40
26:DE:178:VAL:HG13	26:DE:179:SER:H	1.86	0.40
22:BA:152:A:H2'	22:BA:153:U:C6	2.57	0.40
57:DA:88:G:C2	57:DA:89:A:C8	3.09	0.40
1:AA:457:G:C5	1:AA:458:U:C5	3.10	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	216/218 (99%)	132 (61%)	55 (26%)	29 (13%)	0	1
2	CB	216/218 (99%)	149 (69%)	49 (23%)	18 (8%)	1	7
3	AC	204/206 (99%)	153 (75%)	34 (17%)	17 (8%)	1	7
3	CC	204/206 (99%)	145 (71%)	39 (19%)	20 (10%)	1	4
4	AD	203/205 (99%)	133 (66%)	43 (21%)	27 (13%)	0	1
4	CD	203/205 (99%)	138 (68%)	42 (21%)	23 (11%)	0	3
5	AE	148/150 (99%)	103 (70%)	28 (19%)	17 (12%)	0	3
5	CE	148/150 (99%)	106 (72%)	24 (16%)	18 (12%)	0	2
6	AF	98/100 (98%)	71 (72%)	20 (20%)	7 (7%)	1	10
6	CF	98/100 (98%)	68 (69%)	19 (19%)	11 (11%)	0	3
7	AG	149/151 (99%)	108 (72%)	35 (24%)	6 (4%)	4	27
8	AH	127/129 (98%)	94 (74%)	27 (21%)	6 (5%)	3	22
8	CH	127/129 (98%)	89 (70%)	29 (23%)	9 (7%)	1	10
9	AI	125/127 (98%)	84 (67%)	30 (24%)	11 (9%)	1	5

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	CI	125/127 (98%)	90 (72%)	23 (18%)	12 (10%)	1	5
10	AJ	96/98 (98%)	70 (73%)	16 (17%)	10 (10%)	1	4
10	CJ	96/98 (98%)	55 (57%)	26 (27%)	15 (16%)	0	1
11	AK	115/117 (98%)	86 (75%)	20 (17%)	9 (8%)	1	8
11	CK	115/117 (98%)	86 (75%)	20 (17%)	9 (8%)	1	8
12	AL	121/123 (98%)	88 (73%)	16 (13%)	17 (14%)	0	1
12	CL	121/123 (98%)	83 (69%)	30 (25%)	8 (7%)	1	12
13	AM	112/114 (98%)	84 (75%)	19 (17%)	9 (8%)	1	7
14	AN	92/100 (92%)	58 (63%)	22 (24%)	12 (13%)	0	2
14	CN	91/100 (91%)	60 (66%)	26 (29%)	5 (6%)	2	18
15	AO	86/88 (98%)	62 (72%)	13 (15%)	11 (13%)	0	2
15	CO	86/88 (98%)	65 (76%)	18 (21%)	3 (4%)	4	31
16	AP	80/82 (98%)	56 (70%)	15 (19%)	9 (11%)	0	3
17	AQ	78/80 (98%)	55 (70%)	11 (14%)	12 (15%)	0	1
17	CQ	78/80 (98%)	61 (78%)	8 (10%)	9 (12%)	0	3
18	AR	53/55 (96%)	41 (77%)	10 (19%)	2 (4%)	4	28
18	CR	53/55 (96%)	42 (79%)	10 (19%)	1 (2%)	10	50
19	AS	77/79 (98%)	59 (77%)	12 (16%)	6 (8%)	1	8
19	CS	77/79 (98%)	46 (60%)	24 (31%)	7 (9%)	1	5
20	AT	83/85 (98%)	65 (78%)	10 (12%)	8 (10%)	1	5
20	CT	83/85 (98%)	61 (74%)	13 (16%)	9 (11%)	0	3
21	AU	49/51 (96%)	26 (53%)	15 (31%)	8 (16%)	0	1
21	CU	49/51 (96%)	21 (43%)	12 (24%)	16 (33%)	0	0
24	BC	269/271 (99%)	180 (67%)	61 (23%)	28 (10%)	1	4
24	DC	269/271 (99%)	164 (61%)	72 (27%)	33 (12%)	0	2
25	BD	207/209 (99%)	141 (68%)	37 (18%)	29 (14%)	0	1
25	DD	207/209 (99%)	134 (65%)	41 (20%)	32 (16%)	0	1
26	BE	199/201 (99%)	148 (74%)	31 (16%)	20 (10%)	1	4
26	DE	199/201 (99%)	120 (60%)	54 (27%)	25 (13%)	0	2
27	BF	175/177 (99%)	127 (73%)	29 (17%)	19 (11%)	0	3
28	BG	174/176 (99%)	116 (67%)	34 (20%)	24 (14%)	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
28	DG	174/176 (99%)	104 (60%)	39 (22%)	31 (18%)	0	0
29	BH	147/149 (99%)	63 (43%)	52 (35%)	32 (22%)	0	0
29	DH	147/149 (99%)	73 (50%)	53 (36%)	21 (14%)	0	1
30	BI	139/141 (99%)	84 (60%)	41 (30%)	14 (10%)	1	4
30	DI	139/141 (99%)	83 (60%)	38 (27%)	18 (13%)	0	2
31	BJ	140/142 (99%)	106 (76%)	20 (14%)	14 (10%)	1	4
31	DJ	140/142 (99%)	92 (66%)	30 (21%)	18 (13%)	0	2
32	BK	120/122 (98%)	83 (69%)	20 (17%)	17 (14%)	0	1
32	DK	120/122 (98%)	77 (64%)	21 (18%)	22 (18%)	0	0
33	BL	141/143 (99%)	95 (67%)	30 (21%)	16 (11%)	0	3
33	DL	141/143 (99%)	78 (55%)	42 (30%)	21 (15%)	0	1
34	BM	134/136 (98%)	96 (72%)	24 (18%)	14 (10%)	1	4
34	DM	134/136 (98%)	94 (70%)	25 (19%)	15 (11%)	0	3
35	BN	118/120 (98%)	88 (75%)	20 (17%)	10 (8%)	1	6
35	DN	118/120 (98%)	67 (57%)	35 (30%)	16 (14%)	0	1
36	BO	114/116 (98%)	88 (77%)	17 (15%)	9 (8%)	1	8
36	DO	114/116 (98%)	79 (69%)	27 (24%)	8 (7%)	1	10
37	BP	112/114 (98%)	74 (66%)	23 (20%)	15 (13%)	0	1
37	DP	112/114 (98%)	66 (59%)	28 (25%)	18 (16%)	0	1
38	BQ	115/117 (98%)	99 (86%)	9 (8%)	7 (6%)	2	15
38	DQ	115/117 (98%)	78 (68%)	24 (21%)	13 (11%)	0	3
39	BR	101/103 (98%)	82 (81%)	11 (11%)	8 (8%)	1	8
39	DR	101/103 (98%)	70 (69%)	21 (21%)	10 (10%)	1	4
40	BS	108/110 (98%)	83 (77%)	16 (15%)	9 (8%)	1	7
40	DS	108/110 (98%)	76 (70%)	24 (22%)	8 (7%)	1	9
41	BT	91/93 (98%)	58 (64%)	20 (22%)	13 (14%)	0	1
41	DT	91/93 (98%)	49 (54%)	26 (29%)	16 (18%)	0	0
42	BU	100/102 (98%)	70 (70%)	16 (16%)	14 (14%)	0	1
42	DU	100/102 (98%)	51 (51%)	27 (27%)	22 (22%)	0	0
43	BV	92/94 (98%)	77 (84%)	14 (15%)	1 (1%)	17	62
43	DV	92/94 (98%)	65 (71%)	22 (24%)	5 (5%)	2	19

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
44	BW	77/79 (98%)	31 (40%)	18 (23%)	28 (36%)	0	0
44	DW	77/79 (98%)	32 (42%)	26 (34%)	19 (25%)	0	0
45	BX	75/77 (97%)	58 (77%)	13 (17%)	4 (5%)	2	19
45	DX	75/77 (97%)	48 (64%)	19 (25%)	8 (11%)	0	3
46	BY	61/63 (97%)	40 (66%)	13 (21%)	8 (13%)	0	2
46	DY	61/63 (97%)	43 (70%)	13 (21%)	5 (8%)	1	7
47	BZ	56/58 (97%)	43 (77%)	10 (18%)	3 (5%)	2	19
47	DZ	56/58 (97%)	34 (61%)	16 (29%)	6 (11%)	0	3
48	B0	54/56 (96%)	42 (78%)	7 (13%)	5 (9%)	1	5
48	D0	54/56 (96%)	40 (74%)	7 (13%)	7 (13%)	0	2
49	B1	48/50 (96%)	35 (73%)	10 (21%)	3 (6%)	2	13
49	D1	48/50 (96%)	37 (77%)	6 (12%)	5 (10%)	1	4
50	B2	44/46 (96%)	39 (89%)	4 (9%)	1 (2%)	8	44
50	D2	44/46 (96%)	30 (68%)	7 (16%)	7 (16%)	0	1
51	B3	62/64 (97%)	51 (82%)	8 (13%)	3 (5%)	3	22
51	D3	62/64 (97%)	40 (64%)	17 (27%)	5 (8%)	1	7
52	B4	36/38 (95%)	27 (75%)	6 (17%)	3 (8%)	1	7
52	D4	36/38 (95%)	22 (61%)	9 (25%)	5 (14%)	0	1
54	CG	148/150 (99%)	98 (66%)	42 (28%)	8 (5%)	2	19
55	CM	111/113 (98%)	63 (57%)	36 (32%)	12 (11%)	0	3
56	CP	78/80 (98%)	49 (63%)	19 (24%)	10 (13%)	0	2
59	DF	176/178 (99%)	98 (56%)	44 (25%)	34 (19%)	0	0
All	All	11238/11447 (98%)	7571 (67%)	2387 (21%)	1280 (11%)	0	3

All (1280) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	20	ARG
2	AB	40	ILE
2	AB	72	LYS
2	AB	75	ALA
2	AB	119	GLN
2	AB	133	ALA
2	AB	169	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	200	PRO
3	AC	16	PRO
3	AC	17	TRP
3	AC	60	ALA
3	AC	205	GLU
4	AD	26	ALA
4	AD	28	ASP
4	AD	29	THR
4	AD	34	GLU
4	AD	131	ILE
4	AD	159	GLU
4	AD	191	SER
4	AD	192	ALA
5	AE	44	ARG
5	AE	97	PRO
5	AE	137	ARG
5	AE	156	ARG
5	AE	157	GLY
6	AF	54	LEU
6	AF	86	ARG
7	AG	93	VAL
8	AH	26	MET
8	AH	49	LYS
8	AH	66	GLN
9	AI	8	THR
9	AI	40	ARG
9	AI	43	ALA
9	AI	55	ASP
9	AI	71	ILE
9	AI	128	LYS
10	AJ	57	VAL
10	AJ	61	ALA
10	AJ	92	LEU
11	AK	13	LYS
11	AK	51	PHE
11	AK	125	LYS
11	AK	126	ARG
12	AL	23	LEU
12	AL	24	GLU
12	AL	43	LYS
12	AL	75	GLU
13	AM	46	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	AN	22	LYS
14	AN	33	VAL
14	AN	51	PRO
14	AN	61	ASN
15	AO	17	ASP
16	AP	11	ALA
16	AP	80	LYS
17	AQ	12	VAL
17	AQ	16	MET
17	AQ	52	CYS
17	AQ	70	LYS
19	AS	48	ILE
19	AS	63	ASP
20	AT	3	ILE
20	AT	4	LYS
20	AT	5	SER
21	AU	11	PHE
21	AU	12	ASP
24	BC	57	HIS
24	BC	104	LEU
24	BC	105	ALA
24	BC	120	ASP
24	BC	121	ALA
24	BC	140	VAL
25	BD	43	ASP
25	BD	73	VAL
25	BD	92	VAL
25	BD	99	GLU
25	BD	103	ASP
25	BD	104	VAL
25	BD	122	VAL
25	BD	169	ARG
25	BD	183	GLU
25	BD	191	GLY
26	BE	8	ALA
26	BE	46	GLN
26	BE	79	ARG
26	BE	80	SER
26	BE	86	ALA
26	BE	175	ILE
27	BF	134	GLN
27	BF	175	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	BG	7	PRO
28	BG	8	VAL
28	BG	31	GLU
28	BG	33	THR
28	BG	44	HIS
28	BG	45	ALA
28	BG	84	LYS
28	BG	94	ARG
28	BG	118	ALA
28	BG	168	VAL
29	BH	8	LYS
29	BH	9	VAL
29	BH	10	ALA
29	BH	14	SER
29	BH	28	ASN
29	BH	32	PRO
29	BH	33	GLN
29	BH	83	LYS
29	BH	101	ASP
30	BI	65	SER
30	BI	92	PRO
31	BJ	4	PHE
31	BJ	21	THR
31	BJ	41	LYS
31	BJ	44	TYR
31	BJ	45	THR
31	BJ	111	LYS
32	BK	13	ASN
32	BK	35	VAL
32	BK	46	ALA
32	BK	48	PRO
32	BK	49	ARG
32	BK	71	ARG
32	BK	72	PRO
32	BK	108	ARG
33	BL	15	ALA
33	BL	29	LYS
33	BL	66	PHE
34	BM	2	LEU
34	BM	14	LYS
34	BM	36	VAL
34	BM	54	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	BM	56	ALA
34	BM	60	GLN
34	BM	69	PRO
34	BM	77	PRO
35	BN	14	SER
35	BN	80	PHE
35	BN	101	GLY
35	BN	117	ASP
36	BO	3	LYS
36	BO	68	LYS
36	BO	112	GLU
37	BP	25	VAL
37	BP	33	GLU
37	BP	50	ARG
37	BP	103	THR
37	BP	105	LYS
38	BQ	87	VAL
38	BQ	91	ARG
40	BS	3	THR
40	BS	14	ALA
40	BS	19	LEU
41	BT	27	SER
41	BT	29	THR
41	BT	69	ARG
41	BT	88	LYS
42	BU	6	ARG
42	BU	51	LEU
42	BU	88	ASP
43	BV	69	GLU
44	BW	9	THR
44	BW	10	ARG
44	BW	18	LYS
44	BW	23	LYS
44	BW	27	GLY
44	BW	29	SER
44	BW	30	VAL
44	BW	48	ALA
44	BW	50	VAL
45	BX	34	SER
45	BX	53	LYS
46	BY	23	ARG
46	BY	24	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	BY	37	LEU
47	BZ	3	THR
47	BZ	9	THR
48	B0	54	ILE
49	B1	51	ALA
50	B2	44	VAL
52	B4	4	ARG
52	B4	16	ILE
2	CB	81	ASP
2	CB	84	LEU
2	CB	102	ASN
2	CB	129	THR
2	CB	150	ILE
3	CC	59	PRO
3	CC	63	ILE
4	CD	24	VAL
4	CD	25	ARG
4	CD	26	ALA
4	CD	35	GLN
4	CD	80	ARG
4	CD	82	LYS
4	CD	191	SER
4	CD	192	ALA
5	CE	31	SER
5	CE	100	GLU
5	CE	144	GLU
6	CF	44	ARG
6	CF	68	GLN
6	CF	82	ASP
6	CF	99	ALA
54	CG	29	LEU
54	CG	30	MET
54	CG	31	VAL
54	CG	52	ARG
9	CI	71	ILE
11	CK	70	ALA
11	CK	118	ASN
11	CK	126	ARG
11	CK	127	ARG
55	CM	4	ALA
55	CM	65	GLU
14	CN	95	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	CP	63	GLN
17	CQ	52	CYS
19	CS	46	LEU
20	CT	3	ILE
20	CT	43	LYS
20	CT	65	LEU
21	CU	4	LYS
21	CU	8	ASN
21	CU	9	GLU
21	CU	15	LEU
21	CU	23	GLU
21	CU	32	ARG
21	CU	35	GLU
21	CU	36	PHE
21	CU	38	GLU
24	DC	9	SER
24	DC	28	PRO
24	DC	69	ASN
24	DC	140	VAL
24	DC	217	PRO
24	DC	232	GLY
24	DC	269	ARG
25	DD	11	MET
25	DD	14	ILE
25	DD	31	ALA
25	DD	74	GLU
25	DD	77	ARG
25	DD	95	SER
25	DD	102	ALA
25	DD	112	THR
25	DD	150	GLN
25	DD	162	ALA
25	DD	164	GLN
25	DD	170	VAL
25	DD	175	LEU
25	DD	194	PRO
26	DE	41	GLN
26	DE	55	SER
26	DE	62	GLN
26	DE	73	ILE
26	DE	99	LYS
26	DE	116	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DE	127	GLU
59	DF	10	GLU
59	DF	12	VAL
59	DF	32	LYS
59	DF	36	ASN
59	DF	42	ALA
59	DF	43	ILE
59	DF	112	ASP
59	DF	114	ARG
59	DF	120	SER
59	DF	122	ASP
59	DF	137	PHE
59	DF	145	VAL
59	DF	148	VAL
28	DG	49	LEU
28	DG	59	ASP
28	DG	95	ALA
28	DG	165	ASP
29	DH	3	VAL
29	DH	9	VAL
29	DH	10	ALA
29	DH	39	ALA
29	DH	76	GLU
29	DH	98	ASP
29	DH	102	ALA
30	DI	22	PRO
30	DI	29	GLN
30	DI	58	ILE
31	DJ	45	THR
31	DJ	81	ILE
31	DJ	83	GLY
31	DJ	95	ARG
32	DK	18	ARG
32	DK	29	HIS
32	DK	49	ARG
32	DK	71	ARG
32	DK	110	GLU
32	DK	120	PRO
33	DL	4	ASN
33	DL	29	LYS
33	DL	41	ARG
33	DL	82	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	DL	85	VAL
33	DL	89	VAL
33	DL	101	ILE
33	DL	111	ILE
34	DM	2	LEU
34	DM	72	PRO
34	DM	73	ILE
34	DM	77	PRO
34	DM	135	VAL
35	DN	10	LEU
35	DN	30	ARG
35	DN	63	ARG
35	DN	104	ALA
37	DP	25	VAL
37	DP	50	ARG
37	DP	83	ILE
37	DP	94	ALA
37	DP	108	ARG
37	DP	112	ARG
38	DQ	23	TYR
40	DS	28	LYS
40	DS	33	LEU
40	DS	72	THR
41	DT	14	PRO
41	DT	15	HIS
41	DT	20	ALA
41	DT	29	THR
41	DT	56	GLU
41	DT	88	LYS
42	DU	65	GLN
42	DU	82	VAL
42	DU	92	VAL
42	DU	96	LYS
43	DV	56	PHE
43	DV	58	SER
44	DW	9	THR
44	DW	34	SER
44	DW	35	ILE
44	DW	83	ALA
45	DX	41	SER
47	DZ	30	ARG
48	D0	54	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	D2	40	ALA
51	D3	3	ILE
51	D3	29	ARG
51	D3	51	LYS
52	D4	3	VAL
52	D4	8	LYS
52	D4	20	ASP
2	AB	17	HIS
2	AB	18	GLN
2	AB	21	TYR
2	AB	22	TRP
2	AB	37	VAL
2	AB	63	LYS
2	AB	125	PHE
2	AB	140	LEU
2	AB	189	ASN
2	AB	210	THR
2	AB	211	LEU
3	AC	14	VAL
3	AC	126	ARG
3	AC	165	GLU
4	AD	22	SER
4	AD	23	GLY
4	AD	31	CYS
4	AD	33	ILE
4	AD	35	GLN
4	AD	147	LYS
4	AD	148	ALA
4	AD	150	LYS
4	AD	152	SER
4	AD	173	ASP
4	AD	174	ALA
5	AE	11	GLN
5	AE	50	GLY
5	AE	98	ALA
5	AE	121	ASN
5	AE	154	ALA
7	AG	95	ARG
7	AG	129	ASN
8	AH	48	PHE
8	AH	77	VAL
8	AH	88	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	AJ	74	VAL
10	AJ	101	SER
12	AL	33	CYS
12	AL	73	LEU
12	AL	88	ASP
12	AL	97	VAL
12	AL	117	GLY
13	AM	4	ALA
14	AN	27	LYS
14	AN	44	VAL
14	AN	52	ARG
16	AP	10	GLY
16	AP	16	PHE
16	AP	36	VAL
17	AQ	34	GLY
17	AQ	75	VAL
18	AR	47	ARG
19	AS	27	LYS
20	AT	67	HIS
21	AU	8	ASN
24	BC	188	ARG
24	BC	239	PHE
25	BD	144	GLY
25	BD	153	GLY
25	BD	170	VAL
25	BD	192	ALA
26	BE	45	ALA
26	BE	116	ASP
26	BE	123	LYS
26	BE	153	LEU
26	BE	173	THR
27	BF	61	GLY
28	BG	9	VAL
28	BG	30	GLY
28	BG	53	PRO
28	BG	60	GLY
28	BG	164	ALA
28	BG	170	THR
29	BH	3	VAL
29	BH	15	LEU
29	BH	34	GLY
29	BH	54	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	BH	81	ALA
29	BH	107	GLY
29	BH	111	ALA
29	BH	121	VAL
29	BH	131	SER
30	BI	30	GLN
30	BI	105	LEU
31	BJ	14	ASP
31	BJ	81	ILE
32	BK	50	GLY
32	BK	93	GLN
33	BL	27	LEU
33	BL	31	GLY
33	BL	65	GLY
33	BL	88	GLY
33	BL	111	ILE
33	BL	114	GLY
34	BM	35	ALA
34	BM	55	ARG
35	BN	59	SER
35	BN	84	GLY
36	BO	22	GLY
36	BO	58	ILE
36	BO	113	ALA
37	BP	15	ASP
38	BQ	4	LYS
39	BR	49	ILE
39	BR	55	ASP
40	BS	64	ALA
40	BS	96	ILE
41	BT	16	VAL
41	BT	38	ALA
41	BT	39	THR
41	BT	68	LYS
41	BT	70	HIS
42	BU	18	LYS
42	BU	45	GLN
42	BU	98	ASN
44	BW	15	SER
44	BW	33	GLY
44	BW	34	SER
44	BW	37	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	BW	40	ARG
44	BW	47	GLY
44	BW	51	GLY
44	BW	74	LYS
46	BY	22	LEU
48	B0	34	GLY
48	B0	35	GLU
48	B0	51	ARG
51	B3	22	LYS
51	B3	30	HIS
2	CB	26	MET
2	CB	85	SER
2	CB	128	LEU
2	CB	148	GLY
2	CB	149	GLY
2	CB	205	ALA
3	CC	60	ALA
3	CC	77	GLY
3	CC	87	ARG
3	CC	100	ILE
3	CC	140	ALA
3	CC	178	ARG
3	CC	205	GLU
4	CD	12	ARG
4	CD	27	ILE
4	CD	29	THR
4	CD	39	GLN
4	CD	47	LEU
4	CD	187	ARG
4	CD	188	SER
5	CE	29	ILE
5	CE	68	ARG
5	CE	69	ASN
5	CE	81	GLN
5	CE	104	ILE
5	CE	111	ARG
5	CE	143	LEU
6	CF	85	ILE
6	CF	94	HIS
6	CF	98	GLU
54	CG	36	SER
54	CG	62	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	CG	113	LYS
54	CG	133	ALA
8	CH	2	MET
8	CH	30	LYS
8	CH	43	GLY
8	CH	117	GLN
9	CI	44	ARG
9	CI	54	VAL
9	CI	58	GLU
10	CJ	34	ALA
10	CJ	44	THR
10	CJ	46	LYS
10	CJ	57	VAL
10	CJ	74	VAL
10	CJ	83	THR
10	CJ	93	ALA
11	CK	14	GLN
11	CK	90	PRO
11	CK	91	GLY
11	CK	104	PHE
12	CL	8	ARG
12	CL	16	ALA
12	CL	34	THR
12	CL	43	LYS
12	CL	117	GLY
55	CM	11	HIS
55	CM	14	ALA
55	CM	49	GLU
55	CM	76	ILE
14	CN	21	ALA
14	CN	53	ASP
15	CO	13	GLU
56	CP	31	ARG
56	CP	78	VAL
17	CQ	69	THR
17	CQ	76	ARG
18	CR	70	THR
19	CS	4	LEU
19	CS	7	GLY
20	CT	82	ILE
21	CU	30	GLU
21	CU	31	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	CU	34	ARG
24	DC	3	VAL
24	DC	34	GLU
24	DC	35	LYS
24	DC	36	ASN
24	DC	59	GLN
24	DC	121	ALA
24	DC	141	HIS
25	DD	93	GLY
25	DD	118	PHE
25	DD	119	ALA
25	DD	120	GLY
25	DD	136	ASN
25	DD	143	PRO
25	DD	176	ASP
26	DE	22	ASP
26	DE	69	ARG
26	DE	80	SER
26	DE	81	GLY
26	DE	96	VAL
26	DE	153	LEU
26	DE	165	HIS
26	DE	188	MET
59	DF	8	LYS
59	DF	41	GLU
59	DF	67	THR
59	DF	76	PHE
59	DF	113	PHE
59	DF	138	PRO
28	DG	40	VAL
28	DG	83	THR
28	DG	85	LYS
28	DG	86	LEU
28	DG	92	GLY
28	DG	93	TYR
28	DG	123	GLU
28	DG	125	PRO
28	DG	126	THR
28	DG	149	ALA
28	DG	150	TYR
28	DG	164	ALA
29	DH	61	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	DH	66	ASN
29	DH	72	ILE
29	DH	97	ARG
29	DH	99	ILE
30	DI	23	VAL
30	DI	30	GLN
30	DI	51	GLY
30	DI	52	LEU
30	DI	62	ALA
30	DI	69	VAL
30	DI	140	GLU
31	DJ	39	LYS
31	DJ	84	ILE
31	DJ	87	ALA
32	DK	16	ALA
32	DK	30	ARG
32	DK	35	VAL
32	DK	46	ALA
32	DK	93	GLN
32	DK	98	ARG
32	DK	103	VAL
32	DK	104	THR
33	DL	66	PHE
33	DL	115	GLU
34	DM	14	LYS
35	DN	2	ARG
35	DN	91	ALA
35	DN	102	PHE
36	DO	3	LYS
36	DO	72	ALA
36	DO	90	VAL
37	DP	32	VAL
37	DP	51	ASN
37	DP	85	VAL
38	DQ	5	ARG
38	DQ	86	SER
38	DQ	88	GLU
38	DQ	91	ARG
39	DR	8	GLY
39	DR	40	MET
40	DS	40	ASN
40	DS	71	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	DT	18	GLU
41	DT	19	LYS
41	DT	39	THR
41	DT	68	LYS
41	DT	74	ILE
42	DU	4	ILE
42	DU	87	GLU
42	DU	88	ASP
42	DU	89	GLY
42	DU	95	PHE
42	DU	97	SER
43	DV	33	GLY
43	DV	55	GLU
44	DW	18	LYS
44	DW	26	GLY
44	DW	33	GLY
44	DW	46	ALA
44	DW	53	GLY
44	DW	57	THR
44	DW	71	LYS
45	DX	2	ARG
45	DX	25	LYS
45	DX	34	SER
46	DY	9	LYS
46	DY	22	LEU
46	DY	37	LEU
47	DZ	4	ILE
47	DZ	13	ILE
48	D0	21	LEU
48	D0	55	ALA
49	D1	35	LEU
49	D1	36	LYS
50	D2	24	THR
50	D2	43	THR
51	D3	6	VAL
51	D3	22	LYS
2	AB	33	ALA
2	AB	58	LYS
2	AB	128	LEU
2	AB	142	LYS
2	AB	150	ILE
2	AB	219	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	192	TYR
4	AD	124	VAL
4	AD	167	PRO
4	AD	195	ASN
4	AD	196	GLU
5	AE	109	ALA
5	AE	149	PRO
6	AF	7	VAL
9	AI	119	LYS
11	AK	97	ARG
12	AL	102	ASP
13	AM	3	ILE
13	AM	113	LYS
14	AN	41	TRP
14	AN	43	ALA
15	AO	45	HIS
16	AP	49	GLY
16	AP	78	VAL
17	AQ	11	VAL
17	AQ	49	ASN
17	AQ	50	ASN
17	AQ	67	SER
21	AU	23	GLU
24	BC	22	GLU
24	BC	77	VAL
24	BC	149	LYS
24	BC	157	ALA
24	BC	196	ASN
24	BC	224	MET
24	BC	243	PRO
24	BC	265	PHE
25	BD	71	ALA
25	BD	107	VAL
25	BD	118	PHE
25	BD	173	GLN
25	BD	182	ALA
25	BD	190	LYS
26	BE	11	ALA
26	BE	69	ARG
27	BF	111	ARG
27	BF	132	ARG
27	BF	147	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BF	174	PHE
28	BG	28	LYS
29	BH	7	ASP
29	BH	30	LEU
29	BH	89	LYS
29	BH	125	THR
30	BI	59	THR
31	BJ	2	LYS
31	BJ	65	THR
31	BJ	74	TYR
32	BK	73	ASP
32	BK	75	SER
32	BK	92	GLU
33	BL	19	LEU
33	BL	58	TYR
33	BL	64	PHE
33	BL	94	THR
35	BN	3	HIS
35	BN	15	SER
35	BN	55	ALA
36	BO	59	ALA
36	BO	77	ALA
36	BO	111	ARG
37	BP	65	ASN
38	BQ	86	SER
39	BR	53	PHE
41	BT	86	THR
42	BU	8	ASP
42	BU	85	ARG
42	BU	87	GLU
42	BU	92	VAL
44	BW	22	VAL
44	BW	26	GLY
44	BW	39	GLN
44	BW	41	GLY
46	BY	9	LYS
46	BY	41	HIS
49	B1	4	ILE
51	B3	31	ILE
2	CB	73	ARG
3	CC	130	ARG
3	CC	145	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	CC	164	THR
3	CC	173	PRO
3	CC	186	SER
3	CC	188	ALA
4	CD	3	TYR
4	CD	33	ILE
4	CD	40	HIS
5	CE	38	VAL
5	CE	43	GLY
5	CE	75	LEU
5	CE	112	ALA
6	CF	92	THR
8	CH	29	SER
8	CH	41	GLU
9	CI	11	ARG
9	CI	52	GLU
9	CI	55	ASP
10	CJ	87	LEU
11	CK	88	PRO
12	CL	42	LYS
12	CL	47	ALA
55	CM	45	SER
55	CM	46	GLU
55	CM	77	LYS
56	CP	47	GLU
56	CP	53	ASP
17	CQ	12	VAL
17	CQ	31	PRO
17	CQ	79	GLU
20	CT	72	ALA
20	CT	77	ASN
21	CU	7	GLU
21	CU	11	PHE
24	DC	13	ARG
24	DC	37	SER
24	DC	88	ALA
24	DC	98	GLY
24	DC	195	GLY
24	DC	237	ARG
25	DD	107	VAL
25	DD	169	ARG
25	DD	197	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DE	13	THR
26	DE	45	ALA
26	DE	46	GLN
26	DE	166	LYS
59	DF	37	MET
59	DF	116	LEU
59	DF	133	GLU
28	DG	9	VAL
28	DG	11	PRO
28	DG	39	ALA
28	DG	45	ALA
28	DG	80	GLU
28	DG	117	PRO
28	DG	155	PRO
29	DH	23	ALA
29	DH	28	ASN
29	DH	124	THR
30	DI	19	PRO
30	DI	35	MET
31	DJ	44	TYR
31	DJ	112	GLY
31	DJ	113	PRO
32	DK	6	THR
32	DK	14	SER
32	DK	17	ARG
32	DK	72	PRO
33	DL	43	GLY
33	DL	64	PHE
33	DL	88	GLY
33	DL	117	THR
34	DM	95	LEU
35	DN	8	ARG
35	DN	82	GLU
36	DO	8	ILE
37	DP	33	GLU
37	DP	65	ASN
37	DP	93	LYS
37	DP	109	ILE
38	DQ	4	LYS
38	DQ	29	ARG
38	DQ	32	ARG
38	DQ	39	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	DQ	87	VAL
39	DR	3	ALA
39	DR	29	THR
39	DR	65	ALA
40	DS	32	ALA
41	DT	38	ALA
41	DT	66	LYS
42	DU	40	LEU
42	DU	54	PRO
44	DW	16	GLU
44	DW	23	LYS
44	DW	24	ARG
44	DW	36	ILE
44	DW	39	GLN
45	DX	21	LEU
48	D0	32	THR
48	D0	53	VAL
50	D2	4	THR
2	AB	96	LEU
3	AC	35	ASP
3	AC	100	ILE
3	AC	139	ASN
3	AC	148	ILE
4	AD	125	ASN
4	AD	197	HIS
5	AE	23	THR
6	AF	39	LEU
6	AF	56	LYS
7	AG	130	LYS
9	AI	37	TYR
9	AI	120	ALA
10	AJ	36	VAL
11	AK	124	LYS
12	AL	22	ALA
12	AL	72	ASN
12	AL	77	SER
13	AM	104	ASN
14	AN	63	CYS
15	AO	16	ARG
15	AO	24	THR
15	AO	72	LYS
15	AO	86	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	AQ	10	ARG
19	AS	5	LYS
24	BC	109	LEU
24	BC	135	PRO
24	BC	246	PRO
24	BC	264	LYS
25	BD	72	GLY
25	BD	109	VAL
25	BD	119	ALA
25	BD	175	LEU
25	BD	181	ASP
26	BE	10	SER
27	BF	2	LYS
27	BF	10	GLU
27	BF	54	ALA
27	BF	113	PHE
28	BG	61	TRP
28	BG	91	VAL
28	BG	97	VAL
28	BG	119	GLY
29	BH	16	GLY
29	BH	29	PHE
29	BH	40	THR
29	BH	138	VAL
30	BI	6	ALA
30	BI	83	ALA
30	BI	89	SER
32	BK	3	GLN
32	BK	69	VAL
33	BL	40	SER
33	BL	54	GLN
35	BN	2	ARG
37	BP	5	LYS
37	BP	51	ASN
37	BP	93	LYS
38	BQ	5	ARG
39	BR	51	VAL
39	BR	91	GLN
39	BR	100	GLY
41	BT	35	ALA
41	BT	90	GLY
42	BU	38	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	BW	14	ASP
44	BW	25	PHE
44	BW	70	VAL
45	BX	17	ARG
47	BZ	34	THR
49	B1	50	GLU
2	CB	18	GLN
2	CB	22	TRP
3	CC	180	ASP
4	CD	11	SER
5	CE	56	PRO
8	CH	98	LEU
10	CJ	61	ALA
10	CJ	82	LYS
55	CM	42	VAL
55	CM	93	GLY
15	CO	19	ASN
56	CP	54	LEU
56	CP	69	ASP
17	CQ	78	VAL
19	CS	3	SER
20	CT	67	HIS
20	CT	76	ALA
21	CU	10	PRO
21	CU	26	GLY
24	DC	64	VAL
24	DC	72	GLY
24	DC	147	PRO
24	DC	227	VAL
24	DC	238	ASN
24	DC	239	PHE
25	DD	43	ASP
25	DD	106	LYS
25	DD	109	VAL
25	DD	145	SER
25	DD	167	ASN
26	DE	148	ILE
26	DE	187	VAL
59	DF	70	ARG
59	DF	83	PRO
59	DF	94	ARG
59	DF	104	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	DF	142	TYR
28	DG	46	ASP
28	DG	91	VAL
28	DG	166	GLU
29	DH	121	VAL
29	DH	144	VAL
30	DI	87	SER
30	DI	119	ALA
31	DJ	25	LEU
31	DJ	74	TYR
31	DJ	120	ARG
32	DK	89	ASN
32	DK	105	ARG
32	DK	119	ALA
33	DL	93	ASN
33	DL	99	ASN
33	DL	100	ILE
34	DM	69	PRO
34	DM	70	ASP
34	DM	87	GLY
34	DM	106	ASP
34	DM	111	GLU
34	DM	134	THR
35	DN	13	ASN
35	DN	17	ARG
35	DN	105	GLY
36	DO	7	ARG
37	DP	20	ARG
38	DQ	44	TYR
39	DR	53	PHE
39	DR	80	ARG
39	DR	98	ILE
42	DU	34	ILE
42	DU	67	SER
42	DU	101	THR
45	DX	33	HIS
46	DY	46	VAL
49	D1	50	GLU
50	D2	8	SER
50	D2	39	ARG
3	AC	65	VAL
3	AC	107	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	145	ALA
3	AC	191	THR
4	AD	166	LYS
5	AE	77	ASN
5	AE	144	GLU
6	AF	15	SER
6	AF	63	ASN
7	AG	84	TYR
9	AI	56	MET
9	AI	122	ARG
10	AJ	35	GLN
11	AK	88	PRO
12	AL	122	LYS
13	AM	6	ILE
13	AM	84	CYS
14	AN	91	GLU
15	AO	43	ALA
15	AO	68	TYR
17	AQ	5	ARG
18	AR	54	LEU
20	AT	72	ALA
20	AT	74	HIS
21	AU	37	TYR
24	BC	59	GLN
24	BC	64	VAL
24	BC	110	LYS
24	BC	150	GLY
24	BC	252	LYS
25	BD	145	SER
25	BD	150	GLN
26	BE	53	THR
26	BE	70	SER
26	BE	83	VAL
26	BE	96	VAL
27	BF	20	ASN
27	BF	83	PRO
27	BF	133	GLU
27	BF	150	GLY
28	BG	16	VAL
28	BG	20	GLY
28	BG	46	ASP
29	BH	25	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	BH	35	LYS
30	BI	3	LYS
30	BI	20	SER
31	BJ	13	ARG
31	BJ	125	TYR
32	BK	5	GLN
32	BK	119	ALA
34	BM	73	ILE
34	BM	81	ARG
34	BM	134	THR
37	BP	2	ASN
37	BP	20	ARG
38	BQ	95	ALA
39	BR	98	ILE
40	BS	56	ALA
40	BS	57	ASN
41	BT	55	VAL
42	BU	101	THR
44	BW	36	ILE
44	BW	76	ARG
44	BW	78	PHE
46	BY	46	VAL
46	BY	57	LEU
52	B4	8	LYS
2	CB	177	ASN
2	CB	179	GLY
2	CB	188	THR
2	CB	200	PRO
3	CC	24	ASN
3	CC	65	VAL
3	CC	128	MET
4	CD	68	GLU
4	CD	196	GLU
5	CE	113	VAL
8	CH	74	ILE
9	CI	103	VAL
9	CI	119	LYS
10	CJ	36	VAL
10	CJ	75	ASP
15	CO	87	ARG
56	CP	43	ALA
56	CP	46	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	CQ	81	ALA
19	CS	54	ARG
19	CS	79	TYR
20	CT	73	ARG
24	DC	96	LYS
24	DC	106	PRO
24	DC	197	ALA
24	DC	204	LEU
25	DD	99	GLU
26	DE	60	TRP
59	DF	31	GLU
59	DF	82	TYR
59	DF	84	ILE
59	DF	175	PRO
28	DG	152	ARG
29	DH	25	TYR
29	DH	103	VAL
29	DH	143	ILE
30	DI	83	ALA
31	DJ	13	ARG
31	DJ	42	ALA
32	DK	48	PRO
33	DL	19	LEU
33	DL	105	ILE
35	DN	36	THR
35	DN	70	THR
36	DO	109	ALA
37	DP	63	ILE
37	DP	113	LEU
38	DQ	6	GLY
38	DQ	58	GLN
39	DR	89	HIS
42	DU	12	VAL
43	DV	84	PRO
44	DW	41	GLY
44	DW	49	ASN
45	DX	27	ARG
46	DY	2	LYS
47	DZ	52	PHE
48	D0	17	SER
49	D1	38	PHE
52	D4	16	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	120	SER
2	AB	141	GLU
3	AC	173	PRO
5	AE	104	ILE
10	AJ	33	GLY
11	AK	40	ALA
13	AM	11	HIS
15	AO	2	LEU
15	AO	35	ILE
19	AS	22	VAL
19	AS	26	ASP
20	AT	76	ALA
21	AU	33	ARG
21	AU	36	PHE
24	BC	37	SER
24	BC	230	PRO
25	BD	11	MET
26	BE	13	THR
27	BF	128	SER
27	BF	149	ARG
29	BH	31	VAL
30	BI	7	TYR
33	BL	41	ARG
38	BQ	101	ASP
40	BS	32	ALA
42	BU	26	ASN
42	BU	53	GLN
44	BW	17	ALA
45	BX	69	GLU
4	CD	166	LYS
5	CE	89	THR
6	CF	63	ASN
6	CF	69	GLU
8	CH	58	LEU
9	CI	31	GLN
9	CI	127	SER
10	CJ	41	PRO
17	CQ	4	ILE
26	DE	129	PRO
59	DF	88	VAL
28	DG	170	THR
29	DH	134	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	DI	31	GLY
31	DJ	23	LYS
31	DJ	43	GLU
33	DL	28	GLY
34	DM	16	ARG
36	DO	27	VAL
37	DP	57	ALA
40	DS	29	VAL
41	DT	50	LEU
42	DU	33	VAL
42	DU	41	VAL
42	DU	52	ASN
45	DX	63	ILE
47	DZ	32	GLY
48	D0	26	SER
4	AD	172	VAL
5	AE	148	SER
10	AJ	41	PRO
12	AL	86	VAL
16	AP	42	ILE
21	AU	52	VAL
25	BD	93	GLY
27	BF	11	VAL
30	BI	97	VAL
31	BJ	73	VAL
34	BM	87	GLY
37	BP	4	ILE
37	BP	104	GLY
39	BR	27	ILE
55	CM	50	GLY
26	DE	82	GLY
36	DO	42	PRO
41	DT	53	VAL
42	DU	35	VAL
7	AG	6	ILE
10	AJ	42	LEU
11	AK	15	VAL
15	AO	85	GLY
20	AT	57	VAL
24	BC	28	PRO
29	BH	13	GLY
29	BH	80	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	BS	63	GLY
48	B0	53	VAL
4	CD	37	PRO
5	CE	17	VAL
10	CJ	33	GLY
14	CN	56	PRO
56	CP	49	GLY
24	DC	246	PRO
25	DD	44	GLY
30	DI	138	VAL
31	DJ	139	VAL
33	DL	46	VAL
37	DP	34	GLY
40	DS	74	ILE
41	DT	16	VAL
49	D1	4	ILE
2	AB	209	VAL
12	AL	41	PRO
16	AP	15	PRO
26	BE	59	PRO
29	BH	103	VAL
30	BI	23	VAL
6	CF	64	VAL
12	CL	7	VAL
19	CS	29	PRO
24	DC	2	VAL
26	DE	126	VAL
59	DF	125	GLY
28	DG	97	VAL
30	DI	28	GLY
35	DN	85	PRO
39	DR	52	PRO
42	DU	47	PRO
42	DU	64	ILE
44	DW	22	VAL
50	D2	38	GLY
52	D4	21	GLY
12	AL	54	VAL
13	AM	9	PRO
14	AN	81	ILE
30	BI	31	GLY
3	CC	54	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	CN	51	PRO
24	DC	226	PRO
25	DD	2	ILE
59	DF	81	GLY
28	DG	53	PRO
28	DG	119	GLY
34	DM	36	VAL
35	DN	29	VAL
47	DZ	50	VAL
27	BF	145	VAL
37	BP	34	GLY
9	CI	50	PRO
10	CJ	25	ILE

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	AB	180/180 (100%)	142 (79%)	38 (21%)	1	7
2	CB	180/180 (100%)	156 (87%)	24 (13%)	5	23
3	AC	170/170 (100%)	142 (84%)	28 (16%)	3	13
3	CC	170/170 (100%)	152 (89%)	18 (11%)	8	34
4	AD	172/172 (100%)	146 (85%)	26 (15%)	3	17
4	CD	172/172 (100%)	140 (81%)	32 (19%)	2	10
5	AE	113/113 (100%)	90 (80%)	23 (20%)	1	7
5	CE	113/113 (100%)	94 (83%)	19 (17%)	2	13
6	AF	87/87 (100%)	75 (86%)	12 (14%)	4	21
6	CF	87/87 (100%)	75 (86%)	12 (14%)	4	21
7	AG	124/124 (100%)	108 (87%)	16 (13%)	5	24
8	AH	104/104 (100%)	87 (84%)	17 (16%)	3	14
8	CH	104/104 (100%)	87 (84%)	17 (16%)	3	14
9	AI	105/105 (100%)	84 (80%)	21 (20%)	1	8

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	CI	105/105 (100%)	89 (85%)	16 (15%)	3	17
10	AJ	86/86 (100%)	72 (84%)	14 (16%)	3	14
10	CJ	86/86 (100%)	77 (90%)	9 (10%)	8	35
11	AK	90/90 (100%)	73 (81%)	17 (19%)	2	10
11	CK	90/90 (100%)	77 (86%)	13 (14%)	4	19
12	AL	103/103 (100%)	82 (80%)	21 (20%)	1	7
12	CL	103/103 (100%)	86 (84%)	17 (16%)	3	13
13	AM	92/92 (100%)	87 (95%)	5 (5%)	27	68
14	AN	79/83 (95%)	72 (91%)	7 (9%)	12	44
14	CN	79/83 (95%)	67 (85%)	12 (15%)	3	17
15	AO	76/76 (100%)	67 (88%)	9 (12%)	6	29
15	CO	76/76 (100%)	69 (91%)	7 (9%)	11	41
16	AP	65/65 (100%)	57 (88%)	8 (12%)	6	27
17	AQ	74/74 (100%)	58 (78%)	16 (22%)	1	6
17	CQ	74/74 (100%)	61 (82%)	13 (18%)	2	11
18	AR	48/48 (100%)	46 (96%)	2 (4%)	36	75
18	CR	48/48 (100%)	44 (92%)	4 (8%)	14	49
19	AS	70/70 (100%)	61 (87%)	9 (13%)	5	24
19	CS	70/70 (100%)	62 (89%)	8 (11%)	7	31
20	AT	65/65 (100%)	49 (75%)	16 (25%)	1	3
20	CT	65/65 (100%)	53 (82%)	12 (18%)	2	10
21	AU	44/44 (100%)	33 (75%)	11 (25%)	1	2
21	CU	44/44 (100%)	33 (75%)	11 (25%)	1	2
24	BC	216/216 (100%)	169 (78%)	47 (22%)	1	6
24	DC	216/216 (100%)	189 (88%)	27 (12%)	6	26
25	BD	164/164 (100%)	131 (80%)	33 (20%)	1	7
25	DD	164/164 (100%)	141 (86%)	23 (14%)	4	20
26	BE	165/165 (100%)	123 (74%)	42 (26%)	1	2
26	DE	165/165 (100%)	147 (89%)	18 (11%)	8	33
27	BF	148/148 (100%)	127 (86%)	21 (14%)	4	19
28	BG	137/137 (100%)	108 (79%)	29 (21%)	1	7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
28	DG	137/137 (100%)	118 (86%)	19 (14%)	4	20
29	BH	114/114 (100%)	96 (84%)	18 (16%)	3	15
29	DH	114/114 (100%)	94 (82%)	20 (18%)	2	12
30	BI	109/109 (100%)	91 (84%)	18 (16%)	3	13
30	DI	109/109 (100%)	102 (94%)	7 (6%)	22	62
31	BJ	116/116 (100%)	87 (75%)	29 (25%)	1	2
31	DJ	116/116 (100%)	102 (88%)	14 (12%)	6	28
32	BK	103/103 (100%)	86 (84%)	17 (16%)	3	13
32	DK	103/103 (100%)	81 (79%)	22 (21%)	1	6
33	BL	102/102 (100%)	77 (76%)	25 (24%)	1	3
33	DL	102/102 (100%)	87 (85%)	15 (15%)	4	18
34	BM	109/109 (100%)	85 (78%)	24 (22%)	1	6
34	DM	109/109 (100%)	97 (89%)	12 (11%)	8	33
35	BN	100/100 (100%)	77 (77%)	23 (23%)	1	4
35	DN	100/100 (100%)	82 (82%)	18 (18%)	2	11
36	BO	86/86 (100%)	69 (80%)	17 (20%)	1	8
36	DO	86/86 (100%)	79 (92%)	7 (8%)	15	51
37	BP	99/99 (100%)	69 (70%)	30 (30%)	0	1
37	DP	99/99 (100%)	88 (89%)	11 (11%)	8	32
38	BQ	89/89 (100%)	75 (84%)	14 (16%)	3	15
38	DQ	89/89 (100%)	75 (84%)	14 (16%)	3	15
39	BR	84/84 (100%)	68 (81%)	16 (19%)	2	10
39	DR	84/84 (100%)	71 (84%)	13 (16%)	3	15
40	BS	93/93 (100%)	71 (76%)	22 (24%)	1	4
40	DS	93/93 (100%)	77 (83%)	16 (17%)	2	12
41	BT	80/80 (100%)	59 (74%)	21 (26%)	0	2
41	DT	80/80 (100%)	74 (92%)	6 (8%)	17	55
42	BU	83/83 (100%)	66 (80%)	17 (20%)	1	7
42	DU	83/83 (100%)	72 (87%)	11 (13%)	5	23
43	BV	78/78 (100%)	59 (76%)	19 (24%)	1	3
43	DV	78/78 (100%)	67 (86%)	11 (14%)	4	20

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
44	BW	59/59 (100%)	42 (71%)	17 (29%)	0	1
44	DW	59/59 (100%)	46 (78%)	13 (22%)	1	6
45	BX	67/67 (100%)	51 (76%)	16 (24%)	1	3
45	DX	67/67 (100%)	58 (87%)	9 (13%)	5	22
46	BY	55/55 (100%)	42 (76%)	13 (24%)	1	4
46	DY	55/55 (100%)	52 (94%)	3 (6%)	27	68
47	BZ	48/48 (100%)	34 (71%)	14 (29%)	0	1
47	DZ	48/48 (100%)	40 (83%)	8 (17%)	3	13
48	B0	47/47 (100%)	38 (81%)	9 (19%)	2	10
48	D0	47/47 (100%)	40 (85%)	7 (15%)	4	17
49	B1	45/45 (100%)	36 (80%)	9 (20%)	1	8
49	D1	45/45 (100%)	41 (91%)	4 (9%)	12	44
50	B2	38/38 (100%)	31 (82%)	7 (18%)	2	10
50	D2	38/38 (100%)	34 (90%)	4 (10%)	8	35
51	B3	51/51 (100%)	44 (86%)	7 (14%)	4	21
51	D3	51/51 (100%)	42 (82%)	9 (18%)	2	11
52	B4	34/34 (100%)	29 (85%)	5 (15%)	4	18
52	D4	34/34 (100%)	27 (79%)	7 (21%)	1	7
54	CG	123/123 (100%)	101 (82%)	22 (18%)	2	11
55	CM	91/91 (100%)	80 (88%)	11 (12%)	6	28
56	CP	65/65 (100%)	52 (80%)	13 (20%)	1	8
59	DF	149/149 (100%)	123 (83%)	26 (17%)	2	12
All	All	9331/9339 (100%)	7772 (83%)	1559 (17%)	3	13

All (1559) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	10	LYS
2	AB	13	VAL
2	AB	15	PHE
2	AB	19	THR
2	AB	20	ARG
2	AB	22	TRP
2	AB	30	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	36	LYS
2	AB	38	HIS
2	AB	42	LEU
2	AB	56	LEU
2	AB	57	ASN
2	AB	67	LEU
2	AB	73	ARG
2	AB	86	CYS
2	AB	87	ASP
2	AB	88	GLN
2	AB	90	PHE
2	AB	94	ARG
2	AB	100	LEU
2	AB	102	ASN
2	AB	108	GLN
2	AB	112	ARG
2	AB	115	ASP
2	AB	116	LEU
2	AB	119	GLN
2	AB	125	PHE
2	AB	128	LEU
2	AB	130	LYS
2	AB	141	GLU
2	AB	143	LEU
2	AB	156	LEU
2	AB	170	ILE
2	AB	185	ILE
2	AB	206	ILE
2	AB	207	ARG
2	AB	209	VAL
2	AB	219	THR
3	AC	2	GLN
3	AC	13	ILE
3	AC	17	TRP
3	AC	24	ASN
3	AC	25	THR
3	AC	26	LYS
3	AC	28	PHE
3	AC	32	LEU
3	AC	35	ASP
3	AC	36	PHE
3	AC	42	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	50	SER
3	AC	58	ARG
3	AC	69	THR
3	AC	79	LYS
3	AC	89	VAL
3	AC	106	ARG
3	AC	119	ILE
3	AC	127	VAL
3	AC	139	ASN
3	AC	143	LEU
3	AC	148	ILE
3	AC	156	LEU
3	AC	161	ILE
3	AC	165	GLU
3	AC	166	TRP
3	AC	184	ASN
3	AC	199	VAL
4	AD	11	SER
4	AD	19	PHE
4	AD	21	LYS
4	AD	25	ARG
4	AD	30	LYS
4	AD	31	CYS
4	AD	43	ARG
4	AD	52	VAL
4	AD	54	LEU
4	AD	55	ARG
4	AD	57	LYS
4	AD	58	GLN
4	AD	69	ARG
4	AD	88	ASN
4	AD	99	ASN
4	AD	115	GLN
4	AD	122	ILE
4	AD	127	ARG
4	AD	131	ILE
4	AD	147	LYS
4	AD	160	LEU
4	AD	166	LYS
4	AD	170	LEU
4	AD	178	GLU
4	AD	193	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	205	LYS
5	AE	10	LEU
5	AE	11	GLN
5	AE	14	LEU
5	AE	18	ASN
5	AE	28	ARG
5	AE	31	SER
5	AE	68	ARG
5	AE	75	LEU
5	AE	79	THR
5	AE	81	GLN
5	AE	95	MET
5	AE	96	GLN
5	AE	100	GLU
5	AE	113	VAL
5	AE	116	VAL
5	AE	119	VAL
5	AE	121	ASN
5	AE	123	LEU
5	AE	135	VAL
5	AE	136	VAL
5	AE	141	ASP
5	AE	155	LYS
5	AE	156	ARG
6	AF	14	GLN
6	AF	17	GLN
6	AF	24	ARG
6	AF	29	ILE
6	AF	38	ARG
6	AF	46	GLN
6	AF	54	LEU
6	AF	55	HIS
6	AF	68	GLN
6	AF	69	GLU
6	AF	77	THR
6	AF	86	ARG
7	AG	3	ARG
7	AG	8	GLN
7	AG	12	LEU
7	AG	21	LEU
7	AG	22	LEU
7	AG	37	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	47	GLU
7	AG	62	GLU
7	AG	68	VAL
7	AG	83	THR
7	AG	85	GLN
7	AG	93	VAL
7	AG	105	GLU
7	AG	117	LEU
7	AG	123	LEU
7	AG	143	MET
8	AH	21	LYS
8	AH	29	SER
8	AH	30	LYS
8	AH	64	TYR
8	AH	65	PHE
8	AH	72	GLU
8	AH	76	ARG
8	AH	79	ARG
8	AH	82	LEU
8	AH	86	LYS
8	AH	89	ASP
8	AH	98	LEU
8	AH	100	ILE
8	AH	110	MET
8	AH	111	THR
8	AH	120	LEU
8	AH	128	VAL
9	AI	4	GLN
9	AI	21	LYS
9	AI	28	VAL
9	AI	35	GLU
9	AI	37	TYR
9	AI	42	THR
9	AI	44	ARG
9	AI	47	VAL
9	AI	48	ARG
9	AI	54	VAL
9	AI	56	MET
9	AI	62	LEU
9	AI	67	LYS
9	AI	87	MET
9	AI	88	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AI	98	ARG
9	AI	105	ARG
9	AI	106	ASP
9	AI	125	GLN
9	AI	126	PHE
9	AI	128	LYS
10	AJ	6	ILE
10	AJ	22	THR
10	AJ	32	THR
10	AJ	35	GLN
10	AJ	48	ARG
10	AJ	49	PHE
10	AJ	50	THR
10	AJ	59	LYS
10	AJ	63	ASP
10	AJ	70	HIS
10	AJ	73	LEU
10	AJ	89	ARG
10	AJ	92	LEU
10	AJ	96	VAL
11	AK	17	ASP
11	AK	30	ILE
11	AK	35	ASP
11	AK	51	PHE
11	AK	55	ARG
11	AK	64	VAL
11	AK	76	TYR
11	AK	78	ILE
11	AK	82	GLU
11	AK	96	ILE
11	AK	100	ASN
11	AK	106	ILE
11	AK	118	ASN
11	AK	124	LYS
11	AK	125	LYS
11	AK	127	ARG
11	AK	128	VAL
12	AL	3	VAL
12	AL	17	LYS
12	AL	18	SER
12	AL	20	VAL
12	AL	26	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	AL	34	THR
12	AL	35	ARG
12	AL	38	THR
12	AL	41	PRO
12	AL	43	LYS
12	AL	49	ARG
12	AL	51	VAL
12	AL	57	THR
12	AL	63	THR
12	AL	64	SER
12	AL	74	GLN
12	AL	87	LYS
12	AL	88	ASP
12	AL	94	TYR
12	AL	104	SER
12	AL	109	ARG
13	AM	3	ILE
13	AM	7	ASN
13	AM	42	VAL
13	AM	58	GLU
13	AM	106	ARG
14	AN	13	VAL
14	AN	58	ARG
14	AN	59	GLN
14	AN	61	ASN
14	AN	73	LEU
14	AN	96	LYS
14	AN	99	SER
15	AO	16	ARG
15	AO	34	GLN
15	AO	57	ARG
15	AO	63	ARG
15	AO	65	LEU
15	AO	67	ASP
15	AO	80	LEU
15	AO	84	LEU
15	AO	86	LEU
16	AP	6	LEU
16	AP	19	VAL
16	AP	33	ILE
16	AP	46	LYS
16	AP	55	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	AP	63	GLN
16	AP	68	SER
16	AP	77	GLU
17	AQ	3	LYS
17	AQ	16	MET
17	AQ	20	ILE
17	AQ	28	VAL
17	AQ	29	LYS
17	AQ	37	ILE
17	AQ	47	ASP
17	AQ	49	ASN
17	AQ	50	ASN
17	AQ	51	GLU
17	AQ	54	ILE
17	AQ	64	ARG
17	AQ	74	LEU
17	AQ	75	VAL
17	AQ	78	VAL
17	AQ	80	LYS
18	AR	20	ILE
18	AR	54	LEU
19	AS	42	ASN
19	AS	54	ARG
19	AS	55	GLN
19	AS	57	VAL
19	AS	59	VAL
19	AS	60	PHE
19	AS	61	VAL
19	AS	64	GLU
19	AS	79	TYR
20	AT	2	ASN
20	AT	4	LYS
20	AT	11	ILE
20	AT	26	MET
20	AT	27	MET
20	AT	28	ARG
20	AT	29	THR
20	AT	33	LYS
20	AT	35	TYR
20	AT	38	ILE
20	AT	42	ASP
20	AT	53	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	AT	67	HIS
20	AT	75	LYS
20	AT	77	ASN
20	AT	84	LYS
21	AU	4	LYS
21	AU	8	ASN
21	AU	9	GLU
21	AU	10	PRO
21	AU	15	LEU
21	AU	18	PHE
21	AU	27	VAL
21	AU	33	ARG
21	AU	37	TYR
21	AU	38	GLU
21	AU	42	THR
24	BC	2	VAL
24	BC	12	ARG
24	BC	20	ASN
24	BC	27	LYS
24	BC	35	LYS
24	BC	38	LYS
24	BC	43	ASN
24	BC	49	THR
24	BC	70	LYS
24	BC	73	ILE
24	BC	77	VAL
24	BC	85	ASN
24	BC	90	ILE
24	BC	93	VAL
24	BC	100	ARG
24	BC	103	ILE
24	BC	104	LEU
24	BC	109	LEU
24	BC	110	LYS
24	BC	114	GLN
24	BC	115	ILE
24	BC	120	ASP
24	BC	123	ILE
24	BC	129	LEU
24	BC	142	ASN
24	BC	155	ARG
24	BC	163	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	BC	164	VAL
24	BC	166	ARG
24	BC	171	VAL
24	BC	172	THR
24	BC	173	LEU
24	BC	175	LEU
24	BC	176	ARG
24	BC	181	ARG
24	BC	200	MET
24	BC	201	LEU
24	BC	202	ARG
24	BC	203	VAL
24	BC	212	TRP
24	BC	215	VAL
24	BC	216	ARG
24	BC	250	GLN
24	BC	252	LYS
24	BC	254	LYS
24	BC	258	SER
24	BC	268	ARG
25	BD	4	LEU
25	BD	9	VAL
25	BD	13	ARG
25	BD	14	ILE
25	BD	16	THR
25	BD	33	ARG
25	BD	40	LEU
25	BD	43	ASP
25	BD	45	TYR
25	BD	67	HIS
25	BD	73	VAL
25	BD	79	LEU
25	BD	89	GLU
25	BD	90	PHE
25	BD	91	THR
25	BD	95	SER
25	BD	98	VAL
25	BD	100	LEU
25	BD	101	PHE
25	BD	113	SER
25	BD	114	LYS
25	BD	118	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BD	124	ARG
25	BD	150	GLN
25	BD	151	THR
25	BD	159	LYS
25	BD	170	VAL
25	BD	176	ASP
25	BD	177	VAL
25	BD	183	GLU
25	BD	186	LEU
25	BD	203	VAL
25	BD	207	VAL
26	BE	12	LEU
26	BE	18	THR
26	BE	21	ARG
26	BE	24	ASN
26	BE	40	ARG
26	BE	43	THR
26	BE	44	ARG
26	BE	48	THR
26	BE	61	ARG
26	BE	62	GLN
26	BE	65	THR
26	BE	69	ARG
26	BE	77	ILE
26	BE	78	TRP
26	BE	80	SER
26	BE	90	GLN
26	BE	108	ILE
26	BE	109	LEU
26	BE	113	VAL
26	BE	116	ASP
26	BE	118	LEU
26	BE	119	ILE
26	BE	121	VAL
26	BE	122	GLU
26	BE	123	LYS
26	BE	124	PHE
26	BE	127	GLU
26	BE	131	THR
26	BE	132	LYS
26	BE	136	GLN
26	BE	141	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BE	146	VAL
26	BE	147	LEU
26	BE	149	ILE
26	BE	153	LEU
26	BE	159	LEU
26	BE	163	ASN
26	BE	167	VAL
26	BE	170	ARG
26	BE	171	ASP
26	BE	186	VAL
26	BE	189	THR
27	BF	3	LEU
27	BF	8	LYS
27	BF	9	ASP
27	BF	12	VAL
27	BF	17	THR
27	BF	24	VAL
27	BF	34	THR
27	BF	35	LEU
27	BF	36	ASN
27	BF	46	LYS
27	BF	65	LEU
27	BF	80	GLN
27	BF	90	LEU
27	BF	103	ILE
27	BF	109	ARG
27	BF	114	ARG
27	BF	132	ARG
27	BF	134	GLN
27	BF	154	THR
27	BF	157	THR
27	BF	166	ARG
28	BG	2	ARG
28	BG	8	VAL
28	BG	29	ASN
28	BG	34	ARG
28	BG	35	THR
28	BG	37	ASN
28	BG	40	VAL
28	BG	55	ASP
28	BG	59	ASP
28	BG	68	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	BG	78	VAL
28	BG	80	GLU
28	BG	84	LYS
28	BG	86	LEU
28	BG	88	LEU
28	BG	91	VAL
28	BG	101	VAL
28	BG	115	GLN
28	BG	116	LEU
28	BG	120	ILE
28	BG	121	THR
28	BG	123	GLU
28	BG	131	VAL
28	BG	132	LEU
28	BG	138	GLN
28	BG	148	ARG
28	BG	165	ASP
28	BG	170	THR
28	BG	174	LYS
29	BH	3	VAL
29	BH	6	LEU
29	BH	12	LEU
29	BH	18	GLN
29	BH	25	TYR
29	BH	28	ASN
29	BH	31	VAL
29	BH	33	GLN
29	BH	43	ASN
29	BH	50	ARG
29	BH	54	LEU
29	BH	68	ARG
29	BH	75	LEU
29	BH	83	LYS
29	BH	96	THR
29	BH	104	THR
29	BH	125	THR
29	BH	135	HIS
30	BI	2	LYS
30	BI	10	LEU
30	BI	11	GLN
30	BI	12	VAL
30	BI	23	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	BI	30	GLN
30	BI	37	PHE
30	BI	39	LYS
30	BI	49	GLU
30	BI	61	TYR
30	BI	71	LYS
30	BI	81	LYS
30	BI	86	LYS
30	BI	95	ASP
30	BI	107	GLU
30	BI	124	MET
30	BI	126	ARG
30	BI	135	MET
31	BJ	1	MET
31	BJ	2	LYS
31	BJ	3	THR
31	BJ	24	THR
31	BJ	25	LEU
31	BJ	30	THR
31	BJ	34	ARG
31	BJ	36	LEU
31	BJ	40	HIS
31	BJ	41	LYS
31	BJ	44	TYR
31	BJ	54	ILE
31	BJ	55	ILE
31	BJ	57	LEU
31	BJ	64	VAL
31	BJ	65	THR
31	BJ	67	ASN
31	BJ	69	ARG
31	BJ	72	LYS
31	BJ	86	GLN
31	BJ	103	ILE
31	BJ	105	VAL
31	BJ	109	LEU
31	BJ	111	LYS
31	BJ	114	LEU
31	BJ	123	LYS
31	BJ	129	GLU
31	BJ	135	GLN
31	BJ	140	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	BK	8	LEU
32	BK	18	ARG
32	BK	23	LYS
32	BK	41	ILE
32	BK	42	THR
32	BK	51	LYS
32	BK	52	VAL
32	BK	54	LYS
32	BK	58	LEU
32	BK	61	VAL
32	BK	73	ASP
32	BK	89	ASN
32	BK	95	ILE
32	BK	105	ARG
32	BK	111	LYS
32	BK	114	LYS
32	BK	118	LEU
33	BL	3	LEU
33	BL	4	ASN
33	BL	6	LEU
33	BL	8	PRO
33	BL	12	SER
33	BL	14	LYS
33	BL	19	LEU
33	BL	21	ARG
33	BL	27	LEU
33	BL	30	THR
33	BL	35	HIS
33	BL	47	ARG
33	BL	55	MET
33	BL	61	LEU
33	BL	66	PHE
33	BL	82	LEU
33	BL	91	ASP
33	BL	93	ASN
33	BL	94	THR
33	BL	101	ILE
33	BL	111	ILE
33	BL	112	LEU
33	BL	115	GLU
33	BL	127	VAL
33	BL	135	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	BM	2	LEU
34	BM	8	LYS
34	BM	10	ARG
34	BM	12	MET
34	BM	24	THR
34	BM	25	ASP
34	BM	27	SER
34	BM	33	LEU
34	BM	36	VAL
34	BM	58	LYS
34	BM	70	ASP
34	BM	75	GLU
34	BM	76	LYS
34	BM	80	VAL
34	BM	81	ARG
34	BM	90	GLU
34	BM	96	ILE
34	BM	97	GLN
34	BM	102	LEU
34	BM	110	GLU
34	BM	118	LYS
34	BM	131	VAL
34	BM	133	LYS
34	BM	134	THR
35	BN	2	ARG
35	BN	3	HIS
35	BN	8	ARG
35	BN	10	LEU
35	BN	11	ASN
35	BN	14	SER
35	BN	15	SER
35	BN	22	ARG
35	BN	23	ASN
35	BN	30	ARG
35	BN	33	ILE
35	BN	35	LYS
35	BN	38	LEU
35	BN	43	GLU
35	BN	51	LEU
35	BN	54	LEU
35	BN	69	ARG
35	BN	71	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BN	75	ILE
35	BN	86	ARG
35	BN	95	THR
35	BN	96	ARG
35	BN	118	ARG
36	BO	5	SER
36	BO	9	ARG
36	BO	16	ARG
36	BO	17	LYS
36	BO	28	VAL
36	BO	31	THR
36	BO	36	TYR
36	BO	80	GLU
36	BO	83	LEU
36	BO	84	GLU
36	BO	89	ASP
36	BO	94	ARG
36	BO	100	HIS
36	BO	103	VAL
36	BO	106	LEU
36	BO	111	ARG
36	BO	116	GLN
37	BP	3	ILE
37	BP	6	GLN
37	BP	7	LEU
37	BP	14	GLN
37	BP	16	VAL
37	BP	18	SER
37	BP	19	PHE
37	BP	20	ARG
37	BP	24	THR
37	BP	28	LYS
37	BP	35	SER
37	BP	36	LYS
37	BP	37	LYS
37	BP	38	ARG
37	BP	56	SER
37	BP	61	ARG
37	BP	64	SER
37	BP	72	VAL
37	BP	75	THR
37	BP	79	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	BP	80	VAL
37	BP	83	ILE
37	BP	91	VAL
37	BP	92	ARG
37	BP	93	LYS
37	BP	95	LYS
37	BP	96	LEU
37	BP	99	LEU
37	BP	101	GLU
37	BP	109	ILE
38	BQ	2	ARG
38	BQ	8	ILE
38	BQ	10	ARG
38	BQ	50	ARG
38	BQ	63	ARG
38	BQ	65	ASN
38	BQ	69	ARG
38	BQ	88	GLU
38	BQ	89	ILE
38	BQ	93	ILE
38	BQ	94	LEU
38	BQ	96	ASP
38	BQ	97	ILE
38	BQ	103	VAL
39	BR	10	LYS
39	BR	14	VAL
39	BR	25	LEU
39	BR	37	GLU
39	BR	38	VAL
39	BR	39	LEU
39	BR	43	ASN
39	BR	46	GLU
39	BR	48	LYS
39	BR	51	VAL
39	BR	54	VAL
39	BR	55	ASP
39	BR	63	VAL
39	BR	85	LYS
39	BR	86	GLN
39	BR	97	LYS
40	BS	1	MET
40	BS	3	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	BS	4	ILE
40	BS	7	HIS
40	BS	24	ILE
40	BS	30	SER
40	BS	33	LEU
40	BS	36	LEU
40	BS	39	THR
40	BS	41	LYS
40	BS	45	VAL
40	BS	48	LYS
40	BS	66	ILE
40	BS	68	ASP
40	BS	71	VAL
40	BS	73	LYS
40	BS	76	VAL
40	BS	88	ARG
40	BS	96	ILE
40	BS	101	SER
40	BS	107	VAL
40	BS	109	ASP
41	BT	2	ILE
41	BT	3	ARG
41	BT	4	GLU
41	BT	8	LEU
41	BT	17	SER
41	BT	19	LYS
41	BT	28	ASN
41	BT	29	THR
41	BT	30	ILE
41	BT	31	VAL
41	BT	32	LEU
41	BT	37	ASP
41	BT	43	ILE
41	BT	48	GLN
41	BT	58	VAL
41	BT	61	LEU
41	BT	64	LYS
41	BT	67	VAL
41	BT	68	LYS
41	BT	69	ARG
41	BT	74	ILE
42	BU	6	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BU	8	ASP
42	BU	18	LYS
42	BU	20	LYS
42	BU	23	LYS
42	BU	26	ASN
42	BU	29	SER
42	BU	42	LYS
42	BU	61	GLU
42	BU	64	ILE
42	BU	67	SER
42	BU	80	ASP
42	BU	86	PHE
42	BU	87	GLU
42	BU	92	VAL
42	BU	99	SER
42	BU	102	ILE
43	BV	1	MET
43	BV	3	THR
43	BV	5	ASN
43	BV	8	VAL
43	BV	10	LYS
43	BV	12	GLN
43	BV	14	LYS
43	BV	20	LEU
43	BV	29	ILE
43	BV	35	GLU
43	BV	41	GLU
43	BV	42	LEU
43	BV	43	ASP
43	BV	46	LYS
43	BV	51	GLN
43	BV	55	GLU
43	BV	60	VAL
43	BV	61	LEU
43	BV	66	ASP
44	BW	14	ASP
44	BW	15	SER
44	BW	23	LYS
44	BW	24	ARG
44	BW	25	PHE
44	BW	38	ARG
44	BW	40	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	BW	45	HIS
44	BW	49	ASN
44	BW	54	ARG
44	BW	58	LEU
44	BW	61	LYS
44	BW	67	LYS
44	BW	71	LYS
44	BW	76	ARG
44	BW	77	LYS
44	BW	80	SER
45	BX	6	VAL
45	BX	10	ARG
45	BX	19	HIS
45	BX	24	THR
45	BX	26	ARG
45	BX	27	ARG
45	BX	29	LEU
45	BX	36	ARG
45	BX	41	SER
45	BX	47	THR
45	BX	53	LYS
45	BX	60	LYS
45	BX	63	ILE
45	BX	65	THR
45	BX	71	ARG
45	BX	77	TYR
46	BY	9	LYS
46	BY	10	SER
46	BY	14	LEU
46	BY	17	GLU
46	BY	18	LEU
46	BY	19	LEU
46	BY	22	LEU
46	BY	37	LEU
46	BY	42	LEU
46	BY	47	ARG
46	BY	56	LEU
46	BY	57	LEU
46	BY	59	GLU
47	BZ	2	LYS
47	BZ	3	THR
47	BZ	4	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	BZ	5	LYS
47	BZ	8	GLN
47	BZ	9	THR
47	BZ	15	ARG
47	BZ	23	LEU
47	BZ	30	ARG
47	BZ	37	ARG
47	BZ	38	GLU
47	BZ	43	ILE
47	BZ	51	SER
47	BZ	58	GLU
48	B0	5	ASN
48	B0	9	ARG
48	B0	17	SER
48	B0	21	LEU
48	B0	22	THR
48	B0	26	SER
48	B0	27	LEU
48	B0	39	ARG
48	B0	42	ILE
49	B1	4	ILE
49	B1	9	LYS
49	B1	16	THR
49	B1	29	LYS
49	B1	33	LEU
49	B1	35	LEU
49	B1	41	VAL
49	B1	42	VAL
49	B1	43	ARG
50	B2	1	MET
50	B2	3	ARG
50	B2	9	VAL
50	B2	12	ARG
50	B2	16	HIS
50	B2	21	ARG
50	B2	39	ARG
51	B3	5	THR
51	B3	7	ARG
51	B3	22	LYS
51	B3	31	ILE
51	B3	49	VAL
51	B3	51	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	B3	56	LEU
52	B4	1	MET
52	B4	4	ARG
52	B4	9	LYS
52	B4	13	ASN
52	B4	27	CYS
2	CB	9	LEU
2	CB	10	LYS
2	CB	14	HIS
2	CB	19	THR
2	CB	21	TYR
2	CB	22	TRP
2	CB	26	MET
2	CB	34	ARG
2	CB	36	LYS
2	CB	39	ILE
2	CB	42	LEU
2	CB	46	VAL
2	CB	69	VAL
2	CB	88	GLN
2	CB	103	TRP
2	CB	124	THR
2	CB	125	PHE
2	CB	131	LYS
2	CB	147	LEU
2	CB	164	ASP
2	CB	177	ASN
2	CB	182	VAL
2	CB	191	ASP
2	CB	196	ASP
3	CC	26	LYS
3	CC	30	ASP
3	CC	35	ASP
3	CC	41	TYR
3	CC	53	ARG
3	CC	106	ARG
3	CC	123	LEU
3	CC	126	ARG
3	CC	134	LYS
3	CC	139	ASN
3	CC	153	SER
3	CC	161	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	CC	164	THR
3	CC	166	TRP
3	CC	178	ARG
3	CC	183	TYR
3	CC	185	THR
3	CC	194	VAL
4	CD	2	ARG
4	CD	8	LEU
4	CD	16	THR
4	CD	24	VAL
4	CD	25	ARG
4	CD	29	THR
4	CD	30	LYS
4	CD	34	GLU
4	CD	55	ARG
4	CD	57	LYS
4	CD	62	ARG
4	CD	80	ARG
4	CD	84	ASN
4	CD	106	PHE
4	CD	119	HIS
4	CD	125	ASN
4	CD	127	ARG
4	CD	137	SER
4	CD	140	ASP
4	CD	142	VAL
4	CD	147	LYS
4	CD	151	GLN
4	CD	153	ARG
4	CD	160	LEU
4	CD	168	THR
4	CD	170	LEU
4	CD	182	LYS
4	CD	183	ARG
4	CD	187	ARG
4	CD	189	ASP
4	CD	194	ILE
4	CD	199	ILE
5	CE	11	GLN
5	CE	13	LYS
5	CE	18	ASN
5	CE	24	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	CE	25	LYS
5	CE	59	ILE
5	CE	75	LEU
5	CE	80	LEU
5	CE	81	GLN
5	CE	87	VAL
5	CE	91	SER
5	CE	95	MET
5	CE	99	SER
5	CE	119	VAL
5	CE	131	ASN
5	CE	133	ILE
5	CE	134	ASN
5	CE	136	VAL
5	CE	144	GLU
6	CF	33	GLU
6	CF	38	ARG
6	CF	44	ARG
6	CF	52	ASN
6	CF	54	LEU
6	CF	56	LYS
6	CF	58	HIS
6	CF	61	LEU
6	CF	72	ASP
6	CF	86	ARG
6	CF	89	VAL
6	CF	98	GLU
54	CG	3	ARG
54	CG	5	VAL
54	CG	6	ILE
54	CG	10	LYS
54	CG	12	LEU
54	CG	16	LYS
54	CG	55	LYS
54	CG	58	LEU
54	CG	66	GLU
54	CG	75	LYS
54	CG	77	ARG
54	CG	78	ARG
54	CG	85	GLN
54	CG	90	VAL
54	CG	100	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	CG	102	TRP
54	CG	112	ASP
54	CG	119	LEU
54	CG	123	LEU
54	CG	137	ARG
54	CG	139	ASP
54	CG	148	LYS
8	CH	2	MET
8	CH	11	THR
8	CH	37	ASN
8	CH	42	GLU
8	CH	46	GLU
8	CH	50	VAL
8	CH	54	THR
8	CH	59	GLU
8	CH	73	SER
8	CH	75	GLN
8	CH	76	ARG
8	CH	78	SER
8	CH	79	ARG
8	CH	82	LEU
8	CH	89	ASP
8	CH	93	LYS
8	CH	110	MET
9	CI	3	ASN
9	CI	4	GLN
9	CI	5	TYR
9	CI	36	GLN
9	CI	37	TYR
9	CI	45	MET
9	CI	53	LEU
9	CI	54	VAL
9	CI	60	LEU
9	CI	61	ASP
9	CI	83	THR
9	CI	87	MET
9	CI	93	LEU
9	CI	125	GLN
9	CI	126	PHE
9	CI	129	ARG
10	CJ	11	LYS
10	CJ	15	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	CJ	48	ARG
10	CJ	59	LYS
10	CJ	67	ILE
10	CJ	69	THR
10	CJ	82	LYS
10	CJ	87	LEU
10	CJ	92	LEU
11	CK	12	ARG
11	CK	27	ASN
11	CK	33	ILE
11	CK	34	THR
11	CK	57	SER
11	CK	73	VAL
11	CK	78	ILE
11	CK	81	LEU
11	CK	94	SER
11	CK	95	THR
11	CK	105	ARG
11	CK	115	ILE
11	CK	128	VAL
12	CL	3	VAL
12	CL	4	ASN
12	CL	5	GLN
12	CL	9	LYS
12	CL	18	SER
12	CL	19	ASN
12	CL	28	GLN
12	CL	39	THR
12	CL	48	LEU
12	CL	49	ARG
12	CL	57	THR
12	CL	62	VAL
12	CL	72	ASN
12	CL	88	ASP
12	CL	96	THR
12	CL	107	LYS
12	CL	120	ARG
55	CM	12	LYS
55	CM	24	VAL
55	CM	28	ARG
55	CM	32	ILE
55	CM	46	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	CM	53	ASP
55	CM	77	LYS
55	CM	91	ARG
55	CM	92	ARG
55	CM	100	ARG
55	CM	113	LYS
14	CN	3	GLN
14	CN	27	LYS
14	CN	41	TRP
14	CN	52	ARG
14	CN	53	ASP
14	CN	58	ARG
14	CN	61	ASN
14	CN	63	CYS
14	CN	65	GLN
14	CN	72	PHE
14	CN	96	LYS
14	CN	100	TRP
15	CO	16	ARG
15	CO	34	GLN
15	CO	38	LEU
15	CO	39	GLN
15	CO	45	HIS
15	CO	65	LEU
15	CO	80	LEU
56	CP	1	MET
56	CP	3	THR
56	CP	19	VAL
56	CP	29	ASN
56	CP	32	PHE
56	CP	35	ARG
56	CP	41	PRO
56	CP	44	SER
56	CP	46	LYS
56	CP	54	LEU
56	CP	56	ARG
56	CP	69	ASP
56	CP	71	VAL
17	CQ	3	LYS
17	CQ	6	THR
17	CQ	7	LEU
17	CQ	20	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	CQ	32	ILE
17	CQ	37	ILE
17	CQ	39	ARG
17	CQ	51	GLU
17	CQ	52	CYS
17	CQ	58	VAL
17	CQ	60	ILE
17	CQ	75	VAL
17	CQ	80	LYS
18	CR	25	ILE
18	CR	44	THR
18	CR	65	SER
18	CR	72	ARG
19	CS	5	LYS
19	CS	10	ILE
19	CS	11	ASP
19	CS	52	ASN
19	CS	54	ARG
19	CS	55	GLN
19	CS	56	HIS
19	CS	73	PHE
20	CT	11	ILE
20	CT	26	MET
20	CT	30	PHE
20	CT	35	TYR
20	CT	42	ASP
20	CT	47	GLN
20	CT	53	MET
20	CT	67	HIS
20	CT	68	LYS
20	CT	69	ASN
20	CT	73	ARG
20	CT	82	ILE
21	CU	4	LYS
21	CU	9	GLU
21	CU	13	VAL
21	CU	17	ARG
21	CU	18	PHE
21	CU	19	LYS
21	CU	27	VAL
21	CU	32	ARG
21	CU	36	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	CU	37	TYR
21	CU	53	LYS
24	DC	23	LEU
24	DC	35	LYS
24	DC	43	ASN
24	DC	51	ARG
24	DC	53	ILE
24	DC	62	ARG
24	DC	90	ILE
24	DC	102	TYR
24	DC	124	LYS
24	DC	152	GLN
24	DC	164	VAL
24	DC	172	THR
24	DC	173	LEU
24	DC	187	CYS
24	DC	188	ARG
24	DC	190	THR
24	DC	203	VAL
24	DC	212	TRP
24	DC	213	ARG
24	DC	220	ARG
24	DC	227	VAL
24	DC	228	ASP
24	DC	235	GLU
24	DC	251	THR
24	DC	260	LYS
24	DC	267	VAL
24	DC	269	ARG
25	DD	24	VAL
25	DD	28	GLU
25	DD	32	ASN
25	DD	33	ARG
25	DD	34	VAL
25	DD	38	LYS
25	DD	48	ILE
25	DD	50	VAL
25	DD	55	LYS
25	DD	58	ASN
25	DD	62	LYS
25	DD	79	LEU
25	DD	84	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DD	100	LEU
25	DD	106	LYS
25	DD	121	THR
25	DD	138	LEU
25	DD	140	HIS
25	DD	148	GLN
25	DD	159	LYS
25	DD	168	GLU
25	DD	189	VAL
25	DD	193	VAL
26	DE	53	THR
26	DE	57	LYS
26	DE	63	LYS
26	DE	67	ARG
26	DE	73	ILE
26	DE	77	ILE
26	DE	78	TRP
26	DE	91	ASP
26	DE	108	ILE
26	DE	112	LEU
26	DE	126	VAL
26	DE	127	GLU
26	DE	139	LYS
26	DE	149	ILE
26	DE	157	LEU
26	DE	163	ASN
26	DE	164	LEU
26	DE	166	LYS
59	DF	13	LYS
59	DF	25	MET
59	DF	47	LYS
59	DF	48	LEU
59	DF	49	LEU
59	DF	76	PHE
59	DF	77	LYS
59	DF	94	ARG
59	DF	97	GLU
59	DF	110	ILE
59	DF	111	ARG
59	DF	113	PHE
59	DF	119	LYS
59	DF	131	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
59	DF	133	GLU
59	DF	134	GLN
59	DF	135	ILE
59	DF	139	GLU
59	DF	142	TYR
59	DF	147	ARG
59	DF	148	VAL
59	DF	151	LEU
59	DF	160	LYS
59	DF	166	ARG
59	DF	172	PHE
59	DF	177	ARG
28	DG	2	ARG
28	DG	18	ILE
28	DG	19	ASN
28	DG	21	GLN
28	DG	34	ARG
28	DG	35	THR
28	DG	40	VAL
28	DG	42	VAL
28	DG	51	PHE
28	DG	72	ASN
28	DG	84	LYS
28	DG	93	TYR
28	DG	120	ILE
28	DG	132	LEU
28	DG	143	VAL
28	DG	162	ARG
28	DG	163	TYR
28	DG	166	GLU
28	DG	176	LYS
29	DH	8	LYS
29	DH	22	LYS
29	DH	25	TYR
29	DH	27	ARG
29	DH	28	ASN
29	DH	44	ILE
29	DH	50	ARG
29	DH	57	LYS
29	DH	66	ASN
29	DH	68	ARG
29	DH	76	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	DH	86	ASP
29	DH	90	LEU
29	DH	91	PHE
29	DH	103	VAL
29	DH	104	THR
29	DH	109	GLU
29	DH	119	ASN
29	DH	132	PHE
29	DH	144	VAL
30	DI	7	TYR
30	DI	16	MET
30	DI	30	GLN
30	DI	58	ILE
30	DI	68	PHE
30	DI	72	THR
30	DI	93	ASN
31	DJ	3	THR
31	DJ	25	LEU
31	DJ	34	ARG
31	DJ	43	GLU
31	DJ	47	HIS
31	DJ	52	ASP
31	DJ	54	ILE
31	DJ	57	LEU
31	DJ	80	HIS
31	DJ	81	ILE
31	DJ	95	ARG
31	DJ	106	LYS
31	DJ	129	GLU
31	DJ	139	VAL
32	DK	3	GLN
32	DK	7	MET
32	DK	13	ASN
32	DK	25	LEU
32	DK	39	ILE
32	DK	41	ILE
32	DK	47	ILE
32	DK	49	ARG
32	DK	54	LYS
32	DK	65	THR
32	DK	73	ASP
32	DK	79	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	DK	87	LEU
32	DK	91	SER
32	DK	95	ILE
32	DK	100	PHE
32	DK	103	VAL
32	DK	105	ARG
32	DK	106	GLU
32	DK	107	LEU
32	DK	111	LYS
32	DK	114	LYS
33	DL	3	LEU
33	DL	4	ASN
33	DL	6	LEU
33	DL	47	ARG
33	DL	48	ARG
33	DL	79	LEU
33	DL	82	LEU
33	DL	92	LEU
33	DL	99	ASN
33	DL	103	ILE
33	DL	111	ILE
33	DL	112	LEU
33	DL	118	THR
33	DL	141	LYS
33	DL	143	GLU
34	DM	8	LYS
34	DM	33	LEU
34	DM	38	ARG
34	DM	73	ILE
34	DM	78	LEU
34	DM	89	VAL
34	DM	95	LEU
34	DM	97	GLN
34	DM	105	MET
34	DM	115	GLU
34	DM	126	ILE
34	DM	129	THR
35	DN	14	SER
35	DN	18	GLN
35	DN	20	MET
35	DN	29	VAL
35	DN	33	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	DN	34	ILE
35	DN	53	THR
35	DN	62	ASN
35	DN	63	ARG
35	DN	69	ARG
35	DN	75	ILE
35	DN	90	ARG
35	DN	94	TYR
35	DN	95	THR
35	DN	97	ILE
35	DN	98	LEU
35	DN	107	ASN
35	DN	114	GLU
36	DO	17	LYS
36	DO	31	THR
36	DO	65	THR
36	DO	68	LYS
36	DO	90	VAL
36	DO	115	LEU
36	DO	117	PHE
37	DP	6	GLN
37	DP	7	LEU
37	DP	13	LYS
37	DP	19	PHE
37	DP	28	LYS
37	DP	31	VAL
37	DP	52	ARG
37	DP	83	ILE
37	DP	86	LYS
37	DP	95	LYS
37	DP	101	GLU
38	DQ	3	VAL
38	DQ	10	ARG
38	DQ	12	ARG
38	DQ	13	HIS
38	DQ	15	LYS
38	DQ	35	PHE
38	DQ	46	TYR
38	DQ	50	ARG
38	DQ	54	ARG
38	DQ	57	ARG
38	DQ	63	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	DQ	69	ARG
38	DQ	79	ILE
38	DQ	96	ASP
39	DR	6	GLN
39	DR	10	LYS
39	DR	13	ARG
39	DR	37	GLU
39	DR	48	LYS
39	DR	58	VAL
39	DR	75	VAL
39	DR	80	ARG
39	DR	81	LYS
39	DR	83	TYR
39	DR	86	GLN
39	DR	90	ARG
39	DR	93	PHE
40	DS	6	LYS
40	DS	22	ASP
40	DS	23	LEU
40	DS	31	GLN
40	DS	36	LEU
40	DS	45	VAL
40	DS	46	LEU
40	DS	66	ILE
40	DS	70	LYS
40	DS	74	ILE
40	DS	76	VAL
40	DS	81	SER
40	DS	84	ARG
40	DS	86	MET
40	DS	88	ARG
40	DS	107	VAL
41	DT	9	LYS
41	DT	12	ARG
41	DT	18	GLU
41	DT	39	THR
41	DT	50	LEU
41	DT	54	GLU
42	DU	13	LEU
42	DU	14	THR
42	DU	16	LYS
42	DU	17	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DU	20	LYS
42	DU	21	ARG
42	DU	40	LEU
42	DU	45	GLN
42	DU	85	ARG
42	DU	94	PHE
42	DU	95	PHE
43	DV	17	SER
43	DV	26	PHE
43	DV	40	ILE
43	DV	44	HIS
43	DV	51	GLN
43	DV	61	LEU
43	DV	65	VAL
43	DV	69	GLU
43	DV	70	ILE
43	DV	76	ASP
43	DV	90	ASP
44	DW	18	LYS
44	DW	20	LEU
44	DW	22	VAL
44	DW	23	LYS
44	DW	30	VAL
44	DW	37	VAL
44	DW	39	GLN
44	DW	40	ARG
44	DW	58	LEU
44	DW	68	PHE
44	DW	76	ARG
44	DW	77	LYS
44	DW	80	SER
45	DX	5	GLN
45	DX	6	VAL
45	DX	26	ARG
45	DX	29	LEU
45	DX	31	ASN
45	DX	46	VAL
45	DX	47	THR
45	DX	63	ILE
45	DX	73	ARG
46	DY	1	MET
46	DY	4	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	DY	28	LEU
47	DZ	16	LEU
47	DZ	24	LEU
47	DZ	28	LEU
47	DZ	29	ARG
47	DZ	30	ARG
47	DZ	37	ARG
47	DZ	50	VAL
47	DZ	53	MET
48	D0	3	GLN
48	D0	5	ASN
48	D0	22	THR
48	D0	41	HIS
48	D0	42	ILE
48	D0	49	ARG
48	D0	53	VAL
49	D1	10	LEU
49	D1	20	TYR
49	D1	35	LEU
49	D1	44	GLN
50	D2	9	VAL
50	D2	26	ASN
50	D2	33	ARG
50	D2	46	LYS
51	D3	12	ARG
51	D3	14	LYS
51	D3	27	ASN
51	D3	29	ARG
51	D3	41	ARG
51	D3	46	LYS
51	D3	48	MET
51	D3	51	LYS
51	D3	61	LEU
52	D4	2	LYS
52	D4	3	VAL
52	D4	9	LYS
52	D4	11	CYS
52	D4	13	ASN
52	D4	15	LYS
52	D4	17	VAL

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (333) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	14	HIS
2	AB	38	HIS
2	AB	57	ASN
2	AB	102	ASN
2	AB	108	GLN
2	AB	119	GLN
2	AB	169	HIS
3	AC	5	HIS
3	AC	24	ASN
3	AC	68	HIS
3	AC	138	GLN
3	AC	139	ASN
4	AD	40	HIS
4	AD	53	GLN
4	AD	58	GLN
4	AD	70	GLN
4	AD	73	ASN
4	AD	84	ASN
4	AD	99	ASN
4	AD	119	HIS
4	AD	163	GLN
5	AE	11	GLN
5	AE	42	ASN
5	AE	72	ASN
5	AE	77	ASN
5	AE	121	ASN
6	AF	11	HIS
6	AF	46	GLN
6	AF	52	ASN
6	AF	68	GLN
7	AG	85	GLN
7	AG	121	ASN
7	AG	147	ASN
8	AH	3	GLN
8	AH	17	GLN
8	AH	20	ASN
8	AH	117	GLN
9	AI	3	ASN
9	AI	4	GLN
9	AI	80	HIS
9	AI	125	GLN
10	AJ	20	GLN
10	AJ	35	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	AJ	58	ASN
10	AJ	64	GLN
11	AK	100	ASN
11	AK	108	ASN
12	AL	4	ASN
12	AL	45	ASN
12	AL	74	GLN
13	AM	7	ASN
14	AN	42	ASN
14	AN	48	GLN
14	AN	61	ASN
15	AO	19	ASN
15	AO	36	ASN
15	AO	45	HIS
15	AO	61	GLN
16	AP	29	ASN
16	AP	59	HIS
16	AP	63	GLN
17	AQ	44	HIS
17	AQ	49	ASN
18	AR	30	ASN
18	AR	53	GLN
18	AR	73	HIS
19	AS	42	ASN
20	AT	12	GLN
20	AT	47	GLN
20	AT	51	ASN
20	AT	54	GLN
20	AT	60	GLN
20	AT	74	HIS
20	AT	77	ASN
21	AU	8	ASN
24	BC	14	HIS
24	BC	20	ASN
24	BC	59	GLN
24	BC	89	ASN
24	BC	114	GLN
24	BC	141	HIS
24	BC	152	GLN
24	BC	242	HIS
24	BC	250	GLN
24	BC	259	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BD	32	ASN
25	BD	58	ASN
25	BD	126	ASN
25	BD	130	GLN
25	BD	150	GLN
26	BE	24	ASN
26	BE	29	HIS
26	BE	30	GLN
26	BE	62	GLN
26	BE	97	ASN
26	BE	136	GLN
27	BF	22	ASN
27	BF	26	GLN
27	BF	134	GLN
28	BG	72	ASN
28	BG	114	HIS
29	BH	2	GLN
29	BH	18	GLN
29	BH	20	ASN
29	BH	33	GLN
29	BH	43	ASN
29	BH	145	ASN
30	BI	5	GLN
30	BI	30	GLN
30	BI	110	GLN
31	BJ	40	HIS
31	BJ	76	HIS
31	BJ	77	HIS
31	BJ	128	ASN
31	BJ	130	HIS
32	BK	5	GLN
32	BK	88	ASN
32	BK	89	ASN
33	BL	4	ASN
33	BL	54	GLN
33	BL	93	ASN
33	BL	99	ASN
33	BL	104	GLN
34	BM	88	ASN
35	BN	9	GLN
35	BN	11	ASN
35	BN	23	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BN	62	ASN
35	BN	73	ASN
35	BN	107	ASN
36	BO	19	GLN
36	BO	34	HIS
36	BO	38	GLN
36	BO	100	HIS
37	BP	9	GLN
37	BP	74	GLN
38	BQ	13	HIS
38	BQ	19	GLN
38	BQ	43	GLN
38	BQ	65	ASN
39	BR	18	GLN
39	BR	43	ASN
39	BR	66	HIS
39	BR	82	HIS
39	BR	87	GLN
40	BS	15	GLN
40	BS	40	ASN
40	BS	57	ASN
41	BT	48	GLN
41	BT	70	HIS
41	BT	72	GLN
41	BT	91	GLN
42	BU	52	ASN
42	BU	65	GLN
42	BU	73	ASN
43	BV	5	ASN
43	BV	44	HIS
43	BV	51	GLN
43	BV	80	HIS
43	BV	88	HIS
44	BW	11	ASN
44	BW	39	GLN
45	BX	5	GLN
45	BX	15	ASN
45	BX	22	ASN
46	BY	15	ASN
46	BY	27	ASN
46	BY	41	HIS
48	B0	3	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	B2	6	GLN
50	B2	13	ASN
50	B2	16	HIS
50	B2	26	ASN
51	B3	27	ASN
52	B4	13	ASN
52	B4	33	HIS
52	B4	35	GLN
2	CB	18	GLN
2	CB	23	ASN
2	CB	38	HIS
2	CB	108	GLN
2	CB	145	ASN
2	CB	169	HIS
2	CB	176	ASN
2	CB	177	ASN
3	CC	2	GLN
3	CC	7	ASN
3	CC	18	ASN
3	CC	31	ASN
3	CC	68	HIS
3	CC	139	ASN
3	CC	184	ASN
4	CD	70	GLN
4	CD	84	ASN
4	CD	115	GLN
4	CD	119	HIS
4	CD	125	ASN
4	CD	163	GLN
5	CE	11	GLN
5	CE	76	ASN
5	CE	121	ASN
5	CE	131	ASN
6	CF	11	HIS
6	CF	58	HIS
6	CF	81	ASN
54	CG	67	ASN
54	CG	85	GLN
8	CH	3	GLN
8	CH	17	GLN
9	CI	3	ASN
9	CI	4	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	CI	49	GLN
9	CI	74	GLN
9	CI	109	GLN
9	CI	125	GLN
10	CJ	70	HIS
11	CK	27	ASN
11	CK	108	ASN
12	CL	4	ASN
12	CL	5	GLN
12	CL	19	ASN
12	CL	72	ASN
12	CL	74	GLN
12	CL	111	GLN
55	CM	90	HIS
14	CN	65	GLN
15	CO	27	GLN
15	CO	34	GLN
15	CO	39	GLN
15	CO	45	HIS
56	CP	18	GLN
56	CP	26	ASN
17	CQ	44	HIS
17	CQ	49	ASN
19	CS	51	HIS
19	CS	52	ASN
19	CS	56	HIS
20	CT	12	GLN
20	CT	74	HIS
21	CU	8	ASN
24	DC	14	HIS
24	DC	20	ASN
24	DC	43	ASN
24	DC	52	HIS
24	DC	57	HIS
24	DC	59	GLN
24	DC	89	ASN
24	DC	116	GLN
24	DC	133	ASN
24	DC	196	ASN
25	DD	36	GLN
25	DD	49	GLN
25	DD	58	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DD	126	ASN
25	DD	136	ASN
25	DD	140	HIS
25	DD	150	GLN
25	DD	185	ASN
26	DE	29	HIS
59	DF	126	ASN
28	DG	19	ASN
28	DG	21	GLN
28	DG	37	ASN
28	DG	44	HIS
28	DG	103	ASN
28	DG	138	GLN
29	DH	2	GLN
29	DH	28	ASN
29	DH	43	ASN
29	DH	66	ASN
30	DI	42	ASN
30	DI	93	ASN
30	DI	106	GLN
31	DJ	40	HIS
31	DJ	77	HIS
31	DJ	138	GLN
32	DK	3	GLN
32	DK	9	ASN
32	DK	13	ASN
32	DK	89	ASN
33	DL	4	ASN
33	DL	54	GLN
34	DM	13	HIS
35	DN	3	HIS
35	DN	16	HIS
35	DN	18	GLN
35	DN	23	ASN
35	DN	31	HIS
35	DN	73	ASN
35	DN	107	ASN
36	DO	29	HIS
36	DO	38	GLN
37	DP	2	ASN
37	DP	6	GLN
37	DP	9	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	DP	65	ASN
37	DP	114	ASN
38	DQ	19	GLN
38	DQ	71	ASN
38	DQ	80	ASN
39	DR	6	GLN
39	DR	82	HIS
39	DR	86	GLN
39	DR	87	GLN
40	DS	31	GLN
40	DS	57	ASN
41	DT	15	HIS
41	DT	48	GLN
41	DT	92	ASN
42	DU	44	HIS
42	DU	45	GLN
42	DU	52	ASN
42	DU	53	GLN
43	DV	51	GLN
43	DV	80	HIS
43	DV	88	HIS
45	DX	15	ASN
45	DX	22	ASN
45	DX	31	ASN
45	DX	35	HIS
46	DY	15	ASN
46	DY	20	ASN
46	DY	41	HIS
47	DZ	19	HIS
48	D0	41	HIS
50	D2	6	GLN
50	D2	16	HIS
50	D2	26	ASN
50	D2	29	GLN
51	D3	27	ASN
51	D3	30	HIS
51	D3	42	HIS
52	D4	37	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1532/1533 (99%)	478 (31%)	237 (15%)
22	BA	2850/2903 (98%)	829 (29%)	411 (14%)
23	BB	117/118 (99%)	31 (26%)	17 (14%)
53	CA	1529/1530 (99%)	540 (35%)	242 (15%)
57	DA	2838/2904 (97%)	1042 (36%)	504 (17%)
58	DB	116/117 (99%)	37 (31%)	17 (14%)
All	All	8982/9105 (98%)	2957 (32%)	1428 (15%)

All (2957) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	5	U
1	AA	6	G
1	AA	7	A
1	AA	8	A
1	AA	9	G
1	AA	14	U
1	AA	22	G
1	AA	31	G
1	AA	32	A
1	AA	33	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	50	A
1	AA	51	A
1	AA	52	C
1	AA	61	G
1	AA	65	A
1	AA	66	A
1	AA	67	C
1	AA	70	U
1	AA	71	A
1	AA	72	A
1	AA	73	C
1	AA	74	A
1	AA	75	G
1	AA	76	G
1	AA	77	A
1	AA	79	G
1	AA	82	G
1	AA	83	C
1	AA	85	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	86	G
1	AA	87	C
1	AA	88	U
1	AA	89	U
1	AA	90	C
1	AA	91	U
1	AA	92	U
1	AA	93	U
1	AA	94	G
1	AA	95	C
1	AA	96	U
1	AA	97	G
1	AA	98	A
1	AA	109	A
1	AA	110	C
1	AA	116	A
1	AA	119	A
1	AA	120	A
1	AA	121	U
1	AA	122	G
1	AA	127	G
1	AA	130	A
1	AA	131	A
1	AA	132	C
1	AA	138	G
1	AA	141	G
1	AA	143	A
1	AA	159	G
1	AA	163	C
1	AA	164	G
1	AA	174	A
1	AA	175	C
1	AA	177	G
1	AA	181	A
1	AA	182	A
1	AA	183	C
1	AA	184	G
1	AA	185	U
1	AA	195	A
1	AA	197	A
1	AA	198	G
1	AA	199	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	200	G
1	AA	205	A
1	AA	207	C
1	AA	208	U
1	AA	209	U
1	AA	210	C
1	AA	211	G
1	AA	212	G
1	AA	214	C
1	AA	232	G
1	AA	240	G
1	AA	243	A
1	AA	244	U
1	AA	245	U
1	AA	247	G
1	AA	250	A
1	AA	251	G
1	AA	252	U
1	AA	253	A
1	AA	258	G
1	AA	266	G
1	AA	267	C
1	AA	268	U
1	AA	273	U
1	AA	274	A
1	AA	275	G
1	AA	276	G
1	AA	279	A
1	AA	285	C
1	AA	289	G
1	AA	299	G
1	AA	305	G
1	AA	306	A
1	AA	307	C
1	AA	308	C
1	AA	316	C
1	AA	320	A
1	AA	321	A
1	AA	328	C
1	AA	329	A
1	AA	330	C
1	AA	331	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	332	G
1	AA	344	A
1	AA	345	C
1	AA	346	G
1	AA	347	G
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	356	A
1	AA	367	U
1	AA	368	U
1	AA	369	G
1	AA	373	A
1	AA	374	A
1	AA	384	G
1	AA	388	G
1	AA	389	A
1	AA	390	U
1	AA	392	C
1	AA	406	G
1	AA	409	U
1	AA	411	A
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	415	A
1	AA	421	U
1	AA	422	C
1	AA	423	G
1	AA	424	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	431	A
1	AA	438	U
1	AA	439	U
1	AA	448	A
1	AA	451	A
1	AA	452	A
1	AA	453	G
1	AA	458	U
1	AA	459	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	461	A
1	AA	462	G
1	AA	463	U
1	AA	466	A
1	AA	467	U
1	AA	468	A
1	AA	469	C
1	AA	481	G
1	AA	482	A
1	AA	484	G
1	AA	485	U
1	AA	486	U
1	AA	487	A
1	AA	495	A
1	AA	496	A
1	AA	497	G
1	AA	498	A
1	AA	499	A
1	AA	500	G
1	AA	501	C
1	AA	508	U
1	AA	509	A
1	AA	511	C
1	AA	512	U
1	AA	513	C
1	AA	518	C
1	AA	519	C
1	AA	520	A
1	AA	524	G
1	AA	527	G
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	535	A
1	AA	536	C
1	AA	537	G
1	AA	538	G
1	AA	548	G
1	AA	549	C
1	AA	550	G
1	AA	556	C
1	AA	559	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	560	A
1	AA	562	U
1	AA	563	A
1	AA	564	C
1	AA	566	G
1	AA	567	G
1	AA	572	A
1	AA	573	A
1	AA	575	G
1	AA	576	C
1	AA	577	G
1	AA	579	A
1	AA	588	G
1	AA	595	A
1	AA	596	A
1	AA	597	G
1	AA	604	G
1	AA	633	G
1	AA	642	A
1	AA	649	A
1	AA	653	U
1	AA	654	G
1	AA	655	A
1	AA	663	A
1	AA	665	A
1	AA	682	G
1	AA	688	G
1	AA	700	G
1	AA	701	U
1	AA	702	A
1	AA	703	G
1	AA	717	U
1	AA	718	A
1	AA	721	G
1	AA	722	G
1	AA	723	U
1	AA	724	G
1	AA	731	G
1	AA	733	G
1	AA	748	G
1	AA	752	G
1	AA	753	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	754	C
1	AA	755	G
1	AA	776	G
1	AA	777	A
1	AA	792	A
1	AA	793	U
1	AA	794	A
1	AA	795	C
1	AA	802	A
1	AA	813	U
1	AA	814	A
1	AA	815	A
1	AA	816	A
1	AA	817	C
1	AA	818	G
1	AA	828	U
1	AA	829	G
1	AA	832	G
1	AA	841	C
1	AA	843	U
1	AA	845	A
1	AA	846	G
1	AA	849	G
1	AA	855	U
1	AA	859	G
1	AA	861	G
1	AA	870	U
1	AA	871	U
1	AA	874	G
1	AA	875	U
1	AA	884	U
1	AA	885	G
1	AA	889	A
1	AA	890	G
1	AA	914	A
1	AA	915	A
1	AA	926	G
1	AA	927	G
1	AA	932	C
1	AA	934	C
1	AA	935	A
1	AA	936	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	960	U
1	AA	961	U
1	AA	965	U
1	AA	966	G
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	972	C
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	978	A
1	AA	982	U
1	AA	983	A
1	AA	984	C
1	AA	985	C
1	AA	989	U
1	AA	992	U
1	AA	993	G
1	AA	995	C
1	AA	1003	G
1	AA	1004	A
1	AA	1008	U
1	AA	1017	U
1	AA	1018	G
1	AA	1022	A
1	AA	1030	U
1	AA	1031	C
1	AA	1032	G
1	AA	1033	G
1	AA	1034	G
1	AA	1037	C
1	AA	1050	G
1	AA	1051	C
1	AA	1053	G
1	AA	1054	C
1	AA	1055	A
1	AA	1064	G
1	AA	1065	U
1	AA	1066	C
1	AA	1085	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1086	U
1	AA	1087	G
1	AA	1088	G
1	AA	1093	A
1	AA	1094	G
1	AA	1095	U
1	AA	1096	C
1	AA	1101	A
1	AA	1102	A
1	AA	1103	C
1	AA	1104	G
1	AA	1113	C
1	AA	1124	G
1	AA	1125	U
1	AA	1126	U
1	AA	1127	G
1	AA	1128	C
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G
1	AA	1133	G
1	AA	1135	U
1	AA	1137	C
1	AA	1138	G
1	AA	1140	C
1	AA	1141	C
1	AA	1142	G
1	AA	1143	G
1	AA	1144	G
1	AA	1145	A
1	AA	1151	A
1	AA	1152	A
1	AA	1153	G
1	AA	1157	A
1	AA	1158	C
1	AA	1159	U
1	AA	1160	G
1	AA	1161	C
1	AA	1162	C
1	AA	1167	A
1	AA	1168	U
1	AA	1169	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1170	A
1	AA	1178	G
1	AA	1181	G
1	AA	1182	G
1	AA	1183	U
1	AA	1184	G
1	AA	1191	A
1	AA	1192	C
1	AA	1196	A
1	AA	1197	A
1	AA	1198	G
1	AA	1200	C
1	AA	1201	A
1	AA	1202	U
1	AA	1203	C
1	AA	1212	U
1	AA	1213	A
1	AA	1224	U
1	AA	1225	A
1	AA	1226	C
1	AA	1227	A
1	AA	1228	C
1	AA	1229	A
1	AA	1238	A
1	AA	1239	A
1	AA	1240	U
1	AA	1241	G
1	AA	1242	G
1	AA	1256	A
1	AA	1257	A
1	AA	1258	G
1	AA	1259	C
1	AA	1278	G
1	AA	1279	G
1	AA	1280	A
1	AA	1282	C
1	AA	1283	U
1	AA	1284	C
1	AA	1285	A
1	AA	1286	U
1	AA	1287	A
1	AA	1293	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1297	G
1	AA	1299	A
1	AA	1303	C
1	AA	1304	G
1	AA	1305	G
1	AA	1308	U
1	AA	1315	U
1	AA	1316	G
1	AA	1317	C
1	AA	1318	A
1	AA	1320	C
1	AA	1321	U
1	AA	1322	C
1	AA	1323	G
1	AA	1324	A
1	AA	1332	A
1	AA	1333	A
1	AA	1337	G
1	AA	1338	G
1	AA	1346	A
1	AA	1348	U
1	AA	1349	A
1	AA	1353	G
1	AA	1362	A
1	AA	1363	A
1	AA	1364	U
1	AA	1370	G
1	AA	1371	G
1	AA	1380	U
1	AA	1381	U
1	AA	1382	C
1	AA	1394	A
1	AA	1395	C
1	AA	1396	A
1	AA	1397	C
1	AA	1398	A
1	AA	1399	C
1	AA	1400	C
1	AA	1402	C
1	AA	1408	A
1	AA	1432	G
1	AA	1433	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1441	A
1	AA	1446	A
1	AA	1448	C
1	AA	1451	U
1	AA	1452	C
1	AA	1453	G
1	AA	1454	G
1	AA	1455	G
1	AA	1469	C
1	AA	1470	U
1	AA	1490	U
1	AA	1492	A
1	AA	1494	G
1	AA	1497	G
1	AA	1498	U
1	AA	1499	A
1	AA	1502	A
1	AA	1503	A
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1517	G
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A
1	AA	1532	U
22	BA	10	A
22	BA	12	U
22	BA	13	A
22	BA	14	A
22	BA	15	G
22	BA	27	G
22	BA	28	A
22	BA	34	U
22	BA	35	G
22	BA	42	A
22	BA	43	G
22	BA	46	G
22	BA	49	A
22	BA	50	U
22	BA	52	A
22	BA	53	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	61	C
22	BA	63	A
22	BA	70	G
22	BA	71	A
22	BA	74	A
22	BA	75	G
22	BA	76	C
22	BA	80	G
22	BA	82	U
22	BA	84	A
22	BA	85	G
22	BA	92	U
22	BA	93	G
22	BA	101	A
22	BA	102	U
22	BA	117	G
22	BA	118	A
22	BA	119	A
22	BA	120	U
22	BA	126	A
22	BA	127	A
22	BA	135	U
22	BA	136	G
22	BA	137	U
22	BA	138	U
22	BA	139	U
22	BA	140	C
22	BA	141	G
22	BA	142	A
22	BA	143	C
22	BA	144	A
22	BA	145	C
22	BA	149	A
22	BA	162	U
22	BA	163	C
22	BA	164	C
22	BA	165	A
22	BA	174	U
22	BA	196	A
22	BA	197	A
22	BA	199	A
22	BA	204	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	205	G
22	BA	206	U
22	BA	207	A
22	BA	215	G
22	BA	216	A
22	BA	217	A
22	BA	221	A
22	BA	222	A
22	BA	223	A
22	BA	230	G
22	BA	232	G
22	BA	233	A
22	BA	241	A
22	BA	242	G
22	BA	243	U
22	BA	244	A
22	BA	248	G
22	BA	249	C
22	BA	250	G
22	BA	255	A
22	BA	256	A
22	BA	264	C
22	BA	265	A
22	BA	266	G
22	BA	267	C
22	BA	268	C
22	BA	271	G
22	BA	272	A
22	BA	273	G
22	BA	274	C
22	BA	276	U
22	BA	278	A
22	BA	285	G
22	BA	301	G
22	BA	302	C
22	BA	303	G
22	BA	311	A
22	BA	312	G
22	BA	313	G
22	BA	322	A
22	BA	329	G
22	BA	330	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	345	A
22	BA	346	A
22	BA	347	A
22	BA	353	C
22	BA	359	G
22	BA	361	G
22	BA	362	A
22	BA	371	A
22	BA	372	G
22	BA	386	G
22	BA	387	U
22	BA	388	G
22	BA	389	G
22	BA	391	A
22	BA	395	U
22	BA	396	G
22	BA	404	A
22	BA	405	U
22	BA	411	G
22	BA	412	A
22	BA	413	C
22	BA	421	C
22	BA	422	A
22	BA	423	A
22	BA	424	G
22	BA	435	C
22	BA	436	C
22	BA	443	A
22	BA	449	A
22	BA	451	U
22	BA	452	G
22	BA	454	A
22	BA	455	C
22	BA	457	A
22	BA	459	U
22	BA	460	A
22	BA	461	C
22	BA	462	C
22	BA	475	C
22	BA	476	G
22	BA	479	A
22	BA	480	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	481	G
22	BA	482	A
22	BA	483	A
22	BA	489	G
22	BA	490	C
22	BA	491	G
22	BA	504	A
22	BA	505	A
22	BA	507	A
22	BA	508	A
22	BA	509	C
22	BA	510	C
22	BA	512	G
22	BA	513	A
22	BA	514	A
22	BA	526	A
22	BA	528	A
22	BA	529	A
22	BA	530	G
22	BA	531	C
22	BA	532	A
22	BA	533	G
22	BA	538	A
22	BA	541	A
22	BA	544	C
22	BA	546	U
22	BA	548	G
22	BA	549	G
22	BA	550	C
22	BA	553	G
22	BA	555	G
22	BA	556	A
22	BA	563	A
22	BA	564	C
22	BA	572	A
22	BA	573	U
22	BA	575	A
22	BA	586	A
22	BA	588	U
22	BA	603	A
22	BA	604	G
22	BA	605	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	613	A
22	BA	614	A
22	BA	615	U
22	BA	618	G
22	BA	621	A
22	BA	622	G
22	BA	627	A
22	BA	631	A
22	BA	634	C
22	BA	637	A
22	BA	638	G
22	BA	645	C
22	BA	646	U
22	BA	647	G
22	BA	654	A
22	BA	655	A
22	BA	656	G
22	BA	664	G
22	BA	668	A
22	BA	669	G
22	BA	670	A
22	BA	685	A
22	BA	686	U
22	BA	688	U
22	BA	705	A
22	BA	706	A
22	BA	714	U
22	BA	722	A
22	BA	727	A
22	BA	728	G
22	BA	729	G
22	BA	730	A
22	BA	738	G
22	BA	740	C
22	BA	747	U
22	BA	748	G
22	BA	751	A
22	BA	752	A
22	BA	763	G
22	BA	764	A
22	BA	765	C
22	BA	774	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	775	G
22	BA	776	G
22	BA	777	G
22	BA	782	A
22	BA	783	A
22	BA	784	G
22	BA	785	G
22	BA	791	C
22	BA	792	A
22	BA	801	G
22	BA	805	G
22	BA	806	C
22	BA	811	U
22	BA	812	C
22	BA	819	A
22	BA	827	U
22	BA	828	U
22	BA	829	A
22	BA	830	G
22	BA	845	A
22	BA	846	U
22	BA	847	U
22	BA	858	G
22	BA	859	G
22	BA	860	U
22	BA	865	C
22	BA	866	A
22	BA	876	C
22	BA	878	A
22	BA	896	A
22	BA	897	C
22	BA	910	A
22	BA	913	U
22	BA	914	G
22	BA	915	C
22	BA	916	G
22	BA	919	U
22	BA	932	U
22	BA	933	A
22	BA	934	U
22	BA	941	A
22	BA	946	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	955	U
22	BA	958	U
22	BA	959	A
22	BA	961	C
22	BA	962	G
22	BA	968	C
22	BA	973	A
22	BA	974	G
22	BA	983	A
22	BA	984	A
22	BA	985	C
22	BA	989	G
22	BA	990	A
22	BA	991	C
22	BA	995	C
22	BA	996	A
22	BA	1004	U
22	BA	1005	C
22	BA	1008	A
22	BA	1009	A
22	BA	1011	G
22	BA	1012	U
22	BA	1013	C
22	BA	1014	A
22	BA	1021	A
22	BA	1022	G
22	BA	1023	U
22	BA	1024	G
22	BA	1025	G
22	BA	1026	G
22	BA	1027	A
22	BA	1033	U
22	BA	1034	G
22	BA	1044	C
22	BA	1046	A
22	BA	1047	G
22	BA	1060	U
22	BA	1061	U
22	BA	1062	G
22	BA	1063	G
22	BA	1064	C
22	BA	1065	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1066	U
22	BA	1070	A
22	BA	1071	G
22	BA	1072	C
22	BA	1073	A
22	BA	1074	G
22	BA	1075	C
22	BA	1078	U
22	BA	1082	U
22	BA	1083	U
22	BA	1084	A
22	BA	1088	A
22	BA	1090	A
22	BA	1098	A
22	BA	1111	A
22	BA	1112	G
22	BA	1128	G
22	BA	1129	A
22	BA	1130	U
22	BA	1132	U
22	BA	1133	A
22	BA	1135	C
22	BA	1136	G
22	BA	1138	G
22	BA	1139	G
22	BA	1142	A
22	BA	1144	A
22	BA	1151	A
22	BA	1156	A
22	BA	1157	G
22	BA	1158	C
22	BA	1169	A
22	BA	1170	C
22	BA	1172	C
22	BA	1175	A
22	BA	1176	U
22	BA	1180	U
22	BA	1181	U
22	BA	1182	G
22	BA	1185	G
22	BA	1186	G
22	BA	1205	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1206	G
22	BA	1207	C
22	BA	1210	G
22	BA	1213	A
22	BA	1227	G
22	BA	1236	G
22	BA	1237	A
22	BA	1238	G
22	BA	1248	G
22	BA	1249	U
22	BA	1250	G
22	BA	1251	C
22	BA	1253	A
22	BA	1255	U
22	BA	1256	G
22	BA	1261	C
22	BA	1266	G
22	BA	1271	G
22	BA	1272	A
22	BA	1273	U
22	BA	1275	A
22	BA	1276	A
22	BA	1281	G
22	BA	1287	A
22	BA	1288	G
22	BA	1289	C
22	BA	1290	C
22	BA	1300	G
22	BA	1301	A
22	BA	1303	G
22	BA	1321	A
22	BA	1324	G
22	BA	1325	U
22	BA	1326	U
22	BA	1327	A
22	BA	1329	U
22	BA	1330	C
22	BA	1331	G
22	BA	1332	G
22	BA	1336	A
22	BA	1341	G
22	BA	1343	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1344	U
22	BA	1349	C
22	BA	1352	U
22	BA	1359	A
22	BA	1360	G
22	BA	1365	A
22	BA	1374	G
22	BA	1378	A
22	BA	1379	U
22	BA	1380	G
22	BA	1383	A
22	BA	1385	A
22	BA	1386	C
22	BA	1387	A
22	BA	1395	A
22	BA	1397	U
22	BA	1398	C
22	BA	1399	C
22	BA	1403	A
22	BA	1413	A
22	BA	1416	G
22	BA	1417	C
22	BA	1419	A
22	BA	1420	A
22	BA	1421	G
22	BA	1427	A
22	BA	1428	C
22	BA	1429	G
22	BA	1430	G
22	BA	1434	A
22	BA	1437	C
22	BA	1440	U
22	BA	1451	C
22	BA	1452	G
22	BA	1455	G
22	BA	1459	G
22	BA	1460	U
22	BA	1461	C
22	BA	1475	G
22	BA	1476	U
22	BA	1477	A
22	BA	1482	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1490	A
22	BA	1491	G
22	BA	1492	G
22	BA	1494	A
22	BA	1495	A
22	BA	1497	U
22	BA	1498	C
22	BA	1499	C
22	BA	1504	A
22	BA	1507	C
22	BA	1508	A
22	BA	1509	A
22	BA	1510	G
22	BA	1511	G
22	BA	1512	C
22	BA	1515	A
22	BA	1522	A
22	BA	1523	U
22	BA	1527	G
22	BA	1528	A
22	BA	1533	C
22	BA	1534	U
22	BA	1535	A
22	BA	1536	C
22	BA	1537	G
22	BA	1538	G
22	BA	1539	U
22	BA	1555	G
22	BA	1556	C
22	BA	1558	C
22	BA	1559	U
22	BA	1566	A
22	BA	1567	G
22	BA	1569	A
22	BA	1578	U
22	BA	1581	G
22	BA	1583	A
22	BA	1584	U
22	BA	1585	C
22	BA	1603	A
22	BA	1607	C
22	BA	1608	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1610	A
22	BA	1616	A
22	BA	1626	A
22	BA	1627	G
22	BA	1634	A
22	BA	1635	A
22	BA	1646	C
22	BA	1647	U
22	BA	1648	U
22	BA	1649	G
22	BA	1652	A
22	BA	1653	G
22	BA	1654	A
22	BA	1655	A
22	BA	1674	G
22	BA	1675	C
22	BA	1693	U
22	BA	1694	C
22	BA	1695	G
22	BA	1696	G
22	BA	1697	G
22	BA	1698	A
22	BA	1699	G
22	BA	1700	A
22	BA	1701	A
22	BA	1707	G
22	BA	1713	A
22	BA	1714	U
22	BA	1715	G
22	BA	1716	U
22	BA	1717	A
22	BA	1723	G
22	BA	1729	U
22	BA	1730	C
22	BA	1732	C
22	BA	1733	G
22	BA	1734	G
22	BA	1735	A
22	BA	1736	U
22	BA	1737	G
22	BA	1738	G
22	BA	1744	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1755	A
22	BA	1764	C
22	BA	1769	U
22	BA	1773	A
22	BA	1776	G
22	BA	1780	A
22	BA	1782	U
22	BA	1785	A
22	BA	1786	A
22	BA	1787	A
22	BA	1788	C
22	BA	1791	A
22	BA	1799	G
22	BA	1800	C
22	BA	1801	A
22	BA	1802	A
22	BA	1808	A
22	BA	1809	A
22	BA	1816	C
22	BA	1819	A
22	BA	1821	A
22	BA	1827	U
22	BA	1829	A
22	BA	1848	A
22	BA	1849	G
22	BA	1858	A
22	BA	1859	U
22	BA	1865	U
22	BA	1866	A
22	BA	1867	G
22	BA	1869	G
22	BA	1871	A
22	BA	1872	A
22	BA	1873	G
22	BA	1876	A
22	BA	1885	A
22	BA	1886	U
22	BA	1900	A
22	BA	1901	A
22	BA	1902	C
22	BA	1906	G
22	BA	1907	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1913	A
22	BA	1914	C
22	BA	1918	A
22	BA	1919	A
22	BA	1920	C
22	BA	1926	U
22	BA	1927	A
22	BA	1929	G
22	BA	1930	G
22	BA	1931	U
22	BA	1937	A
22	BA	1938	A
22	BA	1941	C
22	BA	1943	U
22	BA	1944	U
22	BA	1945	G
22	BA	1954	G
22	BA	1955	U
22	BA	1960	A
22	BA	1962	C
22	BA	1963	U
22	BA	1964	G
22	BA	1966	A
22	BA	1967	C
22	BA	1968	G
22	BA	1970	A
22	BA	1971	U
22	BA	1972	G
22	BA	1986	C
22	BA	1991	U
22	BA	1992	G
22	BA	1993	U
22	BA	1996	C
22	BA	1997	C
22	BA	2022	U
22	BA	2023	C
22	BA	2030	A
22	BA	2031	A
22	BA	2032	G
22	BA	2033	A
22	BA	2035	G
22	BA	2036	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2037	A
22	BA	2043	C
22	BA	2049	G
22	BA	2051	A
22	BA	2052	A
22	BA	2055	C
22	BA	2056	G
22	BA	2059	A
22	BA	2060	A
22	BA	2061	G
22	BA	2062	A
22	BA	2067	G
22	BA	2068	U
22	BA	2069	G
22	BA	2092	U
22	BA	2093	G
22	BA	2104	C
22	BA	2106	U
22	BA	2107	G
22	BA	2109	U
22	BA	2110	G
22	BA	2134	A
22	BA	2135	A
22	BA	2136	G
22	BA	2137	U
22	BA	2140	G
22	BA	2143	C
22	BA	2144	G
22	BA	2145	C
22	BA	2146	C
22	BA	2147	A
22	BA	2148	G
22	BA	2149	U
22	BA	2150	C
22	BA	2151	U
22	BA	2155	U
22	BA	2156	G
22	BA	2180	U
22	BA	2181	U
22	BA	2183	A
22	BA	2184	A
22	BA	2185	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2187	U
22	BA	2198	A
22	BA	2199	A
22	BA	2200	C
22	BA	2203	U
22	BA	2204	G
22	BA	2210	U
22	BA	2211	A
22	BA	2212	A
22	BA	2214	C
22	BA	2215	C
22	BA	2223	G
22	BA	2225	A
22	BA	2226	C
22	BA	2238	G
22	BA	2239	G
22	BA	2248	C
22	BA	2250	G
22	BA	2258	C
22	BA	2259	U
22	BA	2266	A
22	BA	2267	A
22	BA	2268	A
22	BA	2273	A
22	BA	2275	C
22	BA	2276	G
22	BA	2278	A
22	BA	2283	C
22	BA	2284	A
22	BA	2286	G
22	BA	2287	A
22	BA	2297	A
22	BA	2298	A
22	BA	2305	U
22	BA	2307	G
22	BA	2308	G
22	BA	2309	A
22	BA	2310	C
22	BA	2311	A
22	BA	2312	U
22	BA	2320	U
22	BA	2321	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2325	G
22	BA	2326	C
22	BA	2327	A
22	BA	2333	A
22	BA	2334	U
22	BA	2335	A
22	BA	2336	A
22	BA	2337	G
22	BA	2344	U
22	BA	2345	G
22	BA	2347	C
22	BA	2358	A
22	BA	2361	G
22	BA	2383	G
22	BA	2384	U
22	BA	2385	C
22	BA	2386	A
22	BA	2392	A
22	BA	2402	U
22	BA	2403	C
22	BA	2406	A
22	BA	2423	U
22	BA	2424	C
22	BA	2425	A
22	BA	2426	A
22	BA	2427	C
22	BA	2428	G
22	BA	2429	G
22	BA	2430	A
22	BA	2431	U
22	BA	2435	A
22	BA	2439	A
22	BA	2440	C
22	BA	2441	U
22	BA	2447	G
22	BA	2448	A
22	BA	2458	G
22	BA	2459	A
22	BA	2476	A
22	BA	2491	U
22	BA	2493	U
22	BA	2497	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2500	U
22	BA	2501	C
22	BA	2502	G
22	BA	2503	A
22	BA	2504	U
22	BA	2505	G
22	BA	2506	U
22	BA	2507	C
22	BA	2515	C
22	BA	2518	A
22	BA	2525	G
22	BA	2529	G
22	BA	2543	G
22	BA	2547	A
22	BA	2554	U
22	BA	2566	A
22	BA	2567	G
22	BA	2573	C
22	BA	2574	G
22	BA	2576	G
22	BA	2579	C
22	BA	2585	U
22	BA	2586	U
22	BA	2603	G
22	BA	2604	U
22	BA	2609	U
22	BA	2610	C
22	BA	2611	C
22	BA	2612	C
22	BA	2613	U
22	BA	2614	A
22	BA	2615	U
22	BA	2621	G
22	BA	2629	U
22	BA	2630	G
22	BA	2638	G
22	BA	2645	G
22	BA	2646	C
22	BA	2654	A
22	BA	2655	G
22	BA	2661	G
22	BA	2663	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2672	U
22	BA	2673	G
22	BA	2681	C
22	BA	2682	A
22	BA	2690	U
22	BA	2713	U
22	BA	2714	G
22	BA	2724	U
22	BA	2725	A
22	BA	2726	A
22	BA	2727	A
22	BA	2728	U
22	BA	2729	G
22	BA	2732	G
22	BA	2733	A
22	BA	2748	A
22	BA	2750	A
22	BA	2751	G
22	BA	2753	A
22	BA	2756	U
22	BA	2757	A
22	BA	2758	A
22	BA	2765	A
22	BA	2771	C
22	BA	2778	A
22	BA	2779	U
22	BA	2791	G
22	BA	2797	U
22	BA	2798	U
22	BA	2800	A
22	BA	2801	G
22	BA	2808	G
22	BA	2809	A
22	BA	2812	G
22	BA	2818	U
22	BA	2820	A
22	BA	2821	A
22	BA	2824	C
22	BA	2825	G
22	BA	2826	A
22	BA	2833	U
22	BA	2835	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2836	U
22	BA	2849	U
22	BA	2866	U
22	BA	2867	G
22	BA	2868	A
22	BA	2869	G
22	BA	2873	A
22	BA	2874	C
22	BA	2879	A
22	BA	2880	C
22	BA	2883	A
22	BA	2884	U
22	BA	2886	A
22	BA	2894	G
22	BA	2895	G
23	BB	12	C
23	BB	13	G
23	BB	14	U
23	BB	15	A
23	BB	16	G
23	BB	24	G
23	BB	25	U
23	BB	30	C
23	BB	35	C
23	BB	37	C
23	BB	41	G
23	BB	42	C
23	BB	43	C
23	BB	44	G
23	BB	45	A
23	BB	46	A
23	BB	52	A
23	BB	53	A
23	BB	56	G
23	BB	57	A
23	BB	58	A
23	BB	66	A
23	BB	67	G
23	BB	87	U
23	BB	88	C
23	BB	89	U
23	BB	90	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	91	C
23	BB	99	A
23	BB	108	A
23	BB	109	A
53	CA	6	G
53	CA	7	A
53	CA	8	A
53	CA	9	G
53	CA	13	U
53	CA	14	U
53	CA	15	G
53	CA	16	A
53	CA	17	U
53	CA	19	A
53	CA	22	G
53	CA	31	G
53	CA	32	A
53	CA	33	A
53	CA	39	G
53	CA	40	C
53	CA	47	C
53	CA	48	C
53	CA	51	A
53	CA	52	C
53	CA	53	A
53	CA	61	G
53	CA	65	A
53	CA	66	A
53	CA	67	C
53	CA	68	G
53	CA	70	U
53	CA	71	A
53	CA	72	A
53	CA	73	C
53	CA	74	A
53	CA	76	G
53	CA	77	A
53	CA	80	A
53	CA	81	A
53	CA	82	G
53	CA	83	C
53	CA	85	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	86	G
53	CA	87	C
53	CA	88	U
53	CA	89	U
53	CA	90	C
53	CA	91	U
53	CA	92	U
53	CA	93	U
53	CA	94	G
53	CA	95	C
53	CA	96	U
53	CA	98	A
53	CA	101	A
53	CA	110	C
53	CA	115	G
53	CA	116	A
53	CA	119	A
53	CA	120	A
53	CA	121	U
53	CA	122	G
53	CA	131	A
53	CA	132	C
53	CA	133	U
53	CA	141	G
53	CA	143	A
53	CA	144	G
53	CA	155	A
53	CA	164	G
53	CA	166	U
53	CA	174	A
53	CA	175	C
53	CA	177	G
53	CA	178	C
53	CA	181	A
53	CA	182	A
53	CA	184	G
53	CA	185	U
53	CA	198	G
53	CA	199	A
53	CA	200	G
53	CA	201	G
53	CA	206	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	207	C
53	CA	208	U
53	CA	209	U
53	CA	210	C
53	CA	211	G
53	CA	212	G
53	CA	213	G
53	CA	214	C
53	CA	239	U
53	CA	240	G
53	CA	241	G
53	CA	243	A
53	CA	244	U
53	CA	245	U
53	CA	246	A
53	CA	247	G
53	CA	248	C
53	CA	249	U
53	CA	250	A
53	CA	251	G
53	CA	252	U
53	CA	253	A
53	CA	254	G
53	CA	266	G
53	CA	267	C
53	CA	268	U
53	CA	275	G
53	CA	276	G
53	CA	277	C
53	CA	280	C
53	CA	289	G
53	CA	294	U
53	CA	298	A
53	CA	301	G
53	CA	305	G
53	CA	306	A
53	CA	315	A
53	CA	316	C
53	CA	317	U
53	CA	321	A
53	CA	328	C
53	CA	329	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	330	C
53	CA	331	G
53	CA	332	G
53	CA	338	A
53	CA	339	C
53	CA	344	A
53	CA	345	C
53	CA	346	G
53	CA	347	G
53	CA	348	G
53	CA	349	A
53	CA	352	C
53	CA	353	A
53	CA	354	G
53	CA	367	U
53	CA	368	U
53	CA	369	G
53	CA	372	C
53	CA	373	A
53	CA	374	A
53	CA	376	G
53	CA	381	C
53	CA	382	A
53	CA	384	G
53	CA	389	A
53	CA	390	U
53	CA	397	A
53	CA	398	U
53	CA	406	G
53	CA	412	A
53	CA	413	G
53	CA	414	A
53	CA	415	A
53	CA	416	G
53	CA	421	U
53	CA	422	C
53	CA	423	G
53	CA	424	G
53	CA	425	G
53	CA	426	U
53	CA	428	G
53	CA	429	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	430	A
53	CA	435	A
53	CA	438	U
53	CA	452	A
53	CA	453	G
53	CA	454	G
53	CA	456	A
53	CA	457	G
53	CA	458	U
53	CA	459	A
53	CA	461	A
53	CA	463	U
53	CA	464	U
53	CA	465	A
53	CA	466	A
53	CA	467	U
53	CA	468	A
53	CA	469	C
53	CA	474	G
53	CA	476	U
53	CA	478	A
53	CA	479	U
53	CA	481	G
53	CA	482	A
53	CA	483	C
53	CA	484	G
53	CA	485	U
53	CA	486	U
53	CA	493	A
53	CA	496	A
53	CA	497	G
53	CA	498	A
53	CA	500	G
53	CA	501	C
53	CA	508	U
53	CA	509	A
53	CA	510	A
53	CA	511	C
53	CA	512	U
53	CA	513	C
53	CA	514	C
53	CA	516	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	517	G
53	CA	518	C
53	CA	519	C
53	CA	520	A
53	CA	521	G
53	CA	524	G
53	CA	527	G
53	CA	530	G
53	CA	532	A
53	CA	533	A
53	CA	534	U
53	CA	535	A
53	CA	536	C
53	CA	537	G
53	CA	548	G
53	CA	559	A
53	CA	560	A
53	CA	562	U
53	CA	563	A
53	CA	564	C
53	CA	565	U
53	CA	566	G
53	CA	567	G
53	CA	568	G
53	CA	572	A
53	CA	573	A
53	CA	575	G
53	CA	576	C
53	CA	577	G
53	CA	578	C
53	CA	596	A
53	CA	597	G
53	CA	604	G
53	CA	616	G
53	CA	617	G
53	CA	633	G
53	CA	642	A
53	CA	643	C
53	CA	644	U
53	CA	653	U
53	CA	654	G
53	CA	655	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	665	A
53	CA	666	G
53	CA	688	G
53	CA	689	C
53	CA	695	A
53	CA	700	G
53	CA	701	U
53	CA	702	A
53	CA	703	G
53	CA	704	A
53	CA	705	G
53	CA	718	A
53	CA	719	C
53	CA	721	G
53	CA	722	G
53	CA	723	U
53	CA	724	G
53	CA	728	A
53	CA	731	G
53	CA	733	G
53	CA	734	G
53	CA	735	C
53	CA	748	G
53	CA	754	C
53	CA	755	G
53	CA	758	C
53	CA	760	G
53	CA	777	A
53	CA	781	A
53	CA	782	A
53	CA	785	G
53	CA	792	A
53	CA	793	U
53	CA	794	A
53	CA	795	C
53	CA	803	G
53	CA	810	C
53	CA	812	G
53	CA	815	A
53	CA	816	A
53	CA	817	C
53	CA	818	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	819	A
53	CA	820	U
53	CA	821	G
53	CA	826	C
53	CA	828	U
53	CA	829	G
53	CA	841	C
53	CA	842	U
53	CA	843	U
53	CA	844	G
53	CA	845	A
53	CA	846	G
53	CA	847	G
53	CA	849	G
53	CA	859	G
53	CA	870	U
53	CA	871	U
53	CA	874	G
53	CA	880	C
53	CA	885	G
53	CA	889	A
53	CA	890	G
53	CA	891	U
53	CA	892	A
53	CA	914	A
53	CA	915	A
53	CA	926	G
53	CA	927	G
53	CA	934	C
53	CA	935	A
53	CA	936	C
53	CA	937	A
53	CA	942	G
53	CA	945	G
53	CA	960	U
53	CA	961	U
53	CA	962	C
53	CA	963	G
53	CA	966	G
53	CA	968	A
53	CA	969	A
53	CA	970	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	972	C
53	CA	974	A
53	CA	975	A
53	CA	976	G
53	CA	977	A
53	CA	978	A
53	CA	979	C
53	CA	980	C
53	CA	982	U
53	CA	983	A
53	CA	984	C
53	CA	985	C
53	CA	986	U
53	CA	987	G
53	CA	990	C
53	CA	991	U
53	CA	992	U
53	CA	993	G
53	CA	995	C
53	CA	996	A
53	CA	997	U
53	CA	1000	A
53	CA	1004	A
53	CA	1006	G
53	CA	1016	A
53	CA	1019	A
53	CA	1020	G
53	CA	1022	A
53	CA	1024	G
53	CA	1026	G
53	CA	1029	U
53	CA	1031	C
53	CA	1032	G
53	CA	1036	A
53	CA	1037	C
53	CA	1049	U
53	CA	1050	G
53	CA	1051	C
53	CA	1052	U
53	CA	1053	G
53	CA	1054	C
53	CA	1064	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	1065	U
53	CA	1066	C
53	CA	1067	A
53	CA	1068	G
53	CA	1085	U
53	CA	1086	U
53	CA	1087	G
53	CA	1094	G
53	CA	1101	A
53	CA	1102	A
53	CA	1103	C
53	CA	1113	C
53	CA	1124	G
53	CA	1125	U
53	CA	1127	G
53	CA	1128	C
53	CA	1130	A
53	CA	1131	G
53	CA	1136	C
53	CA	1137	C
53	CA	1138	G
53	CA	1139	G
53	CA	1140	C
53	CA	1141	C
53	CA	1142	G
53	CA	1143	G
53	CA	1144	G
53	CA	1145	A
53	CA	1146	A
53	CA	1147	C
53	CA	1148	U
53	CA	1149	C
53	CA	1151	A
53	CA	1152	A
53	CA	1153	G
53	CA	1158	C
53	CA	1159	U
53	CA	1160	G
53	CA	1161	C
53	CA	1162	C
53	CA	1168	U
53	CA	1169	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	1181	G
53	CA	1183	U
53	CA	1184	G
53	CA	1185	G
53	CA	1190	G
53	CA	1191	A
53	CA	1192	C
53	CA	1193	G
53	CA	1196	A
53	CA	1197	A
53	CA	1200	C
53	CA	1201	A
53	CA	1202	U
53	CA	1203	C
53	CA	1211	U
53	CA	1212	U
53	CA	1213	A
53	CA	1214	C
53	CA	1215	G
53	CA	1217	C
53	CA	1222	G
53	CA	1224	U
53	CA	1225	A
53	CA	1226	C
53	CA	1227	A
53	CA	1228	C
53	CA	1229	A
53	CA	1230	C
53	CA	1231	G
53	CA	1238	A
53	CA	1239	A
53	CA	1240	U
53	CA	1241	G
53	CA	1243	C
53	CA	1244	G
53	CA	1250	A
53	CA	1251	A
53	CA	1256	A
53	CA	1257	A
53	CA	1260	G
53	CA	1266	G
53	CA	1278	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	1279	G
53	CA	1280	A
53	CA	1281	C
53	CA	1282	C
53	CA	1283	U
53	CA	1284	C
53	CA	1285	A
53	CA	1286	U
53	CA	1287	A
53	CA	1288	A
53	CA	1289	A
53	CA	1294	G
53	CA	1295	U
53	CA	1297	G
53	CA	1299	A
53	CA	1300	G
53	CA	1301	U
53	CA	1302	C
53	CA	1303	C
53	CA	1305	G
53	CA	1312	G
53	CA	1316	G
53	CA	1317	C
53	CA	1320	C
53	CA	1322	C
53	CA	1323	G
53	CA	1324	A
53	CA	1332	A
53	CA	1338	G
53	CA	1346	A
53	CA	1348	U
53	CA	1349	A
53	CA	1350	A
53	CA	1359	C
53	CA	1362	A
53	CA	1364	U
53	CA	1365	G
53	CA	1367	C
53	CA	1368	A
53	CA	1370	G
53	CA	1379	G
53	CA	1381	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	1382	C
53	CA	1394	A
53	CA	1395	C
53	CA	1396	A
53	CA	1397	C
53	CA	1398	A
53	CA	1400	C
53	CA	1411	C
53	CA	1422	G
53	CA	1429	A
53	CA	1431	A
53	CA	1432	G
53	CA	1441	A
53	CA	1446	A
53	CA	1447	A
53	CA	1448	C
53	CA	1449	C
53	CA	1450	U
53	CA	1452	C
53	CA	1453	G
53	CA	1454	G
53	CA	1455	G
53	CA	1456	A
53	CA	1491	G
53	CA	1493	A
53	CA	1494	G
53	CA	1497	G
53	CA	1499	A
53	CA	1502	A
53	CA	1503	A
53	CA	1505	G
53	CA	1507	A
53	CA	1508	A
53	CA	1517	G
53	CA	1519	A
53	CA	1520	C
53	CA	1529	G
53	CA	1530	G
53	CA	1531	A
53	CA	1534	A
57	DA	12	U
57	DA	14	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	15	G
57	DA	27	G
57	DA	28	A
57	DA	34	U
57	DA	35	G
57	DA	36	G
57	DA	37	C
57	DA	39	G
57	DA	46	G
57	DA	49	A
57	DA	50	U
57	DA	52	A
57	DA	53	A
57	DA	55	G
57	DA	61	C
57	DA	62	U
57	DA	70	G
57	DA	71	A
57	DA	73	A
57	DA	74	A
57	DA	75	G
57	DA	76	C
57	DA	77	G
57	DA	78	U
57	DA	79	C
57	DA	83	A
57	DA	84	A
57	DA	85	G
57	DA	86	G
57	DA	87	U
57	DA	88	G
57	DA	91	A
57	DA	92	U
57	DA	93	G
57	DA	96	C
57	DA	100	U
57	DA	101	A
57	DA	102	U
57	DA	103	A
57	DA	104	A
57	DA	118	A
57	DA	119	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	120	U
57	DA	121	G
57	DA	122	G
57	DA	123	G
57	DA	126	A
57	DA	128	C
57	DA	129	C
57	DA	134	G
57	DA	139	U
57	DA	140	C
57	DA	141	G
57	DA	142	A
57	DA	143	C
57	DA	144	A
57	DA	150	U
57	DA	155	A
57	DA	156	A
57	DA	160	A
57	DA	161	A
57	DA	162	U
57	DA	163	C
57	DA	164	C
57	DA	165	A
57	DA	166	U
57	DA	180	G
57	DA	181	A
57	DA	196	A
57	DA	197	A
57	DA	199	A
57	DA	204	A
57	DA	205	G
57	DA	206	U
57	DA	207	A
57	DA	208	C
57	DA	215	G
57	DA	216	A
57	DA	217	A
57	DA	221	A
57	DA	222	A
57	DA	223	A
57	DA	224	U
57	DA	225	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	227	A
57	DA	228	C
57	DA	229	C
57	DA	230	G
57	DA	231	A
57	DA	232	G
57	DA	233	A
57	DA	234	U
57	DA	235	U
57	DA	241	A
57	DA	242	G
57	DA	243	U
57	DA	244	A
57	DA	245	G
57	DA	248	G
57	DA	249	C
57	DA	250	G
57	DA	251	A
57	DA	255	A
57	DA	264	C
57	DA	265	A
57	DA	266	G
57	DA	271	G
57	DA	272	A
57	DA	273	G
57	DA	274	C
57	DA	277	G
57	DA	280	U
57	DA	281	C
57	DA	284	U
57	DA	285	G
57	DA	294	A
57	DA	295	G
57	DA	299	A
57	DA	301	G
57	DA	302	C
57	DA	303	G
57	DA	304	U
57	DA	305	C
57	DA	311	A
57	DA	312	G
57	DA	314	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	315	G
57	DA	322	A
57	DA	323	C
57	DA	324	A
57	DA	325	G
57	DA	329	G
57	DA	330	A
57	DA	334	C
57	DA	335	C
57	DA	336	C
57	DA	343	C
57	DA	351	C
57	DA	353	C
57	DA	354	A
57	DA	362	A
57	DA	367	G
57	DA	370	G
57	DA	371	A
57	DA	372	G
57	DA	373	U
57	DA	374	A
57	DA	375	G
57	DA	383	C
57	DA	385	C
57	DA	387	U
57	DA	388	G
57	DA	389	G
57	DA	390	U
57	DA	391	A
57	DA	392	U
57	DA	395	U
57	DA	396	G
57	DA	397	U
57	DA	398	C
57	DA	399	U
57	DA	404	A
57	DA	405	U
57	DA	406	G
57	DA	407	G
57	DA	408	G
57	DA	411	G
57	DA	412	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	413	C
57	DA	424	G
57	DA	428	A
57	DA	430	A
57	DA	436	C
57	DA	442	G
57	DA	443	A
57	DA	444	C
57	DA	445	C
57	DA	446	G
57	DA	447	A
57	DA	449	A
57	DA	450	G
57	DA	451	U
57	DA	455	C
57	DA	457	A
57	DA	459	U
57	DA	460	A
57	DA	461	C
57	DA	475	C
57	DA	476	G
57	DA	477	A
57	DA	478	A
57	DA	479	A
57	DA	480	A
57	DA	481	G
57	DA	482	A
57	DA	484	C
57	DA	485	C
57	DA	490	C
57	DA	491	G
57	DA	492	A
57	DA	498	G
57	DA	502	A
57	DA	504	A
57	DA	505	A
57	DA	507	A
57	DA	510	C
57	DA	511	U
57	DA	512	G
57	DA	527	C
57	DA	528	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	529	A
57	DA	530	G
57	DA	531	C
57	DA	532	A
57	DA	533	G
57	DA	534	U
57	DA	544	C
57	DA	545	U
57	DA	546	U
57	DA	547	A
57	DA	548	G
57	DA	549	G
57	DA	550	C
57	DA	562	U
57	DA	563	A
57	DA	571	U
57	DA	572	A
57	DA	573	U
57	DA	574	A
57	DA	575	A
57	DA	576	U
57	DA	577	G
57	DA	586	A
57	DA	590	A
57	DA	603	A
57	DA	604	G
57	DA	605	G
57	DA	606	U
57	DA	613	A
57	DA	614	A
57	DA	615	U
57	DA	616	A
57	DA	617	G
57	DA	618	G
57	DA	621	A
57	DA	622	G
57	DA	623	C
57	DA	627	A
57	DA	628	G
57	DA	629	G
57	DA	637	A
57	DA	638	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	639	U
57	DA	640	C
57	DA	643	A
57	DA	645	C
57	DA	646	U
57	DA	654	A
57	DA	656	G
57	DA	657	U
57	DA	662	G
57	DA	664	G
57	DA	669	G
57	DA	671	C
57	DA	672	C
57	DA	673	C
57	DA	686	U
57	DA	687	C
57	DA	688	U
57	DA	695	G
57	DA	699	A
57	DA	705	A
57	DA	717	C
57	DA	726	G
57	DA	727	A
57	DA	728	G
57	DA	729	G
57	DA	730	A
57	DA	739	A
57	DA	740	C
57	DA	741	U
57	DA	746	U
57	DA	747	U
57	DA	748	G
57	DA	749	A
57	DA	750	A
57	DA	751	A
57	DA	753	A
57	DA	756	A
57	DA	757	G
57	DA	763	G
57	DA	764	A
57	DA	775	G
57	DA	776	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	782	A
57	DA	783	A
57	DA	784	G
57	DA	785	G
57	DA	789	A
57	DA	790	U
57	DA	792	A
57	DA	794	A
57	DA	798	G
57	DA	800	A
57	DA	801	G
57	DA	802	A
57	DA	803	U
57	DA	805	G
57	DA	806	C
57	DA	812	C
57	DA	819	A
57	DA	827	U
57	DA	828	U
57	DA	829	A
57	DA	830	G
57	DA	831	G
57	DA	832	U
57	DA	846	U
57	DA	847	U
57	DA	858	G
57	DA	859	G
57	DA	860	U
57	DA	861	A
57	DA	862	G
57	DA	866	A
57	DA	867	C
57	DA	868	U
57	DA	873	C
57	DA	875	G
57	DA	877	A
57	DA	878	A
57	DA	902	C
57	DA	910	A
57	DA	912	C
57	DA	914	G
57	DA	915	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	916	G
57	DA	917	A
57	DA	922	C
57	DA	932	U
57	DA	933	A
57	DA	934	U
57	DA	941	A
57	DA	944	C
57	DA	946	C
57	DA	947	A
57	DA	953	G
57	DA	958	U
57	DA	959	A
57	DA	960	A
57	DA	961	C
57	DA	962	G
57	DA	963	U
57	DA	964	C
57	DA	965	C
57	DA	973	A
57	DA	974	G
57	DA	976	G
57	DA	977	G
57	DA	983	A
57	DA	985	C
57	DA	989	G
57	DA	990	A
57	DA	991	C
57	DA	992	C
57	DA	995	C
57	DA	996	A
57	DA	1005	C
57	DA	1008	A
57	DA	1009	A
57	DA	1010	A
57	DA	1011	G
57	DA	1012	U
57	DA	1013	C
57	DA	1020	A
57	DA	1021	A
57	DA	1022	G
57	DA	1023	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1024	G
57	DA	1025	G
57	DA	1026	G
57	DA	1027	A
57	DA	1033	U
57	DA	1034	G
57	DA	1035	U
57	DA	1037	G
57	DA	1039	A
57	DA	1044	C
57	DA	1045	C
57	DA	1046	A
57	DA	1047	G
57	DA	1050	A
57	DA	1055	G
57	DA	1056	G
57	DA	1057	A
57	DA	1060	U
57	DA	1061	U
57	DA	1063	G
57	DA	1064	C
57	DA	1065	U
57	DA	1066	U
57	DA	1068	G
57	DA	1069	A
57	DA	1070	A
57	DA	1071	G
57	DA	1072	C
57	DA	1073	A
57	DA	1074	G
57	DA	1075	C
57	DA	1076	C
57	DA	1077	A
57	DA	1078	U
57	DA	1079	C
57	DA	1080	A
57	DA	1081	U
57	DA	1083	U
57	DA	1088	A
57	DA	1089	A
57	DA	1091	G
57	DA	1097	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1100	C
57	DA	1103	A
57	DA	1111	A
57	DA	1112	G
57	DA	1113	U
57	DA	1114	C
57	DA	1115	G
57	DA	1126	A
57	DA	1127	A
57	DA	1128	G
57	DA	1129	A
57	DA	1130	U
57	DA	1132	U
57	DA	1133	A
57	DA	1135	C
57	DA	1136	G
57	DA	1139	G
57	DA	1142	A
57	DA	1144	A
57	DA	1145	C
57	DA	1156	A
57	DA	1157	G
57	DA	1158	C
57	DA	1159	U
57	DA	1169	A
57	DA	1172	C
57	DA	1174	U
57	DA	1176	U
57	DA	1194	A
57	DA	1204	A
57	DA	1205	A
57	DA	1206	G
57	DA	1207	C
57	DA	1208	C
57	DA	1211	C
57	DA	1227	G
57	DA	1231	U
57	DA	1235	G
57	DA	1237	A
57	DA	1241	A
57	DA	1242	U
57	DA	1246	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1247	A
57	DA	1248	G
57	DA	1249	U
57	DA	1250	G
57	DA	1253	A
57	DA	1255	U
57	DA	1256	G
57	DA	1257	C
57	DA	1262	A
57	DA	1264	A
57	DA	1265	A
57	DA	1266	G
57	DA	1267	U
57	DA	1268	A
57	DA	1269	A
57	DA	1271	G
57	DA	1272	A
57	DA	1273	U
57	DA	1274	A
57	DA	1275	A
57	DA	1276	A
57	DA	1277	G
57	DA	1278	C
57	DA	1286	A
57	DA	1287	A
57	DA	1288	G
57	DA	1289	C
57	DA	1290	C
57	DA	1291	C
57	DA	1292	G
57	DA	1300	G
57	DA	1301	A
57	DA	1304	A
57	DA	1305	C
57	DA	1311	G
57	DA	1313	U
57	DA	1314	C
57	DA	1315	C
57	DA	1321	A
57	DA	1324	G
57	DA	1325	U
57	DA	1326	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1327	A
57	DA	1328	A
57	DA	1329	U
57	DA	1330	C
57	DA	1331	G
57	DA	1332	G
57	DA	1333	G
57	DA	1334	G
57	DA	1336	A
57	DA	1337	G
57	DA	1338	G
57	DA	1340	U
57	DA	1341	G
57	DA	1344	U
57	DA	1345	C
57	DA	1346	G
57	DA	1347	A
57	DA	1349	C
57	DA	1352	U
57	DA	1355	G
57	DA	1365	A
57	DA	1374	G
57	DA	1376	C
57	DA	1379	U
57	DA	1382	G
57	DA	1383	A
57	DA	1385	A
57	DA	1386	C
57	DA	1387	A
57	DA	1388	G
57	DA	1389	G
57	DA	1397	U
57	DA	1398	C
57	DA	1399	C
57	DA	1400	U
57	DA	1401	G
57	DA	1402	U
57	DA	1403	A
57	DA	1404	C
57	DA	1416	G
57	DA	1417	C
57	DA	1418	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1419	A
57	DA	1421	G
57	DA	1426	G
57	DA	1427	A
57	DA	1428	C
57	DA	1430	G
57	DA	1434	A
57	DA	1438	U
57	DA	1440	U
57	DA	1452	G
57	DA	1453	A
57	DA	1455	G
57	DA	1456	G
57	DA	1457	U
57	DA	1458	U
57	DA	1459	G
57	DA	1460	U
57	DA	1461	C
57	DA	1470	A
57	DA	1478	G
57	DA	1481	U
57	DA	1482	G
57	DA	1483	G
57	DA	1484	U
57	DA	1490	A
57	DA	1491	G
57	DA	1492	G
57	DA	1493	C
57	DA	1494	A
57	DA	1497	U
57	DA	1498	C
57	DA	1499	C
57	DA	1503	A
57	DA	1504	A
57	DA	1507	C
57	DA	1508	A
57	DA	1509	A
57	DA	1510	G
57	DA	1511	G
57	DA	1512	C
57	DA	1520	U
57	DA	1522	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1523	U
57	DA	1524	G
57	DA	1530	G
57	DA	1531	C
57	DA	1532	A
57	DA	1534	U
57	DA	1535	A
57	DA	1536	C
57	DA	1537	G
57	DA	1538	G
57	DA	1539	U
57	DA	1540	G
57	DA	1541	C
57	DA	1555	G
57	DA	1556	C
57	DA	1557	C
57	DA	1558	C
57	DA	1559	U
57	DA	1560	G
57	DA	1561	C
57	DA	1566	A
57	DA	1567	G
57	DA	1568	G
57	DA	1569	A
57	DA	1570	A
57	DA	1583	A
57	DA	1584	U
57	DA	1585	C
57	DA	1586	A
57	DA	1600	C
57	DA	1603	A
57	DA	1607	C
57	DA	1608	A
57	DA	1609	A
57	DA	1610	A
57	DA	1612	C
57	DA	1613	G
57	DA	1616	A
57	DA	1618	A
57	DA	1626	A
57	DA	1635	A
57	DA	1636	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1640	A
57	DA	1646	C
57	DA	1647	U
57	DA	1648	U
57	DA	1649	G
57	DA	1650	A
57	DA	1653	G
57	DA	1654	A
57	DA	1655	A
57	DA	1663	G
57	DA	1668	A
57	DA	1669	A
57	DA	1670	C
57	DA	1674	G
57	DA	1675	C
57	DA	1681	G
57	DA	1682	G
57	DA	1683	U
57	DA	1694	C
57	DA	1695	G
57	DA	1696	G
57	DA	1698	A
57	DA	1699	G
57	DA	1700	A
57	DA	1701	A
57	DA	1707	G
57	DA	1713	A
57	DA	1714	U
57	DA	1715	G
57	DA	1717	A
57	DA	1718	G
57	DA	1722	A
57	DA	1723	G
57	DA	1728	C
57	DA	1729	U
57	DA	1730	C
57	DA	1731	G
57	DA	1732	C
57	DA	1733	G
57	DA	1734	G
57	DA	1735	A
57	DA	1739	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1740	G
57	DA	1750	G
57	DA	1754	A
57	DA	1758	U
57	DA	1759	A
57	DA	1760	C
57	DA	1764	C
57	DA	1773	A
57	DA	1776	G
57	DA	1777	U
57	DA	1780	A
57	DA	1781	U
57	DA	1782	U
57	DA	1783	A
57	DA	1784	A
57	DA	1785	A
57	DA	1786	A
57	DA	1787	A
57	DA	1788	C
57	DA	1800	C
57	DA	1802	A
57	DA	1803	A
57	DA	1804	C
57	DA	1808	A
57	DA	1809	A
57	DA	1810	A
57	DA	1811	G
57	DA	1815	A
57	DA	1816	C
57	DA	1817	G
57	DA	1818	U
57	DA	1820	U
57	DA	1821	A
57	DA	1822	C
57	DA	1827	U
57	DA	1829	A
57	DA	1830	C
57	DA	1832	C
57	DA	1838	C
57	DA	1839	G
57	DA	1840	G
57	DA	1847	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1848	A
57	DA	1857	G
57	DA	1870	C
57	DA	1873	G
57	DA	1875	G
57	DA	1877	A
57	DA	1884	G
57	DA	1889	A
57	DA	1900	A
57	DA	1901	A
57	DA	1902	C
57	DA	1903	G
57	DA	1906	G
57	DA	1913	A
57	DA	1914	C
57	DA	1915	U
57	DA	1916	A
57	DA	1919	A
57	DA	1920	C
57	DA	1927	A
57	DA	1930	G
57	DA	1931	U
57	DA	1932	A
57	DA	1937	A
57	DA	1938	A
57	DA	1939	U
57	DA	1941	C
57	DA	1942	C
57	DA	1943	U
57	DA	1944	U
57	DA	1945	G
57	DA	1946	U
57	DA	1955	U
57	DA	1956	U
57	DA	1963	U
57	DA	1964	G
57	DA	1966	A
57	DA	1967	C
57	DA	1968	G
57	DA	1970	A
57	DA	1971	U
57	DA	1972	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1973	G
57	DA	1975	G
57	DA	1981	A
57	DA	1982	U
57	DA	1983	G
57	DA	1989	G
57	DA	1991	U
57	DA	1993	U
57	DA	1996	C
57	DA	1997	C
57	DA	1998	A
57	DA	2015	A
57	DA	2020	A
57	DA	2021	C
57	DA	2022	U
57	DA	2023	C
57	DA	2024	G
57	DA	2030	A
57	DA	2031	A
57	DA	2033	A
57	DA	2034	U
57	DA	2035	G
57	DA	2036	C
57	DA	2037	A
57	DA	2043	C
57	DA	2052	A
57	DA	2055	C
57	DA	2056	G
57	DA	2060	A
57	DA	2061	G
57	DA	2062	A
57	DA	2063	C
57	DA	2068	U
57	DA	2069	G
57	DA	2072	C
57	DA	2080	A
57	DA	2092	U
57	DA	2093	G
57	DA	2094	A
57	DA	2095	A
57	DA	2104	C
57	DA	2107	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2108	A
57	DA	2109	U
57	DA	2110	G
57	DA	2134	A
57	DA	2135	A
57	DA	2136	G
57	DA	2137	U
57	DA	2138	G
57	DA	2139	U
57	DA	2143	C
57	DA	2144	G
57	DA	2145	C
57	DA	2147	A
57	DA	2148	G
57	DA	2149	U
57	DA	2150	C
57	DA	2152	G
57	DA	2153	C
57	DA	2154	A
57	DA	2156	G
57	DA	2157	G
57	DA	2180	U
57	DA	2181	U
57	DA	2183	A
57	DA	2187	U
57	DA	2191	A
57	DA	2192	U
57	DA	2198	A
57	DA	2199	A
57	DA	2203	U
57	DA	2204	G
57	DA	2210	U
57	DA	2211	A
57	DA	2212	A
57	DA	2213	U
57	DA	2214	C
57	DA	2215	C
57	DA	2216	G
57	DA	2217	G
57	DA	2225	A
57	DA	2226	C
57	DA	2227	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2238	G
57	DA	2239	G
57	DA	2240	U
57	DA	2243	U
57	DA	2249	U
57	DA	2250	G
57	DA	2259	U
57	DA	2260	C
57	DA	2266	A
57	DA	2267	A
57	DA	2268	A
57	DA	2275	C
57	DA	2276	G
57	DA	2277	G
57	DA	2279	G
57	DA	2283	C
57	DA	2284	A
57	DA	2286	G
57	DA	2287	A
57	DA	2289	G
57	DA	2296	U
57	DA	2297	A
57	DA	2298	A
57	DA	2299	U
57	DA	2305	U
57	DA	2306	C
57	DA	2308	G
57	DA	2309	A
57	DA	2310	C
57	DA	2311	A
57	DA	2312	U
57	DA	2313	C
57	DA	2314	A
57	DA	2320	U
57	DA	2325	G
57	DA	2332	C
57	DA	2334	U
57	DA	2335	A
57	DA	2337	G
57	DA	2338	C
57	DA	2339	C
57	DA	2345	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2347	C
57	DA	2348	U
57	DA	2349	G
57	DA	2358	A
57	DA	2379	G
57	DA	2382	G
57	DA	2383	G
57	DA	2384	U
57	DA	2385	C
57	DA	2386	A
57	DA	2387	U
57	DA	2388	A
57	DA	2392	A
57	DA	2394	C
57	DA	2401	U
57	DA	2402	U
57	DA	2403	C
57	DA	2404	U
57	DA	2405	G
57	DA	2406	A
57	DA	2407	A
57	DA	2408	U
57	DA	2409	G
57	DA	2410	G
57	DA	2423	U
57	DA	2424	C
57	DA	2426	A
57	DA	2427	C
57	DA	2428	G
57	DA	2429	G
57	DA	2430	A
57	DA	2431	U
57	DA	2435	A
57	DA	2439	A
57	DA	2440	C
57	DA	2441	U
57	DA	2447	G
57	DA	2448	A
57	DA	2459	A
57	DA	2460	U
57	DA	2475	C
57	DA	2476	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2490	G
57	DA	2491	U
57	DA	2492	U
57	DA	2493	U
57	DA	2494	G
57	DA	2498	C
57	DA	2499	C
57	DA	2502	G
57	DA	2503	A
57	DA	2504	U
57	DA	2505	G
57	DA	2518	A
57	DA	2519	U
57	DA	2520	C
57	DA	2521	C
57	DA	2529	G
57	DA	2534	A
57	DA	2542	A
57	DA	2543	G
57	DA	2544	G
57	DA	2547	A
57	DA	2554	U
57	DA	2567	G
57	DA	2573	C
57	DA	2574	G
57	DA	2578	G
57	DA	2582	G
57	DA	2583	G
57	DA	2585	U
57	DA	2602	A
57	DA	2609	U
57	DA	2610	C
57	DA	2611	C
57	DA	2612	C
57	DA	2613	U
57	DA	2614	A
57	DA	2615	U
57	DA	2616	C
57	DA	2629	U
57	DA	2630	G
57	DA	2632	A
57	DA	2646	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2654	A
57	DA	2655	G
57	DA	2656	U
57	DA	2657	A
57	DA	2658	C
57	DA	2660	A
57	DA	2667	C
57	DA	2668	G
57	DA	2669	G
57	DA	2682	A
57	DA	2683	C
57	DA	2690	U
57	DA	2691	C
57	DA	2712	C
57	DA	2713	U
57	DA	2714	G
57	DA	2718	G
57	DA	2725	A
57	DA	2726	A
57	DA	2727	A
57	DA	2728	U
57	DA	2729	G
57	DA	2732	G
57	DA	2736	A
57	DA	2739	U
57	DA	2748	A
57	DA	2750	A
57	DA	2751	G
57	DA	2752	C
57	DA	2753	A
57	DA	2756	U
57	DA	2757	A
57	DA	2758	A
57	DA	2765	A
57	DA	2766	A
57	DA	2777	G
57	DA	2778	A
57	DA	2779	U
57	DA	2791	G
57	DA	2799	A
57	DA	2801	G
57	DA	2808	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2820	A
57	DA	2822	G
57	DA	2823	A
57	DA	2833	U
57	DA	2834	G
57	DA	2835	A
57	DA	2836	U
57	DA	2837	A
57	DA	2838	G
57	DA	2848	G
57	DA	2849	U
57	DA	2850	A
57	DA	2851	A
57	DA	2852	G
57	DA	2861	U
57	DA	2866	U
57	DA	2867	G
57	DA	2868	A
57	DA	2869	G
57	DA	2872	A
57	DA	2874	C
57	DA	2875	C
57	DA	2876	G
57	DA	2877	G
57	DA	2879	A
57	DA	2880	C
57	DA	2881	U
57	DA	2883	A
57	DA	2894	G
57	DA	2895	G
57	DA	2896	C
57	DA	2902	C
58	DB	12	C
58	DB	13	G
58	DB	15	A
58	DB	16	G
58	DB	17	C
58	DB	18	G
58	DB	24	G
58	DB	25	U
58	DB	30	C
58	DB	35	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	DB	36	C
58	DB	41	G
58	DB	42	C
58	DB	43	C
58	DB	44	G
58	DB	45	A
58	DB	46	A
58	DB	48	U
58	DB	57	A
58	DB	58	A
58	DB	59	A
58	DB	63	C
58	DB	64	G
58	DB	65	U
58	DB	66	A
58	DB	67	G
58	DB	68	C
58	DB	69	G
58	DB	87	U
58	DB	88	C
58	DB	89	U
58	DB	90	C
58	DB	91	C
58	DB	99	A
58	DB	109	A
58	DB	110	C
58	DB	111	U

All (1428) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	7	A
1	AA	13	U
1	AA	30	U
1	AA	32	A
1	AA	47	C
1	AA	51	A
1	AA	52	C
1	AA	60	A
1	AA	61	G
1	AA	64	G
1	AA	66	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	71	A
1	AA	73	C
1	AA	74	A
1	AA	85	U
1	AA	87	C
1	AA	91	U
1	AA	92	U
1	AA	94	G
1	AA	95	C
1	AA	97	G
1	AA	109	A
1	AA	115	G
1	AA	116	A
1	AA	119	A
1	AA	121	U
1	AA	129	A
1	AA	131	A
1	AA	173	U
1	AA	174	A
1	AA	181	A
1	AA	184	G
1	AA	197	A
1	AA	198	G
1	AA	199	A
1	AA	243	A
1	AA	245	U
1	AA	246	A
1	AA	250	A
1	AA	251	G
1	AA	252	U
1	AA	266	G
1	AA	267	C
1	AA	274	A
1	AA	275	G
1	AA	279	A
1	AA	305	G
1	AA	306	A
1	AA	315	A
1	AA	327	A
1	AA	330	C
1	AA	331	G
1	AA	344	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	346	G
1	AA	347	G
1	AA	351	G
1	AA	352	C
1	AA	366	A
1	AA	368	U
1	AA	372	C
1	AA	373	A
1	AA	388	G
1	AA	389	A
1	AA	411	A
1	AA	414	A
1	AA	422	C
1	AA	423	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	439	U
1	AA	451	A
1	AA	452	A
1	AA	466	A
1	AA	468	A
1	AA	484	G
1	AA	486	U
1	AA	487	A
1	AA	495	A
1	AA	496	A
1	AA	497	G
1	AA	499	A
1	AA	500	G
1	AA	508	U
1	AA	509	A
1	AA	511	C
1	AA	512	U
1	AA	517	G
1	AA	519	C
1	AA	531	U
1	AA	534	U
1	AA	535	A
1	AA	536	C
1	AA	537	G
1	AA	547	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	548	G
1	AA	549	C
1	AA	559	A
1	AA	563	A
1	AA	564	C
1	AA	566	G
1	AA	575	G
1	AA	577	G
1	AA	595	A
1	AA	596	A
1	AA	641	U
1	AA	642	A
1	AA	653	U
1	AA	654	G
1	AA	686	U
1	AA	688	G
1	AA	701	U
1	AA	704	A
1	AA	717	U
1	AA	718	A
1	AA	721	G
1	AA	722	G
1	AA	723	U
1	AA	724	G
1	AA	752	G
1	AA	754	C
1	AA	755	G
1	AA	792	A
1	AA	794	A
1	AA	812	G
1	AA	813	U
1	AA	815	A
1	AA	816	A
1	AA	817	C
1	AA	821	G
1	AA	870	U
1	AA	874	G
1	AA	884	U
1	AA	885	G
1	AA	889	A
1	AA	891	U
1	AA	913	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	914	A
1	AA	934	C
1	AA	935	A
1	AA	960	U
1	AA	961	U
1	AA	965	U
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	972	C
1	AA	974	A
1	AA	976	G
1	AA	977	A
1	AA	982	U
1	AA	984	C
1	AA	991	U
1	AA	994	A
1	AA	1049	U
1	AA	1050	G
1	AA	1053	G
1	AA	1054	C
1	AA	1055	A
1	AA	1064	G
1	AA	1066	C
1	AA	1068	G
1	AA	1085	U
1	AA	1087	G
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1102	A
1	AA	1127	G
1	AA	1129	C
1	AA	1130	A
1	AA	1136	C
1	AA	1138	G
1	AA	1141	C
1	AA	1142	G
1	AA	1151	A
1	AA	1152	A
1	AA	1157	A
1	AA	1158	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1161	C
1	AA	1168	U
1	AA	1169	A
1	AA	1181	G
1	AA	1183	U
1	AA	1184	G
1	AA	1190	G
1	AA	1191	A
1	AA	1196	A
1	AA	1197	A
1	AA	1200	C
1	AA	1201	A
1	AA	1202	U
1	AA	1215	G
1	AA	1224	U
1	AA	1228	C
1	AA	1229	A
1	AA	1239	A
1	AA	1241	G
1	AA	1256	A
1	AA	1258	G
1	AA	1282	C
1	AA	1283	U
1	AA	1297	G
1	AA	1303	C
1	AA	1319	A
1	AA	1320	C
1	AA	1322	C
1	AA	1323	G
1	AA	1331	G
1	AA	1332	A
1	AA	1336	C
1	AA	1337	G
1	AA	1338	G
1	AA	1345	U
1	AA	1348	U
1	AA	1362	A
1	AA	1365	G
1	AA	1380	U
1	AA	1381	U
1	AA	1394	A
1	AA	1395	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1396	A
1	AA	1398	A
1	AA	1399	C
1	AA	1432	G
1	AA	1447	A
1	AA	1448	C
1	AA	1451	U
1	AA	1453	G
1	AA	1454	G
1	AA	1498	U
1	AA	1502	A
1	AA	1505	G
1	AA	1506	U
1	AA	1528	U
1	AA	1530	G
1	AA	1531	A
22	BA	13	A
22	BA	14	A
22	BA	27	G
22	BA	33	C
22	BA	34	U
22	BA	35	G
22	BA	49	A
22	BA	52	A
22	BA	60	G
22	BA	62	U
22	BA	63	A
22	BA	70	G
22	BA	71	A
22	BA	74	A
22	BA	75	G
22	BA	84	A
22	BA	85	G
22	BA	91	A
22	BA	92	U
22	BA	100	U
22	BA	119	A
22	BA	125	A
22	BA	126	A
22	BA	137	U
22	BA	138	U
22	BA	142	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	143	C
22	BA	144	A
22	BA	162	U
22	BA	164	C
22	BA	177	G
22	BA	196	A
22	BA	199	A
22	BA	204	A
22	BA	206	U
22	BA	215	G
22	BA	216	A
22	BA	221	A
22	BA	229	C
22	BA	232	G
22	BA	241	A
22	BA	243	U
22	BA	249	C
22	BA	265	A
22	BA	266	G
22	BA	271	G
22	BA	273	G
22	BA	301	G
22	BA	302	C
22	BA	310	A
22	BA	312	G
22	BA	321	U
22	BA	324	A
22	BA	329	G
22	BA	333	G
22	BA	345	A
22	BA	346	A
22	BA	369	U
22	BA	373	U
22	BA	386	G
22	BA	388	G
22	BA	390	U
22	BA	395	U
22	BA	403	U
22	BA	404	A
22	BA	411	G
22	BA	412	A
22	BA	421	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	422	A
22	BA	434	U
22	BA	435	C
22	BA	442	G
22	BA	446	G
22	BA	454	A
22	BA	459	U
22	BA	474	G
22	BA	475	C
22	BA	479	A
22	BA	480	A
22	BA	481	G
22	BA	482	A
22	BA	489	G
22	BA	491	G
22	BA	503	A
22	BA	506	G
22	BA	507	A
22	BA	509	C
22	BA	512	G
22	BA	513	A
22	BA	527	C
22	BA	529	A
22	BA	531	C
22	BA	533	G
22	BA	555	G
22	BA	571	U
22	BA	572	A
22	BA	587	C
22	BA	588	U
22	BA	603	A
22	BA	604	G
22	BA	613	A
22	BA	616	A
22	BA	620	G
22	BA	637	A
22	BA	638	G
22	BA	645	C
22	BA	655	A
22	BA	667	U
22	BA	669	G
22	BA	685	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	687	C
22	BA	704	G
22	BA	727	A
22	BA	729	G
22	BA	739	A
22	BA	746	U
22	BA	747	U
22	BA	762	U
22	BA	763	G
22	BA	764	A
22	BA	765	C
22	BA	774	G
22	BA	782	A
22	BA	790	U
22	BA	800	A
22	BA	802	A
22	BA	805	G
22	BA	811	U
22	BA	829	A
22	BA	858	G
22	BA	860	U
22	BA	865	C
22	BA	913	U
22	BA	914	G
22	BA	915	C
22	BA	931	U
22	BA	933	A
22	BA	945	A
22	BA	946	C
22	BA	957	C
22	BA	958	U
22	BA	961	C
22	BA	972	A
22	BA	984	A
22	BA	985	C
22	BA	989	G
22	BA	990	A
22	BA	995	C
22	BA	996	A
22	BA	1008	A
22	BA	1009	A
22	BA	1011	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1013	C
22	BA	1020	A
22	BA	1021	A
22	BA	1022	G
22	BA	1023	U
22	BA	1025	G
22	BA	1026	G
22	BA	1027	A
22	BA	1033	U
22	BA	1045	C
22	BA	1048	A
22	BA	1060	U
22	BA	1062	G
22	BA	1071	G
22	BA	1073	A
22	BA	1110	G
22	BA	1112	G
22	BA	1128	G
22	BA	1129	A
22	BA	1130	U
22	BA	1135	C
22	BA	1141	U
22	BA	1144	A
22	BA	1157	G
22	BA	1181	U
22	BA	1204	A
22	BA	1206	G
22	BA	1210	G
22	BA	1236	G
22	BA	1247	A
22	BA	1249	U
22	BA	1250	G
22	BA	1265	A
22	BA	1267	U
22	BA	1275	A
22	BA	1276	A
22	BA	1286	A
22	BA	1287	A
22	BA	1289	C
22	BA	1300	G
22	BA	1320	C
22	BA	1321	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1324	G
22	BA	1326	U
22	BA	1329	U
22	BA	1330	C
22	BA	1340	U
22	BA	1343	G
22	BA	1378	A
22	BA	1379	U
22	BA	1385	A
22	BA	1386	C
22	BA	1394	U
22	BA	1396	U
22	BA	1398	C
22	BA	1416	G
22	BA	1417	C
22	BA	1427	A
22	BA	1429	G
22	BA	1434	A
22	BA	1451	C
22	BA	1458	U
22	BA	1459	G
22	BA	1461	C
22	BA	1475	G
22	BA	1476	U
22	BA	1490	A
22	BA	1491	G
22	BA	1493	C
22	BA	1494	A
22	BA	1497	U
22	BA	1498	C
22	BA	1508	A
22	BA	1510	G
22	BA	1522	A
22	BA	1535	A
22	BA	1537	G
22	BA	1538	G
22	BA	1554	U
22	BA	1555	G
22	BA	1558	C
22	BA	1565	C
22	BA	1602	U
22	BA	1606	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1615	C
22	BA	1626	A
22	BA	1634	A
22	BA	1647	U
22	BA	1648	U
22	BA	1653	G
22	BA	1654	A
22	BA	1674	G
22	BA	1682	G
22	BA	1693	U
22	BA	1695	G
22	BA	1696	G
22	BA	1698	A
22	BA	1706	C
22	BA	1707	G
22	BA	1713	A
22	BA	1714	U
22	BA	1716	U
22	BA	1732	C
22	BA	1733	G
22	BA	1734	G
22	BA	1759	A
22	BA	1780	A
22	BA	1784	A
22	BA	1785	A
22	BA	1786	A
22	BA	1787	A
22	BA	1799	G
22	BA	1808	A
22	BA	1815	A
22	BA	1816	C
22	BA	1818	U
22	BA	1821	A
22	BA	1828	G
22	BA	1838	C
22	BA	1847	A
22	BA	1848	A
22	BA	1857	G
22	BA	1858	A
22	BA	1865	U
22	BA	1866	A
22	BA	1870	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1871	A
22	BA	1872	A
22	BA	1885	A
22	BA	1900	A
22	BA	1918	A
22	BA	1919	A
22	BA	1929	G
22	BA	1931	U
22	BA	1936	A
22	BA	1941	C
22	BA	1943	U
22	BA	1945	G
22	BA	1954	G
22	BA	1962	C
22	BA	1963	U
22	BA	1966	A
22	BA	1967	C
22	BA	1970	A
22	BA	1971	U
22	BA	1992	G
22	BA	1993	U
22	BA	1996	C
22	BA	2021	C
22	BA	2023	C
22	BA	2030	A
22	BA	2035	G
22	BA	2036	C
22	BA	2051	A
22	BA	2060	A
22	BA	2062	A
22	BA	2067	G
22	BA	2068	U
22	BA	2092	U
22	BA	2093	G
22	BA	2136	G
22	BA	2146	C
22	BA	2148	G
22	BA	2149	U
22	BA	2150	C
22	BA	2199	A
22	BA	2210	U
22	BA	2214	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2225	A
22	BA	2238	G
22	BA	2249	U
22	BA	2258	C
22	BA	2266	A
22	BA	2267	A
22	BA	2275	C
22	BA	2282	G
22	BA	2283	C
22	BA	2286	G
22	BA	2296	U
22	BA	2297	A
22	BA	2307	G
22	BA	2309	A
22	BA	2311	A
22	BA	2319	G
22	BA	2321	U
22	BA	2324	U
22	BA	2325	G
22	BA	2326	C
22	BA	2327	A
22	BA	2333	A
22	BA	2335	A
22	BA	2336	A
22	BA	2337	G
22	BA	2344	U
22	BA	2347	C
22	BA	2382	G
22	BA	2383	G
22	BA	2385	C
22	BA	2391	G
22	BA	2392	A
22	BA	2405	G
22	BA	2407	A
22	BA	2423	U
22	BA	2424	C
22	BA	2425	A
22	BA	2427	C
22	BA	2439	A
22	BA	2458	G
22	BA	2468	A
22	BA	2490	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2492	U
22	BA	2503	A
22	BA	2517	C
22	BA	2542	A
22	BA	2566	A
22	BA	2572	A
22	BA	2573	C
22	BA	2581	G
22	BA	2602	A
22	BA	2603	G
22	BA	2609	U
22	BA	2611	C
22	BA	2613	U
22	BA	2615	U
22	BA	2629	U
22	BA	2638	G
22	BA	2645	G
22	BA	2654	A
22	BA	2673	G
22	BA	2681	C
22	BA	2689	U
22	BA	2712	C
22	BA	2725	A
22	BA	2727	A
22	BA	2728	U
22	BA	2729	G
22	BA	2732	G
22	BA	2750	A
22	BA	2752	C
22	BA	2756	U
22	BA	2757	A
22	BA	2777	G
22	BA	2778	A
22	BA	2790	U
22	BA	2797	U
22	BA	2800	A
22	BA	2801	G
22	BA	2808	G
22	BA	2820	A
22	BA	2832	U
22	BA	2835	A
22	BA	2848	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2866	U
22	BA	2868	A
22	BA	2873	A
22	BA	2879	A
22	BA	2880	C
22	BA	2893	A
22	BA	2894	G
23	BB	12	C
23	BB	14	U
23	BB	24	G
23	BB	25	U
23	BB	40	U
23	BB	42	C
23	BB	44	G
23	BB	45	A
23	BB	52	A
23	BB	56	G
23	BB	57	A
23	BB	66	A
23	BB	67	G
23	BB	87	U
23	BB	90	C
23	BB	108	A
23	BB	109	A
53	CA	6	G
53	CA	9	G
53	CA	13	U
53	CA	14	U
53	CA	15	G
53	CA	30	U
53	CA	32	A
53	CA	47	C
53	CA	52	C
53	CA	60	A
53	CA	65	A
53	CA	66	A
53	CA	70	U
53	CA	71	A
53	CA	72	A
53	CA	73	C
53	CA	81	A
53	CA	82	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	85	U
53	CA	86	G
53	CA	87	C
53	CA	89	U
53	CA	90	C
53	CA	92	U
53	CA	94	G
53	CA	95	C
53	CA	96	U
53	CA	109	A
53	CA	115	G
53	CA	116	A
53	CA	119	A
53	CA	131	A
53	CA	132	C
53	CA	173	U
53	CA	174	A
53	CA	181	A
53	CA	184	G
53	CA	197	A
53	CA	199	A
53	CA	213	G
53	CA	239	U
53	CA	240	G
53	CA	243	A
53	CA	245	U
53	CA	247	G
53	CA	248	C
53	CA	251	G
53	CA	252	U
53	CA	253	A
53	CA	274	A
53	CA	275	G
53	CA	276	G
53	CA	279	A
53	CA	282	A
53	CA	305	G
53	CA	315	A
53	CA	316	C
53	CA	327	A
53	CA	328	C
53	CA	330	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	331	G
53	CA	347	G
53	CA	348	G
53	CA	351	G
53	CA	352	C
53	CA	353	A
53	CA	366	A
53	CA	368	U
53	CA	369	G
53	CA	372	C
53	CA	373	A
53	CA	388	G
53	CA	389	A
53	CA	411	A
53	CA	414	A
53	CA	421	U
53	CA	423	G
53	CA	424	G
53	CA	428	G
53	CA	429	U
53	CA	430	A
53	CA	438	U
53	CA	451	A
53	CA	452	A
53	CA	453	G
53	CA	481	G
53	CA	482	A
53	CA	484	G
53	CA	486	U
53	CA	495	A
53	CA	497	G
53	CA	499	A
53	CA	500	G
53	CA	508	U
53	CA	509	A
53	CA	511	C
53	CA	512	U
53	CA	513	C
53	CA	517	G
53	CA	519	C
53	CA	520	A
53	CA	531	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	534	U
53	CA	535	A
53	CA	536	C
53	CA	547	A
53	CA	548	G
53	CA	559	A
53	CA	563	A
53	CA	564	C
53	CA	566	G
53	CA	575	G
53	CA	577	G
53	CA	595	A
53	CA	596	A
53	CA	641	U
53	CA	643	C
53	CA	652	U
53	CA	654	G
53	CA	686	U
53	CA	688	G
53	CA	701	U
53	CA	704	A
53	CA	717	U
53	CA	718	A
53	CA	721	G
53	CA	722	G
53	CA	733	G
53	CA	734	G
53	CA	753	A
53	CA	792	A
53	CA	794	A
53	CA	802	A
53	CA	815	A
53	CA	816	A
53	CA	817	C
53	CA	821	G
53	CA	870	U
53	CA	874	G
53	CA	884	U
53	CA	885	G
53	CA	889	A
53	CA	891	U
53	CA	913	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	914	A
53	CA	934	C
53	CA	935	A
53	CA	936	C
53	CA	960	U
53	CA	961	U
53	CA	962	C
53	CA	969	A
53	CA	974	A
53	CA	975	A
53	CA	977	A
53	CA	978	A
53	CA	979	C
53	CA	982	U
53	CA	983	A
53	CA	984	C
53	CA	985	C
53	CA	992	U
53	CA	995	C
53	CA	996	A
53	CA	1049	U
53	CA	1051	C
53	CA	1052	U
53	CA	1064	G
53	CA	1066	C
53	CA	1067	A
53	CA	1068	G
53	CA	1085	U
53	CA	1086	U
53	CA	1101	A
53	CA	1102	A
53	CA	1124	G
53	CA	1127	G
53	CA	1138	G
53	CA	1139	G
53	CA	1140	C
53	CA	1141	C
53	CA	1142	G
53	CA	1143	G
53	CA	1145	A
53	CA	1146	A
53	CA	1147	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	1148	U
53	CA	1151	A
53	CA	1152	A
53	CA	1157	A
53	CA	1158	C
53	CA	1160	G
53	CA	1161	C
53	CA	1167	A
53	CA	1168	U
53	CA	1184	G
53	CA	1190	G
53	CA	1191	A
53	CA	1200	C
53	CA	1201	A
53	CA	1202	U
53	CA	1215	G
53	CA	1217	C
53	CA	1227	A
53	CA	1229	A
53	CA	1244	G
53	CA	1278	G
53	CA	1282	C
53	CA	1283	U
53	CA	1285	A
53	CA	1287	A
53	CA	1288	A
53	CA	1298	U
53	CA	1299	A
53	CA	1301	U
53	CA	1331	G
53	CA	1345	U
53	CA	1348	U
53	CA	1349	A
53	CA	1366	C
53	CA	1367	C
53	CA	1380	U
53	CA	1381	U
53	CA	1394	A
53	CA	1395	C
53	CA	1396	A
53	CA	1397	C
53	CA	1398	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CA	1399	C
53	CA	1447	A
53	CA	1449	C
53	CA	1452	C
53	CA	1453	G
53	CA	1454	G
53	CA	1455	G
53	CA	1498	U
53	CA	1499	A
53	CA	1502	A
53	CA	1505	G
53	CA	1507	A
53	CA	1528	U
53	CA	1530	G
57	DA	13	A
57	DA	14	A
57	DA	27	G
57	DA	28	A
57	DA	33	C
57	DA	35	G
57	DA	36	G
57	DA	49	A
57	DA	52	A
57	DA	53	A
57	DA	60	G
57	DA	61	C
57	DA	70	G
57	DA	73	A
57	DA	75	G
57	DA	76	C
57	DA	77	G
57	DA	84	A
57	DA	86	G
57	DA	87	U
57	DA	91	A
57	DA	92	U
57	DA	103	A
57	DA	104	A
57	DA	119	A
57	DA	121	G
57	DA	122	G
57	DA	125	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	128	C
57	DA	129	C
57	DA	143	C
57	DA	162	U
57	DA	163	C
57	DA	164	C
57	DA	196	A
57	DA	197	A
57	DA	204	A
57	DA	206	U
57	DA	207	A
57	DA	215	G
57	DA	217	A
57	DA	222	A
57	DA	223	A
57	DA	224	U
57	DA	227	A
57	DA	229	C
57	DA	230	G
57	DA	231	A
57	DA	232	G
57	DA	234	U
57	DA	241	A
57	DA	243	U
57	DA	244	A
57	DA	249	C
57	DA	250	G
57	DA	273	G
57	DA	301	G
57	DA	302	C
57	DA	303	G
57	DA	321	U
57	DA	324	A
57	DA	329	G
57	DA	335	C
57	DA	336	C
57	DA	370	G
57	DA	374	A
57	DA	375	G
57	DA	386	G
57	DA	388	G
57	DA	389	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	390	U
57	DA	391	A
57	DA	395	U
57	DA	396	G
57	DA	397	U
57	DA	404	A
57	DA	406	G
57	DA	407	G
57	DA	411	G
57	DA	412	A
57	DA	423	A
57	DA	424	G
57	DA	442	G
57	DA	443	A
57	DA	444	C
57	DA	445	C
57	DA	446	G
57	DA	449	A
57	DA	454	A
57	DA	459	U
57	DA	474	G
57	DA	475	C
57	DA	476	G
57	DA	477	A
57	DA	479	A
57	DA	480	A
57	DA	484	C
57	DA	489	G
57	DA	491	G
57	DA	492	A
57	DA	503	A
57	DA	505	A
57	DA	510	C
57	DA	527	C
57	DA	530	G
57	DA	532	A
57	DA	533	G
57	DA	571	U
57	DA	572	A
57	DA	573	U
57	DA	575	A
57	DA	576	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	603	A
57	DA	604	G
57	DA	605	G
57	DA	615	U
57	DA	617	G
57	DA	620	G
57	DA	621	A
57	DA	622	G
57	DA	627	A
57	DA	628	G
57	DA	637	A
57	DA	638	G
57	DA	639	U
57	DA	655	A
57	DA	656	G
57	DA	669	G
57	DA	670	A
57	DA	672	C
57	DA	685	A
57	DA	687	C
57	DA	704	G
57	DA	726	G
57	DA	727	A
57	DA	730	A
57	DA	739	A
57	DA	740	C
57	DA	762	U
57	DA	763	G
57	DA	765	C
57	DA	775	G
57	DA	777	G
57	DA	782	A
57	DA	783	A
57	DA	788	A
57	DA	794	A
57	DA	800	A
57	DA	802	A
57	DA	827	U
57	DA	828	U
57	DA	829	A
57	DA	830	G
57	DA	831	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	859	G
57	DA	860	U
57	DA	861	A
57	DA	865	C
57	DA	867	C
57	DA	868	U
57	DA	913	U
57	DA	915	C
57	DA	916	G
57	DA	931	U
57	DA	933	A
57	DA	945	A
57	DA	946	C
57	DA	947	A
57	DA	957	C
57	DA	959	A
57	DA	961	C
57	DA	962	G
57	DA	963	U
57	DA	964	C
57	DA	973	A
57	DA	975	A
57	DA	976	G
57	DA	984	A
57	DA	989	G
57	DA	990	A
57	DA	991	C
57	DA	1008	A
57	DA	1009	A
57	DA	1010	A
57	DA	1011	G
57	DA	1020	A
57	DA	1021	A
57	DA	1023	U
57	DA	1024	G
57	DA	1025	G
57	DA	1026	G
57	DA	1027	A
57	DA	1033	U
57	DA	1034	G
57	DA	1050	A
57	DA	1060	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1063	G
57	DA	1064	C
57	DA	1069	A
57	DA	1074	G
57	DA	1077	A
57	DA	1078	U
57	DA	1079	C
57	DA	1080	A
57	DA	1110	G
57	DA	1112	G
57	DA	1114	C
57	DA	1126	A
57	DA	1129	A
57	DA	1135	C
57	DA	1136	G
57	DA	1141	U
57	DA	1144	A
57	DA	1156	A
57	DA	1157	G
57	DA	1158	C
57	DA	1204	A
57	DA	1206	G
57	DA	1207	C
57	DA	1210	G
57	DA	1213	A
57	DA	1247	A
57	DA	1249	U
57	DA	1254	A
57	DA	1255	U
57	DA	1256	G
57	DA	1265	A
57	DA	1267	U
57	DA	1268	A
57	DA	1272	A
57	DA	1274	A
57	DA	1275	A
57	DA	1276	A
57	DA	1287	A
57	DA	1288	G
57	DA	1289	C
57	DA	1291	C
57	DA	1300	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1303	G
57	DA	1304	A
57	DA	1312	U
57	DA	1313	U
57	DA	1314	C
57	DA	1325	U
57	DA	1327	A
57	DA	1329	U
57	DA	1333	G
57	DA	1340	U
57	DA	1346	G
57	DA	1385	A
57	DA	1386	C
57	DA	1388	G
57	DA	1397	U
57	DA	1398	C
57	DA	1399	C
57	DA	1400	U
57	DA	1401	G
57	DA	1416	G
57	DA	1417	C
57	DA	1418	G
57	DA	1427	A
57	DA	1429	G
57	DA	1451	C
57	DA	1455	G
57	DA	1456	G
57	DA	1482	G
57	DA	1483	G
57	DA	1489	C
57	DA	1491	G
57	DA	1492	G
57	DA	1497	U
57	DA	1498	C
57	DA	1508	A
57	DA	1510	G
57	DA	1511	G
57	DA	1536	C
57	DA	1537	G
57	DA	1539	U
57	DA	1555	G
57	DA	1557	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1558	C
57	DA	1560	G
57	DA	1565	C
57	DA	1568	G
57	DA	1569	A
57	DA	1603	A
57	DA	1606	C
57	DA	1611	C
57	DA	1612	C
57	DA	1613	G
57	DA	1615	C
57	DA	1634	A
57	DA	1635	A
57	DA	1636	U
57	DA	1647	U
57	DA	1648	U
57	DA	1649	G
57	DA	1653	G
57	DA	1654	A
57	DA	1667	G
57	DA	1669	A
57	DA	1674	G
57	DA	1675	C
57	DA	1681	G
57	DA	1682	G
57	DA	1693	U
57	DA	1695	G
57	DA	1698	A
57	DA	1700	A
57	DA	1706	C
57	DA	1713	A
57	DA	1717	A
57	DA	1722	A
57	DA	1731	G
57	DA	1733	G
57	DA	1734	G
57	DA	1735	A
57	DA	1738	G
57	DA	1739	A
57	DA	1758	U
57	DA	1759	A
57	DA	1775	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1776	G
57	DA	1780	A
57	DA	1782	U
57	DA	1784	A
57	DA	1785	A
57	DA	1786	A
57	DA	1787	A
57	DA	1799	G
57	DA	1802	A
57	DA	1803	A
57	DA	1808	A
57	DA	1809	A
57	DA	1810	A
57	DA	1815	A
57	DA	1816	C
57	DA	1817	G
57	DA	1821	A
57	DA	1828	G
57	DA	1838	C
57	DA	1839	G
57	DA	1847	A
57	DA	1857	G
57	DA	1900	A
57	DA	1901	A
57	DA	1913	A
57	DA	1915	U
57	DA	1918	A
57	DA	1919	A
57	DA	1929	G
57	DA	1931	U
57	DA	1936	A
57	DA	1941	C
57	DA	1942	C
57	DA	1943	U
57	DA	1945	G
57	DA	1954	G
57	DA	1956	U
57	DA	1962	C
57	DA	1963	U
57	DA	1965	C
57	DA	1967	C
57	DA	1972	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	1980	G
57	DA	1981	A
57	DA	1982	U
57	DA	1992	G
57	DA	1993	U
57	DA	1996	C
57	DA	1997	C
57	DA	2021	C
57	DA	2023	C
57	DA	2024	G
57	DA	2030	A
57	DA	2034	U
57	DA	2036	C
57	DA	2051	A
57	DA	2060	A
57	DA	2061	G
57	DA	2063	C
57	DA	2067	G
57	DA	2068	U
57	DA	2069	G
57	DA	2092	U
57	DA	2094	A
57	DA	2133	G
57	DA	2135	A
57	DA	2136	G
57	DA	2143	C
57	DA	2148	G
57	DA	2149	U
57	DA	2150	C
57	DA	2199	A
57	DA	2210	U
57	DA	2214	C
57	DA	2216	G
57	DA	2225	A
57	DA	2226	C
57	DA	2238	G
57	DA	2239	G
57	DA	2249	U
57	DA	2258	C
57	DA	2259	U
57	DA	2266	A
57	DA	2267	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2275	C
57	DA	2276	G
57	DA	2282	G
57	DA	2283	C
57	DA	2286	G
57	DA	2288	A
57	DA	2289	G
57	DA	2296	U
57	DA	2298	A
57	DA	2299	U
57	DA	2311	A
57	DA	2314	A
57	DA	2334	U
57	DA	2337	G
57	DA	2339	C
57	DA	2344	U
57	DA	2347	C
57	DA	2348	U
57	DA	2384	U
57	DA	2386	A
57	DA	2387	U
57	DA	2391	G
57	DA	2404	U
57	DA	2406	A
57	DA	2407	A
57	DA	2408	U
57	DA	2409	G
57	DA	2425	A
57	DA	2427	C
57	DA	2428	G
57	DA	2429	G
57	DA	2439	A
57	DA	2440	C
57	DA	2447	G
57	DA	2450	A
57	DA	2458	G
57	DA	2459	A
57	DA	2490	G
57	DA	2492	U
57	DA	2493	U
57	DA	2497	A
57	DA	2498	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2503	A
57	DA	2504	U
57	DA	2517	C
57	DA	2520	C
57	DA	2542	A
57	DA	2543	G
57	DA	2566	A
57	DA	2567	G
57	DA	2572	A
57	DA	2573	C
57	DA	2581	G
57	DA	2582	G
57	DA	2601	C
57	DA	2609	U
57	DA	2611	C
57	DA	2613	U
57	DA	2615	U
57	DA	2645	G
57	DA	2654	A
57	DA	2656	U
57	DA	2657	A
57	DA	2667	C
57	DA	2668	G
57	DA	2681	C
57	DA	2682	A
57	DA	2689	U
57	DA	2691	C
57	DA	2712	C
57	DA	2714	G
57	DA	2725	A
57	DA	2727	A
57	DA	2728	U
57	DA	2750	A
57	DA	2752	C
57	DA	2756	U
57	DA	2757	A
57	DA	2776	A
57	DA	2777	G
57	DA	2778	A
57	DA	2781	A
57	DA	2798	U
57	DA	2832	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DA	2836	U
57	DA	2837	A
57	DA	2848	G
57	DA	2850	A
57	DA	2851	A
57	DA	2866	U
57	DA	2868	A
57	DA	2873	A
57	DA	2874	C
57	DA	2875	C
57	DA	2876	G
57	DA	2880	C
57	DA	2893	A
57	DA	2895	G
58	DB	12	C
58	DB	13	G
58	DB	16	G
58	DB	17	C
58	DB	40	U
58	DB	41	G
58	DB	42	C
58	DB	45	A
58	DB	56	G
58	DB	58	A
58	DB	66	A
58	DB	68	C
58	DB	88	C
58	DB	90	C
58	DB	108	A
58	DB	110	C
58	DB	111	U

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry

Of 365 ligands modelled in this entry, 364 are monoatomic - leaving 1 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
61	CLM	BA	3136	-	18,20,20	2.42	4 (22%)	22,27,27	1.92	5 (22%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
61	CLM	BA	3136	-	-	0/22/22/22	0/1/1/1

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	BA	3136	CLM	C8-C9	2.38	1.43	1.38
61	BA	3136	CLM	C2-N2	3.87	1.42	1.34
61	BA	3136	CLM	C11-C6	5.33	1.47	1.39
61	BA	3136	CLM	O9B-N9	6.62	1.35	1.22

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
61	BA	3136	CLM	C3-N2-C2	-4.85	114.11	123.13
61	BA	3136	CLM	C4-C3-N2	2.64	114.10	109.29
61	BA	3136	CLM	O5-C5-C3	2.66	115.05	107.94
61	BA	3136	CLM	O4-C4-C3	2.71	118.37	111.12
61	BA	3136	CLM	C6-C5-C3	4.26	119.68	111.62

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
61	BA	3136	CLM	1	0

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	AA	1533/1533 (100%)	-0.63	16 (1%) 84 75	28, 82, 201, 415	0
2	AB	218/218 (100%)	1.69	72 (33%) 0 0	117, 160, 233, 278	0
2	CB	218/218 (100%)	1.20	44 (20%) 1 1	121, 173, 237, 292	0
3	AC	206/206 (100%)	0.52	13 (6%) 23 13	64, 107, 164, 196	0
3	CC	206/206 (100%)	1.09	30 (14%) 3 2	79, 158, 229, 303	0
4	AD	205/205 (100%)	-0.05	6 (2%) 55 41	45, 89, 164, 275	0
4	CD	205/205 (100%)	-0.28	1 (0%) 91 87	39, 61, 122, 254	0
5	AE	150/150 (100%)	-0.15	1 (0%) 89 83	57, 81, 142, 210	0
5	CE	150/150 (100%)	0.36	3 (2%) 68 54	67, 99, 157, 252	0
6	AF	100/100 (100%)	0.10	4 (4%) 42 27	55, 103, 161, 189	0
6	CF	100/100 (100%)	-0.02	1 (1%) 84 75	72, 116, 176, 217	0
7	AG	151/151 (100%)	0.49	13 (8%) 13 7	88, 150, 218, 247	0
8	AH	129/129 (100%)	0.17	7 (5%) 29 17	44, 82, 127, 184	0
8	CH	129/129 (100%)	0.64	9 (6%) 19 11	68, 113, 170, 246	0
9	AI	127/127 (100%)	1.04	24 (18%) 2 1	72, 154, 248, 287	0
9	CI	127/127 (100%)	2.02	51 (40%) 0 0	116, 201, 289, 319	0
10	AJ	98/98 (100%)	0.77	16 (16%) 2 1	78, 127, 203, 244	0
10	CJ	98/98 (100%)	2.83	55 (56%) 0 0	114, 204, 278, 301	0
11	AK	117/117 (100%)	0.85	17 (14%) 3 2	47, 117, 196, 238	0
11	CK	117/117 (100%)	0.25	5 (4%) 39 25	68, 117, 175, 239	0
12	AL	123/123 (100%)	-0.16	1 (0%) 87 80	24, 57, 121, 180	0
12	CL	123/123 (100%)	0.48	8 (6%) 22 12	44, 89, 144, 226	0
13	AM	114/114 (100%)	0.67	16 (14%) 4 2	90, 158, 240, 281	0
14	AN	96/100 (96%)	0.48	13 (13%) 4 2	76, 122, 214, 271	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
14	CN	95/100 (95%)	2.60	46 (48%) 0 0	123, 239, 369, 399	0
15	AO	88/88 (100%)	-0.40	0 100 100	40, 81, 123, 187	0
15	CO	88/88 (100%)	0.02	1 (1%) 82 72	76, 122, 190, 265	0
16	AP	82/82 (100%)	0.51	8 (9%) 10 5	46, 79, 155, 228	0
17	AQ	80/80 (100%)	0.42	6 (7%) 17 9	36, 79, 146, 244	0
17	CQ	80/80 (100%)	1.01	10 (12%) 5 3	61, 112, 163, 194	0
18	AR	55/55 (100%)	0.23	2 (3%) 46 31	60, 92, 174, 242	0
18	CR	55/55 (100%)	0.01	0 100 100	48, 91, 159, 236	0
19	AS	79/79 (100%)	1.28	23 (29%) 1 0	95, 156, 236, 256	0
19	CS	79/79 (100%)	2.94	45 (56%) 0 0	206, 416, 490, 515	0
20	AT	85/85 (100%)	-0.24	0 100 100	46, 83, 124, 174	0
20	CT	85/85 (100%)	1.11	18 (21%) 1 1	76, 142, 200, 234	0
21	AU	51/51 (100%)	1.90	24 (47%) 0 0	91, 152, 216, 243	0
21	CU	51/51 (100%)	0.54	4 (7%) 16 9	82, 115, 208, 290	0
22	BA	2854/2903 (98%)	-0.55	40 (1%) 78 65	7, 31, 162, 401	0
23	BB	118/118 (100%)	-0.69	0 100 100	20, 45, 78, 115	0
24	BC	271/271 (100%)	-0.35	6 (2%) 65 50	13, 41, 96, 201	0
24	DC	271/271 (100%)	0.65	31 (11%) 7 4	45, 101, 160, 200	0
25	BD	209/209 (100%)	-0.47	0 100 100	7, 29, 80, 144	0
25	DD	209/209 (100%)	0.97	39 (18%) 2 1	60, 123, 193, 270	0
26	BE	201/201 (100%)	-0.35	0 100 100	7, 42, 105, 189	0
26	DE	201/201 (100%)	1.92	73 (36%) 0 0	68, 254, 429, 475	0
27	BF	177/177 (100%)	0.05	6 (3%) 49 34	33, 78, 142, 205	0
28	BG	176/176 (100%)	-0.10	2 (1%) 82 72	23, 62, 124, 215	0
28	DG	176/176 (100%)	2.14	84 (47%) 0 0	79, 207, 297, 363	0
29	BH	149/149 (100%)	3.09	62 (41%) 0 0	41, 178, 274, 301	0
29	DH	149/149 (100%)	2.73	66 (44%) 0 0	93, 182, 270, 305	0
30	BI	141/141 (100%)	2.41	67 (47%) 0 0	171, 257, 316, 355	0
30	DI	141/141 (100%)	4.03	102 (72%) 0 0	227, 344, 382, 400	0
31	BJ	142/142 (100%)	-0.54	0 100 100	9, 23, 68, 127	0
31	DJ	142/142 (100%)	0.66	15 (10%) 8 4	63, 122, 184, 223	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
32	BK	122/122 (100%)	-0.50	0 100 100	14, 31, 84, 254	0
32	DK	122/122 (100%)	0.83	19 (15%) 3 2	57, 106, 172, 204	0
33	BL	143/143 (100%)	-0.52	0 100 100	9, 37, 80, 126	0
33	DL	143/143 (100%)	1.60	46 (32%) 1 0	68, 176, 296, 329	0
34	BM	136/136 (100%)	-0.55	0 100 100	9, 29, 71, 133	0
34	DM	136/136 (100%)	0.89	21 (15%) 3 2	47, 126, 187, 223	0
35	BN	120/120 (100%)	-0.54	0 100 100	10, 25, 48, 123	0
35	DN	120/120 (100%)	1.62	43 (35%) 0 0	90, 149, 231, 305	0
36	BO	116/116 (100%)	-0.31	0 100 100	28, 49, 93, 126	0
36	DO	116/116 (100%)	1.57	36 (31%) 1 0	132, 176, 238, 280	0
37	BP	114/114 (100%)	-0.35	1 (0%) 85 78	17, 39, 95, 184	0
37	DP	114/114 (100%)	1.11	22 (19%) 2 1	63, 122, 187, 204	0
38	BQ	117/117 (100%)	-0.63	0 100 100	7, 20, 46, 100	0
38	DQ	117/117 (100%)	1.04	22 (18%) 2 1	78, 127, 221, 298	0
39	BR	103/103 (100%)	-0.50	1 (0%) 84 75	7, 34, 78, 139	0
39	DR	103/103 (100%)	2.49	51 (49%) 0 0	80, 157, 275, 306	0
40	BS	110/110 (100%)	-0.57	0 100 100	8, 23, 56, 172	0
40	DS	110/110 (100%)	1.77	43 (39%) 0 0	69, 142, 254, 323	0
41	BT	93/93 (100%)	-0.10	2 (2%) 65 50	22, 53, 135, 194	0
41	DT	93/93 (100%)	2.21	41 (44%) 0 0	125, 241, 359, 398	0
42	BU	102/102 (100%)	-0.09	2 (1%) 68 54	22, 54, 111, 237	0
42	DU	102/102 (100%)	3.95	66 (64%) 0 0	135, 334, 460, 561	0
43	BV	94/94 (100%)	-0.28	0 100 100	18, 47, 89, 149	0
43	DV	94/94 (100%)	1.14	21 (22%) 1 1	109, 156, 208, 233	0
44	BW	79/79 (100%)	-0.17	2 (2%) 61 47	13, 36, 90, 194	0
44	DW	79/79 (100%)	2.06	37 (46%) 0 0	99, 166, 250, 315	0
45	BX	77/77 (100%)	-0.41	0 100 100	17, 42, 87, 113	0
45	DX	77/77 (100%)	0.82	13 (16%) 2 1	72, 122, 190, 222	0
46	BY	63/63 (100%)	-0.15	1 (1%) 74 62	34, 73, 121, 155	0
46	DY	63/63 (100%)	1.72	20 (31%) 1 0	159, 374, 464, 494	0
47	BZ	58/58 (100%)	-0.54	0 100 100	7, 26, 61, 84	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
47	DZ	58/58 (100%)	0.64	5 (8%) 13 7	80, 142, 228, 257	0
48	B0	56/56 (100%)	-0.70	0 100 100	6, 26, 80, 127	0
48	D0	56/56 (100%)	1.34	13 (23%) 1 1	75, 148, 244, 284	0
49	B1	50/50 (100%)	0.77	3 (6%) 25 14	42, 66, 121, 173	0
49	D1	50/50 (100%)	2.17	25 (50%) 0 0	114, 179, 216, 264	0
50	B2	46/46 (100%)	-0.58	1 (2%) 65 50	11, 27, 56, 164	0
50	D2	46/46 (100%)	1.33	12 (26%) 1 0	79, 130, 179, 205	0
51	B3	64/64 (100%)	-0.58	0 100 100	11, 29, 53, 81	0
51	D3	64/64 (100%)	1.76	25 (39%) 0 0	85, 145, 232, 281	0
52	B4	38/38 (100%)	0.20	1 (2%) 59 45	29, 53, 95, 103	0
52	D4	38/38 (100%)	2.69	25 (65%) 0 0	87, 165, 229, 248	0
53	CA	1530/1530 (100%)	-0.08	40 (2%) 59 45	43, 110, 301, 420	0
54	CG	150/150 (100%)	2.30	70 (46%) 0 0	101, 233, 303, 344	0
55	CM	113/113 (100%)	2.58	65 (57%) 0 0	226, 447, 522, 562	0
56	CP	80/80 (100%)	0.96	17 (21%) 1 1	49, 105, 165, 226	0
57	DA	2841/2904 (97%)	0.20	89 (3%) 52 38	51, 132, 279, 491	0
58	DB	117/117 (100%)	-0.21	0 100 100	107, 180, 240, 264	0
59	DF	178/178 (100%)	2.46	104 (58%) 0 0	175, 239, 286, 345	0
All	All	20431/20552 (99%)	0.34	2211 (10%) 8 4	6, 103, 285, 562	0

All (2211) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
29	DH	92	GLY	22.2
14	CN	33	VAL	20.9
29	DH	124	THR	20.6
30	DI	51	GLY	20.1
29	DH	91	PHE	17.7
42	DU	74	ALA	17.0
14	CN	34	ASN	16.4
55	CM	93	GLY	16.2
29	BH	86	ASP	15.9
29	BH	122	LEU	15.8
29	BH	92	GLY	15.5
30	DI	50	LYS	15.3
29	BH	91	PHE	14.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	BH	90	LEU	14.8
42	DU	97	SER	13.9
28	DG	7	PRO	13.0
29	DH	123	ARG	12.7
42	DU	75	ALA	12.6
29	BH	84	ALA	12.5
17	AQ	82	VAL	12.4
42	DU	12	VAL	12.2
30	DI	4	VAL	12.1
42	DU	76	THR	12.1
42	DU	87	GLU	12.0
42	DU	86	PHE	11.9
59	DF	129	MET	11.6
42	DU	35	VAL	11.6
29	BH	118	PRO	11.5
10	CJ	8	ILE	11.4
59	DF	141	ASP	11.4
30	BI	52	LEU	11.3
16	AP	81	ALA	11.1
29	BH	93	SER	11.1
30	DI	17	ALA	11.1
30	BI	46	ASP	11.0
29	BH	117	LEU	11.0
29	BH	123	ARG	11.0
14	CN	52	ARG	11.0
41	DT	55	VAL	10.8
29	DH	93	SER	10.7
29	BH	85	GLY	10.6
46	DY	63	ALA	10.2
55	CM	94	LEU	10.0
19	CS	29	PRO	10.0
19	CS	60	PHE	9.9
19	CS	28	LYS	9.7
42	DU	85	ARG	9.7
19	CS	23	GLU	9.7
29	DH	105	ALA	9.7
41	DT	15	HIS	9.7
39	DR	50	GLY	9.6
29	BH	87	GLU	9.6
30	DI	93	ASN	9.6
22	BA	2154	A	9.5
38	DQ	81	GLY	9.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	CG	71	THR	9.4
29	DH	131	SER	9.4
51	D3	20	GLY	9.4
14	CN	49	THR	9.3
14	CN	32	ASP	9.2
57	DA	613	A	9.2
26	DE	144	GLU	9.2
29	BH	105	ALA	9.2
29	BH	148	ALA	9.1
30	DI	15	GLY	9.1
42	DU	88	ASP	9.1
30	DI	56	VAL	9.1
39	DR	26	ASP	9.1
28	DG	83	THR	9.0
30	DI	5	GLN	9.0
42	DU	42	LYS	8.9
9	CI	66	VAL	8.9
35	DN	63	ARG	8.9
29	BH	143	ILE	8.8
19	CS	25	GLY	8.7
30	DI	83	ALA	8.7
9	CI	42	THR	8.6
39	DR	96	VAL	8.6
29	BH	88	GLY	8.6
46	DY	62	GLY	8.6
54	CG	70	PRO	8.6
19	CS	73	PHE	8.5
30	DI	95	ASP	8.5
10	CJ	72	ARG	8.5
29	BH	126	GLY	8.5
29	DH	121	VAL	8.4
22	BA	2179	C	8.4
53	CA	209	U	8.4
29	DH	119	ASN	8.3
29	BH	146	VAL	8.3
29	DH	86	ASP	8.3
29	BH	128	HIS	8.2
59	DF	83	PRO	8.2
29	BH	145	ASN	8.1
30	DI	58	ILE	8.1
30	DI	18	ASN	8.1
30	DI	57	VAL	8.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	DY	35	GLY	8.1
39	DR	22	LEU	8.1
54	CG	65	LEU	8.0
30	DI	121	ILE	8.0
30	DI	72	THR	8.0
42	DU	73	ASN	7.9
39	DR	27	ILE	7.9
29	BH	125	THR	7.9
30	DI	66	PHE	7.9
42	DU	2	ALA	7.9
54	CG	95	ARG	7.9
10	CJ	74	VAL	7.8
26	DE	175	ILE	7.8
9	AI	42	THR	7.8
16	AP	82	ALA	7.7
9	CI	127	SER	7.7
29	BH	134	VAL	7.7
36	DO	61	GLN	7.7
30	DI	55	PRO	7.7
29	DH	143	ILE	7.7
33	DL	82	LEU	7.7
51	D3	21	PHE	7.7
9	AI	89	TYR	7.7
29	DH	85	GLY	7.7
29	BH	74	ALA	7.7
26	DE	164	LEU	7.6
16	AP	80	LYS	7.6
29	DH	133	GLN	7.6
29	DH	146	VAL	7.6
30	BI	2	LYS	7.6
29	DH	87	GLU	7.6
22	BA	2143	C	7.5
29	DH	112	LYS	7.5
55	CM	108	ARG	7.5
22	BA	2147	A	7.5
29	BH	89	LYS	7.5
39	DR	20	VAL	7.5
53	CA	461	A	7.5
54	CG	72	VAL	7.5
54	CG	150	PHE	7.4
39	DR	52	PRO	7.4
54	CG	151	ALA	7.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	DI	2	LYS	7.4
49	D1	35	LEU	7.4
29	BH	147	VAL	7.3
57	DA	1536	C	7.3
10	CJ	76	ILE	7.3
29	BH	79	THR	7.3
41	DT	43	ILE	7.3
30	BI	13	ALA	7.3
28	DG	104	LEU	7.3
40	DS	70	LYS	7.3
29	BH	71	LYS	7.3
29	DH	125	THR	7.3
54	CG	102	TRP	7.3
30	DI	138	VAL	7.2
29	DH	88	GLY	7.2
57	DA	139	U	7.2
29	DH	82	SER	7.2
26	DE	190	ALA	7.2
37	DP	109	ILE	7.2
30	BI	67	THR	7.2
55	CM	46	GLU	7.2
30	BI	139	VAL	7.2
26	DE	180	LEU	7.1
29	BH	98	ASP	7.1
9	CI	65	THR	7.1
29	BH	124	THR	7.1
36	DO	62	LEU	7.1
41	DT	72	GLN	7.1
30	DI	21	PRO	7.1
26	DE	171	ASP	7.1
9	CI	57	VAL	7.1
26	DE	24	ASN	7.1
57	DA	2157	G	7.0
30	DI	22	PRO	7.0
41	DT	16	VAL	7.0
39	DR	103	ALA	7.0
42	DU	34	ILE	7.0
48	D0	56	LYS	7.0
12	CL	123	ALA	7.0
29	BH	73	ASN	6.9
29	BH	113	SER	6.9
59	DF	155	ILE	6.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
57	DA	2146	C	6.9
30	DI	12	VAL	6.9
28	DG	51	PHE	6.9
22	BA	2180	U	6.9
52	D4	10	LEU	6.8
54	CG	58	LEU	6.8
38	DQ	36	GLN	6.8
29	DH	90	LEU	6.8
30	DI	16	MET	6.8
26	DE	119	ILE	6.8
54	CG	87	PRO	6.8
10	CJ	7	ARG	6.8
28	DG	8	VAL	6.7
28	DG	32	LEU	6.7
57	DA	1537	G	6.7
30	DI	60	VAL	6.7
40	DS	110	ARG	6.7
30	BI	66	PHE	6.6
30	DI	119	ALA	6.6
10	CJ	99	GLN	6.6
19	CS	26	ASP	6.6
29	DH	144	VAL	6.6
59	DF	39	VAL	6.6
9	CI	15	ALA	6.6
52	D4	38	GLY	6.6
29	BH	80	ILE	6.6
36	DO	60	GLU	6.6
30	DI	59	THR	6.5
22	BA	138	U	6.5
44	DW	52	CYS	6.5
55	CM	63	VAL	6.5
29	DH	89	LYS	6.5
57	DA	1535	A	6.5
10	CJ	75	ASP	6.5
54	CG	64	ALA	6.4
30	DI	140	GLU	6.4
53	CA	1224	U	6.4
35	DN	75	ILE	6.4
26	DE	186	VAL	6.4
28	DG	101	VAL	6.4
30	BI	11	GLN	6.4
53	CA	210	C	6.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	CG	7	GLY	6.4
10	CJ	73	LEU	6.4
29	DH	145	ASN	6.4
22	BA	2146	C	6.4
2	AB	51	GLU	6.4
42	DU	13	LEU	6.4
59	DF	105	ILE	6.3
54	CG	61	PHE	6.3
48	D0	36	LYS	6.3
10	CJ	77	VAL	6.3
19	CS	36	ARG	6.3
25	DD	91	THR	6.3
55	CM	42	VAL	6.3
30	DI	123	ALA	6.2
57	DA	2799	A	6.2
44	DW	29	SER	6.2
28	DG	165	ASP	6.2
42	DU	41	VAL	6.2
26	DE	172	ALA	6.2
42	DU	11	ILE	6.2
59	DF	9	ASP	6.2
26	DE	147	LEU	6.2
14	CN	40	ARG	6.2
41	DT	83	ALA	6.2
39	DR	63	VAL	6.2
10	CJ	91	ASP	6.2
42	DU	4	ILE	6.2
59	DF	153	ILE	6.2
29	DH	147	VAL	6.2
26	DE	122	GLU	6.1
9	CI	4	GLN	6.1
30	DI	68	PHE	6.1
9	CI	39	GLY	6.1
19	CS	11	ASP	6.1
22	BA	2110	G	6.1
2	AB	73	ARG	6.1
29	DH	127	GLU	6.1
44	DW	34	SER	6.1
10	CJ	10	LEU	6.1
22	BA	139	U	6.1
30	DI	61	TYR	6.0
59	DF	131	VAL	6.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	AB	26	MET	6.0
54	CG	143	MET	6.0
51	D3	9	ALA	6.0
41	DT	2	ILE	6.0
54	CG	15	PRO	6.0
42	DU	78	LYS	6.0
26	DE	143	LEU	6.0
42	DU	77	GLY	6.0
19	CS	30	LEU	6.0
10	CJ	34	ALA	6.0
52	D4	1	MET	5.9
59	DF	94	ARG	5.9
33	DL	92	LEU	5.9
37	DP	73	PHE	5.9
2	AB	220	VAL	5.9
54	CG	73	GLU	5.9
10	CJ	6	ILE	5.8
30	DI	48	ILE	5.8
29	BH	81	ALA	5.8
59	DF	150	GLY	5.8
14	CN	25	GLU	5.8
29	DH	128	HIS	5.8
30	BI	86	LYS	5.8
46	DY	36	GLN	5.8
10	CJ	71	LEU	5.8
10	CJ	100	ILE	5.8
29	DH	122	LEU	5.8
59	DF	24	VAL	5.8
9	AI	129	ARG	5.8
40	DS	94	ASP	5.8
29	DH	120	GLY	5.7
9	AI	128	LYS	5.7
56	CP	47	GLU	5.7
19	CS	59	VAL	5.7
10	CJ	39	PRO	5.7
28	DG	56	GLY	5.7
30	DI	52	LEU	5.7
10	CJ	40	ILE	5.6
22	BA	2149	U	5.6
54	CG	136	LYS	5.6
40	DS	32	ALA	5.6
55	CM	62	PHE	5.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DU	70	ALA	5.6
57	DA	1075	C	5.6
52	D4	8	LYS	5.6
41	DT	42	GLU	5.5
54	CG	75	LYS	5.5
57	DA	228	C	5.5
22	BA	546	U	5.5
30	DI	120	ASP	5.5
9	CI	63	TYR	5.5
33	DL	5	THR	5.5
28	DG	72	ASN	5.5
33	DL	122	VAL	5.5
49	D1	46	VAL	5.5
42	DU	19	GLY	5.5
30	BI	141	ASP	5.5
30	BI	78	LEU	5.5
57	DA	1175	A	5.5
9	CI	16	ALA	5.5
46	DY	13	GLU	5.4
30	DI	62	ALA	5.4
14	CN	48	GLN	5.4
22	BA	2138	G	5.4
19	CS	70	LEU	5.4
2	AB	64	GLY	5.4
30	BI	132	ALA	5.4
55	CM	109	LYS	5.4
42	DU	59	GLU	5.4
10	CJ	11	LYS	5.4
33	DL	142	ILE	5.4
54	CG	54	GLY	5.4
29	DH	129	GLU	5.4
4	AD	35	GLN	5.4
21	AU	22	CYS	5.4
19	CS	37	SER	5.4
30	BI	22	PRO	5.3
28	DG	102	ILE	5.3
40	DS	5	ALA	5.3
29	BH	130	VAL	5.3
29	BH	119	ASN	5.3
54	CG	38	ALA	5.3
59	DF	152	ASP	5.3
40	DS	26	GLY	5.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	DG	33	THR	5.3
29	BH	149	GLU	5.3
26	DE	187	VAL	5.3
42	DU	5	ARG	5.3
42	DU	50	ALA	5.3
22	BA	1175	A	5.3
54	CG	18	GLY	5.3
3	CC	108	PRO	5.3
36	DO	103	VAL	5.3
32	DK	110	GLU	5.3
40	DS	4	ILE	5.3
29	BH	144	VAL	5.3
24	DC	232	GLY	5.3
57	DA	1067	A	5.3
56	CP	52	LEU	5.3
2	AB	150	ILE	5.2
19	CS	58	PRO	5.2
36	DO	65	THR	5.2
41	DT	35	ALA	5.2
30	DI	65	SER	5.2
39	DR	87	GLN	5.2
30	DI	14	ALA	5.2
35	DN	78	LYS	5.2
55	CM	111	PRO	5.2
2	CB	110	ILE	5.2
30	BI	21	PRO	5.2
47	DZ	1	ALA	5.2
19	CS	65	MET	5.2
33	DL	107	PHE	5.2
51	D3	22	LYS	5.2
10	AJ	102	LEU	5.2
14	CN	19	TYR	5.2
19	CS	27	LYS	5.2
30	DI	43	ALA	5.2
2	AB	135	MET	5.2
30	DI	97	VAL	5.2
54	CG	90	VAL	5.2
42	DU	51	LEU	5.2
42	DU	72	PHE	5.2
59	DF	10	GLU	5.2
51	D3	50	SER	5.2
37	DP	37	LYS	5.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	DT	65	GLY	5.2
54	CG	55	LYS	5.2
29	DH	142	VAL	5.2
13	AM	42	VAL	5.1
19	CS	47	THR	5.1
26	DE	121	VAL	5.1
30	DI	67	THR	5.1
9	CI	128	LYS	5.1
57	DA	1078	U	5.1
46	DY	29	ARG	5.1
8	CH	129	ALA	5.1
14	CN	16	ALA	5.1
54	CG	48	THR	5.1
28	DG	79	THR	5.1
43	DV	94	ALA	5.1
54	CG	44	SER	5.1
55	CM	67	ASP	5.1
55	CM	97	ARG	5.1
10	CJ	26	VAL	5.1
54	CG	69	ARG	5.1
26	DE	201	ALA	5.1
26	DE	198	GLU	5.1
25	DD	10	GLY	5.1
48	D0	34	GLY	5.0
30	BI	12	VAL	5.0
24	DC	240	GLY	5.0
3	CC	195	ILE	5.0
49	D1	34	GLU	5.0
30	BI	77	VAL	5.0
26	DE	127	GLU	5.0
30	DI	23	VAL	5.0
3	AC	64	ARG	5.0
10	CJ	41	PRO	5.0
46	DY	37	LEU	5.0
19	CS	79	TYR	5.0
2	AB	50	ASN	5.0
34	DM	135	VAL	5.0
18	AR	19	GLU	5.0
41	DT	71	GLY	5.0
30	DI	98	GLY	5.0
2	AB	59	ILE	4.9
26	DE	25	GLU	4.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	129	THR	4.9
14	CN	61	ASN	4.9
43	DV	69	GLU	4.9
30	DI	41	PHE	4.9
17	CQ	7	LEU	4.9
55	CM	59	VAL	4.9
28	DG	1	SER	4.9
2	AB	66	ILE	4.9
30	BI	16	MET	4.9
9	AI	31	GLN	4.9
39	DR	55	ASP	4.9
57	DA	137	U	4.9
57	DA	846	U	4.9
30	DI	46	ASP	4.9
30	DI	141	ASP	4.9
29	DH	126	GLY	4.9
39	DR	88	GLY	4.9
1	AA	86	G	4.9
42	DU	28	LEU	4.9
2	AB	45	THR	4.9
29	BH	116	ARG	4.9
46	DY	31	GLN	4.8
55	CM	92	ARG	4.8
33	DL	101	ILE	4.8
35	DN	113	ILE	4.8
19	CS	80	ARG	4.8
43	DV	42	LEU	4.8
10	AJ	63	ASP	4.8
29	DH	141	LYS	4.8
54	CG	76	SER	4.8
29	BH	70	GLU	4.8
53	CA	211	G	4.8
10	CJ	65	TYR	4.8
19	AS	38	THR	4.8
55	CM	112	ARG	4.8
33	DL	88	GLY	4.8
53	CA	1534	A	4.8
9	CI	129	ARG	4.8
28	DG	57	TYR	4.8
41	DT	56	GLU	4.8
59	DF	51	ASN	4.8
29	BH	112	LYS	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	2145	C	4.8
55	CM	76	ILE	4.8
9	CI	3	ASN	4.8
10	CJ	80	THR	4.8
30	BI	33	ASN	4.8
41	DT	36	LYS	4.8
17	CQ	6	THR	4.8
26	DE	177	PRO	4.8
55	CM	110	GLY	4.8
22	BA	2150	C	4.7
30	DI	109	ALA	4.7
14	CN	62	ARG	4.7
25	DD	95	SER	4.7
46	DY	14	LEU	4.7
3	CC	194	VAL	4.7
57	DA	2145	C	4.7
59	DF	41	GLU	4.7
25	DD	96	ILE	4.7
26	DE	188	MET	4.7
28	DG	84	LYS	4.7
42	DU	31	GLY	4.7
42	DU	26	ASN	4.7
2	AB	67	LEU	4.7
33	DL	106	GLU	4.7
26	DE	173	THR	4.7
54	CG	17	PHE	4.7
30	DI	125	THR	4.7
26	DE	42	GLY	4.7
39	DR	45	GLU	4.7
29	BH	121	VAL	4.7
2	AB	89	PHE	4.7
37	DP	42	PHE	4.7
30	BI	60	VAL	4.7
49	D1	52	LYS	4.7
28	DG	31	GLU	4.6
30	DI	94	LYS	4.6
57	DA	645	C	4.6
59	DF	171	ALA	4.6
21	AU	31	VAL	4.6
30	DI	3	LYS	4.6
38	DQ	28	SER	4.6
57	DA	1077	A	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	DI	103	ALA	4.6
33	DL	28	GLY	4.6
42	DU	17	ASP	4.6
30	BI	1	ALA	4.6
10	CJ	63	ASP	4.6
28	DG	140	ILE	4.6
29	BH	75	LEU	4.6
14	AN	20	PHE	4.6
40	DS	43	ALA	4.6
3	CC	154	GLY	4.6
3	AC	99	GLN	4.6
14	CN	53	ASP	4.6
21	AU	49	ALA	4.6
26	DE	103	GLY	4.6
30	DI	69	VAL	4.6
28	DG	106	LEU	4.6
33	DL	108	ALA	4.6
35	DN	38	LEU	4.6
57	DA	931	U	4.6
26	DE	48	THR	4.6
55	CM	45	SER	4.6
10	CJ	9	ARG	4.5
42	DU	94	PHE	4.6
3	CC	123	LEU	4.5
28	DG	55	ASP	4.5
30	DI	75	ALA	4.5
9	CI	64	ILE	4.5
42	DU	82	VAL	4.5
19	CS	24	SER	4.5
44	DW	50	VAL	4.5
3	CC	143	LEU	4.5
28	DG	45	ALA	4.5
2	CB	109	SER	4.5
49	D1	23	THR	4.5
42	DU	71	ILE	4.5
46	DY	24	GLU	4.5
35	DN	62	ASN	4.5
36	DO	40	ILE	4.5
57	DA	1420	A	4.5
22	BA	2148	G	4.5
26	DE	23	PHE	4.5
38	DQ	87	VAL	4.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DU	30	SER	4.5
33	DL	4	ASN	4.5
34	DM	136	MET	4.5
11	AK	18	GLY	4.5
19	CS	12	LEU	4.5
36	DO	56	LYS	4.5
54	CG	149	ALA	4.5
28	DG	82	PHE	4.5
4	AD	24	VAL	4.5
35	DN	28	LEU	4.5
33	DL	80	SER	4.5
36	DO	52	SER	4.5
39	DR	66	HIS	4.5
52	D4	36	ARG	4.5
54	CG	66	GLU	4.5
36	DO	24	THR	4.5
49	D1	21	THR	4.5
31	DJ	44	TYR	4.4
41	DT	3	ARG	4.4
54	CG	132	THR	4.4
55	CM	38	ILE	4.4
25	DD	180	VAL	4.4
55	CM	54	THR	4.4
59	DF	115	GLY	4.4
53	CA	954	G	4.4
10	CJ	97	ASP	4.4
59	DF	53	ALA	4.4
35	DN	74	GLU	4.4
30	DI	118	GLY	4.4
41	DT	33	LYS	4.4
36	DO	27	VAL	4.4
59	DF	110	ILE	4.4
42	DU	27	VAL	4.4
42	DU	69	VAL	4.4
30	BI	47	SER	4.4
39	DR	29	THR	4.4
55	CM	95	PRO	4.4
59	DF	116	LEU	4.4
29	BH	127	GLU	4.4
42	DU	36	GLU	4.4
48	D0	25	THR	4.4
49	B1	52	LYS	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	2136	G	4.4
55	CM	31	ALA	4.4
14	CN	60	ARG	4.4
55	CM	80	MET	4.4
29	BH	94	ILE	4.4
51	D3	60	CYS	4.3
9	CI	10	ARG	4.3
57	DA	136	G	4.3
26	DE	41	GLN	4.3
52	D4	25	VAL	4.3
39	DR	43	ASN	4.3
2	CB	31	PHE	4.3
33	DL	113	ALA	4.3
42	DU	25	LYS	4.3
39	DR	51	VAL	4.3
33	DL	81	ASP	4.3
9	CI	56	MET	4.3
26	DE	193	VAL	4.3
51	D3	10	ALA	4.3
49	D1	29	LYS	4.3
24	DC	99	GLU	4.3
35	DN	39	PRO	4.3
59	DF	93	GLU	4.3
30	BI	58	ILE	4.3
36	DO	41	ALA	4.3
42	DU	79	ALA	4.3
49	D1	26	LYS	4.3
49	D1	20	TYR	4.3
28	DG	166	GLU	4.3
57	DA	2181	U	4.3
52	D4	26	ILE	4.3
20	CT	40	ALA	4.3
1	AA	1030	U	4.3
54	CG	106	ALA	4.3
21	AU	30	GLU	4.3
44	DW	56	HIS	4.3
10	AJ	75	ASP	4.3
2	AB	29	PHE	4.3
30	BI	68	PHE	4.3
19	CS	63	ASP	4.3
52	D4	15	LYS	4.3
10	AJ	91	ASP	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	CN	26	LEU	4.2
39	DR	25	LEU	4.2
24	DC	100	ARG	4.2
26	DE	4	VAL	4.2
26	DE	148	ILE	4.2
59	DF	117	SER	4.2
30	BI	3	LYS	4.2
9	CI	126	PHE	4.2
35	DN	111	ALA	4.2
39	DR	65	ALA	4.2
40	DS	16	LYS	4.2
9	CI	117	LEU	4.2
30	DI	54	ILE	4.2
59	DF	140	ILE	4.2
35	DN	98	LEU	4.2
3	CC	90	VAL	4.2
22	BA	2155	U	4.2
53	CA	950	U	4.2
10	CJ	98	VAL	4.2
13	AM	114	PRO	4.2
42	DU	37	GLY	4.2
54	CG	80	GLY	4.2
53	CA	1314	C	4.2
17	AQ	6	THR	4.2
29	DH	118	PRO	4.2
54	CG	84	TYR	4.2
30	DI	31	GLY	4.2
33	DL	89	VAL	4.2
48	D0	22	THR	4.2
1	AA	1534	A	4.2
25	DD	26	VAL	4.2
39	DR	34	GLU	4.2
53	CA	1271	A	4.2
29	DH	2	GLN	4.2
39	DR	92	TRP	4.2
2	AB	28	PRO	4.2
54	CG	53	SER	4.2
54	CG	8	GLN	4.1
2	AB	152	ASP	4.1
25	DD	185	ASN	4.1
26	DE	183	PHE	4.1
10	CJ	36	VAL	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DO	46	GLU	4.1
37	DP	33	GLU	4.1
2	AB	68	PHE	4.1
2	CB	87	ASP	4.1
35	DN	70	THR	4.1
44	DW	51	GLY	4.1
19	AS	29	PRO	4.1
33	DL	144	GLU	4.1
35	DN	46	ARG	4.1
39	DR	61	ALA	4.1
25	DD	186	LEU	4.1
57	DA	546	U	4.1
30	BI	35	MET	4.1
29	BH	76	GLU	4.1
12	CL	80	LEU	4.1
10	CJ	66	GLU	4.1
9	AI	62	LEU	4.1
51	D3	13	PHE	4.1
42	DU	21	ARG	4.1
3	AC	63	ILE	4.1
29	DH	73	ASN	4.1
35	DN	118	ARG	4.1
17	CQ	37	ILE	4.1
50	D2	42	LEU	4.1
2	AB	186	VAL	4.0
40	DS	22	ASP	4.0
9	CI	116	GLY	4.0
39	DR	28	ALA	4.0
39	DR	33	VAL	4.0
27	BF	77	LYS	4.0
26	DE	131	THR	4.0
39	DR	62	GLU	4.0
28	DG	120	ILE	4.0
43	DV	68	LYS	4.0
53	CA	208	U	4.0
10	CJ	51	VAL	4.0
21	CU	7	GLU	4.0
28	DG	52	GLY	4.0
57	DA	1173	U	4.0
59	DF	31	GLU	4.0
35	DN	36	THR	4.0
41	DT	14	PRO	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	DS	20	VAL	4.0
42	DU	10	VAL	4.0
30	DI	20	SER	4.0
44	DW	73	PRO	4.0
52	D4	9	LYS	4.0
26	DE	157	LEU	4.0
55	CM	4	ALA	4.0
59	DF	34	THR	4.0
9	CI	55	ASP	4.0
59	DF	67	THR	4.0
57	DA	1870	C	4.0
54	CG	67	ASN	4.0
22	BA	2144	G	4.0
55	CM	28	ARG	4.0
2	CB	113	LEU	4.0
10	CJ	30	LYS	3.9
56	CP	80	LYS	3.9
54	CG	68	VAL	3.9
54	CG	74	VAL	3.9
21	CU	8	ASN	3.9
54	CG	142	ARG	3.9
52	D4	14	CYS	3.9
9	CI	62	LEU	3.9
29	DH	84	ALA	3.9
41	BT	16	VAL	3.9
3	CC	86	LEU	3.9
28	DG	100	ASN	3.9
29	DH	116	ARG	3.9
30	BI	51	GLY	3.9
44	DW	62	ALA	3.9
59	DF	77	LYS	3.9
4	AD	27	ILE	3.9
14	AN	29	ILE	3.9
25	DD	104	VAL	3.9
29	BH	77	THR	3.9
3	CC	36	PHE	3.9
30	DI	53	PRO	3.9
39	DR	102	SER	3.9
30	BI	114	ALA	3.9
26	DE	170	ARG	3.9
19	CS	43	MET	3.9
44	DW	58	LEU	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
55	CM	82	LEU	3.9
22	BA	2139	U	3.9
3	CC	106	ARG	3.9
28	DG	50	THR	3.9
57	DA	1172	C	3.9
32	DK	103	VAL	3.9
43	DV	5	ASN	3.9
30	DI	122	GLU	3.9
57	DA	2602	A	3.9
40	DS	47	VAL	3.8
2	AB	48	MET	3.8
52	D4	35	GLN	3.8
30	DI	44	LYS	3.8
39	DR	24	LYS	3.8
33	DL	77	ILE	3.8
33	DL	125	LEU	3.8
2	CB	160	LEU	3.8
3	CC	179	ALA	3.8
31	DJ	74	TYR	3.8
25	DD	43	ASP	3.8
39	DR	60	LYS	3.8
52	D4	33	HIS	3.8
9	AI	38	PHE	3.8
56	CP	39	PHE	3.8
59	DF	30	VAL	3.8
3	CC	42	LEU	3.8
29	BH	78	VAL	3.8
28	DG	110	HIS	3.8
28	DG	130	ILE	3.8
32	DK	68	GLY	3.8
18	AR	73	HIS	3.8
41	DT	58	VAL	3.8
42	DU	48	VAL	3.8
54	CG	146	ALA	3.8
25	DD	103	ASP	3.8
59	DF	163	GLU	3.8
36	DO	87	ILE	3.8
42	DU	98	ASN	3.8
9	CI	9	GLY	3.8
14	CN	23	ARG	3.8
28	DG	6	ALA	3.8
29	BH	120	GLY	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	AU	27	VAL	3.8
2	AB	157	PRO	3.8
30	BI	53	PRO	3.8
30	BI	65	SER	3.8
38	DQ	82	LEU	3.8
3	CC	35	ASP	3.8
28	DG	61	TRP	3.8
2	CB	32	GLY	3.8
19	AS	45	GLY	3.8
35	DN	29	VAL	3.7
41	DT	32	LEU	3.7
10	AJ	35	GLN	3.7
42	DU	53	GLN	3.7
39	DR	95	ASP	3.7
17	CQ	77	VAL	3.7
9	AI	20	ILE	3.7
24	DC	241	LYS	3.7
30	DI	139	VAL	3.7
44	DW	45	HIS	3.7
35	DN	72	ASP	3.7
59	DF	54	ALA	3.7
9	CI	67	LYS	3.7
40	DS	48	LYS	3.7
29	BH	72	ILE	3.7
2	CB	17	HIS	3.7
4	AD	26	ALA	3.7
2	AB	193	ASP	3.7
59	DF	146	ASP	3.7
1	AA	461	A	3.7
3	CC	160	GLU	3.7
30	BI	107	GLU	3.7
34	DM	37	GLY	3.7
42	DU	20	LYS	3.7
54	CG	43	TYR	3.7
30	DI	117	THR	3.7
14	CN	31	SER	3.7
30	DI	107	GLU	3.7
2	CB	66	ILE	3.7
21	AU	53	LYS	3.7
19	AS	60	PHE	3.7
44	DW	35	ILE	3.7
32	DK	89	ASN	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	DM	36	VAL	3.7
44	DW	67	LYS	3.7
57	DA	2147	A	3.7
28	DG	113	ASP	3.7
2	CB	186	VAL	3.7
9	CI	8	THR	3.7
22	BA	277	G	3.7
38	DQ	1	ALA	3.7
41	DT	60	THR	3.7
43	DV	60	VAL	3.7
59	DF	38	GLY	3.7
14	CN	50	LEU	3.7
1	AA	88	U	3.6
29	DH	74	ALA	3.6
33	DL	83	ALA	3.6
10	AJ	8	ILE	3.6
30	DI	84	GLY	3.6
31	DJ	98	GLU	3.6
8	CH	1	SER	3.6
10	CJ	101	SER	3.6
30	BI	87	SER	3.6
30	BI	134	SER	3.6
55	CM	104	ASN	3.6
29	BH	131	SER	3.6
42	DU	62	ALA	3.6
43	DV	6	ALA	3.6
33	DL	70	LYS	3.6
49	D1	49	LYS	3.6
55	CM	98	GLY	3.6
3	CC	41	TYR	3.6
17	CQ	60	ILE	3.6
41	DT	76	ARG	3.6
41	DT	70	HIS	3.6
28	DG	16	VAL	3.6
30	DI	42	ASN	3.6
31	DJ	128	ASN	3.6
2	AB	87	ASP	3.6
2	CB	27	LYS	3.6
26	DE	128	ALA	3.6
36	DO	113	ALA	3.6
10	CJ	5	ARG	3.6
42	DU	80	ASP	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
57	DA	1076	C	3.6
43	DV	57	TYR	3.6
3	CC	32	LEU	3.6
33	DL	57	LEU	3.6
35	DN	82	GLU	3.6
36	DO	88	LYS	3.6
6	CF	8	PHE	3.6
20	CT	3	ILE	3.6
28	DG	85	LYS	3.6
19	CS	74	ALA	3.6
30	DI	45	THR	3.6
30	DI	33	ASN	3.6
7	AG	7	GLY	3.6
7	AG	79	VAL	3.6
19	CS	22	VAL	3.6
2	CB	33	ALA	3.6
29	DH	77	THR	3.6
2	CB	150	ILE	3.6
28	DG	41	GLU	3.6
30	DI	63	ASP	3.6
31	DJ	136	GLN	3.6
2	AB	95	TRP	3.6
35	DN	56	LYS	3.6
56	CP	20	VAL	3.6
59	DF	55	ASP	3.6
14	CN	100	TRP	3.6
44	DW	28	GLU	3.6
38	DQ	94	LEU	3.5
44	DW	81	ILE	3.5
41	DT	75	GLY	3.5
29	DH	20	ASN	3.5
59	DF	104	THR	3.5
21	AU	4	LYS	3.5
55	CM	81	ASP	3.5
8	AH	129	ALA	3.5
28	DG	58	ALA	3.5
53	CA	953	G	3.5
54	CG	13	PRO	3.5
30	BI	4	VAL	3.5
42	DU	43	LYS	3.5
34	DM	72	PRO	3.5
29	DH	40	THR	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	DN	37	THR	3.5
36	DO	25	ARG	3.5
2	CB	165	ALA	3.5
59	DF	130	GLY	3.5
21	AU	50	SER	3.5
50	D2	33	ARG	3.5
45	DX	20	ALA	3.5
44	DW	19	ARG	3.5
59	DF	96	TRP	3.5
24	DC	236	GLY	3.5
39	DR	38	VAL	3.5
29	DH	117	LEU	3.5
40	DS	17	VAL	3.5
54	CG	88	VAL	3.5
11	AK	20	ALA	3.5
29	DH	106	ALA	3.5
24	DC	47	ARG	3.5
26	DE	56	GLY	3.5
40	DS	3	THR	3.5
53	CA	94	G	3.5
55	CM	30	LYS	3.5
2	CB	181	PRO	3.5
30	DI	47	SER	3.5
38	DQ	117	ALA	3.5
55	CM	75	SER	3.5
21	AU	28	LEU	3.5
31	DJ	53	TYR	3.5
7	AG	81	GLY	3.5
29	BH	64	ALA	3.5
51	D3	19	GLY	3.5
22	BA	2181	U	3.5
10	CJ	78	GLU	3.5
11	AK	110	THR	3.4
26	DE	118	LEU	3.5
27	BF	116	LEU	3.5
34	DM	41	LEU	3.5
30	DI	32	VAL	3.4
54	CG	78	ARG	3.4
57	DA	94	A	3.4
14	CN	51	PRO	3.4
24	DC	63	ILE	3.4
28	DG	48	THR	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	AJ	101	SER	3.4
25	DD	38	LYS	3.4
34	DM	103	TYR	3.4
12	CL	79	ILE	3.4
47	DZ	33	HIS	3.4
28	DG	168	VAL	3.4
50	D2	32	ALA	3.4
51	D3	57	VAL	3.4
26	DE	179	SER	3.4
44	DW	31	LEU	3.4
13	AM	32	ILE	3.4
30	BI	40	ALA	3.4
33	DL	74	THR	3.4
40	DS	40	ASN	3.4
50	D2	18	PHE	3.4
2	AB	56	LEU	3.4
37	DP	11	GLN	3.4
41	DT	1	MET	3.4
30	DI	27	LEU	3.4
55	CM	68	LEU	3.4
10	CJ	96	VAL	3.4
2	AB	192	PRO	3.4
3	AC	91	ALA	3.4
9	CI	19	PHE	3.4
16	AP	47	GLU	3.4
14	CN	78	LEU	3.4
35	DN	73	ASN	3.4
54	CG	51	GLN	3.4
30	BI	99	LYS	3.4
30	DI	81	LYS	3.4
19	AS	2	ARG	3.4
40	DS	19	LEU	3.4
57	DA	93	G	3.4
59	DF	151	LEU	3.4
20	CT	2	ASN	3.4
30	BI	42	ASN	3.4
10	CJ	38	GLY	3.4
35	DN	112	TYR	3.4
38	DQ	86	SER	3.4
39	DR	23	GLU	3.4
46	DY	10	SER	3.4
30	DI	25	PRO	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
37	DP	96	LEU	3.4
40	DS	68	ASP	3.4
54	CG	14	ASP	3.4
31	DJ	142	ILE	3.4
21	AU	52	VAL	3.4
26	DE	35	TYR	3.4
19	CS	64	GLU	3.4
21	AU	23	GLU	3.4
26	DE	12	LEU	3.4
9	AI	61	ASP	3.4
30	BI	138	VAL	3.4
37	DP	114	ASN	3.4
59	DF	76	PHE	3.4
30	DI	128	ILE	3.4
11	CK	125	LYS	3.4
30	DI	130	GLY	3.3
48	D0	33	SER	3.3
52	D4	23	ILE	3.3
9	AI	18	VAL	3.3
52	D4	24	ARG	3.3
25	DD	47	ALA	3.3
47	DZ	7	THR	3.3
36	DO	63	LYS	3.3
9	CI	89	TYR	3.3
1	AA	85	U	3.3
39	DR	48	LYS	3.3
19	AS	12	LEU	3.3
59	DF	86	CYS	3.3
2	AB	184	ALA	3.3
29	BH	106	ALA	3.3
19	CS	76	THR	3.3
28	DG	5	LYS	3.3
24	DC	26	GLY	3.3
26	DE	146	VAL	3.3
28	DG	131	VAL	3.3
9	CI	38	PHE	3.3
39	DR	53	PHE	3.3
54	CG	19	SER	3.3
50	D2	36	ALA	3.3
55	CM	44	ILE	3.3
19	CS	38	THR	3.3
44	DW	14	ASP	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	AU	6	ARG	3.3
22	BA	885	C	3.3
2	CB	30	ILE	3.3
2	AB	151	LYS	3.3
45	DX	19	HIS	3.3
27	BF	79	ARG	3.3
49	D1	22	THR	3.3
38	DQ	38	VAL	3.3
8	AH	1	SER	3.3
30	DI	127	SER	3.3
9	CI	107	ALA	3.3
9	CI	20	ILE	3.3
29	DH	27	ARG	3.3
53	CA	79	G	3.3
46	DY	45	GLN	3.3
9	AI	96	GLU	3.3
44	DW	21	GLY	3.3
2	AB	84	LEU	3.3
30	DI	137	LEU	3.3
2	AB	224	ARG	3.2
2	AB	185	ILE	3.2
10	CJ	22	THR	3.2
10	CJ	49	PHE	3.2
46	DY	21	LEU	3.2
31	DJ	118	MET	3.2
40	DS	34	ASP	3.2
44	DW	63	ASP	3.2
28	DG	87	GLN	3.2
2	AB	216	VAL	3.2
30	BI	29	GLN	3.2
33	DL	86	GLU	3.2
54	CG	86	VAL	3.2
13	AM	113	LYS	3.2
59	DF	109	ARG	3.2
53	CA	1031	C	3.2
2	AB	165	ALA	3.2
39	DR	6	GLN	3.2
44	DW	84	GLU	3.2
9	AI	127	SER	3.2
16	AP	4	ILE	3.2
39	DR	64	VAL	3.2
59	DF	11	VAL	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
45	DX	21	LEU	3.2
57	DA	101	A	3.2
57	DA	318	C	3.2
24	BC	236	GLY	3.2
59	DF	44	ALA	3.2
10	AJ	90	LEU	3.2
40	DS	101	SER	3.2
59	DF	35	LEU	3.2
2	AB	114	LYS	3.2
14	CN	76	PHE	3.2
30	DI	40	ALA	3.2
42	DU	24	VAL	3.2
45	DX	17	ARG	3.2
59	DF	82	TYR	3.2
19	AS	31	ARG	3.2
30	BI	96	LYS	3.2
2	AB	199	ILE	3.2
2	CB	159	ALA	3.2
3	AC	167	TYR	3.2
9	CI	37	TYR	3.2
29	DH	140	ALA	3.2
39	BR	50	GLY	3.2
14	CN	6	LYS	3.2
30	DI	91	LYS	3.2
30	DI	82	ALA	3.2
34	DM	17	ASN	3.2
10	CJ	50	THR	3.2
34	DM	110	GLU	3.2
24	DC	239	PHE	3.2
12	AL	123	ALA	3.2
21	AU	51	ALA	3.2
10	AJ	89	ARG	3.2
28	DG	68	ARG	3.2
39	DR	19	THR	3.2
50	D2	37	LYS	3.2
43	DV	35	GLU	3.2
25	DD	97	SER	3.2
19	CS	8	PRO	3.2
30	BI	97	VAL	3.2
35	DN	20	MET	3.2
49	D1	14	ALA	3.2
59	DF	127	TYR	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	DG	19	ASN	3.2
52	D4	37	GLN	3.2
49	D1	6	GLU	3.2
52	D4	11	CYS	3.2
19	AS	39	ILE	3.2
45	DX	18	SER	3.2
14	CN	18	LYS	3.2
40	DS	27	LYS	3.2
57	DA	1044	C	3.1
1	AA	78	A	3.1
59	DF	156	THR	3.1
19	CS	61	VAL	3.1
54	CG	16	LYS	3.1
57	DA	1171	G	3.1
1	AA	87	C	3.1
14	CN	71	GLY	3.1
19	AS	14	LEU	3.1
19	CS	66	VAL	3.1
28	DG	42	VAL	3.1
30	BI	95	ASP	3.1
53	CA	958	A	3.1
57	DA	138	U	3.1
26	DE	90	GLN	3.1
20	CT	43	LYS	3.1
32	DK	82	ASN	3.1
59	DF	114	ARG	3.1
34	DM	1	MET	3.1
2	AB	158	ASP	3.1
41	DT	74	ILE	3.1
42	DU	89	GLY	3.1
1	AA	412	A	3.1
24	DC	244	VAL	3.1
29	BH	139	PHE	3.1
25	DD	173	GLN	3.1
17	CQ	22	VAL	3.1
19	CS	39	ILE	3.1
55	CM	74	MET	3.1
9	CI	111	GLU	3.1
28	DG	24	THR	3.1
19	CS	71	GLY	3.1
25	DD	4	LEU	3.1
20	CT	86	ALA	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DE	102	ARG	3.1
29	DH	148	ALA	3.1
59	DF	139	GLU	3.1
53	CA	86	G	3.1
25	DD	24	VAL	3.1
30	BI	37	PHE	3.1
28	DG	137	LYS	3.1
57	DA	2151	U	3.1
26	DE	176	ASP	3.1
6	AF	51	ILE	3.1
59	DF	135	ILE	3.1
57	DA	1066	U	3.1
59	DF	172	PHE	3.1
35	DN	76	VAL	3.1
33	DL	31	GLY	3.1
56	CP	57	ILE	3.1
3	AC	98	ALA	3.1
55	CM	29	SER	3.1
59	DF	174	PHE	3.1
28	DG	94	ARG	3.1
57	DA	2797	U	3.1
52	D4	21	GLY	3.1
2	AB	166	ASP	3.1
30	BI	120	ASP	3.1
24	BC	235	GLU	3.0
30	DI	129	GLU	3.0
41	DT	64	LYS	3.0
42	DU	1	ALA	3.0
7	AG	82	SER	3.0
41	DT	69	ARG	3.0
39	DR	98	ILE	3.0
40	DS	15	GLN	3.0
14	CN	42	ASN	3.0
24	DC	237	ARG	3.0
49	D1	43	ARG	3.0
39	DR	8	GLY	3.0
29	BH	129	GLU	3.0
2	AB	188	THR	3.0
38	DQ	111	LYS	3.0
7	AG	61	PHE	3.0
46	DY	32	ALA	3.0
26	DE	43	THR	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	DQ	73	ILE	3.0
19	AS	37	SER	3.0
29	BH	135	HIS	3.0
6	AF	62	MET	3.0
9	CI	90	ASP	3.0
19	AS	46	LEU	3.0
19	AS	48	ILE	3.0
21	AU	3	ILE	3.0
7	AG	4	ARG	3.0
59	DF	124	ARG	3.0
7	AG	58	LEU	3.0
26	DE	98	LYS	3.0
35	DN	21	PHE	3.0
57	DA	2152	G	3.0
59	DF	98	PHE	3.0
39	DR	31	GLU	3.0
55	CM	70	ARG	3.0
9	AI	49	GLN	3.0
59	DF	68	LYS	3.0
2	CB	190	SER	3.0
32	DK	75	SER	3.0
37	DP	71	ARG	3.0
42	DU	83	GLY	3.0
57	DA	2313	C	3.0
19	AS	15	LEU	3.0
55	CM	105	ALA	3.0
59	DF	128	SER	3.0
9	CI	99	LYS	3.0
4	AD	28	ASP	3.0
8	CH	60	LEU	3.0
16	AP	22	ALA	3.0
22	BA	2106	U	3.0
41	BT	1	MET	3.0
9	CI	27	ILE	3.0
30	DI	19	PRO	3.0
1	AA	1492	A	3.0
26	DE	40	ARG	3.0
11	AK	41	LEU	3.0
14	CN	15	LEU	3.0
35	DN	102	PHE	3.0
19	CS	62	THR	3.0
29	DH	19	VAL	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	CH	44	PHE	2.9
14	CN	22	LYS	2.9
25	DD	5	VAL	2.9
30	BI	18	ASN	2.9
37	DP	74	GLN	2.9
51	D3	46	LYS	2.9
30	DI	26	ALA	2.9
11	AK	33	ILE	2.9
13	AM	38	ILE	2.9
14	CN	69	PRO	2.9
14	AN	42	ASN	2.9
32	DK	69	VAL	2.9
8	AH	23	ALA	2.9
40	DS	21	ALA	2.9
2	AB	101	THR	2.9
28	DG	35	THR	2.9
9	CI	6	TYR	2.9
26	DE	200	LEU	2.9
59	DF	50	ASP	2.9
40	DS	84	ARG	2.9
2	CB	147	LEU	2.9
30	BI	137	LEU	2.9
42	DU	58	VAL	2.9
46	DY	59	GLU	2.9
28	DG	164	ALA	2.9
54	CG	81	GLY	2.9
59	DF	99	PHE	2.9
35	DN	95	THR	2.9
40	DS	72	THR	2.9
21	AU	20	ARG	2.9
29	BH	142	VAL	2.9
30	DI	86	LYS	2.9
1	AA	81	A	2.9
36	DO	50	ALA	2.9
59	DF	112	ASP	2.9
57	DA	1278	C	2.9
26	DE	197	GLU	2.9
41	DT	12	ARG	2.9
59	DF	108	PRO	2.9
28	DG	81	GLY	2.9
31	DJ	119	PHE	2.9
9	AI	40	ARG	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	AU	37	TYR	2.9
1	AA	79	G	2.9
19	CS	5	LYS	2.9
28	DG	161	VAL	2.9
39	DR	46	GLU	2.9
57	DA	343	C	2.9
57	DA	2107	G	2.9
55	CM	107	THR	2.9
14	CN	21	ALA	2.9
26	DE	104	ALA	2.9
30	DI	124	MET	2.9
40	DS	23	LEU	2.9
42	DU	40	LEU	2.9
11	AK	83	VAL	2.9
24	DC	231	HIS	2.9
33	DL	20	GLY	2.9
49	D1	30	PRO	2.9
11	CK	20	ALA	2.9
53	CA	1317	C	2.9
7	AG	150	PHE	2.9
17	AQ	13	SER	2.9
28	DG	49	LEU	2.9
44	DW	69	GLU	2.9
49	D1	15	GLY	2.9
4	AD	21	LYS	2.9
10	AJ	87	LEU	2.9
22	BA	2108	A	2.9
30	DI	10	LEU	2.9
2	CB	146	SER	2.9
22	BA	2153	C	2.9
46	DY	34	SER	2.9
56	CP	35	ARG	2.9
57	DA	62	U	2.9
30	DI	92	PRO	2.9
17	AQ	19	SER	2.9
2	AB	201	GLY	2.9
14	CN	64	ARG	2.9
57	DA	33	C	2.9
19	CS	48	ILE	2.8
28	DG	116	LEU	2.8
40	DS	69	LEU	2.8
53	CA	202	G	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	CA	1270	G	2.8
57	DA	2402	U	2.8
29	DH	115	VAL	2.8
55	CM	61	LYS	2.8
59	DF	173	ASP	2.8
14	AN	30	ILE	2.8
13	AM	18	LEU	2.8
26	DE	156	ASN	2.8
55	CM	77	LYS	2.8
36	DO	19	GLN	2.8
44	DW	37	VAL	2.8
19	AS	10	ILE	2.8
30	BI	54	ILE	2.8
20	CT	33	LYS	2.8
21	AU	34	ARG	2.8
37	DP	111	GLU	2.8
50	D2	34	ARG	2.8
2	CB	103	TRP	2.8
22	BA	1065	U	2.8
2	CB	15	PHE	2.8
11	AK	32	THR	2.8
32	DK	112	PHE	2.8
59	DF	74	ALA	2.8
10	CJ	35	GLN	2.8
10	AJ	74	VAL	2.8
22	BA	2152	G	2.8
24	DC	238	ASN	2.8
35	DN	100	CYS	2.8
9	CI	68	GLY	2.8
29	DH	13	GLY	2.8
55	CM	22	TYR	2.8
2	CB	158	ASP	2.8
13	AM	40	GLU	2.8
20	CT	67	HIS	2.8
43	DV	23	ALA	2.8
49	D1	31	GLU	2.8
54	CG	50	ALA	2.8
20	CT	66	ILE	2.8
14	CN	73	LEU	2.8
25	DD	8	LYS	2.8
26	DE	87	ALA	2.8
28	DG	173	ALA	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	AK	17	ASP	2.8
59	DF	143	ASP	2.8
2	AB	65	LYS	2.8
17	CQ	5	ARG	2.8
24	BC	234	GLY	2.8
34	DM	16	ARG	2.8
33	DL	19	LEU	2.8
3	AC	169	GLU	2.8
9	CI	58	GLU	2.8
14	CN	43	ALA	2.8
36	DO	57	ALA	2.8
57	DA	2306	C	2.8
16	AP	45	GLU	2.8
59	DF	126	ASN	2.8
28	DG	118	ALA	2.8
44	DW	60	ALA	2.8
26	DE	178	VAL	2.8
2	CB	180	ILE	2.8
51	D3	63	TYR	2.8
22	BA	1072	C	2.8
11	AK	62	ALA	2.8
10	CJ	37	ARG	2.8
46	BY	7	ARG	2.8
17	AQ	69	THR	2.8
31	DJ	141	ASP	2.8
59	DF	59	ILE	2.8
8	CH	92	PRO	2.8
37	DP	32	VAL	2.8
38	DQ	85	ALA	2.8
56	CP	19	VAL	2.8
29	DH	95	GLY	2.7
51	D3	23	HIS	2.7
26	DE	5	LEU	2.7
33	DL	115	GLU	2.7
54	CG	139	ASP	2.7
9	AI	92	SER	2.7
36	DO	64	TYR	2.7
51	D3	1	PRO	2.7
33	DL	90	VAL	2.7
2	CB	41	ASN	2.7
32	DK	38	ILE	2.7
59	DF	66	ILE	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
59	DF	75	GLY	2.7
42	DU	3	LYS	2.7
3	CC	171	ARG	2.7
39	DR	21	ARG	2.7
40	DS	95	ARG	2.7
50	D2	12	ARG	2.7
57	DA	356	G	2.7
42	DU	47	PRO	2.7
59	DF	175	PRO	2.7
3	CC	85	LYS	2.7
10	AJ	76	ILE	2.7
21	AU	8	ASN	2.7
25	DD	205	PRO	2.7
24	DC	48	ILE	2.7
33	DL	23	ILE	2.7
43	DV	64	VAL	2.7
48	D0	23	ALA	2.7
55	CM	35	ALA	2.7
57	DA	2104	C	2.7
59	DF	154	THR	2.7
2	AB	213	LEU	2.7
36	DO	66	GLY	2.7
21	CU	9	GLU	2.7
54	CG	52	ARG	2.7
37	BP	65	ASN	2.7
19	CS	57	VAL	2.7
24	DC	102	TYR	2.7
29	DH	81	ALA	2.7
30	BI	63	ASP	2.7
10	CJ	16	ARG	2.7
12	CL	81	ILE	2.7
35	DN	114	GLU	2.7
40	DS	24	ILE	2.7
53	CA	1036	A	2.7
3	AC	79	LYS	2.7
30	DI	39	LYS	2.7
33	DL	58	TYR	2.7
51	D3	14	LYS	2.7
52	D4	34	LYS	2.7
29	BH	102	ALA	2.7
2	AB	8	MET	2.7
39	DR	35	PHE	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
51	D3	48	MET	2.7
59	DF	157	THR	2.7
39	DR	7	SER	2.7
3	CC	107	LYS	2.7
31	DJ	17	VAL	2.7
37	DP	110	LYS	2.7
44	DW	71	LYS	2.7
59	DF	79	ARG	2.7
36	DO	59	ALA	2.7
24	DC	81	GLU	2.7
28	DG	60	GLY	2.7
59	DF	78	ILE	2.7
59	DF	92	GLY	2.7
10	CJ	20	GLN	2.7
57	DA	1459	G	2.7
59	DF	2	LYS	2.7
59	DF	178	LYS	2.7
17	CQ	76	ARG	2.7
30	DI	13	ALA	2.7
42	DU	68	ASN	2.7
55	CM	55	LEU	2.7
2	AB	27	LYS	2.7
3	AC	111	ASP	2.7
9	AI	27	ILE	2.7
22	BA	654	A	2.7
30	DI	24	GLY	2.7
37	DP	8	GLU	2.7
2	AB	153	MET	2.7
21	AU	32	ARG	2.7
1	AA	80	A	2.7
12	CL	92	VAL	2.7
44	DW	42	THR	2.7
28	DG	105	SER	2.7
25	DD	19	GLY	2.7
54	CG	77	ARG	2.7
46	DY	49	ASP	2.7
54	CG	140	VAL	2.7
2	AB	72	LYS	2.6
17	AQ	3	LYS	2.6
33	DL	30	THR	2.7
34	DM	129	THR	2.7
26	DE	55	SER	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	CG	56	SER	2.6
26	DE	9	GLN	2.6
22	BA	884	U	2.6
10	CJ	27	GLU	2.6
41	DT	13	ALA	2.6
51	D3	64	ALA	2.6
9	CI	14	SER	2.6
14	AN	31	SER	2.6
24	DC	103	ILE	2.6
49	D1	12	SER	2.6
17	CQ	45	VAL	2.6
36	DO	90	VAL	2.6
10	CJ	89	ARG	2.6
14	CN	45	LEU	2.6
2	CB	82	ALA	2.6
19	CS	21	ALA	2.6
34	DM	79	ALA	2.6
24	DC	245	THR	2.6
57	DA	316	C	2.6
26	DE	120	VAL	2.6
45	DX	53	LYS	2.6
7	AG	77	ARG	2.6
11	CK	99	LEU	2.6
12	CL	93	ARG	2.6
30	DI	104	GLN	2.6
13	AM	41	ASP	2.6
19	AS	26	ASP	2.6
53	CA	1441	A	2.6
37	DP	30	TRP	2.6
54	CG	47	GLU	2.6
31	DJ	54	ILE	2.6
44	BW	45	HIS	2.6
9	CI	95	SER	2.6
19	AS	30	LEU	2.6
29	BH	47	PHE	2.6
22	BA	2107	G	2.6
30	BI	19	PRO	2.6
55	CM	88	LEU	2.6
20	CT	84	LYS	2.6
26	DE	26	ALA	2.6
36	DO	58	ILE	2.6
26	DE	32	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	DN	24	MET	2.6
10	CJ	92	LEU	2.6
36	DO	26	LEU	2.6
54	CG	59	GLU	2.6
54	CG	62	GLU	2.6
3	CC	166	TRP	2.6
22	BA	2885	G	2.6
37	DP	79	VAL	2.6
45	DX	49	ARG	2.6
29	DH	70	GLU	2.6
38	DQ	22	GLY	2.6
28	DG	53	PRO	2.6
29	BH	99	ILE	2.6
41	DT	59	ASN	2.6
10	CJ	60	ASP	2.6
44	BW	40	ARG	2.6
55	CM	100	ARG	2.6
11	AK	128	VAL	2.6
22	BA	2142	A	2.6
51	D3	55	GLY	2.6
14	CN	93	PRO	2.6
24	BC	239	PHE	2.6
2	CB	225	SER	2.6
28	DG	76	ILE	2.6
30	DI	64	ARG	2.6
44	DW	38	ARG	2.6
44	DW	39	GLN	2.6
55	CM	91	ARG	2.6
59	DF	132	ARG	2.6
26	DE	76	PRO	2.6
2	AB	195	VAL	2.6
11	AK	125	LYS	2.6
54	CG	147	ASN	2.6
57	DA	1731	G	2.6
3	CC	66	THR	2.6
35	DN	33	ILE	2.6
56	CP	76	LYS	2.6
8	AH	24	VAL	2.6
9	AI	126	PHE	2.6
19	AS	63	ASP	2.6
57	DA	2307	G	2.6
14	CN	97	LYS	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	DK	33	ALA	2.6
54	CG	79	VAL	2.6
2	CB	34	ARG	2.5
11	AK	36	ARG	2.5
35	DN	115	LEU	2.5
43	DV	91	PHE	2.6
45	DX	48	LEU	2.5
53	CA	955	U	2.6
26	DE	184	ASP	2.5
28	DG	115	GLN	2.5
57	DA	1090	A	2.5
19	CS	40	PHE	2.5
40	DS	13	SER	2.5
11	AK	84	MET	2.5
8	CH	74	ILE	2.5
19	CS	49	ALA	2.5
10	CJ	90	LEU	2.5
25	DD	90	PHE	2.5
25	DD	1	MET	2.5
14	CN	29	ILE	2.5
3	CC	91	ALA	2.5
11	AK	72	ALA	2.5
31	DJ	35	ARG	2.5
40	DS	2	GLU	2.5
19	AS	70	LEU	2.5
24	DC	104	LEU	2.5
25	DD	187	LEU	2.5
47	DZ	55	LYS	2.5
1	AA	1362	A	2.5
10	CJ	33	GLY	2.5
14	AN	51	PRO	2.5
55	CM	37	GLY	2.5
26	DE	154	ASP	2.5
22	BA	2109	U	2.5
55	CM	84	CYS	2.5
38	DQ	114	ALA	2.5
54	CG	63	VAL	2.5
59	DF	7	TYR	2.5
59	DF	58	ALA	2.5
55	CM	23	GLY	2.5
30	BI	20	SER	2.5
10	CJ	12	ALA	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	DH	132	PHE	2.5
54	CG	130	LYS	2.5
57	DA	405	U	2.5
28	DG	111	PRO	2.5
9	CI	72	SER	2.5
14	CN	11	LYS	2.5
9	AI	91	GLU	2.5
14	CN	72	PHE	2.5
30	DI	49	GLU	2.5
36	DO	115	LEU	2.5
54	CG	107	ALA	2.5
34	DM	6	ARG	2.5
20	CT	8	LYS	2.5
2	CB	106	VAL	2.5
30	BI	111	THR	2.5
33	DL	143	GLU	2.5
36	DO	28	VAL	2.5
13	AM	94	LEU	2.5
25	DD	188	LEU	2.5
28	DG	86	LEU	2.5
2	AB	63	LYS	2.5
30	DI	38	CYS	2.5
2	CB	144	GLU	2.5
8	AH	60	LEU	2.5
20	CT	65	LEU	2.5
29	BH	132	PHE	2.5
44	DW	6	GLY	2.5
43	DV	55	GLU	2.5
8	CH	58	LEU	2.5
33	DL	79	LEU	2.5
57	DA	279	A	2.5
9	CI	76	GLY	2.5
30	DI	108	ILE	2.5
16	AP	19	VAL	2.5
49	D1	42	VAL	2.5
2	AB	80	LYS	2.5
2	AB	200	PRO	2.5
59	DF	169	LEU	2.5
14	AN	16	ALA	2.5
55	CM	73	SER	2.5
30	BI	48	ILE	2.5
25	DD	203	VAL	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
55	CM	96	VAL	2.5
40	DS	31	GLN	2.4
24	DC	46	GLY	2.4
53	CA	1312	G	2.4
57	DA	1116	G	2.4
25	DD	176	ASP	2.4
29	DH	113	SER	2.4
32	DK	104	THR	2.4
51	D3	5	THR	2.4
28	DG	171	LYS	2.4
29	DH	3	VAL	2.4
30	BI	10	LEU	2.4
40	DS	105	VAL	2.4
51	D3	51	LYS	2.4
52	D4	32	LYS	2.4
5	CE	117	ALA	2.4
14	AN	19	TYR	2.4
30	BI	98	GLY	2.4
56	CP	17	TYR	2.4
19	AS	47	THR	2.4
19	CS	13	HIS	2.4
19	CS	31	ARG	2.4
51	D3	3	ILE	2.4
48	D0	24	VAL	2.4
7	AG	84	TYR	2.4
8	CH	127	TYR	2.4
30	DI	88	GLY	2.4
30	BI	100	ILE	2.4
39	DR	59	ILE	2.4
10	AJ	10	LEU	2.4
26	DE	28	VAL	2.4
48	D0	41	HIS	2.4
59	DF	145	VAL	2.4
35	DN	25	ALA	2.4
36	DO	51	ALA	2.4
24	BC	250	GLN	2.4
30	BI	5	GLN	2.4
53	CA	1257	A	2.4
14	AN	25	GLU	2.4
55	CM	32	ILE	2.4
14	AN	33	VAL	2.4
2	AB	19	THR	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	DK	37	ASP	2.4
53	CA	1315	U	2.4
2	AB	127	LYS	2.4
2	AB	159	ALA	2.4
28	DG	95	ALA	2.4
28	DG	103	ASN	2.4
30	BI	121	ILE	2.4
30	DI	7	TYR	2.4
59	DF	164	GLU	2.4
53	CA	80	A	2.4
30	BI	102	ARG	2.4
30	BI	103	ALA	2.4
44	DW	48	ALA	2.4
59	DF	118	ALA	2.4
5	CE	107	GLY	2.4
14	CN	77	GLY	2.4
36	DO	112	GLU	2.4
9	CI	40	ARG	2.4
13	AM	91	ARG	2.4
25	DD	55	LYS	2.4
53	CA	81	A	2.4
26	DE	10	SER	2.4
2	AB	163	ILE	2.4
25	DD	2	ILE	2.4
28	DG	129	GLU	2.4
33	DL	68	SER	2.4
42	DU	100	GLU	2.4
55	CM	103	THR	2.4
33	DL	78	ARG	2.4
40	DS	18	ARG	2.4
25	DD	166	GLY	2.4
33	DL	91	ASP	2.4
35	DN	43	GLU	2.4
45	DX	13	THR	2.4
9	CI	86	LEU	2.4
14	AN	23	ARG	2.4
24	DC	94	LEU	2.4
54	CG	85	GLN	2.4
57	DA	1084	A	2.4
1	AA	1032	G	2.4
9	AI	16	ALA	2.4
2	AB	44	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	AI	53	LEU	2.4
9	CI	106	ASP	2.4
36	DO	16	ARG	2.4
38	DQ	97	ILE	2.4
10	AJ	98	VAL	2.4
24	DC	109	LEU	2.4
37	DP	84	SER	2.4
59	DF	142	TYR	2.4
22	BA	2402	U	2.4
13	AM	83	GLY	2.4
32	DK	101	GLY	2.4
42	BU	87	GLU	2.4
53	CA	1138	G	2.4
57	DA	1407	G	2.4
42	DU	57	ILE	2.4
41	DT	47	VAL	2.4
59	DF	45	ASP	2.4
2	AB	118	THR	2.4
49	D1	16	THR	2.4
2	CB	127	LYS	2.4
29	DH	83	LYS	2.4
57	DA	653	U	2.4
55	CM	106	ARG	2.4
2	AB	180	ILE	2.4
10	CJ	52	LEU	2.4
34	DM	46	ILE	2.4
28	DG	9	VAL	2.4
2	CB	61	SER	2.3
44	DW	18	LYS	2.3
55	CM	113	LYS	2.3
44	DW	41	GLY	2.3
53	CA	1230	C	2.3
32	DK	76	VAL	2.3
41	DT	34	VAL	2.3
14	AN	32	ASP	2.3
41	DT	79	ASP	2.3
3	AC	106	ARG	2.3
45	DX	10	ARG	2.3
43	DV	84	PRO	2.3
49	D1	13	SER	2.3
13	AM	84	CYS	2.3
24	DC	29	PHE	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	DW	59	PHE	2.3
46	DY	3	ALA	2.3
29	DH	130	VAL	2.3
56	CP	9	HIS	2.3
29	DH	51	ARG	2.3
34	DM	12	MET	2.3
52	D4	19	ARG	2.3
28	BG	15	ASP	2.3
28	DG	11	PRO	2.3
2	AB	160	LEU	2.3
51	D3	54	LEU	2.3
29	BH	83	LYS	2.3
30	BI	32	VAL	2.3
1	AA	844	G	2.3
53	CA	971	G	2.3
32	DK	106	GLU	2.3
37	DP	101	GLU	2.3
2	AB	149	GLY	2.3
24	DC	234	GLY	2.3
26	DE	11	ALA	2.3
28	DG	155	PRO	2.3
24	DC	64	VAL	2.3
20	CT	35	TYR	2.3
24	DC	20	ASN	2.3
26	DE	51	GLU	2.3
54	CG	128	GLU	2.3
19	AS	7	GLY	2.3
25	DD	181	ASP	2.3
33	DL	16	GLY	2.3
26	DE	185	LYS	2.3
28	DG	147	LEU	2.3
41	DT	37	ASP	2.3
43	DV	45	ASP	2.3
49	D1	36	LYS	2.3
51	D3	56	LEU	2.3
3	AC	65	VAL	2.3
14	CN	79	SER	2.3
7	AG	80	GLY	2.3
53	CA	1235	U	2.3
4	CD	27	ILE	2.3
38	DQ	90	ASP	2.3
40	DS	66	ILE	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
59	DF	168	LEU	2.3
19	CS	75	PRO	2.3
28	DG	167	VAL	2.3
35	DN	27	SER	2.3
57	DA	329	G	2.3
57	DA	1043	C	2.3
57	DA	1079	C	2.3
10	CJ	64	GLN	2.3
21	AU	35	GLU	2.3
56	CP	60	TRP	2.3
3	AC	80	GLY	2.3
44	DW	53	GLY	2.3
55	CM	26	LYS	2.3
28	DG	162	ARG	2.3
52	D4	12	ARG	2.3
52	D4	20	ASP	2.3
20	CT	7	LYS	2.3
39	DR	32	THR	2.3
2	CB	22	TRP	2.3
2	AB	41	ASN	2.3
12	CL	91	GLY	2.3
19	CS	2	ARG	2.3
26	DE	21	ARG	2.3
50	D2	29	GLN	2.3
35	DN	79	LEU	2.3
55	CM	18	LEU	2.3
57	DA	88	G	2.3
34	DM	35	ALA	2.3
41	DT	67	VAL	2.3
57	DA	2142	A	2.3
22	BA	2105	U	2.3
25	DD	70	LYS	2.3
29	DH	60	GLU	2.3
43	DV	82	TYR	2.3
59	DF	62	GLN	2.3
3	AC	100	ILE	2.3
3	CC	63	ILE	2.3
24	DC	45	ASN	2.3
43	DV	70	ILE	2.3
28	DG	96	ALA	2.3
30	DI	76	ALA	2.3
30	BI	38	CYS	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
31	DJ	75	TYR	2.3
5	CE	157	GLY	2.3
39	DR	12	HIS	2.3
43	DV	86	LEU	2.3
49	D1	33	LEU	2.3
59	DF	49	LEU	2.3
29	DH	9	VAL	2.3
32	DK	53	LYS	2.3
39	DR	54	VAL	2.3
44	DW	70	VAL	2.3
55	CM	72	ILE	2.3
59	DF	148	VAL	2.3
2	AB	181	PRO	2.3
59	DF	138	PRO	2.3
33	DL	87	GLY	2.3
53	CA	1032	G	2.3
53	CA	1313	U	2.3
57	DA	367	G	2.3
57	DA	1217	U	2.3
2	CB	79	VAL	2.3
10	CJ	25	ILE	2.3
28	DG	10	VAL	2.3
30	DI	131	THR	2.3
39	DR	47	VAL	2.3
42	DU	46	LYS	2.3
2	CB	75	ALA	2.2
8	AH	53	ASP	2.2
29	DH	15	LEU	2.2
39	DR	5	PHE	2.2
2	AB	17	HIS	2.2
2	CB	13	VAL	2.2
26	DE	181	ILE	2.2
28	DG	18	ILE	2.2
47	DZ	54	VAL	2.2
52	D4	16	ILE	2.2
3	CC	58	ARG	2.2
40	DS	44	ALA	2.2
9	AI	88	GLU	2.2
53	CA	1015	G	2.2
57	DA	2133	G	2.2
26	DE	174	GLY	2.2
11	CK	83	VAL	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	DG	44	HIS	2.2
41	DT	91	GLN	2.2
55	CM	89	ARG	2.2
57	DA	1606	C	2.2
2	AB	168	GLU	2.2
57	DA	12	U	2.2
9	CI	83	THR	2.2
33	DL	121	THR	2.2
26	DE	47	LYS	2.2
28	DG	160	GLY	2.2
2	CB	28	PRO	2.2
9	AI	32	ARG	2.2
19	CS	41	PRO	2.2
53	CA	1272	G	2.2
41	DT	82	LYS	2.2
57	DA	1164	C	2.2
59	DF	32	LYS	2.2
59	DF	46	LYS	2.2
49	B1	3	GLY	2.2
9	AI	29	ILE	2.2
19	AS	44	ILE	2.2
25	DD	73	VAL	2.2
34	DM	131	VAL	2.2
41	DT	31	VAL	2.2
7	AG	17	PHE	2.2
25	DD	25	THR	2.2
33	DL	102	GLY	2.2
53	CA	87	C	2.2
57	DA	436	C	2.2
9	CI	41	GLU	2.2
14	CN	59	GLN	2.2
29	DH	56	ALA	2.2
56	CP	45	GLU	2.2
13	AM	2	ARG	2.2
48	D0	27	LEU	2.2
9	CI	46	VAL	2.2
57	DA	39	G	2.2
14	CN	98	ALA	2.2
21	AU	29	ALA	2.2
33	DL	75	ALA	2.2
38	DQ	32	ARG	2.2
38	DQ	41	ALA	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	CJ	56	HIS	2.2
33	DL	114	GLY	2.2
32	DK	77	ILE	2.2
41	DT	49	LYS	2.2
46	DY	44	LYS	2.2
34	DM	60	GLN	2.2
36	DO	55	GLU	2.2
3	CC	126	ARG	2.2
25	DD	182	ALA	2.2
33	DL	21	ARG	2.2
57	DA	810	U	2.2
2	AB	14	HIS	2.2
57	DA	587	C	2.2
2	AB	183	PHE	2.2
59	DF	125	GLY	2.2
33	DL	73	ILE	2.2
30	DI	89	SER	2.2
48	D0	35	GLU	2.2
57	DA	1073	A	2.2
59	DF	23	SER	2.2
24	DC	121	ALA	2.2
27	BF	118	ALA	2.2
30	DI	11	GLN	2.2
40	DS	54	ALA	2.2
40	DS	97	LEU	2.2
17	CQ	32	ILE	2.2
54	CG	6	ILE	2.2
35	DN	71	ARG	2.2
49	B1	51	ALA	2.2
59	DF	106	ALA	2.2
59	DF	134	GLN	2.2
9	AI	60	LEU	2.2
20	CT	63	LYS	2.2
59	DF	20	ASN	2.2
30	DI	28	GLY	2.2
55	CM	57	ASP	2.2
9	CI	123	ARG	2.2
43	DV	59	GLU	2.2
7	AG	22	LEU	2.2
20	CT	71	ALA	2.2
36	DO	77	ALA	2.2
55	CM	34	ALA	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	176	ASN	2.2
2	CB	200	PRO	2.2
19	AS	8	PRO	2.2
13	AM	11	HIS	2.2
36	DO	111	ARG	2.2
10	CJ	47	GLU	2.1
27	BF	139	GLU	2.1
57	DA	2106	U	2.1
52	D4	6	SER	2.1
54	CG	12	LEU	2.1
54	CG	144	ALA	2.1
55	CM	47	LEU	2.1
59	DF	15	LEU	2.1
2	AB	24	PRO	2.1
2	AB	69	VAL	2.1
20	CT	83	ASN	2.1
25	DD	14	ILE	2.1
28	DG	23	ILE	2.1
28	DG	25	ILE	2.1
30	BI	23	VAL	2.1
42	DU	64	ILE	2.1
59	DF	33	ILE	2.1
55	CM	85	TYR	2.1
45	DX	32	LEU	2.1
57	DA	344	A	2.1
3	CC	145	ALA	2.1
38	DQ	37	ALA	2.1
30	BI	24	GLY	2.1
52	B4	12	ARG	2.1
10	AJ	50	THR	2.1
31	DJ	18	VAL	2.1
37	DP	4	ILE	2.1
42	DU	38	ILE	2.1
5	AE	114	LEU	2.1
35	DN	77	ALA	2.1
56	CP	7	ALA	2.1
11	CK	67	GLU	2.1
37	DP	62	LYS	2.1
11	AK	99	LEU	2.1
30	DI	78	LEU	2.1
35	DN	83	LEU	2.1
9	CI	49	GLN	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	1171	G	2.1
26	DE	167	VAL	2.1
28	BG	25	ILE	2.1
36	DO	80	GLU	2.1
39	DR	58	VAL	2.1
35	DN	45	ARG	2.1
2	AB	191	ASP	2.1
10	AJ	49	PHE	2.1
32	DK	90	ASN	2.1
40	DS	33	LEU	2.1
6	AF	68	GLN	2.1
25	DD	9	VAL	2.1
56	CP	21	VAL	2.1
56	CP	48	GLU	2.1
9	CI	124	PRO	2.1
35	DN	30	ARG	2.1
6	AF	37	HIS	2.1
20	CT	70	LYS	2.1
50	D2	43	THR	2.1
57	DA	1042	G	2.1
57	DA	1622	G	2.1
59	DF	176	PHE	2.1
30	BI	6	ALA	2.1
48	D0	20	ALA	2.1
57	DA	1744	A	2.1
44	DW	7	GLY	2.1
37	DP	29	VAL	2.1
53	CA	1209	C	2.1
33	DL	132	ARG	2.1
45	DX	2	ARG	2.1
49	D1	40	PRO	2.1
59	DF	28	PRO	2.1
14	CN	99	SER	2.1
40	DS	108	SER	2.1
55	CM	71	GLU	2.1
59	DF	22	ASN	2.1
3	CC	163	ARG	2.1
40	DS	99	ARG	2.1
42	DU	93	ARG	2.1
45	DX	12	VAL	2.1
57	DA	1046	A	2.1
59	DF	84	ILE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
59	DF	149	ARG	2.1
38	DQ	35	PHE	2.1
46	DY	56	LEU	2.1
2	CB	38	HIS	2.1
32	DK	113	MET	2.1
3	CC	33	ASP	2.1
3	CC	155	ARG	2.1
26	DE	169	VAL	2.1
8	AH	125	ILE	2.1
49	D1	32	LYS	2.1
51	D3	58	ILE	2.1
2	AB	113	LEU	2.1
2	AB	128	LEU	2.1
3	CC	196	GLY	2.1
28	DG	73	SER	2.1
28	DG	154	GLU	2.1
30	DI	116	MET	2.1
36	DO	37	ALA	2.1
44	DW	33	GLY	2.1
10	CJ	82	LYS	2.1
37	DP	36	LYS	2.1
51	D3	49	VAL	2.1
20	CT	42	ASP	2.1
29	DH	94	ILE	2.1
13	AM	33	LEU	2.1
29	BH	5	LEU	2.1
29	DH	139	PHE	2.1
30	BI	79	LEU	2.1
24	BC	237	ARG	2.1
24	DC	93	VAL	2.1
25	DD	69	ALA	2.1
39	DR	56	GLY	2.1
35	DN	116	VAL	2.1
2	AB	190	SER	2.1
14	CN	65	GLN	2.1
25	DD	202	ILE	2.1
57	DA	357	C	2.1
2	CB	189	ASN	2.1
30	BI	27	LEU	2.1
43	DV	26	PHE	2.1
55	CM	79	LEU	2.1
38	DQ	31	TYR	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	DS	38	TYR	2.1
21	AU	10	PRO	2.1
21	AU	40	PRO	2.1
40	DS	73	LYS	2.1
50	B2	46	LYS	2.1
11	AK	29	THR	2.0
22	BA	1172	C	2.0
50	D2	13	ASN	2.0
56	CP	50	THR	2.0
55	CM	43	LYS	2.0
57	DA	549	G	2.0
21	CU	23	GLU	2.0
34	DM	80	VAL	2.0
41	DT	24	MET	2.0
2	AB	38	HIS	2.0
30	BI	34	ILE	2.0
42	DU	102	ILE	2.0
2	CB	67	LEU	2.0
11	AK	81	LEU	2.0
14	AN	22	LYS	2.0
28	DG	43	LYS	2.0
19	AS	23	GLU	2.0
21	AU	41	THR	2.0
27	BF	82	TYR	2.0
41	DT	62	VAL	2.0
28	DG	34	ARG	2.0
2	CB	114	LYS	2.0
43	DV	61	LEU	2.0
44	DW	80	SER	2.0
15	CO	74	VAL	2.0
29	DH	79	THR	2.0
53	CA	1362	A	2.0
57	DA	795	C	2.0
35	DN	35	LYS	2.0
48	D0	37	HIS	2.0
53	CA	212	G	2.0
57	DA	1074	G	2.0
9	CI	18	VAL	2.0
13	AM	86	ARG	2.0
30	BI	7	TYR	2.0
34	DM	93	VAL	2.0
12	CL	122	LYS	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	DH	39	ALA	2.0
50	D2	35	ARG	2.0
57	DA	1083	U	2.0
59	DF	36	ASN	2.0
8	CH	17	GLN	2.0
14	CN	75	LYS	2.0
28	DG	54	ARG	2.0
41	DT	17	SER	2.0
52	D4	22	VAL	2.0
2	AB	74	ALA	2.0
24	DC	105	ALA	2.0
42	BU	52	ASN	2.0
57	DA	1202	G	2.0
22	BA	1094	U	2.0

6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(Å ²)	Q<0.9
60	MG	BA	3130	1/1	0.98	0.44	20.61	257,257,257,257	0
60	MG	DA	3059	1/1	0.94	0.38	15.13	241,241,241,241	0
60	MG	AA	1640	1/1	0.98	0.25	11.81	189,189,189,189	0
60	MG	CA	1640	1/1	0.89	0.29	10.84	171,171,171,171	0
60	MG	BA	3123	1/1	0.95	0.56	10.48	112,112,112,112	0
60	MG	DA	3074	1/1	0.88	0.45	8.03	239,239,239,239	0
60	MG	BA	3135	1/1	0.79	0.38	7.74	204,204,204,204	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	BA	3107	1/1	0.97	0.19	4.67	8,8,8,8	0
60	MG	DA	3002	1/1	0.67	0.39	4.57	229,229,229,229	0
60	MG	BA	3082	1/1	0.95	0.17	4.13	98,98,98,98	0
60	MG	BA	3104	1/1	0.95	0.18	3.86	27,27,27,27	0
60	MG	BA	3039	1/1	0.98	0.20	3.64	9,9,9,9	0
60	MG	BA	3103	1/1	0.90	0.20	3.39	8,8,8,8	0
60	MG	BA	3115	1/1	0.96	0.18	3.28	8,8,8,8	0
60	MG	BA	3069	1/1	0.89	0.19	2.94	223,223,223,223	0
60	MG	BA	3026	1/1	0.99	0.18	2.80	122,122,122,122	0
60	MG	CA	1628	1/1	0.81	0.34	2.68	259,259,259,259	0
60	MG	DA	3114	1/1	0.97	0.24	2.47	166,166,166,166	0
60	MG	BA	3013	1/1	0.99	0.18	2.42	6,6,6,6	0
60	MG	BA	3096	1/1	0.98	0.17	2.29	59,59,59,59	0
60	MG	BA	3100	1/1	0.96	0.17	2.12	26,26,26,26	0
60	MG	DA	3105	1/1	0.54	0.23	2.06	305,305,305,305	0
60	MG	DA	3129	1/1	0.91	0.62	1.99	271,271,271,271	0
60	MG	CA	1625	1/1	0.95	0.21	1.34	160,160,160,160	0
60	MG	BA	3108	1/1	0.98	0.17	1.28	6,6,6,6	0
60	MG	CA	1607	1/1	0.91	0.21	1.14	222,222,222,222	0
60	MG	DA	3068	1/1	0.86	0.28	1.04	225,225,225,225	0
60	MG	DA	3043	1/1	0.91	0.22	0.82	112,112,112,112	0
60	MG	CA	1641	1/1	0.95	0.18	0.80	73,73,73,73	0
60	MG	CA	1616	1/1	0.81	0.35	0.75	279,279,279,279	0
60	MG	DA	3056	1/1	0.84	0.37	0.74	243,243,243,243	0
60	MG	BA	3008	1/1	0.96	0.16	0.72	29,29,29,29	0
61	CLM	BA	3136	20/20	0.97	0.20	0.64	2,26,77,92	0
60	MG	BA	3129	1/1	0.99	0.15	0.48	15,15,15,15	0
60	MG	AA	1641	1/1	0.98	0.16	0.45	27,27,27,27	0
60	MG	AA	1630	1/1	0.95	0.14	0.44	209,209,209,209	0
60	MG	DA	3100	1/1	0.92	0.24	0.39	149,149,149,149	0
60	MG	DA	3133	1/1	0.74	0.26	0.38	241,241,241,241	0
60	MG	DA	3109	1/1	0.77	0.34	0.24	169,169,169,169	0
60	MG	DA	3026	1/1	0.62	0.21	0.23	139,139,139,139	0
60	MG	CA	1611	1/1	0.91	0.18	0.21	116,116,116,116	0
60	MG	AN	201	1/1	0.76	0.20	0.10	219,219,219,219	0
60	MG	AA	1621	1/1	0.99	0.14	-0.08	35,35,35,35	0
60	MG	CA	1631	1/1	0.92	0.20	-0.09	111,111,111,111	0
60	MG	DA	3128	1/1	0.94	0.26	-0.15	138,138,138,138	0
60	MG	BA	3072	1/1	0.99	0.16	-0.20	81,81,81,81	0
60	MG	CA	1618	1/1	0.78	0.17	-0.20	141,141,141,141	0
60	MG	DA	3094	1/1	0.91	0.21	-0.22	98,98,98,98	0
60	MG	CA	1637	1/1	0.92	0.19	-0.23	140,140,140,140	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	DA	3041	1/1	0.77	0.20	-0.30	133,133,133,133	0
60	MG	CA	1629	1/1	0.77	0.20	-0.31	214,214,214,214	0
60	MG	CA	1621	1/1	0.97	0.16	-0.43	60,60,60,60	0
60	MG	DA	3050	1/1	0.84	0.17	-0.45	89,89,89,89	0
60	MG	BA	3106	1/1	0.96	0.14	-0.67	13,13,13,13	0
60	MG	DB	201	1/1	0.90	0.12	-0.68	109,109,109,109	0
60	MG	DC	301	1/1	0.91	0.15	-0.83	134,134,134,134	0
60	MG	BA	3131	1/1	0.98	0.09	-0.85	96,96,96,96	0
60	MG	DA	3082	1/1	0.79	0.11	-0.91	214,214,214,214	0
60	MG	BA	3046	1/1	0.95	0.12	-0.93	142,142,142,142	0
60	MG	CA	1617	1/1	0.80	0.15	-0.94	205,205,205,205	0
60	MG	AA	1632	1/1	0.97	0.10	-0.94	53,53,53,53	0
60	MG	DA	3102	1/1	0.94	0.16	-0.95	105,105,105,105	0
60	MG	BA	3120	1/1	0.99	0.06	-1.00	44,44,44,44	0
60	MG	BA	3048	1/1	0.97	0.14	-1.13	18,18,18,18	0
60	MG	BA	3133	1/1	0.99	0.14	-1.18	5,5,5,5	0
60	MG	DA	3022	1/1	0.90	0.17	-1.21	118,118,118,118	0
60	MG	CA	1606	1/1	0.88	0.14	-1.24	77,77,77,77	0
60	MG	BA	3049	1/1	0.97	0.12	-1.37	72,72,72,72	0
60	MG	AA	1616	1/1	0.97	0.13	-1.44	123,123,123,123	0
60	MG	BA	3119	1/1	0.98	0.14	-1.45	15,15,15,15	0
60	MG	DA	3047	1/1	0.96	0.14	-1.51	82,82,82,82	0
60	MG	DA	3111	1/1	0.96	0.11	-1.53	89,89,89,89	0
60	MG	DA	3024	1/1	0.82	0.14	-1.56	147,147,147,147	0
60	MG	DA	3099	1/1	0.96	0.15	-1.59	96,96,96,96	0
60	MG	DA	3032	1/1	0.84	0.19	-1.59	193,193,193,193	0
60	MG	BA	3113	1/1	0.98	0.10	-1.62	34,34,34,34	0
60	MG	DA	3023	1/1	0.78	0.18	-1.70	90,90,90,90	0
60	MG	DA	3083	1/1	0.55	0.10	-1.72	176,176,176,176	0
60	MG	BA	3056	1/1	0.96	0.12	-1.74	86,86,86,86	0
60	MG	DA	3038	1/1	0.94	0.18	-1.85	163,163,163,163	0
60	MG	CA	1634	1/1	0.90	0.16	-2.04	200,200,200,200	0
60	MG	AA	1604	1/1	0.94	0.10	-2.19	112,112,112,112	0
60	MG	BB	202	1/1	0.93	0.09	-2.20	54,54,54,54	0
60	MG	DA	3065	1/1	0.98	0.12	-2.38	40,40,40,40	0
60	MG	DA	3054	1/1	0.98	0.13	-2.44	125,125,125,125	0
60	MG	DA	3064	1/1	0.96	0.13	-2.48	65,65,65,65	0
60	MG	AA	1611	1/1	0.98	0.10	-2.49	81,81,81,81	0
60	MG	DA	3071	1/1	0.90	0.09	-2.52	136,136,136,136	0
60	MG	BA	3128	1/1	0.99	0.13	-2.62	6,6,6,6	0
60	MG	DA	3131	1/1	0.92	0.10	-2.64	104,104,104,104	0
62	ZN	D4	101	1/1	0.92	0.09	-2.74	197,197,197,197	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	BA	3027	1/1	0.98	0.12	-2.75	34,34,34,34	0
60	MG	DA	3012	1/1	0.89	0.12	-2.78	57,57,57,57	0
60	MG	AA	1609	1/1	0.95	0.10	-2.86	47,47,47,47	0
60	MG	DA	3103	1/1	0.87	0.16	-2.87	36,36,36,36	0
60	MG	AA	1607	1/1	0.94	0.10	-2.93	98,98,98,98	0
60	MG	DA	3049	1/1	0.92	0.14	-2.99	150,150,150,150	0
60	MG	DA	3104	1/1	0.96	0.15	-2.99	48,48,48,48	0
60	MG	BA	3022	1/1	0.91	0.11	-3.02	20,20,20,20	0
60	MG	BA	3052	1/1	0.99	0.09	-3.07	12,12,12,12	0
60	MG	DA	3051	1/1	0.95	0.09	-3.07	49,49,49,49	0
60	MG	DA	3039	1/1	0.97	0.15	-3.10	59,59,59,59	0
60	MG	BA	3023	1/1	0.99	0.12	-3.15	8,8,8,8	0
60	MG	AA	1606	1/1	0.98	0.10	-3.19	58,58,58,58	0
60	MG	CA	1642	1/1	0.88	0.07	-3.34	121,121,121,121	0
60	MG	BA	3062	1/1	1.00	0.13	-3.40	9,9,9,9	0
60	MG	DA	3123	1/1	0.95	0.14	-3.43	65,65,65,65	0
60	MG	BA	3012	1/1	0.93	0.13	-3.43	5,5,5,5	0
60	MG	BA	3109	1/1	0.98	0.10	-3.48	105,105,105,105	0
60	MG	BA	3021	1/1	0.98	0.11	-3.77	15,15,15,15	0
60	MG	BA	3002	1/1	0.94	0.09	-3.79	60,60,60,60	0
60	MG	BA	3095	1/1	0.99	0.12	-3.93	13,13,13,13	0
62	ZN	B4	101	1/1	0.96	0.05	-3.95	81,81,81,81	0
60	MG	AA	1613	1/1	0.96	0.09	-4.10	56,56,56,56	0
60	MG	BA	3067	1/1	0.99	0.11	-4.26	22,22,22,22	0
60	MG	DA	3078	1/1	0.92	0.11	-4.31	95,95,95,95	0
60	MG	CA	1639	1/1	0.94	0.06	-4.50	148,148,148,148	0
60	MG	DA	3016	1/1	0.95	0.12	-4.55	75,75,75,75	0
60	MG	DA	3060	1/1	0.93	0.07	-4.77	144,144,144,144	0
60	MG	BA	3005	1/1	0.96	0.07	-4.78	60,60,60,60	0
60	MG	CA	1604	1/1	0.95	0.04	-4.79	65,65,65,65	0
60	MG	BA	3020	1/1	0.99	0.11	-4.85	21,21,21,21	0
60	MG	AA	1628	1/1	0.97	0.06	-5.14	70,70,70,70	0
60	MG	BA	3117	1/1	0.90	0.09	-5.63	79,79,79,79	0
60	MG	CA	1609	1/1	0.97	0.13	-5.63	71,71,71,71	0
60	MG	CA	1613	1/1	0.95	0.08	-5.74	116,116,116,116	0
60	MG	BA	3092	1/1	0.86	0.07	-5.96	30,30,30,30	0
60	MG	BA	3061	1/1	0.97	0.12	-6.37	11,11,11,11	0
60	MG	BA	3064	1/1	0.98	0.08	-6.68	8,8,8,8	0
60	MG	AA	1633	1/1	0.96	0.09	-6.74	52,52,52,52	0
60	MG	AA	1624	1/1	0.98	0.06	-7.28	139,139,139,139	0
60	MG	BA	3070	1/1	0.99	0.11	-7.65	76,76,76,76	0
60	MG	BA	3016	1/1	0.99	0.07	-7.67	5,5,5,5	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	BA	3057	1/1	0.95	0.06	-7.86	43,43,43,43	0
60	MG	AA	1642	1/1	0.99	0.09	-7.86	42,42,42,42	0
60	MG	BA	3078	1/1	0.96	0.07	-8.31	49,49,49,49	0
60	MG	DA	3061	1/1	0.49	0.61	-	210,210,210,210	0
60	MG	BA	3075	1/1	0.94	0.19	-	74,74,74,74	0
60	MG	DA	3076	1/1	0.95	0.08	-	110,110,110,110	0
60	MG	DA	3063	1/1	0.27	0.97	-	305,305,305,305	0
60	MG	BA	3010	1/1	0.96	0.09	-	48,48,48,48	0
60	MG	BA	3001	1/1	0.94	0.07	-	84,84,84,84	0
60	MG	BA	3132	1/1	0.90	0.40	-	145,145,145,145	0
60	MG	BB	201	1/1	0.81	0.22	-	246,246,246,246	0
60	MG	DA	3057	1/1	0.88	0.40	-	257,257,257,257	0
60	MG	BA	3094	1/1	0.92	0.07	-	42,42,42,42	0
60	MG	DA	3067	1/1	0.93	0.11	-	95,95,95,95	0
60	MG	CA	1626	1/1	0.98	0.22	-	27,27,27,27	0
60	MG	BA	3017	1/1	0.98	0.07	-	27,27,27,27	0
60	MG	DE	301	1/1	0.58	0.31	-	191,191,191,191	0
60	MG	BA	3112	1/1	0.98	0.16	-	33,33,33,33	0
60	MG	BA	3099	1/1	0.99	0.10	-	32,32,32,32	0
60	MG	DA	3081	1/1	0.94	0.22	-	143,143,143,143	0
60	MG	BA	3033	1/1	0.95	0.16	-	89,89,89,89	0
60	MG	BA	3101	1/1	0.98	0.06	-	105,105,105,105	0
60	MG	BA	3084	1/1	0.97	0.13	-	9,9,9,9	0
60	MG	DA	3118	1/1	0.97	0.06	-	75,75,75,75	0
60	MG	AA	1626	1/1	0.97	0.19	-	185,185,185,185	0
60	MG	DA	3011	1/1	0.63	0.27	-	215,215,215,215	0
60	MG	DA	3058	1/1	0.91	0.10	-	204,204,204,204	0
60	MG	DA	3069	1/1	0.90	0.12	-	93,93,93,93	0
60	MG	AA	1623	1/1	0.93	0.07	-	104,104,104,104	0
60	MG	CA	1627	1/1	0.93	0.33	-	220,220,220,220	0
60	MG	AA	1622	1/1	0.94	0.15	-	185,185,185,185	0
60	MG	BA	3080	1/1	0.98	0.14	-	25,25,25,25	0
60	MG	DA	3106	1/1	0.95	0.10	-	55,55,55,55	0
60	MG	BA	3097	1/1	0.85	0.15	-	182,182,182,182	0
60	MG	DA	3007	1/1	0.74	0.50	-	188,188,188,188	0
60	MG	BA	3055	1/1	0.94	0.36	-	240,240,240,240	0
60	MG	BA	3036	1/1	0.99	0.15	-	30,30,30,30	0
60	MG	BA	3091	1/1	0.95	0.14	-	131,131,131,131	0
60	MG	DA	3089	1/1	0.98	0.06	-	81,81,81,81	0
60	MG	BA	3134	1/1	0.93	0.11	-	145,145,145,145	0
60	MG	DA	3110	1/1	0.76	0.24	-	174,174,174,174	0
60	MG	AA	1636	1/1	0.96	0.18	-	149,149,149,149	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	DA	3113	1/1	0.96	0.06	-	123,123,123,123	0
60	MG	DA	3095	1/1	0.91	0.15	-	110,110,110,110	0
60	MG	DA	3010	1/1	0.89	0.66	-	261,261,261,261	0
60	MG	DA	3075	1/1	0.63	0.51	-	229,229,229,229	0
60	MG	DA	3046	1/1	0.84	0.17	-	152,152,152,152	0
60	MG	BA	3083	1/1	0.96	0.10	-	52,52,52,52	0
60	MG	DA	3091	1/1	0.87	0.16	-	167,167,167,167	0
60	MG	DA	3122	1/1	0.72	0.11	-	155,155,155,155	0
60	MG	BA	3035	1/1	0.97	0.20	-	241,241,241,241	0
60	MG	DA	3035	1/1	0.96	0.36	-	228,228,228,228	0
60	MG	DA	3126	1/1	0.86	0.17	-	129,129,129,129	0
60	MG	BB	204	1/1	0.96	0.11	-	30,30,30,30	0
60	MG	BA	3077	1/1	0.98	0.13	-	151,151,151,151	0
60	MG	CA	1602	1/1	0.54	0.17	-	131,131,131,131	0
60	MG	DA	3013	1/1	0.78	0.36	-	209,209,209,209	0
60	MG	BA	3111	1/1	0.96	0.13	-	93,93,93,93	0
60	MG	BA	3041	1/1	0.95	0.14	-	12,12,12,12	0
60	MG	BA	3053	1/1	0.99	0.10	-	35,35,35,35	0
60	MG	DA	3107	1/1	0.73	0.60	-	201,201,201,201	0
60	MG	DA	3090	1/1	0.70	0.20	-	209,209,209,209	0
60	MG	DA	3088	1/1	0.97	0.21	-	102,102,102,102	0
60	MG	AA	1614	1/1	0.90	0.54	-	201,201,201,201	0
60	MG	BA	3040	1/1	0.99	0.12	-	11,11,11,11	0
60	MG	AA	1637	1/1	0.97	0.11	-	34,34,34,34	0
60	MG	BA	3088	1/1	0.97	0.10	-	22,22,22,22	0
60	MG	BA	3030	1/1	0.97	0.14	-	34,34,34,34	0
60	MG	DA	3019	1/1	0.48	0.88	-	252,252,252,252	0
60	MG	BA	3063	1/1	1.00	0.12	-	11,11,11,11	0
60	MG	BA	3118	1/1	0.95	0.29	-	136,136,136,136	0
60	MG	DA	3027	1/1	0.80	0.54	-	277,277,277,277	0
60	MG	BA	3015	1/1	0.97	0.07	-	30,30,30,30	0
60	MG	BA	3093	1/1	0.99	0.10	-	68,68,68,68	0
60	MG	CA	1614	1/1	0.89	0.64	-	271,271,271,271	0
60	MG	DA	3077	1/1	0.71	0.78	-	259,259,259,259	0
60	MG	BA	3037	1/1	0.99	0.16	-	7,7,7,7	0
60	MG	DA	3055	1/1	0.98	0.10	-	121,121,121,121	0
60	MG	BA	3098	1/1	0.97	0.12	-	46,46,46,46	0
60	MG	AA	1605	1/1	0.99	0.12	-	30,30,30,30	0
60	MG	AA	1620	1/1	0.92	0.08	-	120,120,120,120	0
60	MG	BA	3011	1/1	0.98	0.08	-	149,149,149,149	0
60	MG	DA	3070	1/1	0.85	0.20	-	61,61,61,61	0
60	MG	DA	3044	1/1	0.65	0.13	-	230,230,230,230	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	DA	3073	1/1	0.74	1.20	-	276,276,276,276	0
60	MG	BA	3110	1/1	0.99	0.09	-	65,65,65,65	0
60	MG	BA	3043	1/1	0.99	0.25	-	19,19,19,19	0
60	MG	BA	3019	1/1	0.99	0.15	-	50,50,50,50	0
60	MG	BA	3066	1/1	0.99	0.11	-	14,14,14,14	0
60	MG	DA	3006	1/1	0.76	0.12	-	149,149,149,149	0
60	MG	CA	1612	1/1	0.85	0.26	-	133,133,133,133	0
60	MG	DA	3045	1/1	0.88	0.14	-	76,76,76,76	0
60	MG	BA	3086	1/1	0.83	0.20	-	144,144,144,144	0
60	MG	AA	1602	1/1	0.99	0.08	-	117,117,117,117	0
60	MG	AA	1608	1/1	0.95	0.14	-	38,38,38,38	0
60	MG	DA	3048	1/1	0.63	0.16	-	243,243,243,243	0
60	MG	DA	3116	1/1	0.97	0.10	-	59,59,59,59	0
60	MG	BA	3014	1/1	0.96	0.17	-	75,75,75,75	0
60	MG	CA	1624	1/1	0.91	0.31	-	123,123,123,123	0
60	MG	BA	3089	1/1	0.91	0.08	-	39,39,39,39	0
60	MG	DA	3001	1/1	0.86	0.12	-	149,149,149,149	0
60	MG	DA	3030	1/1	0.72	0.20	-	66,66,66,66	0
60	MG	AA	1639	1/1	0.92	0.06	-	92,92,92,92	0
60	MG	BA	3009	1/1	0.97	0.15	-	12,12,12,12	0
60	MG	DA	3036	1/1	0.96	0.15	-	111,111,111,111	0
60	MG	AA	1618	1/1	0.85	0.68	-	217,217,217,217	0
60	MG	DA	3127	1/1	0.56	1.91	-	274,274,274,274	0
60	MG	BA	3079	1/1	0.97	0.11	-	20,20,20,20	0
60	MG	DA	3120	1/1	0.93	0.14	-	84,84,84,84	0
60	MG	DA	3096	1/1	0.91	0.29	-	180,180,180,180	0
60	MG	BA	3071	1/1	0.97	0.11	-	8,8,8,8	0
60	MG	CA	1638	1/1	0.95	0.11	-	106,106,106,106	0
60	MG	CA	1622	1/1	0.77	0.12	-	196,196,196,196	0
60	MG	DA	3101	1/1	0.89	0.12	-	73,73,73,73	0
60	MG	DA	3029	1/1	0.90	0.17	-	135,135,135,135	0
60	MG	BA	3060	1/1	0.96	0.26	-	257,257,257,257	0
60	MG	BA	3050	1/1	0.98	0.10	-	12,12,12,12	0
60	MG	BA	3034	1/1	0.99	0.09	-	9,9,9,9	0
60	MG	DA	3028	1/1	0.84	0.40	-	195,195,195,195	0
60	MG	AA	1635	1/1	0.96	0.21	-	198,198,198,198	0
60	MG	CA	1623	1/1	0.80	0.12	-	79,79,79,79	0
60	MG	DA	3093	1/1	0.95	0.30	-	166,166,166,166	0
60	MG	BA	3029	1/1	0.98	0.20	-	10,10,10,10	0
60	MG	AA	1638	1/1	0.92	0.11	-	139,139,139,139	0
60	MG	DA	3033	1/1	0.96	0.07	-	91,91,91,91	0
60	MG	BA	3024	1/1	0.82	0.34	-	206,206,206,206	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	AA	1612	1/1	0.97	0.14	-	103,103,103,103	0
60	MG	DA	3124	1/1	0.10	0.49	-	211,211,211,211	0
60	MG	BA	3068	1/1	0.73	0.11	-	174,174,174,174	0
60	MG	DA	3053	1/1	0.93	0.10	-	78,78,78,78	0
60	MG	DA	3117	1/1	0.61	0.12	-	99,99,99,99	0
60	MG	CA	1615	1/1	0.78	0.18	-	243,243,243,243	0
60	MG	DA	3009	1/1	0.95	0.11	-	75,75,75,75	0
60	MG	CA	1605	1/1	0.97	0.17	-	47,47,47,47	0
60	MG	DA	3021	1/1	0.96	0.16	-	169,169,169,169	0
60	MG	BA	3076	1/1	0.97	0.06	-	31,31,31,31	0
60	MG	BA	3065	1/1	0.99	0.15	-	27,27,27,27	0
60	MG	BA	3003	1/1	0.94	0.13	-	44,44,44,44	0
60	MG	BA	3042	1/1	0.99	0.13	-	34,34,34,34	0
60	MG	AA	1603	1/1	0.89	0.10	-	131,131,131,131	0
60	MG	DA	3085	1/1	0.62	0.16	-	127,127,127,127	0
60	MG	DJ	201	1/1	0.65	1.44	-	331,331,331,331	0
60	MG	DA	3004	1/1	0.89	0.16	-	86,86,86,86	0
60	MG	BA	3054	1/1	0.72	0.21	-	214,214,214,214	0
60	MG	CA	1636	1/1	0.95	0.10	-	130,130,130,130	0
60	MG	DA	3115	1/1	0.98	0.19	-	69,69,69,69	0
60	MG	DA	3086	1/1	0.91	0.10	-	185,185,185,185	0
60	MG	CA	1610	1/1	0.83	0.09	-	220,220,220,220	0
60	MG	DA	3072	1/1	0.73	0.12	-	193,193,193,193	0
60	MG	AA	1615	1/1	0.98	0.04	-	127,127,127,127	0
60	MG	BA	3085	1/1	0.97	0.13	-	24,24,24,24	0
60	MG	DA	3031	1/1	0.91	0.10	-	121,121,121,121	0
60	MG	BA	3045	1/1	0.97	0.12	-	13,13,13,13	0
60	MG	CA	1635	1/1	0.97	0.09	-	85,85,85,85	0
60	MG	BA	3073	1/1	0.95	0.09	-	116,116,116,116	0
60	MG	BA	3102	1/1	0.98	0.10	-	14,14,14,14	0
60	MG	BA	3006	1/1	0.98	0.05	-	47,47,47,47	0
60	MG	DA	3080	1/1	0.96	0.25	-	70,70,70,70	0
60	MG	BA	3047	1/1	0.92	0.13	-	112,112,112,112	0
60	MG	BA	3007	1/1	0.95	0.10	-	84,84,84,84	0
60	MG	DA	3005	1/1	0.82	0.44	-	280,280,280,280	0
60	MG	AA	1629	1/1	0.94	0.14	-	227,227,227,227	0
60	MG	BA	3058	1/1	0.83	0.18	-	106,106,106,106	0
60	MG	DA	3062	1/1	0.27	2.37	-	262,262,262,262	0
60	MG	DA	3025	1/1	0.12	1.44	-	253,253,253,253	0
60	MG	DA	3130	1/1	0.41	1.45	-	305,305,305,305	0
60	MG	DA	3079	1/1	0.89	0.13	-	149,149,149,149	0
60	MG	BA	3031	1/1	0.99	0.12	-	15,15,15,15	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	BA	3051	1/1	0.95	0.10	-	48,48,48,48	0
60	MG	DA	3092	1/1	0.95	0.12	-	209,209,209,209	0
60	MG	DA	3042	1/1	0.91	0.14	-	166,166,166,166	0
60	MG	BA	3018	1/1	1.00	0.30	-	10,10,10,10	0
60	MG	DA	3121	1/1	0.91	0.15	-	114,114,114,114	0
60	MG	DA	3084	1/1	0.91	0.26	-	157,157,157,157	0
60	MG	BA	3028	1/1	0.98	0.07	-	45,45,45,45	0
60	MG	BA	3059	1/1	0.98	0.16	-	147,147,147,147	0
60	MG	DA	3017	1/1	0.76	0.23	-	147,147,147,147	0
60	MG	BA	3122	1/1	0.96	0.12	-	25,25,25,25	0
60	MG	AA	1627	1/1	0.91	0.17	-	165,165,165,165	0
60	MG	CA	1630	1/1	0.69	0.12	-	176,176,176,176	0
60	MG	BA	3004	1/1	0.90	0.13	-	150,150,150,150	0
60	MG	AA	1601	1/1	0.96	0.15	-	93,93,93,93	0
60	MG	DA	3008	1/1	0.72	0.23	-	153,153,153,153	0
60	MG	BA	3081	1/1	0.98	0.04	-	41,41,41,41	0
60	MG	AA	1617	1/1	0.90	0.12	-	111,111,111,111	0
60	MG	BA	3090	1/1	0.93	0.14	-	93,93,93,93	0
60	MG	DA	3098	1/1	0.83	0.22	-	218,218,218,218	0
60	MG	BA	3044	1/1	0.89	0.16	-	56,56,56,56	0
60	MG	BA	3032	1/1	0.99	0.16	-	6,6,6,6	0
60	MG	DA	3034	1/1	0.93	0.21	-	156,156,156,156	0
60	MG	BA	3025	1/1	0.98	0.10	-	38,38,38,38	0
60	MG	BA	3121	1/1	0.99	0.14	-	5,5,5,5	0
60	MG	CA	1603	1/1	0.96	0.16	-	140,140,140,140	0
60	MG	CA	1633	1/1	0.96	0.07	-	82,82,82,82	0
60	MG	DA	3040	1/1	0.86	0.21	-	120,120,120,120	0
60	MG	BB	203	1/1	0.99	0.10	-	16,16,16,16	0
60	MG	BL	201	1/1	0.98	0.07	-	34,34,34,34	0
60	MG	DA	3015	1/1	0.96	0.26	-	277,277,277,277	0
60	MG	CA	1619	1/1	0.96	0.26	-	243,243,243,243	0
60	MG	DA	3097	1/1	0.92	0.20	-	143,143,143,143	0
60	MG	BA	3087	1/1	0.93	0.12	-	182,182,182,182	0
60	MG	CA	1601	1/1	0.82	0.08	-	123,123,123,123	0
60	MG	CA	1620	1/1	0.94	0.20	-	209,209,209,209	0
60	MG	DA	3037	1/1	0.51	0.18	-	203,203,203,203	0
60	MG	DA	3020	1/1	0.98	0.19	-	36,36,36,36	0
60	MG	BA	3116	1/1	0.99	0.06	-	14,14,14,14	0
60	MG	DA	3119	1/1	0.88	0.22	-	84,84,84,84	0
60	MG	BA	3114	1/1	0.95	0.15	-	148,148,148,148	0
60	MG	BA	3125	1/1	0.98	0.11	-	26,26,26,26	0
60	MG	DA	3125	1/1	0.83	0.10	-	132,132,132,132	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	MG	DA	3014	1/1	0.90	0.40	-	177,177,177,177	0
60	MG	DA	3132	1/1	0.75	0.24	-	225,225,225,225	0
60	MG	AA	1625	1/1	0.97	0.22	-	31,31,31,31	0
60	MG	CA	1608	1/1	0.89	0.22	-	82,82,82,82	0
60	MG	AA	1610	1/1	0.79	0.08	-	200,200,200,200	0
60	MG	DA	3018	1/1	0.94	0.21	-	225,225,225,225	0
60	MG	DA	3052	1/1	0.93	0.20	-	105,105,105,105	0
60	MG	DA	3108	1/1	0.74	0.31	-	123,123,123,123	0
60	MG	DA	3087	1/1	0.88	0.15	-	178,178,178,178	0
60	MG	BA	3105	1/1	0.99	0.15	-	11,11,11,11	0
60	MG	DA	3003	1/1	0.87	0.98	-	253,253,253,253	0
60	MG	BA	3124	1/1	0.95	0.16	-	22,22,22,22	0
60	MG	BA	3038	1/1	0.99	0.17	-	21,21,21,21	0
60	MG	DA	3112	1/1	0.89	0.08	-	114,114,114,114	0
60	MG	AA	1634	1/1	0.98	0.07	-	58,58,58,58	0
60	MG	AA	1631	1/1	0.99	0.13	-	95,95,95,95	0
60	MG	BA	3126	1/1	0.99	0.14	-	32,32,32,32	0
60	MG	DA	3066	1/1	0.96	0.12	-	65,65,65,65	0
60	MG	AA	1619	1/1	0.96	0.06	-	165,165,165,165	0
60	MG	BA	3074	1/1	0.98	0.18	-	15,15,15,15	0
60	MG	CA	1632	1/1	0.88	0.17	-	143,143,143,143	0
60	MG	BA	3127	1/1	0.98	0.10	-	21,21,21,21	0

6.5 Other polymers

There are no such residues in this entry.