



# Full wwPDB X-ray Structure Validation Report ⓘ

Feb 1, 2016 – 10:22 PM GMT

PDB ID : 4U53  
Title : Crystal structure of Deoxynivalenol bound to the yeast 80S ribosome  
Authors : Garreau de Loubresse, N.; Prokhorova, I.; Yusupova, G.; Yusupov, M.  
Deposited on : 2014-07-24  
Resolution : 3.30 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](mailto: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 : **FAILED**  
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : trunk26865

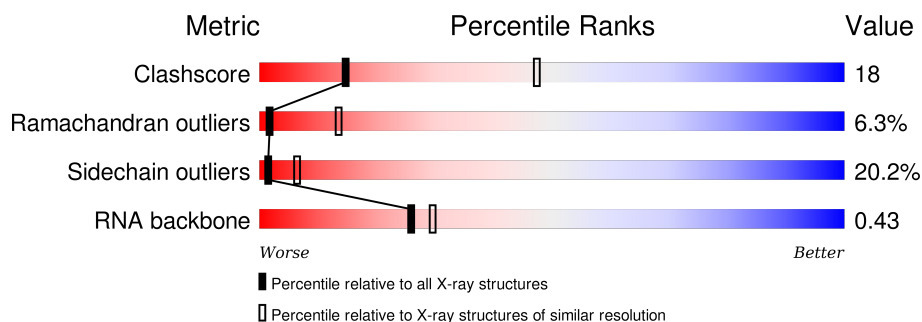
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.30 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))
Clashscore	102246	1058 (3.38-3.22)
Ramachandran outliers	100387	1038 (3.38-3.22)
Sidechain outliers	100360	1037 (3.38-3.22)
RNA backbone	2183	1005 (3.82-2.78)

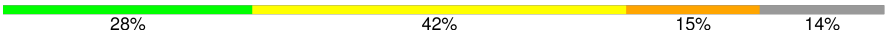



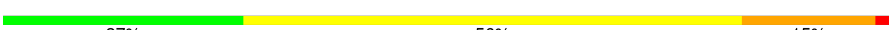





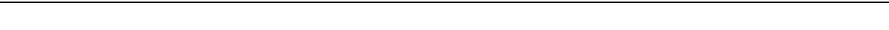

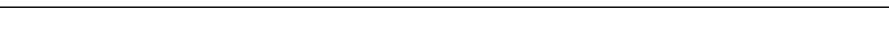
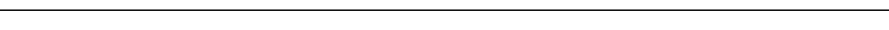

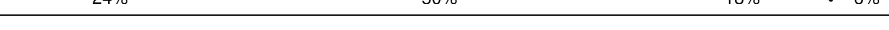

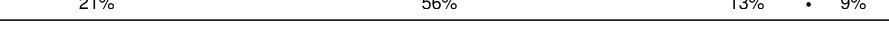



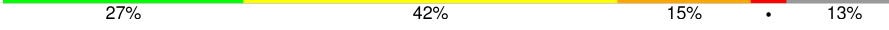



The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria. 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.

Note EDS failed to run properly.

Mol	Chain	Length	Quality of chain
1	2	1800	<div> <div>29%</div> <div>46%</div> <div>19%</div> <div>• •</div> </div>
1	6	1800	<div> <div>30%</div> <div>45%</div> <div>21%</div> <div>•</div> </div>
2	S0	251	<div> <div>21%</div> <div>45%</div> <div>16%</div> <div>•</div> <div>18%</div> </div>
2	s0	251	<div> <div>63%</div> <div>17%</div> <div>•</div> <div>18%</div> </div>
3	S1	254	<div> <div>17%</div> <div>48%</div> <div>17%</div> <div>•</div> <div>16%</div> </div>
3	s1	254	<div> <div>66%</div> <div>18%</div> <div>•</div> <div>15%</div> </div>


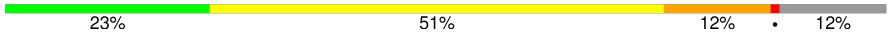

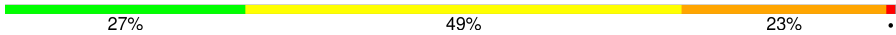

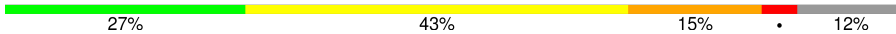

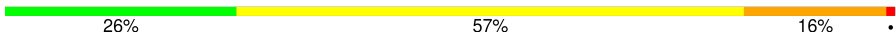

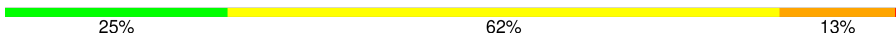

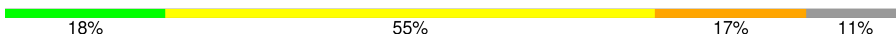

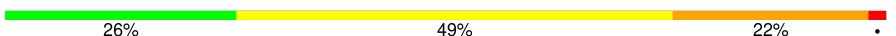











*Continued on next page...*

Continued from previous page...

Mol	Chain	Length	Quality of chain
4	S2	253	
4	s2	253	
5	S3	239	
5	s3	239	
6	S4	260	
6	s4	260	
7	S5	224	
7	s5	224	
8	S6	236	
8	s6	236	
9	S7	189	
9	s7	189	
10	S8	200	
10	s8	200	
11	S9	196	
11	s9	196	
12	C0	105	
12	c0	105	
13	C1	155	
13	c1	155	
14	C2	142	
14	c2	142	
15	C3	150	
15	c3	150	
16	C4	136	

Continued on next page...



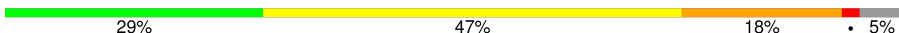



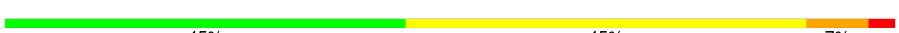








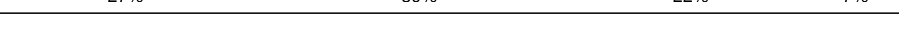

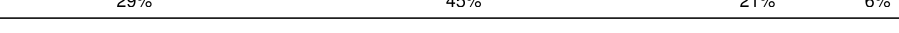
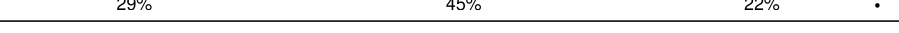
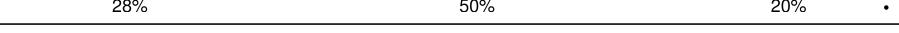





Continued from previous page...

Mol	Chain	Length	Quality of chain
16	c4	136	
17	C5	141	
17	c5	141	
18	C6	142	
18	c6	142	
19	C7	136	
19	c7	136	
20	C8	145	
20	c8	145	
21	C9	143	
21	c9	143	
22	D0	120	
22	d0	120	
23	D1	87	
23	d1	87	
24	D2	129	
24	d2	129	
25	D3	144	
25	d3	144	
26	D4	134	
26	d4	134	
27	D5	107	
27	d5	107	
28	D6	97	
28	d6	97	

Continued on next page...



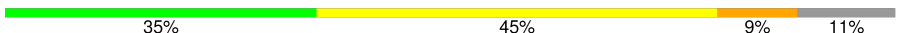



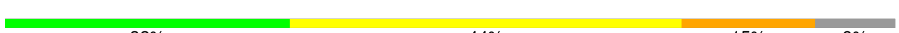




















Continued from previous page...

Mol	Chain	Length	Quality of chain
29	D7	81	
29	d7	81	
30	D8	66	
30	d8	66	
31	D9	55	
31	d9	55	
32	E0	60	
33	E1	76	
33	e1	76	
34	SR	318	
34	sR	318	
35	SM	273	
35	sM	273	
36	1	3396	
36	5	3396	
37	3	121	
37	7	121	
38	4	158	
38	8	158	
39	L2	253	
39	l2	253	
40	L3	386	
40	l3	386	
41	L4	361	
41	l4	361	




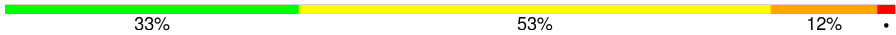

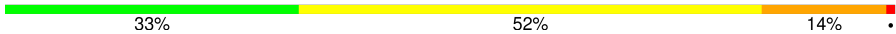

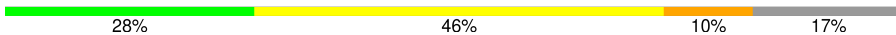

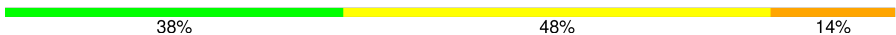

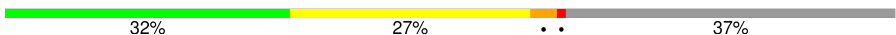

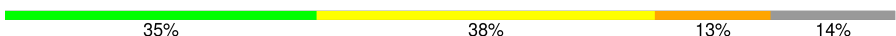









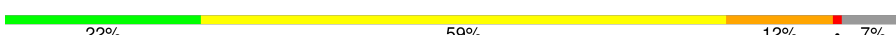

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
42	L5	296	
42	l5	296	
43	L6	175	
43	l6	175	
44	L7	243	
44	l7	243	
45	L8	255	
45	l8	255	
46	L9	191	
46	l9	191	
47	M0	220	
47	m0	220	
48	M1	173	
48	m1	173	
49	M3	198	
49	m3	198	
50	M4	137	
50	m4	137	
51	M5	203	
51	m5	203	
52	M6	198	
52	m6	198	
53	M7	183	
53	m7	183	
54	M8	185	



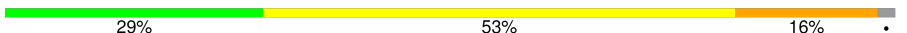



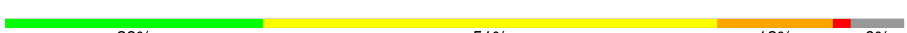








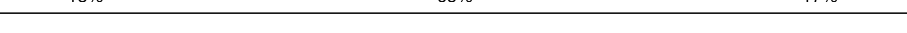









Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
54	m8	185	
55	M9	188	
55	m9	188	
56	N0	172	
56	n0	172	
57	N1	159	
57	n1	159	
58	N2	120	
58	n2	120	
59	N3	136	
59	n3	136	
60	N4	155	
60	n4	155	
61	N5	141	
61	n5	141	
62	N6	126	
62	n6	126	
63	N7	135	
63	n7	135	
64	N8	148	
64	n8	148	
65	N9	58	
65	n9	58	
66	O0	104	
66	o0	104	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
67	O1	112	
67	o1	112	
68	O2	129	
68	o2	129	
69	O3	106	
69	o3	106	
70	O4	119	
70	o4	119	
71	O5	119	
71	o5	119	
72	O6	99	
72	o6	99	
73	O7	87	
73	o7	87	
74	O8	77	
74	o8	77	
75	O9	50	
75	o9	50	
76	Q0	52	
76	q0	52	
77	Q1	25	
77	q1	25	
78	Q2	105	
78	q2	105	
79	Q3	91	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
79	q3	91	 79% 20%
80	e0	62	 71% 27%
81	m2	160	 93% 6%
82	p0	311	 38% 8% 54%
83	p1	47	 100%
84	p2	46	 100%

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
86	OHX	1	3959	-	-	X	-
86	OHX	1	3961	-	-	X	-
86	OHX	1	3972	-	-	X	-
86	OHX	1	4004	-	-	X	-
86	OHX	1	4032	-	-	X	-
86	OHX	1	4045	-	-	X	-
86	OHX	1	4056	-	-	X	-
86	OHX	1	4057	-	-	X	-
86	OHX	1	4132	-	-	X	-
86	OHX	1	4140	-	-	X	-
86	OHX	1	4156	-	-	X	-
86	OHX	1	4163	-	-	X	-
86	OHX	1	4172	-	-	X	-
86	OHX	1	4180	-	-	X	-
86	OHX	1	4197	-	-	X	-
86	OHX	2	2031	-	-	X	-
86	OHX	2	2044	-	-	X	-
86	OHX	2	2090	-	-	X	-
86	OHX	2	2099	-	-	X	-
86	OHX	2	2131	-	-	X	-
86	OHX	2	2146	-	-	X	-
86	OHX	5	3936	-	-	X	-
86	OHX	5	3955	-	-	X	-
86	OHX	5	3966	-	-	X	-
86	OHX	5	3971	-	-	X	-
86	OHX	5	3995	-	-	X	-
86	OHX	5	3996	-	-	X	-

Continued on next page...

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
86	OHX	5	4005	-	-	X	-
86	OHX	5	4015	-	-	X	-
86	OHX	5	4060	-	-	X	-
86	OHX	5	4084	-	-	X	-
86	OHX	5	4096	-	-	X	-
86	OHX	5	4137	-	-	X	-
86	OHX	5	4193	-	-	X	-
86	OHX	5	4195	-	-	X	-
86	OHX	5	4211	-	-	X	-
86	OHX	5	4228	-	-	X	-
86	OHX	5	4236	-	-	X	-
86	OHX	6	2058	-	-	X	-
86	OHX	6	2118	-	-	X	-
86	OHX	6	2124	-	-	X	-
86	OHX	6	2145	-	-	X	-
86	OHX	6	2170	-	-	X	-
86	OHX	6	2182	-	-	X	-
86	OHX	6	2189	-	-	X	-
86	OHX	8	218	-	-	X	-
86	OHX	8	226	-	-	X	-
86	OHX	O1	201	-	-	X	-
86	OHX	Q2	502	-	-	X	-

## 2 Entry composition

There are 88 unique types of molecules in this entry. The entry contains 411183 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 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	2	1750	Total	C	N	O	P	0	0	0
			37283	16668	6591	12274	1750			
1	6	1795	Total	C	N	O	P	0	0	0
			38238	17095	6758	12590	1795			

- Molecule 2 is a protein called 40S ribosomal protein S0-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	S0	206	Total	C	N	O	S	0	0	0
			1577	1014	278	283	2			
2	s0	206	Total	C	N	O	S	0	0	0
			1583	1017	281	283	2			

- Molecule 3 is a protein called 40S ribosomal protein S1-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	S1	214	Total	C	N	O	S	0	0	0
			1709	1084	310	311	4			
3	s1	216	Total	C	N	O	S	0	0	0
			1722	1091	312	315	4			

- Molecule 4 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	S2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			
4	s2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			

- Molecule 5 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	S3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			
5	s3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			

- Molecule 6 is a protein called 40S ribosomal protein S4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	S4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			
6	s4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			

- Molecule 7 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	S5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			
7	s5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			

- Molecule 8 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	S6	226	Total	C	N	O	S	0	0	0
			1799	1129	346	321	3			
8	s6	218	Total	C	N	O	S	0	0	0
			1755	1102	337	313	3			

- Molecule 9 is a protein called 40S ribosomal protein S7-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	S7	184	Total	C	N	O	0	0	0
			1481	951	265	265			
9	s7	186	Total	C	N	O	0	0	0
			1491	957	267	267			

- Molecule 10 is a protein called 40S ribosomal protein S8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	S8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	s8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

- Molecule 11 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	S9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			
11	s9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			

- Molecule 12 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	C0	96	Total	C	N	O	S	0	0	0
			773	500	126	145	2			
12	c0	96	Total	C	N	O	S	0	0	0
			762	491	125	144	2			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C0	89	ALA	GLY	conflict	UNP Q08745
c0	89	ALA	GLY	conflict	UNP Q08745

- Molecule 13 is a protein called 40S ribosomal protein S11-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	C1	155	Total	C	N	O	S	0	0	0
			1214	775	230	206	3			
13	c1	146	Total	C	N	O	S	0	0	0
			1168	747	221	197	3			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C1	147	ALA	GLY	conflict	UNP P0CX47
c1	147	ALA	GLY	conflict	UNP P0CX47

- Molecule 14 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	C2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			
14	c2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C2	104	ALA	GLY	conflict	UNP P48589
C2	110	ALA	GLY	conflict	UNP P48589
c2	104	ALA	GLY	conflict	UNP P48589
c2	110	ALA	GLY	conflict	UNP P48589

- Molecule 15 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	C3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			
15	c3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			

- Molecule 16 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	C4	127	Total	C	N	O	S	0	0	0
			891	545	182	163	1			
16	c4	128	Total	C	N	O	S	0	0	0
			949	582	188	176	3			

- Molecule 17 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	C5	124	Total	C	N	O	S	0	0	0
			977	622	182	166	7			
17	c5	135	Total	C	N	O	S	0	0	0
			1039	658	196	178	7			

- Molecule 18 is a protein called 40S ribosomal protein S16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	C6	141	Total	C	N	O		0	0	0
			1105	708	203	194				

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	c6	142	Total	C	N	O	0	0	0
			1111	711	204	196			

- Molecule 19 is a protein called 40S ribosomal protein S17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	C7	120	Total	C	N	O	S	0	0	0
			926	577	177	170	2			
19	c7	117	Total	C	N	O	S	0	0	0
			906	563	174	167	2			

- Molecule 20 is a protein called 40S ribosomal protein S18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	C8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			
20	c8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			

- Molecule 21 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	C9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			
21	c9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			

- Molecule 22 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	D0	107	Total	C	N	O	S	0	0	0
			855	539	156	159	1			
22	d0	110	Total	C	N	O	S	0	0	0
			882	554	161	166	1			

- Molecule 23 is a protein called 40S ribosomal protein S21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	D1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			
23	d1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			

- Molecule 24 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	D2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			
24	d2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			

- Molecule 25 is a protein called 40S ribosomal protein S23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	D3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			
25	d3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			

- Molecule 26 is a protein called 40S ribosomal protein S24-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
26	D4	134	Total	C	N	O	0	0	0
			1073	676	208	189			
26	d4	134	Total	C	N	O	0	0	0
			1073	676	208	189			

- Molecule 27 is a protein called 40S ribosomal protein S25-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	D5	70	Total	C	N	O	0	0	0
			563	360	104	99			
27	d5	69	Total	C	N	O	0	0	0
			558	357	103	98			

- Molecule 28 is a protein called 40S ribosomal protein S26-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	D6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			
28	d6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

- Molecule 29 is a protein called 40S ribosomal protein S27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	D7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			
29	d7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			

- Molecule 30 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	D8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			
30	d8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			

- Molecule 31 is a protein called 40S ribosomal protein S29-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	D9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			
31	d9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			

- Molecule 32 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	E0	60	Total	C	N	O	S	0	0	0
			475	299	98	77	1			

- Molecule 33 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	E1	71	Total	C	N	O	S	0	0	0
			566	362	106	94	4			
33	e1	76	Total	C	N	O	S	0	0	0
			608	388	117	99	4			

- Molecule 34 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	SR	318	Total	C	N	O	S	0	0	0
			2441	1544	419	470	8			
34	sR	318	Total	C	N	O	S	0	0	0
			2442	1544	418	472	8			

- Molecule 35 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
35	SM	159	Total	C	N	O	0	0	0
			1104	652	221	231			
35	sM	104	Total	C	N	O	0	0	0
			680	403	140	137			

- Molecule 36 is a RNA chain called 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1	3149	Total	C	N	O	P	0	0	0
			67355	30086	12142	21978	3149			
36	5	3150	Total	C	N	O	P	0	0	0
			67376	30095	12145	21987	3149			

- Molecule 37 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	3	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			
37	7	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			

- Molecule 38 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	4	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			
38	8	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			

- Molecule 39 is a protein called 60S ribosomal protein L2-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	L2	252	Total	C	N	O	S	0	0	0
			1914	1191	388	334	1			
39	12	252	Total	C	N	O	S	0	0	0
			1912	1190	388	333	1			

- Molecule 40 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	L3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			
40	l3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			

- Molecule 41 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	L4	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			
41	l4	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			

- Molecule 42 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	L5	296	Total	C	N	O	S	0	0	0
			2375	1501	414	458	2			
42	l5	294	Total	C	N	O	S	0	0	0
			2359	1489	412	456	2			

- Molecule 43 is a protein called 60S ribosomal protein L6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	L6	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			
43	l6	157	Total	C	N	O	S	0	0	0
			1248	806	224	217	1			

- Molecule 44 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	L7	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			
44	l7	223	Total	C	N	O	S	0	0	0
			1791	1155	325	310	1			

- Molecule 45 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	L8	233	Total	C	N	O	S	0	0	0
			1804	1151	323	327	3			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	l8	231	Total	C	N	O	S	0	0	0
			1763	1130	316	314	3			

- Molecule 46 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	L9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			
46	l9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			

- Molecule 47 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	M0	211	Total	C	N	O	S	0	0	0
			1705	1083	322	294	6			
47	m0	213	Total	C	N	O	S	0	0	0
			1722	1094	325	297	6			

- Molecule 48 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	M1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			
48	m1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			

- Molecule 49 is a protein called 60S ribosomal protein L13-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	M3	193	Total	C	N	O	0	0	0
			1543	962	315	266			
49	m3	194	Total	C	N	O	0	0	0
			1548	965	316	267			

- Molecule 50 is a protein called 60S ribosomal protein L14-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
50	M4	136	Total	C	N	O	0	0	0
			1053	675	199	177			
50	m4	137	Total	C	N	O	0	0	0
			1059	678	200	179			



- Molecule 51 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	M5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			
51	m5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			

- Molecule 52 is a protein called 60S ribosomal protein L16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	M6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			
52	m6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			

- Molecule 53 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	M7	183	Total	C	N	O	S	0	0	0
			1420	882	281	257				
53	m7	155	Total	C	N	O	S	0	0	0
			1227	764	238	225				

- Molecule 54 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	M8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			
54	m8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			

- Molecule 55 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	M9	188	Total	C	N	O	S	0	0	0
			1521	935	326	260				
55	m9	188	Total	C	N	O	S	0	0	0
			1521	935	326	260				

- Molecule 56 is a protein called 60S ribosomal protein L20-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	N0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			
56	n0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

- Molecule 57 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	N1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			
57	n1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			

- Molecule 58 is a protein called 60S ribosomal protein L22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	N2	100	Total	C	N	O		0	0	0
			796	516	131	149				
58	n2	98	Total	C	N	O		0	0	0
			778	505	127	146				

- Molecule 59 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	N3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			
59	n3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			

- Molecule 60 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	N4	98	Total	C	N	O	S	0	0	0
			699	443	137	118	1			
60	n4	135	Total	C	N	O	S	0	0	0
			1038	651	206	180	1			

- Molecule 61 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	N5	121	Total	C	N	O	S	0	0	0
			964	620	169	173	2			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	n5	120	Total	C	N	O	S	0	0	0
			959	617	168	172	2			

- Molecule 62 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	N6	126	Total	C	N	O		0	0	0
			993	625	192	176				
62	n6	126	Total	C	N	O		0	0	0
			993	625	192	176				

- Molecule 63 is a protein called 60S ribosomal protein L27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	N7	135	Total	C	N	O		0	0	0
			1092	710	202	180				
63	n7	135	Total	C	N	O		0	0	0
			1092	710	202	180				

- Molecule 64 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	N8	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			
64	n8	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			

- Molecule 65 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	N9	58	Total	C	N	O		0	0	0
			462	289	100	73				
65	n9	58	Total	C	N	O		0	0	0
			462	289	100	73				

- Molecule 66 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	O0	97	Total	C	N	O	S	0	0	0
			743	479	124	139	1			
66	o0	100	Total	C	N	O	S	0	0	0
			767	492	128	146	1			

- Molecule 67 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	O1	109	Total	C	N	O	S	0	0	0
			876	556	167	152	1			
67	o1	109	Total	C	N	O	S	0	0	0
			883	559	167	156	1			

- Molecule 68 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	O2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			
68	o2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

- Molecule 69 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	O3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			
69	o3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			

- Molecule 70 is a protein called 60S ribosomal protein L34-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	O4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			
70	o4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			

- Molecule 71 is a protein called 60S ribosomal protein L35-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	O5	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			
71	o5	119	Total	C	N	O	S	0	0	0
			965	612	185	167	1			

- Molecule 72 is a protein called 60S ribosomal protein L36-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	O6	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			
72	o6	99	Total	C	N	O	S	0	0	0
			770	481	156	131	2			

- Molecule 73 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	O7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			
73	o7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			

- Molecule 74 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	O8	77	Total	C	N	O		0	0	0
			612	391	115	106				
74	o8	77	Total	C	N	O		0	0	0
			608	388	114	106				

- Molecule 75 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	O9	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			
75	o9	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			

- Molecule 76 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	Q0	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			
76	q0	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			

- Molecule 77 is a protein called 60S ribosomal protein L41-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	Q1	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	q1	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			

- Molecule 78 is a protein called 60S ribosomal protein L42-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	Q2	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			
78	q2	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			

- Molecule 79 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	Q3	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			
79	q3	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			

- Molecule 80 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
80	e0	62	Total	C	N	O	S	0	0	0
			491	309	101	80	1			

- Molecule 81 is a protein called Unknown Protein m2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
81	m2	150	Total	C	N	O	0	0	0
			750	450	150	150			

- Molecule 82 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
82	p0	143	Total	C	N	O	S	0	0	0
			1077	687	192	195	3			

- Molecule 83 is a protein called Unknown Protein p1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
83	p1	47	Total	C	N	O	0	0	0
			235	141	47	47			

- Molecule 84 is a protein called Unknown Protein p2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
84	p2	46	Total	C	N	O	0	0	0
			230	138	46	46			

- Molecule 85 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	L7	2	Total	Mg	0	0
			2	2		
85	m6	2	Total	Mg	0	0
			2	2		
85	n8	2	Total	Mg	0	0
			2	2		
85	q3	2	Total	Mg	0	0
			2	2		
85	o1	1	Total	Mg	0	0
			1	1		
85	N5	1	Total	Mg	0	0
			1	1		
85	6	147	Total	Mg	0	0
			147	147		
85	sM	2	Total	Mg	0	0
			2	2		
85	m5	2	Total	Mg	0	0
			2	2		
85	l3	3	Total	Mg	0	0
			3	3		
85	M1	1	Total	Mg	0	0
			1	1		
85	n0	2	Total	Mg	0	0
			2	2		
85	d6	1	Total	Mg	0	0
			1	1		
85	2	123	Total	Mg	0	0
			123	123		
85	O3	1	Total	Mg	0	0
			1	1		
85	L4	2	Total	Mg	0	0
			2	2		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	l7	2	Total 2	Mg 2	0	0
85	M5	2	Total 2	Mg 2	0	0
85	o0	1	Total 1	Mg 1	0	0
85	S2	1	Total 1	Mg 1	0	0
85	L8	1	Total 1	Mg 1	0	0
85	D3	1	Total 1	Mg 1	0	0
85	o4	1	Total 1	Mg 1	0	0
85	M9	2	Total 2	Mg 2	0	0
85	q0	1	Total 1	Mg 1	0	0
85	c8	2	Total 2	Mg 2	0	0
85	M0	3	Total 3	Mg 3	0	0
85	c1	1	Total 1	Mg 1	0	0
85	5	496	Total 496	Mg 496	0	0
85	L5	1	Total 1	Mg 1	0	0
85	O7	1	Total 1	Mg 1	0	0
85	l4	1	Total 1	Mg 1	0	0
85	n9	1	Total 1	Mg 1	0	0
85	1	471	Total 471	Mg 471	0	0
85	D0	1	Total 1	Mg 1	0	0
85	S8	1	Total 1	Mg 1	0	0
85	m1	1	Total 1	Mg 1	0	0

*Continued on next page...*



*Continued from previous page...*

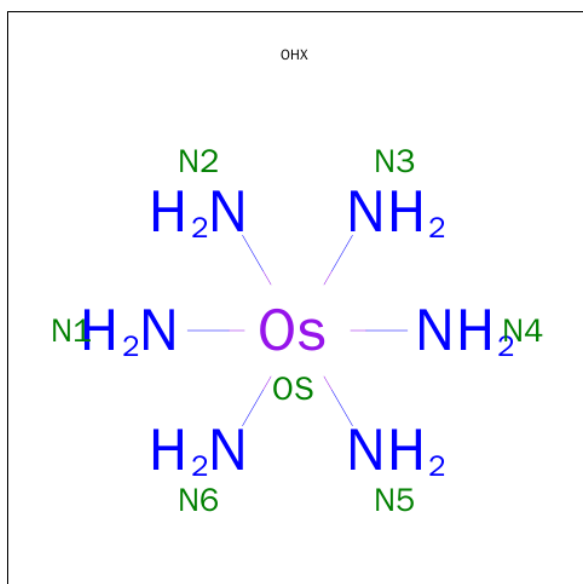
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	O2	2	Total 2	Mg 2	0	0
85	s9	1	Total 1	Mg 1	0	0
85	o3	2	Total 2	Mg 2	0	0
85	d3	3	Total 3	Mg 3	0	0
85	M3	3	Total 3	Mg 3	0	0
85	N3	3	Total 3	Mg 3	0	0
85	4	20	Total 20	Mg 20	0	0
85	n6	2	Total 2	Mg 2	0	0
85	L2	3	Total 3	Mg 3	0	0
85	l5	3	Total 3	Mg 3	0	0
85	C3	1	Total 1	Mg 1	0	0
85	M7	4	Total 4	Mg 4	0	0
85	N8	5	Total 5	Mg 5	0	0
85	s1	1	Total 1	Mg 1	0	0
85	l9	1	Total 1	Mg 1	0	0
85	s8	2	Total 2	Mg 2	0	0
85	c7	1	Total 1	Mg 1	0	0
85	7	18	Total 18	Mg 18	0	0
85	n3	2	Total 2	Mg 2	0	0
85	L3	3	Total 3	Mg 3	0	0
85	l2	2	Total 2	Mg 2	0	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	8	15	Total	Mg	0	0
			15	15		
85	m0	1	Total	Mg	0	0
			1	1		
85	M6	1	Total	Mg	0	0
			1	1		
85	N0	2	Total	Mg	0	0
			2	2		
85	3	14	Total	Mg	0	0
			14	14		
85	m7	5	Total	Mg	0	0
			5	5		

- Molecule 86 is osmium (III) hexammine (three-letter code: OHX) (formula:  $\text{H}_{12}\text{N}_6\text{Os}$ ).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	2	1	Total	N	Os	0	0
			7	6	1		
86	S6	1	Total	N	Os	0	0
			7	6	1		
86	S8	1	Total	N	Os	0	0
			7	6	1		
86	C3	1	Total	N	Os	0	0
			7	6	1		
86	C5	1	Total	N	Os	0	0
			7	6	1		
86	C8	1	Total	N	Os	0	0
			7	6	1		
86	D3	1	Total	N	Os	0	0
			7	6	1		
86	D9	1	Total	N	Os	0	0
			7	6	1		
86	SR	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	1	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	3	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	4	1	Total	N	Os	0	0
			7	6	1		
86	L3	1	Total	N	Os	0	0
			7	6	1		
86	L3	1	Total	N	Os	0	0
			7	6	1		
86	L4	1	Total	N	Os	0	0
			7	6	1		
86	M0	1	Total	N	Os	0	0
			7	6	1		
86	M5	1	Total	N	Os	0	0
			7	6	1		
86	M7	1	Total	N	Os	0	0
			7	6	1		
86	M7	1	Total	N	Os	0	0
			7	6	1		
86	M9	1	Total	N	Os	0	0
			7	6	1		
86	N9	1	Total	N	Os	0	0
			7	6	1		
86	O1	1	Total	N	Os	0	0
			7	6	1		
86	O3	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	O4	1	Total	N	Os	0	0
			7	6	1		
86	O6	1	Total	N	Os	0	0
			7	6	1		
86	O7	1	Total	N	Os	0	0
			7	6	1		
86	O9	1	Total	N	Os	0	0
			7	6	1		
86	Q2	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	6	1	Total	N	Os	0	0
			7	6	1		
86	s1	1	Total	N	Os	0	0
			7	6	1		
86	s1	1	Total	N	Os	0	0
			7	6	1		
86	s8	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	c3	1	Total	N	Os	0	0
			7	6	1		
86	c5	1	Total	N	Os	0	0
			7	6	1		
86	c8	1	Total	N	Os	0	0
			7	6	1		
86	d4	1	Total	N	Os	0	0
			7	6	1		
86	d9	1	Total	N	Os	0	0
			7	6	1		
86	sR	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	5	1	Total	N	Os	0	0
			7	6	1		
86	5	1	Total	N	Os	0	0
			7	6	1		
86	7	1	Total	N	Os	0	0
			7	6	1		
86	7	1	Total	N	Os	0	0
			7	6	1		
86	7	1	Total	N	Os	0	0
			7	6	1		
86	7	1	Total	N	Os	0	0
			7	6	1		
86	7	1	Total	N	Os	0	0
			7	6	1		
86	7	1	Total	N	Os	0	0
			7	6	1		
86	7	1	Total	N	Os	0	0
			7	6	1		
86	7	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	8	1	Total	N	Os	0	0
			7	6	1		
86	13	1	Total	N	Os	0	0
			7	6	1		
86	13	1	Total	N	Os	0	0
			7	6	1		
86	14	1	Total	N	Os	0	0
			7	6	1		
86	14	1	Total	N	Os	0	0
			7	6	1		
86	15	1	Total	N	Os	0	0
			7	6	1		
86	15	1	Total	N	Os	0	0
			7	6	1		
86	15	1	Total	N	Os	0	0
			7	6	1		
86	15	1	Total	N	Os	0	0
			7	6	1		
86	19	1	Total	N	Os	0	0
			7	6	1		
86	m0	1	Total	N	Os	0	0
			7	6	1		
86	m0	1	Total	N	Os	0	0
			7	6	1		
86	m1	1	Total	N	Os	0	0
			7	6	1		
86	m4	1	Total	N	Os	0	0
			7	6	1		
86	m5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	m6	1	Total	N	Os	0	0
			7	6	1		
86	m7	1	Total	N	Os	0	0
			7	6	1		
86	m8	1	Total	N	Os	0	0
			7	6	1		
86	n3	1	Total	N	Os	0	0
			7	6	1		
86	n3	1	Total	N	Os	0	0
			7	6	1		
86	n6	1	Total	N	Os	0	0
			7	6	1		
86	n9	1	Total	N	Os	0	0
			7	6	1		
86	o2	1	Total	N	Os	0	0
			7	6	1		
86	o3	1	Total	N	Os	0	0
			7	6	1		
86	o7	1	Total	N	Os	0	0
			7	6	1		
86	o7	1	Total	N	Os	0	0
			7	6	1		
86	q2	1	Total	N	Os	0	0
			7	6	1		

- Molecule 87 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
87	q0	1	Total	Zn	0	0
			1	1		
87	D6	1	Total	Zn	0	0
			1	1		
87	Q2	1	Total	Zn	0	0
			1	1		
87	e1	1	Total	Zn	0	0
			1	1		
87	Q3	1	Total	Zn	0	0
			1	1		
87	D9	1	Total	Zn	0	0
			1	1		
87	E1	1	Total	Zn	0	0
			1	1		

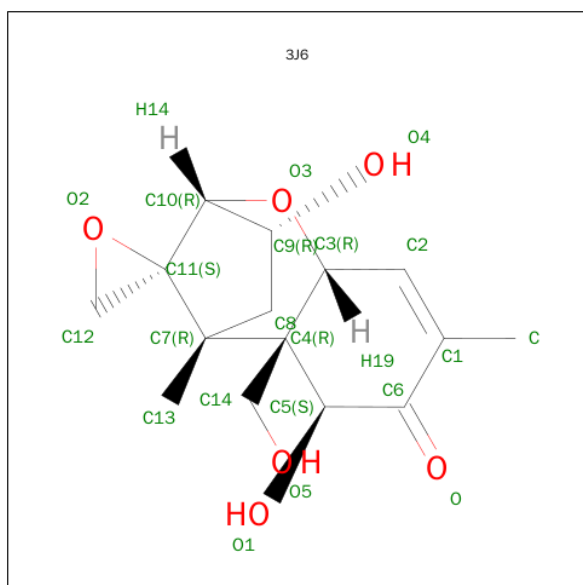
*Continued on next page...*



Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
87	Q0	1	Total	Zn	0	0
			1	1		
87	d7	1	Total	Zn	0	0
			1	1		
87	q3	1	Total	Zn	0	0
			1	1		
87	d9	1	Total	Zn	0	0
			1	1		
87	D7	1	Total	Zn	0	0
			1	1		
87	d6	1	Total	Zn	0	0
			1	1		
87	o7	1	Total	Zn	0	0
			1	1		
87	O7	1	Total	Zn	0	0
			1	1		
87	q2	1	Total	Zn	0	0
			1	1		

- Molecule 88 is (3beta,7alpha)-3,7,15-trihydroxy-12,13-epoxytrichothec-9-en-8-one (three-letter code: 3J6) (formula: C<sub>15</sub>H<sub>20</sub>O<sub>6</sub>).



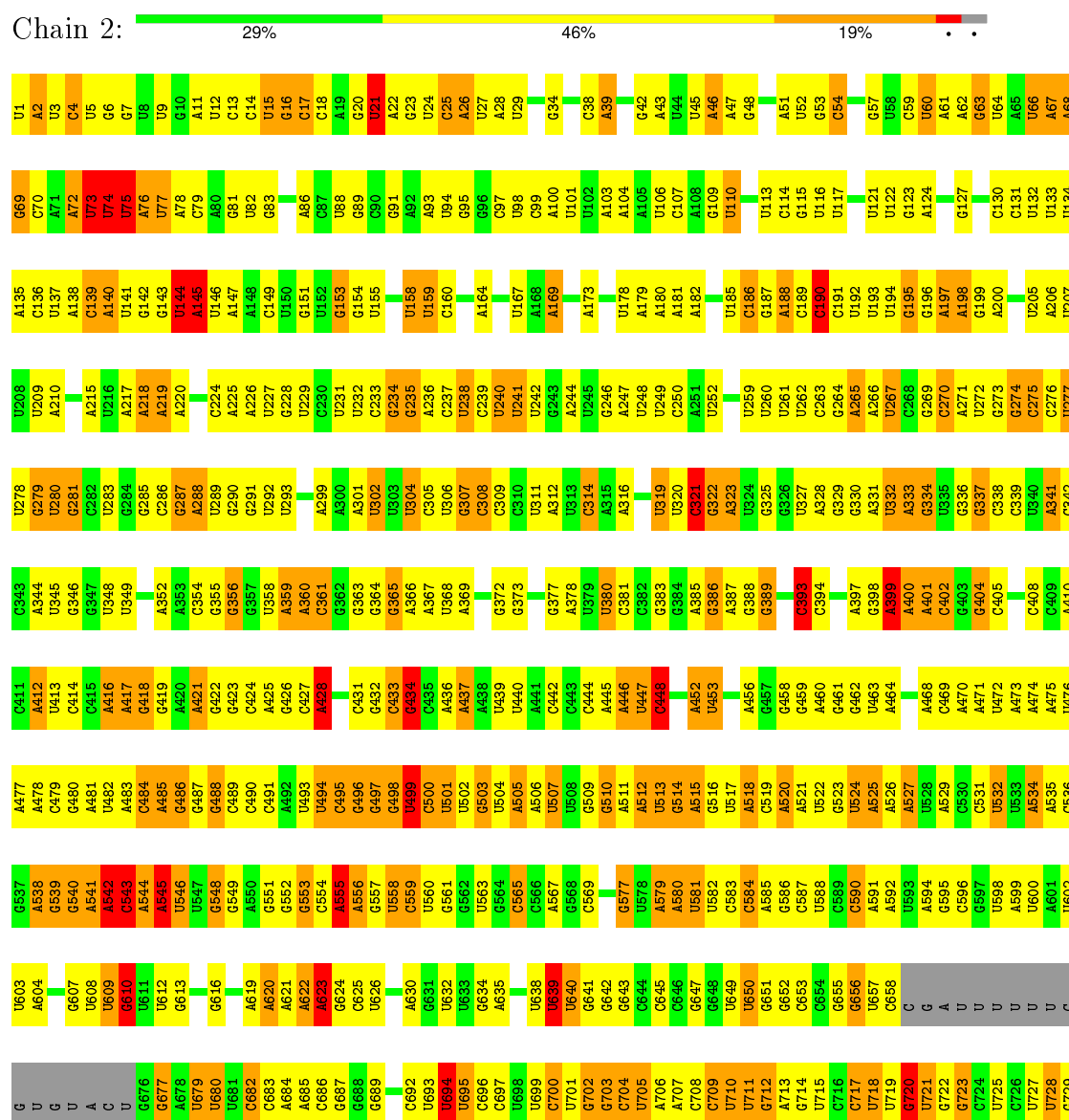
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
88	1	1	Total	C	O	0	0
			21	15	6		
88	5	1	Total	C	O	0	0
			21	15	6		

### 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.

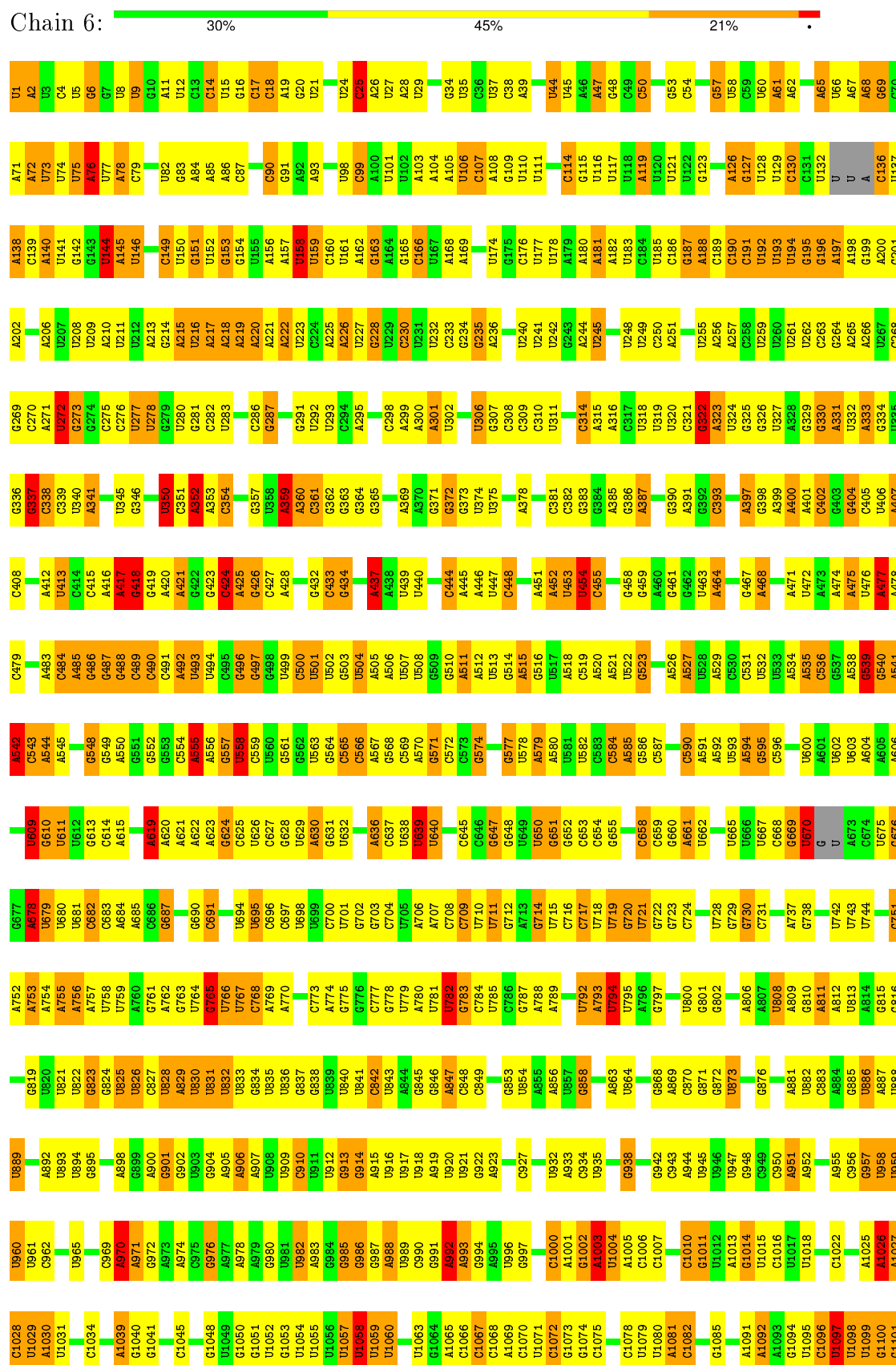
Note EDS failed to run properly.

- Molecule 1: 18S ribosomal RNA

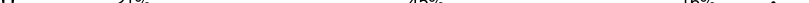


G1768	G1769	U1770	G1773	G1774	G1775	G1776	G1777	G1778	G1779	G1780	G1781	A1782	G1783	G1784	G1785	G1786	G1787	G1788	G1789	G1790	G1791	G1792	G1793	G1794	G1795	G1796	G1797	G1798	G1799	G1800	G1801	G1802	A803	A811	A812	A813	A814	A815	A816	A817	C818	G819	G820	U821	U822	G823	G824	U825	U826	C827	U828	A829	U830	U831	G832	U833	G834	G835	G836	G837	G838	U839	U840	U841	U842	U843	G844	G845	G846	A847	A848	A849	A850	C851	C852	G853	U854	A855	A856	U857	U858	A859	A860	A861	A862	A863	U864	A865	A866	G867	G868	U869	A870	A871	A872	A873	A874	A875	A876	A877	A878	A879	A880	A881	U882	A883	A884	A885	U886	A887	U888	U889	A890	A891	U892	U893	U894	A895	U896	U897	U898	U899	U900	U901	U902	U903	U904	U905	U906	U907	U908	U909	U910	U911	U912	U913	U914	U915	U916	U917	U918	U919	U920	U921	U922	U923	U924	U925	U926	U927	U928	U929	U930	U931	U932	U933	U934	U935	U936	U937	U938	U939	U940	U941	U942	U943	U944	U945	U946	U947	U948	U949	A1000	A1001	U1002	A1003	U1004	A1005	U1006	U1007	U1008	U1009	U1010	U1011	U1012	U1013	U1014	U1015	U1016	U1017	U1018	U1019	U1020	U1021	U1022	U1023	U1024	U1025	U1026	U1027	U1028	U1029	U1030	U1031	U1032	U1033	U1034	U1035	U1036	U1037	U1038	U1039	U1040	U1041	U1042	U1043	U1044	U1045	U1046	U1047	U1048	U1049	U1050	U1051	U1052	U1053	U1054	U1055	U1056	U1057	U1058	U1059	U1060	U1061	U1062	U1063	U1064	U1065	U1066	U1067	U1068	U1069	U1070	U1071	U1072	U1073	U1074	U1075	U1076	U1077	U1078	U1079	U1080	U1081	U1082	U1083	U1084	U1085	U1086	U1087	U1088	U1089	U1090	U1091	U1092	U1093	U1094	U1095	U1096	U1097	U1098	U1099	U1100	U1101	U1102	U1103	U1104	U1105	U1106	U1107	U1108	U1109	U1110	U1111	U1112	U1113	U1114	U1115	U1116	U1117	U1118	U1119	U1120	U1121	U1122	U1123	U1124	U1125	U1126	U1127	U1128	U1129	U1130	U1131	U1132	U1133	U1134	U1135	U1136	U1137	U1138	U1139	U1140	U1141	U1142	U1143	U1144	U1145	U1146	U1147	U1148	U1149	U1150	U1151	U1152	U1153	U1154	U1155	U1156	U1157	U1158	U1159	U1160	U1161	U1162	U1163	U1164	U1165	U1166	U1167	U1168	U1169	U1170	U1171	U1172	U1173	U1174	U1175	U1176	U1177	U1178	U1179	U1180	U1181	U1182	U1183	U1184	U1185	U1186	U1187	U1188	U1189	U1190	U1191	U1192	U1193	U1194	U1195	U1196	U1197	U1198	U1199	U1200	U1201	U1202	U1203	U1204	U1205	U1206	U1207	U1208	U1209	U1210	U1211	U1212	U1213	U1214	U1215	U1216	U1217	U1218	U1219	U1220	U1221	U1222	U1223	U1224	U1225	U1226	U1227	U1228	U1229	U1230	U1231	U1232	U1233	U1234	U1235	U1236	U1237	U1238	U1239	U1240	U1241	U1242	U1243	U1244	U1245	U1246	U1247	U1248	U1249	U1250	U1251	U1252	U1253	U1254	U1255	U1256	U1257	U1258	U1259	U1260	U1261	U1262	U1263	U1264	U1265	U1266	U1267	U1268	U1269	U1270	U1271	U1272	U1273	U1274	U1275	U1276	U1277	U1278	U1279	U1280	U1281	U1282	U1283	U1284	U1285	U1286	U1287	U1288	U1289	U1290	U1291	U1292	U1293	U1294	U1295	U1296	U1297	U1298	U1299	U1300	U1301	U1302	U1303	U1304	U1305	U1306	U1307	U1308	U1309	U1310	U1311	U1312	U1313	U1314	U1315	U1316	U1317	U1318	U1319	U1320	U1321	U1322	U1323	U1324	U1325	U1326	U1327	U1328	U1329	U1330	U1331	U1332	U1333	U1334	U1335	U1336	U1337	U1338	U1339	U1340	U1341	U1342	U1343	U1344	U1345	U1346	U1347	U1348	U1349	U1350	U1351	U1352	U1353	U1354	U1355	U1356	U1357	U1358	U1359	U1360	U1361	U1362	U1363	U1364	U1365	U1366	U1367	U1368	U1369	U1370	U1371	U1372	U1373	U1374	U1375	U1376	U1377	U1378	U1379	U1380	U1381	U1382	U1383	U1384	U1385	U1386	U1387	U1388	U1389	U1390	U1391	U1392	U1393	U1394	U1395	U1396	U1397	U1398	U1399	U1400	U1401	U1402	U1403	U1404	U1405	U1406	U1407	U1408	U1409	U1410	U1411	U1412	U1413	U1414	U1415	U1416	U1417	U1418	U1419	U1420	U1421	U1422	U1423	U1424	U1425	U1426	U1427	U1428	U1429	U1430	U1431	U1432	U1433	U1434	U1435	U1436	U1437	U1438	U1439	U1440	U1441	U1442	U1443	U1444	U1445	U1446	U1447	U1448	U1449	U1450	U1451	U1452	U1453	U1454	U1455	U1456	U1457	U1458	U1459	U1460	U1461	U1462	U1463	U1464	U1465	U1466	U1467	U1468	U1469	U1470	U1471	U1472	U1473	U1474	U1475	U1476	U1477	U1478	U1479	U1480	U1481	U1482	U1483	U1484	U1485	U1486	U1487	U1488	U1489	U1490	U1491	U1492	U1493	U1494	U1495	U1496	U1497	U1498	U1499	U1500	U1501	U1502	U1503	U1504	U1505	U1506	U1507	U1508	U1509	U1510	U1511	U1512	U1513	U1514	U1515	U1516	U1517	U1518	U1519	U1520	U1521	U1522	U1523	U1524	U1525	U1526	U1527	U1528	U1529	U1530	U1531	U1532	U1533	U1534	U1535	U1536	U1537	U1538	U1539	U1540	U1541	U1542	U1543	U1544	U1545	U1546	U1547	U1548	U1549	U1550	U1551	U1552	U1553	U1554	U1555	U1556	U1557	U1558	U1559	U1560	U1561	U1562	U1563	U1564	U1565	U1566	U1567	U1568	U1569	U1570	U1571	U1572	U1573	U1574	U1575	U1576	U1577	U1578	U1579	U1580	U1581	U1582	U1583	U1584	U1585	U1586	U1587	U1588	U1589	U1590	U1591	U1592	U1593	U1594	U1595	U1596	U1597	U1598	U1599	U1600	U1601	U1602	U1603	U1604	U1605	U1606	U1607	U1608	U1609	U1610	U1611	U1612	U1613	U1614	U1615	U1616	U1617	U1618	U1619	U1620	U1621	U1622	U1623	U1624	U1625	U1626	U1627	U1628	U1629	U1630	U1631	U1632	U1633	U1634	U1635	U1636	U1637	U1638	U1639	U1640	U1641	U1642	U1643	U1644	U1645	U1646	U1647	U1648	U1649	U1650	U1651	U1652	U1653	U1654	U1655	U1656	U1657	U1658	U1659	U1660	U1661	U1662	U1663	U1664	U1665	U1666	U1667	U1668	U1669	U1670	U1671	U1672	U1673	U1674	U1675	U1676	U1677	U1678	U1679	U1680	U1681	U1682	U1683	U1684	U1685	U1686	U1687	U1688	U1689	U1690	U1691	U1692	U1693	U1694	U1695	U1696	U1697	U1698	U1699	U1700	U1701	U1702	U1703	U1704	U1705	U1706	U1707	U1708	U1709	U1710	U1711	U1712	U1713	U1714	U1715	U1716	U1717	U1718	U1719	U1720	U1721	U1722	U1723	U1724	U1725	U1726	U1727	U1728	U1729	U1730	U1731	U1732	U1733	U1734	U1735	U1736	U1737	U1738	U1739	U1740	U1741	U1742	U1743	U1744	U1745	U1746	U1747	U1748	U1749	U1750	U1751	U1752	U1753	U1754	U1755	U1756	U1757	U1758	U1759	U1760	U1761	U1762	U1763	U1764	U1765	U1766	U1767	U1768	U1769	U1770	U1771	U1772	U1773	U1774	U1775	U1776	U1777	U1778	U1779	U1780	U1781	U1782	U1783	U1784	U1785	U1786	U1787	U1788	U1789	U1790	U1791	U1792	U1793	U1794	U1795	U1796	U1797	U1798	U1799	U1800	U1801	U1802	U1803	U1804	U1805	U1806	U1807	U1808	U1809	U1810	U1811	U1812	U1813	U1814	U1815	U1816	U1817	U1818	U1819	U1820	U1821	U1822	U1823	U1824	U1825	U1826	U1827	U1828	U1829	U1830	U1831	U1832	U1833	U1834	U1835	U1836	U1837	U1838	U1839	U1840	U1841	U1842	U1843	U1844	U1845	U1846	U1847	U1848	U1849	U1850	U1851	U1852	U1853	U1854	U1855	U1856	U1857	U1858	U1859	U1860	U1861	U1862	U1863	U1864	U1865	U1866	U1867	U1868	U1869	U1870	U1871	U1872	U1873	U1874	U1875	U1876	U1877	U1878	U1879	U1880	U1881	U1882	U1883	U1884	U1885	U1886	U1887	U1888	U1889	U1890	U1891	U1892	U1893	U1894	U1895	U1896	U1897	U1898	U1899	U1900	U1901	U1902	U1903	U1904	U1905	U1906	U1907	U1908	U1909	U1910	U1911	U1912	U1913	U1914	U1915	U1916	U1917	U1918	U1919	U1920	U1921	U1922	U1923	U1924	U1925	U1926	U1927	U1928	U1929	U1930	U1931	U1932	U1933	U1934	U1935	U1936	U1937	U1938	U1939	U1940	U1941	U1942	U1943	U1944	U1945	U1946	U1947	U1948	U1949	U1950	U1951	U1952	U1953	U1954	U1955	U1956	U1957	U1958	U1959	U1960	U1961	U1962	U1963	U1964	U1965	U1966	U1967	U1968	U1969	U1970	U1971	U1972	U1973	U1974	U1975	U1976	U1977	U1978	U1979	U1980	U1981	U1982	U1983	U1984	U1985	U1986	U1987	U1988	U1989	U1990	U1991	U1992	U1993	U1994	U1995	U1996	U1997	U1998	U1999	U2000	U2001	U2002	U2003	U2004	U2005	U2006	U2007	U2008	U2009	U2010	U2011	U2012	U2013	U2014	U2015	U2016	U2017	U2018	U2019	U2020	U2021	U2022	U2023	U2024	U2025	U2026	U2027	U2028	U2029	U2030	U2031	U2032	U2033	U2034	U2035	U2036	U2037	U2038	U2039	U2040	U2041	U2042	U2043	U2044	U2045	U2046	U2047	U2048	U2049	U2050	U2051	U2052	U2053	U2054	U2055	U2056	U2057	U2058	U2059	U2060	U2061	U2062	U2063	U2064	U2065	U2066	U2067	U2068	U2069	U2070	U2071	U2072	U2073	U2074	U2
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	----

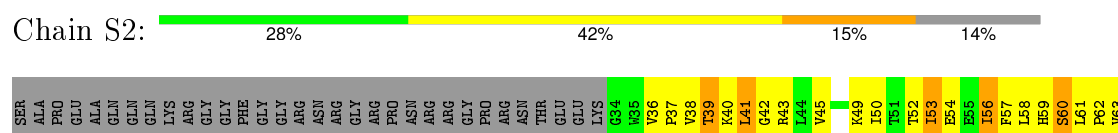
• Molecule 1: 18S ribosomal RNA

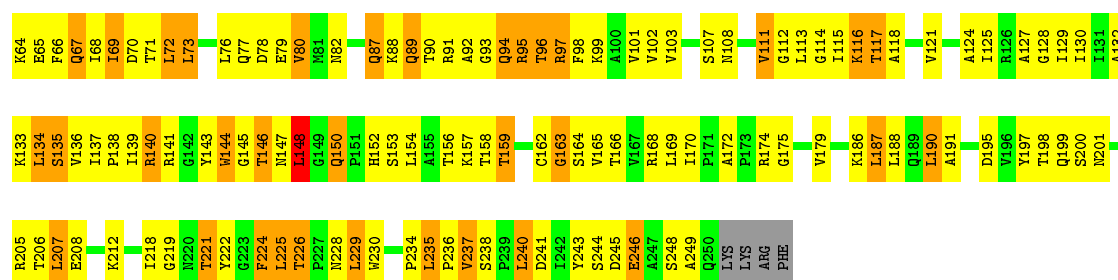




Chain S0: 

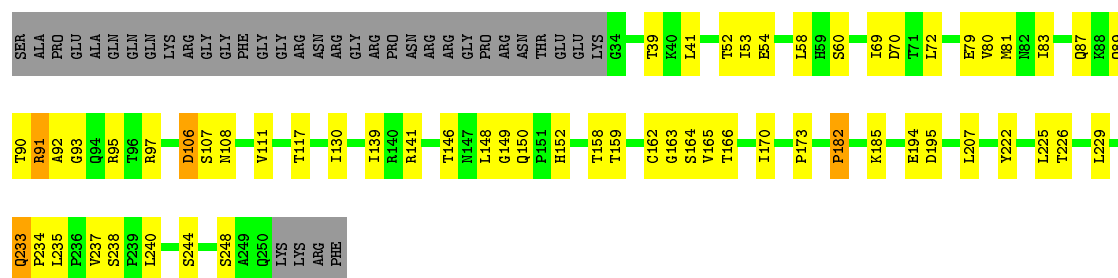






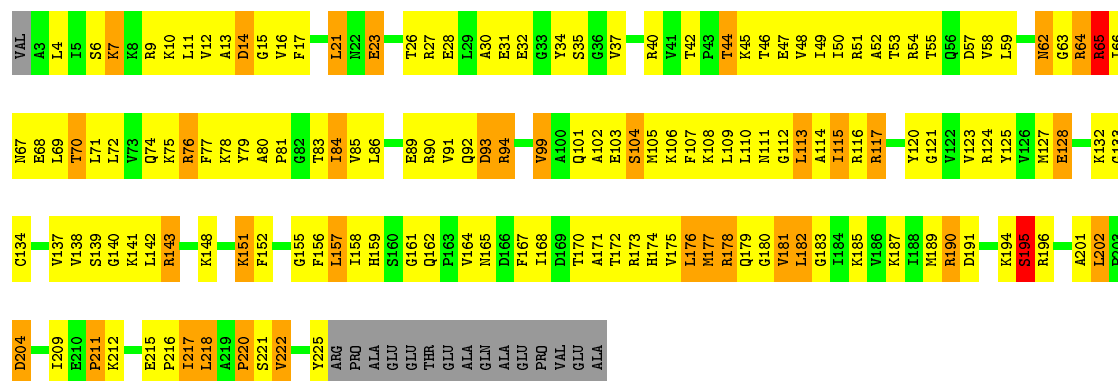
• Molecule 4: 40S ribosomal protein S2

Chain s2: 62% 23% 14%



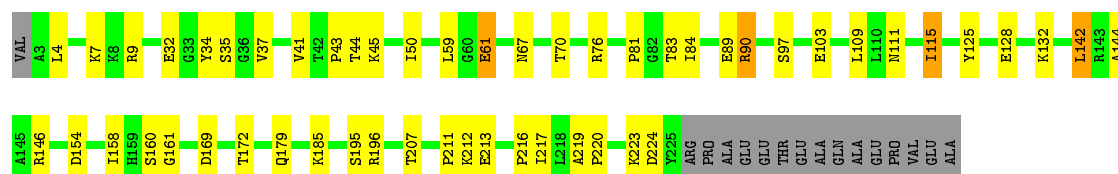
• Molecule 5: 40S ribosomal protein S3

Chain S3: 29% 49% 14% 7%



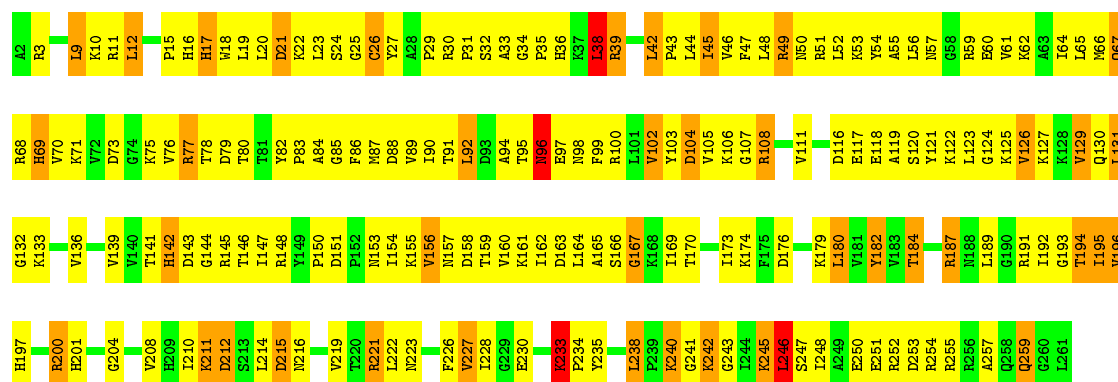
• Molecule 5: 40S ribosomal protein S3

Chain s3: 71% 21% 7%



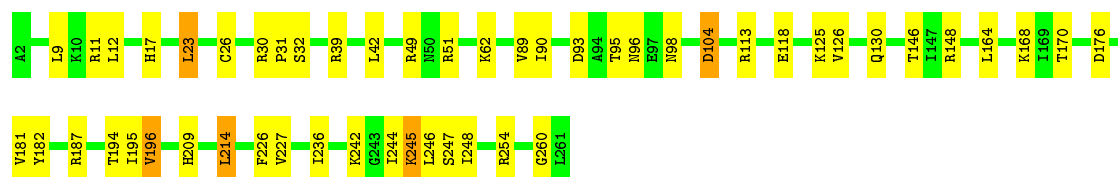
• Molecule 6: 40S ribosomal protein S4-A

Chain S4: 27% 56% 15%



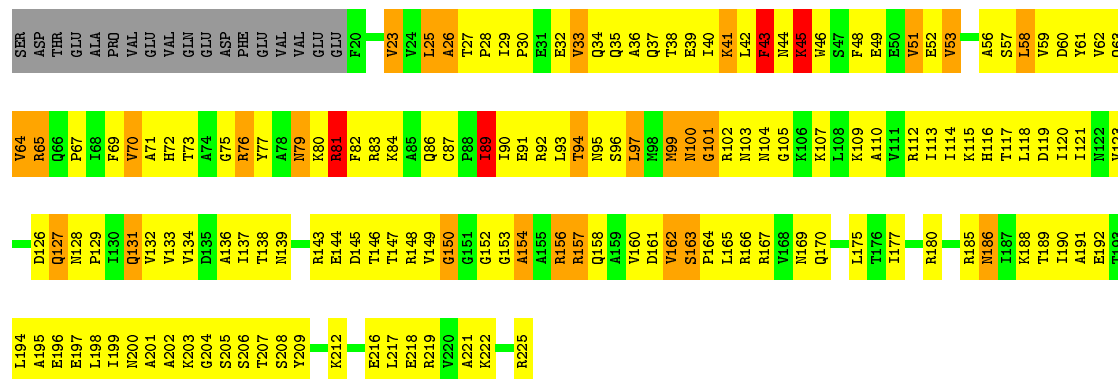
• Molecule 6: 40S ribosomal protein S4-A

Chain s4: 80% 18% •



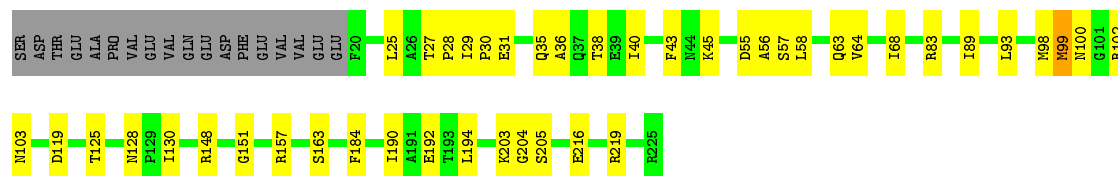
• Molecule 7: 40S ribosomal protein S5

Chain S5: 23% 55% 12% 8% •



• Molecule 7: 40S ribosomal protein S5

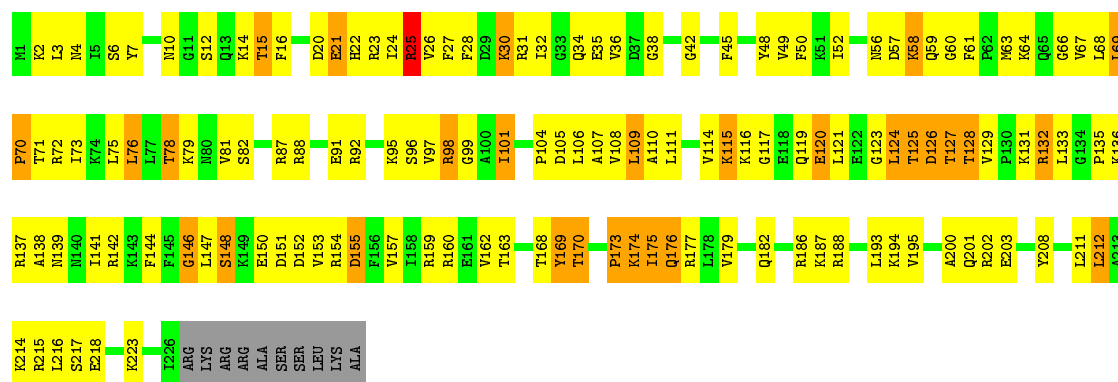
Chain s5: 72% 19% 8% •



• Molecule 8: 40S ribosomal protein S6-A

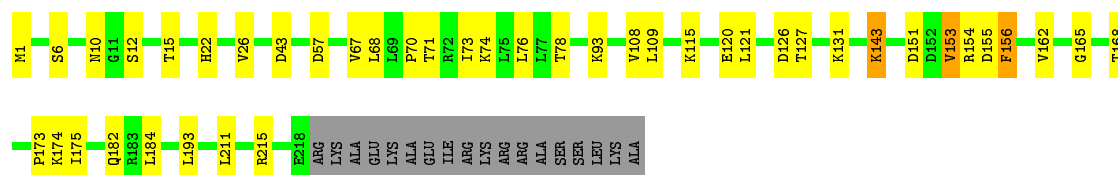
Chain S6: 36% 47% 12% •





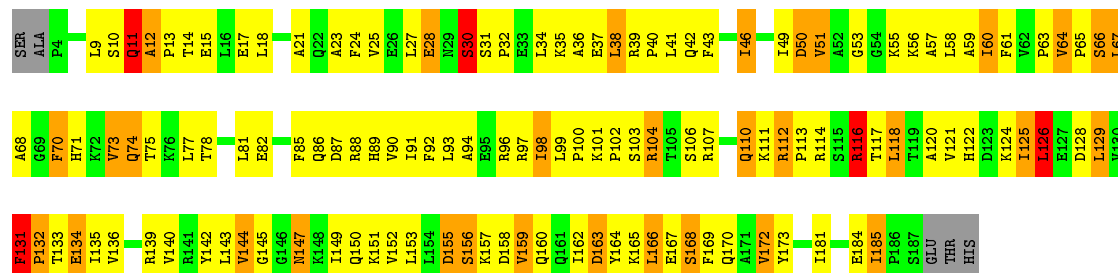
- Molecule 8: 40S ribosomal protein S6-A

Chain s6:    74% 17% 8%



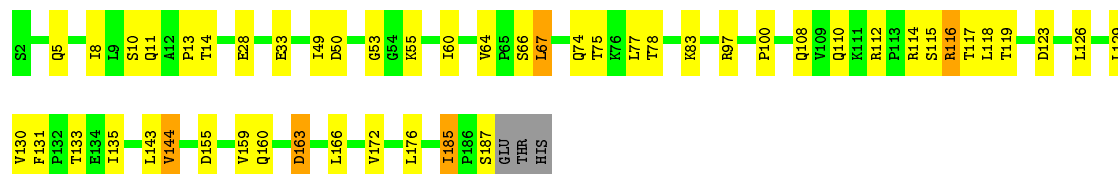
- Molecule 9: 40S ribosomal protein S7-A

Chain S7:     29% 49% 17%



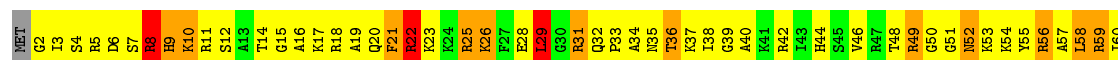
- Molecule 9: 40S ribosomal protein S7-A

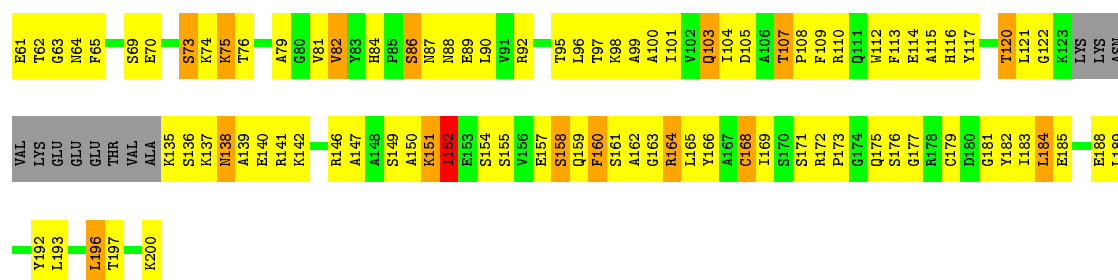
Chain s7:    72% 24%



- Molecule 10: 40S ribosomal protein S8-A

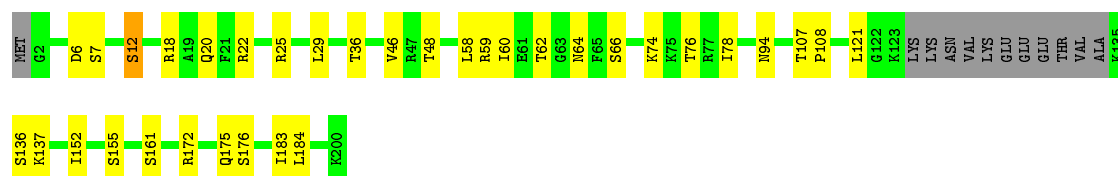
Chain S8:     23% 56% 14% 6%





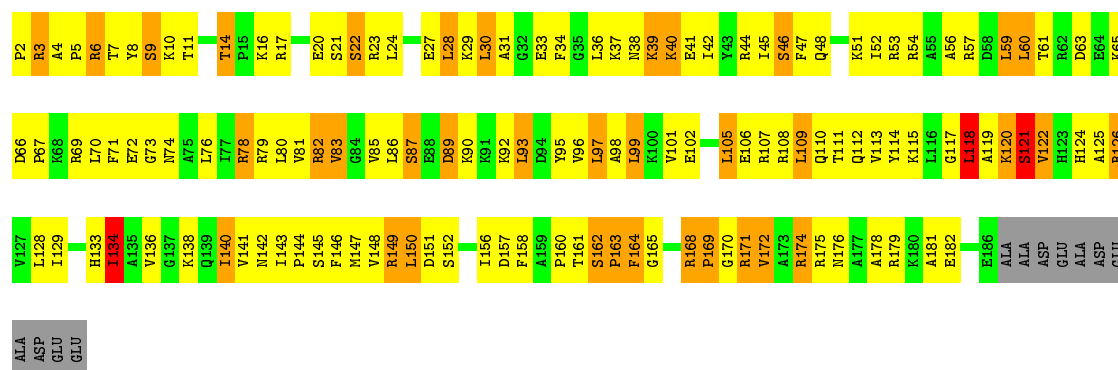
- Molecule 10: 40S ribosomal protein S8-A

Chain s8: 77% 17% 6%



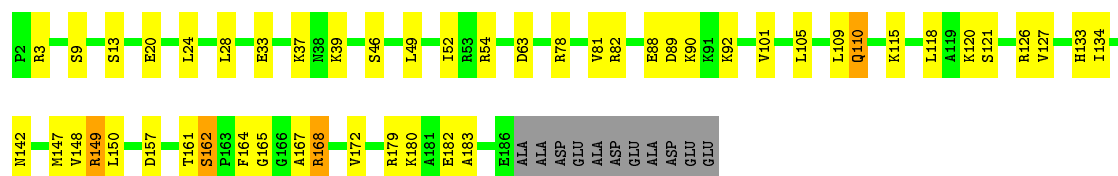
- Molecule 11: 40S ribosomal protein S9-A

Chain S9: 24% 50% 18% 6%



- Molecule 11: 40S ribosomal protein S9-A

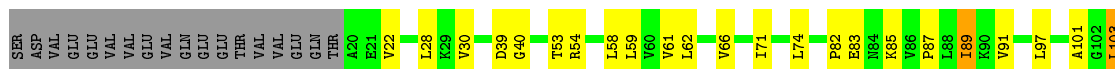
Chain s9: 69% 23% 6%



- Molecule 12: 40S ribosomal protein S10-A

Chain C0: 21% 56% 13% 9%

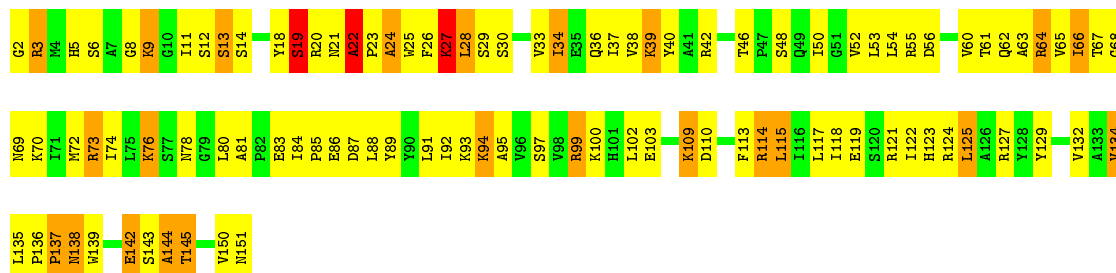






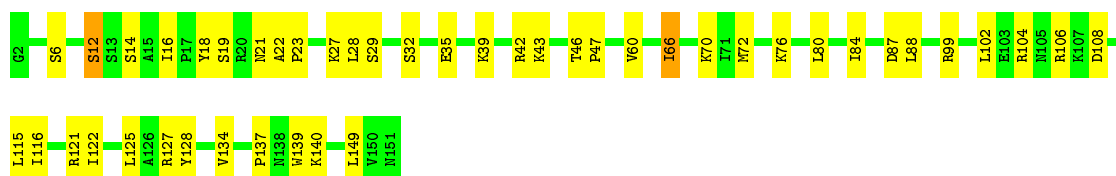
- Molecule 15: 40S ribosomal protein S13

Chain C3: 32% 51% 15%



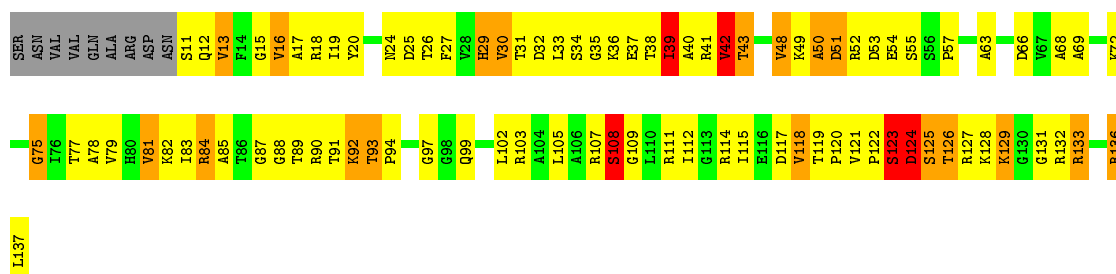
- Molecule 15: 40S ribosomal protein S13

Chain c3: 70% 29%



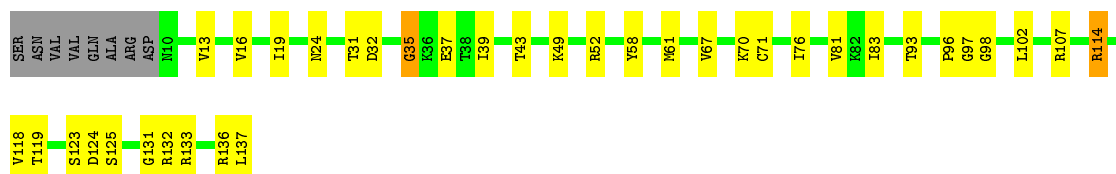
- Molecule 16: 40S ribosomal protein S14-A

Chain C4: 28% 48% 14% 7%

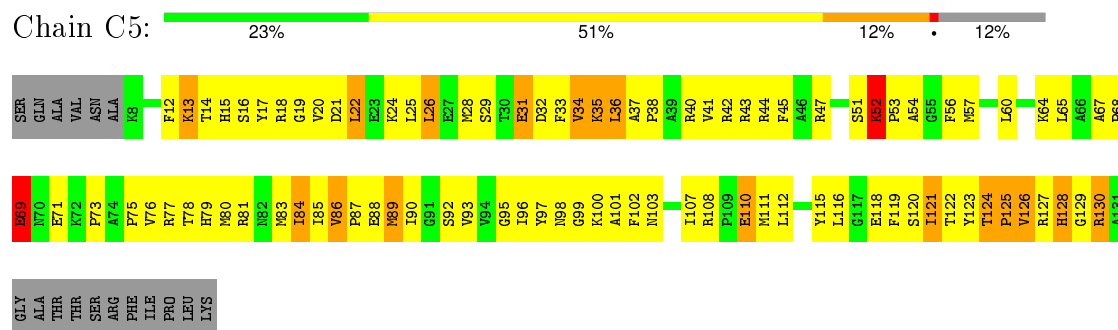


- Molecule 16: 40S ribosomal protein S14-A

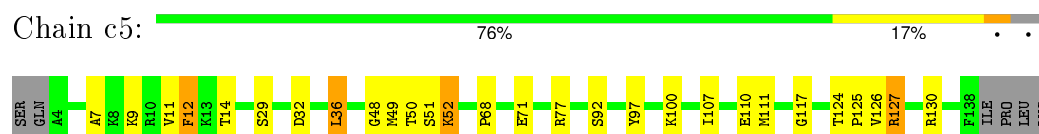
Chain c4: 67% 26% 6%



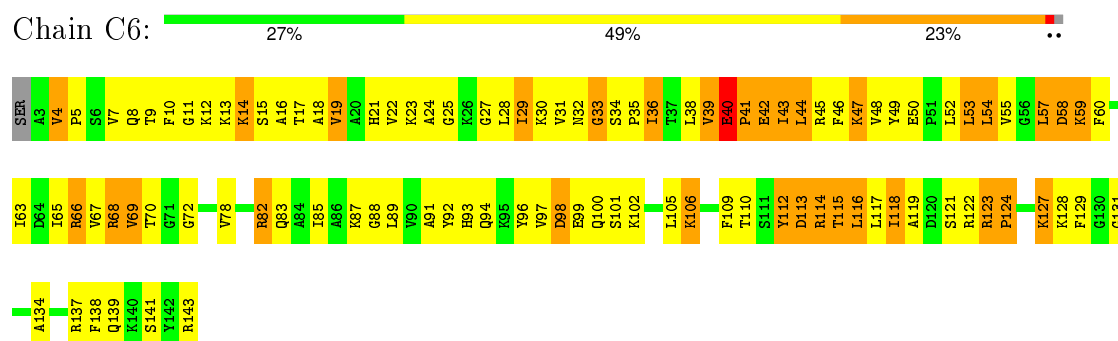
- Molecule 17: 40S ribosomal protein S15



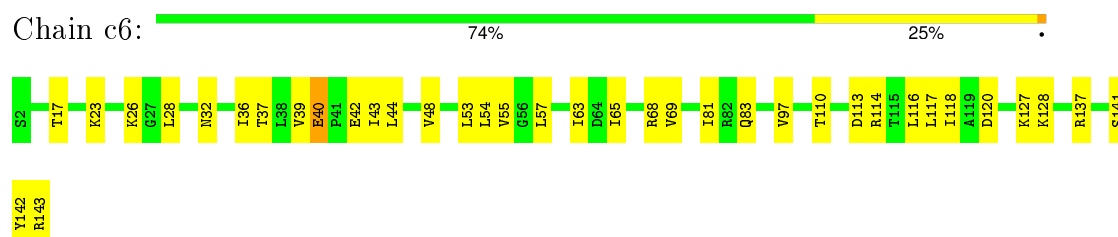
- Molecule 17: 40S ribosomal protein S15



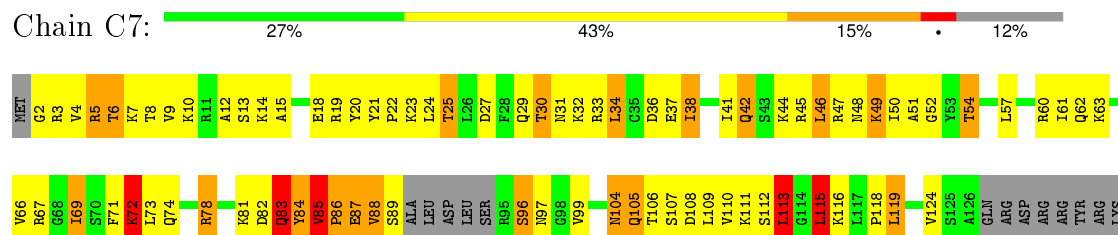
- Molecule 18: 40S ribosomal protein S16-A



- Molecule 18: 40S ribosomal protein S16-A



- Molecule 19: 40S ribosomal protein S17-A



ARG  
VAL

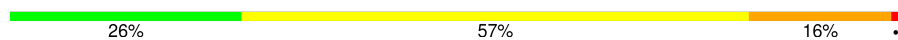
- Molecule 19: 40S ribosomal protein S17-A

Chain c7:  68% 16% 14%

MET G2 R3 V4 R5 T6 V9 I17 L34 R45 L46 R47 R60 I61 I69 K72 D82 Q83 T84 V85 P86 E87 V88 S89 A90 LEU ASP LEU SER R95 V99 N104 S112 L113 K116 S120 V121 I122 ASN VAL SER ALA GLN ARG ASP ARG

TYR  
ARG  
LYS  
ARG  
VAL

- Molecule 20: 40S ribosomal protein S18-A

Chain C8:  26% 57% 16%

S2 L3 V4 V5 Q6 E7 Q8 G9 S10 Q12 H13 I14 L15 R16 L17 L18 N19 T20 T21 N22 Q23 G24 N25 I26 K27 I28 V29 A31 L32 T33 T34 I35 K36 G37 V38 G39 R40 R41 Y42 L45 V46 K49 A50 D51 V52 D53 L54 H55 K56 R57 R58 A59 E60 L61 T62

R65 L66 R67 R68 Q69 V70 Q71 W72 M73 Q74 T75 P76 T77 H78 Y79 R80 R81 P82 A83 R84 F85 L86 R87 R88 R89 I90 D91 T92 T93 D94 G95 K96 D97 Y98 H99 T100 L101 A102 K108 L109 R110 D111 D112 R115 L116 A117 K118 L119 R120 A121 H122 R123 G124 T125 R126 F127 T128

R132 V133 R134 Q135 G136 H137 T138 K139 T140 T141 R143 R144 R145 A146

- Molecule 20: 40S ribosomal protein S18-A

Chain c8:  75% 22%

S2 L3 V4 H13 I14 L15 N25 L28 V29 T33 K36 G37 V38 G39 R40 R41 H55 K56 R57 L61 T62 Q63 I69 T77 F85 N90 D91 D94 D97 T100 L101 A102 E106 R115 L116 V133 R134 G135 Q136 H137 T138 T141

G142 R143 R144 A146

- Molecule 21: 40S ribosomal protein S19-A


Chain C9:  25% 62% 13%

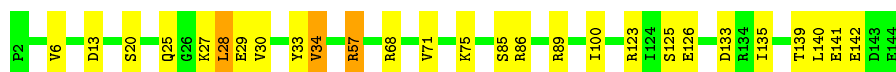
P2 G3 S5 R7 D8 V9 A10 D13 F14 I15 I16 A17 Y18 A19 S20 S21 F21 L22 Q23 R24 Q25 G26 K27 L28 E29 V30 P31 G32 Y33 V34 D35 T36 V37 K38 T39 G42 N43 E44 M45 P46 P47 Q48 D49 A50 E51 G52 W53 F54 Y55 K56 R57 A58 A59 S60 A62 R63

H64 R67 R68 R69 Q70 V71 G72 G73 R74 L75 L76 L77 G82 A83 R84 S85 R86 G87 G88 R89 P90 Y91 K92 H93 I94 D95 A96 S97 G98 S99 I100 N101 R102 K103 V104 L105 L108 E109 K110 I111 G112 I113 T116 S117 P118 K119 R122 R123 I124 S125 A126 E127 G128 Q129 R130

D131 L132 A136 A137 G138 T139 L140 E141 E142 D143 E144

- Molecule 21: 40S ribosomal protein S19-A

Chain c9:  81% 17%



- Molecule 22: 40S ribosomal protein S20

Chain D0: 18% 55% 17% 11%



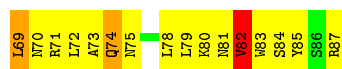
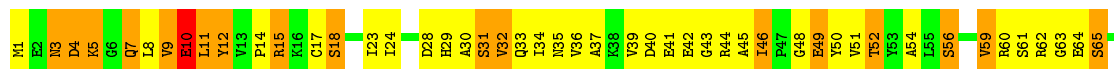
- Molecule 22: 40S ribosomal protein S20

Chain d0: 60% 31% 8%



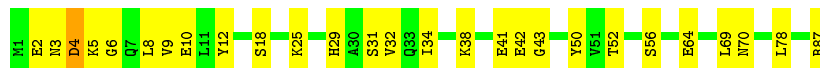
- Molecule 23: 40S ribosomal protein S21-A

Chain D1: 26% 49% 22%



- Molecule 23: 40S ribosomal protein S21-A

Chain d1: 69% 30%




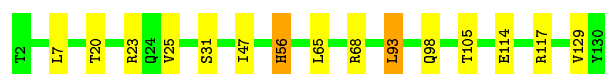
- Molecule 24: 40S ribosomal protein S22-A

Chain D2: 31% 57% 11%



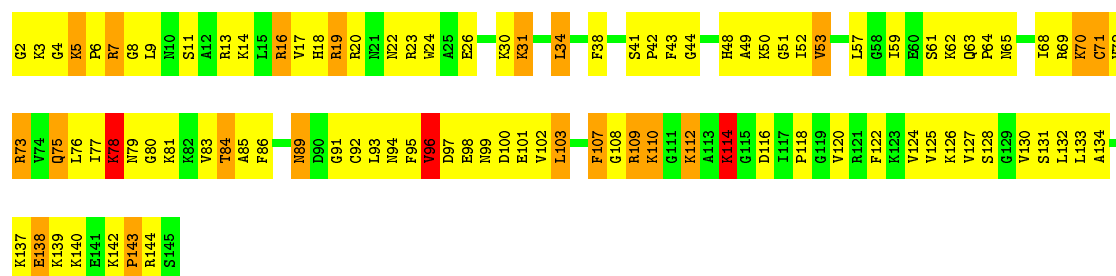
- Molecule 24: 40S ribosomal protein S22-A

Chain d2:  88% 10% •




- Molecule 25: 40S ribosomal protein S23-A

Chain D3:  31% 53% 14% •



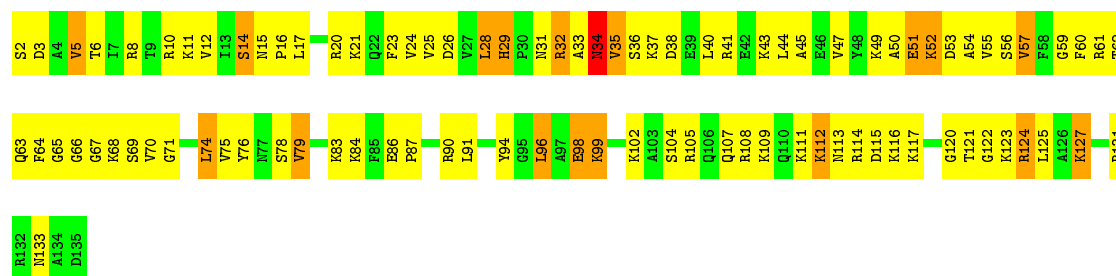
- Molecule 25: 40S ribosomal protein S23-A

Chain d3:  77% 23%




- Molecule 26: 40S ribosomal protein S24-A

Chain D4:  31% 56% 13% •



- Molecule 26: 40S ribosomal protein S24-A

Chain d4:  78% 21% •



- Molecule 27: 40S ribosomal protein S25-A

Chain D5:  11% 34% 19% 35% •

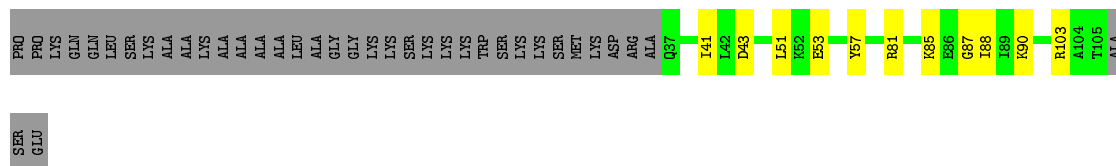






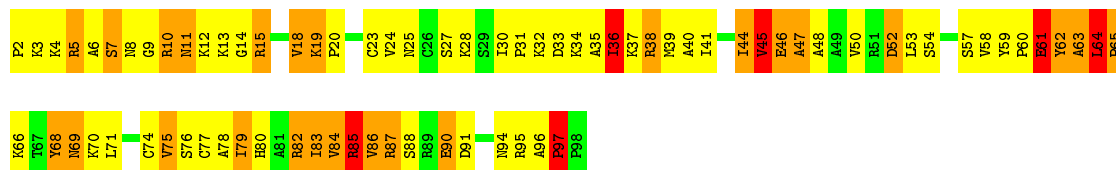
- Molecule 27: 40S ribosomal protein S25-A

Chain d5: 54% 10% 36%



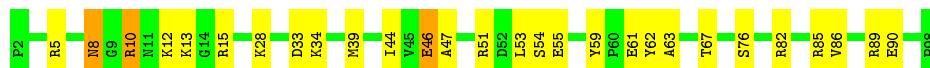
- Molecule 28: 40S ribosomal protein S26-B

Chain D6: 21% 47% 26% 6%



- Molecule 28: 40S ribosomal protein S26-B

Chain d6: 71% 26%



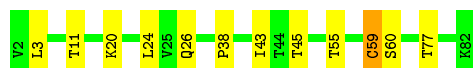
- Molecule 29: 40S ribosomal protein S27-A

Chain D7: 37% 51% 11%



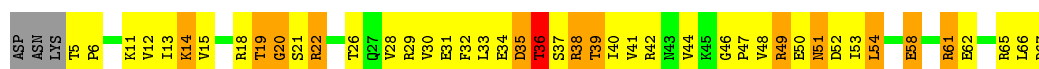
- Molecule 29: 40S ribosomal protein S27-A

Chain d7: 85% 14%



- Molecule 30: 40S ribosomal protein S28-A

Chain D8: 29% 47% 18% 5%



- Molecule 30: 40S ribosomal protein S28-A

Chain d8: 73% 21% 5%



- Molecule 31: 40S ribosomal protein S29-A

Chain D9: 27% 55% 15%



- Molecule 31: 40S ribosomal protein S29-A

Chain d9: 67% 25% 8%



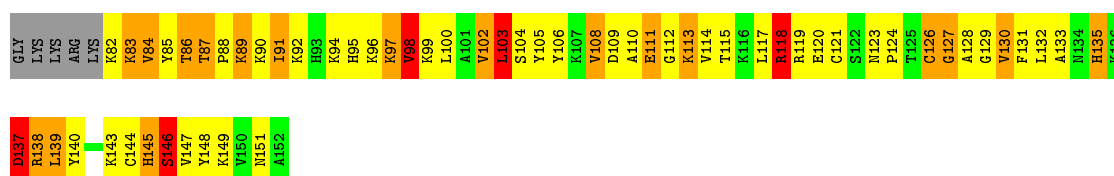
- Molecule 32: 40S ribosomal protein S30-A

Chain E0: 45% 45% 7%



- Molecule 33: Ubiquitin-40S ribosomal protein S31

Chain E1: 16% 47% 24% 7% 7%



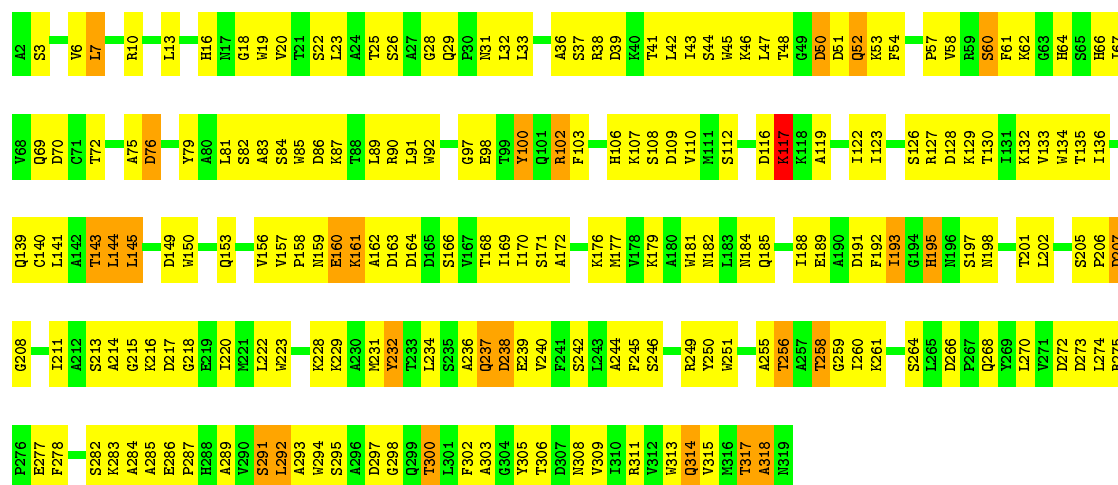
- Molecule 33: Ubiquitin-40S ribosomal protein S31

Chain e1: 57% 38% 5%



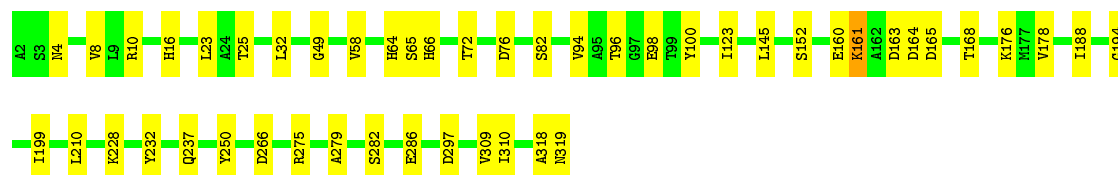
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

Chain SR: 37% 55% 8%



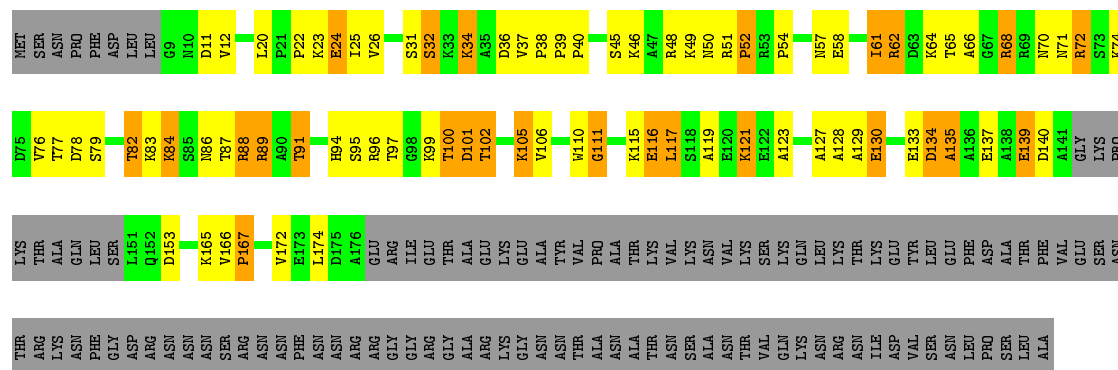
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

Chain sR: 85% 15%



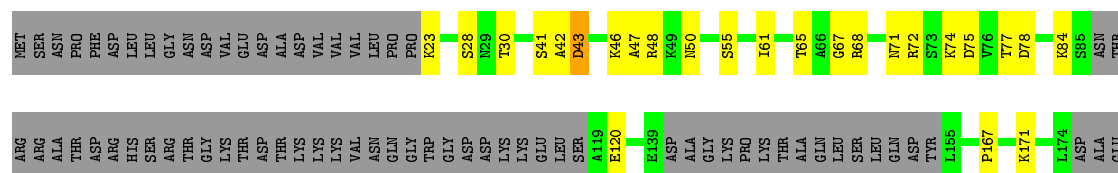
- Molecule 35: Suppressor protein STM1

Chain SM: 28% 21% 10% 42%



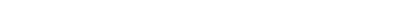
- Molecule 35: Suppressor protein STM1

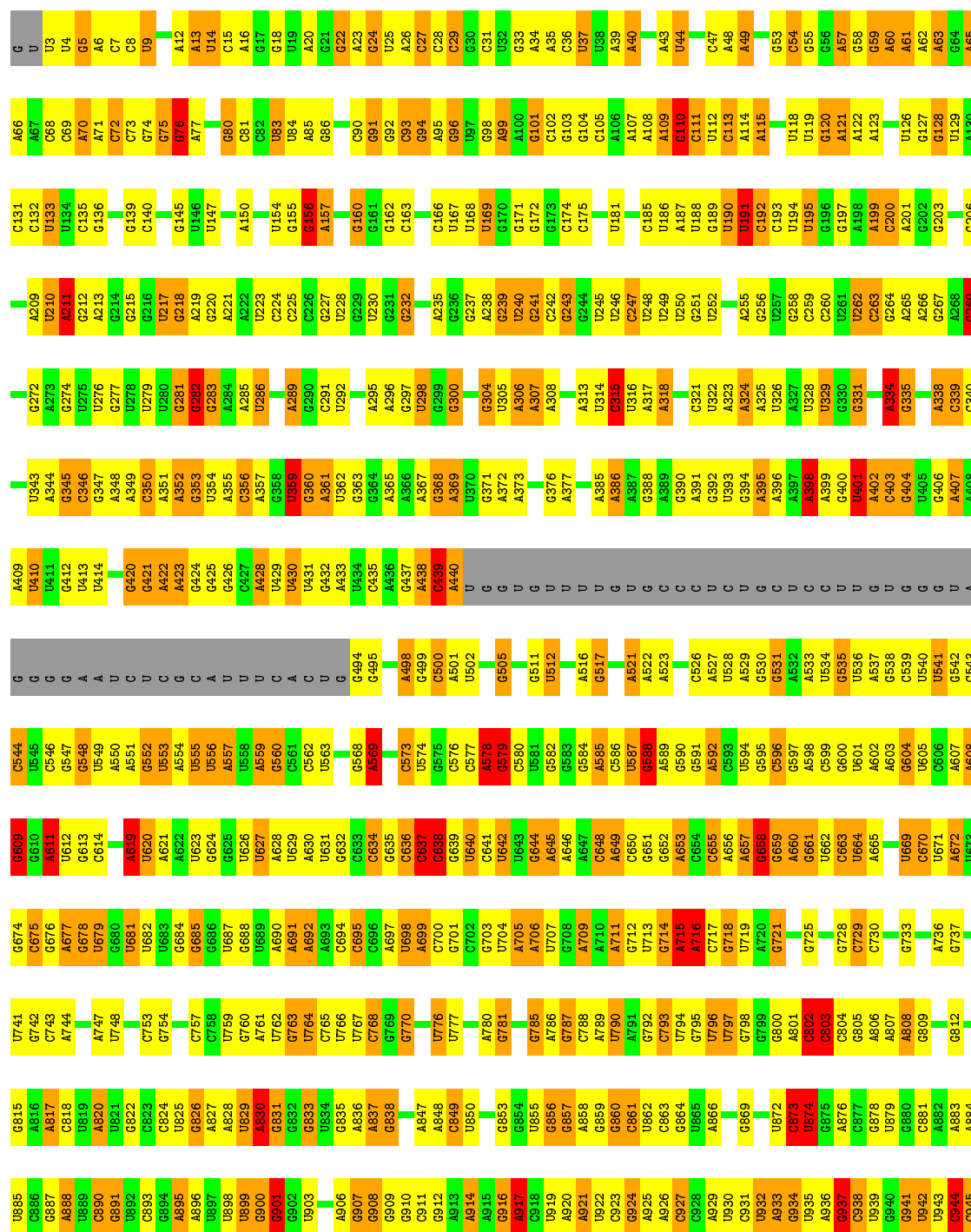
Chain sM: 29% 9% 62%



[illegible]

- Molecule 36: 25S ribosomal RNA

Chain 1:  26% 40% 22% 7%



U	G1898	U1821	G1758	G1680	U1607	G1544	G1480	A1418	U1353	U1288	U1218	A1154	G1087	G1012	U946
U	G1899	C1822	C1759	U1681	C1608	A1545	A1481	A1419	G1354	G1289	A1221	C1155	G1090	G1013	G947
G	A1901	A1823	A1760	U1682	C1609	A1546	A1482	A1421	A1356	U1293	A1222	C1156	G1090	U1014	C948
U	G1902	U1824	C1761	A1683	G1610	U1549	U1484	G1424	G1357	U1294	A1223	A1158	U1093	C1016	A951
C	U1903	C1829	C1763	U1686	A1612	U1548	G1485	U1425	G1362	G1295	A1224	A1159	U1094	G1017	A952
A	C1904	U1830	U1764	U1687	A1613	G1552	G1486	C1426	A1363	C1296	A1225	C1160	U1095	G1018	G953
G	G1905	U1831	U1765	U1688	C1614	U1553	G1487	U1427	A1364	C1297	G1226	G1161	U1096	G1019	U954
A	G1906	C1832	C1766	U1689	C1615	U1554	G1488	A1428	G1364	C1298	C1227	A1162	U1097	G1020	U955
C	C1907	U1833	C1767	U1690	G1616	U1555	A1489	A1429	G1365	U1299	C1228	A1163	A1098	G1021	U956
C	A1908	U1834	U1768	U1692	U1617	U1556	A1490	G1430	A1366	G1300	G1229	G1164	A1099	G1022	C957
C	A1909	A1835	G1769	C1693	G1618	C1558	A1491	U1431	G1367	A1303	G1230	A1165	U1100	G1024	C958
A	C1910	U1836	G1770	U1694	A1619	G1559	G1492	G1432	U1368	A1304	A1231	A1166	A1025	A1025	C959
G	A1911	U1837	C1771	U1695	U1620	A1560	G1493	C1433	A1369	U1305	C1232	U1167	A1103	U860	
C	C1912	G1838	C1772	A1696	A1621	G1561	U1494	A1434	C1372	U1306	G1233	A1168	G1104	G1029	C961
G	A1915	U1839	C1774	U1697	U1622	G1562	U1495	G1434	A1372	A1169	G1234	A1169	A1030	A1030	A962
G	U1916	U1840	G1775	U1701	U1623	G1563	C1496	A1435	A1373	A1170	U1235	A1170	C1107	U1033	G963
C	A1917	A1841	C1776	U1702	U1624	C1564	C1497	U1436	G1374	A1308	G1236	G1171	U1108	G964	
C	A1918	A1842	U1777	U1703	U1625	U1565	A1498	C1437	G1375	U1309	G1237	G1172	U1109	U1034	A965
U	C1919	C1843	C1778	U1704	U1626	U1566	C1499	U1438	C1376	U1310	G1238	U1173	U1110	G1035	U966
U	U1920	C1844	U1779	U1705	A1632	U1567	U1501	U1439	C1377	G1311	C1239	G1174	U1111	G1036	A967
C	G1921	U1845	U1780	C1709	G1633	U1568	C1502	G1440	U1378	C1312	U1240	C1175	U1112	G968	
C	C1922	C1846	U1781	C1710	G1634	U1569	A1503	U1441	G1379	C1313	U1241	C1176	G1113	C1037	C969
U	U1924	A1847	U1782	C1711	G1635	U1570	A1504	G1442	A1381	C1314	G1242	G1177	U1114	A1040	A970
U	U1925	G1848	G1783	G1712	U1636	U1571	A1505	G1443	G1382	U1315	G1243	G1178	G1115	G971	
U	C1926	C1849	U1784	G1713	U1637	A1572	C1506	G1444	G1383	C1316	A1244	A1179	G1116	A1043	A972
G	G1927	A1850	U1785	U1714	A1638	G1573	A1507	U1445	U1384	A1317	A1245	A1180	G1117	U1044	A973
U	A1932	U1851	C1776	U1715	C1639	C1574	C1507	A1446	G1385	A1318	G1246	U1181	C1118	C1045	G974
G	C1933	C1852	U1778	U1716	G1640	C1575	A1508	A1447	A1386	G1319	U1247	A1182	C1119	A1046	C975
A	A1934	U1853	U1779	U1717	U1641	A1576	A1509	U1448	G1387	C1320	G1248	U1183	U1124	A1047	U976
C	G1935	C1854	G1780	U1718	U1642	G1577	G1510	A1449	U1388	G1321	G1249	U1184	U1125	A1048	C977
C	A1936	U1855	U1781	U1719	A1643	C1578	U1511	G1450	G1389	U1322	C1255	C1185	U1126	C1049	G978
U	U1937	C1856	C1772	U1720	C1644	C1579	U1512	C1451	A1390	G1323	G1256	G1186	G1127	U1050	U979
G	A1938	U1857	G1782	U1721	U1645	A1580	G1513	A1452	C1391	U1324	C1257	C1187	U1128	U1051	A980
C	C1939	C1858	U1783	U1722	G1646	C1581	G1514	A1453	G1392	U1258	G1257	C1188	U1129	U1052	U981
U	G1940	U1859	U1784	U1723	U1647	C1582	A1515	A1454	A1393	U1259	A1259	A1190	A1053	C982	
G	C1941	A1864	G1795	U1724	U1648	C1583	A1516	U1455	A1394	U1329	A1260	G1191	A1054	A983	
G	U1942	U1865	C1775	U1725	G1650	A1584	G1517	A1456	G1395	A1330	A1261	G1192	G1131	A1055	G984
U	C1943	C1866	U1796	U1726	A1654	U1585	U1518	C1459	C1396	U1331	G1261	A1193	C1132	G1063	
U	A1946	U1867	U1797	U1727	G1655	C1586	G1519	A1460	C1397	A1332	G1262	G1194	A1133	A1064	U988
G	G1947	C1868	A1729	U1728	A1656	G1587	U1520	A1461	U1398	C1333	A1263	A1195	A1134	A1065	A989
G	U1948	U1869	U1730	U1729	C1657	A1588	G1521	A1462	A1399	U1334	G1264	G1196	A1135		
C	C1949	C1870	G1734	U1730	U1658	A1589	U1522	A1463	G1400	C1335	U1265	C1136	C1137	A992	
U	U1950	U1874	U1735	U1731	U1659	A1590	U1523	G1464	A1401	U1336	G1266	A1200	A1137	G993	
U	C1951	U1875	U1736	U1732	C1660	G1591	A1524	A1465	C1402	U1337	U1267	C1201	C1137	G994	
U	G1952	U1876	U1737	U1733	G1661	G1592	U1525	A1466	C1403	A1338	G1268	A1202	U1138	U995	
G	C1953	C1877	U1738	U1734	G1662	C1593	U1526	A1467	G1404	C1339	U1269	A1203	G1139	G1071	A998
C	G1954	U1878	U1739	U1735	C1663	A1594	G1527	A1468	U1405	C1340	A1270	A1204	C1141	U1073	G999
U	U1955	A1879	U1740	U1741	G1664	U1595	U1528	C1469	A1406	U1341	A1271	A1205	G1142	U1074	C1000
C	A	U1880	U1742	U1742	U1665	C1596	A1529	U1470	G1408	C1342	C1272	G1206	A1143	A1075	G1001
U	G	C1745	C1745	C1745	G1668	U1597	U1533	U1471	C1409	A1343	A1273	U1208	U1144	C1076	A1002
G	C	U1746	U1746	U1746	C1669	G1598	A1534	U1472	G1409	G1344	A1274	U1209	G1145	A1077	A1003
C	U	G1747	G1747	G1747	U1672	U1598	A1535	G1473	C1411	G1346	A1278	U1210	C1146	U1078	
C	U	U1672	U1672	U1672	U1673	U1601	A1536	G1474	U1411	U1347	C1279	U1211	G1147	A1066	A1006
A	A	A1750	A1750	A1750	G1673	A1602	G1536	A1475	G1412	U1348	G1280	A1212	G1148	U1007	
A	C	G1751	G1751	G1751	G1674	A1603	A1537	G1476	G1413	G1349	G1281	A1213	G1149	A1080	
G	G	U1752	U1752	U1752	G1675	A1604	U1538	G1477	G1414	G1349	G1281	A1213	G1149	U1007	
C	C	A1676	A1676	A1676	G1676	A1605	G1539	G1478	U1415	A1350	G1285	A1216	A1150	U1081	U1008
C	C	G1677	G1677	G1677	G1677	A1606	G1542	C1478	C1416	U1351	A1286	G1152	G1151	A1082	A1009
G	C	U1756	U1756	U1756	G1677	U1606	G1543	U1479	G1417	A1352	A1287	A1217	G1152	G1083	G1010
G	C	A1757	A1757	A1757	U1677	U1606	G1543	U1479	G1417	A1352	A1287	A1217	G1152	G1083	A1011

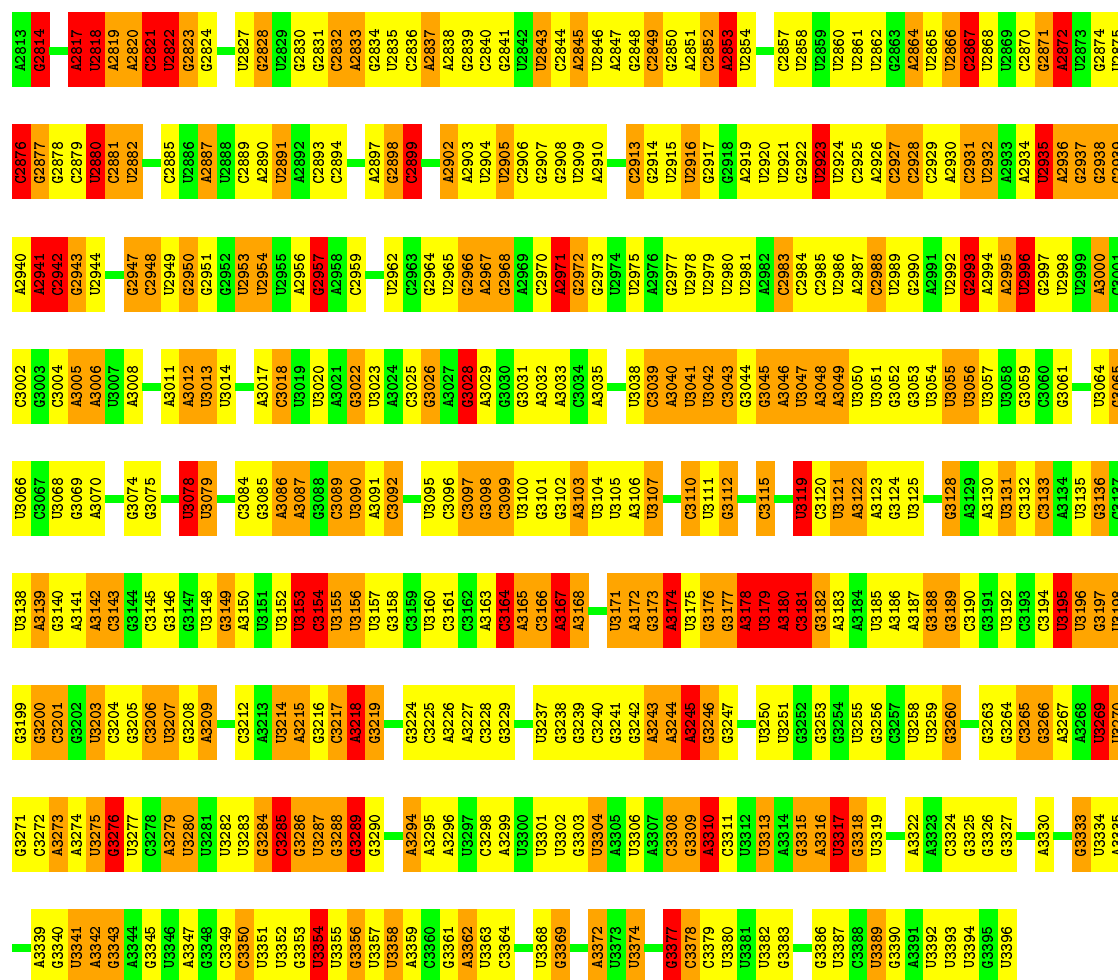






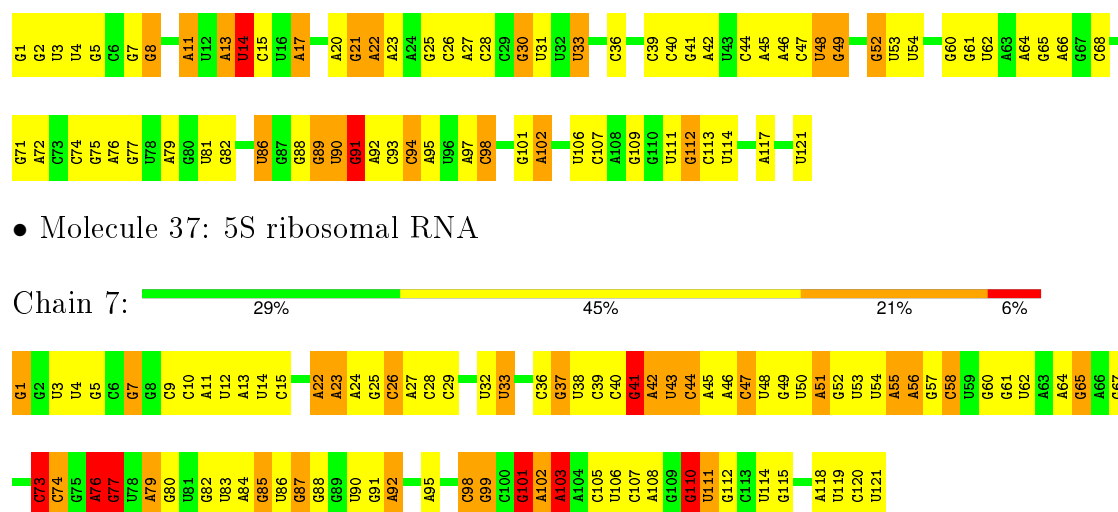


A2746	C2682	G2608	U2537	U2411		A2280	A2213	C2146	G	U	U1888	C1827	U1765
A2747	U2683	A2609	U2538	G2412	A2945	A2281	A2214	A2147	C	U	G1889	A1828	G1766
A2748	C2684	G2610	C2539	G2413	C2946	U2282	A2215	U2148	G	U	A1890	G1829	C1767
G2749	C2685	U2611	A2540	G2414	U2947	G2283		A2149	C	A	A1891	G1830	U1768
U2750	A2686	U2612	U2541	C2415	A2948	C2284	G2218		U	G	G1892	A1831	G1769
G2751	U2687	U2613	U2542	U2416	U2949	G2285		U2154	U	G	A1893	C1832	G1770
U2752	U2688	G2614	U2543	U2417	U2950	U2286	G2221	G2155	C	C	U1894	G1833	C1771
G2753	A2689	G2615		G2418	C2951	C2287	A2222	C2156	G	C	A1895	U1834	U1772
U2754	G2690	U2616	C2546	A2419	A2952	U2288	A2223	G2157	C	C	A1896	G1835	C1773
C2755	A2691	U2617	U2547	C2420	G2953	U2289	A2224	A2158	U	G	G1897	U1836	G1774
C2756	A2692	G2618	U2548	C2421	C2954	U2290	U2225	U2159	C	A	U1898	C1837	C1775
U2757	C2693	G2619	U2550	U2421	G2955	A2291		G2160	A	U	G1899	G1838	
	A2694	A2620	U2551	A2424	C2956	U2292	A2229	G2161	A	A	A1900	A1839	G1778
G2761	A2695	G2621		G2425	A2957	U2293	C2230	U2162	U	C	A1901	U1840	C1779
A2762	A2696	C2622		U2426	A2958	G2294	C2231	C2163	U	U	G1902	G1841	G1780
U2763	G2697	G2623		U2427	C2959	U2295	A2232	A2164	A	A		A1842	C1781
C2764	G2698	G2624		U2428	C2960	A2296	A2233	G2165	A2093	G	G1906	C1843	U1782
C2765	U2699	U2625		G2429		U2297	G2234	A2166	G	C	A1908	C1844	U1783
U2766	G2700	A2626			G2364	U2298	U2241	A2167	C2105	U	A1913	G1845	G1784
U2767	A2701	C2627		U2433	C2365	A2299	G2236	G2168	A2106	U	A1914	C1846	U1785
	U2702	A2628		U2434	C2366	G2300		A2169	U2102	G	A1909	A1847	G1786
A2703	A2703	C2629		U2435	A2367	U2301	G2239	G2170	U2103	C	A1911	G1848	A1787
A2704	U2704	U2630		U2436	A2368	G2302	G2240	G2171	A2104	C	A1912	C1849	U1788
A2705	G2705	U2631		G2437	G2369	C2303	U2242		G2105	U	A1913	A1850	G1789
C2707	G2706	C2632		A2438	G2370	C2304	A2243	G2174	A2106	U	A1914	G1851	G1790
U2708	U2633	U2633		A2439	G2371	G2305	A2243	U2175	A2107	G	A1915	G1852	C1791
C2709	U2635	U2635		G2440	A2372	C2306	A2244	U2176	U2108	U	U1916	U1853	C1792
C2710	A2636	U2636		G2441	A2373	G2307	C2245	C2177	G2109	U	C1917	C1854	C1793
	G2710	A2637		G2442	C2374	C2308	G2246	A2178	G2110	U	C1918	G1794	U1795
		U2637		A2443	G2375	A2309	G2247	C2179	G2111	U	G1919	C1856	U1796
U2713	G2713	C2638		C2444	G2376	U2310	G2248	C2180	U2112	A	U1920	A1857	G1797
A2714	A2714	C2639			G2377	G2311	G2249	C2181	C2113	A		A1858	A1797
G2715	U2505	U2606		U		A2312	G2250		C2114	U	U1925	A1859	A1798
U2716	C2507	C2507		A	G2381	A2313		U2184	A2117	C	C1926	G1860	A1799
U2717	U2508	U2508		G	G2382	U2314	G2253	U2185	G2118	G	G1927	G1861	A1800
U2718	U2509	U2509		A	C2383	G2315	U2254	U2186		C	G1928	U1862	U1801
U2719	U2510	U2510		G	A2384	G2316	A2255	U2187	C2121	U	U1931	G1863	A1804
	A2511	A2511		G	C2385	A2317	A2256	A2188	G2122	U		A1864	C1805
	C2512	C2512		G	A2386	U2318	C2257		G2123	U	G1934	A1865	A1806
U2725	U2513	U2513		U	A2387	G2319	U2258	C2192	G2124	C	U1935	A1867	G1807
U2726	U2514	U2514		G	C2388	A2320	A2259	U2193	G2125	G	A1936	G1868	G1808
A2727	A2515	U2515		U	A2321	G2321	G2261	C2195	A2125	U	U1937	C1869	A1809
G2728	U2516	U2516		A	C2322		A2262	C2196		U	U1938	C1870	A1810
C2590	U2517	U2517		G	C2323	U2327	C2263	C2197	C2128	G	G1939	U1871	G1811
A2591	C2518	A2518		A	G2393	U2328	U2264	A2198	U2129	U	C1940	C1872	G1812
G2592	A2519	A2519		A	G2394	C2329	U2265	G2199	G2130	G	C1941	U1873	A1813
A2593	A2520	G2520		U	G2395	G2336	G2272	G2205	A2131	U	U1942	A1874	A1814
C2594	U2521	U2521		A	G2396	C2330	G2273	U2200	G2140	C	C1943	A1875	U1815
A2595	U2522	A2522		A	A2397	C2331	U2274	G2201	G2134	U	U1944	G1876	U1816
	G2523	A2523		G	A2398	A2332	A2275	C2202	U2135	C	A1945	U1877	G1817
	A2524	A2524		U	A2399	C2333	A2276	U2203	C2136	U	U1946	G1878	U1818
	G2525	G2525		G	G2400	U2334	G2277	C2204	U2137	U	A1947	U1819	A1819
	C2526	C2526		G	A2401	G2335	G2278	U2205	A2138	G	G1948	U1880	U1820
	A2601	A2601		U	G2402	C2336	U2279	A2207	A2139	U		A1881	U1821
G2602	U2521	U2521		A	G2403	C2337	U2274	A2208	U2141	A	G1952	C1822	G1822
G2603	G2530	G2530		G	A2404	C2338	A2275	U2209	A2142	A	C1953	A1884	A1823
U2604	U2531	U2531		C	C2405	C2339	G2276	U2208	A2143	C	G	U1885	U1824
G2605	U2532	U2532		U	G2406	U2340	C2277	U2209	G2210	C	U	A1886	G1825
G2606	G2533	G2533		U	G2409	A2341	C2278	U2211	A2144	C	U	A1887	
G2607	A2536	A2536		C	U2410	U2342	A2279	C2212	A2145	G			



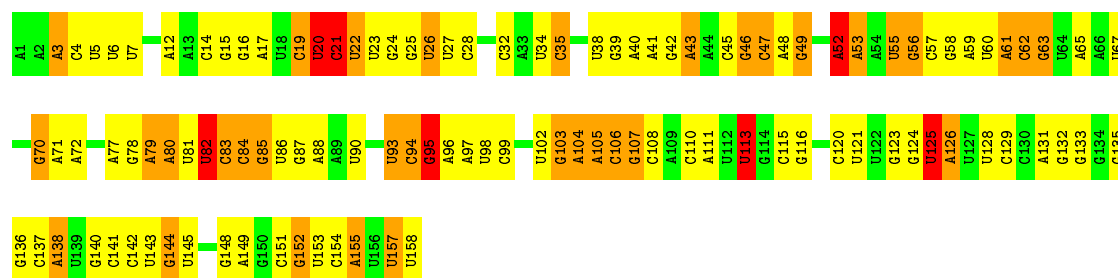
• Molecule 37: 5S ribosomal RNA

Chain 3: 38% 45% 15%

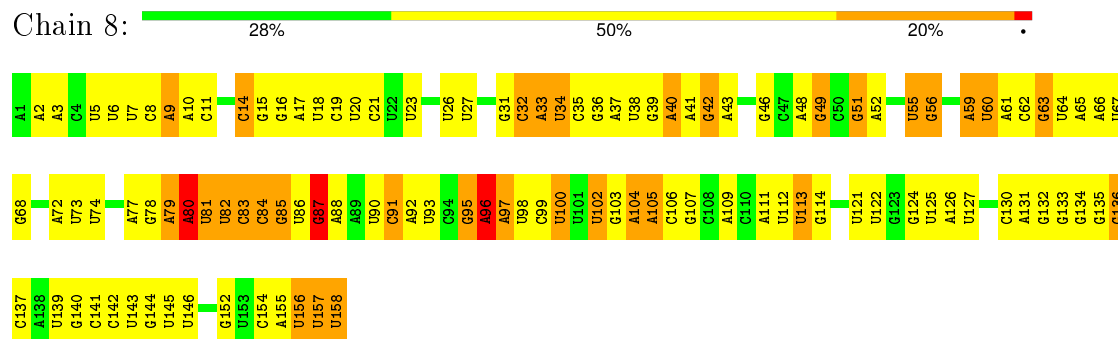


• Molecule 38: 5.8S ribosomal RNA

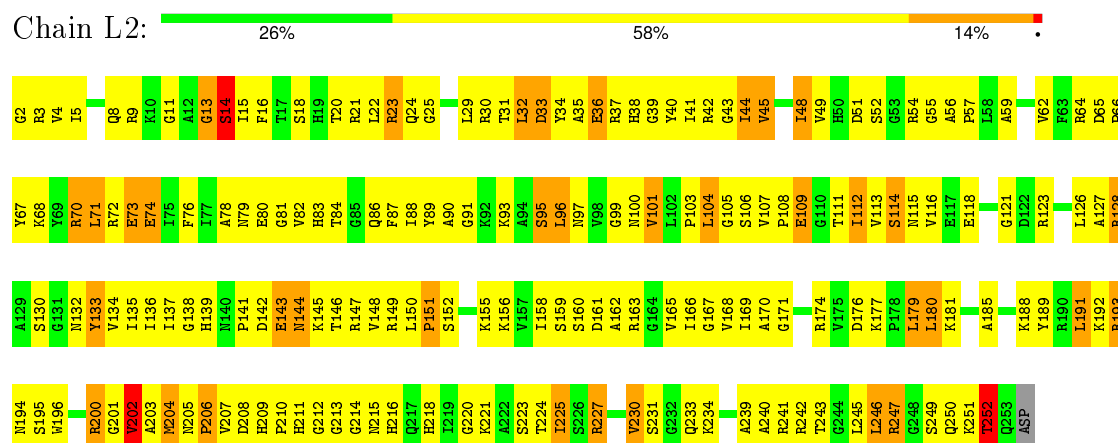
Chain 4: 29% 45% 22%



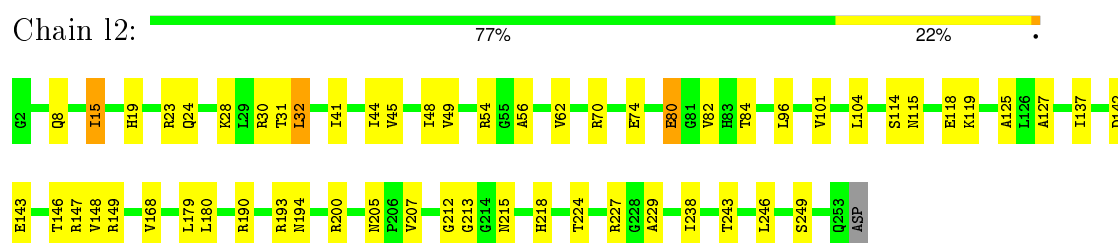
• Molecule 38: 5.8S ribosomal RNA



• Molecule 39: 60S ribosomal protein L2-A

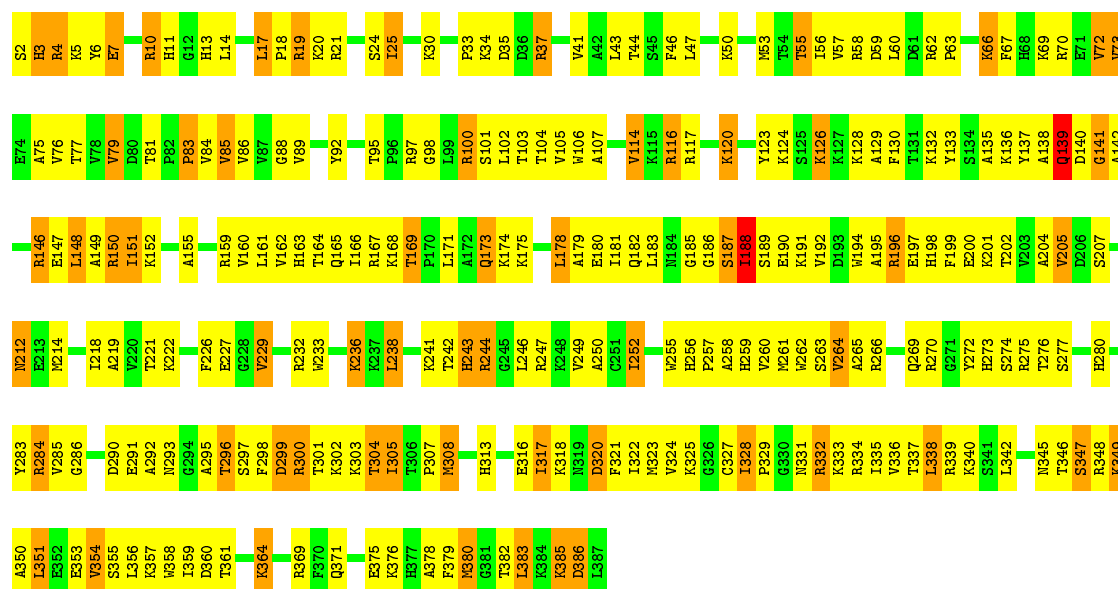


• Molecule 39: 60S ribosomal protein L2-A



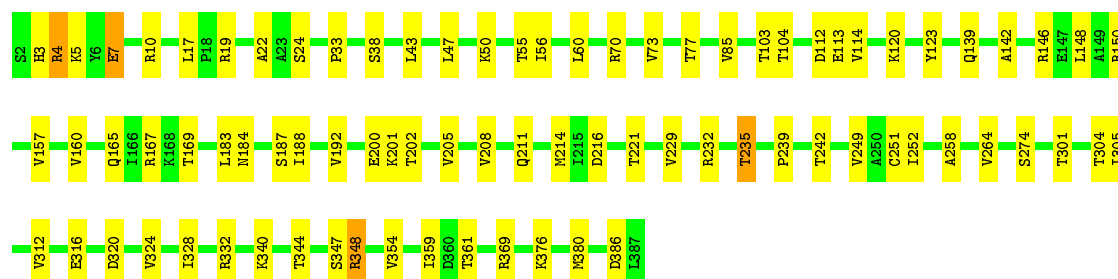
• Molecule 40: 60S ribosomal protein L3





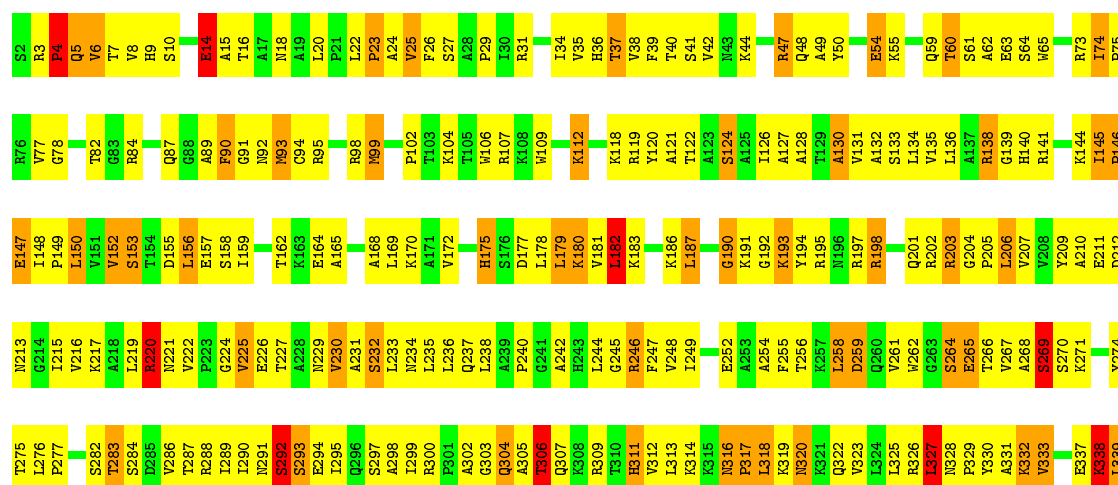
• Molecule 40: 60S ribosomal protein L3

Chain 13: 78% 20%



• Molecule 41: 60S ribosomal protein L4-A

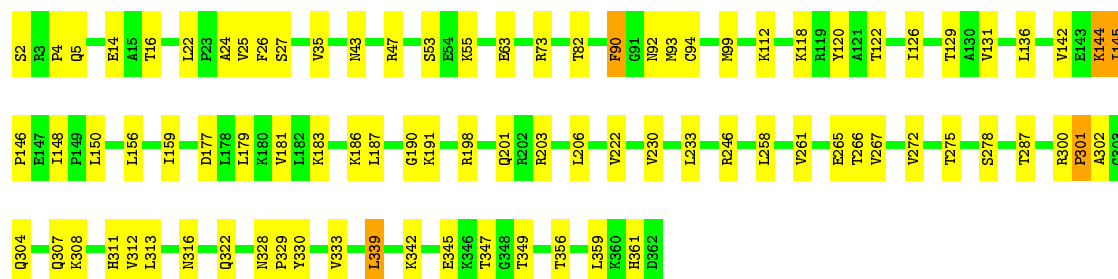
Chain L4: 32% 51% 14%





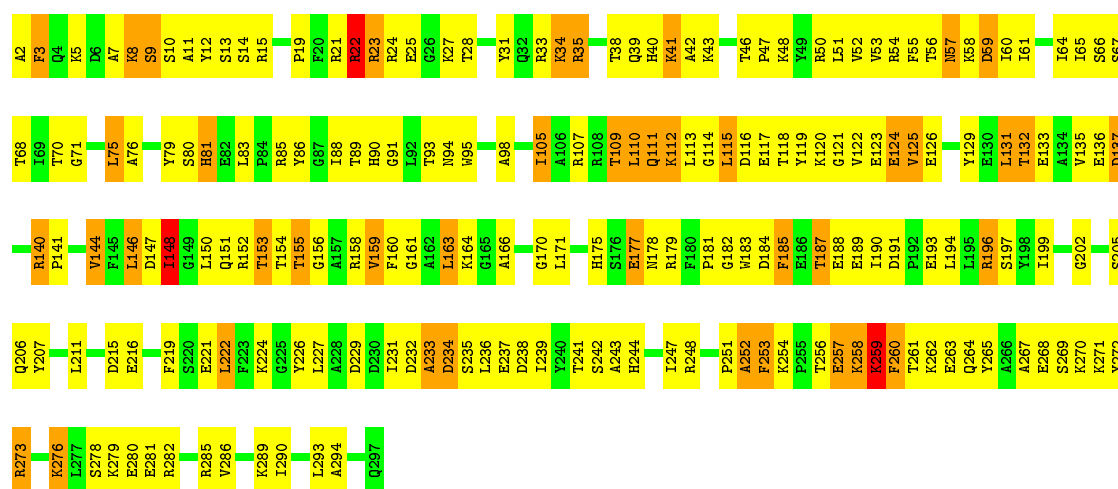
• Molecule 41: 60S ribosomal protein L4-A

Chain 14: 76% 23% .



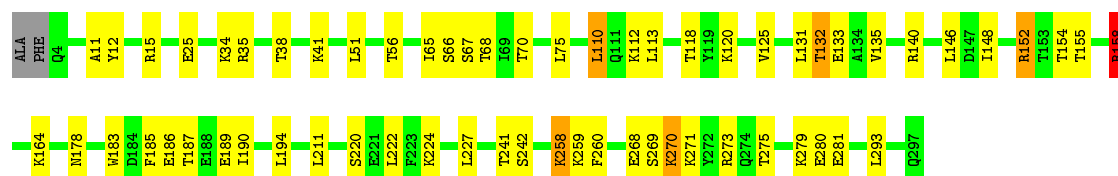
• Molecule 42: 60S ribosomal protein L5

Chain L5: 33% 51% 15% .



• Molecule 42: 60S ribosomal protein L5

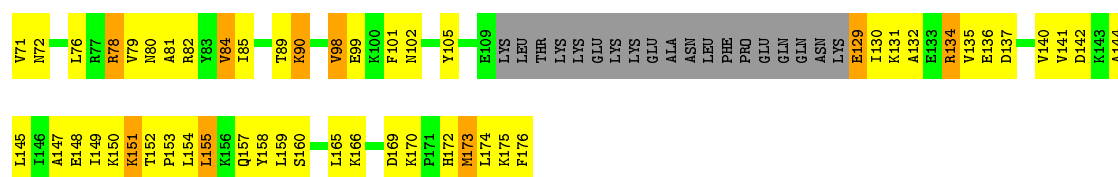
Chain 15: 78% 19% ..



• Molecule 43: 60S ribosomal protein L6-A

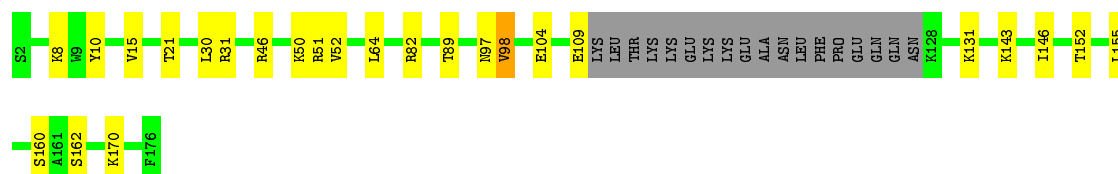
Chain L6: 35% 45% 9% 11%





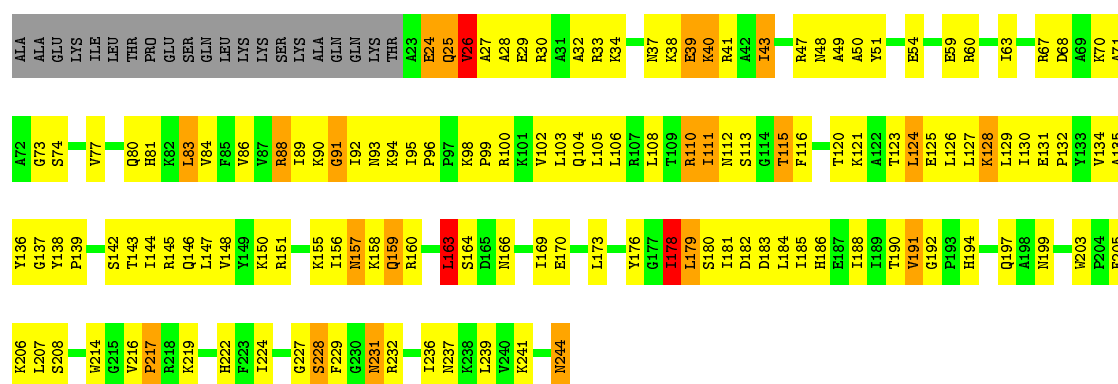
• Molecule 43: 60S ribosomal protein L6-A

Chain l6: 75% 14% 10%



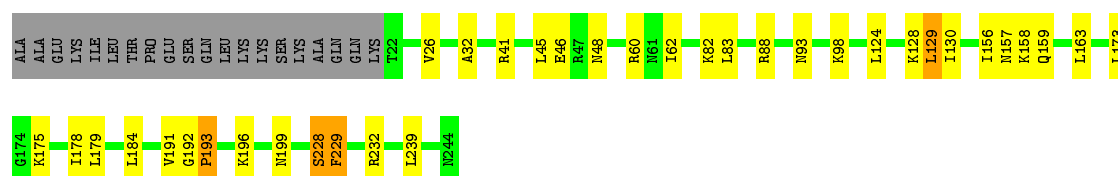
• Molecule 44: 60S ribosomal protein L7-A

Chain L7: 35% 47% 9% 9%



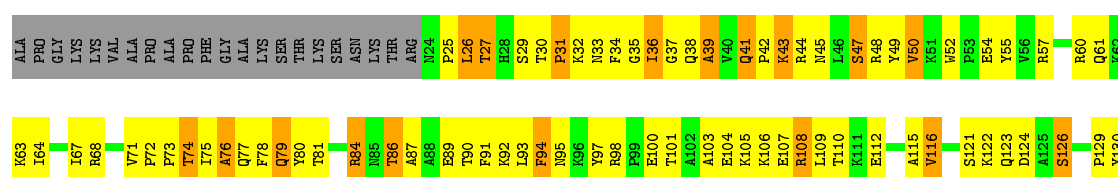
• Molecule 44: 60S ribosomal protein L7-A

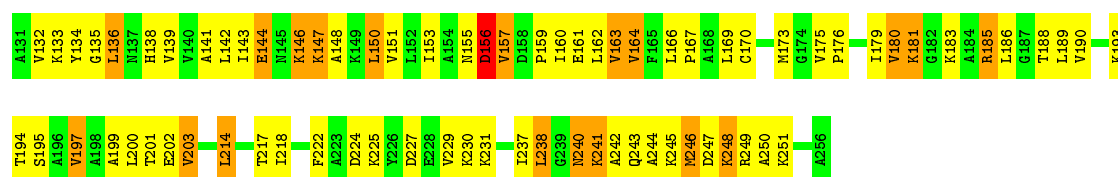
Chain l7: 77% 13% 8%



• Molecule 45: 60S ribosomal protein L8-A

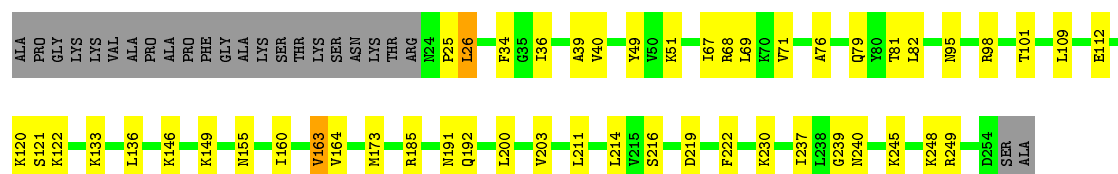
Chain L8: 32% 44% 15% 9%





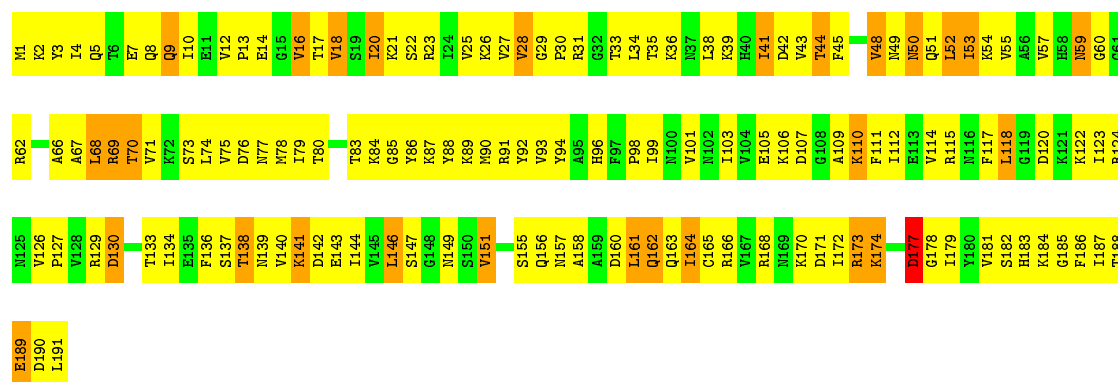
• Molecule 45: 60S ribosomal protein L8-A

Chain l8: 71% 19% 9%



• Molecule 46: 60S ribosomal protein L9-A

Chain L9: 24% 61% 15%



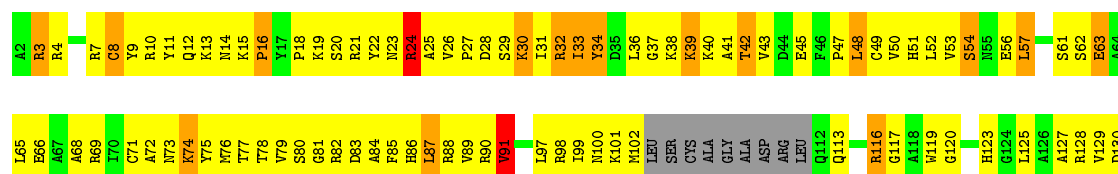
• Molecule 46: 60S ribosomal protein L9-A

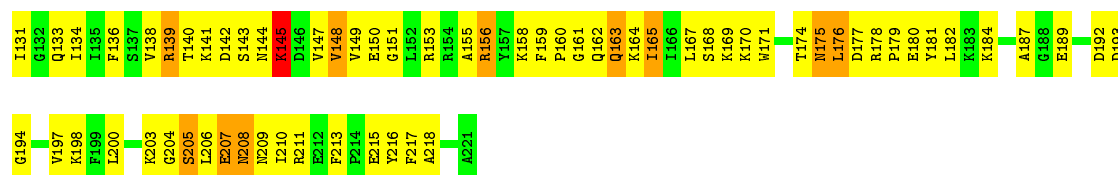
Chain l9: 74% 25%



• Molecule 47: 60S ribosomal protein L10

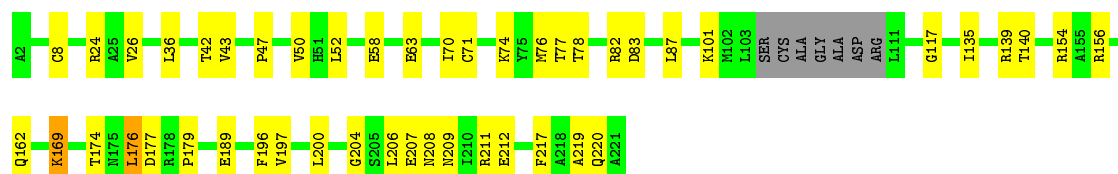
Chain M0: 24% 59% 12%





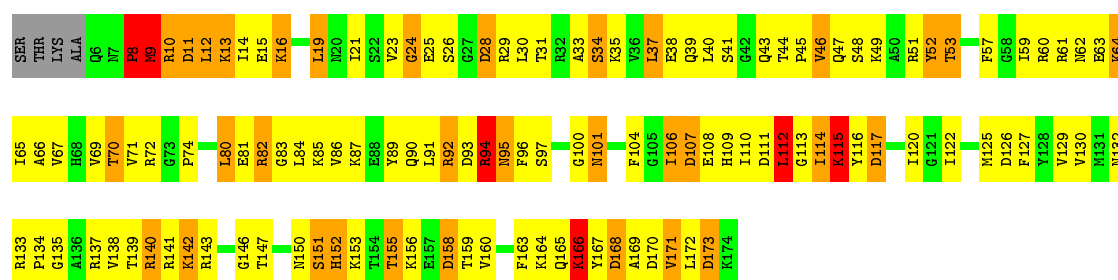
• Molecule 47: 60S ribosomal protein L10

Chain m0: 75% 20% ..



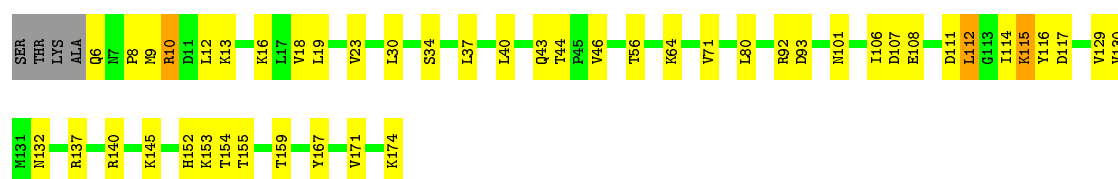
• Molecule 48: 60S ribosomal protein L11-B

Chain M1: 26% 49% 19% ..



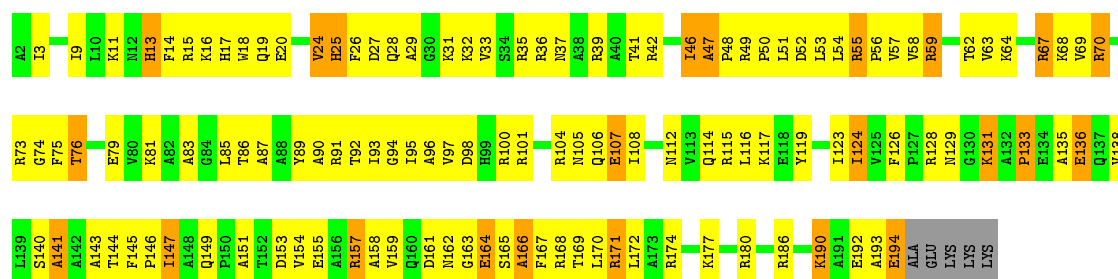
• Molecule 48: 60S ribosomal protein L11-B

Chain m1: 71% 25% ..



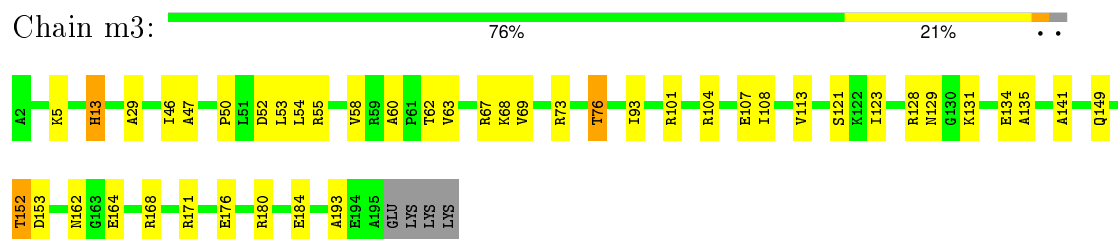
• Molecule 49: 60S ribosomal protein L13-A

Chain M3: 34% 52% 12% ..

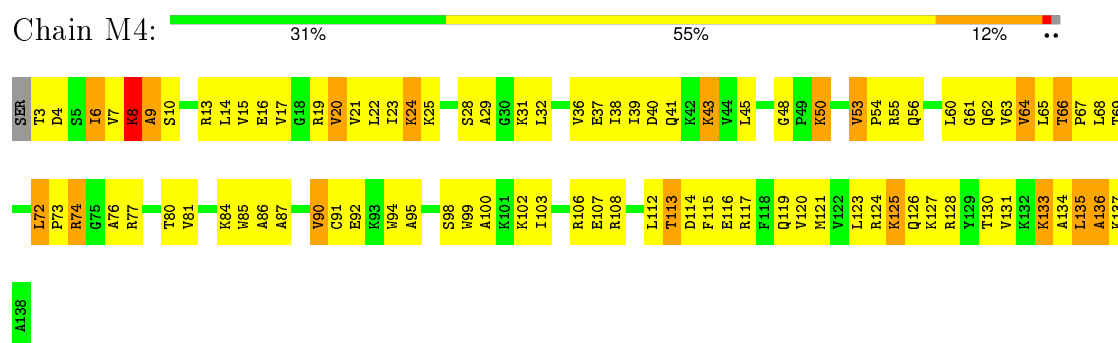




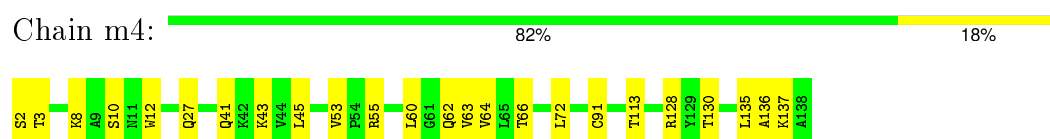
- Molecule 49: 60S ribosomal protein L13-A



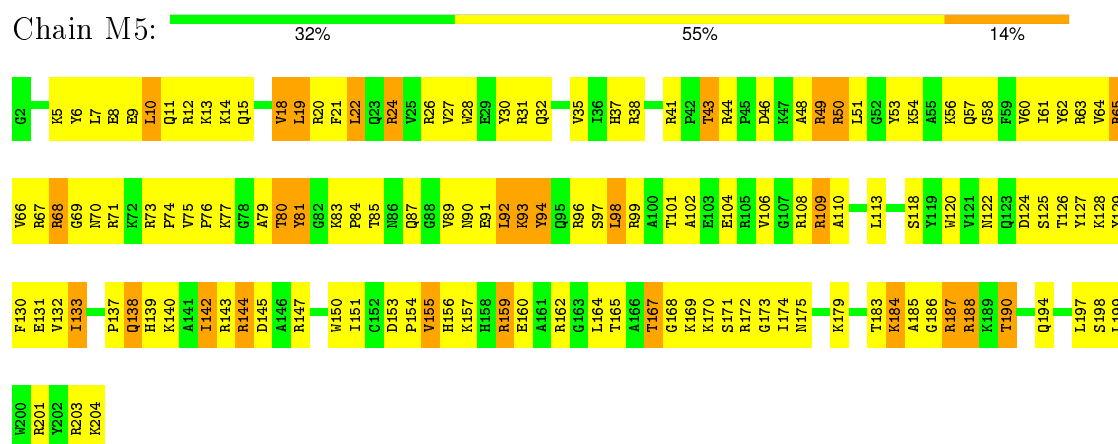
- Molecule 50: 60S ribosomal protein L14-A



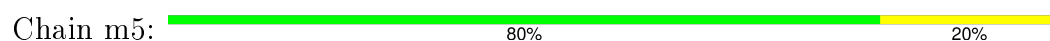
- Molecule 50: 60S ribosomal protein L14-A

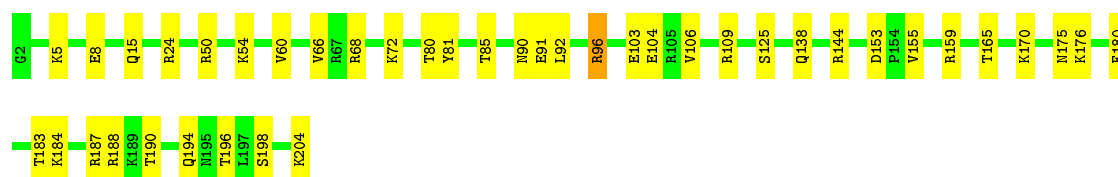


- Molecule 51: 60S ribosomal protein L15-A

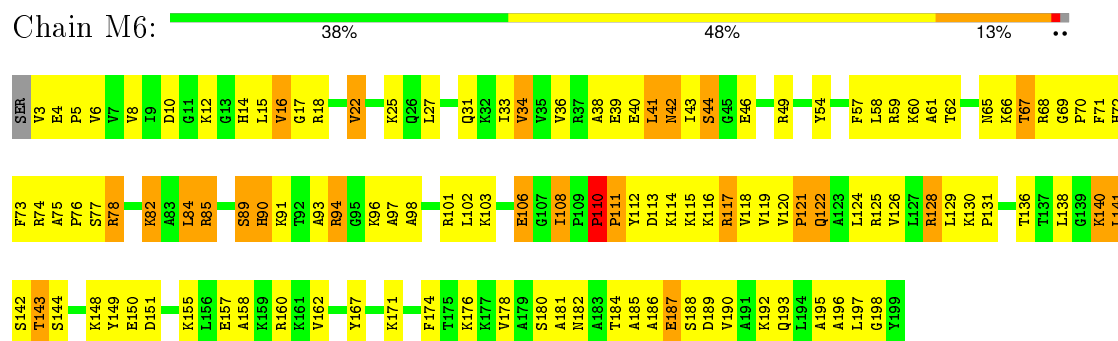


- Molecule 51: 60S ribosomal protein L15-A

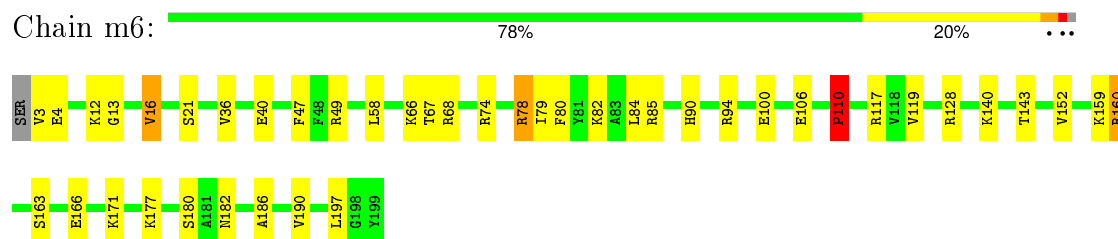




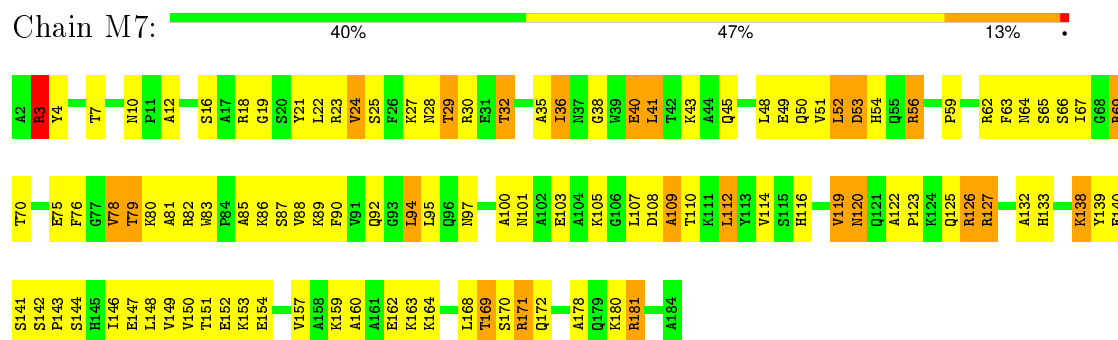
- Molecule 52: 60S ribosomal protein L16-A



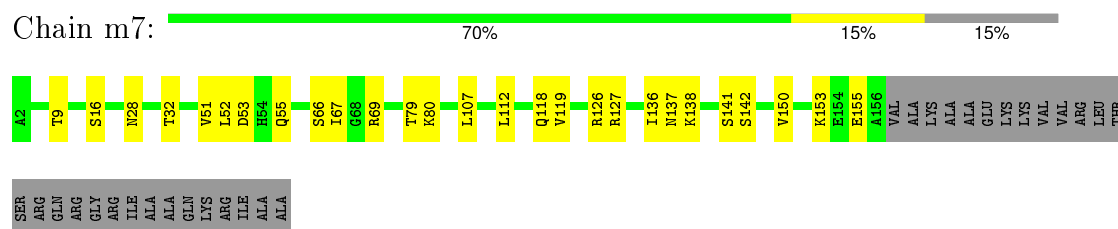
- Molecule 52: 60S ribosomal protein L16-A



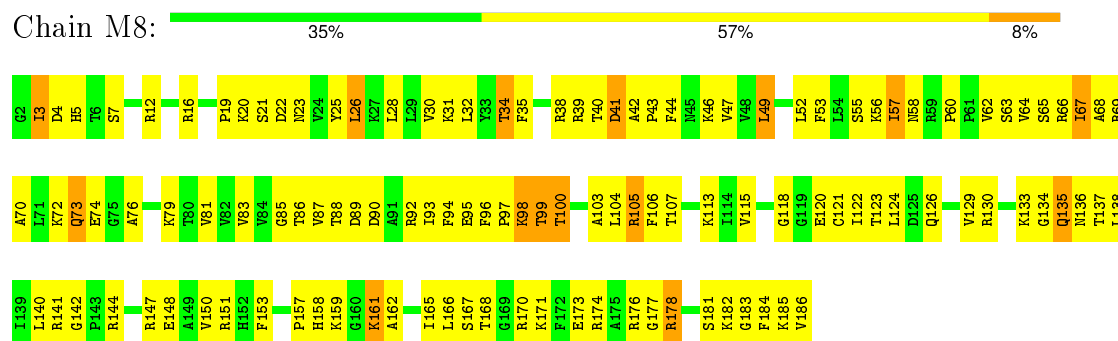
- Molecule 53: 60S ribosomal protein L17-A



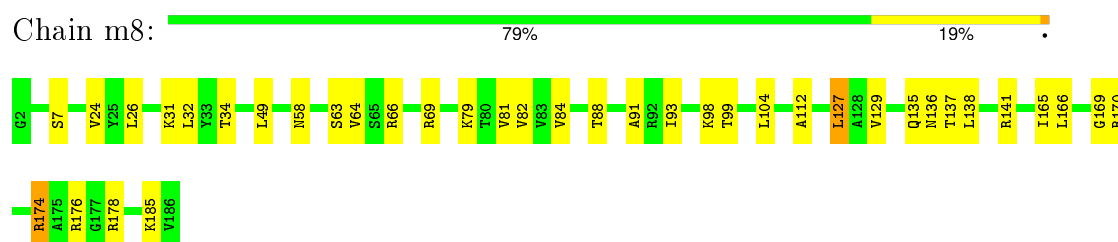
- Molecule 53: 60S ribosomal protein L17-A



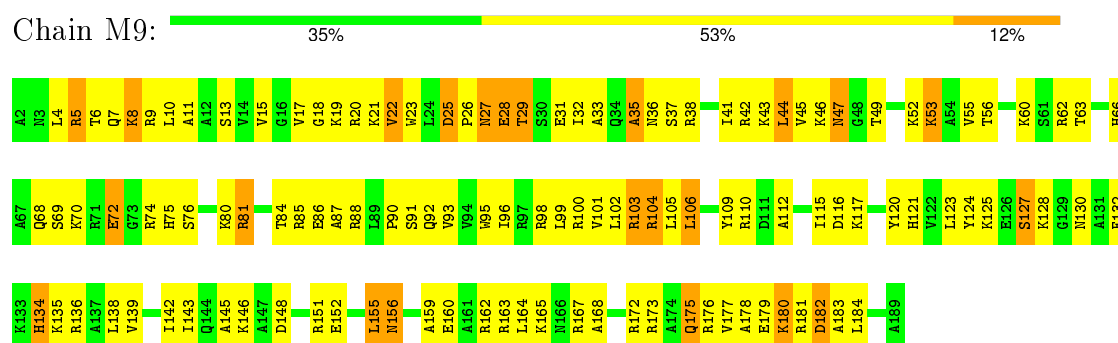
- Molecule 54: 60S ribosomal protein L18-A



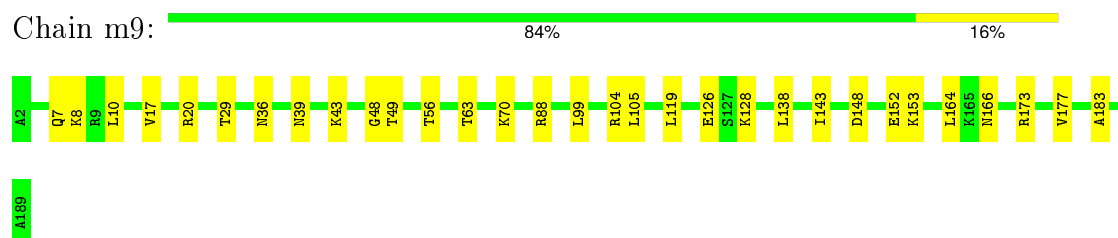
- Molecule 54: 60S ribosomal protein L18-A



- Molecule 55: 60S ribosomal protein L19-A



- Molecule 55: 60S ribosomal protein L19-A

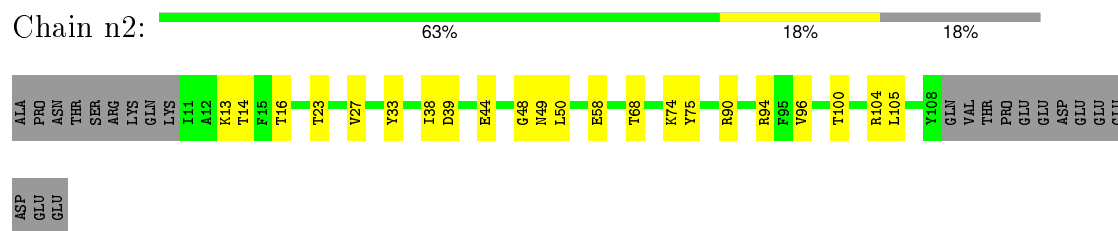


- Molecule 56: 60S ribosomal protein L20-A

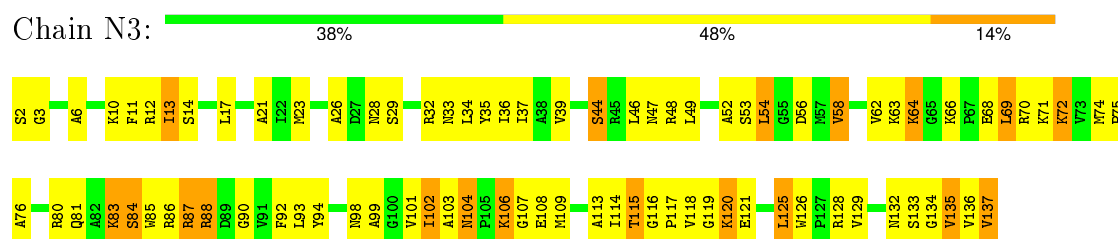




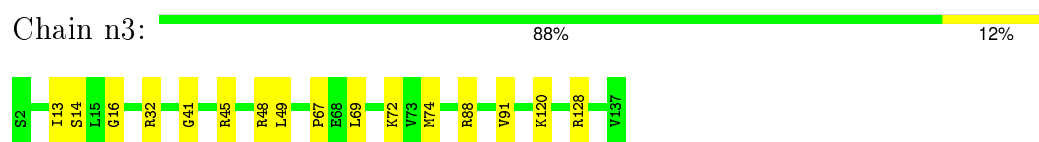
- Molecule 58: 60S ribosomal protein L22-A



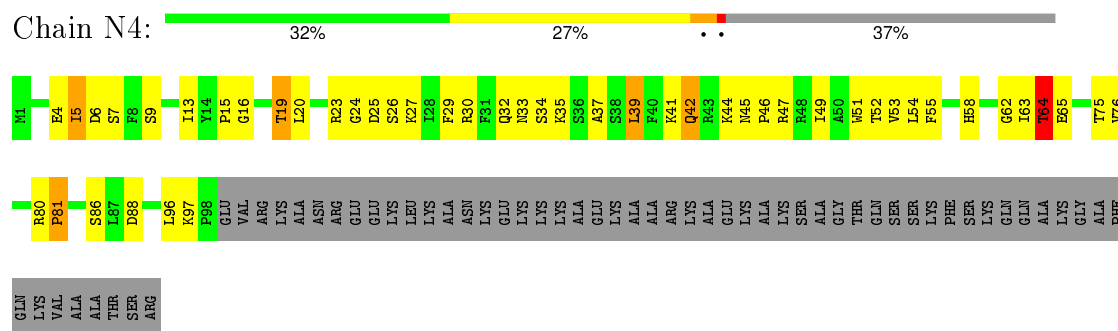
- Molecule 59: 60S ribosomal protein L23-A



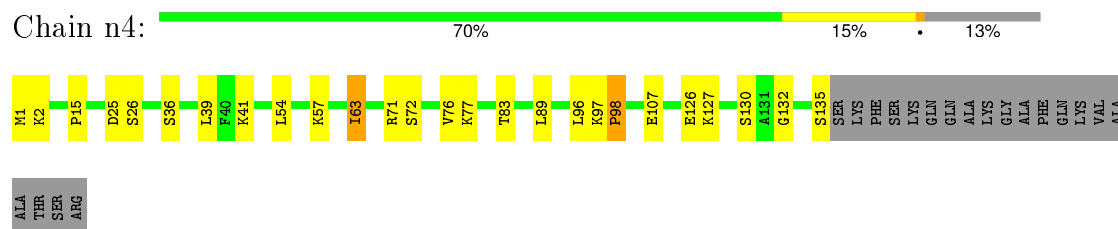
- Molecule 59: 60S ribosomal protein L23-A



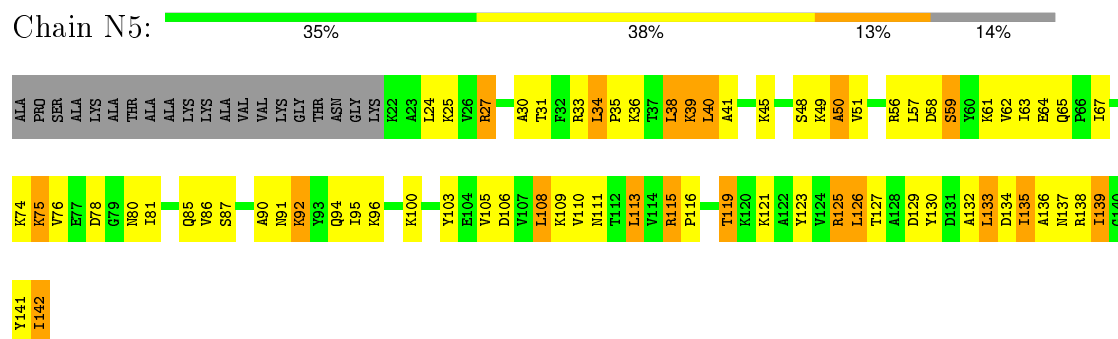
- Molecule 60: 60S ribosomal protein L24-A



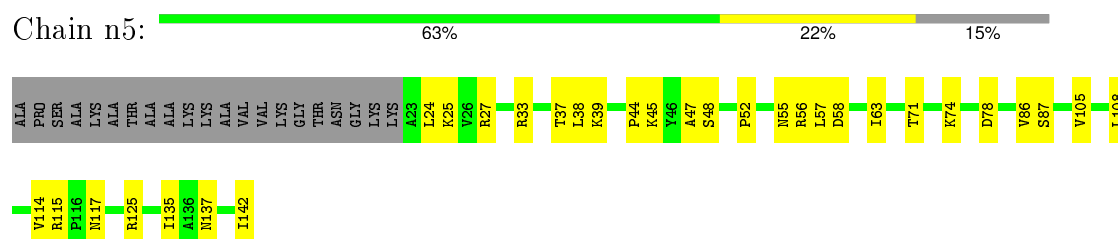
- Molecule 60: 60S ribosomal protein L24-A



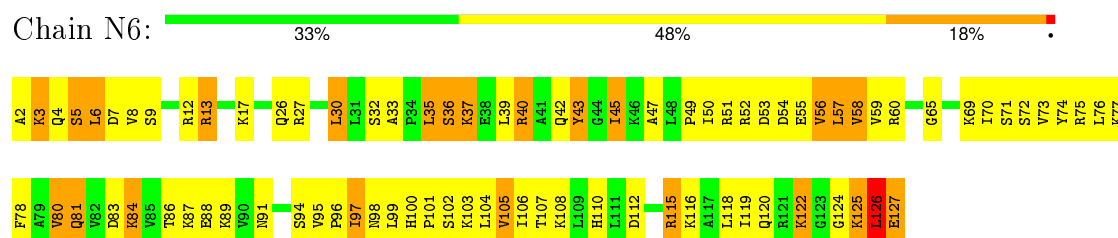
- Molecule 61: 60S ribosomal protein L25



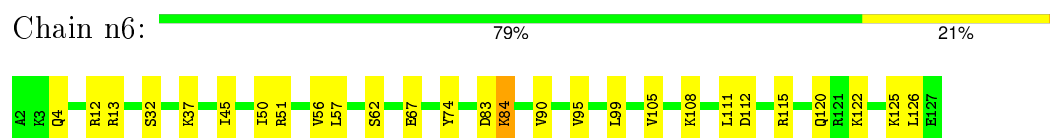
- Molecule 61: 60S ribosomal protein L25



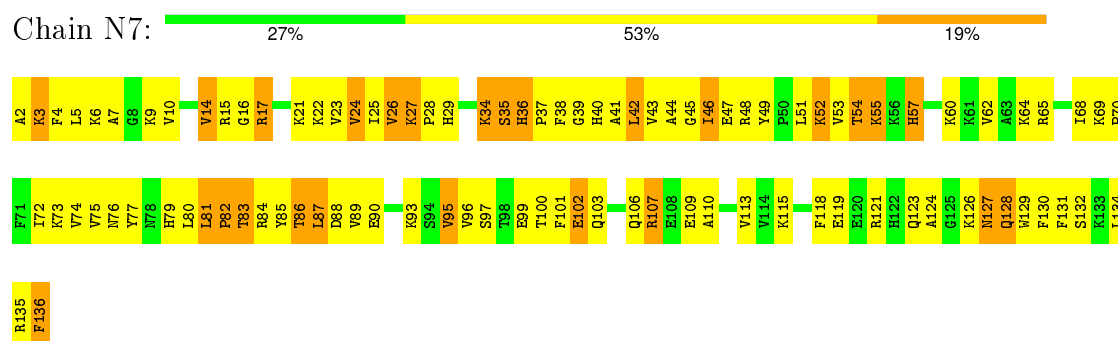
- Molecule 62: 60S ribosomal protein L26-A



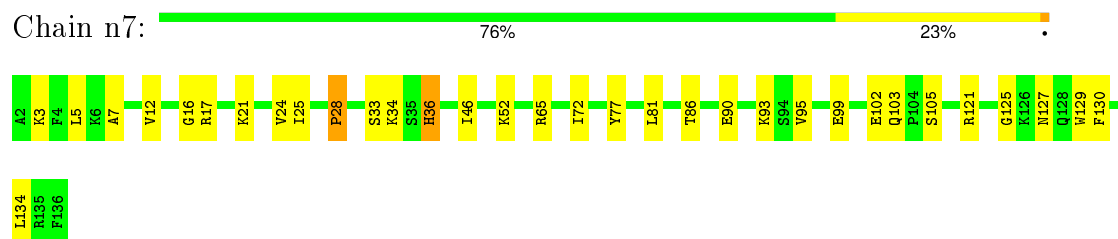
- Molecule 62: 60S ribosomal protein L26-A



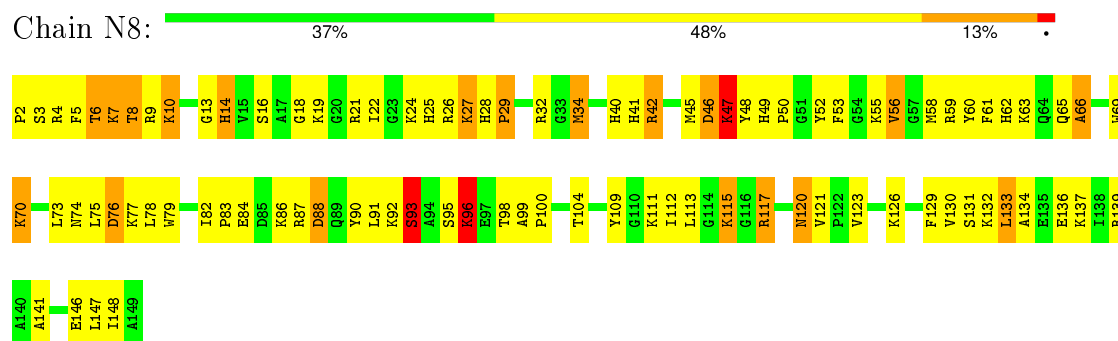
- Molecule 63: 60S ribosomal protein L27-A



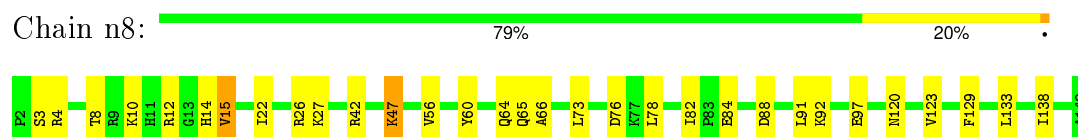
- Molecule 63: 60S ribosomal protein L27-A



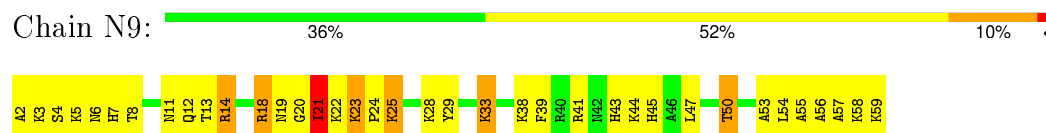
- Molecule 64: 60S ribosomal protein L28



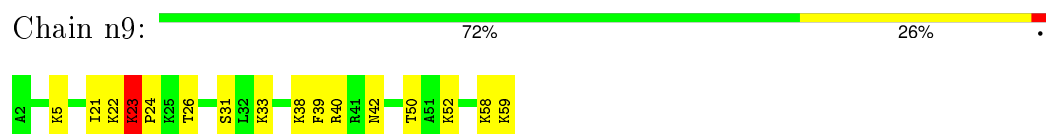
- Molecule 64: 60S ribosomal protein L28



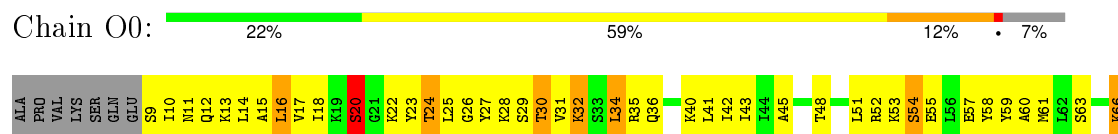
- Molecule 65: 60S ribosomal protein L29

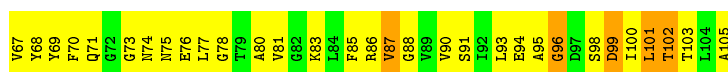


- Molecule 65: 60S ribosomal protein L29



- Molecule 66: 60S ribosomal protein L30





- Molecule 66: 60S ribosomal protein L30

Chain o0: 79% 17% •



- Molecule 67: 60S ribosomal protein L31-A

Chain O1: 30% 53% 13% • •



- Molecule 67: 60S ribosomal protein L31-A

Chain o1: 68% 27% • •



- Molecule 68: 60S ribosomal protein L32

Chain O2: 29% 53% 16% •



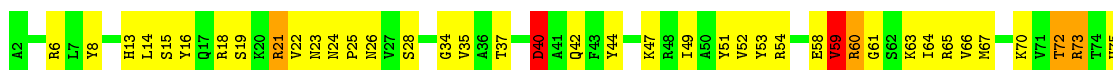
- Molecule 68: 60S ribosomal protein L32

Chain o2: 76% 20% • • •

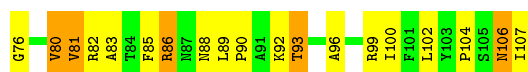


- Molecule 69: 60S ribosomal protein L33-A

Chain O3: 44% 45% 8% •







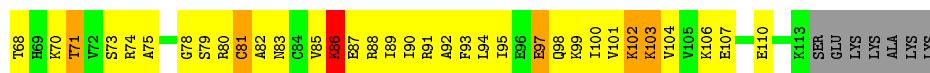
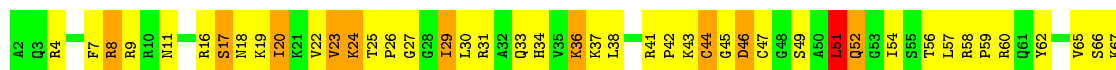
- Molecule 69: 60S ribosomal protein L33-A

Chain o3:  80% 17% .



- Molecule 70: 60S ribosomal protein L34-A

Chain 04:  29% 51% 13% • 6%



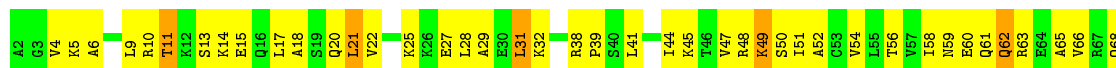
- Molecule 70: 60S ribosomal protein L34-A

Chain 04:  72% 22% 6%




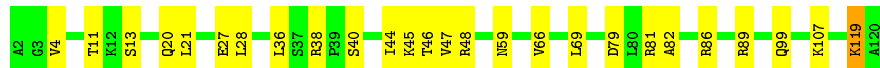
- Molecule 71: 60S ribosomal protein L35-A

Chain O5:  29% 59% 10%



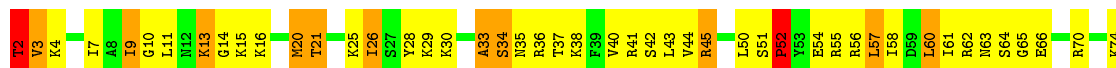
- Molecule 71: 60S ribosomal protein L35-A

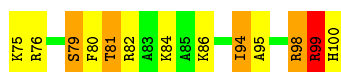
Chain o5:  78% 21%



- Molecule 72: 60S ribosomal protein L36-A

Chain 06:  39% 42% 15%





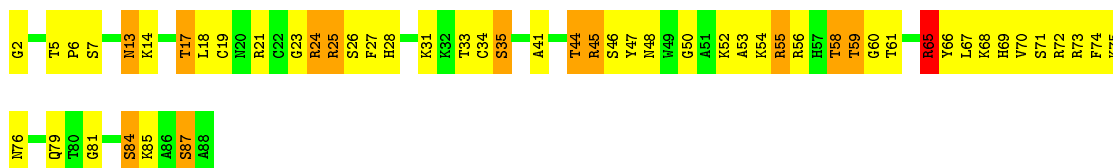
- Molecule 72: 60S ribosomal protein L36-A

Chain o6: 70% 30%



- Molecule 73: 60S ribosomal protein L37-A

Chain O7: 39% 46% 14%



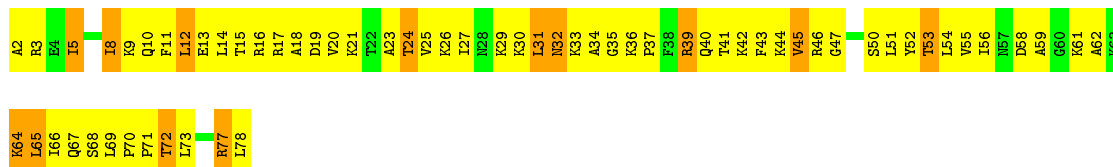
- Molecule 73: 60S ribosomal protein L37-A

Chain o7: 84% 13%



- Molecule 74: 60S ribosomal protein L38

Chain O8: 18% 65% 17%



- Molecule 74: 60S ribosomal protein L38

Chain o8: 75% 23%




- Molecule 75: 60S ribosomal protein L39

Chain O9: 34% 54% 12%



- Molecule 75: 60S ribosomal protein L39

Chain o9:  84% 16%



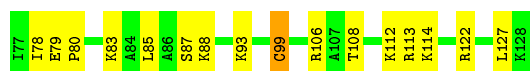
- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain Q0:  42% 42% 13%



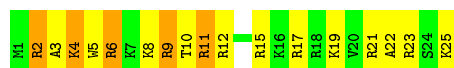
- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain q0:  69% 29%



- Molecule 77: 60S ribosomal protein L41-A

Chain Q1:  32% 48% 20%



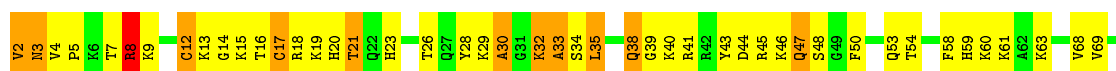
- Molecule 77: 60S ribosomal protein L41-A

Chain q1:  64% 32%




- Molecule 78: 60S ribosomal protein L42-A

Chain Q2:  35% 49% 15%

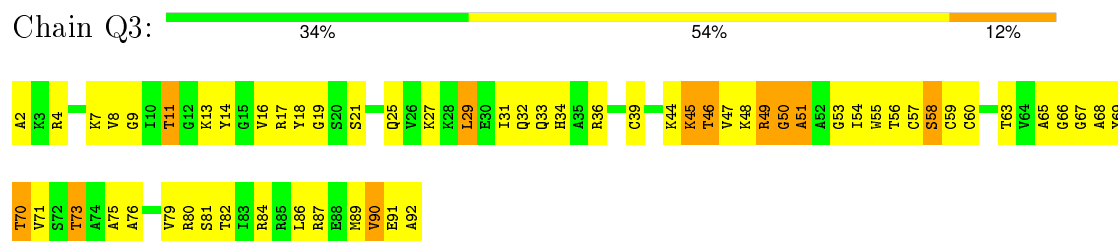


- Molecule 78: 60S ribosomal protein L42-A

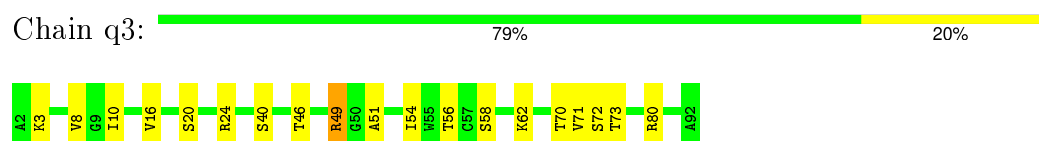
Chain q2:  82% 17%



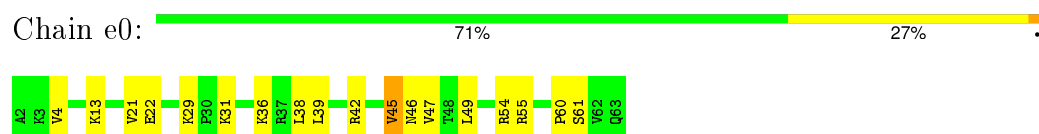
- Molecule 79: 60S ribosomal protein L43-A



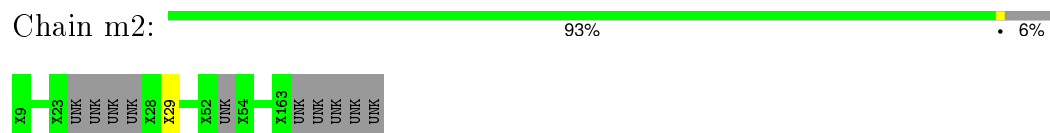
- Molecule 79: 60S ribosomal protein L43-A



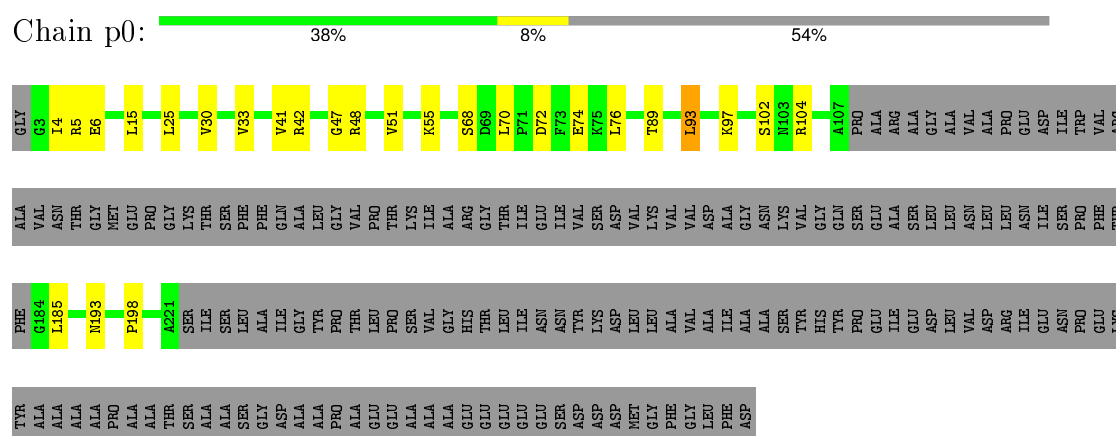
- Molecule 80: 40S ribosomal protein S30-A



- Molecule 81: Unknown Protein m2



- Molecule 82: 60S acidic ribosomal protein P0



- Molecule 83: Unknown Protein p1

Chain p1:  100%

There are no outlier residues recorded for this chain.

- Molecule 84: Unknown Protein p2

Chain p2:  100%

There are no outlier residues recorded for this chain.

## 4 Data and refinement statistics

EDS failed to run properly - this section will therefore be incomplete.

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	435.84Å 286.77Å 303.77Å 90.00° 99.03° 90.00°	Depositor
Resolution (Å)	49.70 – 3.30	Depositor
% Data completeness (in resolution range)	99.4 (49.70-3.30)	Depositor
$R_{merge}$	0.31	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.34 (at 3.33Å)	Xtriage
Refinement program	PHENIX (phenix.refine: dev_1702)	Depositor
R, $R_{free}$	0.202 , 0.255	Depositor
Wilson B-factor (Å <sup>2</sup> )	90.1	Xtriage
Anisotropy	0.099	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.46$ , $\langle L^2 \rangle = 0.28$	Xtriage
Outliers	0 of 1095529 reflections	Xtriage
Total number of atoms	411183	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	79.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.47% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical 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: 3J6, ZN, OHX, 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	2	0.74	6/41698 (0.0%)	1.29	289/64972 (0.4%)
1	6	0.88	18/42765 (0.0%)	1.38	477/66634 (0.7%)
2	S0	0.46	0/1617	0.66	0/2215
2	s0	0.48	0/1623	0.69	0/2222
3	S1	0.39	0/1735	0.65	1/2335 (0.0%)
3	s1	0.50	0/1748	0.70	1/2352 (0.0%)
4	S2	0.50	0/1665	0.66	0/2263
4	s2	0.58	0/1665	0.72	0/2263
5	S3	0.50	0/1759	0.66	0/2368
5	s3	0.42	0/1759	0.60	0/2368
6	S4	0.47	0/2109	0.70	1/2839 (0.0%)
6	s4	0.53	0/2109	0.73	0/2839
7	S5	0.40	0/1629	0.59	0/2202
7	s5	0.46	0/1629	0.69	0/2202
8	S6	0.44	0/1823	0.64	0/2439
8	s6	0.55	0/1779	0.70	0/2379
9	S7	0.43	0/1506	0.65	0/2028
9	s7	0.44	0/1516	0.65	0/2043
10	S8	0.54	0/1514	0.71	2/2021 (0.1%)
10	s8	0.60	0/1514	0.74	0/2021
11	S9	0.47	0/1519	0.65	0/2035
11	s9	0.56	0/1519	0.78	1/2035 (0.0%)
12	C0	0.42	0/790	0.64	1/1069 (0.1%)
12	c0	0.37	0/777	0.66	3/1049 (0.3%)
13	C1	0.58	0/1240	0.70	0/1675
13	c1	0.63	0/1194	0.76	0/1610
14	C2	0.38	0/900	0.64	1/1224 (0.1%)
14	c2	0.29	0/900	0.57	0/1224
15	C3	0.47	0/1215	0.68	2/1638 (0.1%)
15	c3	0.54	0/1215	0.71	0/1638
16	C4	0.40	0/901	0.68	0/1217
16	c4	0.52	0/960	0.74	1/1290 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	C5	0.46	0/998	0.65	0/1341
17	c5	0.48	0/1060	0.70	1/1426 (0.1%)
18	C6	0.45	0/1125	0.68	1/1510 (0.1%)
18	c6	0.51	0/1131	0.70	0/1518
19	C7	0.44	0/935	0.63	0/1254
19	c7	0.47	0/914	0.69	0/1224
20	C8	0.42	0/1211	0.64	0/1628
20	c8	0.50	0/1211	0.71	1/1628 (0.1%)
21	C9	0.45	0/1130	0.65	1/1517 (0.1%)
21	c9	0.50	0/1130	0.67	1/1517 (0.1%)
22	D0	0.46	0/865	0.65	0/1169
22	d0	0.48	0/892	0.68	0/1205
23	D1	0.46	0/693	0.65	0/935
23	d1	0.52	0/693	0.68	0/935
24	D2	0.50	0/1038	0.75	2/1395 (0.1%)
24	d2	0.61	0/1038	0.76	1/1395 (0.1%)
25	D3	0.61	0/1139	0.75	0/1518
25	d3	0.75	0/1139	0.86	2/1518 (0.1%)
26	D4	0.45	0/1087	0.61	0/1449
26	d4	0.51	0/1087	0.71	0/1449
27	D5	0.40	0/571	0.72	0/768
27	d5	0.46	0/566	0.71	0/761
28	D6	0.48	0/782	0.71	0/1047
28	d6	0.65	0/782	0.79	1/1047 (0.1%)
29	D7	0.43	0/620	0.67	0/838
29	d7	0.49	0/620	0.64	0/838
30	D8	0.36	0/499	0.56	0/670
30	d8	0.46	0/499	0.63	0/670
31	D9	0.54	0/452	0.70	1/600 (0.2%)
31	d9	0.48	0/452	0.65	0/600
32	E0	0.48	0/483	0.61	0/643
33	E1	0.43	0/577	0.77	0/770
33	e1	0.39	0/619	0.69	1/822 (0.1%)
34	SR	0.37	0/2494	0.58	0/3393
34	sR	0.42	0/2495	0.59	0/3395
35	SM	0.53	0/1113	0.80	4/1502 (0.3%)
35	sM	0.50	0/683	0.73	1/923 (0.1%)
36	1	1.15	144/75394 (0.2%)	1.64	1754/117545 (1.5%)
36	5	1.19	180/75414 (0.2%)	1.67	1900/117575 (1.6%)
37	3	0.94	1/2883 (0.0%)	1.44	31/4491 (0.7%)
37	7	1.14	3/2883 (0.1%)	1.67	68/4491 (1.5%)
38	4	1.06	2/3746 (0.1%)	1.55	59/5832 (1.0%)
38	8	0.98	1/3746 (0.0%)	1.42	27/5832 (0.5%)



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
39	L2	0.70	0/1948	0.85	4/2617 (0.2%)
39	l2	0.67	0/1946	0.84	0/2614
40	L3	0.73	0/3146	0.82	1/4228 (0.0%)
40	l3	0.83	2/3146 (0.1%)	0.90	2/4228 (0.0%)
41	L4	0.81	2/2800 (0.1%)	0.91	3/3790 (0.1%)
41	l4	0.72	1/2800 (0.0%)	0.87	0/3790
42	L5	0.57	0/2425	0.71	0/3271
42	l5	0.70	0/2408	0.82	4/3248 (0.1%)
43	L6	0.74	0/1260	0.79	0/1694
43	l6	0.75	0/1269	0.82	1/1705 (0.1%)
44	L7	0.76	0/1821	0.88	2/2451 (0.1%)
44	l7	0.84	0/1828	0.88	4/2461 (0.2%)
45	L8	0.56	0/1836	0.69	0/2481
45	l8	0.51	0/1795	0.64	0/2429
46	L9	0.64	0/1539	0.77	0/2073
46	l9	0.80	0/1539	0.84	0/2073
47	M0	0.77	1/1741 (0.1%)	0.83	1/2335 (0.0%)
47	m0	0.77	1/1758 (0.1%)	0.83	0/2358
48	M1	0.51	0/1374	0.70	0/1842
48	m1	0.67	0/1374	0.85	2/1842 (0.1%)
49	M3	0.75	0/1568	0.84	1/2106 (0.0%)
49	m3	0.68	0/1573	0.80	0/2113
50	M4	0.73	0/1068	0.76	0/1438
50	m4	0.82	0/1074	0.82	1/1446 (0.1%)
51	M5	0.72	0/1757	0.84	0/2354
51	m5	0.66	0/1757	0.80	2/2354 (0.1%)
52	M6	0.82	0/1585	0.85	1/2128 (0.0%)
52	m6	0.98	2/1585 (0.1%)	0.96	2/2128 (0.1%)
53	M7	0.80	1/1443 (0.1%)	0.84	2/1944 (0.1%)
53	m7	0.84	0/1250	0.84	0/1683
54	M8	0.78	0/1465	0.91	1/1965 (0.1%)
54	m8	0.71	0/1465	0.94	5/1965 (0.3%)
55	M9	0.56	0/1538	0.66	0/2050
55	m9	0.62	0/1538	0.72	0/2050
56	N0	0.74	0/1481	0.84	3/1990 (0.2%)
56	n0	0.89	0/1481	0.89	0/1990
57	N1	0.76	0/1300	0.78	0/1743
57	n1	0.83	2/1300 (0.2%)	0.82	1/1743 (0.1%)
58	N2	0.46	0/812	0.63	0/1099
58	n2	0.50	0/794	0.67	0/1076
59	N3	0.69	0/1018	0.83	1/1369 (0.1%)
59	n3	0.81	0/1018	0.87	0/1369
60	N4	0.55	0/712	0.66	0/958

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
60	n4	0.67	0/1052	0.79	0/1398
61	N5	0.63	0/979	0.77	1/1321 (0.1%)
61	n5	0.67	0/974	0.79	0/1314
62	N6	0.74	0/1004	0.87	1/1341 (0.1%)
62	n6	0.63	0/1004	0.79	0/1341
63	N7	0.54	0/1118	0.70	0/1497
63	n7	0.49	0/1118	0.65	0/1497
64	N8	0.75	0/1204	0.90	0/1612
64	n8	0.77	0/1204	0.87	0/1612
65	N9	0.65	0/473	0.77	1/629 (0.2%)
65	n9	0.79	0/473	0.97	1/629 (0.2%)
66	O0	0.50	0/751	0.66	0/1008
66	o0	0.52	0/775	0.69	0/1040
67	O1	0.63	0/890	0.72	0/1196
67	o1	0.72	0/897	0.84	0/1205
68	O2	0.84	0/1041	0.90	1/1394 (0.1%)
68	o2	0.81	0/1041	0.90	2/1394 (0.1%)
69	O3	0.89	0/868	0.87	1/1168 (0.1%)
69	o3	0.90	0/868	0.90	0/1168
70	O4	0.59	0/890	0.79	1/1189 (0.1%)
70	o4	0.56	0/890	0.76	0/1189
71	O5	0.71	0/978	0.78	0/1301
71	o5	0.56	0/974	0.68	0/1297
72	O6	0.66	0/778	0.76	0/1034
72	o6	0.55	0/777	0.73	0/1033
73	O7	0.75	0/696	0.99	3/923 (0.3%)
73	o7	0.70	0/696	0.86	1/923 (0.1%)
74	O8	0.52	0/618	0.68	0/826
74	o8	0.50	0/614	0.68	0/822
75	O9	0.74	0/443	0.88	0/588
75	o9	0.66	0/443	0.79	0/588
76	Q0	0.69	0/423	0.82	0/562
76	q0	0.94	1/423 (0.2%)	0.92	0/562
77	Q1	0.61	0/234	0.78	0/300
77	q1	0.78	0/234	1.00	0/300
78	Q2	0.88	1/860 (0.1%)	0.90	0/1136
78	q2	0.79	1/860 (0.1%)	0.77	1/1136 (0.1%)
79	Q3	0.71	0/701	0.81	1/934 (0.1%)
79	q3	0.71	0/701	0.80	0/934
80	e0	0.58	0/499	0.74	0/665
82	p0	0.46	0/1092	0.61	0/1474
All	All	0.90	370/430074 (0.1%)	1.30	4696/631364 (0.7%)

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
6	S4	0	1
7	s5	0	1
9	S7	0	2
9	s7	0	1
10	s8	0	1
11	s9	0	1
16	C4	0	2
18	c6	0	1
19	C7	0	1
25	D3	0	1
27	D5	0	1
28	D6	0	1
33	E1	0	1
39	L2	0	1
39	l2	0	1
40	L3	0	1
43	L6	0	1
43	l6	0	1
44	l7	0	1
45	L8	0	1
46	L9	0	1
48	M1	0	1
52	M6	0	1
52	m6	0	1
54	m8	0	1
56	N0	0	1
56	n0	0	1
59	n3	0	1
64	n8	0	1
65	N9	0	2
67	O1	0	1
72	O6	0	1
81	m2	0	1
All	All	0	36

All (370) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	Q2	17	CYS	CB-SG	12.26	2.03	1.82

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1152	G	N9-C4	-11.12	1.29	1.38
36	5	2726	C	N3-C4	-9.57	1.27	1.33
78	q2	17	CYS	CB-SG	9.14	1.97	1.82
36	1	3181	C	N3-C4	-8.78	1.27	1.33
36	5	1152	G	N3-C4	-8.51	1.29	1.35
36	5	2358	A	N9-C4	-8.41	1.32	1.37
36	1	1116	G	N7-C5	-8.32	1.34	1.39
36	1	2875	U	C2-N3	8.29	1.43	1.37
47	m0	8	CYS	CB-SG	-8.05	1.68	1.82
36	1	1164	G	C6-N1	-8.01	1.33	1.39
47	M0	8	CYS	CB-SG	-7.86	1.68	1.82
36	5	951	A	N7-C5	-7.76	1.34	1.39
36	5	2875	U	C2-N3	7.75	1.43	1.37
36	5	1366	A	N3-C4	-7.68	1.30	1.34
36	1	984	G	N7-C5	-7.58	1.34	1.39
36	5	2704	A	N9-C4	-7.53	1.33	1.37
36	5	960	U	N1-C2	7.45	1.45	1.38
36	1	2812	C	N1-C6	-7.45	1.32	1.37
36	5	876	A	N3-C4	-7.36	1.30	1.34
36	5	1874	A	N9-C4	-7.32	1.33	1.37
36	5	2145	A	C6-N1	-7.29	1.30	1.35
36	5	2943	G	C5-C6	-7.27	1.35	1.42
36	5	646	A	C6-N1	-7.22	1.30	1.35
36	5	2943	G	N7-C5	-7.22	1.34	1.39
36	1	952	A	N3-C4	-7.21	1.30	1.34
36	1	2619	G	C5-C4	-7.15	1.33	1.38
36	5	1159	A	N3-C4	-7.15	1.30	1.34
1	6	1653	C	N1-C6	-7.12	1.32	1.37
36	5	3040	A	N9-C4	-7.12	1.33	1.37
36	5	2799	A	C6-N1	-7.11	1.30	1.35
36	5	2626	A	N3-C4	-7.08	1.30	1.34
36	5	523	A	N3-C4	-7.06	1.30	1.34
57	n1	104	GLU	CB-CG	6.89	1.65	1.52
36	5	3008	A	N9-C4	-6.88	1.33	1.37
36	1	1429	G	N9-C8	-6.87	1.33	1.37
36	5	2640	A	N9-C4	-6.87	1.33	1.37
36	1	2820	A	N9-C4	-6.87	1.33	1.37
36	1	3142	A	N9-C4	-6.86	1.33	1.37
41	L4	94	CYS	CB-SG	-6.85	1.70	1.82
36	1	361	A	C6-N1	-6.80	1.30	1.35
36	1	790	U	C2-N3	-6.78	1.33	1.37
36	5	2375	G	C6-N1	-6.73	1.34	1.39

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1137	A	N9-C4	-6.73	1.33	1.37
36	5	2644	C	N1-C6	-6.72	1.33	1.37
36	5	999	G	C5-C4	-6.72	1.33	1.38
36	5	1199	C	N1-C6	-6.72	1.33	1.37
36	1	3006	A	N9-C4	-6.72	1.33	1.37
36	1	1432	C	N1-C6	-6.71	1.33	1.37
36	5	2333	C	N1-C6	-6.69	1.33	1.37
36	5	953	G	C5-C4	-6.68	1.33	1.38
36	1	699	A	N9-C4	-6.66	1.33	1.37
36	5	869	G	C6-N1	-6.64	1.34	1.39
1	6	1337	A	N9-C4	-6.61	1.33	1.37
36	1	2213	A	N9-C4	-6.60	1.33	1.37
36	5	3139	A	N3-C4	-6.60	1.30	1.34
36	1	1373	A	N3-C4	-6.59	1.30	1.34
36	5	1301	A	C5-C6	-6.58	1.35	1.41
36	5	2993	G	C5-C4	-6.57	1.33	1.38
36	1	33	G	N7-C5	-6.50	1.35	1.39
1	6	119	A	N9-C4	-6.49	1.33	1.37
36	5	2620	G	N3-C4	-6.49	1.30	1.35
36	1	1116	G	N9-C8	-6.45	1.33	1.37
36	1	2419	A	N9-C4	-6.45	1.33	1.37
36	5	642	U	C2-N3	-6.44	1.33	1.37
36	5	2950	G	C5-C6	-6.44	1.35	1.42
36	5	2804	A	N9-C4	-6.43	1.33	1.37
36	5	1451	C	N1-C6	-6.43	1.33	1.37
36	1	34	A	N9-C4	-6.42	1.33	1.37
36	1	942	U	C4-O4	6.42	1.28	1.23
36	1	2639	G	N7-C5	-6.39	1.35	1.39
36	5	1158	A	C5-C6	-6.37	1.35	1.41
36	1	2714	G	N9-C4	-6.36	1.32	1.38
36	5	519	A	N9-C4	-6.34	1.34	1.37
36	5	1085	A	N9-C4	-6.32	1.34	1.37
36	5	647	A	N9-C8	-6.29	1.32	1.37
36	1	2213	A	N3-C4	-6.27	1.31	1.34
36	5	962	A	C5-C6	-6.27	1.35	1.41
36	5	523	A	N9-C4	-6.22	1.34	1.37
36	1	1143	A	N9-C4	-6.22	1.34	1.37
36	1	1304	A	N9-C4	-6.19	1.34	1.37
36	5	1152	G	C5-C6	-6.18	1.36	1.42
36	5	651	G	N7-C5	-6.17	1.35	1.39
36	5	2814	G	N7-C5	-6.15	1.35	1.39
1	6	337	G	C2-N3	6.14	1.37	1.32

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	924	G	C5-C4	-6.13	1.34	1.38
36	5	2381	G	N7-C5	-6.13	1.35	1.39
36	5	1139	G	N9-C4	-6.12	1.33	1.38
36	5	2971	A	N9-C4	6.11	1.41	1.37
36	5	3139	A	N9-C4	-6.11	1.34	1.37
36	5	1338	C	N1-C6	-6.09	1.33	1.37
38	8	14	C	N1-C6	-6.09	1.33	1.37
36	5	2879	C	N1-C6	-6.07	1.33	1.37
36	5	691	A	C6-N1	-6.04	1.31	1.35
36	1	2138	A	N7-C5	-6.02	1.35	1.39
36	1	367	A	N9-C4	-6.02	1.34	1.37
36	1	874	U	C2-N3	-6.00	1.33	1.37
36	1	2402	A	C5-C6	-6.00	1.35	1.41
36	5	2942	C	N1-C6	-6.00	1.33	1.37
36	5	1381	A	N9-C4	-5.99	1.34	1.37
36	5	1099	A	C5-C6	-5.99	1.35	1.41
40	l3	251	CYS	CB-SG	-5.98	1.72	1.81
36	5	1081	U	C2-N3	5.98	1.42	1.37
36	5	1048	A	C6-N1	-5.97	1.31	1.35
36	1	2360	C	N1-C6	-5.97	1.33	1.37
36	1	353	G	N7-C5	-5.96	1.35	1.39
36	1	943	U	C2-N3	-5.96	1.33	1.37
36	1	657	A	C5-C6	-5.96	1.35	1.41
36	5	652	G	N3-C4	-5.96	1.31	1.35
36	5	1462	A	N9-C4	-5.96	1.34	1.37
36	1	2409	G	N7-C5	-5.96	1.35	1.39
36	5	2639	G	N7-C5	-5.94	1.35	1.39
36	1	2406	C	N1-C6	-5.94	1.33	1.37
36	5	1332	A	N9-C4	-5.93	1.34	1.37
36	5	1099	A	N7-C5	-5.93	1.35	1.39
36	5	2833	A	C5-C4	-5.93	1.34	1.38
37	7	55	A	C5-C6	-5.92	1.35	1.41
36	1	695	C	N3-C4	-5.91	1.29	1.33
1	6	1744	A	N9-C4	-5.91	1.34	1.37
36	5	1192	C	N1-C2	5.90	1.46	1.40
36	1	3012	A	N9-C4	-5.90	1.34	1.37
36	5	1434	G	N3-C4	-5.90	1.31	1.35
36	1	920	A	C6-N1	-5.89	1.31	1.35
36	1	699	A	N3-C4	-5.89	1.31	1.34
52	m6	40	GLU	CG-CD	5.89	1.60	1.51
76	q0	99	CYS	CB-SG	-5.89	1.72	1.81
41	L4	65	TRP	CB-CG	-5.88	1.39	1.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	962	A	N7-C5	-5.88	1.35	1.39
36	1	1364	C	N1-C6	-5.87	1.33	1.37
36	1	937	G	C5-C6	-5.85	1.36	1.42
36	1	1401	A	C6-N1	-5.84	1.31	1.35
36	1	2396	G	N7-C5	-5.84	1.35	1.39
36	5	3107	U	C2-N3	-5.83	1.33	1.37
36	5	1330	A	C5-C6	-5.82	1.35	1.41
36	5	2872	A	N9-C4	-5.82	1.34	1.37
36	1	338	A	N7-C5	-5.81	1.35	1.39
36	5	345	G	N3-C4	-5.78	1.31	1.35
36	5	2872	A	N7-C5	-5.77	1.35	1.39
36	5	1048	A	N3-C4	-5.77	1.31	1.34
36	1	1452	A	N9-C4	-5.75	1.34	1.37
1	2	1651	A	N9-C4	-5.75	1.34	1.37
36	5	1429	G	N9-C4	-5.75	1.33	1.38
36	1	2748	A	N9-C4	-5.74	1.34	1.37
36	5	1456	A	N9-C4	-5.73	1.34	1.37
36	5	2743	A	N7-C5	-5.70	1.35	1.39
36	5	397	A	N3-C4	-5.69	1.31	1.34
36	5	1390	A	N3-C4	-5.69	1.31	1.34
36	5	1195	A	N9-C4	-5.68	1.34	1.37
36	1	2805	G	C8-N7	-5.67	1.27	1.30
36	5	3091	A	C6-N1	-5.65	1.31	1.35
36	5	2954	U	N3-C4	5.65	1.43	1.38
1	2	1657	U	N1-C2	5.64	1.43	1.38
36	1	2402	A	C5-C4	-5.64	1.34	1.38
36	5	1207	G	C5-C4	-5.64	1.34	1.38
1	6	1137	A	C5-C4	-5.64	1.34	1.38
36	5	2891	U	C2-N3	-5.64	1.33	1.37
37	3	82	G	C6-N1	-5.63	1.35	1.39
36	5	1886	A	N7-C5	-5.63	1.35	1.39
36	1	2986	U	N1-C2	-5.63	1.33	1.38
37	7	118	A	N3-C4	-5.63	1.31	1.34
36	5	1303	A	N9-C4	-5.62	1.34	1.37
36	1	2610	G	C5-C6	-5.61	1.36	1.42
36	5	706	A	N9-C4	-5.61	1.34	1.37
36	5	3086	A	N3-C4	-5.61	1.31	1.34
36	5	2291	A	N9-C4	-5.60	1.34	1.37
36	5	3000	A	N9-C4	-5.60	1.34	1.37
36	5	2809	C	N1-C6	-5.60	1.33	1.37
36	1	2382	G	N1-C2	-5.59	1.33	1.37
36	1	1133	A	N7-C5	-5.59	1.35	1.39

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2875	U	N3-C4	5.59	1.43	1.38
36	1	1468	A	N9-C4	-5.58	1.34	1.37
36	1	2797	C	N1-C6	-5.58	1.33	1.37
36	5	2876	C	N3-C4	-5.58	1.30	1.33
57	n1	104	GLU	CG-CD	5.55	1.60	1.51
53	M7	138	LYS	CD-CE	5.55	1.65	1.51
1	2	1750	A	N7-C5	-5.54	1.35	1.39
36	1	2762	A	N3-C4	-5.54	1.31	1.34
36	1	1296	C	N3-C4	-5.54	1.30	1.33
36	5	2996	U	N1-C2	5.54	1.43	1.38
36	1	939	U	N1-C2	-5.53	1.33	1.38
36	1	657	A	C5-C4	-5.52	1.34	1.38
36	5	1048	A	C5-C4	-5.52	1.34	1.38
36	1	2404	A	C6-N1	5.50	1.39	1.35
1	6	1745	G	N9-C8	-5.50	1.33	1.37
36	5	2743	A	N9-C8	-5.50	1.33	1.37
36	1	1854	C	N3-C4	-5.50	1.30	1.33
36	1	2726	C	N3-C4	-5.50	1.30	1.33
36	1	2966	G	C5-C4	-5.49	1.34	1.38
36	5	1320	C	N3-C4	-5.49	1.30	1.33
1	2	1730	A	N9-C4	-5.49	1.34	1.37
1	6	163	G	N9-C4	-5.49	1.33	1.38
36	5	866	A	N9-C4	-5.49	1.34	1.37
36	1	1206	G	C2-N3	-5.48	1.28	1.32
36	1	2979	U	C2-N3	-5.48	1.33	1.37
36	5	1117	G	C5-C6	-5.48	1.36	1.42
36	5	3004	C	N1-C2	-5.48	1.34	1.40
36	1	790	U	N3-C4	-5.47	1.33	1.38
36	5	3362	A	N3-C4	-5.47	1.31	1.34
36	1	659	G	C5-C4	-5.47	1.34	1.38
36	5	421	G	C6-N1	-5.46	1.35	1.39
36	5	1048	A	C5-C6	-5.46	1.36	1.41
36	1	1330	A	C5-C6	-5.46	1.36	1.41
36	5	2823	G	N7-C5	-5.45	1.35	1.39
52	m6	80	PHE	CB-CG	-5.45	1.42	1.51
36	1	994	G	C6-N1	-5.45	1.35	1.39
36	5	43	A	C5-C6	-5.44	1.36	1.41
36	5	1115	G	P-O5'	-5.44	1.54	1.59
36	1	925	A	N3-C4	-5.44	1.31	1.34
36	5	657	A	N3-C4	-5.43	1.31	1.34
36	5	2398	A	N3-C4	-5.43	1.31	1.34
36	5	2398	A	C5-C4	-5.43	1.34	1.38

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1330	A	N9-C4	-5.43	1.34	1.37
41	14	94	CYS	CB-SG	-5.43	1.73	1.81
36	1	3139	A	N9-C4	-5.42	1.34	1.37
36	1	3180	A	C5-C6	-5.42	1.36	1.41
36	5	2823	G	C5-C6	-5.42	1.36	1.42
36	1	59	G	N7-C5	-5.41	1.36	1.39
36	1	28	C	N1-C6	-5.41	1.33	1.37
36	5	642	U	N1-C2	-5.41	1.33	1.38
36	5	3092	C	N1-C6	-5.40	1.33	1.37
36	1	2725	U	C2-N3	-5.40	1.33	1.37
37	7	56	A	C5-C6	-5.39	1.36	1.41
36	1	957	C	N1-C2	-5.39	1.34	1.40
36	1	627	U	N1-C2	-5.38	1.33	1.38
1	6	630	A	N7-C5	-5.38	1.36	1.39
36	1	1150	A	N9-C4	-5.38	1.34	1.37
36	5	1476	G	N3-C4	-5.38	1.31	1.35
36	1	818	C	N1-C6	-5.38	1.33	1.37
36	5	1587	A	N9-C4	-5.37	1.34	1.37
1	6	1524	A	N9-C4	-5.35	1.34	1.37
36	1	2762	A	N9-C4	-5.34	1.34	1.37
36	5	3382	U	N1-C2	5.34	1.43	1.38
36	1	2169	G	C5-C6	5.34	1.47	1.42
36	1	1167	U	C2-N3	-5.33	1.34	1.37
36	5	2399	A	N9-C4	-5.33	1.34	1.37
36	5	1450	G	C2-N3	-5.33	1.28	1.32
36	1	2924	U	N1-C2	-5.33	1.33	1.38
38	4	52	A	N3-C4	-5.32	1.31	1.34
36	5	367	A	N3-C4	-5.32	1.31	1.34
36	5	952	A	N9-C4	-5.32	1.34	1.37
1	2	334	G	N9-C4	-5.32	1.33	1.38
36	1	1308	A	C6-N1	-5.32	1.31	1.35
36	5	3005	A	N9-C8	-5.32	1.33	1.37
36	1	2363	A	N9-C4	-5.31	1.34	1.37
36	5	1362	G	N9-C8	-5.31	1.34	1.37
36	1	1147	G	N7-C5	-5.30	1.36	1.39
36	5	2280	A	N9-C4	-5.30	1.34	1.37
36	5	923	C	N1-C6	-5.29	1.33	1.37
36	5	3310	A	C6-N1	-5.29	1.31	1.35
36	1	1143	A	N3-C4	-5.29	1.31	1.34
36	1	393	U	C2-N3	-5.28	1.34	1.37
36	1	3306	U	C2-N3	-5.28	1.34	1.37
36	5	343	U	C2-N3	-5.28	1.34	1.37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	4	19	C	N3-C4	-5.28	1.30	1.33
36	1	1002	A	N9-C4	-5.27	1.34	1.37
36	1	1150	A	N3-C4	-5.27	1.31	1.34
36	1	2286	U	C2-N3	-5.27	1.34	1.37
36	1	3306	U	N3-C4	-5.27	1.33	1.38
36	5	691	A	N3-C4	-5.27	1.31	1.34
36	5	2959	C	N1-C6	-5.26	1.33	1.37
36	5	818	C	N1-C6	-5.26	1.33	1.37
36	1	3130	A	N7-C5	-5.25	1.36	1.39
1	6	986	G	N7-C5	-5.25	1.36	1.39
36	1	505	G	N3-C4	-5.25	1.31	1.35
40	13	7	GLU	CG-CD	5.25	1.59	1.51
36	5	953	G	N3-C4	-5.24	1.31	1.35
36	1	1373	A	N9-C4	-5.24	1.34	1.37
36	5	3245	A	N7-C5	-5.24	1.36	1.39
36	5	1115	G	N7-C5	-5.24	1.36	1.39
36	5	1794	G	N9-C8	-5.24	1.34	1.37
36	1	1186	G	N1-C2	-5.23	1.33	1.37
36	5	830	A	C5-C6	-5.23	1.36	1.41
36	1	910	G	N9-C8	-5.23	1.34	1.37
36	5	945	C	N1-C6	-5.22	1.34	1.37
36	5	2799	A	N3-C4	-5.22	1.31	1.34
36	1	2692	A	N7-C5	-5.22	1.36	1.39
36	1	2187	G	N7-C5	-5.21	1.36	1.39
36	1	3006	A	N3-C4	-5.21	1.31	1.34
36	1	2358	A	N3-C4	-5.21	1.31	1.34
36	5	1180	A	N3-C4	-5.21	1.31	1.34
36	5	2283	G	C5-C6	-5.20	1.37	1.42
36	5	2243	A	N3-C4	-5.20	1.31	1.34
36	5	1794	G	N9-C4	-5.20	1.33	1.38
36	5	1868	G	C5-C6	-5.19	1.37	1.42
1	2	992	A	N9-C4	-5.18	1.34	1.37
36	1	936	A	C5-C6	-5.17	1.36	1.41
36	1	1369	A	N9-C4	-5.17	1.34	1.37
36	1	1430	U	N1-C2	-5.17	1.33	1.38
36	5	2950	G	N7-C5	-5.17	1.36	1.39
36	5	367	A	C5-C4	-5.17	1.35	1.38
36	5	1174	G	C5-C4	-5.17	1.34	1.38
36	1	1307	G	N1-C2	-5.17	1.33	1.37
36	1	2640	A	C6-N1	-5.17	1.31	1.35
36	5	1454	A	N9-C4	-5.17	1.34	1.37
36	1	421	G	C5-C4	-5.16	1.34	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	657	A	N3-C4	-5.16	1.31	1.34
36	1	657	A	N7-C5	-5.16	1.36	1.39
36	1	803	C	N3-C4	-5.16	1.30	1.33
36	5	1194	G	C5-C4	-5.16	1.34	1.38
36	1	423	A	N7-C5	-5.16	1.36	1.39
36	1	967	A	N3-C4	-5.16	1.31	1.34
36	5	2866	U	N1-C2	5.15	1.43	1.38
36	5	3103	A	N3-C4	-5.15	1.31	1.34
36	1	701	G	N3-C4	-5.14	1.31	1.35
36	5	947	G	N3-C4	-5.14	1.31	1.35
36	1	651	G	N9-C8	-5.14	1.34	1.37
36	1	670	C	N1-C6	-5.14	1.34	1.37
36	1	2394	G	N1-C2	-5.14	1.33	1.37
36	1	1394	A	N9-C4	-5.13	1.34	1.37
36	5	1046	A	N3-C4	-5.13	1.31	1.34
36	5	1195	A	C5-C4	-5.13	1.35	1.38
36	1	1192	C	N1-C2	5.13	1.45	1.40
36	5	3245	A	C5-C6	-5.13	1.36	1.41
36	1	1129	A	N7-C5	-5.13	1.36	1.39
1	6	992	A	C5-C6	-5.13	1.36	1.41
36	5	1116	G	N9-C8	-5.12	1.34	1.37
36	5	647	A	C5-C4	-5.12	1.35	1.38
36	5	3138	U	N1-C2	-5.12	1.33	1.38
36	1	339	C	N3-C4	-5.12	1.30	1.33
36	1	2960	C	N3-C4	-5.12	1.30	1.33
36	1	1392	G	C5-C4	-5.11	1.34	1.38
36	5	45	A	N9-C4	-5.11	1.34	1.37
36	5	3026	G	C5-C6	-5.11	1.37	1.42
36	5	406	G	N3-C4	-5.11	1.31	1.35
36	1	2875	U	N3-C4	5.11	1.43	1.38
36	1	884	A	N9-C4	-5.10	1.34	1.37
1	6	397	A	N9-C4	-5.10	1.34	1.37
36	5	2840	C	N1-C6	-5.09	1.34	1.37
36	1	938	C	C4-C5	-5.09	1.38	1.43
36	5	651	G	N3-C4	-5.09	1.31	1.35
36	5	2419	A	N7-C5	-5.09	1.36	1.39
36	1	2868	U	C2-N3	-5.08	1.34	1.37
36	5	2748	A	C5-C6	-5.08	1.36	1.41
36	5	3178	A	N9-C4	-5.08	1.34	1.37
36	5	3330	A	C5-C4	-5.07	1.35	1.38
36	1	635	G	C5-C6	-5.07	1.37	1.42
36	5	896	A	C5-C4	-5.07	1.35	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1370	G	C6-N1	-5.07	1.36	1.39
36	5	3047	U	N3-C4	-5.06	1.33	1.38
36	1	1180	A	N9-C4	-5.06	1.34	1.37
36	5	55	G	N9-C4	-5.06	1.33	1.38
1	6	65	A	C5-C6	-5.06	1.36	1.41
36	5	635	G	C5-C6	-5.06	1.37	1.42
36	5	3032	A	N7-C5	-5.06	1.36	1.39
36	5	2659	G	N7-C5	-5.06	1.36	1.39
36	1	2335	G	C5-C4	-5.05	1.34	1.38
36	5	1193	A	N7-C5	-5.05	1.36	1.39
36	1	1372	C	C2-N3	-5.04	1.31	1.35
36	1	27	C	N1-C6	-5.04	1.34	1.37
1	6	1137	A	N3-C4	-5.04	1.31	1.34
36	1	360	G	N7-C5	-5.04	1.36	1.39
36	5	1309	U	C2-N3	-5.04	1.34	1.37
36	5	2312	A	N3-C4	-5.03	1.31	1.34
36	1	651	G	C5-C4	-5.03	1.34	1.38
36	1	1429	G	C5-C4	-5.03	1.34	1.38
36	5	2857	C	N1-C6	-5.03	1.34	1.37
36	1	2611	U	C2-N3	-5.03	1.34	1.37
1	6	1764	C	N1-C6	-5.03	1.34	1.37
36	5	2138	A	N7-C5	-5.03	1.36	1.39
36	1	2866	U	C4-O4	5.02	1.27	1.23
36	5	981	U	N1-C2	5.02	1.43	1.38
1	6	1027	A	N9-C4	-5.02	1.34	1.37
36	5	1536	G	C2-N3	-5.01	1.28	1.32
36	1	635	G	N7-C5	-5.00	1.36	1.39
36	1	2626	A	N3-C4	-5.00	1.31	1.34
36	1	2644	C	N1-C6	-5.00	1.34	1.37
36	1	2617	U	N3-C4	-5.00	1.33	1.38
36	5	952	A	C5-C6	-5.00	1.36	1.41
36	5	2637	A	N7-C5	-5.00	1.36	1.39
36	5	2899	C	C2-O2	-5.00	1.20	1.24

All (4696) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1116	G	O5'-P-OP1	-18.97	87.94	110.70
36	5	1152	G	C2-N3-C4	-18.00	102.90	111.90
36	5	1152	G	N3-C4-C5	17.23	137.22	128.60
36	5	1152	G	N3-C4-N9	-15.73	116.56	126.00
36	1	1495	U	C5-C6-N1	-15.66	114.87	122.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	639	G	N1-C6-O6	14.78	128.77	119.90
36	5	2199	G	N1-C6-O6	14.34	128.50	119.90
36	5	1158	A	N1-C6-N6	14.13	127.08	118.60
36	5	424	G	C5-C6-O6	-13.84	120.30	128.60
36	5	1179	A	O5'-P-OP1	-13.82	93.26	105.70
36	1	1838	G	N1-C6-O6	13.28	127.87	119.90
36	5	960	U	N3-C2-O2	-12.66	113.34	122.20
36	5	1152	G	C5-N7-C8	-12.50	98.05	104.30
36	1	282	G	C8-N9-C4	-12.33	101.47	106.40
36	5	2950	G	C4-C5-N7	12.21	115.69	110.80
36	1	435	C	C6-N1-C2	12.21	125.18	120.30
36	5	1306	G	C5-C6-O6	-12.20	121.28	128.60
36	1	790	U	N3-C2-O2	-12.15	113.70	122.20
36	1	1166	G	N1-C6-O6	11.87	127.02	119.90
36	1	2819	A	O5'-P-OP2	-11.72	95.15	105.70
36	5	1200	A	N1-C6-N6	11.64	125.58	118.60
36	1	979	U	N3-C2-O2	-11.47	114.17	122.20
36	5	2726	C	C6-N1-C2	-11.47	115.71	120.30
36	5	1897	G	N1-C6-O6	11.47	126.78	119.90
36	5	3245	A	C2-N3-C4	-11.38	104.91	110.60
1	6	448	C	C6-N1-C2	-11.34	115.76	120.30
36	5	2943	G	N1-C6-O6	11.25	126.65	119.90
36	1	2870	C	C2-N1-C1'	-11.22	106.46	118.80
36	1	2636	A	C8-N9-C4	-11.20	101.32	105.80
36	5	1186	G	O5'-P-OP2	-11.19	95.63	105.70
36	5	426	G	O5'-P-OP2	-11.18	95.64	105.70
36	1	639	G	C5-C6-O6	-11.18	121.89	128.60
36	5	2875	U	C5-C6-N1	11.14	128.27	122.70
36	1	957	C	N1-C2-O2	-11.14	112.22	118.90
36	1	2610	G	N1-C6-O6	11.13	126.58	119.90
36	1	645	A	N1-C6-N6	-11.06	111.96	118.60
36	5	2943	G	C6-C5-N7	-11.06	123.76	130.40
36	1	636	C	N3-C4-C5	11.03	126.31	121.90
36	1	2714	G	N3-C4-C5	11.02	134.11	128.60
36	1	2610	G	C5-C6-O6	-10.99	122.01	128.60
36	1	2868	U	N1-C2-O2	10.94	130.46	122.80
36	5	1152	G	N1-C6-O6	10.93	126.46	119.90
36	5	2893	C	N3-C4-C5	-10.85	117.56	121.90
36	5	2971	A	C2-N3-C4	10.85	116.02	110.60
36	5	3245	A	N7-C8-N9	10.81	119.20	113.80
1	6	1026	A	O5'-P-OP1	-10.76	96.02	105.70
36	5	96	G	O5'-P-OP2	-10.75	96.03	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	17	C	C6-N1-C2	-10.74	116.00	120.30
36	1	369	A	C8-N9-C4	-10.72	101.51	105.80
36	1	1838	G	C6-C5-N7	-10.68	123.99	130.40
36	5	41	G	C4-C5-N7	10.65	115.06	110.80
36	1	2121	G	N1-C6-O6	-10.64	113.52	119.90
36	5	968	G	O5'-P-OP1	-10.64	96.13	105.70
36	1	363	G	C5-C6-O6	-10.62	122.23	128.60
36	5	1150	A	O5'-P-OP2	-10.60	96.16	105.70
36	1	59	G	N1-C6-O6	10.57	126.24	119.90
36	5	2819	A	O5'-P-OP2	-10.57	96.19	105.70
36	5	2375	G	N1-C6-O6	-10.52	113.59	119.90
36	5	3245	A	C5-N7-C8	-10.52	98.64	103.90
36	1	2617	U	C5-C4-O4	10.46	132.18	125.90
36	5	1306	G	N1-C6-O6	10.44	126.16	119.90
36	1	2714	G	N3-C4-N9	-10.44	119.74	126.00
36	5	2950	G	C5-C6-O6	-10.44	122.34	128.60
36	1	2247	G	N1-C6-O6	10.42	126.15	119.90
36	5	966	U	N3-C2-O2	-10.40	114.92	122.20
36	5	960	U	N1-C2-O2	10.39	130.07	122.80
36	5	2872	A	N1-C6-N6	10.38	124.83	118.60
36	1	1495	U	C4-C5-C6	10.38	125.93	119.70
36	5	2899	C	C6-N1-C2	-10.36	116.15	120.30
36	5	2704	A	O5'-P-OP1	-10.34	96.39	105.70
36	5	1481	A	O5'-P-OP2	-10.33	96.41	105.70
36	5	776	U	N3-C2-O2	-10.29	115.00	122.20
36	5	2400	G	N1-C6-O6	10.27	126.06	119.90
36	1	1308	A	O5'-P-OP2	-10.22	96.50	105.70
36	1	885	U	C5-C6-N1	-10.22	117.59	122.70
36	1	2283	G	N1-C6-O6	10.19	126.02	119.90
36	5	2715	A	N9-C4-C5	10.18	109.87	105.80
36	5	1117	G	O5'-P-OP1	-10.14	96.58	105.70
36	5	640	U	N1-C2-O2	-10.13	115.71	122.80
36	5	2954	U	C2-N1-C1'	10.12	129.84	117.70
36	1	70	A	N1-C6-N6	10.07	124.64	118.60
36	5	869	G	N1-C6-O6	-10.07	113.86	119.90
36	5	2726	C	C5-C4-N4	10.04	127.23	120.20
36	5	2943	G	C4-C5-N7	10.03	114.81	110.80
35	SM	135	ALA	N-CA-CB	10.02	124.13	110.10
36	5	2942	C	O5'-P-OP2	-10.02	96.68	105.70
36	5	280	U	O5'-P-OP2	-10.01	96.69	105.70
36	5	776	U	N1-C2-N3	9.98	120.89	114.90
36	1	1166	G	C5-C6-O6	-9.96	122.62	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	652	G	O5'-P-OP2	-9.94	96.76	105.70
36	1	2618	G	N1-C6-O6	-9.93	113.94	119.90
36	5	3181	C	N3-C2-O2	-9.92	114.96	121.90
36	5	2954	U	O4'-C1'-N1	9.89	116.11	108.20
36	1	2846	U	C5-C4-O4	9.88	131.83	125.90
38	8	80	A	C8-N9-C4	-9.88	101.85	105.80
36	5	2350	C	O5'-P-OP2	-9.87	96.82	105.70
36	1	59	G	C5-C6-O6	-9.84	122.70	128.60
36	5	1158	A	C5-C6-N6	-9.83	115.84	123.70
36	5	2822	U	O5'-P-OP1	-9.82	96.86	105.70
36	5	283	G	C4-C5-N7	9.80	114.72	110.80
36	5	2950	G	C6-C5-N7	-9.79	124.53	130.40
36	1	346	C	N1-C2-O2	-9.79	113.03	118.90
36	5	41	G	N1-C6-O6	9.77	125.76	119.90
36	1	979	U	C6-N1-C2	-9.76	115.14	121.00
36	5	1099	A	N1-C6-N6	9.72	124.44	118.60
36	1	3025	C	C6-N1-C2	9.72	124.19	120.30
36	1	2374	C	N3-C2-O2	-9.71	115.10	121.90
36	1	59	G	C6-C5-N7	-9.71	124.57	130.40
36	1	3110	C	C6-N1-C2	-9.71	116.42	120.30
36	5	776	U	C5-C6-N1	-9.71	117.84	122.70
36	1	645	A	N9-C4-C5	9.70	109.68	105.80
36	1	1437	C	C6-N1-C2	-9.68	116.43	120.30
36	1	1838	G	C5-C6-O6	-9.64	122.81	128.60
36	1	2827	U	N1-C2-N3	9.63	120.68	114.90
1	2	553	G	N1-C6-O6	9.61	125.67	119.90
36	5	2715	A	N1-C6-N6	-9.59	112.85	118.60
1	6	163	G	N3-C4-N9	-9.59	120.25	126.00
36	5	420	G	C8-N9-C4	9.56	110.22	106.40
36	5	3245	A	C8-N9-C4	-9.54	101.98	105.80
36	1	648	C	O5'-P-OP1	-9.52	97.13	105.70
36	5	1117	G	C4-C5-N7	9.52	114.61	110.80
36	5	3245	A	C6-C5-N7	-9.52	125.63	132.30
36	1	2726	C	N3-C4-N4	-9.49	111.36	118.00
36	1	3278	C	N1-C2-O2	9.48	124.59	118.90
36	1	347	G	C4-C5-N7	9.47	114.59	110.80
36	1	1116	G	C4-C5-C6	9.45	124.47	118.80
36	1	2764	C	C5-C6-N1	9.44	125.72	121.00
36	5	428	A	N1-C6-N6	9.44	124.27	118.60
36	1	407	A	O5'-P-OP2	-9.44	97.20	105.70
36	1	1179	A	O5'-P-OP1	-9.43	97.22	105.70
36	5	2315	G	O5'-P-OP1	-9.43	97.22	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2643	A	O5'-P-OP1	-9.41	97.23	105.70
36	1	2400	G	C6-C5-N7	-9.40	124.76	130.40
36	1	2643	A	C8-N9-C4	9.38	109.55	105.80
36	1	1403	C	C6-N1-C2	9.36	124.05	120.30
36	1	2639	G	C6-C5-N7	-9.35	124.79	130.40
36	5	1434	G	N9-C4-C5	9.34	109.14	105.40
36	1	651	G	O5'-P-OP2	-9.34	97.29	105.70
36	5	922	U	C5-C6-N1	-9.31	118.04	122.70
36	5	2199	G	C5-C6-O6	-9.30	123.02	128.60
36	5	1152	G	C4-C5-N7	9.29	114.52	110.80
36	5	2186	U	O5'-P-OP2	-9.29	97.34	105.70
36	5	404	G	O5'-P-OP2	-9.28	97.34	105.70
36	1	335	G	C5-C6-O6	-9.28	123.03	128.60
36	5	1006	A	O5'-P-OP2	-9.28	97.35	105.70
36	5	1879	A	N1-C6-N6	9.27	124.17	118.60
36	1	1308	A	C8-N9-C4	-9.27	102.09	105.80
36	1	1296	C	C6-N1-C2	-9.25	116.60	120.30
36	5	343	U	O5'-P-OP1	-9.25	97.38	105.70
36	5	2928	C	C6-N1-C2	-9.24	116.60	120.30
1	2	314	C	O5'-P-OP1	-9.21	97.41	105.70
36	5	1450	G	N1-C6-O6	9.21	125.43	119.90
36	5	41	G	C5-C6-O6	-9.21	123.07	128.60
1	6	1700	C	N1-C2-O2	9.20	124.42	118.90
1	2	1096	C	N1-C2-O2	9.20	124.42	118.90
36	1	638	C	O5'-P-OP2	-9.19	97.43	105.70
36	1	1902	G	C6-C5-N7	-9.19	124.89	130.40
36	1	691	A	O5'-P-OP1	-9.18	97.44	105.70
36	5	2634	U	C5-C4-O4	-9.16	120.41	125.90
36	5	2359	C	C6-N1-C2	9.15	123.96	120.30
36	5	952	A	N1-C6-N6	9.14	124.09	118.60
36	1	609	G	O5'-P-OP2	-9.14	97.48	105.70
36	1	2142	A	C2-N3-C4	9.13	115.17	110.60
73	O7	65	ARG	NE-CZ-NH1	9.12	124.86	120.30
36	1	2808	A	N1-C6-N6	9.11	124.07	118.60
36	5	1181	U	C5-C6-N1	-9.11	118.15	122.70
36	5	1116	G	N3-C4-C5	-9.11	124.05	128.60
36	1	1320	C	C6-N1-C2	-9.10	116.66	120.30
36	5	2794	G	C5-C6-O6	-9.09	123.15	128.60
36	1	3181	C	C5-C4-N4	9.08	126.56	120.20
1	2	1773	C	C6-N1-C2	-9.07	116.67	120.30
36	5	1116	G	C4-C5-C6	9.05	124.23	118.80
36	1	1307	G	N1-C6-O6	-9.05	114.47	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1837	U	O5'-P-OP1	-9.03	97.58	105.70
36	1	1152	G	O5'-P-OP1	-9.02	97.59	105.70
36	5	559	A	O5'-P-OP2	-9.01	97.59	105.70
36	1	2868	U	N3-C2-O2	-9.00	115.90	122.20
36	5	2950	G	C5-N7-C8	-8.99	99.80	104.30
37	3	90	U	O5'-P-OP2	-8.98	97.62	105.70
38	4	94	C	C6-N1-C2	8.98	123.89	120.30
1	2	73	U	O4'-C1'-N1	8.97	115.38	108.20
36	5	1452	A	N1-C6-N6	8.97	123.98	118.60
36	1	2402	A	C5-C6-N6	-8.97	116.53	123.70
36	5	2295	A	C8-N9-C4	-8.96	102.21	105.80
36	5	2954	U	C6-N1-C1'	-8.95	108.67	121.20
36	1	145	G	N1-C6-O6	8.94	125.26	119.90
36	5	1468	A	N1-C6-N6	8.93	123.95	118.60
36	5	2726	C	N3-C4-N4	-8.92	111.75	118.00
36	5	3143	C	N1-C2-O2	-8.91	113.55	118.90
36	1	1167	U	C5-C6-N1	-8.91	118.24	122.70
36	5	592	A	O5'-P-OP1	-8.91	97.68	105.70
36	5	2283	G	C5-C6-O6	-8.90	123.26	128.60
36	5	1200	A	C5-C6-N6	-8.88	116.59	123.70
36	5	1099	A	C5-C6-N6	-8.88	116.59	123.70
36	5	2290	C	C6-N1-C2	8.88	123.85	120.30
36	5	2199	G	C6-C5-N7	-8.87	125.08	130.40
36	5	1513	G	C8-N9-C4	-8.87	102.85	106.40
36	1	794	U	O5'-P-OP2	-8.86	97.72	105.70
36	5	2283	G	C4-C5-N7	8.86	114.34	110.80
36	1	1196	C	C6-N1-C2	8.85	123.84	120.30
36	5	3245	A	N1-C2-N3	8.85	133.72	129.30
36	5	2398	A	N1-C6-N6	-8.84	113.30	118.60
36	5	3313	U	O5'-P-OP2	-8.83	97.75	105.70
36	1	3217	C	C2-N1-C1'	8.83	128.51	118.80
36	5	2943	G	C5-C6-O6	-8.81	123.31	128.60
36	1	2619	G	O5'-P-OP1	-8.81	97.77	105.70
36	1	960	U	C6-N1-C2	8.80	126.28	121.00
36	5	3099	C	C6-N1-C2	8.80	123.82	120.30
36	5	1117	G	C5-C6-O6	-8.79	123.33	128.60
36	1	1151	U	C6-N1-C2	-8.77	115.73	121.00
36	5	283	G	C5-C6-O6	-8.77	123.34	128.60
36	1	960	U	C5-C6-N1	-8.77	118.32	122.70
36	1	3344	A	N7-C8-N9	8.76	118.18	113.80
36	5	2411	U	C5-C6-N1	-8.76	118.32	122.70
36	1	679	U	O5'-P-OP2	-8.75	97.83	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3092	C	C6-N1-C2	8.74	123.80	120.30
38	8	80	A	N7-C8-N9	8.73	118.17	113.80
36	1	890	C	C6-N1-C2	-8.73	116.81	120.30
36	1	1114	U	C4-C5-C6	-8.72	114.47	119.70
1	2	1291	G	C2-N3-C4	-8.72	107.54	111.90
36	5	1449	A	C4-C5-C6	8.72	121.36	117.00
1	6	1634	C	C2-N1-C1'	8.71	128.39	118.80
1	6	364	G	C5-C6-O6	-8.71	123.37	128.60
37	7	10	C	C2-N1-C1'	8.70	128.37	118.80
36	5	1879	A	C6-C5-N7	-8.69	126.22	132.30
1	2	334	G	N3-C4-C5	8.67	132.94	128.60
1	6	1	U	C2-N1-C1'	8.66	128.10	117.70
1	2	639	U	N3-C2-O2	-8.65	116.14	122.20
36	5	3143	C	N3-C4-C5	-8.65	118.44	121.90
36	1	2247	G	C6-C5-N7	-8.65	125.21	130.40
1	6	29	U	C5-C4-O4	8.65	131.09	125.90
1	6	631	G	O5'-P-OP2	-8.64	97.92	105.70
36	1	984	G	N3-C4-C5	-8.64	124.28	128.60
36	5	2715	A	C8-N9-C4	-8.64	102.34	105.80
36	1	27	C	O5'-P-OP1	-8.64	97.93	105.70
36	5	1428	A	O5'-P-OP2	-8.63	97.93	105.70
36	1	3181	C	N3-C4-N4	-8.63	111.96	118.00
38	4	103	G	N3-C4-C5	-8.62	124.29	128.60
36	5	2283	G	O5'-P-OP2	-8.61	97.95	105.70
36	5	2996	U	N1-C2-O2	8.61	128.83	122.80
36	5	361	A	N1-C6-N6	-8.61	113.44	118.60
36	1	1156	C	N3-C2-O2	-8.60	115.88	121.90
36	5	3245	A	N1-C6-N6	8.60	123.76	118.60
36	5	2732	G	O5'-P-OP2	-8.59	97.97	105.70
36	5	1897	G	C5-C6-O6	-8.59	123.45	128.60
36	1	639	G	C6-C5-N7	-8.59	125.25	130.40
36	5	1390	A	N9-C4-C5	8.58	109.23	105.80
36	1	1151	U	O5'-P-OP2	8.57	120.99	110.70
36	1	1362	G	C8-N9-C4	8.56	109.83	106.40
1	6	858	G	O4'-C1'-N9	8.56	115.05	108.20
48	m1	112	LEU	CA-CB-CG	8.56	134.98	115.30
36	1	3265	C	C6-N1-C2	8.54	123.72	120.30
36	1	1381	A	O5'-P-OP1	-8.54	98.02	105.70
1	6	542	A	O4'-C1'-N9	8.53	115.02	108.20
36	5	2726	C	N3-C2-O2	-8.53	115.93	121.90
36	1	917	A	O5'-P-OP2	-8.53	98.03	105.70
36	5	1127	G	N1-C6-O6	-8.52	114.79	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	907	G	N9-C4-C5	-8.52	101.99	105.40
36	5	1316	C	N3-C4-N4	8.51	123.96	118.00
36	1	645	A	C8-N9-C4	-8.50	102.40	105.80
36	5	1079	A	N1-C6-N6	-8.50	113.50	118.60
36	1	1116	G	C6-C5-N7	-8.50	125.30	130.40
36	1	2379	U	N1-C2-O2	-8.49	116.86	122.80
36	5	1075	A	C8-N9-C4	8.49	109.20	105.80
36	5	2715	A	C5-C6-N6	8.48	130.49	123.70
36	1	797	U	O5'-P-OP1	-8.47	98.07	105.70
36	5	966	U	N1-C2-O2	8.47	128.73	122.80
36	1	1902	G	C4-C5-N7	8.46	114.19	110.80
36	1	1367	G	O5'-P-OP1	-8.46	98.09	105.70
36	5	651	G	C8-N9-C4	-8.46	103.02	106.40
36	1	2714	G	C2-N3-C4	-8.46	107.67	111.90
36	5	1158	A	C6-C5-N7	-8.46	126.38	132.30
1	6	426	G	O5'-P-OP2	-8.45	98.09	105.70
36	5	424	G	N1-C6-O6	8.45	124.97	119.90
36	5	1316	C	N3-C4-C5	-8.44	118.52	121.90
36	1	2400	G	N1-C6-O6	8.44	124.97	119.90
36	5	2818	U	O5'-P-OP1	-8.44	98.11	105.70
36	1	919	U	O5'-P-OP2	-8.44	98.11	105.70
36	1	1729	A	O5'-P-OP2	-8.43	98.11	105.70
36	1	2889	C	N1-C2-O2	8.43	123.96	118.90
1	6	1700	C	C2-N1-C1'	8.43	128.07	118.80
36	5	1379	G	C8-N9-C4	8.43	109.77	106.40
36	5	939	U	O5'-P-OP2	-8.42	98.12	105.70
36	5	2866	U	N3-C2-O2	-8.42	116.31	122.20
36	1	1838	G	N9-C4-C5	-8.41	102.03	105.40
36	5	2572	C	N1-C2-O2	8.41	123.95	118.90
36	1	1495	U	C2-N1-C1'	-8.41	107.61	117.70
36	5	2246	G	O5'-P-OP2	8.40	120.79	110.70
36	1	655	C	N1-C2-O2	-8.40	113.86	118.90
36	1	939	U	N1-C2-O2	-8.40	116.92	122.80
36	5	923	C	C6-N1-C2	8.40	123.66	120.30
36	5	1450	G	N3-C2-N2	-8.39	114.03	119.90
36	5	2358	A	C8-N9-C4	8.39	109.16	105.80
36	1	1343	A	O5'-P-OP2	-8.39	98.15	105.70
36	1	984	G	C8-N9-C4	-8.38	103.05	106.40
36	1	274	G	N1-C6-O6	8.37	124.92	119.90
36	1	421	G	C2-N3-C4	8.37	116.08	111.90
36	1	24	G	C2-N3-C4	-8.36	107.72	111.90
37	7	101	G	N1-C6-O6	8.36	124.91	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	639	U	N1-C2-O2	8.35	128.65	122.80
36	1	406	G	O4'-C1'-N9	8.34	114.87	108.20
36	5	424	G	C4-C5-N7	8.33	114.13	110.80
36	5	1868	G	C6-C5-N7	-8.33	125.40	130.40
37	7	37	G	N9-C4-C5	-8.33	102.07	105.40
36	1	1902	G	N1-C6-O6	8.32	124.89	119.90
36	5	3154	C	N1-C2-O2	8.31	123.89	118.90
36	5	1306	G	C4-C5-N7	8.31	114.12	110.80
36	1	2827	U	C5-C4-O4	8.30	130.88	125.90
36	1	421	G	C5-C6-N1	8.30	115.65	111.50
36	5	1049	C	C6-N1-C2	-8.30	116.98	120.30
36	1	1414	G	N1-C6-O6	8.29	124.87	119.90
36	1	386	A	N1-C6-N6	8.28	123.57	118.60
36	5	2893	C	C6-N1-C2	-8.28	116.99	120.30
36	5	666	A	N1-C6-N6	-8.27	113.64	118.60
36	1	1114	U	C5-C6-N1	8.26	126.83	122.70
36	1	3260	G	N1-C6-O6	8.26	124.85	119.90
36	5	2944	U	C5-C6-N1	8.25	126.83	122.70
1	6	119	A	C2-N3-C4	-8.25	106.47	110.60
36	1	3134	A	O5'-P-OP2	-8.25	98.28	105.70
36	5	2176	U	N3-C2-O2	-8.24	116.43	122.20
38	4	32	C	N3-C4-C5	8.24	125.20	121.90
36	1	2726	C	N3-C2-O2	-8.23	116.14	121.90
36	5	1493	G	O5'-P-OP1	-8.23	98.29	105.70
36	1	1148	G	C5-C6-O6	-8.23	123.67	128.60
36	1	1484	U	P-O3'-C3'	8.23	129.57	119.70
36	1	925	A	C6-N1-C2	-8.22	113.67	118.60
36	1	3362	A	O4'-C1'-N9	8.22	114.78	108.20
36	5	2287	C	C6-N1-C2	-8.22	117.01	120.30
36	1	2572	C	C2-N1-C1'	8.22	127.84	118.80
37	3	95	A	N1-C6-N6	8.22	123.53	118.60
1	6	1025	A	N1-C6-N6	8.22	123.53	118.60
36	1	716	A	N1-C6-N6	8.21	123.53	118.60
36	5	1307	G	P-O3'-C3'	8.21	129.56	119.70
36	1	1192	C	N1-C2-O2	8.21	123.83	118.90
36	5	1884	A	N1-C6-N6	8.21	123.53	118.60
36	1	2431	C	O5'-P-OP2	-8.21	98.31	105.70
36	5	3244	A	O5'-P-OP2	-8.20	98.32	105.70
37	7	9	C	C6-N1-C2	8.20	123.58	120.30
36	5	640	U	N3-C4-O4	8.20	125.14	119.40
36	5	2145	A	C8-N9-C4	-8.20	102.52	105.80
36	5	1153	A	N1-C6-N6	8.20	123.52	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1323	G	C5-C6-O6	-8.20	123.68	128.60
36	5	1114	U	OP2-P-O3'	8.19	123.22	105.20
36	1	1365	G	N3-C4-C5	-8.18	124.51	128.60
36	1	107	A	N1-C6-N6	8.18	123.51	118.60
36	5	1370	G	N3-C4-C5	-8.17	124.52	128.60
36	5	2572	C	C2-N1-C1'	8.16	127.78	118.80
1	6	364	G	N3-C4-N9	8.16	130.90	126.00
36	5	2290	C	O5'-P-OP2	-8.16	98.36	105.70
37	7	87	G	N1-C6-O6	8.15	124.79	119.90
36	5	3181	C	C6-N1-C2	-8.14	117.04	120.30
36	5	1158	A	N9-C4-C5	-8.14	102.55	105.80
73	O7	65	ARG	NE-CZ-NH2	-8.13	116.23	120.30
36	1	2392	C	C6-N1-C2	8.13	123.55	120.30
36	1	640	U	N1-C2-O2	-8.13	117.11	122.80
36	1	3210	A	N1-C6-N6	-8.13	113.72	118.60
36	1	2812	C	C6-N1-C2	8.12	123.55	120.30
36	1	1128	U	N3-C4-O4	-8.12	113.72	119.40
36	5	1362	G	C8-N9-C4	8.12	109.65	106.40
36	5	881	C	C5-C6-N1	8.11	125.05	121.00
36	5	907	G	N3-C4-N9	8.11	130.86	126.00
36	1	1308	A	N7-C8-N9	8.10	117.85	113.80
36	1	218	G	O5'-P-OP2	-8.09	98.42	105.70
36	5	1301	A	N1-C6-N6	8.09	123.45	118.60
36	1	2871	G	O5'-P-OP2	-8.08	98.43	105.70
36	5	651	G	N3-C4-C5	-8.08	124.56	128.60
36	5	2872	A	C4-C5-N7	8.08	114.74	110.70
36	5	2375	G	C5-C6-O6	8.07	133.44	128.60
36	1	2636	A	N7-C8-N9	8.07	117.83	113.80
36	1	1320	C	N3-C4-C5	-8.06	118.67	121.90
1	6	1000	C	C2-N1-C1'	8.06	127.67	118.80
1	6	453	U	N3-C2-O2	-8.06	116.56	122.20
36	5	2872	A	C5-C6-N6	-8.06	117.25	123.70
36	5	2634	U	C2-N3-C4	-8.05	122.17	127.00
44	17	229	PHE	CB-CG-CD1	8.05	126.44	120.80
36	5	651	G	C4-C5-C6	8.04	123.63	118.80
37	7	37	G	C5-C6-O6	-8.04	123.77	128.60
36	5	806	A	O5'-P-OP1	-8.04	98.46	105.70
1	6	889	U	O5'-P-OP1	-8.03	98.47	105.70
1	6	65	A	N1-C6-N6	8.03	123.42	118.60
36	1	2617	U	C5-C6-N1	-8.03	118.69	122.70
36	1	2618	G	C8-N9-C4	-8.03	103.19	106.40
36	5	1366	A	N9-C4-C5	8.01	109.00	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2603	G	C4-C5-N7	7.99	114.00	110.80
36	1	2617	U	N1-C2-N3	7.98	119.69	114.90
1	6	14	C	C6-N1-C2	-7.98	117.11	120.30
36	5	1392	G	C8-N9-C4	7.98	109.59	106.40
36	1	2846	U	N3-C2-O2	-7.97	116.62	122.20
36	5	2899	C	C2-N1-C1'	7.96	127.56	118.80
1	6	858	G	C4-N9-C1'	7.96	136.85	126.50
36	1	1495	U	N1-C2-O2	-7.95	117.23	122.80
37	7	87	G	C5-C6-O6	-7.95	123.83	128.60
36	1	363	G	N1-C6-O6	7.95	124.67	119.90
36	1	2355	G	N1-C6-O6	7.95	124.67	119.90
36	1	2870	C	C6-N1-C1'	7.94	130.33	120.80
36	5	913	A	C8-N9-C4	-7.94	102.62	105.80
36	1	2197	C	C6-N1-C2	7.92	123.47	120.30
36	1	979	U	C2-N1-C1'	7.92	127.20	117.70
1	2	402	C	C6-N1-C2	7.91	123.47	120.30
36	1	2572	C	N1-C2-O2	7.91	123.65	118.90
36	5	2699	G	C8-N9-C4	7.91	109.56	106.40
38	8	96	A	C8-N9-C4	7.91	108.96	105.80
36	5	1161	G	C5-C6-N1	7.90	115.45	111.50
36	5	1399	A	N1-C6-N6	7.90	123.34	118.60
36	5	1292	C	C6-N1-C2	7.90	123.46	120.30
36	1	2247	G	C5-C6-O6	-7.90	123.86	128.60
36	1	1192	C	C2-N1-C1'	7.90	127.49	118.80
36	1	1495	U	N1-C2-N3	7.90	119.64	114.90
36	5	38	U	O5'-P-OP2	-7.90	98.59	105.70
36	5	1321	G	N1-C6-O6	7.90	124.64	119.90
36	5	2331	C	N3-C4-C5	-7.89	118.74	121.90
36	1	1858	A	C2-N3-C4	7.89	114.54	110.60
36	5	2295	A	C5-C6-N1	7.89	121.64	117.70
36	5	2524	A	O4'-C1'-N9	7.88	114.51	108.20
36	5	776	U	C4-C5-C6	7.88	124.43	119.70
36	5	2332	A	C8-N9-C4	7.87	108.95	105.80
36	1	716	A	N9-C4-C5	-7.86	102.65	105.80
36	5	1437	C	C6-N1-C2	-7.86	117.16	120.30
36	1	1099	A	N1-C6-N6	7.86	123.32	118.60
36	5	3181	C	C2-N1-C1'	7.86	127.45	118.80
36	1	426	G	N3-C4-C5	-7.86	124.67	128.60
1	2	1600	A	N1-C6-N6	7.85	123.31	118.60
37	3	8	G	N1-C6-O6	-7.85	115.19	119.90
36	1	1157	G	N1-C2-N3	7.85	128.61	123.90
36	1	1389	G	C4-C5-N7	7.84	113.94	110.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2395	G	O5'-P-OP2	-7.84	98.64	105.70
36	5	610	G	N1-C6-O6	-7.84	115.19	119.90
36	5	708	G	C8-N9-C4	-7.84	103.26	106.40
36	5	1868	G	C4-C5-N7	7.84	113.94	110.80
38	8	114	G	O5'-P-OP1	-7.84	98.64	105.70
36	5	437	G	N3-C4-N9	-7.84	121.30	126.00
36	1	703	G	N3-C4-N9	-7.83	121.30	126.00
36	1	2356	A	N1-C6-N6	7.83	123.30	118.60
36	1	70	A	C6-C5-N7	-7.83	126.82	132.30
36	1	347	G	C5-N7-C8	-7.83	100.39	104.30
36	5	3218	A	N1-C6-N6	7.83	123.30	118.60
1	2	1363	U	N1-C2-O2	7.82	128.28	122.80
36	1	1154	A	C8-N9-C4	-7.82	102.67	105.80
36	1	2283	G	C5-C6-O6	-7.81	123.91	128.60
36	5	907	G	O5'-P-OP1	-7.81	98.67	105.70
36	5	1317	A	C2-N3-C4	7.81	114.50	110.60
36	1	2679	A	C2-N3-C4	-7.80	106.70	110.60
36	5	2820	A	C8-N9-C4	-7.80	102.68	105.80
36	1	2692	A	N1-C6-N6	7.80	123.28	118.60
36	1	65	A	P-O3'-C3'	7.80	129.06	119.70
36	1	3277	U	N3-C2-O2	-7.80	116.74	122.20
36	5	650	C	C2-N1-C1'	-7.79	110.23	118.80
36	5	2938	G	C2-N3-C4	7.79	115.79	111.90
1	2	553	G	C6-C5-N7	-7.78	125.73	130.40
36	1	1852	G	N1-C6-O6	7.78	124.57	119.90
36	1	2679	A	O4'-C1'-N9	7.78	114.42	108.20
38	8	109	A	C5-C6-N1	7.78	121.59	117.70
1	2	1745	G	N3-C4-N9	7.77	130.66	126.00
36	1	1148	G	N1-C6-O6	7.77	124.56	119.90
1	6	957	G	N1-C6-O6	7.77	124.56	119.90
36	5	1592	G	C5-C6-N1	-7.77	107.61	111.50
36	5	1192	C	N1-C2-O2	7.77	123.56	118.90
36	5	1434	G	N3-C4-N9	-7.77	121.34	126.00
1	2	1657	U	O4'-C1'-N1	7.76	114.41	108.20
36	1	2279	A	N9-C4-C5	-7.76	102.70	105.80
36	5	2893	C	N3-C4-N4	7.76	123.43	118.00
36	5	2935	U	O5'-P-OP2	-7.76	98.72	105.70
36	5	880	G	C8-N9-C4	7.76	109.50	106.40
36	1	2314	U	C5-C4-O4	-7.75	121.25	125.90
36	5	647	A	C4-C5-C6	7.75	120.88	117.00
36	1	145	G	C6-C5-N7	-7.75	125.75	130.40
36	1	2887	A	N1-C6-N6	7.75	123.25	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1902	G	N1-C6-O6	7.75	124.55	119.90
36	1	27	C	C6-N1-C2	-7.74	117.20	120.30
36	1	1902	G	C5-C6-O6	-7.74	123.95	128.60
36	5	2354	C	N1-C2-O2	-7.74	114.25	118.90
36	5	2994	A	C8-N9-C4	-7.74	102.70	105.80
36	5	2699	G	C5-C6-O6	-7.74	123.96	128.60
36	1	2409	G	N3-C4-C5	-7.73	124.73	128.60
1	6	144	U	N3-C2-O2	-7.73	116.79	122.20
36	1	790	U	N1-C2-N3	7.73	119.54	114.90
36	5	964	G	C8-N9-C4	-7.73	103.31	106.40
37	3	91	G	C6-C5-N7	-7.73	125.76	130.40
36	1	2642	A	C5-C6-N1	-7.73	113.84	117.70
36	5	2988	C	C5-C6-N1	-7.73	117.14	121.00
36	1	300	G	O5'-P-OP1	-7.72	98.75	105.70
1	6	1793	G	N1-C6-O6	-7.71	115.27	119.90
36	1	2408	U	O5'-P-OP1	-7.70	98.77	105.70
36	1	282	G	N9-C4-C5	7.70	108.48	105.40
1	6	1629	G	O5'-P-OP2	-7.70	98.77	105.70
36	5	1152	G	C8-N9-C1'	7.70	137.01	127.00
36	1	2889	C	N3-C2-O2	-7.70	116.51	121.90
36	1	2827	U	C5-C6-N1	-7.69	118.85	122.70
36	1	1002	A	C8-N9-C4	7.68	108.87	105.80
36	5	922	U	C2-N3-C4	-7.68	122.39	127.00
36	5	974	G	N3-C4-C5	-7.68	124.76	128.60
36	5	1367	G	N1-C6-O6	7.68	124.51	119.90
36	5	2419	A	C8-N9-C4	-7.67	102.73	105.80
36	5	3245	A	C4-C5-N7	7.67	114.54	110.70
44	17	232	ARG	NE-CZ-NH1	-7.67	116.46	120.30
1	6	1011	G	O5'-P-OP2	-7.67	98.80	105.70
36	5	2995	A	O5'-P-OP2	-7.67	98.80	105.70
36	5	2848	G	N1-C6-O6	7.66	124.50	119.90
36	1	3181	C	C6-N1-C2	-7.66	117.23	120.30
36	5	960	U	OP2-P-O3'	7.66	122.05	105.20
36	5	3090	U	O5'-P-OP1	-7.66	98.81	105.70
36	1	925	A	C5-C6-N6	-7.66	117.58	123.70
36	5	1323	G	C4-C5-N7	7.66	113.86	110.80
36	5	2928	C	N3-C4-N4	7.65	123.36	118.00
36	5	966	U	C6-N1-C2	-7.65	116.41	121.00
36	1	2617	U	C4-C5-C6	7.65	124.29	119.70
36	1	1335	C	C6-N1-C2	7.65	123.36	120.30
36	1	355	A	C2-N3-C4	-7.64	106.78	110.60
1	2	1560	U	N3-C2-O2	-7.64	116.85	122.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1491	A	O5'-P-OP1	-7.64	98.82	105.70
42	15	152	ARG	NE-CZ-NH1	7.64	124.12	120.30
1	6	1637	C	C2-N1-C1'	7.64	127.20	118.80
36	5	1200	A	C6-C5-N7	-7.63	126.95	132.30
36	1	2624	G	N7-C8-N9	7.63	116.91	113.10
1	2	91	G	N1-C6-O6	7.62	124.47	119.90
36	5	41	G	C5-N7-C8	-7.62	100.49	104.30
36	1	2730	G	N1-C6-O6	7.62	124.47	119.90
36	5	907	G	C8-N9-C4	7.62	109.45	106.40
36	5	2372	A	P-O3'-C3'	7.61	128.83	119.70
1	2	334	G	C8-N9-C4	7.61	109.44	106.40
36	5	2881	C	C6-N1-C2	7.60	123.34	120.30
36	5	1117	G	N1-C6-O6	7.60	124.46	119.90
36	1	586	C	N3-C2-O2	7.60	127.22	121.90
1	2	1100	G	C6-C5-N7	-7.60	125.84	130.40
36	1	53	G	C5-C6-O6	7.60	133.16	128.60
1	6	630	A	N1-C6-N6	7.59	123.16	118.60
36	5	2410	U	N1-C2-O2	-7.59	117.48	122.80
36	1	49	A	N1-C6-N6	7.59	123.16	118.60
36	1	220	G	N1-C6-O6	7.59	124.45	119.90
36	5	877	C	N3-C4-C5	7.59	124.94	121.90
36	1	1049	C	O5'-P-OP1	-7.59	98.87	105.70
36	5	2413	A	C2-N3-C4	-7.59	106.81	110.60
36	5	651	G	C6-C5-N7	-7.58	125.85	130.40
38	4	38	U	N3-C2-O2	-7.58	116.89	122.20
36	5	909	G	C5-C6-O6	7.58	133.15	128.60
36	5	1370	G	N3-C4-N9	7.58	130.55	126.00
36	1	343	U	O5'-P-OP2	-7.57	98.88	105.70
36	5	3377	G	C5-C6-O6	-7.57	124.06	128.60
36	5	591	G	C8-N9-C4	7.57	109.43	106.40
36	5	929	A	O5'-P-OP2	-7.56	98.89	105.70
36	1	1437	C	C2-N1-C1'	7.56	127.11	118.80
36	5	2412	G	N1-C2-N2	-7.56	109.40	116.20
36	1	49	A	C8-N9-C4	7.56	108.82	105.80
1	2	1745	G	C5-C6-O6	-7.55	124.07	128.60
36	1	1001	G	N1-C6-O6	7.55	124.43	119.90
36	1	2730	G	C5-C6-N1	-7.55	107.72	111.50
36	5	800	G	C8-N9-C4	7.55	109.42	106.40
36	5	1886	A	N1-C2-N3	-7.55	125.52	129.30
1	6	1537	C	C6-N1-C1'	7.55	129.86	120.80
37	7	101	G	C6-C5-N7	-7.55	125.87	130.40
36	1	947	G	C2-N3-C4	-7.54	108.13	111.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2610	G	C4-C5-N7	7.54	113.81	110.80
1	6	1634	C	C6-N1-C2	-7.54	117.29	120.30
36	5	3140	G	C4-C5-N7	7.54	113.81	110.80
36	5	1912	U	C6-N1-C2	7.53	125.52	121.00
1	6	1614	A	C2-N3-C4	-7.53	106.84	110.60
36	1	2815	G	N9-C4-C5	-7.53	102.39	105.40
1	6	453	U	C2-N1-C1'	7.52	126.73	117.70
36	5	3115	C	C6-N1-C2	-7.52	117.29	120.30
36	1	2779	A	C8-N9-C4	7.51	108.81	105.80
36	5	2234	G	N9-C4-C5	-7.51	102.40	105.40
36	5	1142	G	C8-N9-C4	-7.51	103.40	106.40
36	5	2627	C	C6-N1-C2	-7.51	117.30	120.30
36	1	2304	C	C6-N1-C2	-7.50	117.30	120.30
1	2	934	C	C2-N1-C1'	7.50	127.05	118.80
36	1	2639	G	N3-C4-N9	7.49	130.50	126.00
36	1	2764	C	C6-N1-C2	-7.49	117.30	120.30
1	2	1039	A	O4'-C1'-N9	7.49	114.19	108.20
36	5	907	G	N3-C2-N2	7.49	125.14	119.90
1	6	782	U	N1-C2-O2	7.49	128.04	122.80
1	6	1773	C	N3-C4-C5	-7.49	118.91	121.90
36	5	3181	C	N1-C2-O2	7.49	123.39	118.90
36	1	678	G	N3-C2-N2	-7.48	114.66	119.90
37	7	105	C	N1-C2-O2	7.48	123.39	118.90
36	1	3344	A	C5-N7-C8	-7.48	100.16	103.90
15	C3	22	ALA	C-N-CD	-7.48	104.15	120.60
36	5	3335	A	N1-C6-N6	7.48	123.09	118.60
1	2	1759	C	C6-N1-C2	7.47	123.29	120.30
1	6	25	C	N1-C2-O2	-7.47	114.42	118.90
36	5	2272	G	O4'-C1'-N9	7.47	114.18	108.20
1	2	453	U	C2-N1-C1'	7.47	126.67	117.70
36	1	289	A	N1-C6-N6	7.46	123.08	118.60
36	1	1835	A	O5'-P-OP1	-7.46	98.98	105.70
36	5	2353	G	C5-C6-O6	-7.46	124.12	128.60
36	1	1158	A	N1-C6-N6	7.45	123.07	118.60
36	1	1848	G	O5'-P-OP1	-7.45	99.00	105.70
36	5	1481	A	C8-N9-C4	-7.45	102.82	105.80
36	1	1151	U	N3-C4-C5	-7.45	110.13	114.60
36	1	681	U	N3-C4-O4	7.45	124.61	119.40
1	6	765	G	C8-N9-C4	7.45	109.38	106.40
36	1	2247	G	C4-C5-N7	7.44	113.78	110.80
36	5	3382	U	N3-C2-O2	-7.44	116.99	122.20
36	1	636	C	C2-N3-C4	-7.43	116.18	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2729	U	O5'-P-OP1	-7.43	99.01	105.70
36	5	1710	C	C6-N1-C2	7.43	123.27	120.30
36	5	977	C	N3-C2-O2	-7.43	116.70	121.90
36	1	578	A	N1-C6-N6	7.43	123.06	118.60
36	1	2610	G	C6-C5-N7	-7.42	125.95	130.40
36	5	2877	G	N3-C4-N9	7.42	130.46	126.00
36	5	2849	C	N1-C2-O2	-7.42	114.45	118.90
36	1	676	G	C4-N9-C1'	7.42	136.14	126.50
36	1	2831	G	N1-C6-O6	7.42	124.35	119.90
36	5	3166	C	N1-C2-O2	7.41	123.34	118.90
36	1	2796	G	C8-N9-C4	-7.41	103.44	106.40
36	5	373	A	C8-N9-C4	7.40	108.76	105.80
36	5	2297	U	C2-N1-C1'	-7.40	108.82	117.70
36	5	1215	U	N1-C2-O2	-7.40	117.62	122.80
1	2	1200	G	N1-C6-O6	7.40	124.34	119.90
36	1	1279	C	C6-N1-C2	-7.39	117.34	120.30
36	5	2121	G	N3-C4-N9	7.39	130.44	126.00
36	5	3382	U	N1-C2-O2	7.39	127.97	122.80
36	5	2121	G	N9-C4-C5	-7.39	102.44	105.40
36	1	716	A	C8-N9-C4	7.39	108.75	105.80
36	5	933	A	C6-N1-C2	-7.38	114.17	118.60
36	5	804	C	N3-C4-N4	7.38	123.17	118.00
36	1	1495	U	C2-N3-C4	-7.38	122.57	127.00
36	1	2356	A	N9-C4-C5	-7.38	102.85	105.80
1	6	558	U	N1-C2-O2	7.37	127.96	122.80
36	1	2777	G	N9-C4-C5	7.37	108.35	105.40
36	5	996	A	O5'-P-OP2	-7.37	99.07	105.70
36	1	1055	A	O5'-P-OP1	-7.37	99.07	105.70
36	1	2795	U	O5'-P-OP1	-7.36	99.07	105.70
36	1	1150	A	O5'-P-OP2	-7.36	99.08	105.70
36	1	96	G	C2-N3-C4	-7.35	108.22	111.90
36	5	951	A	C8-N9-C4	-7.35	102.86	105.80
36	1	1116	G	N3-C4-C5	-7.35	124.93	128.60
36	5	2411	U	C2-N3-C4	-7.35	122.59	127.00
36	5	2620	G	N9-C4-C5	7.35	108.34	105.40
36	1	1114	U	OP2-P-O3'	7.34	121.36	105.20
36	1	645	A	C6-N1-C2	-7.34	114.19	118.60
36	5	1215	U	N3-C2-O2	7.34	127.34	122.20
36	1	2996	U	C2-N1-C1'	7.34	126.51	117.70
1	6	107	C	C6-N1-C2	7.34	123.23	120.30
36	5	2872	A	C5-N7-C8	-7.34	100.23	103.90
1	6	1793	G	C6-C5-N7	7.33	134.80	130.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	96	G	N1-C6-O6	7.33	124.30	119.90
36	1	394	G	N9-C4-C5	7.33	108.33	105.40
36	1	1365	G	N3-C4-N9	7.33	130.40	126.00
36	5	650	C	N1-C2-O2	-7.32	114.51	118.90
36	1	935	U	N3-C2-O2	-7.32	117.08	122.20
36	1	1128	U	N3-C4-C5	7.31	118.99	114.60
36	5	2421	U	N1-C2-N3	7.31	119.29	114.90
36	5	881	C	C4-C5-C6	-7.31	113.75	117.40
36	1	3187	A	O5'-P-OP2	-7.31	99.12	105.70
36	1	1317	A	O5'-P-OP2	-7.30	99.13	105.70
36	5	1192	C	N3-C2-O2	-7.30	116.79	121.90
36	1	640	U	N3-C2-O2	7.30	127.31	122.20
36	5	216	G	O5'-P-OP1	-7.30	99.13	105.70
36	5	2913	C	N1-C2-O2	-7.30	114.52	118.90
36	5	2983	C	O5'-P-OP1	-7.30	99.13	105.70
36	5	3362	A	O4'-C1'-N9	7.30	114.04	108.20
36	1	347	G	C5-C6-O6	-7.29	124.22	128.60
36	5	2278	C	C4-C5-C6	-7.29	113.75	117.40
36	5	1390	A	N1-C6-N6	-7.29	114.23	118.60
36	1	639	G	C4-C5-N7	7.29	113.72	110.80
36	5	2198	A	O5'-P-OP2	-7.29	99.14	105.70
38	4	28	C	C6-N1-C2	-7.28	117.39	120.30
36	1	1307	G	P-O3'-C3'	7.28	128.44	119.70
36	5	1306	G	C6-C5-N7	-7.28	126.03	130.40
36	5	437	G	C8-N9-C4	-7.28	103.49	106.40
36	5	3154	C	C2-N1-C1'	7.28	126.81	118.80
36	1	3344	A	C8-N9-C4	-7.28	102.89	105.80
1	6	1306	C	C6-N1-C2	-7.27	117.39	120.30
36	1	57	A	C2-N3-C4	-7.27	106.96	110.60
1	6	194	U	C2-N1-C1'	7.27	126.42	117.70
36	5	1846	C	C5-C6-N1	-7.27	117.37	121.00
36	1	919	U	O5'-P-OP1	7.26	119.42	110.70
36	5	3002	C	C6-N1-C2	7.26	123.21	120.30
36	1	2964	G	N9-C4-C5	7.26	108.31	105.40
36	5	2376	G	C6-C5-N7	-7.26	126.04	130.40
36	5	2967	A	O5'-P-OP1	7.26	119.41	110.70
36	1	347	G	N1-C6-O6	7.26	124.25	119.90
1	6	1634	C	N1-C2-O2	7.26	123.25	118.90
36	5	2322	C	C6-N1-C2	-7.26	117.40	120.30
36	5	2737	C	O5'-P-OP2	-7.26	99.17	105.70
36	1	3209	A	N1-C6-N6	7.25	122.95	118.60
36	5	2234	G	C8-N9-C4	7.25	109.30	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	611	A	N1-C6-N6	7.25	122.95	118.60
36	5	2891	U	C5-C6-N1	-7.25	119.08	122.70
36	5	3154	C	C6-N1-C2	-7.25	117.40	120.30
36	1	2405	C	N3-C4-C5	-7.25	119.00	121.90
36	1	2730	G	C2-N3-C4	-7.24	108.28	111.90
36	5	437	G	N9-C4-C5	7.24	108.30	105.40
36	1	1919	G	C8-N9-C4	-7.24	103.50	106.40
36	1	2590	A	N1-C6-N6	-7.24	114.26	118.60
36	1	2870	C	C6-N1-C2	7.24	123.19	120.30
36	5	3004	C	C6-N1-C2	7.24	123.19	120.30
36	5	2375	G	N9-C4-C5	7.24	108.30	105.40
36	5	2950	G	N1-C6-O6	7.24	124.24	119.90
36	1	1820	U	P-O3'-C3'	7.23	128.38	119.70
36	1	649	A	C8-N9-C4	7.22	108.69	105.80
36	5	3285	C	C2-N1-C1'	7.22	126.75	118.80
36	1	1506	A	N1-C6-N6	-7.22	114.27	118.60
1	6	577	G	C6-C5-N7	-7.22	126.07	130.40
36	1	1389	G	N9-C4-C5	-7.22	102.51	105.40
36	1	1905	G	OP2-P-O3'	7.22	121.08	105.20
36	5	1370	G	N1-C2-N2	-7.22	109.70	116.20
36	5	2801	A	N1-C6-N6	-7.22	114.27	118.60
36	5	55	G	N3-C4-C5	7.21	132.21	128.60
1	6	901	G	C4-C5-N7	7.21	113.68	110.80
1	2	287	G	O4'-C1'-N9	7.21	113.97	108.20
36	1	2978	U	O4'-C1'-N1	7.21	113.97	108.20
36	1	350	C	C2-N1-C1'	7.21	126.73	118.80
36	5	3133	C	C6-N1-C2	-7.21	117.42	120.30
36	1	3306	U	N3-C4-O4	-7.20	114.36	119.40
36	5	612	U	O5'-P-OP1	-7.20	99.22	105.70
1	2	15	U	C6-N1-C2	-7.20	116.68	121.00
1	6	453	U	N1-C2-O2	7.20	127.84	122.80
36	5	1155	C	C5-C6-N1	7.20	124.60	121.00
36	5	1390	A	C8-N9-C4	-7.20	102.92	105.80
36	5	715	A	C5-C6-N1	7.20	121.30	117.70
36	1	76	G	N1-C6-O6	7.20	124.22	119.90
36	5	1506	A	C8-N9-C4	-7.20	102.92	105.80
36	1	2702	A	C8-N9-C4	-7.19	102.92	105.80
36	5	817	A	N1-C6-N6	7.19	122.92	118.60
1	2	831	U	C5-C6-N1	7.19	126.30	122.70
36	5	2880	U	N1-C2-N3	7.19	119.21	114.90
1	6	1085	G	N1-C6-O6	-7.19	115.59	119.90
1	6	1748	G	C8-N9-C4	7.19	109.28	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3218	A	C4-C5-N7	7.19	114.29	110.70
36	1	640	U	N3-C4-O4	7.19	124.43	119.40
36	5	2359	C	C5-C6-N1	-7.19	117.41	121.00
36	1	793	C	C6-N1-C2	-7.18	117.43	120.30
38	4	53	A	C2-N3-C4	7.18	114.19	110.60
38	4	84	C	C6-N1-C2	7.18	123.17	120.30
36	1	1450	G	C4-C5-N7	7.17	113.67	110.80
36	5	2130	G	O5'-P-OP2	-7.17	99.24	105.70
36	1	960	U	C2-N1-C1'	-7.17	109.09	117.70
36	5	1012	G	C4-N9-C1'	-7.17	117.18	126.50
36	5	1183	C	C6-N1-C2	7.17	123.17	120.30
1	2	1100	G	C4-N9-C1'	7.17	135.82	126.50
36	5	86	G	C5-C6-O6	-7.17	124.30	128.60
1	2	1241	G	O4'-C1'-N9	7.16	113.93	108.20
37	3	101	G	C8-N9-C4	7.16	109.27	106.40
1	6	782	U	N3-C2-O2	-7.16	117.19	122.20
36	1	2382	G	N1-C2-N2	-7.16	109.76	116.20
1	6	29	U	N3-C2-O2	-7.16	117.19	122.20
36	1	5	G	C8-N9-C4	-7.16	103.54	106.40
12	C0	88	PRO	N-CA-CB	7.16	111.89	103.30
1	6	364	G	C8-N9-C1'	-7.15	117.70	127.00
36	1	925	A	N1-C6-N6	7.15	122.89	118.60
36	5	803	C	C6-N1-C2	-7.15	117.44	120.30
36	1	2726	C	C5-C4-N4	7.14	125.20	120.20
1	2	542	A	O4'-C1'-N9	7.14	113.91	108.20
1	6	452	A	N1-C6-N6	7.14	122.88	118.60
36	5	830	A	C5-C6-N6	-7.14	117.99	123.70
36	5	3050	U	C5-C4-O4	7.14	130.18	125.90
38	4	26	U	C6-N1-C2	-7.13	116.72	121.00
36	5	3197	G	N3-C4-N9	-7.13	121.72	126.00
36	1	1408	G	C6-C5-N7	-7.13	126.12	130.40
36	5	2381	G	C6-C5-N7	-7.13	126.12	130.40
36	5	2980	U	N3-C2-O2	-7.13	117.21	122.20
36	5	1129	A	O5'-P-OP2	-7.13	99.28	105.70
1	6	1029	U	C2-N1-C1'	-7.13	109.14	117.70
10	S8	29	LEU	CA-CB-CG	7.13	131.69	115.30
36	5	1152	G	N3-C2-N2	-7.13	114.91	119.90
36	5	3136	G	C2-N3-C4	-7.13	108.34	111.90
36	5	3339	A	N1-C6-N6	7.13	122.88	118.60
36	1	2923	U	O5'-P-OP1	-7.12	99.29	105.70
1	6	1581	C	N3-C4-C5	7.12	124.75	121.90
36	1	2884	C	N3-C4-C5	7.12	124.75	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2205	U	O4'-C1'-N1	7.12	113.89	108.20
36	1	211	A	N1-C2-N3	7.12	132.86	129.30
1	6	1745	G	C8-N9-C1'	-7.11	117.75	127.00
36	1	1838	G	C4-C5-N7	7.11	113.64	110.80
1	6	163	G	N3-C4-C5	7.11	132.15	128.60
36	1	1001	G	N9-C4-C5	-7.10	102.56	105.40
36	1	3344	A	O4'-C1'-N9	7.10	113.88	108.20
36	1	2760	C	N3-C4-C5	-7.10	119.06	121.90
1	6	1180	C	C6-N1-C2	-7.10	117.46	120.30
36	5	2917	G	C5-C6-O6	-7.10	124.34	128.60
36	5	1116	G	C4-N9-C1'	7.09	135.72	126.50
36	5	283	G	C6-C5-N7	-7.09	126.15	130.40
36	5	428	A	C5-C6-N6	-7.09	118.03	123.70
36	5	2131	A	N1-C6-N6	7.09	122.85	118.60
36	1	2936	A	O5'-P-OP1	-7.09	99.32	105.70
1	6	17	C	N3-C2-O2	-7.09	116.94	121.90
36	5	2381	G	N1-C6-O6	7.09	124.15	119.90
1	2	1731	A	N1-C6-N6	7.08	122.85	118.60
36	1	1864	A	C8-N9-C4	7.08	108.63	105.80
54	m8	127	LEU	CA-CB-CG	7.08	131.59	115.30
36	1	3218	A	N1-C6-N6	7.08	122.85	118.60
36	1	59	G	C4-C5-N7	7.08	113.63	110.80
36	5	1317	A	N1-C2-N3	-7.08	125.76	129.30
36	1	1149	G	N1-C6-O6	7.07	124.14	119.90
36	5	1449	A	N1-C2-N3	7.07	132.83	129.30
36	5	3214	U	N3-C2-O2	-7.07	117.25	122.20
36	1	2402	A	C5-C6-N1	7.06	121.23	117.70
36	1	803	C	O5'-P-OP1	7.06	119.18	110.70
36	5	2800	G	N3-C2-N2	-7.05	114.96	119.90
36	5	2927	C	N1-C2-O2	-7.05	114.67	118.90
36	5	2142	A	C5-C6-N1	7.05	121.23	117.70
36	1	339	C	N3-C4-N4	-7.05	113.07	118.00
36	1	2986	U	N1-C2-O2	-7.05	117.87	122.80
36	1	2374	C	C2-N1-C1'	7.05	126.55	118.80
36	5	3153	U	N1-C2-O2	7.05	127.73	122.80
36	1	2381	G	N3-C4-C5	-7.04	125.08	128.60
36	5	2811	A	N1-C6-N6	-7.04	114.37	118.60
36	1	1316	C	N3-C4-N4	7.04	122.93	118.00
36	1	1445	U	N1-C2-O2	-7.04	117.87	122.80
36	5	923	C	C5-C4-N4	-7.04	115.27	120.20
36	5	2848	G	C6-C5-N7	-7.04	126.18	130.40
36	5	2864	A	C8-N9-C4	7.04	108.61	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	337	G	C4-N9-C1'	7.03	135.64	126.50
36	5	55	G	O5'-P-OP2	-7.03	99.37	105.70
36	5	2899	C	N1-C2-N3	7.03	124.12	119.20
1	2	551	G	C8-N9-C4	-7.03	103.59	106.40
36	1	663	C	C6-N1-C2	7.03	123.11	120.30
36	1	1793	C	O5'-P-OP1	-7.03	99.37	105.70
1	6	639	U	C2-N1-C1'	7.03	126.14	117.70
36	5	2693	C	C6-N1-C2	7.03	123.11	120.30
1	6	779	U	O4'-C1'-N1	7.03	113.82	108.20
37	7	99	G	N1-C6-O6	-7.03	115.69	119.90
36	1	1389	G	C5-C6-O6	-7.02	124.39	128.60
36	1	874	U	O5'-P-OP1	-7.02	99.38	105.70
36	1	191	U	N1-C2-N3	7.02	119.11	114.90
36	5	2349	U	OP1-P-O3'	7.02	120.64	105.20
1	2	577	G	C4-C5-N7	7.02	113.61	110.80
36	1	2406	C	N3-C4-N4	7.01	122.91	118.00
36	5	3026	G	N1-C6-O6	7.01	124.11	119.90
36	1	3362	A	N7-C8-N9	7.01	117.31	113.80
36	1	1450	G	C5-C6-O6	-7.01	124.39	128.60
36	5	2980	U	C6-N1-C2	-7.01	116.80	121.00
36	1	1174	G	N3-C4-N9	7.00	130.20	126.00
36	5	2201	G	N3-C4-C5	-7.00	125.10	128.60
36	1	1007	U	C6-N1-C2	7.00	125.20	121.00
36	1	2996	U	C6-N1-C1'	-7.00	111.40	121.20
36	1	964	G	N3-C2-N2	-7.00	115.00	119.90
36	1	2325	G	C8-N9-C4	-7.00	103.60	106.40
36	5	1115	G	C4-N9-C1'	7.00	135.60	126.50
36	5	2850	G	C5-C6-O6	-7.00	124.40	128.60
36	1	2639	G	C4-N9-C1'	7.00	135.59	126.50
1	6	1361	U	C2-N1-C1'	7.00	126.09	117.70
37	3	117	A	N1-C6-N6	6.99	122.80	118.60
1	6	322	G	N1-C6-O6	6.99	124.10	119.90
36	1	979	U	N1-C2-O2	6.99	127.69	122.80
36	1	1144	U	C5-C6-N1	-6.99	119.20	122.70
36	1	1173	U	C5-C6-N1	-6.99	119.20	122.70
36	5	1300	G	N1-C6-O6	6.99	124.09	119.90
36	5	2317	A	O5'-P-OP2	-6.99	99.41	105.70
36	5	2872	A	C6-C5-N7	-6.99	127.41	132.30
36	1	1174	G	C8-N9-C1'	-6.99	117.92	127.00
37	7	98	C	O5'-P-OP2	-6.99	99.41	105.70
36	5	2920	U	N1-C2-N3	6.99	119.09	114.90
36	1	2356	A	C5-C6-N6	-6.98	118.11	123.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2388	U	N3-C2-O2	6.98	127.09	122.20
36	5	2403	G	O5'-P-OP2	-6.98	99.42	105.70
36	1	2870	C	N3-C4-C5	6.98	124.69	121.90
1	6	1596	C	N3-C2-O2	-6.98	117.02	121.90
36	5	877	C	C5-C4-N4	-6.98	115.32	120.20
36	5	2956	A	C8-N9-C4	-6.98	103.01	105.80
36	5	2868	U	C5-C6-N1	6.98	126.19	122.70
36	1	2169	G	N1-C6-O6	-6.97	115.72	119.90
36	5	2817	A	C2-N3-C4	6.97	114.09	110.60
36	1	925	A	N1-C2-N3	6.97	132.79	129.30
36	1	2853	A	N1-C6-N6	6.97	122.78	118.60
1	6	609	U	N3-C4-O4	-6.97	114.52	119.40
36	5	617	G	N9-C4-C5	-6.97	102.61	105.40
36	5	1099	A	C6-C5-N7	-6.97	127.42	132.30
36	5	3112	G	C4-C5-N7	6.97	113.59	110.80
1	2	334	G	C2-N3-C4	-6.97	108.42	111.90
36	5	1116	G	C5-C6-N1	-6.96	108.02	111.50
36	1	24	G	N1-C2-N2	-6.96	109.93	116.20
36	5	2376	G	N1-C6-O6	6.96	124.08	119.90
1	2	623	A	O5'-P-OP1	-6.96	99.44	105.70
36	1	1048	A	N1-C2-N3	-6.96	125.82	129.30
1	6	364	G	N1-C6-O6	6.96	124.07	119.90
1	6	1396	U	C6-N1-C2	-6.96	116.83	121.00
36	5	43	A	O4'-C1'-N9	6.96	113.77	108.20
36	1	802	C	O5'-P-OP2	6.96	119.05	110.70
36	5	2699	G	N1-C6-O6	6.96	124.07	119.90
36	5	2880	U	C6-N1-C2	-6.95	116.83	121.00
36	5	942	U	N3-C4-C5	-6.94	110.43	114.60
36	1	957	C	N3-C2-O2	6.94	126.76	121.90
1	6	571	G	N9-C4-C5	6.94	108.18	105.40
36	1	220	G	C4-C5-N7	6.94	113.58	110.80
36	1	1442	U	N3-C2-O2	6.94	127.06	122.20
36	1	3344	A	C2-N3-C4	-6.94	107.13	110.60
36	5	57	A	N1-C6-N6	6.94	122.76	118.60
36	5	3098	G	O5'-P-OP2	-6.94	99.46	105.70
1	6	577	G	N7-C8-N9	6.94	116.57	113.10
37	7	53	U	O5'-P-OP2	-6.93	99.46	105.70
1	6	163	G	N3-C2-N2	-6.93	115.05	119.90
36	5	1591	G	C5-C6-O6	-6.93	124.44	128.60
1	2	1600	A	C5-C6-N1	-6.93	114.23	117.70
36	1	3046	A	C2-N3-C4	-6.93	107.14	110.60
1	6	1637	C	N1-C2-O2	6.93	123.06	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1143	A	C2-N3-C4	-6.93	107.14	110.60
36	5	1507	G	C6-C5-N7	-6.93	126.24	130.40
36	5	2400	G	C6-C5-N7	-6.92	126.25	130.40
36	5	3270	U	O5'-P-OP1	-6.92	99.47	105.70
36	5	1126	G	C5-C6-N1	-6.92	108.04	111.50
36	1	788	C	C6-N1-C2	6.92	123.07	120.30
36	5	776	U	C2-N3-C4	-6.92	122.85	127.00
36	5	1161	G	C2-N3-C4	6.92	115.36	111.90
36	5	1301	A	C4-C5-N7	6.92	114.16	110.70
37	7	56	A	N1-C6-N6	6.92	122.75	118.60
36	1	3265	C	C2-N1-C1'	-6.92	111.19	118.80
36	5	1164	G	O5'-P-OP2	-6.92	99.47	105.70
36	5	1323	G	N1-C6-O6	6.92	124.05	119.90
36	1	2636	A	N9-C4-C5	6.92	108.57	105.80
36	5	1152	G	N1-C2-N3	6.91	128.05	123.90
36	1	804	C	OP1-P-O3'	6.91	120.39	105.20
36	1	2279	A	N1-C6-N6	6.91	122.74	118.60
36	1	3087	A	C4-C5-C6	6.91	120.45	117.00
38	4	32	C	C2-N1-C1'	-6.91	111.20	118.80
36	5	2867	C	N3-C4-C5	-6.91	119.14	121.90
36	5	2283	G	N1-C6-O6	6.90	124.04	119.90
36	1	3217	C	C6-N1-C1'	-6.90	112.52	120.80
36	1	958	C	N3-C4-C5	6.90	124.66	121.90
36	1	2808	A	C6-C5-N7	-6.90	127.47	132.30
36	1	3006	A	C2-N3-C4	-6.90	107.15	110.60
36	5	406	G	O4'-C1'-N9	6.90	113.72	108.20
1	6	467	G	N3-C4-N9	6.90	130.14	126.00
36	1	2298	U	O4'-C1'-N1	6.90	113.72	108.20
1	2	507	U	N1-C2-O2	6.89	127.62	122.80
36	1	2121	G	N3-C2-N2	6.89	124.72	119.90
1	2	768	C	C6-N1-C2	-6.89	117.54	120.30
36	1	361	A	N1-C6-N6	-6.89	114.47	118.60
36	1	363	G	O5'-P-OP1	-6.89	99.50	105.70
37	7	47	C	C2-N3-C4	-6.89	116.46	119.90
36	1	933	A	O5'-P-OP2	-6.89	99.50	105.70
36	5	638	C	O5'-P-OP2	6.89	118.96	110.70
36	1	1405	U	N3-C4-C5	6.88	118.73	114.60
36	5	2968	G	C8-N9-C1'	-6.88	118.05	127.00
36	5	1506	A	N9-C4-C5	6.88	108.55	105.80
36	5	1846	C	C6-N1-C2	6.88	123.05	120.30
36	5	952	A	N9-C4-C5	-6.88	103.05	105.80
36	5	2112	U	C6-N1-C2	-6.88	116.87	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2409	G	O5'-P-OP2	-6.88	99.51	105.70
36	5	2572	C	N3-C2-O2	-6.88	117.08	121.90
36	1	580	C	O5'-P-OP1	-6.88	99.51	105.70
36	5	428	A	N9-C4-C5	-6.88	103.05	105.80
36	1	2853	A	C5-C6-N6	-6.88	118.20	123.70
36	5	1844	C	C6-N1-C2	-6.88	117.55	120.30
36	1	2802	A	OP2-P-O3'	6.87	120.32	105.20
36	5	2849	C	N3-C2-O2	6.87	126.71	121.90
36	1	2356	A	C8-N9-C4	6.87	108.55	105.80
1	6	257	A	N1-C6-N6	6.87	122.72	118.60
1	2	448	C	C6-N1-C2	-6.87	117.55	120.30
36	1	857	G	C5-C6-N1	-6.87	108.07	111.50
36	1	2364	G	C5-C6-O6	-6.87	124.48	128.60
36	5	2194	G	C2-N3-C4	-6.87	108.47	111.90
37	7	12	U	C5-C4-O4	-6.86	121.78	125.90
36	5	2583	C	C6-N1-C2	-6.86	117.56	120.30
36	5	584	G	C8-N9-C4	-6.86	103.66	106.40
36	5	1379	G	N9-C4-C5	-6.86	102.66	105.40
36	1	646	A	C2-N3-C4	-6.86	107.17	110.60
36	5	1496	C	C5-C6-N1	6.86	124.43	121.00
37	7	10	C	C6-N1-C1'	-6.86	112.57	120.80
1	6	1058	U	OP1-P-O3'	6.86	120.28	105.20
65	n9	23	LYS	C-N-CD	6.86	142.80	128.40
36	1	24	G	N9-C4-C5	-6.85	102.66	105.40
36	5	919	U	C2-N3-C4	-6.85	122.89	127.00
36	5	1695	U	N3-C2-O2	-6.85	117.40	122.20
36	5	2726	C	N1-C2-N3	6.85	124.00	119.20
1	6	1767	G	C8-N9-C4	6.85	109.14	106.40
36	5	2866	U	N1-C2-O2	6.85	127.59	122.80
36	5	784	A	N1-C6-N6	6.85	122.71	118.60
36	5	216	G	N1-C6-O6	6.85	124.01	119.90
36	1	2644	C	C5-C6-N1	-6.84	117.58	121.00
36	5	3050	U	C6-N1-C2	-6.84	116.89	121.00
36	5	1158	A	C4-C5-N7	6.84	114.12	110.70
36	1	938	C	C6-N1-C2	-6.84	117.56	120.30
36	5	816	A	C8-N9-C4	-6.83	103.07	105.80
1	2	553	G	C5-C6-N1	-6.83	108.08	111.50
1	2	554	C	N1-C2-O2	6.83	123.00	118.90
36	1	1428	A	N1-C6-N6	6.83	122.70	118.60
36	5	952	A	C5-C6-N6	-6.83	118.23	123.70
36	5	1317	A	C5-C6-N6	-6.83	118.23	123.70
36	5	1085	A	C2-N3-C4	-6.83	107.19	110.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3197	G	N3-C2-N2	-6.83	115.12	119.90
37	7	79	A	N1-C6-N6	6.83	122.70	118.60
1	6	777	C	C6-N1-C2	-6.83	117.57	120.30
38	4	113	U	C5-C4-O4	6.83	130.00	125.90
36	5	2608	G	OP2-P-O3'	6.82	120.21	105.20
36	1	1124	U	N3-C4-C5	6.82	118.69	114.60
36	5	2950	G	N3-C4-N9	6.82	130.09	126.00
36	1	1447	G	N1-C6-O6	-6.82	115.81	119.90
36	1	2618	G	N9-C4-C5	6.82	108.13	105.40
36	5	3218	A	C5-N7-C8	-6.82	100.49	103.90
36	1	2815	G	C8-N9-C4	6.82	109.13	106.40
36	1	1313	G	C6-C5-N7	-6.81	126.31	130.40
36	5	822	G	N1-C6-O6	6.81	123.99	119.90
36	5	1160	C	N3-C4-C5	-6.81	119.17	121.90
36	1	1307	G	C5-C6-O6	6.81	132.69	128.60
1	6	982	U	C6-N1-C2	6.81	125.08	121.00
36	1	1114	U	O5'-P-OP2	-6.81	99.57	105.70
36	5	91	G	C6-C5-N7	-6.81	126.31	130.40
37	7	37	G	N1-C6-O6	6.81	123.98	119.90
36	1	569	A	C8-N9-C4	6.81	108.52	105.80
1	2	543	C	N3-C2-O2	-6.80	117.14	121.90
36	5	2827	U	N1-C2-O2	6.80	127.56	122.80
36	5	2804	A	C8-N9-C4	6.80	108.52	105.80
36	5	3343	G	N1-C2-N2	-6.80	110.08	116.20
36	1	1054	A	O5'-P-OP2	-6.80	99.58	105.70
36	1	1161	G	O5'-P-OP2	-6.80	99.58	105.70
36	5	2353	G	N1-C6-O6	6.80	123.98	119.90
36	5	2400	G	C5-C6-O6	-6.80	124.52	128.60
36	1	2624	G	C5-N7-C8	-6.80	100.90	104.30
36	5	420	G	N7-C8-N9	-6.80	109.70	113.10
36	5	1368	U	N3-C2-O2	6.80	126.96	122.20
1	2	1432	U	C6-N1-C2	6.79	125.08	121.00
36	5	1591	G	O5'-P-OP1	-6.79	99.59	105.70
36	5	2400	G	OP2-P-O3'	6.79	120.14	105.20
36	5	880	G	N7-C8-N9	-6.79	109.71	113.10
1	2	1363	U	N3-C2-O2	-6.79	117.45	122.20
36	1	1300	G	N3-C4-N9	6.79	130.07	126.00
36	1	721	G	C4-C5-N7	6.78	113.51	110.80
36	1	585	A	C8-N9-C4	6.78	108.51	105.80
36	1	3212	C	C6-N1-C2	6.78	123.01	120.30
36	5	1592	G	C5-C6-O6	6.78	132.67	128.60
36	1	1200	A	C5-N7-C8	6.78	107.29	103.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2241	U	C5-C4-O4	6.78	129.97	125.90
36	5	2377	G	C8-N9-C4	6.78	109.11	106.40
36	5	3028	G	N1-C2-N2	-6.78	110.10	116.20
36	1	802	C	C6-N1-C2	-6.78	117.59	120.30
36	1	925	A	C6-C5-N7	-6.78	127.56	132.30
36	5	610	G	C4-C5-N7	-6.78	108.09	110.80
36	1	2273	G	N7-C8-N9	-6.77	109.71	113.10
36	5	942	U	N3-C4-O4	6.77	124.14	119.40
36	1	873	C	N1-C2-O2	-6.77	114.84	118.90
36	1	960	U	C2-N3-C4	-6.77	122.94	127.00
36	1	2618	G	C5-C6-N1	6.77	114.89	111.50
36	5	2924	U	O5'-P-OP1	-6.77	99.60	105.70
36	1	331	G	N3-C2-N2	-6.77	115.16	119.90
36	1	1381	A	O5'-P-OP2	6.77	118.82	110.70
1	2	507	U	C2-N1-C1'	6.77	125.82	117.70
36	5	298	U	C5-C6-N1	6.77	126.08	122.70
37	7	41	G	N1-C6-O6	6.77	123.96	119.90
36	1	1459	C	N1-C2-O2	-6.76	114.84	118.90
36	1	2856	G	C8-N9-C4	6.76	109.11	106.40
36	1	3217	C	N1-C2-O2	6.76	122.96	118.90
36	5	3154	C	N3-C2-O2	-6.76	117.17	121.90
36	1	1858	A	C8-N9-C4	-6.76	103.10	105.80
36	1	369	A	N7-C8-N9	6.75	117.18	113.80
36	5	3217	C	C2-N1-C1'	-6.75	111.37	118.80
36	5	2923	U	N1-C2-N3	6.75	118.95	114.90
36	5	869	G	C5-C6-N1	6.75	114.88	111.50
36	5	2333	C	C6-N1-C2	6.75	123.00	120.30
36	1	2846	U	N3-C4-O4	-6.75	114.67	119.40
36	1	2300	G	C8-N9-C4	-6.75	103.70	106.40
36	5	55	G	C8-N9-C4	6.75	109.10	106.40
36	5	195	U	O5'-P-OP2	-6.74	99.63	105.70
36	5	1316	C	N1-C2-O2	-6.74	114.86	118.90
36	1	33	G	N1-C6-O6	6.74	123.94	119.90
36	1	1136	A	C5-C6-N6	-6.74	118.31	123.70
36	5	1475	A	O5'-P-OP1	6.74	118.78	110.70
36	5	2881	C	N3-C2-O2	6.74	126.62	121.90
36	5	2295	A	C2-N3-C4	6.74	113.97	110.60
1	2	590	C	C6-N1-C2	-6.73	117.61	120.30
36	1	3260	G	C5-C6-O6	-6.73	124.56	128.60
36	1	1125	U	O5'-P-OP1	-6.73	99.64	105.70
24	d2	93	LEU	CA-CB-CG	6.73	130.78	115.30
36	1	29	C	C6-N1-C2	6.73	122.99	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1103	A	P-O3'-C3'	6.72	127.77	119.70
36	1	3278	C	C2-N1-C1'	6.72	126.20	118.80
1	2	1110	G	C8-N9-C4	6.72	109.09	106.40
1	6	1002	G	C6-C5-N7	-6.72	126.37	130.40
36	5	952	A	C4-C5-N7	6.72	114.06	110.70
36	5	1127	G	N3-C4-C5	-6.72	125.24	128.60
36	5	2893	C	N1-C2-O2	-6.72	114.87	118.90
36	1	626	U	O5'-P-OP1	-6.72	99.65	105.70
36	5	1362	G	N7-C8-N9	-6.72	109.74	113.10
36	1	1149	G	C4-C5-C6	6.71	122.83	118.80
36	5	2860	U	N3-C4-O4	-6.71	114.70	119.40
36	1	435	C	C2-N1-C1'	-6.71	111.42	118.80
1	6	1048	G	C4-C5-N7	6.71	113.48	110.80
36	5	1331	U	C5-C6-N1	-6.71	119.34	122.70
36	1	91	G	C8-N9-C4	6.71	109.08	106.40
36	1	377	A	N1-C6-N6	6.71	122.63	118.60
36	1	2915	U	N1-C2-O2	-6.71	118.10	122.80
36	1	664	U	C6-N1-C2	6.71	125.02	121.00
1	2	1658	G	C6-C5-N7	-6.71	126.38	130.40
1	2	1291	G	N3-C4-C5	6.70	131.95	128.60
36	1	699	A	C2-N3-C4	-6.70	107.25	110.60
36	1	716	A	O5'-P-OP1	-6.70	99.67	105.70
36	1	2381	G	C4-N9-C1'	6.70	135.21	126.50
36	1	2273	G	C8-N9-C4	6.70	109.08	106.40
36	5	1589	A	N1-C6-N6	6.70	122.62	118.60
37	7	92	A	N1-C6-N6	6.70	122.62	118.60
36	1	304	G	C4-C5-N7	-6.70	108.12	110.80
36	5	523	A	N1-C6-N6	-6.70	114.58	118.60
36	5	1305	U	N3-C4-O4	6.70	124.09	119.40
36	1	2121	G	C5-C6-O6	6.70	132.62	128.60
36	5	2419	A	N7-C8-N9	6.70	117.15	113.80
25	d3	132	LEU	CA-CB-CG	-6.69	99.90	115.30
1	6	407	A	N1-C2-N3	-6.69	125.95	129.30
36	5	952	A	C8-N9-C4	6.69	108.48	105.80
37	7	37	G	C4-C5-N7	6.69	113.48	110.80
1	6	1096	C	C6-N1-C2	6.69	122.98	120.30
36	1	1151	U	C5-C6-N1	6.69	126.04	122.70
36	5	1329	U	C2-N3-C4	-6.69	122.99	127.00
36	1	1366	A	C8-N9-C4	-6.69	103.13	105.80
1	2	1580	C	C6-N1-C2	6.68	122.97	120.30
1	6	1697	G	N3-C4-C5	-6.68	125.26	128.60
36	5	1157	G	OP2-P-O3'	6.68	119.91	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
42	15	110	LEU	CA-CB-CG	6.68	130.68	115.30
35	SM	134	ASP	CB-CA-C	-6.68	97.03	110.40
1	6	420	A	N1-C6-N6	6.68	122.61	118.60
36	5	2117	A	N9-C4-C5	6.68	108.47	105.80
36	1	2400	G	C2-N3-C4	-6.68	108.56	111.90
36	1	3278	C	N3-C2-O2	-6.68	117.22	121.90
36	1	937	G	C8-N9-C4	6.68	109.07	106.40
1	6	1470	C	C6-N1-C2	-6.68	117.63	120.30
36	5	1116	G	C4-C5-N7	-6.68	108.13	110.80
36	1	2884	C	C6-N1-C2	6.68	122.97	120.30
36	1	3256	G	N1-C6-O6	6.68	123.91	119.90
36	1	1408	G	N1-C6-O6	6.67	123.91	119.90
36	5	1161	G	C5-C6-O6	-6.67	124.60	128.60
36	5	2249	G	O5'-P-OP2	-6.67	99.69	105.70
36	1	2827	U	N3-C4-O4	-6.67	114.73	119.40
36	5	1301	A	C5-N7-C8	-6.67	100.57	103.90
36	1	72	C	C6-N1-C2	6.66	122.97	120.30
36	1	675	C	N3-C4-N4	6.66	122.66	118.00
36	5	3112	G	C5-C6-O6	-6.66	124.60	128.60
1	2	1745	G	N9-C4-C5	-6.66	102.73	105.40
36	1	347	G	C6-C5-N7	-6.66	126.40	130.40
36	5	914	A	N1-C6-N6	6.66	122.60	118.60
36	1	2727	A	N1-C6-N6	-6.66	114.60	118.60
36	5	2572	C	C6-N1-C2	-6.66	117.64	120.30
36	5	2631	U	OP1-P-O3'	6.66	119.85	105.20
36	5	966	U	O5'-P-OP2	-6.66	99.71	105.70
36	1	2375	G	N1-C6-O6	-6.66	115.91	119.90
36	1	24	G	C8-N9-C4	6.65	109.06	106.40
1	6	858	G	C8-N9-C1'	-6.65	118.35	127.00
36	5	610	G	C5-C6-O6	6.65	132.59	128.60
36	1	2400	G	C4-C5-N7	6.65	113.46	110.80
38	4	140	G	C8-N9-C4	-6.65	103.74	106.40
1	6	1634	C	C5-C6-N1	6.65	124.33	121.00
1	6	1640	C	N1-C2-O2	6.65	122.89	118.90
36	5	617	G	C4-C5-N7	6.65	113.46	110.80
36	5	830	A	N1-C6-N6	6.65	122.59	118.60
36	5	938	C	C5-C4-N4	-6.65	115.55	120.20
1	6	1120	U	N3-C2-O2	-6.65	117.55	122.20
36	5	2875	U	C2-N1-C1'	6.65	125.68	117.70
37	7	105	C	N3-C4-C5	-6.65	119.24	121.90
36	1	790	U	C6-N1-C2	-6.65	117.01	121.00
36	1	2237	C	C6-N1-C2	6.64	122.96	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1000	C	N3-C2-O2	-6.64	117.25	121.90
1	2	1241	G	C4-N9-C1'	6.64	135.13	126.50
1	2	1761	U	C6-N1-C2	-6.64	117.01	121.00
36	5	417	A	OP2-P-O3'	6.64	119.82	105.20
36	5	3335	A	N9-C4-C5	-6.64	103.14	105.80
36	1	3218	A	C5-C6-N6	-6.64	118.39	123.70
36	1	213	A	N1-C6-N6	6.63	122.58	118.60
36	5	1865	A	C2-N3-C4	-6.63	107.28	110.60
51	m5	96	ARG	NE-CZ-NH1	6.63	123.62	120.30
36	5	2692	A	O5'-P-OP1	-6.63	99.73	105.70
36	1	3208	G	C4-N9-C1'	-6.63	117.88	126.50
36	5	911	C	N1-C2-O2	-6.63	114.92	118.90
36	5	2620	G	C5-C6-O6	6.63	132.58	128.60
36	5	644	G	C5-C6-O6	6.63	132.57	128.60
36	1	1151	U	N1-C2-O2	-6.62	118.16	122.80
36	5	2875	U	C2-N3-C4	6.62	130.97	127.00
1	2	577	G	C5-N7-C8	-6.62	100.99	104.30
36	5	2727	A	O5'-P-OP2	-6.62	99.74	105.70
36	1	1103	A	O5'-P-OP2	6.62	118.64	110.70
36	1	2392	C	N3-C4-C5	6.62	124.55	121.90
36	5	1181	U	C4-C5-C6	6.62	123.67	119.70
36	5	1438	U	N3-C2-O2	-6.62	117.57	122.20
36	5	2932	U	O5'-P-OP1	-6.62	99.74	105.70
1	6	421	A	N1-C6-N6	6.62	122.57	118.60
36	5	869	G	O5'-P-OP2	-6.62	99.75	105.70
36	5	1902	G	C6-C5-N7	-6.62	126.43	130.40
36	5	3245	A	C5-C6-N1	-6.61	114.39	117.70
36	5	784	A	C5-C6-N6	-6.61	118.41	123.70
36	5	816	A	N9-C4-C5	6.61	108.44	105.80
36	5	1101	G	C6-C5-N7	-6.61	126.43	130.40
36	1	1514	G	C4-N9-C1'	6.61	135.09	126.50
36	5	2870	C	N3-C4-C5	6.61	124.54	121.90
36	5	283	G	C5-N7-C8	-6.61	101.00	104.30
36	5	641	C	N3-C4-C5	6.61	124.54	121.90
36	5	1889	G	N3-C4-N9	6.61	129.96	126.00
1	6	44	U	N1-C2-O2	-6.60	118.18	122.80
36	1	1192	C	C5-C6-N1	6.60	124.30	121.00
54	M8	138	LEU	CA-CB-CG	6.60	130.48	115.30
1	2	831	U	C6-N1-C2	-6.59	117.04	121.00
36	1	2391	G	N9-C4-C5	6.59	108.04	105.40
38	8	20	U	N1-C2-O2	-6.59	118.18	122.80
36	1	2639	G	C8-N9-C1'	-6.59	118.43	127.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3217	C	N3-C2-O2	-6.59	117.29	121.90
36	1	307	A	O5'-P-OP2	-6.59	99.77	105.70
56	N0	40	ARG	NE-CZ-NH2	6.59	123.59	120.30
40	l3	4	ARG	NE-CZ-NH1	6.59	123.59	120.30
36	1	1190	A	C6-C5-N7	-6.58	127.69	132.30
36	1	2972	G	C8-N9-C4	-6.58	103.77	106.40
1	6	1440	C	C6-N1-C2	-6.58	117.67	120.30
36	5	370	U	C2-N1-C1'	6.58	125.60	117.70
36	5	640	U	N3-C2-O2	6.58	126.81	122.20
36	1	2306	C	N1-C2-O2	6.58	122.85	118.90
36	1	2692	A	C6-C5-N7	-6.58	127.69	132.30
35	sM	167	PRO	N-CA-CB	6.58	111.20	103.30
36	5	1716	U	C5-C6-N1	6.58	125.99	122.70
1	2	74	U	O4'-C1'-N1	6.58	113.46	108.20
36	1	1878	G	C8-N9-C4	-6.58	103.77	106.40
36	1	2144	A	O4'-C1'-N9	6.58	113.46	108.20
44	L7	83	LEU	CA-CB-CG	6.58	130.43	115.30
36	1	2836	C	C5-C4-N4	6.58	124.80	120.20
36	5	1710	C	N3-C4-C5	6.58	124.53	121.90
36	5	2114	C	C6-N1-C2	-6.58	117.67	120.30
1	2	1658	G	C4-C5-N7	6.57	113.43	110.80
36	1	672	A	C8-N9-C4	6.57	108.43	105.80
36	1	2869	U	C2-N1-C1'	6.57	125.59	117.70
70	O4	51	LEU	CA-CB-CG	6.57	130.42	115.30
36	5	1366	A	C8-N9-C4	-6.57	103.17	105.80
36	1	1468	A	C2-N3-C4	-6.57	107.31	110.60
36	1	435	C	C5-C6-N1	-6.57	117.72	121.00
36	5	628	A	N1-C6-N6	-6.57	114.66	118.60
36	5	2416	U	C5-C6-N1	6.57	125.98	122.70
36	5	2948	C	N3-C4-C5	6.57	124.53	121.90
36	5	2713	U	C5-C4-O4	-6.57	121.96	125.90
36	1	858	A	O5'-P-OP2	-6.56	99.79	105.70
36	1	1437	C	N3-C2-O2	-6.56	117.31	121.90
36	1	350	C	N1-C2-O2	6.56	122.84	118.90
36	1	2714	G	C5-N7-C8	-6.56	101.02	104.30
36	1	3101	G	N1-C6-O6	-6.56	115.96	119.90
36	1	2124	G	N1-C6-O6	6.56	123.84	119.90
36	1	2182	A	C8-N9-C4	-6.56	103.18	105.80
1	6	151	G	N3-C2-N2	-6.56	115.31	119.90
36	1	1378	U	C5-C4-O4	-6.56	121.97	125.90
1	2	1096	C	C2-N1-C1'	6.56	126.01	118.80
36	1	298	U	N1-C2-O2	6.56	127.39	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	232	G	N3-C4-C5	-6.55	125.32	128.60
36	5	2303	A	C8-N9-C4	6.55	108.42	105.80
1	6	1537	C	C6-N1-C2	-6.55	117.68	120.30
36	5	908	G	C5-C6-O6	-6.55	124.67	128.60
36	1	589	A	O5'-P-OP1	-6.55	99.80	105.70
36	5	1902	G	C5-C6-O6	-6.55	124.67	128.60
36	5	827	A	N1-C6-N6	-6.55	114.67	118.60
36	5	1099	A	C4-C5-N7	6.55	113.97	110.70
36	5	1846	C	C2-N3-C4	-6.55	116.63	119.90
36	5	1370	G	N1-C6-O6	-6.54	115.97	119.90
36	1	942	U	N3-C4-O4	6.54	123.98	119.40
36	1	2183	A	C5-C6-N6	-6.54	118.47	123.70
36	5	816	A	O5'-P-OP2	-6.54	99.81	105.70
1	6	18	C	C6-N1-C2	-6.54	117.68	120.30
36	5	3362	A	N7-C8-N9	6.54	117.07	113.80
1	6	1029	U	C5-C4-O4	6.54	129.82	125.90
1	6	1700	C	C6-N1-C1'	-6.54	112.95	120.80
1	6	1744	A	C8-N9-C4	6.54	108.42	105.80
36	1	1154	A	C4-C5-C6	6.54	120.27	117.00
36	1	1556	C	C2-N1-C1'	6.53	125.99	118.80
36	5	1149	G	C5-C6-O6	-6.53	124.68	128.60
36	5	2941	A	O4'-C1'-N9	-6.53	102.97	108.20
41	L4	182	LEU	CA-CB-CG	6.53	130.32	115.30
36	1	353	G	C6-C5-N7	-6.53	126.48	130.40
36	5	3303	G	O5'-P-OP2	-6.53	99.82	105.70
36	5	2310	U	N3-C2-O2	-6.53	117.63	122.20
36	5	2552	C	N1-C2-O2	6.53	122.82	118.90
36	1	2376	G	C5-N7-C8	-6.53	101.04	104.30
36	1	2603	G	C6-C5-N7	-6.53	126.48	130.40
36	5	2375	G	C4-C5-N7	-6.53	108.19	110.80
1	2	1389	C	C2-N1-C1'	6.52	125.98	118.80
36	1	1124	U	OP1-P-O3'	6.52	119.55	105.20
36	1	1741	A	C2-N3-C4	-6.52	107.34	110.60
36	1	2617	U	N3-C2-O2	-6.52	117.64	122.20
36	1	3179	U	O5'-P-OP1	-6.52	99.83	105.70
36	5	2392	C	N3-C4-C5	6.52	124.51	121.90
1	2	1196	A	P-O3'-C3'	6.51	127.52	119.70
1	6	364	G	N9-C4-C5	-6.51	102.79	105.40
36	1	432	G	C5-C6-N1	-6.51	108.24	111.50
51	m5	96	ARG	NE-CZ-NH2	-6.51	117.04	120.30
36	1	938	C	C5-C6-N1	6.51	124.26	121.00
36	1	1003	A	N1-C6-N6	6.51	122.51	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	C4-N9-C1'	-6.51	118.04	126.50
1	2	1761	U	P-O3'-C3'	6.51	127.51	119.70
36	1	24	G	C8-N9-C1'	-6.51	118.54	127.00
36	1	1156	C	C2-N1-C1'	6.51	125.96	118.80
36	1	1884	A	O5'-P-OP2	-6.51	99.84	105.70
36	1	298	U	C2-N1-C1'	6.51	125.51	117.70
36	1	895	A	O5'-P-OP1	-6.51	99.84	105.70
1	2	1595	U	N3-C4-O4	6.50	123.95	119.40
36	5	102	C	C5-C4-N4	-6.50	115.65	120.20
36	5	1152	G	C5-C6-O6	-6.50	124.70	128.60
36	5	1396	C	OP2-P-O3'	6.50	119.51	105.20
73	o7	65	ARG	NE-CZ-NH1	6.50	123.55	120.30
36	1	729	C	C6-N1-C2	-6.50	117.70	120.30
36	5	911	C	C2-N3-C4	-6.50	116.65	119.90
36	5	2314	U	N1-C2-O2	-6.50	118.25	122.80
36	5	3377	G	N1-C6-O6	6.50	123.80	119.90
36	1	639	G	N9-C4-C5	-6.50	102.80	105.40
36	1	704	U	N3-C4-O4	6.50	123.95	119.40
36	1	1001	G	C6-C5-N7	-6.50	126.50	130.40
36	1	2121	G	N3-C4-C5	-6.50	125.35	128.60
35	SM	167	PRO	N-CA-CB	6.50	111.09	103.30
1	6	1137	A	C8-N9-C4	6.50	108.40	105.80
36	1	2306	C	C2-N1-C1'	6.49	125.94	118.80
36	5	1894	U	C5-C6-N1	-6.49	119.45	122.70
36	1	1391	C	C4-C5-C6	6.49	120.65	117.40
36	5	1536	G	N1-C6-O6	6.49	123.80	119.90
36	5	3026	G	C5-C6-O6	-6.49	124.70	128.60
1	2	1761	U	N3-C2-O2	-6.49	117.66	122.20
36	1	428	A	C4-C5-C6	-6.49	113.75	117.00
36	5	2419	A	C6-C5-N7	-6.49	127.76	132.30
36	1	33	G	O5'-P-OP1	-6.49	99.86	105.70
36	5	2696	A	C5-N7-C8	-6.49	100.66	103.90
37	7	51	A	C8-N9-C4	-6.49	103.20	105.80
36	1	1713	G	N3-C4-C5	6.49	131.84	128.60
1	6	1000	C	C6-N1-C2	-6.49	117.71	120.30
36	1	2423	U	O5'-P-OP2	-6.48	99.87	105.70
36	1	2612	U	C5-C6-N1	-6.48	119.46	122.70
1	6	1568	C	P-O3'-C3'	6.48	127.48	119.70
36	5	283	G	O4'-C1'-N9	-6.48	103.01	108.20
36	5	2351	U	N1-C2-N3	6.48	118.79	114.90
36	1	979	U	O4'-C1'-N1	6.48	113.38	108.20
36	5	1181	U	C5-C4-O4	6.48	129.79	125.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1445	U	N3-C2-O2	6.48	126.73	122.20
36	1	3215	A	N1-C6-N6	6.48	122.49	118.60
1	6	1340	U	N3-C2-O2	-6.48	117.66	122.20
36	5	694	C	N3-C2-O2	-6.48	117.36	121.90
36	5	1177	G	C6-N1-C2	-6.48	121.21	125.10
36	5	360	G	C8-N9-C4	-6.48	103.81	106.40
36	5	2199	G	N3-C2-N2	-6.48	115.37	119.90
36	1	2818	U	C5-C6-N1	6.48	125.94	122.70
1	6	858	G	C6-C5-N7	-6.48	126.51	130.40
36	1	145	G	C5-C6-O6	-6.47	124.72	128.60
36	1	3214	U	N3-C2-O2	-6.47	117.67	122.20
1	6	1421	A	C8-N9-C4	6.47	108.39	105.80
12	c0	83	PRO	N-CA-CB	6.47	111.07	103.30
36	5	983	A	C6-N1-C2	-6.47	114.72	118.60
36	5	578	A	N1-C6-N6	6.47	122.48	118.60
37	7	105	C	N3-C2-O2	-6.47	117.37	121.90
1	2	1744	A	O5'-P-OP1	-6.47	99.88	105.70
36	1	2403	G	N1-C6-O6	6.47	123.78	119.90
1	6	1657	U	N1-C2-O2	6.47	127.33	122.80
37	7	83	U	C5-C6-N1	-6.47	119.47	122.70
38	4	20	U	C5-C6-N1	-6.47	119.47	122.70
1	6	1780	G	C4-C5-N7	6.47	113.39	110.80
36	5	424	G	C5-C6-N1	6.46	114.73	111.50
36	1	1206	G	O5'-P-OP2	-6.46	99.88	105.70
36	5	1080	A	N7-C8-N9	-6.46	110.57	113.80
36	5	2616	C	O5'-P-OP2	6.46	118.45	110.70
1	6	1029	U	C6-N1-C1'	6.46	130.24	121.20
36	5	1303	A	N1-C2-N3	-6.46	126.07	129.30
36	5	1476	G	C5-C6-O6	6.46	132.47	128.60
36	5	2929	C	C2-N3-C4	-6.46	116.67	119.90
36	5	939	U	O5'-P-OP1	6.46	118.45	110.70
36	5	3172	A	N1-C2-N3	6.46	132.53	129.30
36	1	1433	A	N9-C4-C5	6.45	108.38	105.80
36	1	2383	C	C5-C4-N4	-6.45	115.68	120.20
36	5	649	A	C5-C6-N6	-6.45	118.54	123.70
36	5	2435	G	N9-C4-C5	-6.45	102.82	105.40
36	1	1807	G	N3-C4-C5	-6.45	125.37	128.60
36	1	1886	A	O5'-P-OP2	-6.45	99.89	105.70
36	1	2968	G	N1-C6-O6	6.45	123.77	119.90
36	1	596	C	N3-C2-O2	-6.45	117.39	121.90
1	6	17	C	N1-C2-O2	6.45	122.77	118.90
1	6	298	C	N3-C2-O2	6.45	126.41	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	758	C	C2-N1-C1'	-6.45	111.71	118.80
36	5	2143	A	C2-N3-C4	6.45	113.82	110.60
36	1	2637	A	O5'-P-OP1	-6.44	99.90	105.70
36	1	1336	U	N1-C2-N3	6.44	118.76	114.90
1	6	1650	U	N3-C4-O4	6.44	123.91	119.40
36	5	2245	C	C6-N1-C2	-6.44	117.72	120.30
1	2	410	A	O5'-P-OP1	-6.43	99.91	105.70
1	2	507	U	N3-C2-O2	-6.43	117.70	122.20
36	1	3025	C	C5-C6-N1	-6.43	117.78	121.00
36	5	1110	U	N1-C2-O2	6.43	127.30	122.80
36	1	2942	C	O5'-P-OP1	6.43	118.42	110.70
1	2	1363	U	C2-N1-C1'	6.43	125.42	117.70
36	5	3362	A	C8-N9-C4	-6.43	103.23	105.80
36	1	145	G	C4-C5-N7	6.43	113.37	110.80
36	1	858	A	C4-C5-C6	6.43	120.22	117.00
36	5	358	G	C5-C6-O6	-6.43	124.75	128.60
36	5	2321	A	OP2-P-O3'	6.43	119.34	105.20
36	5	3195	U	OP1-P-O3'	6.43	119.34	105.20
1	2	54	C	C6-N1-C2	-6.42	117.73	120.30
36	5	2334	U	O5'-P-OP2	-6.42	99.92	105.70
36	5	3131	U	C6-N1-C2	6.42	124.85	121.00
1	2	554	C	C2-N1-C1'	6.42	125.86	118.80
36	1	2283	G	N3-C2-N2	-6.42	115.41	119.90
36	5	102	C	N3-C4-N4	6.42	122.49	118.00
1	6	19	A	C8-N9-C4	6.42	108.37	105.80
37	7	37	G	C8-N9-C4	6.42	108.97	106.40
68	o2	44	ARG	NE-CZ-NH1	-6.42	117.09	120.30
36	5	2710	C	N1-C2-O2	-6.41	115.05	118.90
36	1	92	G	N3-C4-C5	-6.41	125.39	128.60
36	1	1869	C	O5'-P-OP2	-6.41	99.93	105.70
36	1	2159	U	C6-N1-C2	6.41	124.85	121.00
41	L4	327	LEU	CA-CB-CG	6.41	130.04	115.30
36	5	1481	A	N7-C8-N9	6.41	117.01	113.80
36	1	2243	A	O5'-P-OP2	-6.41	99.93	105.70
36	5	813	G	C5-C6-O6	-6.41	124.76	128.60
36	5	999	G	N7-C8-N9	-6.41	109.90	113.10
36	5	1321	G	C6-C5-N7	-6.41	126.56	130.40
36	5	2606	G	OP1-P-O3'	6.41	119.29	105.20
36	5	2968	G	C4-N9-C1'	6.41	134.83	126.50
1	6	387	A	C2-N3-C4	6.40	113.80	110.60
36	5	2821	C	N1-C2-O2	-6.40	115.06	118.90
36	1	709	A	C8-N9-C4	6.40	108.36	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1082	U	C2-N1-C1'	6.40	125.38	117.70
38	4	27	U	C5-C6-N1	6.40	125.90	122.70
36	5	3269	U	P-O3'-C3'	6.40	127.38	119.70
38	8	9	A	N1-C6-N6	6.40	122.44	118.60
36	1	131	C	C6-N1-C2	-6.40	117.74	120.30
36	1	423	A	N9-C4-C5	6.40	108.36	105.80
36	1	3175	U	N3-C2-O2	-6.40	117.72	122.20
1	6	1614	A	O4'-C1'-N9	6.40	113.32	108.20
36	5	2211	U	N3-C2-O2	-6.40	117.72	122.20
36	5	2874	G	C5-C6-O6	6.40	132.44	128.60
36	5	1126	G	C2-N3-C4	-6.39	108.70	111.90
53	M7	138	LYS	CD-CE-NZ	6.39	126.40	111.70
1	6	415	C	N3-C2-O2	-6.39	117.42	121.90
36	5	1661	G	N1-C6-O6	6.39	123.73	119.90
1	6	901	G	C5-C6-O6	-6.39	124.77	128.60
36	5	1470	U	C2-N1-C1'	6.39	125.37	117.70
36	5	2167	A	C8-N9-C4	-6.39	103.25	105.80
36	5	2644	C	O5'-P-OP1	-6.39	99.95	105.70
36	5	2852	C	C6-N1-C2	6.39	122.86	120.30
36	1	1103	A	OP1-P-O3'	6.39	119.25	105.20
36	5	1716	U	C2-N1-C1'	6.39	125.36	117.70
36	5	3140	G	O5'-P-OP1	-6.39	99.95	105.70
36	1	3104	U	C5-C6-N1	-6.38	119.51	122.70
36	5	971	G	C4-C5-N7	-6.38	108.25	110.80
36	5	1897	G	C4-C5-N7	6.38	113.35	110.80
36	1	345	G	N3-C4-C5	-6.38	125.41	128.60
36	1	2924	U	C2-N1-C1'	-6.38	110.04	117.70
1	2	453	U	N3-C2-O2	-6.38	117.73	122.20
36	1	3143	C	N1-C2-O2	-6.38	115.07	118.90
1	6	1785	U	N3-C2-O2	-6.38	117.73	122.20
36	1	627	U	N3-C2-O2	6.38	126.67	122.20
37	3	33	U	N3-C2-O2	-6.38	117.73	122.20
36	5	2978	U	N3-C2-O2	-6.38	117.73	122.20
36	1	2755	C	N3-C2-O2	6.38	126.36	121.90
25	d3	45	GLY	N-CA-C	-6.38	97.16	113.10
36	5	51	A	N1-C6-N6	6.38	122.43	118.60
36	5	3182	G	OP1-P-OP2	-6.37	110.04	119.60
36	1	1269	U	C2-N1-C1'	6.37	125.35	117.70
1	2	830	U	N3-C2-O2	-6.37	117.74	122.20
36	1	857	G	N3-C4-N9	-6.37	122.18	126.00
36	5	2928	C	C2-N1-C1'	6.37	125.81	118.80
36	5	2395	G	O5'-P-OP1	6.37	118.34	110.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	75	U	N1-C2-O2	6.37	127.26	122.80
1	6	1117	U	N3-C4-C5	-6.37	110.78	114.60
36	5	3285	C	N1-C2-O2	6.37	122.72	118.90
36	1	350	C	C6-N1-C1'	-6.36	113.17	120.80
36	1	1475	A	C8-N9-C4	6.36	108.35	105.80
36	5	2772	C	P-O3'-C3'	6.36	127.34	119.70
1	6	1793	G	C4-C5-N7	-6.36	108.25	110.80
36	5	994	G	C5-C6-N1	6.36	114.68	111.50
1	2	380	U	N3-C2-O2	-6.36	117.75	122.20
36	1	1405	U	C2-N3-C4	-6.36	123.19	127.00
36	1	2924	U	C6-N1-C2	6.36	124.81	121.00
36	5	2613	U	O5'-P-OP1	-6.36	99.98	105.70
1	2	577	G	N1-C6-O6	6.36	123.71	119.90
36	1	895	A	C6-C5-N7	-6.36	127.85	132.30
36	1	2182	A	N7-C8-N9	6.36	116.98	113.80
1	6	1747	G	O5'-P-OP1	6.36	118.33	110.70
36	1	324	A	C8-N9-C4	-6.35	103.26	105.80
36	1	790	U	C5-C4-O4	6.35	129.71	125.90
38	4	88	A	N9-C4-C5	-6.35	103.26	105.80
36	5	1452	A	C4-C5-N7	6.35	113.88	110.70
36	5	2750	U	O5'-P-OP1	6.35	118.33	110.70
36	1	1488	G	N1-C6-O6	6.35	123.71	119.90
1	2	334	G	N3-C4-N9	-6.35	122.19	126.00
36	1	2700	G	N1-C6-O6	6.35	123.71	119.90
1	2	1198	G	C8-N9-C4	-6.35	103.86	106.40
36	1	685	G	N1-C6-O6	6.35	123.71	119.90
36	1	2314	U	N3-C2-O2	6.35	126.64	122.20
38	4	103	G	C8-N9-C4	-6.35	103.86	106.40
36	5	2117	A	C5-C6-N6	6.35	128.78	123.70
36	5	3041	U	C4-C5-C6	-6.35	115.89	119.70
36	5	1016	C	O5'-P-OP1	-6.35	99.99	105.70
36	5	2598	G	N1-C6-O6	6.35	123.71	119.90
1	2	334	G	C4-N9-C1'	-6.34	118.25	126.50
36	1	2692	A	C8-N9-C4	-6.34	103.26	105.80
36	5	1403	C	N3-C4-N4	6.34	122.44	118.00
36	5	1589	A	C5-C6-N6	-6.34	118.62	123.70
36	1	70	A	N7-C8-N9	6.34	116.97	113.80
1	6	858	G	N7-C8-N9	6.34	116.27	113.10
36	5	1335	C	N3-C2-O2	6.34	126.34	121.90
36	5	1368	U	O5'-P-OP1	-6.34	99.99	105.70
36	5	1909	A	C8-N9-C4	6.34	108.34	105.80
36	1	70	A	C5-N7-C8	-6.34	100.73	103.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3266	G	N9-C4-C5	6.34	107.94	105.40
36	1	2952	G	N1-C6-O6	6.34	123.70	119.90
36	5	776	U	C5-C4-O4	6.34	129.70	125.90
36	5	1049	C	C5-C6-N1	6.34	124.17	121.00
36	5	1152	G	N7-C8-N9	6.34	116.27	113.10
36	1	3181	C	N3-C2-O2	-6.34	117.46	121.90
1	6	402	C	N3-C4-C5	6.33	124.43	121.90
36	5	2124	G	C8-N9-C4	6.33	108.93	106.40
36	1	1043	C	N3-C4-C5	6.33	124.43	121.90
38	4	46	G	N1-C6-O6	-6.33	116.10	119.90
1	2	1082	C	C2-N1-C1'	6.33	125.76	118.80
36	1	820	A	C8-N9-C4	-6.33	103.27	105.80
36	1	1330	A	N1-C6-N6	6.33	122.40	118.60
36	5	1392	G	N7-C8-N9	-6.33	109.94	113.10
36	1	1514	G	C6-C5-N7	-6.33	126.61	130.40
36	1	3266	G	C8-N9-C4	-6.32	103.87	106.40
36	5	2139	A	N1-C2-N3	6.32	132.46	129.30
36	5	3004	C	N3-C2-O2	6.32	126.33	121.90
1	2	42	G	N1-C6-O6	-6.32	116.11	119.90
36	1	1943	C	C6-N1-C2	-6.32	117.77	120.30
1	2	244	A	N1-C6-N6	6.32	122.39	118.60
36	1	286	U	N3-C2-O2	-6.32	117.78	122.20
36	1	423	A	C8-N9-C4	-6.32	103.27	105.80
36	5	994	G	N3-C4-N9	6.32	129.79	126.00
36	1	1822	C	C6-N1-C2	-6.32	117.77	120.30
36	1	2887	A	C4-C5-N7	6.32	113.86	110.70
1	6	1745	G	N1-C6-O6	6.32	123.69	119.90
36	5	1053	A	N1-C6-N6	-6.32	114.81	118.60
36	5	1366	A	N1-C6-N6	-6.32	114.81	118.60
36	5	3028	G	N3-C2-N2	6.32	124.32	119.90
36	1	670	C	C4-C5-C6	6.31	120.56	117.40
36	5	998	A	OP2-P-O3'	6.31	119.09	105.20
38	8	56	G	N1-C6-O6	6.31	123.69	119.90
36	1	3074	G	N1-C6-O6	6.31	123.69	119.90
36	1	60	A	N1-C6-N6	6.31	122.39	118.60
36	5	943	U	N1-C2-N3	6.31	118.69	114.90
36	5	1080	A	C8-N9-C4	6.31	108.32	105.80
36	5	1101	G	C8-N9-C1'	-6.31	118.80	127.00
36	5	2944	U	O5'-P-OP1	-6.31	100.02	105.70
36	5	3164	C	O4'-C1'-N1	6.31	113.24	108.20
38	8	84	C	C6-N1-C2	-6.30	117.78	120.30
36	1	1858	A	N3-C4-C5	-6.30	122.39	126.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2620	G	C8-N9-C4	6.30	108.92	106.40
36	5	2646	C	C6-N1-C2	6.30	122.82	120.30
36	1	646	A	C5-C6-N1	-6.30	114.55	117.70
36	1	649	A	N7-C8-N9	-6.30	110.65	113.80
36	5	921	A	OP2-P-O3'	6.30	119.05	105.20
36	5	610	G	N9-C4-C5	6.29	107.92	105.40
36	1	716	A	C4-C5-N7	6.29	113.85	110.70
38	4	103	G	C4-N9-C1'	6.29	134.68	126.50
36	5	1788	C	O5'-P-OP2	-6.29	100.04	105.70
36	5	2651	G	C8-N9-C4	6.29	108.92	106.40
36	1	635	G	C5-C6-O6	-6.29	124.83	128.60
36	1	1116	G	C4-N9-C1'	6.29	134.68	126.50
36	5	3311	C	C6-N1-C2	-6.29	117.78	120.30
36	5	428	A	C8-N9-C4	6.29	108.32	105.80
36	1	76	G	C6-C5-N7	-6.29	126.63	130.40
36	1	2344	U	C5-C6-N1	-6.29	119.56	122.70
36	1	2407	C	C6-N1-C2	6.29	122.82	120.30
36	1	2594	C	O5'-P-OP2	-6.29	100.04	105.70
36	1	2777	G	C5-C6-O6	6.29	132.37	128.60
36	5	584	G	N9-C4-C5	6.29	107.92	105.40
36	5	1200	A	C4-C5-C6	6.29	120.14	117.00
36	5	3075	G	C5-C6-N1	-6.29	108.36	111.50
36	5	1710	C	C5-C6-N1	-6.29	117.86	121.00
1	2	91	G	C5-C6-O6	-6.29	124.83	128.60
36	1	770	G	O4'-C1'-N9	6.28	113.23	108.20
36	5	911	C	C5-C6-N1	-6.28	117.86	121.00
36	5	923	C	C6-N1-C1'	-6.28	113.26	120.80
36	5	1148	G	C5-C6-O6	-6.28	124.83	128.60
36	5	57	A	C5-C6-N6	-6.28	118.67	123.70
36	1	2343	C	N3-C4-C5	6.28	124.41	121.90
38	4	56	G	O5'-P-OP2	-6.28	100.05	105.70
1	6	813	U	C2-N1-C1'	6.28	125.24	117.70
36	5	906	A	C8-N9-C4	-6.28	103.29	105.80
36	5	1110	U	C4-C5-C6	-6.28	115.93	119.70
36	5	2950	G	N9-C4-C5	-6.28	102.89	105.40
36	1	3206	C	C2-N1-C1'	-6.28	111.89	118.80
36	5	1450	G	N1-C2-N2	6.28	121.85	116.20
36	1	1157	G	C2-N3-C4	-6.28	108.76	111.90
36	1	2572	C	N3-C2-O2	-6.28	117.51	121.90
36	5	2277	C	C6-N1-C2	6.28	122.81	120.30
20	c8	15	LEU	CA-CB-CG	6.27	129.73	115.30
36	1	2692	A	C5-C6-N6	-6.27	118.68	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	608	U	C5-C4-O4	6.27	129.66	125.90
1	2	1762	A	O5'-P-OP1	-6.27	100.06	105.70
36	1	2872	A	C5-C6-N6	-6.27	118.69	123.70
36	1	3180	A	C5-C6-N6	-6.27	118.69	123.70
36	1	3206	C	C6-N1-C1'	6.27	128.32	120.80
1	6	65	A	N9-C4-C5	-6.27	103.29	105.80
36	5	922	U	C6-N1-C2	6.27	124.76	121.00
36	5	1152	G	O5'-P-OP1	-6.27	100.06	105.70
36	1	2968	G	N3-C2-N2	-6.27	115.51	119.90
1	6	1150	G	C2-N3-C4	-6.26	108.77	111.90
36	5	1421	G	C5-C6-N1	-6.26	108.37	111.50
36	5	2943	G	N9-C4-C5	-6.26	102.89	105.40
36	1	1300	G	N9-C4-C5	-6.26	102.89	105.40
1	2	1761	U	C5-C4-O4	6.26	129.66	125.90
36	5	1879	A	C5-N7-C8	-6.26	100.77	103.90
36	5	2757	U	O5'-P-OP1	-6.26	100.06	105.70
38	4	22	U	C5-C6-N1	-6.26	119.57	122.70
36	1	1144	U	C2-N3-C4	-6.26	123.25	127.00
36	5	91	G	N1-C6-O6	6.26	123.65	119.90
36	1	101	G	OP2-P-O3'	6.25	118.96	105.20
36	1	362	U	C6-N1-C2	6.25	124.75	121.00
36	1	901	G	N1-C6-O6	6.25	123.65	119.90
36	1	2283	G	N3-C4-C5	6.25	131.73	128.60
1	6	21	U	C5-C4-O4	-6.25	122.15	125.90
1	6	111	U	C6-N1-C2	-6.25	117.25	121.00
36	5	361	A	C4-C5-N7	-6.25	107.57	110.70
36	5	640	U	C6-N1-C2	-6.25	117.25	121.00
36	1	1838	G	N3-C4-N9	6.25	129.75	126.00
36	1	2621	G	N3-C2-N2	-6.25	115.53	119.90
36	1	1190	A	C4-N9-C1'	6.25	137.54	126.30
1	2	542	A	N7-C8-N9	6.25	116.92	113.80
1	2	453	U	N1-C2-O2	6.24	127.17	122.80
36	1	586	C	N1-C2-O2	-6.24	115.15	118.90
36	5	1154	A	C2-N3-C4	6.24	113.72	110.60
36	5	3049	A	C8-N9-C4	6.24	108.30	105.80
37	7	9	C	C2-N1-C1'	-6.24	111.93	118.80
36	5	2283	G	C5-N7-C8	-6.24	101.18	104.30
36	5	3043	C	C6-N1-C2	6.24	122.80	120.30
36	1	1846	C	N1-C2-O2	-6.24	115.16	118.90
36	1	2957	G	N3-C2-N2	-6.24	115.53	119.90
36	5	2275	A	O5'-P-OP1	-6.24	100.08	105.70
36	5	2715	A	OP2-P-O3'	6.24	118.93	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1306	G	N1-C6-O6	6.24	123.64	119.90
36	5	1126	G	C6-C5-N7	-6.24	126.66	130.40
36	5	2717	U	C5-C6-N1	-6.24	119.58	122.70
1	2	307	G	C8-N9-C1'	-6.24	118.89	127.00
36	5	2710	C	N3-C2-O2	6.24	126.27	121.90
1	6	539	G	C8-N9-C4	-6.24	103.91	106.40
36	5	1552	G	N1-C6-O6	6.24	123.64	119.90
36	5	3276	G	O5'-P-OP1	-6.24	100.09	105.70
36	1	925	A	C8-N9-C4	-6.23	103.31	105.80
36	5	1336	U	C5-C6-N1	6.23	125.82	122.70
36	5	2354	C	N3-C2-O2	6.23	126.26	121.90
36	5	969	C	C5-C6-N1	-6.23	117.88	121.00
36	5	2797	C	N3-C4-C5	-6.23	119.41	121.90
36	5	2812	C	C6-N1-C2	-6.23	117.81	120.30
36	1	1514	G	C8-N9-C1'	-6.23	118.90	127.00
36	1	3310	A	C8-N9-C4	6.23	108.29	105.80
36	5	2610	G	N1-C6-O6	6.23	123.64	119.90
36	5	3000	A	C2-N3-C4	-6.23	107.48	110.60
36	5	2164	A	C4-C5-C6	6.23	120.11	117.00
36	5	3392	U	N3-C2-O2	-6.23	117.84	122.20
1	2	308	C	C2-N1-C1'	-6.23	111.95	118.80
36	5	1591	G	N1-C6-O6	6.23	123.64	119.90
36	1	1487	G	N9-C4-C5	6.22	107.89	105.40
36	1	2827	U	C6-N1-C1'	6.22	129.91	121.20
36	1	2935	U	N3-C4-C5	-6.22	110.87	114.60
36	5	1162	U	OP1-P-OP2	6.22	128.94	119.60
36	5	1914	G	N1-C6-O6	-6.22	116.17	119.90
37	3	98	C	C5-C6-N1	-6.22	117.89	121.00
36	5	3215	A	C5-C6-N1	-6.22	114.59	117.70
36	5	2176	U	N1-C2-N3	6.22	118.63	114.90
36	1	655	C	N3-C4-C5	-6.22	119.41	121.90
1	6	1541	G	C8-N9-C4	-6.22	103.91	106.40
36	5	806	A	N3-C4-N9	-6.22	122.42	127.40
37	7	55	A	N1-C6-N6	6.22	122.33	118.60
36	1	1159	A	O4'-C1'-N9	6.22	113.17	108.20
36	1	1313	G	C4-C5-N7	6.22	113.29	110.80
1	6	1779	U	O5'-P-OP2	-6.22	100.11	105.70
36	5	1475	A	O5'-P-OP2	-6.22	100.11	105.70
1	2	447	U	C6-N1-C2	-6.21	117.27	121.00
1	2	1428	G	O5'-P-OP1	-6.21	100.11	105.70
1	2	794	U	P-O3'-C3'	6.21	127.15	119.70
1	6	1778	G	C5-N7-C8	-6.21	101.19	104.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1119	C	OP2-P-O3'	6.21	118.87	105.20
36	5	1907	C	O5'-P-OP2	-6.21	100.11	105.70
36	5	2879	C	O5'-P-OP2	-6.21	100.11	105.70
36	5	3166	C	C2-N1-C1'	6.21	125.63	118.80
36	5	2161	G	N9-C4-C5	6.21	107.88	105.40
1	2	579	A	O4'-C1'-N9	6.21	113.17	108.20
1	6	1514	U	C5-C4-O4	6.21	129.62	125.90
36	5	3143	C	N3-C4-N4	6.21	122.35	118.00
36	1	942	U	OP1-P-OP2	-6.21	110.29	119.60
1	6	1651	A	N1-C6-N6	6.21	122.32	118.60
1	2	728	U	C2-N1-C1'	6.21	125.15	117.70
36	5	2631	U	O5'-P-OP2	-6.21	100.11	105.70
36	1	393	U	C5-C4-O4	6.20	129.62	125.90
37	3	91	G	N1-C6-O6	6.20	123.62	119.90
36	5	2334	U	N3-C2-O2	-6.20	117.86	122.20
36	1	2381	G	N3-C4-N9	6.20	129.72	126.00
36	1	2835	U	C5-C6-N1	-6.20	119.60	122.70
36	5	398	A	O5'-P-OP2	-6.20	100.12	105.70
36	1	645	A	C5-C6-N1	6.20	120.80	117.70
36	1	1838	G	C8-N9-C1'	-6.20	118.94	127.00
36	1	2924	U	N1-C2-O2	-6.20	118.46	122.80
36	5	2346	C	N1-C2-O2	-6.20	115.18	118.90
36	1	2300	G	C6-C5-N7	-6.20	126.68	130.40
36	1	888	A	N1-C6-N6	6.20	122.32	118.60
38	4	107	G	N1-C6-O6	-6.20	116.18	119.90
1	2	1291	G	N3-C4-N9	-6.19	122.28	126.00
36	5	960	U	C5-C4-O4	6.19	129.62	125.90
1	2	74	U	O5'-P-OP1	-6.19	100.13	105.70
1	2	1100	G	N1-C6-O6	6.19	123.62	119.90
38	4	42	G	N9-C4-C5	-6.19	102.92	105.40
36	5	2878	G	C5-C6-O6	-6.19	124.88	128.60
36	1	2300	G	N7-C8-N9	6.19	116.19	113.10
36	5	599	C	N1-C2-O2	-6.19	115.19	118.90
36	1	2910	A	C2-N3-C4	-6.19	107.51	110.60
36	1	3209	A	N9-C4-C5	-6.19	103.32	105.80
36	1	650	C	OP2-P-O3'	6.19	118.81	105.20
36	5	514	G	C5-C6-O6	-6.19	124.89	128.60
36	1	334	A	C8-N9-C4	-6.18	103.33	105.80
36	1	335	G	C4-C5-N7	6.18	113.27	110.80
36	1	3256	G	C5-C6-O6	-6.18	124.89	128.60
36	5	890	C	O5'-P-OP2	-6.18	100.13	105.70
1	6	1785	U	N1-C2-N3	6.18	118.61	114.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1343	A	O5'-P-OP2	-6.18	100.14	105.70
36	1	96	G	N3-C4-C5	6.18	131.69	128.60
36	1	394	G	C8-N9-C4	-6.18	103.93	106.40
36	1	627	U	N1-C2-O2	-6.18	118.47	122.80
36	5	585	A	O5'-P-OP2	-6.18	100.14	105.70
37	7	56	A	C2-N3-C4	-6.18	107.51	110.60
36	1	1556	C	N1-C2-O2	6.18	122.61	118.90
31	D9	36	LEU	CA-CB-CG	6.18	129.50	115.30
36	5	3343	G	N3-C2-N2	6.17	124.22	119.90
36	5	2951	G	O5'-P-OP1	-6.17	100.14	105.70
36	5	2790	A	O5'-P-OP2	-6.17	100.15	105.70
1	2	1241	G	C6-C5-N7	-6.17	126.70	130.40
1	6	1123	C	C5-C4-N4	-6.17	115.88	120.20
36	1	1182	A	O5'-P-OP1	-6.17	100.15	105.70
36	1	2354	C	N1-C2-O2	-6.17	115.20	118.90
52	M6	141	LEU	CB-CG-CD2	-6.17	100.52	111.00
1	6	364	G	C8-N9-C4	6.17	108.87	106.40
36	5	2824	G	C5-C6-O6	-6.17	124.90	128.60
36	5	2993	G	C5-C6-N1	6.17	114.58	111.50
38	8	34	U	N1-C2-N3	6.17	118.60	114.90
1	2	17	C	C6-N1-C2	-6.17	117.83	120.30
36	1	721	G	C6-C5-N7	-6.17	126.70	130.40
1	6	158	U	P-O3'-C3'	6.17	127.10	119.70
1	6	1729	C	C6-N1-C2	6.17	122.77	120.30
36	1	1077	U	C5-C6-N1	-6.16	119.62	122.70
36	5	2629	U	N3-C2-O2	6.16	126.52	122.20
36	1	1099	A	C5-C6-N6	-6.16	118.77	123.70
1	6	1152	A	N9-C4-C5	-6.16	103.33	105.80
36	1	2339	C	O5'-P-OP2	-6.16	100.16	105.70
36	5	1452	A	N9-C4-C5	-6.16	103.34	105.80
36	5	2700	G	C5-C6-O6	-6.16	124.90	128.60
36	1	304	G	N9-C4-C5	6.16	107.86	105.40
37	7	77	G	N9-C4-C5	-6.16	102.94	105.40
36	1	2827	U	C2-N1-C1'	-6.16	110.31	117.70
36	5	650	C	C5-C6-N1	-6.16	117.92	121.00
36	1	3004	C	N3-C4-C5	6.15	124.36	121.90
36	1	640	U	C5-C6-N1	6.15	125.78	122.70
1	6	957	G	N3-C2-N2	-6.15	115.59	119.90
36	5	2400	G	N9-C4-C5	-6.15	102.94	105.40
36	1	1795	U	O5'-P-OP1	-6.15	100.17	105.70
36	1	439	C	N1-C2-O2	6.15	122.59	118.90
36	1	2764	C	C2-N1-C1'	6.15	125.56	118.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2887	A	C6-C5-N7	-6.15	128.00	132.30
1	6	371	G	C6-C5-N7	-6.15	126.71	130.40
36	1	2257	C	O4'-C1'-N1	6.15	113.12	108.20
36	5	283	G	N9-C4-C5	-6.14	102.94	105.40
36	1	345	G	N3-C4-N9	6.14	129.69	126.00
36	1	1450	G	N1-C6-O6	6.14	123.58	119.90
36	5	1885	U	C6-N1-C2	6.14	124.69	121.00
36	1	1156	C	C2-N3-C4	-6.14	116.83	119.90
36	1	829	U	N1-C2-O2	6.14	127.10	122.80
36	1	2971	A	C2-N3-C4	6.14	113.67	110.60
36	5	323	A	C8-N9-C4	-6.14	103.34	105.80
36	5	1449	A	C6-C5-N7	-6.14	128.00	132.30
1	2	1773	C	N3-C4-C5	-6.14	119.44	121.90
36	5	335	G	O5'-P-OP2	6.14	118.07	110.70
36	5	651	G	C4-N9-C1'	6.14	134.48	126.50
36	5	874	U	O5'-P-OP1	-6.14	100.18	105.70
36	5	1879	A	C4-C5-C6	6.14	120.07	117.00
36	1	1897	G	N1-C6-O6	6.13	123.58	119.90
36	5	1158	A	C2-N3-C4	-6.13	107.53	110.60
1	2	694	U	N1-C2-O2	6.13	127.09	122.80
37	3	95	A	C6-C5-N7	-6.13	128.01	132.30
36	5	1878	G	C4-N9-C1'	6.13	134.47	126.50
1	2	694	U	C2-N1-C1'	6.13	125.06	117.70
1	6	448	C	N3-C4-C5	-6.13	119.45	121.90
1	2	802	G	C8-N9-C4	-6.13	103.95	106.40
36	5	967	A	N1-C6-N6	-6.12	114.92	118.60
36	5	1468	A	N9-C4-C5	-6.12	103.35	105.80
36	5	2730	G	C5-C6-O6	-6.12	124.92	128.60
1	2	1370	U	P-O3'-C3'	6.12	127.05	119.70
36	1	2924	U	C5-C6-N1	-6.12	119.64	122.70
1	6	1600	A	O4'-C1'-N9	6.12	113.10	108.20
36	5	973	A	N1-C6-N6	6.12	122.27	118.60
36	5	1868	G	N9-C4-C5	-6.12	102.95	105.40
36	5	2278	C	N1-C2-O2	6.12	122.57	118.90
1	6	938	G	N1-C6-O6	6.12	123.57	119.90
36	5	1804	A	C8-N9-C4	6.12	108.25	105.80
36	1	2967	A	N1-C6-N6	6.12	122.27	118.60
54	m8	166	LEU	CA-CB-CG	6.12	129.37	115.30
36	5	3033	A	C2-N3-C4	-6.12	107.54	110.60
1	2	942	G	N1-C6-O6	-6.12	116.23	119.90
36	5	227	G	O5'-P-OP2	-6.12	100.20	105.70
36	5	952	A	O5'-P-OP2	-6.12	100.20	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2383	C	N1-C2-O2	-6.12	115.23	118.90
36	1	1133	A	O5'-P-OP2	-6.11	100.20	105.70
36	5	1163	A	N9-C4-C5	6.11	108.25	105.80
1	6	1389	C	N1-C2-O2	6.11	122.57	118.90
1	2	1100	G	C8-N9-C1'	-6.11	119.06	127.00
36	1	2920	U	N1-C2-O2	-6.11	118.52	122.80
36	5	2199	G	C4-C5-C6	6.11	122.47	118.80
38	8	77	A	C8-N9-C4	6.11	108.24	105.80
1	6	1200	G	N3-C4-N9	-6.11	122.33	126.00
1	6	1389	C	C2-N1-C1'	6.11	125.52	118.80
1	6	1778	G	N7-C8-N9	6.11	116.16	113.10
38	8	34	U	N3-C2-O2	-6.11	117.92	122.20
1	2	825	U	C5-C6-N1	6.11	125.75	122.70
36	1	1185	C	C6-N1-C2	6.11	122.74	120.30
36	1	2151	C	C6-N1-C2	6.11	122.74	120.30
37	3	33	U	N1-C2-O2	6.11	127.07	122.80
1	6	542	A	N1-C2-N3	6.11	132.35	129.30
1	6	864	U	N3-C2-O2	-6.11	117.93	122.20
36	5	2860	U	C6-N1-C2	6.11	124.66	121.00
36	1	960	U	N3-C4-C5	6.10	118.26	114.60
36	5	2730	G	N1-C6-O6	6.10	123.56	119.90
36	1	1434	G	N1-C6-O6	6.10	123.56	119.90
1	6	126	A	C8-N9-C4	6.10	108.24	105.80
1	2	610	G	C8-N9-C1'	-6.10	119.07	127.00
36	1	706	A	C8-N9-C4	6.10	108.24	105.80
36	1	800	G	C5-C6-O6	-6.10	124.94	128.60
36	1	304	G	N3-C2-N2	-6.10	115.63	119.90
36	1	1190	A	N1-C6-N6	6.10	122.26	118.60
36	5	1118	C	N3-C4-C5	6.10	124.34	121.90
36	5	2278	C	N3-C4-C5	6.10	124.34	121.90
1	2	543	C	N1-C2-O2	6.09	122.56	118.90
1	6	406	U	C4-C5-C6	6.09	123.36	119.70
36	1	2959	C	N1-C2-O2	-6.09	115.25	118.90
36	1	3101	G	C6-C5-N7	6.09	134.05	130.40
36	1	893	C	C5-C6-N1	6.09	124.05	121.00
36	5	813	G	N1-C6-O6	6.09	123.55	119.90
36	5	2128	C	C6-N1-C2	-6.09	117.86	120.30
36	1	1442	U	C5-C4-O4	-6.09	122.25	125.90
36	1	76	G	C8-N9-C4	-6.09	103.97	106.40
36	1	3092	C	C5-C6-N1	-6.09	117.96	121.00
1	2	1600	A	N9-C4-C5	-6.08	103.37	105.80
36	1	596	C	C6-N1-C2	-6.08	117.87	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2187	G	C6-C5-N7	-6.08	126.75	130.40
36	1	2406	C	C5-C4-N4	-6.08	115.94	120.20
36	5	359	U	OP2-P-O3'	6.08	118.58	105.20
36	5	2114	C	C5-C6-N1	6.08	124.04	121.00
36	5	3200	G	N1-C6-O6	6.08	123.55	119.90
36	5	3343	G	N3-C4-N9	6.08	129.65	126.00
36	1	580	C	N1-C2-O2	-6.08	115.25	118.90
1	6	1745	G	N9-C4-C5	-6.08	102.97	105.40
36	5	35	A	O5'-P-OP2	-6.08	100.23	105.70
36	5	1012	G	N3-C4-C5	6.08	131.64	128.60
36	1	937	G	C5-C6-O6	-6.08	124.95	128.60
36	1	2183	A	C5-C6-N1	6.08	120.74	117.70
36	5	582	G	C5-C6-O6	6.08	132.25	128.60
36	5	1791	C	C6-N1-C2	-6.08	117.87	120.30
1	2	620	A	C8-N9-C4	-6.08	103.37	105.80
36	1	2658	G	O5'-P-OP2	-6.08	100.23	105.70
36	1	2732	G	N1-C6-O6	6.08	123.55	119.90
1	6	402	C	C6-N1-C2	6.08	122.73	120.30
36	1	2917	G	O5'-P-OP2	-6.07	100.23	105.70
36	5	1548	C	N1-C2-O2	-6.07	115.26	118.90
36	5	2698	G	N1-C6-O6	6.07	123.54	119.90
36	1	922	U	N1-C2-O2	6.07	127.05	122.80
1	6	577	G	C4-C5-N7	6.07	113.23	110.80
36	1	2402	A	N1-C6-N6	6.07	122.24	118.60
36	1	2625	C	N1-C2-O2	-6.07	115.26	118.90
37	7	74	C	N1-C2-O2	-6.07	115.26	118.90
50	m4	72	LEU	CA-CB-CG	6.07	129.26	115.30
36	5	391	A	C8-N9-C4	6.07	108.23	105.80
36	5	425	G	O5'-P-OP1	6.07	117.98	110.70
36	1	2223	A	C8-N9-C4	-6.07	103.37	105.80
1	6	19	A	N1-C6-N6	6.07	122.24	118.60
36	5	1885	U	C5-C6-N1	-6.07	119.67	122.70
36	5	2215	A	C8-N9-C4	6.07	108.23	105.80
36	5	3195	U	P-O3'-C3'	6.07	126.98	119.70
36	1	369	A	C2-N3-C4	6.06	113.63	110.60
36	1	1386	A	C6-N1-C2	-6.06	114.96	118.60
1	6	1637	C	C6-N1-C1'	-6.06	113.53	120.80
36	5	1060	U	C5-C6-N1	-6.06	119.67	122.70
10	S8	8	ARG	NE-CZ-NH2	6.06	123.33	120.30
1	6	610	G	C8-N9-C1'	-6.06	119.13	127.00
36	5	958	C	N3-C4-C5	6.06	124.32	121.90
36	5	2161	G	C4-C5-N7	-6.06	108.38	110.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2743	A	C4-C5-C6	6.06	120.03	117.00
36	1	105	C	C6-N1-C2	6.06	122.72	120.30
36	1	3362	A	C5-N7-C8	-6.05	100.87	103.90
36	5	2199	G	C5-C6-N1	-6.05	108.47	111.50
36	5	2996	U	N3-C2-O2	-6.05	117.96	122.20
1	2	325	G	N3-C4-C5	6.05	131.63	128.60
1	2	1399	C	C5-C6-N1	6.05	124.03	121.00
36	1	2209	U	C5-C6-N1	6.05	125.72	122.70
36	5	1323	G	C6-C5-N7	-6.05	126.77	130.40
36	5	1900	A	N1-C6-N6	6.05	122.23	118.60
36	5	3301	U	C6-N1-C2	6.05	124.63	121.00
36	5	3382	U	C2-N1-C1'	6.05	124.96	117.70
36	1	1320	C	C2-N1-C1'	6.05	125.45	118.80
1	6	1	U	N1-C2-O2	6.05	127.03	122.80
1	2	1389	C	N1-C2-O2	6.04	122.53	118.90
36	5	1476	G	N1-C6-O6	-6.04	116.27	119.90
1	6	1025	A	C6-C5-N7	-6.04	128.07	132.30
36	5	1116	G	N1-C2-N3	6.04	127.53	123.90
37	7	58	C	O5'-P-OP2	-6.04	100.26	105.70
38	8	32	C	C6-N1-C2	6.04	122.72	120.30
36	1	678	G	N1-C2-N2	6.04	121.63	116.20
36	1	2814	G	O5'-P-OP2	6.04	117.95	110.70
36	1	3089	C	C6-N1-C2	-6.04	117.89	120.30
36	5	1306	G	C5-N7-C8	-6.04	101.28	104.30
36	1	706	A	N1-C6-N6	6.04	122.22	118.60
36	1	2812	C	C5-C6-N1	-6.04	117.98	121.00
1	6	1642	G	C5-C6-O6	-6.04	124.98	128.60
36	5	1554	U	C2-N1-C1'	6.04	124.94	117.70
37	3	8	G	C5-C6-O6	6.03	132.22	128.60
36	1	859	G	C8-N9-C1'	-6.03	119.16	127.00
36	1	1192	C	C2-N3-C4	6.03	122.92	119.90
36	1	282	G	N7-C8-N9	6.03	116.11	113.10
36	1	2983	C	O5'-P-OP1	-6.03	100.27	105.70
36	5	1403	C	N1-C2-O2	-6.03	115.28	118.90
1	2	421	A	N1-C6-N6	6.03	122.22	118.60
36	1	398	A	C5-C6-N6	-6.03	118.88	123.70
36	1	1154	A	N9-C4-C5	6.03	108.21	105.80
36	5	2993	G	C5-C6-O6	-6.03	124.98	128.60
36	5	3335	A	C5-C6-N6	-6.03	118.88	123.70
36	1	340	C	N1-C2-O2	6.03	122.52	118.90
36	5	1496	C	C2-N1-C1'	6.03	125.43	118.80
37	7	73	C	C6-N1-C2	-6.03	117.89	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1431	G	N1-C6-O6	-6.02	116.29	119.90
1	6	577	G	C8-N9-C4	-6.02	103.99	106.40
36	5	1879	A	C4-C5-N7	6.02	113.71	110.70
36	5	2980	U	N1-C2-N3	6.02	118.52	114.90
48	m1	152	HIS	N-CA-C	-6.02	94.74	111.00
36	1	2400	G	N9-C4-C5	-6.02	102.99	105.40
36	1	2639	G	C4-C5-C6	6.02	122.41	118.80
1	6	65	A	C2-N3-C4	-6.02	107.59	110.60
36	5	21	G	N3-C4-N9	-6.02	122.39	126.00
36	5	881	C	N1-C2-O2	6.02	122.51	118.90
36	5	666	A	N9-C4-C5	6.02	108.21	105.80
1	2	1749	A	C8-N9-C4	6.02	108.21	105.80
1	6	1537	C	N1-C2-O2	-6.02	115.29	118.90
36	5	787	G	N1-C6-O6	6.02	123.51	119.90
36	5	1166	G	O5'-P-OP1	-6.02	100.28	105.70
36	5	2823	G	N1-C6-O6	6.02	123.51	119.90
36	5	2978	U	O4'-C1'-N1	6.02	113.02	108.20
36	1	3214	U	N1-C2-O2	6.02	127.01	122.80
36	5	1301	A	C6-C5-N7	-6.01	128.09	132.30
36	1	70	A	C5-C6-N6	-6.01	118.89	123.70
1	6	957	G	C5-C6-N1	-6.01	108.50	111.50
1	6	1634	C	N3-C2-O2	-6.01	117.69	121.90
1	2	321	C	C6-N1-C2	-6.01	117.90	120.30
36	1	3054	U	C5-C6-N1	-6.01	119.70	122.70
36	1	690	A	N1-C6-N6	-6.01	115.00	118.60
38	4	15	G	N3-C2-N2	6.01	124.11	119.90
36	5	80	G	C5-C6-O6	-6.01	125.00	128.60
36	5	1192	C	C4-C5-C6	6.01	120.40	117.40
36	5	1662	G	C6-C5-N7	-6.01	126.80	130.40
38	4	84	C	C5-C6-N1	-6.00	118.00	121.00
36	1	426	G	C4-N9-C1'	6.00	134.31	126.50
38	4	108	C	C6-N1-C2	-6.00	117.90	120.30
36	1	369	A	O5'-P-OP2	-6.00	100.30	105.70
36	1	1885	U	C4-C5-C6	6.00	123.30	119.70
36	5	2687	G	O5'-P-OP2	-6.00	100.30	105.70
36	1	220	G	C5-C6-O6	-6.00	125.00	128.60
36	1	2315	G	C8-N9-C4	-6.00	104.00	106.40
36	5	647	A	C8-N9-C1'	-6.00	116.91	127.70
36	5	961	C	N1-C2-O2	6.00	122.50	118.90
36	5	2727	A	C8-N9-C4	-6.00	103.40	105.80
36	5	420	G	N1-C6-O6	6.00	123.50	119.90
37	7	77	G	C5-C6-O6	-5.99	125.00	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1657	U	C4-C5-C6	5.99	123.30	119.70
1	2	307	G	N3-C4-N9	5.99	129.59	126.00
36	1	1783	U	C5-C4-O4	5.99	129.49	125.90
1	6	47	A	N1-C6-N6	5.99	122.19	118.60
36	5	824	C	C6-N1-C2	-5.99	117.90	120.30
36	5	2811	A	C5-C6-N1	5.99	120.69	117.70
36	5	951	A	N7-C8-N9	5.99	116.79	113.80
36	1	695	C	N3-C4-N4	-5.99	113.81	118.00
1	6	257	A	N9-C4-C5	-5.99	103.41	105.80
36	5	1152	G	C6-C5-N7	-5.99	126.81	130.40
36	1	2306	C	C6-N1-C1'	-5.98	113.62	120.80
65	N9	20	GLY	N-CA-C	5.98	128.06	113.10
36	5	2117	A	N1-C6-N6	-5.98	115.01	118.60
36	5	2314	U	N3-C2-O2	5.98	126.39	122.20
36	1	2866	U	N3-C2-O2	-5.98	118.01	122.20
1	6	1729	C	N3-C4-C5	5.98	124.29	121.90
36	5	84	U	C6-N1-C2	5.98	124.59	121.00
36	5	1239	C	C2-N1-C1'	5.98	125.38	118.80
36	1	69	C	N3-C4-C5	-5.98	119.51	121.90
1	6	421	A	N9-C4-C5	-5.98	103.41	105.80
36	5	2305	G	C8-N9-C4	-5.98	104.01	106.40
36	5	2333	C	C5-C4-N4	-5.98	116.01	120.20
36	5	2659	G	C6-C5-N7	-5.98	126.81	130.40
36	1	3319	U	P-O3'-C3'	5.98	126.87	119.70
36	5	110	G	C8-N9-C4	5.98	108.79	106.40
36	1	2376	G	C5-C6-N1	5.98	114.49	111.50
36	1	645	A	C4-C5-N7	-5.97	107.71	110.70
36	1	959	C	N3-C4-C5	5.97	124.29	121.90
36	1	1306	G	C5-C6-O6	-5.97	125.02	128.60
36	1	2374	C	N1-C2-O2	5.97	122.48	118.90
36	5	420	G	N9-C4-C5	-5.97	103.01	105.40
36	5	3188	G	N1-C6-O6	-5.97	116.32	119.90
36	5	1667	A	N9-C4-C5	-5.97	103.41	105.80
36	5	2882	U	O5'-P-OP2	-5.97	100.33	105.70
36	1	1403	C	N3-C2-O2	5.97	126.08	121.90
36	1	676	G	C6-C5-N7	-5.97	126.82	130.40
36	1	1408	G	N3-C4-N9	5.97	129.58	126.00
1	6	245	U	N3-C2-O2	-5.97	118.02	122.20
36	5	1900	A	C5-C6-N6	-5.97	118.93	123.70
36	1	2777	G	C4-C5-N7	-5.96	108.41	110.80
36	5	1101	G	N3-C2-N2	5.96	124.07	119.90
36	5	1879	A	C5-C6-N1	-5.96	114.72	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2273	G	C4-N9-C1'	-5.96	118.75	126.50
36	5	21	G	N3-C4-C5	5.96	131.58	128.60
36	5	1452	A	C5-C6-N6	-5.96	118.93	123.70
36	5	652	G	C6-C5-N7	-5.96	126.82	130.40
36	5	1667	A	N1-C6-N6	5.96	122.18	118.60
36	5	3105	U	N1-C2-N3	5.96	118.48	114.90
36	5	673	U	N1-C2-O2	-5.96	118.63	122.80
36	5	1448	U	C6-N1-C2	5.96	124.58	121.00
36	1	75	G	C6-C5-N7	-5.96	126.83	130.40
36	1	2526	C	C5-C6-N1	5.96	123.98	121.00
36	5	934	G	C2-N3-C4	5.96	114.88	111.90
36	5	2796	G	C5-C6-O6	5.96	132.18	128.60
36	5	2832	C	C6-N1-C2	5.96	122.68	120.30
36	1	2795	U	OP1-P-OP2	5.96	128.53	119.60
1	6	209	U	C2-N1-C1'	-5.96	110.55	117.70
36	5	2345	A	C8-N9-C4	5.96	108.18	105.80
36	1	988	U	C5-C6-N1	-5.96	119.72	122.70
36	1	2376	G	N7-C8-N9	5.96	116.08	113.10
36	5	24	G	C8-N9-C4	5.96	108.78	106.40
1	6	477	A	N1-C6-N6	5.95	122.17	118.60
36	5	1541	G	C4-C5-N7	5.95	113.18	110.80
36	1	2355	G	C6-C5-N7	-5.95	126.83	130.40
36	1	2374	C	C6-N1-C2	-5.95	117.92	120.30
36	5	2350	C	O5'-P-OP1	5.95	117.84	110.70
36	5	1331	U	C2-N3-C4	-5.95	123.43	127.00
36	5	1631	C	C6-N1-C2	-5.95	117.92	120.30
36	5	2984	C	C2-N3-C4	-5.95	116.92	119.90
36	5	646	A	C2-N3-C4	-5.95	107.63	110.60
36	5	2205	U	C5-C6-N1	5.95	125.67	122.70
36	5	2620	G	N3-C4-N9	-5.95	122.43	126.00
36	1	388	G	N3-C2-N2	-5.95	115.74	119.90
36	1	1450	G	C5-N7-C8	-5.95	101.33	104.30
36	1	2646	C	N3-C4-C5	5.95	124.28	121.90
1	6	1782	A	C8-N9-C4	-5.95	103.42	105.80
36	5	2971	A	N1-C2-N3	-5.95	126.33	129.30
36	1	1174	G	C4-N9-C1'	5.94	134.23	126.50
36	1	1416	C	N3-C4-N4	-5.94	113.84	118.00
36	1	1643	A	C8-N9-C4	5.94	108.18	105.80
36	1	1902	G	C5-N7-C8	-5.94	101.33	104.30
36	5	716	A	N9-C4-C5	-5.94	103.42	105.80
36	5	2397	A	C8-N9-C4	5.94	108.18	105.80
36	1	25	U	O5'-P-OP2	5.94	117.83	110.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1308	A	C2-N3-C4	-5.94	107.63	110.60
36	1	2983	C	C5-C4-N4	5.94	124.36	120.20
1	6	1778	G	C8-N9-C4	-5.94	104.02	106.40
36	5	1153	A	C5-C6-N6	-5.94	118.95	123.70
36	5	2409	G	C8-N9-C4	-5.94	104.02	106.40
36	1	836	A	N1-C6-N6	-5.94	115.03	118.60
36	1	1838	G	C4-C5-C6	5.94	122.36	118.80
36	5	2376	G	C5-N7-C8	-5.94	101.33	104.30
36	5	2310	U	O5'-P-OP2	-5.94	100.36	105.70
36	1	961	C	C4-C5-C6	5.94	120.37	117.40
36	1	2419	A	OP1-P-OP2	-5.94	110.69	119.60
36	1	3268	A	N1-C2-N3	5.94	132.27	129.30
36	5	644	G	C4-C5-C6	5.94	122.36	118.80
36	5	891	G	C8-N9-C4	-5.94	104.03	106.40
36	5	2416	U	C6-N1-C2	-5.94	117.44	121.00
1	2	1489	U	N3-C2-O2	-5.94	118.05	122.20
36	1	203	G	C8-N9-C4	5.94	108.78	106.40
36	1	1334	U	N3-C4-O4	5.94	123.56	119.40
36	5	1153	A	C6-C5-N7	-5.94	128.15	132.30
36	1	644	G	C8-N9-C4	-5.93	104.03	106.40
36	1	917	A	N1-C6-N6	-5.93	115.04	118.60
38	8	61	A	O5'-P-OP1	-5.93	100.36	105.70
36	1	1392	G	O4'-C1'-N9	5.93	112.94	108.20
1	6	1773	C	N3-C4-N4	5.93	122.15	118.00
36	5	871	U	N1-C2-N3	5.93	118.46	114.90
36	5	1842	A	OP2-P-O3'	5.93	118.25	105.20
36	1	2904	U	O5'-P-OP1	5.93	117.82	110.70
36	5	3206	C	C6-N1-C2	-5.93	117.93	120.30
1	6	309	C	N3-C2-O2	5.93	126.05	121.90
1	2	794	U	N1-C2-O2	5.93	126.95	122.80
36	1	2114	C	O5'-P-OP2	-5.93	100.37	105.70
1	2	554	C	C6-N1-C1'	-5.92	113.69	120.80
36	1	1864	A	N7-C8-N9	-5.92	110.84	113.80
36	1	2169	G	C4-C5-N7	-5.92	108.43	110.80
36	1	2803	A	O5'-P-OP1	-5.92	100.37	105.70
36	5	2765	C	C5-C6-N1	5.92	123.96	121.00
36	5	3064	U	N1-C2-N3	5.92	118.45	114.90
1	2	380	U	C2-N1-C1'	5.92	124.81	117.70
36	1	637	C	P-O3'-C3'	5.92	126.81	119.70
36	1	953	G	OP1-P-O3'	5.92	118.23	105.20
1	6	1535	U	C5-C6-N1	-5.92	119.74	122.70
36	5	712	G	N1-C6-O6	5.92	123.45	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	406	G	N1-C6-O6	-5.92	116.35	119.90
36	5	2626	A	N1-C2-N3	5.92	132.26	129.30
36	1	3051	U	C5-C6-N1	5.92	125.66	122.70
36	5	881	C	C2-N3-C4	5.92	122.86	119.90
36	5	41	G	C6-C5-N7	-5.92	126.85	130.40
36	5	437	G	C8-N9-C1'	5.92	134.69	127.00
36	5	1178	G	C6-C5-N7	-5.92	126.85	130.40
36	5	2353	G	N9-C4-C5	-5.92	103.03	105.40
36	1	951	A	C5-C6-N1	-5.92	114.74	117.70
36	5	2715	A	C4-C5-N7	-5.92	107.74	110.70
36	1	2372	A	C5-C6-N6	-5.91	118.97	123.70
36	5	994	G	C2-N3-C4	5.91	114.86	111.90
36	5	2871	G	O5'-P-OP2	-5.91	100.38	105.70
36	5	2951	G	N3-C4-N9	5.91	129.55	126.00
36	1	885	U	C6-N1-C2	5.91	124.55	121.00
36	1	1167	U	C2-N1-C1'	-5.91	110.61	117.70
36	1	3362	A	C6-C5-N7	-5.91	128.16	132.30
36	5	2737	C	N1-C2-O2	-5.91	115.35	118.90
36	1	804	C	N3-C2-O2	-5.91	117.76	121.90
36	1	3180	A	C4-C5-N7	5.91	113.65	110.70
1	6	382	C	N1-C2-O2	-5.91	115.35	118.90
36	1	27	C	N3-C4-C5	-5.91	119.54	121.90
1	2	1432	U	C5-C6-N1	-5.91	119.75	122.70
1	6	1412	G	C8-N9-C1'	5.91	134.68	127.00
36	5	3020	U	N1-C2-O2	-5.91	118.67	122.80
36	5	55	G	N1-C6-O6	5.90	123.44	119.90
36	5	857	G	N3-C2-N2	-5.90	115.77	119.90
36	5	2145	A	C4-C5-C6	5.90	119.95	117.00
36	1	39	A	C5-C6-N6	-5.90	118.98	123.70
36	1	650	C	N1-C2-O2	-5.90	115.36	118.90
36	1	2279	A	C5-C6-N6	-5.90	118.98	123.70
36	1	3264	G	C8-N9-C4	5.90	108.76	106.40
36	5	2761	G	C6-N1-C2	-5.90	121.56	125.10
1	2	1081	A	N1-C6-N6	-5.90	115.06	118.60
36	1	281	G	C2-N3-C4	5.90	114.85	111.90
36	1	1424	C	O5'-P-OP1	-5.90	100.39	105.70
36	1	1279	C	C5-C6-N1	5.90	123.95	121.00
36	1	2337	C	C6-N1-C2	-5.90	117.94	120.30
36	1	3266	G	N3-C4-N9	-5.90	122.46	126.00
1	6	992	A	C4-C5-N7	5.90	113.65	110.70
36	1	757	C	N3-C2-O2	5.90	126.03	121.90
36	5	650	C	C6-N1-C2	5.90	122.66	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2865	U	N1-C2-N3	-5.90	111.36	114.90
1	6	1736	G	C8-N9-C4	-5.89	104.04	106.40
36	5	1116	G	OP2-P-O3'	5.89	118.17	105.20
36	5	1897	G	N3-C2-N2	-5.89	115.77	119.90
36	5	2288	G	O5'-P-OP2	-5.89	100.39	105.70
36	5	3362	A	C5-N7-C8	-5.89	100.95	103.90
36	1	512	U	C6-N1-C2	5.89	124.53	121.00
36	1	908	G	O4'-C1'-N9	-5.89	103.49	108.20
36	1	2624	G	N1-C6-O6	5.89	123.44	119.90
1	6	1274	C	C6-N1-C2	-5.89	117.94	120.30
36	5	1127	G	C2-N3-C4	5.89	114.85	111.90
36	5	1404	G	N3-C2-N2	5.89	124.03	119.90
36	5	2643	A	N9-C4-C5	-5.89	103.44	105.80
36	1	1487	G	N3-C2-N2	-5.89	115.78	119.90
36	1	2305	G	C5-C6-O6	-5.89	125.07	128.60
36	1	2335	G	N7-C8-N9	-5.89	110.16	113.10
1	6	577	G	N1-C6-O6	5.89	123.43	119.90
1	6	1152	A	N1-C6-N6	5.89	122.13	118.60
36	5	1407	A	O5'-P-OP2	-5.89	100.40	105.70
36	5	1434	G	C8-N9-C1'	5.89	134.66	127.00
36	5	1613	A	O4'-C1'-N9	5.89	112.91	108.20
1	2	1600	A	C2-N3-C4	-5.89	107.66	110.60
36	1	61	A	N1-C6-N6	5.89	122.13	118.60
36	1	585	A	N7-C8-N9	-5.89	110.86	113.80
38	4	140	G	N9-C4-C5	5.89	107.75	105.40
36	1	433	A	N1-C6-N6	5.88	122.13	118.60
36	1	1144	U	N1-C2-O2	-5.88	118.68	122.80
36	5	938	C	C4-C5-C6	-5.88	114.46	117.40
36	5	1056	U	C5-C6-N1	5.88	125.64	122.70
36	5	2404	A	N7-C8-N9	5.88	116.74	113.80
36	1	92	G	N3-C4-N9	5.88	129.53	126.00
36	1	968	G	C5-C6-N1	5.88	114.44	111.50
36	1	2585	G	N3-C4-C5	-5.88	125.66	128.60
36	5	650	C	N3-C4-N4	-5.88	113.88	118.00
36	5	1001	G	N1-C6-O6	-5.88	116.37	119.90
36	5	1329	U	C5-C4-O4	-5.88	122.37	125.90
36	1	1465	A	C8-N9-C4	5.88	108.15	105.80
36	5	2398	A	N7-C8-N9	-5.88	110.86	113.80
36	1	797	U	OP2-P-O3'	5.88	118.13	105.20
36	1	1116	G	C8-N9-C4	-5.88	104.05	106.40
1	6	577	G	C5-N7-C8	-5.88	101.36	104.30
36	5	2820	A	C2-N3-C4	5.88	113.54	110.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2848	G	C5-C6-O6	-5.88	125.07	128.60
21	C9	57	ARG	NE-CZ-NH1	5.88	123.24	120.30
36	1	932	U	C5-C4-O4	-5.88	122.38	125.90
36	5	1060	U	C2-N3-C4	-5.88	123.47	127.00
1	2	1324	G	N3-C2-N2	-5.87	115.79	119.90
24	D2	93	LEU	CA-CB-CG	5.87	128.81	115.30
36	1	1346	G	N1-C6-O6	5.87	123.42	119.90
36	1	1349	G	C2-N3-C4	5.87	114.84	111.90
36	1	2138	A	C4-C5-C6	5.87	119.94	117.00
36	1	2184	U	C5-C6-N1	5.87	125.64	122.70
36	1	2345	A	N1-C6-N6	5.87	122.12	118.60
36	5	2112	U	C5-C6-N1	5.87	125.64	122.70
1	2	434	G	O5'-P-OP2	-5.87	100.42	105.70
36	1	289	A	N9-C4-C5	-5.87	103.45	105.80
36	5	295	A	C2-N3-C4	-5.87	107.67	110.60
36	5	1868	G	N1-C6-O6	5.87	123.42	119.90
36	5	2811	A	C6-N1-C2	-5.87	115.08	118.60
36	5	2898	G	O4'-C1'-N9	-5.87	103.51	108.20
36	1	394	G	C5-C6-O6	5.86	132.12	128.60
36	1	2381	G	C6-C5-N7	-5.86	126.88	130.40
1	6	1187	U	C6-N1-C2	-5.86	117.48	121.00
36	5	1599	G	C8-N9-C4	5.86	108.75	106.40
36	5	1869	C	C6-N1-C2	5.86	122.65	120.30
36	1	1409	G	N1-C6-O6	-5.86	116.38	119.90
1	2	1280	C	N3-C4-C5	-5.86	119.56	121.90
36	1	994	G	N1-C2-N2	-5.86	110.92	116.20
1	6	151	G	N3-C4-N9	-5.86	122.48	126.00
1	6	539	G	N7-C8-N9	5.86	116.03	113.10
1	6	542	A	P-O3'-C3'	5.86	126.73	119.70
36	5	1496	C	O5'-P-OP1	5.86	117.73	110.70
36	5	1938	U	C6-N1-C2	5.86	124.52	121.00
36	1	2700	G	C6-C5-N7	-5.86	126.89	130.40
36	5	936	A	P-O3'-C3'	5.86	126.73	119.70
36	1	2376	G	C8-N9-C4	-5.86	104.06	106.40
36	5	1119	C	OP1-P-O3'	-5.86	92.31	105.20
36	5	2740	A	C8-N9-C4	-5.86	103.46	105.80
1	6	337	G	C8-N9-C1'	-5.86	119.39	127.00
36	5	101	G	O4'-C1'-N9	5.86	112.89	108.20
36	1	1435	A	O5'-P-OP2	5.85	117.72	110.70
1	6	1396	U	C5-C6-N1	5.85	125.63	122.70
36	5	907	G	N1-C2-N2	-5.85	110.93	116.20
36	5	1412	G	C8-N9-C4	-5.85	104.06	106.40

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1434	G	C8-N9-C4	-5.85	104.06	106.40
36	5	3209	A	O4'-C1'-N9	5.85	112.88	108.20
36	1	2872	A	N1-C6-N6	5.85	122.11	118.60
36	1	2983	C	C4-C5-C6	5.85	120.33	117.40
37	3	52	G	O5'-P-OP2	-5.85	100.43	105.70
1	6	337	G	C6-C5-N7	-5.85	126.89	130.40
1	6	352	A	N1-C6-N6	-5.85	115.09	118.60
36	5	514	G	N1-C6-O6	5.85	123.41	119.90
36	5	938	C	N3-C4-C5	5.85	124.24	121.90
36	1	2961	G	N1-C6-O6	5.85	123.41	119.90
36	5	99	A	C8-N9-C4	5.85	108.14	105.80
36	5	2809	C	C6-N1-C2	5.85	122.64	120.30
37	7	41	G	C8-N9-C4	5.85	108.74	106.40
36	1	676	G	C8-N9-C4	-5.85	104.06	106.40
36	1	3362	A	N1-C6-N6	5.85	122.11	118.60
36	5	410	U	C5-C6-N1	5.85	125.62	122.70
37	7	84	A	O5'-P-OP1	-5.85	100.44	105.70
1	6	29	U	N1-C2-N3	5.85	118.41	114.90
36	5	2308	C	O5'-P-OP2	-5.85	100.44	105.70
36	1	262	U	N3-C2-O2	5.84	126.29	122.20
36	1	2281	A	C8-N9-C4	5.84	108.14	105.80
36	5	1115	G	C6-C5-N7	-5.84	126.89	130.40
36	5	1450	G	C5-C6-O6	-5.84	125.09	128.60
1	6	306	U	C2-N3-C4	-5.84	123.49	127.00
36	5	1163	A	N1-C6-N6	-5.84	115.09	118.60
1	2	448	C	N3-C4-C5	-5.84	119.56	121.90
36	1	369	A	N3-C4-C5	-5.84	122.71	126.80
36	1	787	G	O5'-P-OP2	-5.84	100.44	105.70
36	1	838	G	C8-N9-C4	5.84	108.74	106.40
36	1	1207	G	N1-C6-O6	5.84	123.40	119.90
36	1	1449	A	C2-N3-C4	5.84	113.52	110.60
1	6	194	U	N1-C2-O2	5.84	126.89	122.80
36	5	338	A	OP2-P-O3'	5.84	118.05	105.20
36	5	780	A	N1-C6-N6	5.84	122.11	118.60
36	5	2938	G	N9-C4-C5	5.84	107.74	105.40
36	1	1389	G	N3-C4-N9	5.84	129.50	126.00
1	6	934	C	N3-C2-O2	-5.84	117.81	121.90
36	5	1333	C	C6-N1-C2	-5.84	117.96	120.30
37	3	82	G	N1-C2-N2	-5.84	110.95	116.20
36	1	2634	U	C5-C4-O4	-5.84	122.40	125.90
36	1	3092	C	C2-N3-C4	-5.84	116.98	119.90
36	5	365	A	N9-C4-C5	-5.84	103.47	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	413	U	C5-C6-N1	-5.84	119.78	122.70
36	5	2784	G	C8-N9-C4	-5.84	104.06	106.40
36	5	2914	G	N3-C4-C5	-5.84	125.68	128.60
36	1	2808	A	C4-C5-C6	5.83	119.92	117.00
36	5	1931	U	C2-N1-C1'	-5.83	110.70	117.70
37	7	76	A	O4'-C1'-N9	5.83	112.87	108.20
36	1	916	G	N1-C6-O6	-5.83	116.40	119.90
36	1	1386	A	C5-C6-N6	-5.83	119.03	123.70
36	1	1911	A	N1-C6-N6	5.83	122.10	118.60
1	6	1560	U	N3-C2-O2	-5.83	118.12	122.20
36	5	1500	G	C8-N9-C4	5.83	108.73	106.40
36	5	2412	G	N3-C2-N2	5.83	123.98	119.90
36	1	3101	G	C5-C6-N1	5.83	114.42	111.50
36	1	359	U	N3-C4-C5	-5.83	111.10	114.60
36	1	2351	U	O5'-P-OP2	5.83	117.69	110.70
36	1	2963	C	C4-C5-C6	5.83	120.31	117.40
36	1	2969	A	C2-N3-C4	-5.83	107.69	110.60
36	1	3184	A	N1-C6-N6	5.83	122.10	118.60
1	6	1002	G	C4-C5-N7	5.83	113.13	110.80
1	6	1520	U	N3-C2-O2	5.83	126.28	122.20
36	1	958	C	C2-N3-C4	-5.83	116.99	119.90
36	5	1897	G	C5-N7-C8	-5.83	101.39	104.30
36	5	1368	U	N1-C2-O2	-5.83	118.72	122.80
36	5	2420	C	N1-C2-O2	-5.83	115.41	118.90
36	5	2942	C	N3-C4-N4	5.83	122.08	118.00
1	2	399	A	N1-C6-N6	-5.82	115.11	118.60
36	1	22	G	N1-C6-O6	-5.82	116.41	119.90
36	1	1076	C	N1-C2-O2	5.82	122.39	118.90
1	6	864	U	C2-N1-C1'	5.82	124.69	117.70
36	5	341	G	N3-C4-N9	-5.82	122.51	126.00
36	5	638	C	O5'-P-OP1	-5.82	100.46	105.70
36	5	913	A	N9-C4-C5	5.82	108.13	105.80
36	5	999	G	C8-N9-C4	5.82	108.73	106.40
36	5	2864	A	N9-C4-C5	-5.82	103.47	105.80
36	5	3322	A	N1-C6-N6	5.82	122.09	118.60
38	4	53	A	N1-C6-N6	-5.82	115.11	118.60
1	6	209	U	N3-C2-O2	5.82	126.27	122.20
36	5	2112	U	C2-N1-C1'	5.82	124.68	117.70
36	5	2885	C	C2-N3-C4	-5.82	116.99	119.90
1	2	1412	G	C4-N9-C1'	-5.82	118.94	126.50
36	1	895	A	N1-C6-N6	5.82	122.09	118.60
36	5	567	G	N3-C4-N9	5.82	129.49	126.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1302	A	C2-N3-C4	5.82	113.51	110.60
36	5	3167	A	C8-N9-C4	-5.82	103.47	105.80
36	1	76	G	C4-C5-C6	5.82	122.29	118.80
36	1	2378	C	C5-C4-N4	-5.82	116.13	120.20
36	5	2803	A	O5'-P-OP1	-5.82	100.47	105.70
37	7	10	C	N3-C4-N4	5.81	122.07	118.00
36	1	2884	C	C5-C4-N4	-5.81	116.13	120.20
36	5	961	C	N3-C2-O2	-5.81	117.83	121.90
36	5	1160	C	C2-N1-C1'	-5.81	112.41	118.80
36	5	1869	C	N3-C4-C5	5.81	124.22	121.90
36	5	2211	U	N1-C2-N3	5.81	118.39	114.90
36	5	2403	G	O5'-P-OP1	5.81	117.67	110.70
36	5	2640	A	C8-N9-C4	5.81	108.12	105.80
1	2	734	A	P-O3'-C3'	5.81	126.67	119.70
36	1	2884	C	C4-C5-C6	-5.81	114.50	117.40
36	5	59	G	N1-C6-O6	-5.81	116.42	119.90
36	5	3195	U	N1-C2-O2	5.81	126.87	122.80
36	5	1911	A	N1-C6-N6	5.81	122.08	118.60
36	5	2316	G	C4-C5-N7	-5.81	108.48	110.80
36	1	432	G	N1-C6-O6	5.81	123.38	119.90
36	1	925	A	C5-N7-C8	-5.81	101.00	103.90
1	6	1640	C	C2-N1-C1'	5.81	125.19	118.80
36	1	678	G	O5'-P-OP1	-5.80	100.48	105.70
36	1	1420	C	C6-N1-C2	-5.80	117.98	120.30
1	6	858	G	C4-C5-N7	5.80	113.12	110.80
36	5	1854	C	C6-N1-C2	-5.80	117.98	120.30
36	1	1316	C	N3-C4-C5	-5.80	119.58	121.90
36	1	2300	G	C4-C5-C6	5.80	122.28	118.80
36	5	283	G	N1-C6-O6	5.80	123.38	119.90
36	5	1894	U	C2-N1-C1'	-5.80	110.74	117.70
36	5	3124	G	N9-C4-C5	5.80	107.72	105.40
36	1	430	U	N3-C2-O2	-5.80	118.14	122.20
36	1	1112	A	O5'-P-OP2	-5.80	100.48	105.70
36	1	3135	U	C5-C6-N1	-5.80	119.80	122.70
1	6	1	U	N3-C2-O2	-5.80	118.14	122.20
36	1	1837	U	N1-C2-O2	-5.80	118.74	122.80
36	1	715	A	O4'-C1'-N9	5.80	112.84	108.20
36	1	2730	G	C6-C5-N7	-5.80	126.92	130.40
1	6	1745	G	N3-C4-N9	5.79	129.48	126.00
1	2	356	G	N1-C6-O6	5.79	123.38	119.90
36	1	907	G	C5-N7-C8	5.79	107.20	104.30
62	N6	76	LEU	CA-CB-CG	5.79	128.63	115.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	453	U	C6-N1-C2	-5.79	117.52	121.00
36	5	2923	U	C6-N1-C2	-5.79	117.52	121.00
38	8	88	A	C8-N9-C4	5.79	108.12	105.80
36	5	639	G	N1-C6-O6	5.79	123.38	119.90
1	2	1118	G	N1-C6-O6	5.79	123.37	119.90
36	1	1136	A	C5-C6-N1	5.79	120.59	117.70
36	5	1300	G	C5-C6-O6	-5.79	125.13	128.60
36	5	2278	C	C5-C6-N1	5.79	123.89	121.00
1	2	75	U	N3-C2-O2	-5.79	118.15	122.20
36	1	1192	C	C6-N1-C1'	-5.79	113.85	120.80
36	5	1375	G	O5'-P-OP2	-5.79	100.49	105.70
36	5	2552	C	N3-C2-O2	-5.79	117.85	121.90
36	1	2572	C	C6-N1-C1'	-5.79	113.86	120.80
36	1	608	A	N1-C6-N6	5.79	122.07	118.60
36	1	1330	A	C2-N3-C4	-5.79	107.71	110.60
36	1	2865	U	N3-C4-C5	5.79	118.07	114.60
36	1	2899	C	C2-N3-C4	-5.79	117.01	119.90
38	4	113	U	N1-C2-N3	5.79	118.37	114.90
1	6	982	U	C5-C6-N1	-5.79	119.81	122.70
36	5	960	U	N3-C4-O4	-5.79	115.35	119.40
36	5	2389	C	O5'-P-OP1	-5.79	100.49	105.70
36	5	2659	G	N1-C6-O6	5.79	123.37	119.90
36	1	1506	A	C5-C6-N6	5.78	128.33	123.70
36	5	1499	C	N3-C2-O2	5.78	125.95	121.90
36	5	1813	A	C8-N9-C4	-5.78	103.49	105.80
1	2	545	A	OP1-P-O3'	5.78	117.92	105.20
36	1	2406	C	N3-C2-O2	5.78	125.95	121.90
36	1	2590	A	N9-C4-C5	5.78	108.11	105.80
1	2	1745	G	C5-C6-N1	5.78	114.39	111.50
1	2	1779	U	C2-N1-C1'	-5.78	110.76	117.70
12	c0	97	PRO	N-CA-CB	5.78	110.24	103.30
36	5	867	G	N1-C6-O6	5.78	123.37	119.90
36	5	2865	U	C4-C5-C6	-5.78	116.23	119.70
36	5	3087	A	N9-C4-C5	5.78	108.11	105.80
36	5	2420	C	N3-C2-O2	5.78	125.94	121.90
36	5	1373	A	N1-C6-N6	5.78	122.07	118.60
36	1	1592	G	C5-C6-N1	-5.78	108.61	111.50
36	5	914	A	O5'-P-OP2	-5.78	100.50	105.70
36	5	1496	C	O5'-P-OP2	-5.78	100.50	105.70
36	5	2957	G	O4'-C1'-N9	-5.78	103.58	108.20
36	5	3092	C	C6-N1-C2	5.78	122.61	120.30
36	1	1190	A	C8-N9-C1'	-5.77	117.31	127.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2603	G	N9-C4-C5	-5.77	103.09	105.40
1	2	501	U	OP1-P-O3'	5.77	117.90	105.20
21	c9	57	ARG	NE-CZ-NH1	5.77	123.19	120.30
38	8	51	G	C8-N9-C4	-5.77	104.09	106.40
36	1	2870	C	N3-C2-O2	5.77	125.94	121.90
1	6	542	A	N1-C6-N6	-5.77	115.14	118.60
36	1	410	U	C5-C6-N1	5.77	125.58	122.70
36	1	651	G	O5'-P-OP1	5.77	117.62	110.70
36	5	221	A	C8-N9-C4	5.77	108.11	105.80
36	5	834	U	C2-N1-C1'	-5.76	110.78	117.70
36	5	2943	G	C8-N9-C1'	-5.76	119.51	127.00
1	2	75	U	C2-N1-C1'	5.76	124.62	117.70
36	1	3016	A	N1-C6-N6	5.76	122.06	118.60
36	5	1507	G	N7-C8-N9	5.76	115.98	113.10
36	1	110	G	N9-C1'-C2'	-5.76	105.66	112.00
36	1	1400	G	N3-C4-C5	-5.76	125.72	128.60
36	1	2183	A	C6-N1-C2	-5.76	115.14	118.60
36	5	942	U	C6-N1-C2	-5.76	117.54	121.00
1	2	1114	G	N3-C4-N9	5.76	129.46	126.00
1	6	1537	C	C2-N1-C1'	-5.76	112.47	118.80
36	1	1419	A	O5'-P-OP1	5.76	117.61	110.70
36	1	2178	A	N1-C6-N6	-5.76	115.15	118.60
36	1	2875	U	N3-C2-O2	5.76	126.23	122.20
36	1	2697	A	N1-C6-N6	-5.75	115.15	118.60
36	5	906	A	OP1-P-O3'	5.75	117.86	105.20
1	2	1600	A	C6-C5-N7	-5.75	128.27	132.30
36	1	706	A	N9-C4-C5	-5.75	103.50	105.80
36	1	1445	U	C2-N1-C1'	-5.75	110.80	117.70
36	5	2875	U	N3-C4-O4	5.75	123.43	119.40
36	1	676	G	C8-N9-C1'	-5.75	119.52	127.00
36	1	1907	C	N3-C4-C5	-5.75	119.60	121.90
36	1	2398	A	C8-N9-C4	5.75	108.10	105.80
36	1	2639	G	N3-C4-C5	-5.75	125.72	128.60
36	5	1115	G	C8-N9-C1'	-5.75	119.52	127.00
36	5	3145	C	C5-C6-N1	-5.75	118.12	121.00
1	6	1739	C	N1-C2-O2	-5.75	115.45	118.90
36	5	1910	A	OP2-P-O3'	5.75	117.85	105.20
36	1	578	A	C5-C6-N6	-5.75	119.10	123.70
36	1	3110	C	C5-C6-N1	5.75	123.87	121.00
36	5	82	C	N3-C4-C5	-5.75	119.60	121.90
36	1	156	G	C5-C6-O6	-5.75	125.15	128.60
36	1	401	U	N1-C2-O2	5.75	126.82	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2590	A	C8-N9-C4	-5.75	103.50	105.80
1	6	298	C	N1-C2-O2	-5.75	115.45	118.90
1	6	1745	G	C6-C5-N7	-5.75	126.95	130.40
36	5	639	G	C5-C6-N1	-5.75	108.63	111.50
36	5	2820	A	N7-C8-N9	5.75	116.67	113.80
36	1	948	C	O5'-P-OP1	5.75	117.59	110.70
36	5	2905	U	C2-N3-C4	-5.74	123.55	127.00
36	5	3052	G	C8-N9-C4	-5.74	104.10	106.40
36	5	3287	U	N3-C2-O2	-5.74	118.18	122.20
1	2	103	A	N1-C6-N6	5.74	122.04	118.60
36	1	55	G	N1-C6-O6	5.74	123.34	119.90
36	1	637	C	C6-N1-C2	5.74	122.60	120.30
36	1	1466	G	N3-C4-N9	5.74	129.44	126.00
1	6	1029	U	N3-C4-O4	-5.74	115.38	119.40
1	6	1745	G	C5-C6-O6	-5.74	125.16	128.60
36	5	41	G	N9-C4-C5	-5.74	103.10	105.40
36	5	2643	A	N1-C6-N6	5.74	122.04	118.60
1	2	720	G	OP1-P-O3'	5.74	117.82	105.20
36	1	432	G	C6-C5-N7	-5.74	126.96	130.40
36	1	3018	C	N1-C2-O2	-5.74	115.46	118.90
36	5	3197	G	N3-C4-C5	5.74	131.47	128.60
37	7	47	C	C5-C6-N1	-5.74	118.13	121.00
36	1	2904	U	O5'-P-OP2	-5.74	100.54	105.70
38	4	26	U	N3-C2-O2	-5.73	118.19	122.20
1	6	610	G	C4-N9-C1'	5.73	133.96	126.50
36	5	909	G	N1-C6-O6	-5.73	116.46	119.90
36	1	682	U	N1-C2-O2	5.73	126.81	122.80
36	1	2760	C	C6-N1-C2	-5.73	118.01	120.30
1	6	418	G	C4-C5-N7	5.73	113.09	110.80
36	5	3141	A	O5'-P-OP1	-5.73	100.54	105.70
36	5	3201	C	C6-N1-C2	-5.73	118.01	120.30
36	5	3335	A	C4-C5-N7	5.73	113.57	110.70
1	2	1664	C	O5'-P-OP2	-5.73	100.54	105.70
36	1	345	G	N1-C2-N2	-5.73	111.04	116.20
36	1	1175	C	C6-N1-C2	5.73	122.59	120.30
36	1	1662	G	N1-C6-O6	5.73	123.34	119.90
36	5	1848	G	OP1-P-OP2	5.73	128.20	119.60
36	5	2340	U	C5-C4-O4	-5.73	122.46	125.90
36	1	70	A	C4-C5-N7	5.73	113.56	110.70
36	1	1492	G	N3-C4-N9	5.73	129.44	126.00
36	1	3087	A	N1-C2-N3	5.73	132.16	129.30
1	6	1058	U	P-O3'-C3'	5.73	126.57	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2333	C	C5-C6-N1	-5.73	118.14	121.00
36	5	2716	U	C6-N1-C2	-5.73	117.56	121.00
1	6	558	U	C2-N1-C1'	5.73	124.57	117.70
1	6	1700	C	N3-C2-O2	-5.73	117.89	121.90
15	C3	22	ALA	C-N-CA	5.72	146.05	122.00
36	1	2142	A	N3-C4-C5	-5.72	122.79	126.80
36	1	2617	U	N3-C4-O4	-5.72	115.39	119.40
36	5	2638	C	O5'-P-OP2	-5.72	100.55	105.70
36	5	2915	U	C5-C4-O4	-5.72	122.47	125.90
54	m8	174	ARG	NE-CZ-NH1	5.72	123.16	120.30
1	2	1291	G	N1-C2-N3	5.72	127.33	123.90
1	2	499	U	C2-N1-C1'	5.72	124.56	117.70
36	1	883	A	C6-N1-C2	-5.72	115.17	118.60
36	1	1713	G	N3-C4-N9	-5.72	122.57	126.00
36	1	2148	U	N3-C2-O2	5.72	126.20	122.20
36	5	215	G	N3-C4-C5	-5.72	125.74	128.60
36	1	908	G	N3-C2-N2	-5.72	115.90	119.90
1	2	610	G	C4-N9-C1'	5.72	133.93	126.50
36	1	1389	G	N1-C6-O6	5.72	123.33	119.90
1	6	1751	C	C2-N1-C1'	-5.72	112.51	118.80
36	5	1794	G	C8-N9-C4	5.72	108.69	106.40
36	1	220	G	C6-C5-N7	-5.71	126.97	130.40
36	1	2187	G	C8-N9-C4	-5.71	104.11	106.40
36	1	2298	U	N3-C4-O4	-5.71	115.40	119.40
36	5	942	U	N1-C2-O2	-5.71	118.80	122.80
37	7	105	C	C2-N1-C1'	5.71	125.09	118.80
36	5	1889	G	C5-C6-O6	-5.71	125.17	128.60
36	5	2707	C	N3-C4-C5	5.71	124.19	121.90
36	5	2954	U	N3-C4-O4	5.71	123.40	119.40
36	1	536	U	O5'-P-OP1	-5.71	100.56	105.70
36	1	1535	A	N1-C6-N6	5.71	122.03	118.60
36	1	1713	G	C4-N9-C1'	-5.71	119.08	126.50
36	1	1855	U	O5'-P-OP1	-5.71	100.56	105.70
36	1	2306	C	N3-C2-O2	-5.71	117.90	121.90
1	6	1772	C	C6-N1-C2	-5.71	118.02	120.30
36	5	1239	C	C5-C6-N1	5.71	123.86	121.00
36	1	2194	G	N1-C6-O6	5.71	123.33	119.90
36	1	3081	C	C5-C6-N1	-5.71	118.14	121.00
1	6	163	G	C8-N9-C4	-5.71	104.12	106.40
36	5	121	A	N1-C6-N6	5.71	122.03	118.60
1	2	1782	A	C8-N9-C4	-5.71	103.52	105.80
1	6	331	A	C8-N9-C4	5.71	108.08	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	378	A	N1-C2-N3	-5.71	126.45	129.30
36	5	1541	G	N9-C4-C5	-5.71	103.12	105.40
36	5	394	G	C4-C5-N7	-5.71	108.52	110.80
36	5	397	A	N9-C4-C5	5.71	108.08	105.80
36	5	2951	G	C8-N9-C1'	-5.71	119.58	127.00
37	7	83	U	C2-N1-C1'	-5.71	110.85	117.70
36	1	644	G	C5-C6-N1	-5.70	108.65	111.50
36	1	3344	A	C6-C5-N7	-5.70	128.31	132.30
36	5	3374	U	N3-C4-C5	5.70	118.02	114.60
36	1	1329	U	C2-N1-C1'	5.70	124.54	117.70
36	5	873	C	C4-C5-C6	5.70	120.25	117.40
36	1	388	G	C8-N9-C4	-5.70	104.12	106.40
36	1	2314	U	N1-C2-N3	-5.70	111.48	114.90
1	6	314	C	C6-N1-C2	-5.70	118.02	120.30
36	5	2757	U	N1-C2-O2	-5.70	118.81	122.80
36	1	2828	G	C4-N9-C1'	5.70	133.91	126.50
36	1	3242	G	C8-N9-C4	5.70	108.68	106.40
36	5	1897	G	C6-C5-N7	-5.70	126.98	130.40
36	1	191	U	OP2-P-O3'	5.70	117.73	105.20
36	1	228	U	C5-C6-N1	-5.70	119.85	122.70
36	1	1349	G	N3-C4-C5	-5.70	125.75	128.60
1	6	1539	G	O4'-C1'-N9	-5.70	103.64	108.20
36	5	2874	G	O5'-P-OP2	-5.70	100.57	105.70
36	1	2964	G	C4-C5-N7	-5.70	108.52	110.80
1	6	901	G	N1-C6-O6	5.70	123.32	119.90
36	5	859	G	N3-C4-N9	5.70	129.42	126.00
36	5	1473	G	C8-N9-C4	5.70	108.68	106.40
36	5	2830	G	N1-C2-N3	5.70	127.32	123.90
36	5	966	U	C2-N1-C1'	5.69	124.53	117.70
1	2	1658	G	N9-C4-C5	-5.69	103.12	105.40
36	1	1149	G	N3-C2-N2	-5.69	115.92	119.90
36	5	953	G	OP1-P-O3'	5.69	117.72	105.20
1	2	969	C	C6-N1-C2	5.69	122.58	120.30
36	1	988	U	C6-N1-C2	5.69	124.42	121.00
1	6	593	U	C6-N1-C2	-5.69	117.58	121.00
11	s9	149	ARG	NE-CZ-NH1	5.69	123.14	120.30
36	5	665	A	N1-C6-N6	5.69	122.01	118.60
36	5	2230	C	C6-N1-C2	5.69	122.58	120.30
36	5	2868	U	C2-N3-C4	5.69	130.41	127.00
36	5	2943	G	C4-N9-C1'	5.69	133.90	126.50
36	1	1932	A	N1-C6-N6	5.69	122.01	118.60
36	1	2325	G	N7-C8-N9	5.69	115.94	113.10

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1698	G	C5-C6-O6	5.69	132.01	128.60
59	N3	87	ARG	NE-CZ-NH2	-5.69	117.46	120.30
1	6	1572	G	C8-N9-C4	-5.69	104.12	106.40
36	5	2821	C	C2-N3-C4	-5.69	117.06	119.90
36	1	191	U	C6-N1-C2	-5.69	117.59	121.00
36	1	690	A	N9-C4-C5	5.69	108.08	105.80
36	1	2828	G	N3-C2-N2	5.68	123.88	119.90
37	3	14	U	C6-N1-C2	5.68	124.41	121.00
36	5	2806	U	C5-C6-N1	-5.68	119.86	122.70
38	8	64	U	N3-C2-O2	-5.68	118.22	122.20
36	1	1148	G	C8-N9-C4	5.68	108.67	106.40
36	1	2514	U	O5'-P-OP1	-5.68	100.59	105.70
36	1	2662	G	N3-C4-C5	5.68	131.44	128.60
36	1	2944	U	N3-C2-O2	-5.68	118.22	122.20
36	5	2231	C	O4'-C1'-N1	5.68	112.75	108.20
14	C2	103	LEU	CA-CB-CG	5.68	128.37	115.30
1	6	1568	C	C6-N1-C2	-5.68	118.03	120.30
36	5	3089	C	C5-C6-N1	5.68	123.84	121.00
1	2	968	U	C5-C6-N1	-5.68	119.86	122.70
36	1	1329	U	N3-C2-O2	-5.68	118.22	122.20
36	5	2915	U	N3-C2-O2	5.68	126.18	122.20
36	1	3177	G	N1-C6-O6	5.68	123.31	119.90
36	5	1360	C	N1-C2-O2	-5.68	115.49	118.90
1	2	1292	G	N1-C6-O6	-5.68	116.49	119.90
36	1	232	G	N3-C4-N9	5.68	129.41	126.00
36	1	945	C	C6-N1-C2	5.68	122.57	120.30
36	1	1001	G	C5-C6-O6	-5.68	125.19	128.60
36	1	2607	G	N3-C2-N2	5.68	123.87	119.90
38	4	103	G	N3-C4-N9	5.68	129.41	126.00
36	5	207	U	N3-C2-O2	5.68	126.17	122.20
36	5	1294	A	N1-C6-N6	-5.68	115.19	118.60
36	1	895	A	C2-N3-C4	-5.67	107.76	110.60
36	5	768	C	C6-N1-C2	-5.67	118.03	120.30
36	5	2105	G	N1-C6-O6	5.67	123.30	119.90
36	1	934	G	C4-N9-C1'	5.67	133.87	126.50
36	1	1335	C	C5-C6-N1	-5.67	118.16	121.00
1	6	1656	U	O5'-P-OP2	-5.67	100.60	105.70
36	5	1303	A	C8-N9-C4	5.67	108.07	105.80
36	1	2381	G	C4-C5-C6	5.67	122.20	118.80
1	6	144	U	C2-N1-C1'	5.67	124.50	117.70
36	5	961	C	C2-N1-C1'	5.67	125.04	118.80
36	5	1099	A	C5-N7-C8	-5.67	101.06	103.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2981	U	N3-C2-O2	-5.67	118.23	122.20
36	1	1206	G	C5-C6-N1	-5.67	108.67	111.50
36	5	2992	U	C5-C4-O4	-5.67	122.50	125.90
38	8	33	A	C8-N9-C4	5.67	108.07	105.80
52	m6	78	ARG	NE-CZ-NH2	-5.67	117.47	120.30
36	5	1079	A	C5-C6-N6	5.67	128.23	123.70
36	5	635	G	C4-C5-N7	5.67	113.07	110.80
40	l3	216	ASP	CB-CG-OD1	5.67	123.40	118.30
1	6	794	U	C2-N1-C1'	5.66	124.50	117.70
36	1	362	U	O5'-P-OP1	-5.66	100.60	105.70
36	1	790	U	N1-C2-O2	5.66	126.76	122.80
36	5	196	G	N9-C4-C5	-5.66	103.14	105.40
36	1	24	G	N1-C2-N3	5.66	127.30	123.90
36	1	1466	G	C8-N9-C1'	-5.66	119.64	127.00
36	1	2915	U	N3-C2-O2	5.66	126.16	122.20
1	6	104	A	O5'-P-OP2	-5.66	100.61	105.70
36	5	2388	U	C5-C4-O4	-5.66	122.50	125.90
36	5	2402	A	O4'-C1'-N9	5.66	112.73	108.20
36	5	2865	U	C2-N3-C4	5.66	130.40	127.00
36	1	670	C	N3-C4-C5	-5.66	119.64	121.90
36	1	1452	A	C8-N9-C4	5.66	108.06	105.80
36	5	2286	U	N1-C2-N3	5.66	118.30	114.90
36	5	2355	G	C4-C5-N7	5.66	113.06	110.80
36	5	2105	G	C5-C6-O6	-5.66	125.21	128.60
36	1	1346	G	N3-C2-N2	-5.66	115.94	119.90
36	1	1868	G	N3-C4-C5	-5.66	125.77	128.60
36	1	3143	C	N3-C2-O2	5.66	125.86	121.90
37	3	94	C	C6-N1-C2	5.66	122.56	120.30
1	6	1671	A	N1-C2-N3	5.66	132.13	129.30
36	5	922	U	N3-C4-C5	5.66	117.99	114.60
36	5	2632	G	O5'-P-OP1	-5.66	100.61	105.70
1	6	1614	A	N1-C6-N6	5.65	121.99	118.60
36	5	1476	G	N3-C4-N9	-5.65	122.61	126.00
36	5	2938	G	C4-C5-N7	-5.65	108.54	110.80
1	2	542	A	C4-N9-C1'	5.65	136.47	126.30
36	1	1520	G	C2-N3-C4	5.65	114.73	111.90
1	6	1730	A	C4-C5-C6	5.65	119.83	117.00
36	5	278	U	O5'-P-OP2	-5.65	100.61	105.70
36	5	1939	G	N3-C4-N9	5.65	129.39	126.00
36	5	3245	A	C4-C5-C6	5.65	119.83	117.00
36	1	2191	U	C5-C4-O4	5.65	129.29	125.90
1	6	1793	G	C5-C6-O6	5.65	131.99	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	639	G	C4-C5-C6	5.65	122.19	118.80
36	5	798	G	O5'-P-OP1	-5.65	100.61	105.70
36	5	2938	G	C6-C5-N7	5.65	133.79	130.40
36	5	3178	A	O5'-P-OP2	5.65	117.48	110.70
36	5	720	A	N1-C6-N6	5.65	121.99	118.60
36	5	1665	C	N1-C2-O2	5.65	122.29	118.90
36	1	1099	A	C6-C5-N7	-5.65	128.35	132.30
36	1	2815	G	C2-N3-C4	-5.65	109.08	111.90
36	5	2400	G	C4-C5-N7	5.65	113.06	110.80
36	5	3330	A	C6-N1-C2	-5.65	115.21	118.60
36	1	2148	U	C6-N1-C2	5.65	124.39	121.00
36	1	2284	C	C6-N1-C2	-5.64	118.04	120.30
36	1	2325	G	C5-C6-O6	-5.64	125.21	128.60
1	6	765	G	O4'-C1'-N9	-5.64	103.68	108.20
36	5	3042	U	N1-C2-O2	-5.64	118.85	122.80
36	5	3050	U	N1-C2-N3	5.64	118.29	114.90
36	1	619	A	C8-N9-C4	5.64	108.06	105.80
36	1	1330	A	N3-C4-C5	5.64	130.75	126.80
1	6	965	U	N1-C2-O2	5.64	126.75	122.80
36	5	2930	A	O4'-C1'-N9	5.64	112.71	108.20
36	5	3087	A	N1-C6-N6	-5.64	115.22	118.60
36	1	859	G	N9-C4-C5	-5.64	103.14	105.40
36	5	3150	A	C5-C6-N1	-5.64	114.88	117.70
1	2	1100	G	C4-C5-C6	5.64	122.18	118.80
36	5	644	G	N3-C4-C5	-5.64	125.78	128.60
36	5	2145	A	N7-C8-N9	5.64	116.62	113.80
36	5	3105	U	C6-N1-C1'	5.64	129.09	121.20
36	5	3119	U	O5'-P-OP2	-5.64	100.62	105.70
36	5	3330	A	N9-C4-C5	5.64	108.06	105.80
36	1	2836	C	N3-C2-O2	-5.64	117.95	121.90
36	1	2868	U	C2-N1-C1'	5.64	124.47	117.70
1	6	1	U	C6-N1-C1'	-5.64	113.31	121.20
36	5	684	G	O5'-P-OP2	-5.64	100.63	105.70
36	5	2917	G	C6-C5-N7	-5.64	127.02	130.40
1	2	1422	A	C8-N9-C4	5.64	108.06	105.80
36	5	403	C	C6-N1-C2	-5.64	118.05	120.30
36	5	662	U	N1-C2-N3	5.64	118.28	114.90
36	1	2325	G	C4-C5-N7	5.63	113.05	110.80
36	1	2976	A	C6-N1-C2	-5.63	115.22	118.60
36	5	1116	G	C8-N9-C4	-5.63	104.15	106.40
36	5	1135	A	C8-N9-C4	-5.63	103.55	105.80
36	5	2796	G	O5'-P-OP2	-5.63	100.63	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2824	G	N1-C6-O6	5.63	123.28	119.90
36	5	1126	G	N1-C6-O6	5.63	123.28	119.90
36	5	2931	C	C5-C4-N4	-5.63	116.26	120.20
36	1	653	A	O5'-P-OP2	-5.63	100.63	105.70
36	5	2833	A	C8-N9-C4	5.63	108.05	105.80
36	1	3116	G	N3-C4-C5	-5.63	125.78	128.60
36	1	929	A	OP1-P-O3'	5.63	117.58	105.20
36	1	2815	G	N1-C6-O6	5.63	123.28	119.90
1	6	372	G	N3-C4-N9	5.63	129.38	126.00
36	1	2796	G	N7-C8-N9	5.63	115.91	113.10
36	5	754	G	N1-C6-O6	-5.63	116.52	119.90
36	5	1323	G	C5-N7-C8	-5.63	101.49	104.30
36	5	1448	U	C5-C6-N1	-5.63	119.89	122.70
36	5	2370	G	N3-C2-N2	-5.63	115.96	119.90
36	5	2719	U	C2-N1-C1'	-5.63	110.95	117.70
36	5	361	A	C6-C5-N7	5.62	136.24	132.30
36	5	1307	G	C2'-C3'-O3'	5.62	122.70	113.70
36	1	63	A	C8-N9-C4	-5.62	103.55	105.80
36	1	398	A	C2-N3-C4	5.62	113.41	110.60
36	5	1851	G	N1-C6-O6	5.62	123.27	119.90
36	5	2125	A	C8-N9-C4	-5.62	103.55	105.80
1	2	1176	G	C6-C5-N7	-5.62	127.03	130.40
1	2	1314	U	O4'-C1'-N1	5.62	112.70	108.20
36	1	946	U	N3-C4-O4	5.62	123.33	119.40
36	5	341	G	N3-C4-C5	5.62	131.41	128.60
36	5	968	G	OP1-P-OP2	5.62	128.03	119.60
36	1	2946	A	N1-C6-N6	5.62	121.97	118.60
36	1	3055	U	C5-C4-O4	-5.62	122.53	125.90
1	6	194	U	N3-C2-O2	-5.62	118.27	122.20
1	6	29	U	C6-N1-C2	-5.62	117.63	121.00
36	5	1081	U	N3-C2-O2	5.62	126.13	122.20
36	5	1520	G	N3-C4-C5	-5.62	125.79	128.60
36	5	2988	C	C2-N3-C4	-5.62	117.09	119.90
36	1	1520	G	C5-N7-C8	5.62	107.11	104.30
36	1	2372	A	N1-C6-N6	5.62	121.97	118.60
36	1	2643	A	O5'-P-OP2	5.62	117.44	110.70
1	6	295	A	C8-N9-C4	5.62	108.05	105.80
1	6	433	C	C5-C4-N4	-5.62	116.27	120.20
36	5	582	G	N1-C6-O6	-5.62	116.53	119.90
36	1	2138	A	C6-C5-N7	-5.61	128.37	132.30
36	5	1495	U	C2-N1-C1'	5.61	124.44	117.70
36	5	1548	C	C6-N1-C2	-5.61	118.06	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2682	C	N1-C1'-C2'	-5.61	105.83	112.00
1	2	1339	C	P-O3'-C3'	5.61	126.43	119.70
36	1	390	G	N1-C6-O6	-5.61	116.53	119.90
1	6	424	C	C6-N1-C1'	-5.61	114.07	120.80
36	5	835	G	N3-C2-N2	5.61	123.83	119.90
36	5	1315	U	N3-C4-O4	5.61	123.33	119.40
36	1	2777	G	C8-N9-C4	-5.61	104.16	106.40
36	5	1170	A	C8-N9-C4	5.61	108.04	105.80
36	5	1302	A	O5'-P-OP2	5.61	117.43	110.70
36	5	2699	G	N9-C4-C5	-5.61	103.16	105.40
36	1	1488	G	N3-C2-N2	-5.61	115.97	119.90
36	1	2702	A	N9-C4-C5	5.61	108.04	105.80
36	1	2846	U	N1-C2-N3	5.61	118.26	114.90
1	6	21	U	N3-C4-O4	5.61	123.33	119.40
36	5	1881	A	N1-C6-N6	5.61	121.97	118.60
36	5	2887	A	OP2-P-O3'	5.61	117.53	105.20
36	1	860	G	N1-C6-O6	5.61	123.26	119.90
36	1	2233	A	N1-C6-N6	-5.61	115.24	118.60
36	1	2302	G	N3-C4-C5	-5.61	125.80	128.60
36	1	2986	U	C5-C6-N1	-5.61	119.90	122.70
36	1	3277	U	N1-C2-O2	5.61	126.72	122.80
1	6	337	G	N3-C2-N2	5.61	123.82	119.90
1	6	352	A	OP2-P-O3'	5.61	117.53	105.20
36	5	1101	G	N9-C4-C5	-5.61	103.16	105.40
36	5	1330	A	N1-C6-N6	5.61	121.96	118.60
36	5	1483	G	O4'-C1'-N9	5.61	112.68	108.20
36	1	1514	G	C4-C5-C6	5.60	122.16	118.80
36	1	1724	U	O5'-P-OP1	5.60	117.42	110.70
36	1	2607	G	N3-C4-N9	5.60	129.36	126.00
36	1	2808	A	N9-C4-C5	-5.60	103.56	105.80
1	2	144	U	N1-C2-N3	5.60	118.26	114.90
36	1	2814	G	O5'-P-OP1	-5.60	100.66	105.70
1	6	535	A	N1-C6-N6	5.60	121.96	118.60
1	6	992	A	C5-C6-N6	-5.60	119.22	123.70
1	6	1027	A	C2-N3-C4	-5.60	107.80	110.60
36	5	2201	G	C2-N3-C4	5.60	114.70	111.90
36	5	2738	A	O5'-P-OP2	-5.60	100.66	105.70
36	5	2927	C	OP2-P-O3'	5.60	117.53	105.20
1	2	608	U	N3-C2-O2	-5.60	118.28	122.20
36	1	694	C	O5'-P-OP2	-5.60	100.66	105.70
36	5	871	U	C5-C4-O4	5.60	129.26	125.90
36	5	1460	A	C8-N9-C4	-5.60	103.56	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2359	C	C2-N3-C4	-5.60	117.10	119.90
36	5	3050	U	N3-C2-O2	-5.60	118.28	122.20
36	5	3362	A	C2-N3-C4	-5.60	107.80	110.60
37	7	26	C	C4-C5-C6	5.60	120.20	117.40
36	1	1124	U	N3-C4-O4	-5.60	115.48	119.40
1	6	99	C	C6-N1-C2	-5.60	118.06	120.30
36	5	2954	U	N1-C2-O2	5.60	126.72	122.80
36	5	3078	U	C2-N1-C1'	5.60	124.42	117.70
36	1	651	G	C5-N7-C8	5.60	107.10	104.30
36	1	2383	C	N3-C4-C5	5.60	124.14	121.90
36	5	362	U	C5-C6-N1	5.60	125.50	122.70
36	5	649	A	O5'-P-OP2	-5.60	100.66	105.70
36	5	1379	G	C2-N3-C4	-5.60	109.10	111.90
36	5	2774	C	N3-C4-C5	-5.60	119.66	121.90
36	1	1367	G	N1-C6-O6	5.59	123.26	119.90
36	1	1885	U	C5-C6-N1	-5.59	119.90	122.70
36	1	2624	G	C8-N9-C4	-5.59	104.16	106.40
36	5	1391	C	N3-C4-C5	-5.59	119.66	121.90
36	1	49	A	N9-C4-C5	-5.59	103.56	105.80
36	1	1154	A	N1-C2-N3	5.59	132.10	129.30
36	1	1932	A	C5-C6-N6	-5.59	119.22	123.70
36	5	2376	G	N1-C2-N3	5.59	127.26	123.90
36	1	790	U	N3-C4-O4	-5.59	115.49	119.40
36	1	1150	A	C8-N9-C4	5.59	108.04	105.80
36	1	2112	U	P-O3'-C3'	5.59	126.41	119.70
36	1	2279	A	C8-N9-C4	5.59	108.04	105.80
36	1	2827	U	C2-N3-C4	-5.59	123.64	127.00
1	6	101	U	N1-C2-O2	5.59	126.71	122.80
36	5	1001	G	O5'-P-OP2	5.59	117.41	110.70
1	2	1176	G	N1-C6-O6	5.59	123.25	119.90
36	1	395	A	O5'-P-OP2	-5.59	100.67	105.70
36	1	1136	A	C6-N1-C2	-5.59	115.25	118.60
36	1	1168	U	C5-C4-O4	5.59	129.25	125.90
36	1	1713	G	C6-C5-N7	5.59	133.75	130.40
36	1	2550	U	N3-C2-O2	-5.59	118.29	122.20
36	5	41	G	N3-C4-C5	5.59	131.39	128.60
36	5	694	C	N1-C2-N3	5.59	123.11	119.20
36	5	3110	C	N3-C4-C5	5.59	124.14	121.90
36	5	3177	G	C8-N9-C4	5.59	108.64	106.40
38	4	21	C	C6-N1-C2	5.59	122.53	120.30
36	1	95	A	C8-N9-C4	5.59	108.03	105.80
36	1	2957	G	N9-C4-C5	5.59	107.64	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1338	C	N3-C4-N4	5.59	121.91	118.00
36	1	1332	A	OP2-P-O3'	5.58	117.49	105.20
1	6	1562	G	N1-C6-O6	5.58	123.25	119.90
1	6	1793	G	C4-N9-C1'	-5.58	119.24	126.50
36	5	3317	U	N3-C2-O2	-5.58	118.29	122.20
36	1	802	C	N1-C2-O2	-5.58	115.55	118.90
36	1	2278	C	N1-C2-O2	5.58	122.25	118.90
38	4	88	A	C4-C5-N7	5.58	113.49	110.70
1	6	571	G	C8-N9-C4	-5.58	104.17	106.40
36	5	507	U	N3-C4-O4	5.58	123.31	119.40
36	1	2356	A	C4-C5-N7	5.58	113.49	110.70
36	1	2826	U	C5-C4-O4	-5.58	122.55	125.90
1	6	1655	A	N1-C6-N6	5.58	121.95	118.60
36	5	2201	G	N3-C4-N9	5.58	129.35	126.00
1	6	425	A	OP2-P-O3'	5.58	117.48	105.20
36	1	2403	G	C6-C5-N7	-5.58	127.05	130.40
1	6	29	U	N3-C4-C5	-5.58	111.25	114.60
36	5	2329	C	O5'-P-OP2	-5.58	100.68	105.70
36	5	2336	U	N3-C2-O2	-5.58	118.30	122.20
36	5	3043	C	N3-C4-C5	5.58	124.13	121.90
36	1	577	C	N1-C2-O2	-5.58	115.55	118.90
36	1	1396	C	C6-N1-C2	5.58	122.53	120.30
1	2	1109	G	C8-N9-C4	-5.58	104.17	106.40
36	1	703	G	N3-C4-C5	5.58	131.39	128.60
36	1	1134	G	N3-C4-C5	-5.58	125.81	128.60
36	1	3039	C	C6-N1-C2	-5.58	118.07	120.30
36	5	2315	G	C5-C6-O6	5.58	131.94	128.60
36	5	2915	U	C6-N1-C2	5.58	124.34	121.00
54	m8	104	LEU	CA-CB-CG	5.58	128.12	115.30
36	5	859	G	N3-C4-C5	-5.57	125.81	128.60
36	5	2358	A	C2-N3-C4	-5.57	107.81	110.60
36	5	3140	G	C5-C6-O6	-5.57	125.26	128.60
36	5	799	G	C8-N9-C4	5.57	108.63	106.40
1	2	1258	U	C2-N1-C1'	5.57	124.39	117.70
36	1	1097	G	P-O3'-C3'	5.57	126.38	119.70
1	6	418	G	O5'-P-OP1	-5.57	100.69	105.70
36	5	1316	C	C5-C6-N1	5.57	123.78	121.00
78	q2	17	CYS	CA-CB-SG	5.57	124.03	114.00
36	5	2723	U	O5'-P-OP2	-5.57	100.69	105.70
36	1	1829	G	N9-C4-C5	5.57	107.63	105.40
36	1	3038	U	N3-C2-O2	5.57	126.10	122.20
36	5	1176	C	N1-C2-O2	-5.57	115.56	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1898	G	O4'-C1'-N9	5.57	112.65	108.20
1	2	15	U	C5-C6-N1	5.57	125.48	122.70
1	2	1174	C	N1-C2-O2	5.57	122.24	118.90
36	1	903	U	N3-C4-C5	-5.57	111.26	114.60
36	1	1842	A	N1-C6-N6	-5.57	115.26	118.60
36	5	2531	C	C2-N1-C1'	5.57	124.92	118.80
1	2	608	U	N1-C2-N3	5.56	118.24	114.90
37	3	48	U	C2-N1-C1'	5.56	124.38	117.70
36	5	1127	G	C8-N9-C4	-5.56	104.17	106.40
36	5	2327	U	C5-C6-N1	-5.56	119.92	122.70
36	5	2708	C	N3-C4-C5	5.56	124.12	121.90
36	1	2702	A	C5-C6-N6	5.56	128.15	123.70
1	6	65	A	C4-C5-N7	5.56	113.48	110.70
1	2	632	U	N3-C4-O4	-5.56	115.51	119.40
36	1	672	A	N1-C6-N6	5.56	121.94	118.60
36	1	808	A	C8-N9-C4	5.56	108.02	105.80
36	5	920	A	OP1-P-OP2	-5.56	111.26	119.60
36	5	2951	G	N3-C4-C5	-5.56	125.82	128.60
37	3	89	G	C8-N9-C4	5.56	108.62	106.40
1	6	144	U	N1-C2-O2	5.56	126.69	122.80
36	5	365	A	O5'-P-OP1	-5.56	100.70	105.70
36	5	1489	A	C4-C5-C6	5.56	119.78	117.00
36	5	3044	G	C8-N9-C4	-5.56	104.18	106.40
36	1	356	C	N1-C2-O2	-5.56	115.57	118.90
1	6	350	U	C5-C6-N1	-5.56	119.92	122.70
36	5	1316	C	N3-C2-O2	5.56	125.79	121.90
36	5	2205	U	C2-N1-C1'	5.56	124.37	117.70
1	2	380	U	N1-C2-O2	5.55	126.69	122.80
1	2	765	G	O4'-C1'-N9	-5.55	103.76	108.20
36	5	612	U	O5'-P-OP2	5.55	117.36	110.70
36	5	1040	A	N1-C6-N6	-5.55	115.27	118.60
36	5	1665	C	N3-C2-O2	-5.55	118.01	121.90
36	5	2404	A	N1-C6-N6	5.55	121.93	118.60
36	5	3317	U	P-O3'-C3'	5.55	126.37	119.70
36	5	1012	G	C8-N9-C1'	5.55	134.22	127.00
37	3	89	G	N3-C4-N9	5.55	129.33	126.00
1	6	1152	A	C5-C6-N6	-5.55	119.26	123.70
36	5	207	U	C5-C4-O4	-5.55	122.57	125.90
36	5	1126	G	C4-C5-C6	5.55	122.13	118.80
36	5	2866	U	C6-N1-C2	-5.55	117.67	121.00
36	1	285	A	N1-C2-N3	5.55	132.07	129.30
36	1	941	G	C8-N9-C4	-5.55	104.18	106.40

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2964	G	O4'-C1'-N9	5.55	112.64	108.20
1	6	1745	G	C8-N9-C4	5.55	108.62	106.40
36	5	358	G	N1-C6-O6	5.55	123.23	119.90
36	5	2659	G	C5-C6-O6	-5.55	125.27	128.60
54	m8	166	LEU	CB-CG-CD1	-5.55	101.56	111.00
36	1	1339	C	C2-N3-C4	-5.55	117.13	119.90
36	1	1369	A	C8-N9-C4	-5.55	103.58	105.80
36	1	2808	A	O4'-C1'-N9	-5.55	103.76	108.20
36	1	942	U	N3-C4-C5	-5.55	111.27	114.60
36	1	1906	G	C6-C5-N7	-5.55	127.07	130.40
36	5	2295	A	N9-C4-C5	5.55	108.02	105.80
36	1	641	C	C5-C6-N1	5.54	123.77	121.00
36	1	1506	A	N9-C4-C5	5.54	108.02	105.80
36	1	517	G	C5-C6-O6	5.54	131.93	128.60
36	1	837	A	N1-C6-N6	5.54	121.93	118.60
1	6	402	C	C5-C6-N1	-5.54	118.23	121.00
36	5	2112	U	P-O3'-C3'	5.54	126.35	119.70
36	1	611	A	C4-C5-N7	5.54	113.47	110.70
36	1	937	G	N9-C4-C5	-5.54	103.18	105.40
36	1	945	C	N3-C4-C5	5.54	124.12	121.90
36	1	1129	A	N1-C6-N6	5.54	121.92	118.60
36	1	1330	A	C8-N9-C4	5.54	108.02	105.80
36	1	1351	U	N3-C2-O2	-5.54	118.32	122.20
36	1	1450	G	N9-C4-C5	-5.54	103.18	105.40
36	1	2823	G	C4-C5-N7	-5.54	108.58	110.80
36	5	869	G	N3-C2-N2	5.54	123.78	119.90
36	5	1939	G	C6-C5-N7	-5.54	127.08	130.40
36	1	1200	A	N7-C8-N9	-5.54	111.03	113.80
36	5	429	U	C5-C6-N1	-5.54	119.93	122.70
36	1	3242	G	O4'-C1'-N9	-5.54	103.77	108.20
1	6	813	U	C6-N1-C1'	-5.54	113.45	121.20
36	5	2845	A	N7-C8-N9	5.54	116.57	113.80
1	2	48	G	OP2-P-O3'	5.54	117.38	105.20
36	1	716	A	C5-C6-N6	-5.54	119.27	123.70
36	1	959	C	C2-N3-C4	-5.54	117.13	119.90
1	6	555	A	C8-N9-C4	-5.54	103.59	105.80
36	5	1403	C	C5-C4-N4	-5.54	116.33	120.20
1	2	16	G	N3-C4-C5	-5.53	125.83	128.60
36	1	830	A	C8-N9-C4	-5.53	103.59	105.80
36	1	3208	G	C8-N9-C4	5.53	108.61	106.40
36	1	984	G	C6-N1-C2	-5.53	121.78	125.10
36	5	3032	A	C8-N9-C4	-5.53	103.59	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2901	G	C6-C5-N7	-5.53	127.08	130.40
36	5	1101	G	C4-N9-C1'	5.53	133.69	126.50
36	5	514	G	C4-C5-N7	5.53	113.01	110.80
36	5	634	C	OP2-P-O3'	5.53	117.36	105.20
36	1	91	G	N9-C4-C5	-5.53	103.19	105.40
36	1	1157	G	OP2-P-O3'	5.53	117.36	105.20
36	1	2748	A	C2-N3-C4	-5.53	107.84	110.60
1	6	1389	C	N3-C2-O2	-5.53	118.03	121.90
36	5	523	A	O5'-P-OP2	-5.53	100.73	105.70
36	5	3176	G	C4-C5-N7	-5.53	108.59	110.80
36	1	195	U	N3-C2-O2	-5.53	118.33	122.20
36	1	269	G	N3-C4-N9	-5.53	122.69	126.00
1	6	647	G	N3-C4-N9	-5.53	122.68	126.00
1	6	1337	A	C8-N9-C4	5.53	108.01	105.80
36	5	817	A	C6-C5-N7	-5.53	128.43	132.30
36	5	967	A	N9-C4-C5	5.53	108.01	105.80
36	5	2248	C	OP1-P-O3'	5.53	117.36	105.20
36	5	3215	A	C2-N3-C4	-5.53	107.84	110.60
36	5	1131	G	C5-C6-N1	-5.52	108.74	111.50
36	5	1428	A	N1-C6-N6	-5.52	115.29	118.60
36	1	829	U	C2-N1-C1'	5.52	124.33	117.70
36	1	1331	U	N3-C2-O2	-5.52	118.33	122.20
36	1	2273	G	N3-C4-C5	5.52	131.36	128.60
36	5	1190	A	C8-N9-C4	-5.52	103.59	105.80
36	5	1319	G	N3-C4-C5	-5.52	125.84	128.60
36	1	1115	G	OP1-P-O3'	5.52	117.34	105.20
12	c0	88	PRO	N-CA-CB	5.52	109.92	103.30
36	1	901	G	C8-N9-C4	5.52	108.61	106.40
36	1	947	G	C5-C6-N1	-5.52	108.74	111.50
36	1	48	A	O4'-C1'-N9	5.52	112.61	108.20
36	1	220	G	C5-N7-C8	-5.52	101.54	104.30
36	1	1124	U	C4-C5-C6	-5.52	116.39	119.70
36	1	1190	A	C4-C5-C6	5.52	119.76	117.00
36	1	1796	G	N3-C4-C5	-5.52	125.84	128.60
36	1	2805	G	N9-C4-C5	-5.52	103.19	105.40
36	5	75	G	C5-C6-O6	-5.52	125.29	128.60
36	5	784	A	N9-C4-C5	-5.52	103.59	105.80
36	5	1534	A	N3-C4-C5	-5.52	122.94	126.80
36	1	1389	G	C6-C5-N7	-5.52	127.09	130.40
1	6	426	G	C4-N9-C1'	5.52	133.67	126.50
1	6	639	U	N3-C2-O2	-5.52	118.34	122.20
1	2	88	U	N3-C2-O2	-5.51	118.34	122.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	641	C	C4-C5-C6	-5.51	114.64	117.40
36	1	1399	A	O5'-P-OP1	5.51	117.32	110.70
36	1	2555	G	N3-C4-N9	-5.51	122.69	126.00
1	6	1097	U	P-O3'-C3'	5.51	126.32	119.70
36	5	959	C	N3-C4-C5	-5.51	119.69	121.90
36	5	1900	A	C4-C5-N7	5.51	113.46	110.70
36	5	2245	C	N3-C2-O2	-5.51	118.04	121.90
1	6	338	C	C5-C6-N1	5.51	123.76	121.00
36	5	1208	U	N3-C2-O2	-5.51	118.34	122.20
36	5	2531	C	N1-C2-O2	5.51	122.21	118.90
1	2	1560	U	C5-C4-O4	5.51	129.21	125.90
36	1	2371	G	OP1-P-O3'	5.51	117.32	105.20
36	1	2430	A	C8-N9-C4	-5.51	103.60	105.80
1	6	1614	A	N1-C2-N3	5.51	132.06	129.30
36	5	1193	A	N1-C6-N6	5.51	121.91	118.60
36	5	1398	U	C5-C4-O4	5.51	129.21	125.90
36	5	2874	G	C5-C6-N1	-5.51	108.74	111.50
28	d6	10	ARG	NE-CZ-NH1	-5.51	117.55	120.30
36	5	3309	G	C4-N9-C1'	5.51	133.66	126.50
1	2	734	A	OP1-P-O3'	5.51	117.32	105.20
36	5	868	C	C6-N1-C2	5.51	122.50	120.30
36	5	1390	A	C5-C6-N6	5.51	128.11	123.70
1	2	15	U	C2-N1-C1'	5.51	124.31	117.70
1	2	349	U	C5-C6-N1	-5.51	119.95	122.70
36	1	2278	C	N3-C4-N4	-5.51	114.14	118.00
36	5	40	A	O5'-P-OP1	-5.51	100.74	105.70
36	5	1101	G	N1-C2-N2	-5.51	111.24	116.20
36	1	2858	U	OP2-P-O3'	5.50	117.31	105.20
3	s1	47	LEU	CA-CB-CG	5.50	127.96	115.30
36	5	2914	G	N3-C4-N9	5.50	129.30	126.00
36	1	432	G	N9-C4-C5	-5.50	103.20	105.40
36	1	859	G	N3-C4-N9	5.50	129.30	126.00
36	1	1164	G	C4-N9-C1'	5.50	133.65	126.50
36	1	1346	G	O5'-P-OP2	-5.50	100.75	105.70
36	5	1012	G	C8-N9-C4	5.50	108.60	106.40
36	5	1064	A	N1-C6-N6	5.50	121.90	118.60
36	5	2634	U	N1-C2-N3	5.50	118.20	114.90
1	2	934	C	C6-N1-C1'	-5.50	114.20	120.80
36	1	919	U	N3-C4-C5	5.50	117.90	114.60
36	1	1175	C	C5-C6-N1	-5.50	118.25	121.00
36	5	2887	A	C4-C5-C6	5.50	119.75	117.00
36	5	3000	A	C8-N9-C4	5.50	108.00	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3131	U	N3-C4-O4	-5.50	115.55	119.40
1	2	1412	G	C8-N9-C1'	5.50	134.15	127.00
36	1	289	A	C5-C6-N6	-5.50	119.30	123.70
36	1	804	C	C2-N3-C4	-5.50	117.15	119.90
36	1	968	G	C6-N1-C2	-5.50	121.80	125.10
36	1	2121	G	N1-C2-N2	-5.50	111.25	116.20
36	1	2513	U	OP1-P-O3'	5.50	117.30	105.20
36	1	3214	U	C2-N1-C1'	5.50	124.30	117.70
1	6	119	A	N3-C4-C5	5.50	130.65	126.80
1	6	424	C	C2-N1-C1'	5.50	124.85	118.80
36	5	648	C	O5'-P-OP1	-5.50	100.75	105.70
36	5	2334	U	N1-C2-N3	5.50	118.20	114.90
36	5	2683	U	N1-C2-O2	5.50	126.65	122.80
36	1	25	U	N1-C2-O2	-5.50	118.95	122.80
36	1	919	U	N1-C2-O2	5.50	126.65	122.80
36	1	1303	A	N9-C4-C5	-5.50	103.60	105.80
36	1	2153	U	C6-N1-C2	-5.50	117.70	121.00
1	6	1100	G	N3-C4-C5	-5.50	125.85	128.60
1	6	1355	C	C6-N1-C2	-5.50	118.10	120.30
36	5	669	U	N3-C2-O2	-5.50	118.35	122.20
36	5	981	U	C6-N1-C2	-5.50	117.70	121.00
36	5	3203	U	O5'-P-OP1	-5.50	100.75	105.70
36	5	3339	A	N9-C4-C5	-5.50	103.60	105.80
36	1	340	C	C2-N1-C1'	5.50	124.84	118.80
36	1	947	G	C6-C5-N7	-5.50	127.10	130.40
36	1	2733	A	O5'-P-OP1	5.50	117.29	110.70
1	6	609	U	C5-C6-N1	-5.50	119.95	122.70
1	2	421	A	N9-C4-C5	-5.49	103.60	105.80
36	1	796	U	N1-C2-O2	-5.49	118.95	122.80
36	1	1428	A	C2-N3-C4	-5.49	107.85	110.60
36	5	1450	G	C5-N7-C8	-5.49	101.55	104.30
36	5	2295	A	C6-N1-C2	-5.49	115.30	118.60
1	6	1117	U	C6-N1-C2	-5.49	117.70	121.00
1	6	1306	C	C5-C6-N1	5.49	123.75	121.00
36	5	1931	U	N3-C4-O4	-5.49	115.56	119.40
1	6	523	G	C8-N9-C4	5.49	108.60	106.40
1	6	1100	G	N3-C4-N9	5.49	129.29	126.00
36	5	2199	G	C8-N9-C1'	-5.49	119.86	127.00
1	2	1202	A	C8-N9-C4	-5.49	103.61	105.80
36	1	704	U	O5'-P-OP2	-5.49	100.76	105.70
36	1	2336	U	C6-N1-C2	5.49	124.29	121.00
36	5	2374	C	N1-C2-O2	-5.49	115.61	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	41	G	C8-N9-C1'	-5.49	119.87	127.00
36	1	2391	G	C4-C5-N7	-5.49	108.61	110.80
36	1	2901	G	N1-C6-O6	5.49	123.19	119.90
1	6	1025	A	C8-N9-C4	5.49	108.00	105.80
1	6	1025	A	N9-C4-C5	-5.49	103.61	105.80
1	2	1033	C	N3-C2-O2	-5.49	118.06	121.90
38	4	82	U	N1-C2-O2	-5.49	118.96	122.80
1	6	337	G	C4-C5-C6	5.49	122.09	118.80
36	5	2372	A	C4-C5-C6	5.49	119.74	117.00
1	2	942	G	C8-N9-C4	-5.48	104.21	106.40
36	1	939	U	N3-C2-O2	5.48	126.04	122.20
1	6	536	C	C5-C6-N1	5.48	123.74	121.00
1	6	1456	C	C4-C5-C6	5.48	120.14	117.40
1	2	378	A	N1-C6-N6	5.48	121.89	118.60
36	1	2402	A	O5'-P-OP2	-5.48	100.77	105.70
56	N0	167	ARG	N-CA-C	-5.48	96.20	111.00
36	5	170	G	C4-N9-C1'	5.48	133.62	126.50
36	5	2246	G	O5'-P-OP1	-5.48	100.77	105.70
36	5	2800	G	N3-C4-N9	-5.48	122.71	126.00
1	2	720	G	P-O3'-C3'	5.48	126.28	119.70
36	1	2812	C	OP1-P-O3'	5.48	117.25	105.20
1	6	1680	G	C5-C6-N1	5.48	114.24	111.50
36	1	2552	C	O4'-C1'-N1	5.48	112.58	108.20
36	1	2639	G	N1-C6-O6	5.48	123.19	119.90
36	5	1881	A	C5-C6-N6	-5.48	119.32	123.70
1	6	163	G	C5-N7-C8	-5.48	101.56	104.30
36	5	1124	U	N3-C4-O4	-5.48	115.57	119.40
36	5	2290	C	C5-C6-N1	-5.48	118.26	121.00
36	1	1514	G	N3-C4-N9	5.47	129.28	126.00
36	1	3024	A	O5'-P-OP1	-5.47	100.77	105.70
1	6	163	G	N9-C4-C5	5.47	107.59	105.40
1	6	1412	G	C4-N9-C1'	-5.47	119.38	126.50
36	5	518	G	C5-C6-O6	-5.47	125.31	128.60
36	5	1294	A	O4'-C1'-N9	5.47	112.58	108.20
1	2	145	A	C8-N9-C4	-5.47	103.61	105.80
36	1	967	A	N1-C2-N3	5.47	132.04	129.30
36	1	1389	G	N3-C2-N2	5.47	123.73	119.90
36	1	2836	C	C4-C5-C6	5.47	120.14	117.40
36	1	3266	G	N3-C2-N2	-5.47	116.07	119.90
1	6	639	U	N1-C2-O2	5.47	126.63	122.80
1	6	1162	C	C6-N1-C2	-5.47	118.11	120.30
36	5	1468	A	C4-C5-N7	5.47	113.44	110.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1528	G	N3-C4-C5	-5.47	125.86	128.60
36	5	2875	U	N1-C2-N3	-5.47	111.62	114.90
36	5	2877	G	N3-C2-N2	5.47	123.73	119.90
36	5	2962	U	N1-C2-O2	-5.47	118.97	122.80
36	5	3140	G	N1-C6-O6	5.47	123.18	119.90
36	1	63	A	N9-C4-C5	5.47	107.99	105.80
36	1	1425	U	C5-C4-O4	5.47	129.18	125.90
36	1	2937	G	C8-N9-C4	5.47	108.59	106.40
36	1	2948	C	N3-C4-C5	5.47	124.09	121.90
1	6	354	C	C5-C6-N1	5.47	123.73	121.00
36	1	2369	G	N3-C4-N9	5.47	129.28	126.00
37	3	8	G	C4-C5-N7	-5.47	108.61	110.80
1	6	1085	G	C5-C6-O6	5.47	131.88	128.60
1	6	1776	A	N1-C6-N6	5.47	121.88	118.60
36	5	585	A	C2-N3-C4	-5.47	107.87	110.60
36	5	980	A	N1-C6-N6	-5.47	115.32	118.60
37	7	88	G	N1-C6-O6	-5.47	116.62	119.90
38	8	87	G	N3-C4-N9	5.47	129.28	126.00
1	2	1137	A	C8-N9-C4	5.47	107.99	105.80
36	1	72	C	C2-N1-C1'	-5.47	112.79	118.80
36	1	994	G	N1-C6-O6	-5.47	116.62	119.90
36	1	2516	U	N1-C2-N3	5.47	118.18	114.90
1	6	1346	A	O4'-C1'-N9	5.47	112.57	108.20
36	5	2719	U	C5-C6-N1	-5.47	119.97	122.70
1	2	608	U	N3-C4-O4	-5.46	115.57	119.40
1	2	1026	A	O5'-P-OP1	-5.46	100.78	105.70
36	1	107	A	C4-C5-N7	5.46	113.43	110.70
36	1	335	G	N1-C6-O6	5.46	123.18	119.90
36	1	2145	A	C8-N9-C4	-5.46	103.61	105.80
1	6	318	U	O5'-P-OP2	-5.46	100.78	105.70
1	6	1361	U	N1-C2-O2	5.46	126.63	122.80
36	1	279	U	OP1-P-O3'	5.46	117.22	105.20
1	6	1640	C	C6-N1-C1'	-5.46	114.24	120.80
36	5	3372	A	C8-N9-C4	-5.46	103.61	105.80
36	1	701	G	N1-C6-O6	5.46	123.18	119.90
1	6	1697	G	N3-C4-N9	5.46	129.28	126.00
36	5	106	A	C8-N9-C4	5.46	107.98	105.80
36	5	665	A	C5-C6-N6	-5.46	119.33	123.70
36	5	969	C	OP1-P-O3'	5.46	117.21	105.20
36	5	2552	C	C2-N1-C1'	5.46	124.81	118.80
36	1	329	U	C6-N1-C2	-5.46	117.72	121.00
36	1	659	G	OP2-P-O3'	5.46	117.21	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	121	A	C8-N9-C4	5.46	107.98	105.80
36	5	906	A	N9-C4-C5	5.46	107.98	105.80
36	5	2376	G	C5-C6-O6	-5.46	125.32	128.60
36	1	2642	A	C6-N1-C2	5.46	121.88	118.60
36	1	2984	C	C5-C4-N4	5.46	124.02	120.20
36	5	994	G	OP1-P-O3'	5.46	117.21	105.20
1	2	89	G	N3-C4-C5	5.46	131.33	128.60
1	2	794	U	N3-C2-O2	-5.46	118.38	122.20
1	6	687	G	N3-C4-N9	-5.46	122.73	126.00
1	6	1698	G	N1-C6-O6	-5.46	116.63	119.90
36	5	677	A	C8-N9-C4	-5.46	103.62	105.80
36	1	642	U	C6-N1-C2	-5.46	117.73	121.00
36	1	2636	A	C5-N7-C8	-5.46	101.17	103.90
36	1	2175	U	C5-C4-O4	5.45	129.17	125.90
1	6	1562	G	C5-C6-O6	-5.45	125.33	128.60
36	5	969	C	C2-N3-C4	-5.45	117.17	119.90
36	1	619	A	N9-C4-C5	-5.45	103.62	105.80
36	1	1351	U	N1-C2-O2	5.45	126.61	122.80
36	5	1138	U	C5-C4-O4	-5.45	122.63	125.90
36	5	1301	A	N9-C4-C5	-5.45	103.62	105.80
1	2	1280	C	C6-N1-C2	-5.45	118.12	120.30
36	1	200	C	N1-C2-O2	5.45	122.17	118.90
36	1	642	U	N1-C2-N3	5.45	118.17	114.90
36	1	925	A	N7-C8-N9	5.45	116.52	113.80
36	1	1586	G	N3-C4-C5	-5.45	125.88	128.60
36	1	2616	C	O5'-P-OP1	-5.45	100.80	105.70
1	6	65	A	C6-C5-N7	-5.45	128.49	132.30
36	5	652	G	N3-C4-C5	-5.45	125.88	128.60
38	8	20	U	N1-C2-N3	5.45	118.17	114.90
36	1	433	A	C5-C6-N6	-5.45	119.34	123.70
36	5	105	C	C6-N1-C2	5.45	122.48	120.30
36	5	3143	C	C6-N1-C2	-5.45	118.12	120.30
1	2	312	A	C8-N9-C4	-5.45	103.62	105.80
36	1	651	G	N3-C4-N9	5.45	129.27	126.00
36	1	2871	G	C5-N7-C8	-5.45	101.58	104.30
1	6	613	G	N3-C4-C5	-5.45	125.88	128.60
1	2	1324	G	N1-C2-N2	5.44	121.10	116.20
1	6	1698	G	P-O3'-C3'	5.44	126.23	119.70
36	5	283	G	C8-N9-C1'	-5.44	119.92	127.00
36	5	1003	A	C2-N3-C4	-5.44	107.88	110.60
36	5	2273	G	C8-N9-C1'	5.44	134.08	127.00
36	5	2643	A	C5-C6-N6	-5.44	119.34	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	99	G	N1-C2-N2	-5.44	111.30	116.20
36	1	701	G	C4-C5-C6	5.44	122.06	118.80
36	1	1201	C	N3-C4-C5	-5.44	119.72	121.90
38	4	47	C	C5-C6-N1	-5.44	118.28	121.00
36	5	510	G	C5-C6-O6	5.44	131.87	128.60
36	5	1155	C	C2-N1-C1'	5.44	124.79	118.80
36	5	1657	C	N1-C2-O2	5.44	122.17	118.90
1	2	992	A	N3-C4-C5	5.44	130.61	126.80
36	1	353	G	C5-C6-O6	-5.44	125.34	128.60
36	1	873	C	C2-N1-C1'	-5.44	112.82	118.80
36	1	2325	G	N1-C6-O6	5.44	123.17	119.90
1	6	1648	A	C8-N9-C4	5.44	107.98	105.80
36	5	1463	U	N1-C2-O2	-5.44	118.99	122.80
36	5	2249	G	N3-C4-C5	-5.44	125.88	128.60
36	5	2633	U	C5-C6-N1	-5.44	119.98	122.70
36	5	3180	A	N1-C2-N3	5.44	132.02	129.30
36	1	2406	C	OP1-P-OP2	5.44	127.76	119.60
37	3	101	G	N9-C4-C5	-5.44	103.22	105.40
1	6	1573	A	P-O3'-C3'	5.44	126.23	119.70
36	1	2181	C	N3-C4-C5	5.44	124.08	121.90
36	1	2775	U	N1-C2-N3	5.44	118.16	114.90
36	1	3002	C	N3-C4-C5	5.44	124.08	121.90
36	5	3045	G	N1-C6-O6	5.44	123.16	119.90
36	1	55	G	N9-C4-C5	-5.44	103.23	105.40
36	1	2815	G	C4-C5-N7	5.44	112.97	110.80
36	1	3103	A	C2-N3-C4	-5.44	107.88	110.60
37	3	15	C	C6-N1-C2	5.44	122.47	120.30
36	5	2376	G	C4-C5-N7	5.44	112.97	110.80
36	5	2867	C	N1-C2-O2	-5.44	115.64	118.90
36	1	188	U	N3-C4-C5	-5.43	111.34	114.60
36	1	1434	G	C6-C5-N7	-5.43	127.14	130.40
36	1	2409	G	C8-N9-C4	-5.43	104.23	106.40
1	6	1514	U	N3-C4-O4	-5.43	115.60	119.40
36	5	1072	G	O5'-P-OP2	-5.43	100.81	105.70
36	5	2306	C	OP2-P-O3'	5.43	117.16	105.20
36	5	2419	A	C5-N7-C8	-5.43	101.18	103.90
36	5	2421	U	C4-C5-C6	5.43	122.96	119.70
36	5	3150	A	C2-N3-C4	-5.43	107.88	110.60
36	5	3218	A	P-O3'-C3'	5.43	126.22	119.70
36	5	3240	C	N1-C2-O2	5.43	122.16	118.90
1	2	830	U	N1-C2-O2	5.43	126.60	122.80
36	1	661	G	C5-C6-O6	5.43	131.86	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1206	G	N9-C4-C5	5.43	107.57	105.40
36	1	1795	U	N3-C4-C5	5.43	117.86	114.60
1	6	308	C	C5-C6-N1	-5.43	118.28	121.00
36	5	1370	G	N3-C2-N2	5.43	123.70	119.90
36	5	3011	A	N1-C6-N6	-5.43	115.34	118.60
1	2	21	U	C5-C6-N1	5.43	125.42	122.70
36	1	1151	U	N1-C2-N3	5.43	118.16	114.90
36	1	2679	A	N1-C2-N3	5.43	132.01	129.30
36	1	2944	U	N1-C2-O2	5.43	126.60	122.80
36	5	1117	G	N9-C4-C5	-5.43	103.23	105.40
36	1	933	A	C4-C5-C6	5.43	119.72	117.00
36	1	2808	A	C8-N9-C1'	-5.43	117.93	127.70
36	5	2928	C	C5-C6-N1	5.43	123.71	121.00
38	8	55	U	C6-N1-C2	-5.43	117.74	121.00
36	1	718	G	N3-C4-C5	5.43	131.31	128.60
36	1	2643	A	N9-C4-C5	-5.43	103.63	105.80
1	2	543	C	C6-N1-C2	-5.43	118.13	120.30
36	1	682	U	N3-C2-O2	-5.43	118.40	122.20
36	1	1344	G	OP2-P-O3'	5.43	117.14	105.20
36	1	1447	G	C5-C6-O6	5.43	131.86	128.60
36	1	2381	G	C8-N9-C1'	-5.43	119.95	127.00
36	5	2211	U	C4-C5-C6	5.43	122.96	119.70
36	5	2704	A	OP2-P-O3'	5.43	117.14	105.20
36	5	2899	C	N3-C4-N4	5.43	121.80	118.00
36	5	3362	A	N1-C2-N3	5.43	132.01	129.30
36	1	2101	C	P-O3'-C3'	5.42	126.21	119.70
36	1	3265	C	N3-C4-C5	5.42	124.07	121.90
38	4	113	U	C5-C6-N1	-5.42	119.99	122.70
36	5	1043	C	O5'-P-OP1	5.42	117.21	110.70
36	5	1119	C	C2-N3-C4	-5.42	117.19	119.90
36	5	2372	A	N3-C4-C5	-5.42	123.00	126.80
36	5	2891	U	N3-C4-O4	-5.42	115.60	119.40
37	7	74	C	N3-C2-O2	5.42	125.70	121.90
36	5	1178	G	C5-N7-C8	-5.42	101.59	104.30
36	1	1154	A	N3-C4-C5	-5.42	123.01	126.80
36	1	1307	G	C2'-C3'-O3'	5.42	122.38	113.70
36	1	2186	U	C5-C4-O4	5.42	129.15	125.90
69	O3	73	ARG	NE-CZ-NH1	-5.42	117.59	120.30
36	5	2987	A	C6-N1-C2	5.42	121.85	118.60
36	5	3154	C	C5-C6-N1	5.42	123.71	121.00
36	1	1868	G	C8-N9-C4	-5.42	104.23	106.40
36	1	346	C	N3-C2-O2	5.42	125.69	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	809	G	N1-C6-O6	5.42	123.15	119.90
36	1	2551	U	C2-N1-C1'	5.42	124.20	117.70
36	1	2984	C	N1-C2-N3	5.42	122.99	119.20
36	1	3221	C	O5'-P-OP1	-5.42	100.82	105.70
36	5	3018	C	O5'-P-OP2	-5.42	100.82	105.70
36	1	107	A	C5-C6-N6	-5.42	119.37	123.70
36	1	2952	G	C5-C6-O6	-5.42	125.35	128.60
38	4	7	U	N1-C2-N3	5.42	118.15	114.90
1	6	35	U	N1-C2-N3	5.42	118.15	114.90
1	6	552	G	C5-C6-O6	-5.42	125.35	128.60
1	6	1643	U	N1-C2-N3	5.42	118.15	114.90
37	7	1	G	C4-N9-C1'	5.42	133.54	126.50
36	1	2886	U	N3-C2-O2	5.41	125.99	122.20
38	4	3	A	C2-N3-C4	5.41	113.31	110.60
36	5	112	U	C2-N1-C1'	5.41	124.20	117.70
36	5	1149	G	C2-N3-C4	5.41	114.61	111.90
36	5	1839	A	O5'-P-OP1	-5.41	100.83	105.70
37	7	76	A	N1-C6-N6	-5.41	115.35	118.60
1	2	393	C	C6-N1-C2	5.41	122.47	120.30
36	1	2846	U	C6-N1-C2	-5.41	117.75	121.00
36	5	2195	C	C5-C4-N4	-5.41	116.41	120.20
36	5	2794	G	C5-C6-N1	5.41	114.21	111.50
36	1	3276	G	N3-C4-C5	5.41	131.31	128.60
1	6	1129	U	C5-C4-O4	5.41	129.15	125.90
1	6	1791	A	N1-C6-N6	5.41	121.85	118.60
36	5	644	G	C4-N9-C1'	5.41	133.53	126.50
36	5	3153	U	N3-C2-O2	-5.41	118.41	122.20
37	7	92	A	C5-C6-N6	-5.41	119.37	123.70
37	7	110	G	N3-C4-C5	5.41	131.31	128.60
36	1	669	U	C5-C6-N1	-5.41	120.00	122.70
36	1	2361	A	N1-C2-N3	5.41	132.00	129.30
1	6	584	C	C6-N1-C2	-5.41	118.14	120.30
36	5	837	A	C8-N9-C4	-5.41	103.64	105.80
1	2	1081	A	C6-C5-N7	5.41	136.08	132.30
36	1	1331	U	C2-N1-C1'	5.41	124.19	117.70
36	1	2572	C	C6-N1-C2	-5.41	118.14	120.30
36	1	2618	G	O5'-P-OP2	-5.41	100.83	105.70
36	5	2121	G	O5'-P-OP2	-5.41	100.83	105.70
36	1	1320	C	C4-C5-C6	5.40	120.10	117.40
36	5	2851	A	N9-C4-C5	5.40	107.96	105.80
36	5	2992	U	N3-C4-O4	5.40	123.18	119.40
1	2	973	A	O5'-P-OP1	5.40	117.18	110.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	573	C	N3-C4-C5	5.40	124.06	121.90
36	5	1884	A	O5'-P-OP2	-5.40	100.84	105.70
36	1	282	G	P-O3'-C3'	5.40	126.18	119.70
36	1	2550	U	N1-C2-N3	5.40	118.14	114.90
36	1	2887	A	C5-C6-N6	-5.40	119.38	123.70
1	6	1634	C	C6-N1-C1'	-5.40	114.32	120.80
36	5	2857	C	OP2-P-O3'	5.40	117.08	105.20
36	1	428	A	N1-C6-N6	-5.40	115.36	118.60
36	1	2939	G	C4-C5-N7	-5.40	108.64	110.80
1	6	1000	C	O4'-C1'-N1	5.40	112.52	108.20
36	5	3218	A	C6-C5-N7	-5.40	128.52	132.30
36	1	53	G	N1-C6-O6	-5.40	116.66	119.90
36	1	2644	C	C4-C5-C6	5.40	120.10	117.40
36	5	403	C	N3-C4-N4	5.40	121.78	118.00
1	2	1675	C	C5-C6-N1	-5.39	118.30	121.00
36	1	634	C	C6-N1-C2	5.39	122.46	120.30
36	1	2382	G	N3-C2-N2	5.39	123.68	119.90
36	1	2398	A	N7-C8-N9	-5.39	111.10	113.80
36	5	816	A	N1-C6-N6	-5.39	115.36	118.60
36	1	2185	G	C5-C6-N1	-5.39	108.80	111.50
41	L4	190	GLY	N-CA-C	5.39	126.58	113.10
36	5	364	G	C4-C5-N7	5.39	112.96	110.80
38	8	100	U	C2-N1-C1'	5.39	124.17	117.70
36	5	352	A	O5'-P-OP1	-5.39	100.85	105.70
36	5	414	U	N1-C2-O2	-5.39	119.03	122.80
36	5	873	C	C6-N1-C2	-5.39	118.14	120.30
36	5	1381	A	C2-N3-C4	-5.39	107.90	110.60
36	5	2748	A	N1-C6-N6	5.39	121.83	118.60
36	5	3005	A	OP1-P-OP2	5.39	127.69	119.60
36	1	584	G	N9-C4-C5	5.39	107.56	105.40
36	1	1514	G	N1-C2-N2	-5.39	111.35	116.20
1	6	455	C	N1-C2-O2	-5.39	115.67	118.90
1	6	951	A	C8-N9-C4	5.39	107.96	105.80
1	6	1697	G	C2-N3-C4	5.39	114.59	111.90
36	5	879	U	C5-C4-O4	-5.39	122.67	125.90
36	5	2249	G	C8-N9-C4	-5.39	104.24	106.40
36	5	2993	G	C6-N1-C2	-5.39	121.87	125.10
36	5	3214	U	C5-C4-O4	5.39	129.13	125.90
36	5	3285	C	C6-N1-C1'	-5.39	114.33	120.80
36	1	2126	A	C4-C5-C6	-5.39	114.31	117.00
36	1	3079	U	N1-C2-N3	5.39	118.13	114.90
37	3	91	G	C4-C5-N7	5.39	112.95	110.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	588	G	C8-N9-C4	-5.39	104.25	106.40
38	4	42	G	C8-N9-C4	5.39	108.56	106.40
36	5	1116	G	C5-C6-O6	5.39	131.83	128.60
36	5	1730	G	C8-N9-C4	5.39	108.55	106.40
36	5	3131	U	N3-C4-C5	5.39	117.83	114.60
1	6	300	A	O5'-P-OP1	-5.38	100.85	105.70
1	6	965	U	N3-C4-C5	5.38	117.83	114.60
36	5	1046	A	O5'-P-OP1	-5.38	100.85	105.70
36	5	1365	G	N1-C2-N3	5.38	127.13	123.90
36	5	1429	G	C8-N9-C4	5.38	108.55	106.40
36	5	1454	A	C8-N9-C4	5.38	107.95	105.80
36	5	2346	C	N3-C2-O2	5.38	125.67	121.90
36	5	3123	A	C8-N9-C4	5.38	107.95	105.80
36	5	2211	U	C5-C4-O4	5.38	129.13	125.90
36	5	2728	G	O5'-P-OP2	-5.38	100.86	105.70
36	5	2943	G	C5-N7-C8	-5.38	101.61	104.30
36	1	587	U	OP2-P-O3'	5.38	117.04	105.20
36	1	1905	G	N3-C4-N9	-5.38	122.77	126.00
37	3	88	G	C8-N9-C4	-5.38	104.25	106.40
36	5	834	U	C6-N1-C2	5.38	124.23	121.00
36	5	2514	U	C5-C6-N1	5.38	125.39	122.70
36	5	3055	U	O5'-P-OP2	-5.38	100.86	105.70
36	1	937	G	O5'-P-OP1	-5.38	100.86	105.70
36	5	2868	U	N1-C2-O2	5.38	126.57	122.80
1	2	389	G	C5-C6-O6	-5.38	125.37	128.60
36	1	688	G	N3-C4-C5	-5.38	125.91	128.60
38	4	95	G	C4-N9-C1'	-5.38	119.51	126.50
36	5	1884	A	C5-C6-N6	-5.38	119.40	123.70
36	5	2411	U	C6-N1-C2	5.38	124.23	121.00
36	5	2818	U	P-O3'-C3'	5.38	126.16	119.70
36	5	3115	C	N1-C2-N3	5.38	122.96	119.20
36	5	3177	G	N9-C4-C5	-5.38	103.25	105.40
1	2	551	G	N7-C8-N9	5.38	115.79	113.10
36	1	221	A	N1-C6-N6	-5.38	115.37	118.60
36	1	1001	G	C8-N9-C1'	-5.38	120.01	127.00
36	1	1408	G	C5-C6-O6	-5.38	125.37	128.60
38	4	20	U	C2-N3-C4	-5.38	123.77	127.00
36	5	1003	A	N1-C2-N3	5.38	131.99	129.30
36	5	2934	A	N1-C2-N3	-5.38	126.61	129.30
1	2	1324	G	N9-C4-C5	5.38	107.55	105.40
36	1	2358	A	N1-C6-N6	5.38	121.83	118.60
36	5	804	C	C6-N1-C2	-5.38	118.15	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1289	G	N1-C6-O6	-5.38	116.67	119.90
36	5	3040	A	N7-C8-N9	-5.38	111.11	113.80
36	1	2369	G	C5-C6-O6	-5.37	125.38	128.60
36	5	2818	U	C5'-C4'-O4'	-5.37	102.65	109.10
36	1	611	A	C5-C6-N6	-5.37	119.40	123.70
36	1	3174	A	N1-C6-N6	5.37	121.82	118.60
36	5	206	G	C5-C6-N1	5.37	114.19	111.50
36	5	2286	U	C6-N1-C2	-5.37	117.78	121.00
36	5	2860	U	C5-C4-O4	5.37	129.12	125.90
36	5	3115	C	N1-C2-O2	-5.37	115.68	118.90
36	5	916	G	OP1-P-O3'	5.37	117.02	105.20
36	5	3061	G	C5-C6-O6	-5.37	125.38	128.60
1	2	1307	U	N3-C2-O2	-5.37	118.44	122.20
36	1	345	G	C4-N9-C1'	5.37	133.48	126.50
36	1	347	G	N7-C8-N9	5.37	115.78	113.10
36	1	1311	G	N9-C4-C5	-5.37	103.25	105.40
36	1	1364	C	OP2-P-O3'	5.37	117.01	105.20
36	5	196	G	C5-C6-O6	-5.37	125.38	128.60
36	5	640	U	C5-C6-N1	5.37	125.39	122.70
36	5	801	A	N1-C2-N3	5.37	131.98	129.30
36	5	1301	A	C5-C6-N6	-5.37	119.41	123.70
36	5	1433	A	C8-N9-C4	-5.37	103.65	105.80
36	5	2693	C	N3-C4-C5	5.37	124.05	121.90
36	1	2352	A	O5'-P-OP2	-5.37	100.87	105.70
1	6	417	A	C8-N9-C4	-5.37	103.65	105.80
36	1	361	A	C4-C5-C6	-5.37	114.32	117.00
36	1	1408	G	C4-C5-C6	5.37	122.02	118.80
36	5	1310	G	N1-C6-O6	-5.37	116.68	119.90
36	5	2700	G	C5-C6-N1	5.37	114.18	111.50
1	2	1190	C	C6-N1-C2	5.36	122.44	120.30
1	2	1323	C	N3-C2-O2	-5.36	118.14	121.90
36	1	984	G	C6-C5-N7	-5.36	127.18	130.40
36	1	1447	G	C4-C5-N7	-5.36	108.66	110.80
36	1	3046	A	O5'-P-OP1	-5.36	100.87	105.70
1	6	1600	A	N1-C6-N6	5.36	121.82	118.60
36	5	2514	U	O5'-P-OP1	-5.36	100.87	105.70
36	1	1108	U	C6-N1-C2	5.36	124.22	121.00
36	5	2392	C	C2-N1-C1'	-5.36	112.90	118.80
36	5	2412	G	N3-C4-N9	5.36	129.22	126.00
36	5	2623	G	N3-C2-N2	5.36	123.65	119.90
36	1	2113	A	N1-C6-N6	5.36	121.82	118.60
1	6	994	G	C6-C5-N7	-5.36	127.18	130.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1399	C	C6-N1-C2	-5.36	118.16	120.30
36	5	3040	A	C8-N9-C4	5.36	107.94	105.80
36	1	211	A	C6-N1-C2	-5.36	115.39	118.60
36	1	899	U	N3-C2-O2	-5.36	118.45	122.20
36	1	2190	U	OP2-P-O3'	5.36	116.99	105.20
36	1	2966	G	N3-C4-C5	-5.36	125.92	128.60
1	6	477	A	N9-C4-C5	-5.36	103.66	105.80
1	6	1141	G	O5'-P-OP1	-5.36	100.88	105.70
1	6	1361	U	C6-N1-C1'	-5.36	113.70	121.20
1	6	1614	A	C6-C5-N7	-5.36	128.55	132.30
36	5	2642	A	C5-C6-N6	5.36	127.99	123.70
36	1	315	C	C2-N1-C1'	5.36	124.69	118.80
36	1	1331	U	N1-C2-O2	5.36	126.55	122.80
36	1	2126	A	C8-N9-C4	5.36	107.94	105.80
36	5	437	G	N1-C2-N2	5.36	121.02	116.20
36	5	3289	G	N9-C1'-C2'	-5.36	106.11	112.00
1	2	1199	G	C8-N9-C1'	-5.35	120.04	127.00
36	1	315	C	C5-C6-N1	5.35	123.68	121.00
36	1	576	C	N1-C2-O2	-5.35	115.69	118.90
36	1	657	A	O5'-P-OP2	5.35	117.12	110.70
36	1	1784	G	N3-C4-N9	-5.35	122.79	126.00
36	5	1896	A	O5'-P-OP1	-5.35	100.88	105.70
18	C6	40	GLU	C-N-CD	-5.35	108.82	120.60
36	1	47	C	C6-N1-C2	5.35	122.44	120.30
36	1	757	C	N1-C2-O2	-5.35	115.69	118.90
36	1	3275	U	OP1-P-O3'	5.35	116.97	105.20
36	5	110	G	N7-C8-N9	-5.35	110.42	113.10
36	5	420	G	C5-C6-O6	-5.35	125.39	128.60
36	5	959	C	O4'-C1'-N1	5.35	112.48	108.20
36	5	3022	G	O4'-C1'-N9	5.35	112.48	108.20
36	1	1387	G	C5-C6-O6	5.35	131.81	128.60
36	1	2292	U	C2-N1-C1'	5.35	124.12	117.70
36	5	222	A	O5'-P-OP1	5.35	117.12	110.70
36	5	1469	C	O5'-P-OP2	-5.35	100.88	105.70
36	1	35	A	N1-C6-N6	5.35	121.81	118.60
36	1	676	G	C4-C5-C6	5.35	122.01	118.80
36	1	2283	G	C2-N3-C4	-5.35	109.23	111.90
36	1	2391	G	N3-C2-N2	-5.35	116.16	119.90
36	1	2400	G	OP2-P-O3'	5.35	116.97	105.20
36	5	609	G	N3-C2-N2	-5.35	116.16	119.90
36	5	1152	G	C5-C6-N1	-5.35	108.83	111.50
1	2	1386	G	C8-N9-C4	5.35	108.54	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1405	U	C5-C6-N1	-5.35	120.03	122.70
1	6	1003	A	C8-N9-C4	5.35	107.94	105.80
36	5	1547	G	N3-C4-C5	5.35	131.27	128.60
36	5	3315	G	N1-C2-N3	5.35	127.11	123.90
36	1	655	C	C4-C5-C6	5.35	120.07	117.40
36	1	1114	U	N1-C2-N3	-5.35	111.69	114.90
1	6	90	C	N3-C2-O2	-5.35	118.16	121.90
1	2	334	G	N7-C8-N9	-5.34	110.43	113.10
24	D2	104	LEU	CA-CB-CG	5.34	127.59	115.30
36	1	1177	G	C8-N9-C4	-5.34	104.26	106.40
36	1	1429	G	N3-C4-N9	5.34	129.21	126.00
36	1	2692	A	N7-C8-N9	5.34	116.47	113.80
37	7	79	A	N9-C4-C5	-5.34	103.66	105.80
1	2	70	C	C6-N1-C2	5.34	122.44	120.30
36	1	936	A	N1-C6-N6	5.34	121.81	118.60
36	5	1149	G	N1-C6-O6	5.34	123.11	119.90
36	5	3041	U	N3-C2-O2	5.34	125.94	122.20
1	2	16	G	N3-C4-N9	5.34	129.21	126.00
1	2	1114	G	C6-C5-N7	-5.34	127.19	130.40
36	1	1168	U	N3-C2-O2	-5.34	118.46	122.20
36	1	2306	C	O4'-C1'-N1	-5.34	103.93	108.20
38	4	144	G	N3-C2-N2	-5.34	116.16	119.90
1	6	106	U	C5-C4-O4	5.34	129.10	125.90
1	6	418	G	C5-C6-O6	-5.34	125.39	128.60
36	5	83	U	N3-C2-O2	-5.34	118.46	122.20
36	5	358	G	C8-N9-C4	5.34	108.54	106.40
36	5	2377	G	C6-C5-N7	5.34	133.60	130.40
36	5	2645	G	C8-N9-C4	5.34	108.54	106.40
1	2	144	U	N3-C2-O2	-5.34	118.46	122.20
36	5	429	U	C6-N1-C2	5.34	124.20	121.00
36	5	1327	C	C6-N1-C2	5.34	122.44	120.30
36	5	2799	A	N9-C4-C5	5.34	107.94	105.80
1	6	631	G	C5-C6-O6	-5.34	125.40	128.60
36	1	910	G	C4-C5-C6	5.34	122.00	118.80
36	1	979	U	N1-C2-N3	5.34	118.10	114.90
36	1	3142	A	C5-N7-C8	-5.34	101.23	103.90
79	Q3	29	LEU	CA-CB-CG	-5.34	103.03	115.30
1	6	782	U	C2-N1-C1'	5.34	124.10	117.70
16	c4	35	GLY	N-CA-C	5.34	126.44	113.10
36	5	2193	U	N3-C2-O2	5.34	125.94	122.20
36	1	420	G	O4'-C1'-N9	5.33	112.47	108.20
36	1	820	A	C6-N1-C2	-5.33	115.40	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	871	U	C6-N1-C1'	5.33	128.67	121.20
36	5	2171	G	N1-C6-O6	-5.33	116.70	119.90
36	1	2403	G	OP1-P-O3'	5.33	116.93	105.20
36	5	1489	A	N3-C4-C5	-5.33	123.07	126.80
36	5	2853	A	C4-C5-C6	-5.33	114.33	117.00
36	5	3309	G	C8-N9-C1'	-5.33	120.06	127.00
36	1	339	C	C2-N3-C4	-5.33	117.23	119.90
36	1	432	G	C2-N3-C4	-5.33	109.23	111.90
36	1	645	A	N3-C4-C5	-5.33	123.07	126.80
36	1	803	C	N3-C4-C5	5.33	124.03	121.90
36	1	933	A	N3-C4-C5	-5.33	123.07	126.80
36	1	1313	G	N1-C6-O6	5.33	123.10	119.90
36	1	1448	U	OP2-P-O3'	5.33	116.93	105.20
36	1	2296	A	C2-N3-C4	-5.33	107.94	110.60
36	1	2372	A	OP1-P-O3'	5.33	116.93	105.20
36	5	1169	A	O5'-P-OP2	-5.33	100.90	105.70
36	5	3048	A	O5'-P-OP2	-5.33	100.90	105.70
36	5	227	G	C8-N9-C4	5.33	108.53	106.40
36	5	793	C	N3-C4-N4	5.33	121.73	118.00
36	5	994	G	N3-C2-N2	5.33	123.63	119.90
36	1	369	A	N9-C4-C5	5.33	107.93	105.80
36	1	1296	C	N3-C2-O2	-5.33	118.17	121.90
1	6	1601	G	N1-C6-O6	-5.33	116.70	119.90
36	5	298	U	C6-N1-C2	-5.33	117.80	121.00
36	5	3207	U	N3-C4-C5	-5.33	111.40	114.60
36	1	1269	U	N1-C2-O2	5.33	126.53	122.80
36	1	1844	C	O5'-P-OP1	-5.33	100.91	105.70
36	5	2694	A	N1-C6-N6	-5.33	115.40	118.60
1	2	190	C	O4'-C1'-N1	5.33	112.46	108.20
36	1	944	C	OP2-P-O3'	5.33	116.92	105.20
36	1	2283	G	C5-N7-C8	-5.33	101.64	104.30
36	1	2639	G	C5-C6-O6	-5.33	125.41	128.60
36	1	2831	G	C5-C6-O6	-5.33	125.40	128.60
36	1	3311	C	OP1-P-OP2	5.33	127.59	119.60
1	6	695	U	C2-N1-C1'	5.33	124.09	117.70
36	1	596	C	N1-C2-O2	5.32	122.09	118.90
36	1	1501	U	C6-N1-C2	5.32	124.19	121.00
36	1	2808	A	C4-N9-C1'	5.32	135.88	126.30
36	1	2850	G	N3-C4-N9	5.32	129.19	126.00
36	1	2966	G	N3-C4-N9	5.32	129.19	126.00
1	6	458	G	C8-N9-C4	-5.32	104.27	106.40
36	5	307	A	N1-C6-N6	-5.32	115.41	118.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	770	G	N1-C6-O6	-5.32	116.71	119.90
36	5	855	U	OP2-P-O3'	5.32	116.91	105.20
36	5	1110	U	C5-C6-N1	5.32	125.36	122.70
36	1	393	U	N3-C4-O4	-5.32	115.68	119.40
36	1	857	G	N9-C4-C5	5.32	107.53	105.40
36	1	1385	C	C2-N1-C1'	-5.32	112.95	118.80
36	1	2255	A	C8-N9-C4	5.32	107.93	105.80
38	4	94	C	C6-N1-C1'	-5.32	114.42	120.80
36	5	1413	G	N3-C4-N9	5.32	129.19	126.00
36	5	2142	A	C2-N3-C4	5.32	113.26	110.60
36	5	2689	A	O4'-C1'-N9	5.32	112.46	108.20
36	1	866	A	C8-N9-C4	5.32	107.93	105.80
36	1	1300	G	C8-N9-C1'	-5.32	120.09	127.00
36	1	2202	C	C6-N1-C2	-5.32	118.17	120.30
36	5	1420	C	N1-C2-O2	-5.32	115.71	118.90
36	1	3362	A	C8-N9-C4	-5.32	103.67	105.80
73	O7	5	THR	C-N-CD	5.32	139.57	128.40
1	6	678	A	P-O3'-C3'	5.32	126.08	119.70
36	5	510	G	N3-C2-N2	5.32	123.62	119.90
36	5	2370	G	N1-C2-N3	5.32	127.09	123.90
1	2	308	C	N1-C2-O2	-5.31	115.71	118.90
36	1	2870	C	N3-C4-N4	-5.31	114.28	118.00
1	6	609	U	C5-C4-O4	5.31	129.09	125.90
36	5	2971	A	N3-C4-N9	5.31	131.65	127.40
36	1	911	C	C2-N3-C4	-5.31	117.24	119.90
36	5	1012	G	N3-C4-N9	-5.31	122.81	126.00
36	5	2953	U	O5'-P-OP2	5.31	117.08	110.70
36	5	673	U	C5-C6-N1	-5.31	120.04	122.70
36	5	1886	A	O5'-P-OP2	-5.31	100.92	105.70
1	2	949	C	C6-N1-C2	-5.31	118.18	120.30
36	1	2330	C	C5-C4-N4	-5.31	116.48	120.20
36	1	2758	A	N7-C8-N9	-5.31	111.15	113.80
53	M7	3	ARG	NE-CZ-NH2	-5.31	117.64	120.30
36	5	1155	C	O5'-P-OP1	-5.31	100.92	105.70
36	5	2372	A	C8-N9-C4	-5.31	103.68	105.80
36	5	2823	G	C6-C5-N7	-5.31	127.21	130.40
1	2	728	U	N1-C2-O2	5.31	126.52	122.80
36	1	927	C	N3-C4-N4	5.31	121.72	118.00
36	1	1897	G	C6-C5-N7	-5.31	127.22	130.40
1	6	1148	C	OP2-P-O3'	5.31	116.88	105.20
36	5	1113	G	C5-C6-N1	-5.31	108.85	111.50
36	5	1374	G	N1-C2-N2	-5.31	111.42	116.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1437	C	N3-C2-O2	-5.31	118.19	121.90
36	5	1943	C	C6-N1-C2	-5.31	118.18	120.30
36	5	2965	U	C5-C4-O4	-5.31	122.72	125.90
37	7	48	U	C4-C5-C6	5.31	122.88	119.70
36	1	357	A	C6-N1-C2	-5.31	115.42	118.60
1	6	585	A	C8-N9-C4	5.31	107.92	105.80
36	5	519	A	N1-C6-N6	5.31	121.78	118.60
36	1	1807	G	C8-N9-C4	-5.30	104.28	106.40
36	5	1480	G	O4'-C1'-N9	5.30	112.44	108.20
39	L2	25	GLY	N-CA-C	-5.30	99.84	113.10
36	5	746	A	OP2-P-O3'	5.30	116.87	105.20
36	1	2783	U	C5-C6-N1	5.30	125.35	122.70
1	6	9	U	O5'-P-OP1	-5.30	100.93	105.70
36	5	610	G	C8-N9-C4	-5.30	104.28	106.40
36	5	2135	U	O5'-P-OP2	-5.30	100.93	105.70
36	5	2629	U	C5-C4-O4	-5.30	122.72	125.90
36	1	956	U	N3-C4-C5	-5.30	111.42	114.60
36	1	2293	C	N3-C4-N4	5.30	121.71	118.00
36	1	2369	G	N3-C4-C5	-5.30	125.95	128.60
37	7	77	G	N1-C6-O6	5.30	123.08	119.90
1	2	412	A	N1-C6-N6	5.30	121.78	118.60
1	2	499	U	C5-C4-O4	-5.30	122.72	125.90
36	1	27	C	OP1-P-OP2	5.30	127.55	119.60
36	1	1082	U	N1-C2-O2	5.30	126.51	122.80
36	1	3181	C	N1-C2-N3	5.30	122.91	119.20
36	5	1116	G	C8-N9-C1'	-5.30	120.11	127.00
36	5	2572	C	C6-N1-C1'	-5.30	114.44	120.80
1	2	103	A	C5-C6-N6	-5.30	119.46	123.70
1	2	1014	G	C8-N9-C4	-5.30	104.28	106.40
36	1	645	A	N1-C2-N3	5.30	131.95	129.30
36	1	1646	G	N3-C4-C5	5.30	131.25	128.60
36	1	1669	C	C6-N1-C2	5.30	122.42	120.30
36	5	994	G	N3-C4-C5	-5.30	125.95	128.60
36	5	2419	A	N1-C6-N6	5.30	121.78	118.60
36	5	2643	A	C4-C5-N7	5.30	113.35	110.70
36	5	2965	U	N1-C2-O2	-5.30	119.09	122.80
36	5	3174	A	N7-C8-N9	5.30	116.45	113.80
36	1	410	U	C6-N1-C2	-5.29	117.82	121.00
36	1	717	C	C6-N1-C2	-5.29	118.18	120.30
36	1	1604	G	C4-N9-C1'	5.29	133.38	126.50
36	5	1127	G	C5-C6-N1	5.29	114.15	111.50
36	5	1200	A	N3-C4-N9	5.29	131.64	127.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2622	C	N3-C4-C5	-5.29	119.78	121.90
1	2	864	U	N3-C2-O2	-5.29	118.50	122.20
36	1	1296	C	N1-C2-N3	5.29	122.91	119.20
36	1	2781	U	N1-C2-O2	-5.29	119.09	122.80
38	4	7	U	OP2-P-O3'	5.29	116.84	105.20
47	M0	24	ARG	NE-CZ-NH1	5.29	122.95	120.30
36	5	195	U	N3-C2-O2	-5.29	118.50	122.20
36	1	1419	A	C5'-C4'-O4'	5.29	115.45	109.10
36	1	2523	A	N1-C6-N6	5.29	121.78	118.60
36	1	2723	U	N1-C2-O2	-5.29	119.10	122.80
1	6	1614	A	C5-C6-N1	-5.29	115.05	117.70
36	5	2277	C	N1-C2-O2	5.29	122.08	118.90
36	1	128	G	C6-C5-N7	-5.29	127.23	130.40
36	1	2754	G	C8-N9-C4	5.29	108.52	106.40
36	5	3049	A	N7-C8-N9	-5.29	111.16	113.80
36	1	1154	A	C6-N1-C2	-5.29	115.43	118.60
36	1	1724	U	O5'-P-OP2	-5.29	100.94	105.70
36	1	2612	U	C2-N3-C4	-5.29	123.83	127.00
36	1	2982	A	C4-C5-C6	5.29	119.64	117.00
1	6	272	U	P-O3'-C3'	5.29	126.05	119.70
1	6	619	A	C4-N9-C1'	-5.29	116.78	126.30
36	5	55	G	C2-N3-C4	-5.29	109.26	111.90
36	5	1466	G	C5-C6-O6	-5.29	125.43	128.60
36	5	2112	U	N3-C2-O2	-5.29	118.50	122.20
36	5	2871	G	N3-C4-N9	5.29	129.17	126.00
36	1	1849	C	N3-C4-N4	5.29	121.70	118.00
1	6	1412	G	N3-C4-N9	-5.29	122.83	126.00
36	5	1158	A	O5'-P-OP1	5.29	117.04	110.70
36	5	1367	G	C5-C6-N1	-5.29	108.86	111.50
36	5	2823	G	C4-C5-N7	5.29	112.92	110.80
36	1	979	U	C5-C6-N1	5.29	125.34	122.70
36	1	1305	U	N1-C2-N3	5.29	118.07	114.90
36	1	2948	C	C6-N1-C2	5.29	122.41	120.30
36	5	1716	U	C6-N1-C2	-5.29	117.83	121.00
36	5	3006	A	C2-N3-C4	-5.29	107.96	110.60
36	5	421	G	N3-C4-C5	-5.28	125.96	128.60
36	5	2523	A	N1-C6-N6	-5.28	115.43	118.60
36	1	858	A	C8-N9-C4	-5.28	103.69	105.80
38	4	99	C	C6-N1-C2	5.28	122.41	120.30
1	6	943	C	C2-N1-C1'	-5.28	112.99	118.80
36	5	2145	A	N9-C4-C5	5.28	107.91	105.80
36	5	2355	G	N1-C6-O6	5.28	123.07	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	110	G	N3-C4-N9	-5.28	122.83	126.00
37	3	86	U	N3-C4-C5	5.28	117.77	114.60
36	5	417	A	C8-N9-C4	5.28	107.91	105.80
36	5	2300	G	C4-C5-N7	5.28	112.91	110.80
36	5	3046	A	C5-C6-N1	5.28	120.34	117.70
36	5	3308	C	C4-C5-C6	5.28	120.04	117.40
36	1	228	U	O5'-P-OP1	-5.28	100.95	105.70
36	1	2643	A	N7-C8-N9	-5.28	111.16	113.80
36	1	2857	C	OP2-P-O3'	5.28	116.81	105.20
36	1	2984	C	N1-C2-O2	-5.28	115.73	118.90
36	1	956	U	C5-C4-O4	5.28	129.07	125.90
36	1	2361	A	N1-C6-N6	-5.28	115.43	118.60
36	1	3121	U	OP1-P-O3'	5.28	116.81	105.20
1	6	1029	U	N1-C2-N3	5.28	118.07	114.90
36	5	1606	U	C5-C6-N1	-5.28	120.06	122.70
36	5	2800	G	N3-C4-C5	5.28	131.24	128.60
36	5	3041	U	N3-C4-C5	5.28	117.77	114.60
1	2	1132	A	C5-C6-N6	-5.28	119.48	123.70
36	1	2405	C	N3-C4-N4	5.28	121.69	118.00
38	4	125	U	N1-C2-O2	5.28	126.49	122.80
36	5	1117	G	C5-N7-C8	-5.28	101.66	104.30
36	1	968	G	N3-C4-C5	-5.27	125.96	128.60
36	1	1453	A	C8-N9-C4	-5.27	103.69	105.80
56	N0	106	LEU	CA-CB-CG	5.27	127.43	115.30
36	5	645	A	C8-N9-C4	-5.27	103.69	105.80
36	5	1365	G	C6-C5-N7	-5.27	127.24	130.40
36	5	2342	U	C5-C6-N1	-5.27	120.06	122.70
36	5	3140	G	C6-C5-N7	-5.27	127.24	130.40
1	2	447	U	N3-C4-O4	5.27	123.09	119.40
36	5	3317	U	C6-N1-C2	-5.27	117.84	121.00
36	1	820	A	N7-C8-N9	5.27	116.44	113.80
36	1	1308	A	C5-C6-N1	-5.27	115.06	117.70
36	1	970	A	C8-N9-C4	-5.27	103.69	105.80
36	1	2821	C	OP1-P-OP2	5.27	127.50	119.60
36	5	1188	U	N1-C2-N3	5.27	118.06	114.90
36	5	2843	U	N3-C2-O2	-5.27	118.51	122.20
36	1	44	U	C5-C4-O4	5.27	129.06	125.90
36	1	1164	G	C5-C6-O6	5.27	131.76	128.60
36	1	1330	A	N9-C4-C5	-5.27	103.69	105.80
36	5	878	G	N3-C2-N2	5.27	123.59	119.90
36	5	1196	C	C6-N1-C2	5.27	122.41	120.30
36	5	1412	G	N7-C8-N9	5.27	115.73	113.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2618	G	N3-C4-C5	-5.27	125.97	128.60
36	5	2642	A	N1-C6-N6	-5.27	115.44	118.60
36	1	1377	G	C5-C6-O6	-5.27	125.44	128.60
36	5	808	A	N9-C4-C5	5.27	107.91	105.80
36	5	1327	C	N3-C4-C5	5.27	124.01	121.90
36	5	2366	C	C2-N3-C4	5.27	122.53	119.90
36	1	659	G	C4-C5-N7	5.26	112.91	110.80
36	1	930	U	N1-C2-O2	-5.26	119.11	122.80
37	3	30	G	C8-N9-C4	-5.26	104.29	106.40
36	5	869	G	N1-C2-N2	-5.26	111.46	116.20
36	5	1101	G	N3-C4-N9	5.26	129.16	126.00
36	1	3120	C	N1-C2-O2	5.26	122.06	118.90
1	6	426	G	N3-C4-C5	-5.26	125.97	128.60
36	5	2616	C	N3-C2-O2	5.26	125.58	121.90
36	5	3387	U	N3-C2-O2	-5.26	118.52	122.20
1	2	428	A	N9-C4-C5	5.26	107.91	105.80
36	1	267	G	N1-C6-O6	5.26	123.06	119.90
36	1	925	A	C4-C5-C6	5.26	119.63	117.00
36	1	1164	G	C8-N9-C1'	-5.26	120.16	127.00
1	6	361	C	OP1-P-OP2	-5.26	111.71	119.60
1	6	1267	G	C8-N9-C4	5.26	108.50	106.40
36	5	644	G	C8-N9-C4	-5.26	104.30	106.40
36	1	1141	C	C4-C5-C6	5.26	120.03	117.40
36	1	2842	U	N1-C2-O2	5.26	126.48	122.80
36	1	2980	U	C6-N1-C2	-5.26	117.84	121.00
37	3	48	U	C5-C4-O4	-5.26	122.74	125.90
1	6	552	G	N9-C4-C5	-5.26	103.30	105.40
1	6	1508	U	C6-N1-C2	5.26	124.16	121.00
36	5	29	C	C6-N1-C2	5.26	122.40	120.30
36	5	661	G	N3-C2-N2	5.26	123.58	119.90
36	5	984	G	N3-C4-N9	5.26	129.16	126.00
36	5	1895	A	C5-N7-C8	-5.26	101.27	103.90
36	5	2938	G	N1-C6-O6	-5.26	116.74	119.90
1	2	501	U	P-O3'-C3'	5.26	126.01	119.70
1	2	694	U	N3-C2-O2	-5.26	118.52	122.20
36	1	2604	U	C5-C6-N1	-5.26	120.07	122.70
36	5	2300	G	N1-C2-N2	-5.26	111.47	116.20
36	1	9	U	C2-N1-C1'	-5.26	111.39	117.70
36	1	346	C	C5-C6-N1	-5.26	118.37	121.00
36	1	401	U	N3-C2-O2	-5.26	118.52	122.20
36	1	765	C	N3-C2-O2	-5.26	118.22	121.90
36	5	1128	U	C2-N3-C4	-5.26	123.85	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	73	C	C5-C6-N1	5.26	123.63	121.00
36	1	2177	G	C5-C6-N1	5.25	114.13	111.50
1	6	467	G	N3-C4-C5	-5.25	125.97	128.60
1	2	1473	U	C5-C4-O4	5.25	129.05	125.90
36	1	107	A	C6-C5-N7	-5.25	128.62	132.30
36	1	199	A	N1-C6-N6	5.25	121.75	118.60
36	1	1212	A	N9-C4-C5	-5.25	103.70	105.80
36	1	1434	G	C5-N7-C8	-5.25	101.67	104.30
36	5	1144	U	O5'-P-OP1	-5.25	100.97	105.70
36	5	2143	A	OP1-P-O3'	5.25	116.76	105.20
36	5	2621	G	N3-C4-C5	5.25	131.23	128.60
36	5	3149	G	O5'-P-OP1	5.25	117.00	110.70
1	2	15	U	N3-C2-O2	-5.25	118.52	122.20
1	2	1662	G	N1-C6-O6	-5.25	116.75	119.90
36	1	24	G	C6-C5-N7	-5.25	127.25	130.40
36	1	2344	U	C6-N1-C2	5.25	124.15	121.00
36	1	2800	G	N1-C2-N2	-5.25	111.47	116.20
36	5	575	G	C2-N3-C4	5.25	114.53	111.90
36	5	1413	G	N3-C4-C5	-5.25	125.97	128.60
36	5	1476	G	N3-C4-C5	5.25	131.23	128.60
36	5	1561	G	O4'-C1'-N9	5.25	112.40	108.20
1	2	548	G	N3-C4-N9	5.25	129.15	126.00
36	1	2953	U	N3-C4-O4	5.25	123.08	119.40
1	6	1745	G	C4-N9-C1'	5.25	133.32	126.50
36	5	37	U	OP2-P-O3'	5.25	116.75	105.20
36	5	2372	A	OP2-P-O3'	5.25	116.75	105.20
36	1	274	G	C5-C6-O6	-5.25	125.45	128.60
36	1	1043	C	C6-N1-C2	5.25	122.40	120.30
36	1	1484	U	C5-C6-N1	5.25	125.32	122.70
36	1	2382	G	C2-N3-C4	-5.25	109.28	111.90
36	1	3036	G	N3-C4-C5	-5.25	125.97	128.60
1	6	1744	A	N9-C4-C5	-5.25	103.70	105.80
36	5	293	C	C6-N1-C2	5.25	122.40	120.30
36	5	2117	A	C8-N9-C4	-5.25	103.70	105.80
36	5	2902	A	N1-C6-N6	5.25	121.75	118.60
36	1	1076	C	C6-N1-C1'	-5.25	114.50	120.80
36	5	417	A	N7-C8-N9	-5.25	111.18	113.80
36	5	653	A	O5'-P-OP1	-5.25	100.98	105.70
36	5	1329	U	P-O3'-C3'	5.25	126.00	119.70
37	7	29	C	C6-N1-C2	5.25	122.40	120.30
1	6	76	A	OP1-P-O3'	5.25	116.74	105.20
36	1	282	G	C2'-C3'-O3'	5.24	122.09	113.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	368	G	C6-C5-N7	-5.24	127.25	130.40
36	1	714	G	N1-C6-O6	5.24	123.05	119.90
36	1	1521	G	O5'-P-OP1	-5.24	100.98	105.70
1	6	1200	G	N3-C4-C5	5.24	131.22	128.60
36	5	644	G	C4-C5-N7	-5.24	108.70	110.80
36	5	1049	C	C2-N1-C1'	5.24	124.57	118.80
36	5	1380	G	O5'-P-OP2	-5.24	100.98	105.70
36	5	2891	U	N3-C4-C5	5.24	117.75	114.60
36	5	3044	G	N7-C8-N9	5.24	115.72	113.10
36	5	3091	A	N1-C6-N6	-5.24	115.45	118.60
36	1	1303	A	N1-C6-N6	5.24	121.75	118.60
36	1	3310	A	N9-C4-C5	-5.24	103.70	105.80
36	5	1939	G	N3-C2-N2	5.24	123.57	119.90
36	1	2874	G	C5-C6-N1	-5.24	108.88	111.50
1	6	1027	A	N1-C6-N6	5.24	121.74	118.60
36	5	767	U	O4'-C1'-N1	5.24	112.39	108.20
36	5	1043	C	N3-C2-O2	-5.24	118.23	121.90
36	5	2935	U	C5-C4-O4	-5.24	122.75	125.90
36	1	936	A	C5-C6-N6	-5.24	119.51	123.70
36	1	2526	C	C6-N1-C2	-5.24	118.20	120.30
36	1	2818	U	C4-C5-C6	-5.24	116.56	119.70
36	5	592	A	C8-N9-C4	5.24	107.90	105.80
36	5	960	U	OP1-P-O3'	-5.24	93.67	105.20
36	5	2757	U	N3-C4-O4	5.24	123.07	119.40
36	1	426	G	N3-C4-N9	5.24	129.14	126.00
39	L2	128	ARG	NE-CZ-NH1	-5.24	117.68	120.30
36	5	3146	G	N9-C4-C5	-5.24	103.31	105.40
36	1	39	A	N1-C6-N6	5.24	121.74	118.60
36	1	1137	C	C6-N1-C2	5.24	122.39	120.30
36	1	1414	G	N3-C4-C5	5.24	131.22	128.60
36	1	1431	G	C5-C6-O6	5.24	131.74	128.60
36	1	2187	G	N1-C6-O6	5.24	123.04	119.90
36	1	2418	G	OP2-P-O3'	5.24	116.72	105.20
1	6	217	A	P-O3'-C3'	5.24	125.98	119.70
36	5	411	U	C5-C6-N1	-5.24	120.08	122.70
36	5	1064	A	O4'-C1'-N9	-5.24	104.01	108.20
36	5	2823	G	C5-C6-O6	-5.24	125.46	128.60
36	1	298	U	C6-N1-C1'	-5.23	113.87	121.20
44	L7	163	LEU	CA-CB-CG	-5.23	103.26	115.30
36	1	588	G	N9-C4-C5	5.23	107.49	105.40
36	1	984	G	C2-N3-C4	5.23	114.52	111.90
36	1	2924	U	N3-C2-O2	5.23	125.86	122.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2989	U	C5-C4-O4	-5.23	122.76	125.90
36	1	3267	A	N1-C6-N6	-5.23	115.46	118.60
1	6	1606	C	N1-C2-O2	5.23	122.04	118.90
36	5	1468	A	C5-C6-N6	-5.23	119.51	123.70
36	5	2523	A	N9-C4-C5	5.23	107.89	105.80
36	5	2880	U	N3-C2-O2	-5.23	118.54	122.20
36	5	2951	G	C4-N9-C1'	5.23	133.30	126.50
36	5	3354	U	C2-N1-C1'	5.23	123.98	117.70
36	1	70	A	C4-C5-C6	5.23	119.61	117.00
36	1	788	C	C2-N1-C1'	-5.23	113.05	118.80
36	1	907	G	N3-C4-N9	5.23	129.14	126.00
36	1	2361	A	C2-N3-C4	-5.23	107.98	110.60
1	6	397	A	C2-N3-C4	-5.23	107.98	110.60
36	5	379	C	C6-N1-C2	-5.23	118.21	120.30
36	5	1848	G	O5'-P-OP2	-5.23	100.99	105.70
36	5	3296	A	N1-C6-N6	5.23	121.74	118.60
36	1	635	G	C4-C5-N7	5.23	112.89	110.80
36	1	2619	G	OP1-P-O3'	5.23	116.70	105.20
38	4	39	G	O5'-P-OP1	-5.23	100.99	105.70
36	5	1507	G	C8-N9-C4	-5.23	104.31	106.40
36	5	2353	G	C6-C5-N7	-5.23	127.26	130.40
36	1	1200	A	C4-C5-C6	5.23	119.61	117.00
36	1	3006	A	N1-C2-N3	5.23	131.91	129.30
38	4	61	A	OP2-P-O3'	5.23	116.70	105.20
36	5	1154	A	N1-C6-N6	-5.23	115.46	118.60
36	5	2820	A	OP2-P-O3'	5.23	116.70	105.20
36	5	2879	C	N3-C2-O2	5.23	125.56	121.90
36	5	3326	G	N3-C4-N9	5.23	129.14	126.00
37	7	82	G	C6-C5-N7	-5.23	127.26	130.40
1	2	378	A	C5-C6-N6	-5.23	119.52	123.70
1	6	364	G	C4-N9-C1'	5.23	133.29	126.50
1	6	901	G	N9-C4-C5	-5.23	103.31	105.40
36	5	1701	C	C6-N1-C2	-5.23	118.21	120.30
36	5	3119	U	N1-C2-O2	-5.23	119.14	122.80
1	2	555	A	C8-N9-C4	-5.22	103.71	105.80
36	1	2169	G	C6-C5-N7	5.22	133.53	130.40
36	1	2397	A	O5'-P-OP2	-5.22	101.00	105.70
1	6	359	A	C4-N9-C1'	-5.22	116.89	126.30
1	6	1337	A	N3-C4-C5	5.22	130.46	126.80
36	5	927	C	C6-N1-C2	-5.22	118.21	120.30
36	5	1308	A	OP1-P-OP2	-5.22	111.76	119.60
37	7	85	G	OP2-P-O3'	5.22	116.69	105.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1365	G	C4-N9-C1'	5.22	133.29	126.50
36	1	2756	C	N3-C4-N4	5.22	121.66	118.00
36	1	2816	G	C5-C6-O6	-5.22	125.47	128.60
36	1	3098	G	C4-C5-N7	5.22	112.89	110.80
36	5	2877	G	C8-N9-C1'	-5.22	120.21	127.00
36	1	1206	G	C4-C5-N7	-5.22	108.71	110.80
36	1	2996	U	N1-C2-O2	5.22	126.45	122.80
40	L3	4	ARG	NE-CZ-NH2	-5.22	117.69	120.30
37	7	41	G	N9-C4-C5	-5.22	103.31	105.40
1	2	1241	G	C4-C5-N7	5.22	112.89	110.80
36	1	2406	C	N1-C2-O2	-5.22	115.77	118.90
36	1	2671	A	C4-C5-C6	-5.22	114.39	117.00
1	6	163	G	C2-N3-C4	-5.22	109.29	111.90
1	6	1361	U	C5-C6-N1	5.22	125.31	122.70
36	5	3322	A	C6-C5-N7	-5.22	128.65	132.30
1	6	970	A	N1-C6-N6	5.22	121.73	118.60
1	6	1438	G	N3-C4-N9	5.22	129.13	126.00
36	5	2916	U	O5'-P-OP2	5.22	116.96	110.70
36	5	3026	G	C8-N9-C4	5.22	108.49	106.40
1	2	354	C	N3-C4-C5	-5.22	119.81	121.90
1	2	1215	C	C6-N1-C2	-5.22	118.21	120.30
36	1	1114	U	N1-C2-O2	5.22	126.45	122.80
36	1	2887	A	C5-N7-C8	-5.22	101.29	103.90
38	4	88	A	C5-C6-N6	-5.22	119.53	123.70
1	6	1537	C	O4'-C1'-N1	5.22	112.37	108.20
36	5	916	G	P-O3'-C3'	5.22	125.96	119.70
36	5	2154	U	C6-N1-C2	-5.22	117.87	121.00
36	5	2234	G	N1-C6-O6	5.22	123.03	119.90
36	1	1151	U	N3-C4-O4	5.21	123.05	119.40
1	6	128	U	N1-C2-O2	-5.21	119.15	122.80
1	6	1637	C	N3-C2-O2	-5.21	118.25	121.90
1	6	1780	G	N9-C4-C5	-5.21	103.31	105.40
1	6	1793	G	C8-N9-C1'	5.21	133.78	127.00
36	5	908	G	N1-C6-O6	5.21	123.03	119.90
36	5	1476	G	C6-C5-N7	5.21	133.53	130.40
36	5	2953	U	N3-C4-O4	5.21	123.05	119.40
36	5	2978	U	C5-C6-N1	-5.21	120.09	122.70
1	2	1339	C	C3'-C2'-C1'	5.21	105.67	101.50
36	1	245	U	N3-C2-O2	-5.21	118.55	122.20
36	5	376	G	N3-C4-C5	-5.21	125.99	128.60
1	2	1041	G	C8-N9-C4	-5.21	104.31	106.40
1	2	1241	G	C8-N9-C1'	-5.21	120.22	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2376	G	N3-C4-C5	-5.21	125.99	128.60
36	1	2618	G	N3-C4-C5	-5.21	125.99	128.60
36	1	3088	G	N3-C2-N2	-5.21	116.25	119.90
1	6	1643	U	C2-N3-C4	-5.21	123.87	127.00
36	5	830	A	C4-C5-N7	5.21	113.31	110.70
36	5	1834	U	N3-C4-C5	-5.21	111.47	114.60
36	5	2794	G	N9-C4-C5	-5.21	103.31	105.40
1	2	1777	G	C6-C5-N7	-5.21	127.27	130.40
36	1	1519	G	C8-N9-C4	5.21	108.48	106.40
1	6	1600	A	N9-C1'-C2'	5.21	120.77	114.00
36	5	340	C	N3-C4-N4	-5.21	114.35	118.00
36	5	424	G	N9-C4-C5	-5.21	103.32	105.40
36	5	922	U	N3-C4-O4	-5.21	115.75	119.40
36	5	1468	A	C6-C5-N7	-5.21	128.65	132.30
36	1	1403	C	C2-N1-C1'	-5.21	113.07	118.80
36	1	2805	G	N1-C6-O6	5.21	123.03	119.90
38	4	94	C	C5-C4-N4	-5.21	116.55	120.20
1	6	18	C	C5-C6-N1	5.21	123.60	121.00
1	6	858	G	C5-N7-C8	-5.21	101.70	104.30
36	5	803	C	N1-C2-O2	-5.21	115.78	118.90
36	5	1003	A	C8-N9-C4	5.21	107.88	105.80
1	2	1560	U	C6-N1-C2	-5.21	117.88	121.00
36	1	688	G	C5-C6-O6	-5.21	125.48	128.60
36	1	908	G	N1-C2-N2	5.21	120.89	116.20
36	1	2692	A	C4-C5-N7	5.21	113.30	110.70
38	4	115	C	C6-N1-C2	5.21	122.38	120.30
1	6	14	C	N1-C2-O2	-5.21	115.78	118.90
36	5	80	G	N1-C6-O6	5.21	123.02	119.90
36	5	977	C	N1-C2-O2	5.21	122.02	118.90
36	5	1911	A	O5'-P-OP2	-5.21	101.02	105.70
1	2	866	G	N3-C4-C5	5.20	131.20	128.60
36	1	1156	C	C4-C5-C6	5.20	120.00	117.40
36	5	1874	A	C8-N9-C4	5.20	107.88	105.80
36	5	2965	U	N3-C2-O2	5.20	125.84	122.20
36	5	3317	U	C5-C4-O4	5.20	129.02	125.90
1	2	1558	U	C2-N1-C1'	5.20	123.94	117.70
36	1	556	U	N3-C2-O2	5.20	125.84	122.20
36	1	1204	A	O5'-P-OP1	-5.20	101.02	105.70
36	5	1008	U	C5-C6-N1	-5.20	120.10	122.70
36	1	1369	A	O5'-P-OP1	-5.20	101.02	105.70
36	5	798	G	N1-C6-O6	5.20	123.02	119.90
36	5	2697	A	C5-C6-N6	-5.20	119.54	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1096	C	N3-C2-O2	-5.20	118.26	121.90
36	1	590	G	C5-C6-O6	-5.20	125.48	128.60
36	1	1045	C	OP2-P-O3'	5.20	116.64	105.20
36	1	2232	A	O5'-P-OP2	-5.20	101.02	105.70
36	1	2400	G	C5-C6-N1	-5.20	108.90	111.50
36	1	2647	A	C6-N1-C2	-5.20	115.48	118.60
36	5	564	G	C4-C5-N7	-5.20	108.72	110.80
36	5	1772	U	N3-C2-O2	-5.20	118.56	122.20
36	5	2848	G	C4-C5-C6	5.20	121.92	118.80
37	7	43	U	C5-C6-N1	-5.20	120.10	122.70
1	2	307	G	N9-C4-C5	-5.20	103.32	105.40
36	1	970	A	C5-N7-C8	-5.20	101.30	103.90
1	6	590	C	C6-N1-C2	-5.20	118.22	120.30
36	5	128	G	N3-C4-N9	5.20	129.12	126.00
36	5	1139	G	C5-C6-O6	-5.20	125.48	128.60
36	5	1870	C	N1-C2-O2	-5.20	115.78	118.90
1	2	866	G	C4-C5-N7	5.20	112.88	110.80
36	1	404	G	C5-C6-N1	-5.20	108.90	111.50
36	1	1139	G	C5-C6-O6	5.20	131.72	128.60
36	5	567	G	N1-C2-N2	-5.20	111.52	116.20
36	5	641	C	C6-N1-C2	5.20	122.38	120.30
36	5	1321	G	C5-C6-N1	-5.20	108.90	111.50
38	4	32	C	N3-C2-O2	5.19	125.54	121.90
36	5	1164	G	OP1-P-OP2	5.19	127.39	119.60
36	5	1695	U	N1-C2-N3	5.19	118.02	114.90
36	1	326	U	O5'-P-OP2	-5.19	101.03	105.70
36	1	1386	A	N1-C6-N6	5.19	121.72	118.60
36	1	1428	A	N1-C2-N3	5.19	131.90	129.30
36	1	2307	G	OP2-P-O3'	5.19	116.62	105.20
1	6	558	U	N3-C2-O2	-5.19	118.56	122.20
36	5	221	A	N7-C8-N9	-5.19	111.20	113.80
36	5	1408	G	OP2-P-O3'	5.19	116.62	105.20
36	5	2299	A	C5-C6-N1	-5.19	115.10	117.70
36	5	2338	C	N3-C4-C5	-5.19	119.82	121.90
36	5	2692	A	N1-C6-N6	-5.19	115.48	118.60
36	5	3302	U	C2-N1-C1'	-5.19	111.47	117.70
1	2	1307	U	C2-N1-C1'	5.19	123.93	117.70
36	1	35	A	O5'-P-OP2	-5.19	101.03	105.70
36	1	636	C	C5-C6-N1	-5.19	118.40	121.00
36	1	967	A	C2-N3-C4	-5.19	108.00	110.60
36	5	1300	G	C6-C5-N7	-5.19	127.29	130.40
36	5	2112	U	OP2-P-O3'	5.19	116.62	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2865	U	C5-C6-N1	5.19	125.30	122.70
43	16	30	LEU	CA-CB-CG	5.19	127.24	115.30
36	1	274	G	C6-C5-N7	-5.19	127.29	130.40
36	1	573	C	C6-N1-C2	5.19	122.38	120.30
36	1	984	G	C4-C5-C6	5.19	121.91	118.80
1	6	209	U	N1-C2-O2	-5.19	119.17	122.80
1	6	976	G	C4-C5-N7	5.19	112.88	110.80
36	1	993	G	C5-C6-N1	5.19	114.09	111.50
36	1	1140	G	N3-C2-N2	5.19	123.53	119.90
36	5	934	G	N3-C4-C5	-5.19	126.01	128.60
36	5	2248	C	N1-C2-O2	-5.19	115.79	118.90
36	5	2814	G	C6-C5-N7	-5.19	127.29	130.40
36	1	1330	A	C4-C5-N7	5.19	113.29	110.70
1	6	437	A	N1-C6-N6	-5.19	115.49	118.60
37	7	42	A	O5'-P-OP2	5.19	116.92	110.70
57	n1	106	LEU	CA-CB-CG	-5.19	103.37	115.30
1	6	19	A	N9-C4-C5	-5.18	103.73	105.80
1	6	558	U	P-O3'-C3'	5.18	125.92	119.70
1	2	1650	U	C6-N1-C2	5.18	124.11	121.00
35	SM	134	ASP	CB-CG-OD2	5.18	122.96	118.30
36	1	400	G	C8-N9-C4	-5.18	104.33	106.40
1	6	28	A	OP1-P-O3'	5.18	116.60	105.20
1	6	390	G	OP1-P-OP2	5.18	127.38	119.60
36	5	3128	G	OP2-P-O3'	5.18	116.60	105.20
36	1	1127	G	C5-C6-O6	-5.18	125.49	128.60
37	3	8	G	C6-C5-N7	5.18	133.51	130.40
36	5	382	U	N1-C2-N3	5.18	118.01	114.90
36	5	1085	A	O5'-P-OP1	-5.18	101.04	105.70
36	5	3216	G	C8-N9-C4	5.18	108.47	106.40
1	2	386	G	OP1-P-O3'	5.18	116.59	105.20
36	1	1165	A	C8-N9-C4	5.18	107.87	105.80
36	1	2537	U	P-O3'-C3'	5.18	125.92	119.70
36	1	3210	A	C5-C6-N1	5.18	120.29	117.70
36	5	650	C	C6-N1-C1'	5.18	127.02	120.80
36	5	2618	G	N3-C4-N9	5.18	129.11	126.00
36	5	1305	U	C6-N1-C1'	-5.18	113.95	121.20
36	5	1846	C	P-O3'-C3'	-5.18	113.49	119.70
36	1	590	G	N9-C4-C5	-5.18	103.33	105.40
36	1	1047	A	O5'-P-OP2	-5.18	101.04	105.70
36	1	1175	C	C2-N3-C4	-5.18	117.31	119.90
1	6	413	U	N1-C2-N3	5.18	118.01	114.90
36	5	1520	G	C5-C6-O6	-5.18	125.49	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2128	C	O5'-P-OP2	-5.18	101.04	105.70
36	5	2337	C	N1-C2-O2	5.18	122.01	118.90
36	1	1129	A	N9-C4-C5	-5.17	103.73	105.80
36	1	1414	G	C4-C5-N7	5.17	112.87	110.80
36	1	1501	U	C2-N1-C1'	-5.17	111.49	117.70
1	6	1657	U	N3-C2-O2	-5.17	118.58	122.20
36	5	2950	G	N7-C8-N9	5.17	115.69	113.10
38	8	80	A	N3-C4-C5	-5.17	123.18	126.80
38	8	113	U	N3-C2-O2	-5.17	118.58	122.20
36	5	976	U	C6-N1-C2	-5.17	117.90	121.00
1	2	323	A	O5'-P-OP2	-5.17	101.05	105.70
36	5	1520	G	C6-C5-N7	-5.17	127.30	130.40
36	5	1727	G	N1-C6-O6	-5.17	116.80	119.90
1	2	139	C	P-O3'-C3'	5.17	125.91	119.70
36	1	1468	A	C8-N9-C4	5.17	107.87	105.80
36	1	1904	C	OP2-P-O3'	5.17	116.57	105.20
36	1	2292	U	N1-C2-O2	5.17	126.42	122.80
36	1	3373	U	C6-N1-C2	5.17	124.10	121.00
1	6	107	C	C5-C6-N1	-5.17	118.42	121.00
36	5	720	A	C4-C5-N7	5.17	113.28	110.70
36	5	1210	U	N3-C4-O4	-5.17	115.78	119.40
36	5	1329	U	C6-N1-C1'	-5.17	113.96	121.20
36	5	1889	G	N3-C4-C5	-5.17	126.02	128.60
36	1	2310	U	O5'-P-OP1	-5.17	101.05	105.70
36	1	3298	C	C6-N1-C2	5.17	122.37	120.30
1	6	593	U	C5-C4-O4	5.17	129.00	125.90
36	5	407	A	C4-N9-C1'	5.17	135.60	126.30
36	5	960	U	N1-C1'-C2'	5.17	120.72	114.00
36	5	2871	G	N3-C4-C5	-5.17	126.02	128.60
36	5	2909	U	N1-C2-O2	-5.17	119.18	122.80
36	1	217	U	OP1-P-OP2	5.17	127.35	119.60
36	1	1545	A	N7-C8-N9	5.17	116.38	113.80
36	1	2624	G	C4-C5-N7	5.17	112.87	110.80
1	6	1650	U	N3-C2-O2	5.17	125.82	122.20
36	5	815	G	C4-N9-C1'	5.17	133.22	126.50
36	5	1336	U	O5'-P-OP2	-5.17	101.05	105.70
36	5	1438	U	C6-N1-C2	-5.17	117.90	121.00
36	5	2850	G	N1-C6-O6	5.17	123.00	119.90
36	5	3086	A	C2-N3-C4	-5.17	108.02	110.60
3	S1	96	LEU	CA-CB-CG	5.17	127.18	115.30
36	1	105	C	C5-C4-N4	-5.17	116.58	120.20
36	1	1201	C	N3-C4-N4	5.17	121.61	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1495	U	C6-N1-C1'	5.17	128.43	121.20
36	1	2760	C	N1-C2-O2	-5.17	115.80	118.90
1	2	1205	C	C6-N1-C2	5.16	122.37	120.30
36	1	55	G	C8-N9-C4	5.16	108.47	106.40
36	1	903	U	C4-C5-C6	5.16	122.80	119.70
36	1	2283	G	C4-C5-N7	5.16	112.87	110.80
36	5	423	A	OP2-P-O3'	5.16	116.56	105.20
36	5	630	A	C2-N3-C4	-5.16	108.02	110.60
36	5	1449	A	C6-N1-C2	-5.16	115.50	118.60
36	5	2917	G	N1-C6-O6	5.16	123.00	119.90
36	1	1295	G	N1-C6-O6	-5.16	116.80	119.90
36	1	2378	C	C6-N1-C2	5.16	122.36	120.30
36	5	1842	A	O5'-P-OP2	-5.16	101.05	105.70
36	1	2974	U	N1-C2-N3	5.16	118.00	114.90
49	M3	85	LEU	CA-CB-CG	5.16	127.17	115.30
1	6	1124	A	C8-N9-C4	5.16	107.86	105.80
1	6	1186	U	N3-C2-O2	-5.16	118.59	122.20
36	5	424	G	C6-C5-N7	-5.16	127.30	130.40
36	5	2165	G	N3-C2-N2	5.16	123.51	119.90
36	5	2887	A	N1-C6-N6	5.16	121.70	118.60
36	1	2305	G	C6-N1-C2	-5.16	122.00	125.10
1	6	1014	G	C5-C6-O6	5.16	131.70	128.60
36	5	1149	G	N3-C4-N9	5.16	129.09	126.00
36	5	1154	A	C5-C6-N1	5.16	120.28	117.70
36	5	2685	C	C6-N1-C2	5.16	122.36	120.30
36	5	3179	U	C5-C6-N1	5.16	125.28	122.70
36	1	2124	G	C5-C6-O6	-5.16	125.51	128.60
36	5	2772	C	OP2-P-O3'	5.16	116.55	105.20
36	5	3005	A	N1-C6-N6	5.16	121.69	118.60
36	1	225	C	C5-C6-N1	-5.16	118.42	121.00
36	1	2884	C	N3-C2-O2	5.16	125.51	121.90
36	1	3043	C	N1-C2-O2	5.16	121.99	118.90
36	5	411	U	C4-C5-C6	5.16	122.79	119.70
36	5	673	U	N1-C2-N3	5.16	117.99	114.90
36	5	1463	U	N3-C2-O2	5.16	125.81	122.20
36	5	2598	G	C6-C5-N7	-5.16	127.31	130.40
36	1	120	G	C2-N3-C4	-5.15	109.32	111.90
36	1	1187	C	C6-N1-C2	5.15	122.36	120.30
36	1	1724	U	N3-C2-O2	5.15	125.81	122.20
36	1	2368	A	OP2-P-O3'	5.15	116.54	105.20
36	5	2397	A	OP1-P-O3'	5.15	116.54	105.20
36	1	1429	G	N3-C4-C5	-5.15	126.02	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2360	C	C6-N1-C2	5.15	122.36	120.30
36	1	2376	G	C6-N1-C2	-5.15	122.01	125.10
36	1	3278	C	C5-C6-N1	5.15	123.58	121.00
36	5	391	A	N7-C8-N9	-5.15	111.22	113.80
36	5	800	G	O4'-C1'-N9	-5.15	104.08	108.20
36	5	1434	G	N1-C2-N2	5.15	120.84	116.20
36	5	3086	A	C5-C6-N1	-5.15	115.12	117.70
36	5	3212	C	N1-C2-O2	-5.15	115.81	118.90
37	7	44	C	OP2-P-O3'	5.15	116.53	105.20
1	2	1361	U	C2-N1-C1'	5.15	123.88	117.70
36	1	922	U	C2-N1-C1'	5.15	123.88	117.70
36	1	1064	A	C8-N9-C4	5.15	107.86	105.80
36	1	2868	U	C5-C6-N1	5.15	125.28	122.70
36	1	3297	U	N1-C2-O2	-5.15	119.19	122.80
1	6	318	U	N1-C2-O2	-5.15	119.19	122.80
1	6	337	G	N3-C4-N9	5.15	129.09	126.00
1	6	1164	G	C8-N9-C4	5.15	108.46	106.40
36	5	1495	U	C5-C6-N1	5.15	125.28	122.70
36	5	2202	C	N1-C2-O2	-5.15	115.81	118.90
36	5	2333	C	C2-N3-C4	-5.15	117.33	119.90
36	5	2996	U	O5'-P-OP2	-5.15	101.06	105.70
36	1	2314	U	C4-C5-C6	-5.15	116.61	119.70
38	4	61	A	N1-C6-N6	-5.15	115.51	118.60
39	L2	176	ASP	CB-CG-OD1	-5.15	113.67	118.30
36	5	880	G	C4-N9-C1'	-5.15	119.81	126.50
36	5	2290	C	N3-C4-C5	5.15	123.96	121.90
36	1	803	C	C4-C5-C6	-5.15	114.83	117.40
36	1	1300	G	C6-C5-N7	-5.15	127.31	130.40
36	1	2344	U	C2-N1-C1'	-5.15	111.52	117.70
36	1	2372	A	C8-N9-C4	-5.15	103.74	105.80
1	6	1000	C	C6-N1-C1'	-5.15	114.62	120.80
36	5	1190	A	C4-N9-C1'	5.15	135.57	126.30
36	5	2359	C	N3-C4-C5	5.15	123.96	121.90
36	5	2763	U	C5-C4-O4	-5.15	122.81	125.90
36	5	3266	G	N9-C4-C5	5.15	107.46	105.40
36	1	833	G	N3-C4-N9	-5.15	122.91	126.00
36	5	652	G	C6-N1-C2	-5.15	122.01	125.10
36	5	1118	C	O5'-P-OP2	-5.15	101.07	105.70
36	5	1554	U	N1-C2-O2	5.15	126.40	122.80
36	5	2340	U	C5-C6-N1	5.15	125.27	122.70
36	5	3174	A	C8-N9-C4	-5.15	103.74	105.80
36	1	1428	A	C6-C5-N7	-5.14	128.70	132.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	390	G	N3-C4-C5	-5.14	126.03	128.60
36	5	1012	G	C6-C5-N7	5.14	133.49	130.40
36	5	1307	G	C4-C5-N7	5.14	112.86	110.80
36	5	2331	C	N3-C4-N4	5.14	121.60	118.00
1	2	1662	G	C5-C6-N1	5.14	114.07	111.50
6	S4	246	LEU	CA-CB-CG	5.14	127.13	115.30
36	1	698	U	N1-C2-N3	5.14	117.99	114.90
36	1	1171	G	N9-C4-C5	5.14	107.46	105.40
36	1	1310	G	N1-C2-N2	-5.14	111.57	116.20
36	1	2522	G	C4-N9-C1'	5.14	133.19	126.50
36	1	2791	G	C8-N9-C4	-5.14	104.34	106.40
17	c5	36	LEU	CA-CB-CG	5.14	127.13	115.30
36	1	386	A	C6-C5-N7	-5.14	128.70	132.30
36	5	1176	C	N3-C2-O2	5.14	125.50	121.90
36	5	3105	U	C2-N1-C1'	-5.14	111.53	117.70
36	1	344	A	OP2-P-O3'	5.14	116.51	105.20
36	1	802	C	N3-C4-N4	5.14	121.60	118.00
36	1	2409	G	N3-C4-N9	5.14	129.08	126.00
36	1	2828	G	C5-C6-O6	5.14	131.68	128.60
36	5	935	U	C5-C4-O4	-5.14	122.82	125.90
36	5	1174	G	O5'-P-OP1	-5.14	101.07	105.70
36	5	1417	G	C5-C6-N1	5.14	114.07	111.50
36	5	2572	C	C5-C6-N1	5.14	123.57	121.00
36	5	2794	G	C4-C5-N7	5.14	112.86	110.80
36	1	1163	A	OP1-P-OP2	5.14	127.31	119.60
68	O2	66	LEU	CB-CG-CD2	-5.14	102.27	111.00
36	1	428	A	C6-C5-N7	5.14	135.90	132.30
36	1	1164	G	N1-C6-O6	-5.14	116.82	119.90
36	1	2875	U	C5-C6-N1	5.14	125.27	122.70
1	6	572	C	O5'-P-OP2	5.14	116.86	110.70
1	6	1535	U	N3-C4-O4	-5.14	115.81	119.40
36	5	3070	A	N1-C6-N6	5.14	121.68	118.60
36	5	3368	U	C2-N1-C1'	-5.14	111.54	117.70
1	2	1096	C	C6-N1-C1'	-5.13	114.64	120.80
36	1	1712	G	C5-C6-O6	-5.13	125.52	128.60
36	5	1434	G	C6-C5-N7	5.13	133.48	130.40
36	5	1597	C	N3-C4-N4	5.13	121.59	118.00
36	1	2887	A	OP2-P-O3'	5.13	116.49	105.20
36	1	2996	U	N1-C2-N3	-5.13	111.82	114.90
36	5	776	U	N3-C4-O4	-5.13	115.81	119.40
36	5	3005	A	N3-C4-N9	5.13	131.51	127.40
1	6	751	G	C5-C6-O6	-5.13	125.52	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	682	U	N3-C4-O4	-5.13	115.81	119.40
36	5	1054	A	C8-N9-C4	5.13	107.85	105.80
36	5	1300	G	C4-C5-N7	5.13	112.85	110.80
36	5	2286	U	N3-C2-O2	-5.13	118.61	122.20
36	5	2626	A	O5'-P-OP2	5.13	116.86	110.70
36	1	661	G	O5'-P-OP1	-5.13	101.08	105.70
36	1	931	C	N3-C2-O2	-5.13	118.31	121.90
1	6	29	U	C4-C5-C6	5.13	122.78	119.70
36	5	280	U	O5'-P-OP1	5.13	116.86	110.70
36	1	1515	A	N1-C6-N6	5.13	121.68	118.60
36	1	2121	G	C4-C5-N7	-5.13	108.75	110.80
36	1	2988	C	N1-C2-O2	-5.13	115.82	118.90
36	5	34	A	OP2-P-O3'	5.13	116.48	105.20
36	5	1506	A	N1-C6-N6	-5.13	115.52	118.60
1	2	1745	G	C4-C5-N7	5.13	112.85	110.80
36	1	269	G	C8-N9-C1'	5.13	133.66	127.00
36	1	1373	A	C5-N7-C8	-5.13	101.34	103.90
36	5	2435	G	C8-N9-C4	5.13	108.45	106.40
36	5	2627	C	N1-C2-N3	5.13	122.79	119.20
1	2	110	U	C5-C6-N1	5.12	125.26	122.70
36	1	1186	G	N3-C4-N9	5.12	129.07	126.00
36	1	1852	G	C6-C5-N7	-5.12	127.33	130.40
36	1	2917	G	C2-N3-C4	5.12	114.46	111.90
36	1	2917	G	C4-C5-N7	-5.12	108.75	110.80
36	5	216	G	C5-C6-O6	-5.12	125.53	128.60
1	2	1731	A	N9-C4-C5	-5.12	103.75	105.80
36	1	27	C	N1-C2-O2	-5.12	115.83	118.90
36	1	1518	U	N3-C2-O2	-5.12	118.61	122.20
1	6	323	A	C8-N9-C4	-5.12	103.75	105.80
1	6	421	A	C8-N9-C4	5.12	107.85	105.80
36	5	202	G	N9-C4-C5	-5.12	103.35	105.40
44	17	232	ARG	NE-CZ-NH2	5.12	122.86	120.30
36	1	1174	G	N3-C4-C5	-5.12	126.04	128.60
36	1	2541	U	P-O3'-C3'	5.12	125.84	119.70
36	1	2938	G	OP1-P-OP2	5.12	127.28	119.60
36	5	1153	A	OP2-P-O3'	5.12	116.47	105.20
36	5	1215	U	N3-C4-O4	5.12	122.98	119.40
36	5	2305	G	N7-C8-N9	5.12	115.66	113.10
36	5	2524	A	N9-C1'-C2'	5.12	120.66	114.00
36	5	2801	A	C6-N1-C2	-5.12	115.53	118.60
36	5	3099	C	C5-C6-N1	-5.12	118.44	121.00
38	4	125	U	C2-N1-C1'	5.12	123.84	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1025	A	C4-C5-C6	5.12	119.56	117.00
1	2	1269	U	C2-N1-C1'	5.12	123.84	117.70
36	1	2292	U	N3-C2-O2	-5.12	118.62	122.20
1	6	1	U	C5-C6-N1	5.12	125.26	122.70
1	6	454	U	C5-C6-N1	-5.12	120.14	122.70
36	5	673	U	C2-N1-C1'	-5.12	111.56	117.70
36	5	706	A	C8-N9-C4	5.12	107.85	105.80
36	5	920	A	O5'-P-OP1	5.12	116.84	110.70
36	5	1413	G	N1-C2-N3	5.12	126.97	123.90
36	5	791	A	N1-C6-N6	5.12	121.67	118.60
36	5	1520	G	C4-N9-C1'	5.12	133.15	126.50
36	1	1905	G	N3-C4-C5	5.12	131.16	128.60
36	5	1178	G	N7-C8-N9	5.12	115.66	113.10
36	5	1196	C	N1-C2-O2	5.12	121.97	118.90
36	5	2984	C	C5-C6-N1	-5.12	118.44	121.00
36	1	199	A	O4'-C1'-N9	5.11	112.29	108.20
36	1	1439	U	N1-C2-N3	5.11	117.97	114.90
36	1	1742	U	C5-C4-O4	-5.11	122.83	125.90
36	1	2174	G	N7-C8-N9	5.11	115.66	113.10
36	1	2273	G	C4-N9-C1'	-5.11	119.85	126.50
36	1	3012	A	C2-N3-C4	-5.11	108.04	110.60
39	L2	191	LEU	CA-CB-CG	-5.11	103.54	115.30
1	6	1412	G	C6-C5-N7	5.11	133.47	130.40
1	6	1489	U	C2-N1-C1'	5.11	123.83	117.70
36	5	530	G	C8-N9-C4	-5.11	104.36	106.40
36	5	640	U	N3-C4-C5	-5.11	111.53	114.60
36	5	2735	U	C5-C6-N1	5.11	125.26	122.70
36	5	667	C	N1-C2-O2	5.11	121.97	118.90
36	5	2194	G	N1-C2-N3	5.11	126.97	123.90
36	1	61	A	N9-C4-C5	-5.11	103.76	105.80
36	1	1311	G	C8-N9-C4	5.11	108.44	106.40
36	1	1545	A	C8-N9-C4	-5.11	103.76	105.80
38	4	15	G	N9-C4-C5	-5.11	103.36	105.40
1	6	257	A	C5-C6-N6	-5.11	119.61	123.70
36	5	971	G	N3-C2-N2	-5.11	116.32	119.90
68	o2	4	LEU	C-N-CA	-5.11	100.54	122.00
36	1	1149	G	C5-C6-N1	-5.11	108.94	111.50
36	1	1375	G	O5'-P-OP2	-5.11	101.10	105.70
36	1	2610	G	N9-C4-C5	-5.11	103.36	105.40
61	N5	34	LEU	CA-CB-CG	5.11	127.05	115.30
36	5	99	A	N7-C8-N9	-5.11	111.25	113.80
36	5	3095	U	OP1-P-O3'	5.11	116.44	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1916	U	C5-C6-N1	-5.11	120.15	122.70
36	1	2723	U	N3-C2-O2	5.11	125.78	122.20
36	5	867	G	C5-C6-N1	-5.11	108.95	111.50
36	5	1186	G	O5'-P-OP1	5.11	116.83	110.70
36	5	1381	A	OP1-P-O3'	5.11	116.44	105.20
36	5	2881	C	C2-N1-C1'	-5.11	113.18	118.80
1	6	371	G	C4-N9-C1'	5.11	133.14	126.50
1	6	413	U	C6-N1-C2	-5.11	117.94	121.00
1	6	1493	A	N1-C6-N6	5.11	121.66	118.60
36	5	576	C	N3-C4-C5	5.11	123.94	121.90
36	5	1433	A	N1-C6-N6	-5.11	115.54	118.60
1	2	529	A	N1-C6-N6	5.10	121.66	118.60
1	2	736	C	C5-C6-N1	5.10	123.55	121.00
36	1	1835	A	C6-N1-C2	5.10	121.66	118.60
36	1	2402	A	C6-N1-C2	-5.10	115.54	118.60
36	5	1317	A	C4-C5-N7	5.10	113.25	110.70
36	5	1541	G	C5-C6-O6	-5.10	125.54	128.60
36	5	2271	A	N1-C6-N6	-5.10	115.54	118.60
36	5	2937	G	N1-C6-O6	5.10	122.96	119.90
36	1	637	C	N1-C2-O2	5.10	121.96	118.90
36	1	809	G	C5-C6-O6	-5.10	125.54	128.60
36	1	579	G	O5'-P-OP1	5.10	116.82	110.70
1	6	1187	U	C5-C6-N1	5.10	125.25	122.70
36	5	1215	U	C5-C4-O4	-5.10	122.84	125.90
36	5	2145	A	C4-N9-C1'	5.10	135.48	126.30
1	2	408	C	N1-C2-O2	-5.10	115.84	118.90
36	1	1107	C	C6-N1-C2	5.10	122.34	120.30
36	1	1547	G	C5-N7-C8	5.10	106.85	104.30
36	1	2760	C	C4-C5-C6	5.10	119.95	117.40
38	4	113	U	C4-C5-C6	5.10	122.76	119.70
1	6	1152	A	C8-N9-C4	5.10	107.84	105.80
36	5	1590	G	N1-C6-O6	-5.10	116.84	119.90
36	5	3198	U	OP1-P-OP2	5.10	127.25	119.60
36	5	3287	U	C6-N1-C2	-5.10	117.94	121.00
36	5	649	A	N1-C2-N3	-5.10	126.75	129.30
36	5	1140	G	OP1-P-O3'	5.10	116.41	105.20
36	5	1534	A	C2-N3-C4	5.10	113.15	110.60
36	5	2797	C	N1-C2-O2	-5.10	115.84	118.90
36	5	3335	A	C6-C5-N7	-5.10	128.73	132.30
44	17	229	PHE	CB-CG-CD2	-5.10	117.23	120.80
1	2	1241	G	N7-C8-N9	5.09	115.65	113.10
36	1	859	G	C8-N9-C4	5.09	108.44	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2249	G	N9-C1'-C2'	-5.09	106.40	112.00
1	6	1480	G	C4-C5-N7	5.09	112.84	110.80
36	5	3004	C	C4-C5-C6	-5.09	114.85	117.40
36	5	2199	G	C4-N9-C1'	5.09	133.12	126.50
36	5	2392	C	N1-C2-O2	-5.09	115.84	118.90
1	2	802	G	N3-C4-C5	-5.09	126.05	128.60
36	1	927	C	C5-C4-N4	-5.09	116.64	120.20
36	1	1849	C	C5-C4-N4	-5.09	116.64	120.20
36	1	2614	G	C5-N7-C8	5.09	106.84	104.30
36	1	2835	U	C6-N1-C2	5.09	124.06	121.00
1	6	337	G	N3-C4-C5	-5.09	126.06	128.60
36	5	1452	A	C6-C5-N7	-5.09	128.74	132.30
37	7	103	A	C5-C6-N1	5.09	120.25	117.70
1	2	885	G	N1-C6-O6	5.09	122.95	119.90
36	1	922	U	C6-N1-C1'	-5.09	114.08	121.20
36	1	2325	G	C5-N7-C8	-5.09	101.76	104.30
36	1	2832	C	OP1-P-OP2	5.09	127.23	119.60
36	1	3101	G	C2-N3-C4	5.09	114.44	111.90
37	3	81	U	C5-C6-N1	-5.09	120.16	122.70
1	6	136	C	C2-N1-C1'	5.09	124.40	118.80
1	6	1412	G	N9-C4-C5	5.09	107.44	105.40
36	5	1178	G	C4-C5-N7	5.09	112.84	110.80
36	5	2830	G	C4-C5-C6	5.09	121.85	118.80
36	5	3330	A	N1-C6-N6	-5.09	115.55	118.60
36	1	298	U	N3-C2-O2	-5.09	118.64	122.20
36	1	1349	G	N3-C4-N9	5.09	129.05	126.00
37	7	105	C	C2-N3-C4	5.09	122.44	119.90
1	2	553	G	C4-C5-C6	5.09	121.85	118.80
1	2	1659	A	N7-C8-N9	5.09	116.34	113.80
36	1	304	G	C6-N1-C2	-5.09	122.05	125.10
36	1	398	A	O5'-P-OP2	-5.09	101.12	105.70
36	1	1664	G	C8-N9-C4	-5.09	104.37	106.40
1	6	571	G	N1-C6-O6	-5.09	116.85	119.90
1	6	636	A	OP1-P-OP2	-5.09	111.97	119.60
36	5	1115	G	OP1-P-OP2	-5.09	111.97	119.60
36	5	1891	A	N1-C6-N6	5.08	121.65	118.60
1	2	1596	C	N3-C2-O2	-5.08	118.34	121.90
36	1	711	A	OP2-P-O3'	5.08	116.38	105.20
36	1	1217	A	OP2-P-O3'	5.08	116.38	105.20
38	4	88	A	C8-N9-C4	5.08	107.83	105.80
1	6	1478	G	C4-N9-C1'	5.08	133.11	126.50
36	5	845	G	N9-C4-C5	-5.08	103.37	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	971	G	C5-N7-C8	5.08	106.84	104.30
36	5	1914	G	C5-C6-O6	5.08	131.65	128.60
36	5	2865	U	N1-C2-O2	5.08	126.36	122.80
1	2	456	A	N1-C6-N6	-5.08	115.55	118.60
36	1	590	G	N3-C4-N9	5.08	129.05	126.00
36	1	1480	G	N1-C6-O6	5.08	122.95	119.90
36	1	1829	G	N1-C2-N3	-5.08	120.85	123.90
36	1	2828	G	C8-N9-C1'	-5.08	120.39	127.00
36	5	651	G	N7-C8-N9	5.08	115.64	113.10
36	5	1142	G	N3-C4-C5	-5.08	126.06	128.60
36	5	2905	U	C5-C6-N1	-5.08	120.16	122.70
36	1	33	G	C4-C5-C6	5.08	121.85	118.80
36	1	269	G	C6-C5-N7	5.08	133.45	130.40
36	1	1433	A	N1-C6-N6	-5.08	115.55	118.60
36	1	1820	U	OP2-P-O3'	5.08	116.38	105.20
1	6	1458	G	C4-N9-C1'	5.08	133.10	126.50
36	5	202	G	N1-C6-O6	5.08	122.95	119.90
36	5	321	C	N1-C2-O2	5.08	121.95	118.90
36	5	647	A	N1-C2-N3	5.08	131.84	129.30
36	5	779	G	C5-C6-O6	-5.08	125.55	128.60
36	5	2231	C	C2-N1-C1'	5.08	124.39	118.80
38	8	91	C	C6-N1-C2	-5.08	118.27	120.30
52	m6	68	ARG	NE-CZ-NH2	5.08	122.84	120.30
36	1	3029	A	C8-N9-C4	-5.08	103.77	105.80
36	5	1177	G	N3-C4-C5	-5.08	126.06	128.60
36	5	1513	G	N7-C8-N9	5.08	115.64	113.10
36	5	2188	A	O5'-P-OP1	-5.08	101.13	105.70
1	2	542	A	C5-N7-C8	-5.08	101.36	103.90
36	1	1001	G	C4-C5-N7	5.08	112.83	110.80
36	1	1484	U	C6-N1-C2	-5.08	117.95	121.00
36	1	1850	A	C4-C5-N7	5.08	113.24	110.70
36	1	2208	A	OP2-P-O3'	5.08	116.37	105.20
36	1	3268	A	C4-C5-C6	5.08	119.54	117.00
37	3	75	G	O5'-P-OP1	-5.08	101.13	105.70
36	5	824	C	N3-C2-O2	-5.08	118.35	121.90
36	5	998	A	N1-C2-N3	5.08	131.84	129.30
36	5	1317	A	C5-C6-N1	5.08	120.24	117.70
36	5	1335	C	N1-C2-O2	-5.08	115.86	118.90
36	5	2908	G	C8-N9-C4	-5.08	104.37	106.40
1	2	1539	G	N7-C8-N9	5.07	115.64	113.10
36	1	989	A	C8-N9-C4	5.07	107.83	105.80
36	1	2355	G	C5-C6-O6	-5.07	125.56	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1117	U	N1-C2-N3	5.07	117.94	114.90
36	5	155	G	OP1-P-O3'	5.07	116.36	105.20
36	5	283	G	C4-N9-C1'	5.07	133.10	126.50
36	5	1202	A	N1-C2-N3	5.07	131.84	129.30
36	5	2330	C	OP2-P-O3'	5.07	116.36	105.20
36	5	2801	A	C5-C6-N1	5.07	120.24	117.70
36	5	3313	U	OP1-P-OP2	5.07	127.21	119.60
37	7	55	A	C4-C5-N7	5.07	113.24	110.70
36	1	212	G	O4'-C1'-N9	5.07	112.26	108.20
36	1	658	G	C8-N9-C1'	-5.07	120.41	127.00
36	1	2899	C	C2-N1-C1'	5.07	124.38	118.80
1	2	581	U	C2-N1-C1'	5.07	123.78	117.70
36	1	414	U	O5'-P-OP2	-5.07	101.14	105.70
36	1	1108	U	N3-C4-C5	5.07	117.64	114.60
36	1	1362	G	N7-C8-N9	-5.07	110.56	113.10
36	5	2831	G	N3-C4-C5	-5.07	126.06	128.60
36	5	3214	U	N1-C2-N3	5.07	117.94	114.90
36	1	33	G	C5-C6-N1	-5.07	108.97	111.50
36	1	893	C	C6-N1-C2	-5.07	118.27	120.30
36	1	1836	C	N1-C2-O2	5.07	121.94	118.90
36	1	3209	A	C5-C6-N6	-5.07	119.64	123.70
38	4	110	C	N1-C2-O2	-5.07	115.86	118.90
36	1	104	G	OP2-P-O3'	5.07	116.35	105.20
36	1	907	G	O4'-C1'-N9	5.07	112.25	108.20
36	1	1187	C	N3-C4-C5	5.07	123.93	121.90
36	1	2585	G	C2-N3-C4	5.07	114.43	111.90
36	1	2697	A	N9-C4-C5	5.07	107.83	105.80
1	6	794	U	C5-C6-N1	5.07	125.23	122.70
36	5	817	A	OP2-P-O3'	5.07	116.35	105.20
36	5	1878	G	C8-N9-C1'	-5.07	120.41	127.00
36	5	2920	U	C2-N3-C4	-5.07	123.96	127.00
36	1	262	U	N1-C2-O2	-5.07	119.25	122.80
36	1	1476	G	C5-C6-O6	5.07	131.64	128.60
36	1	1496	C	C6-N1-C2	-5.07	118.27	120.30
36	1	2357	A	C8-N9-C4	-5.07	103.77	105.80
36	1	2389	C	N3-C4-C5	5.07	123.93	121.90
36	1	3180	A	N1-C6-N6	5.07	121.64	118.60
1	6	163	G	C8-N9-C1'	5.06	133.58	127.00
36	1	500	C	C6-N1-C2	-5.06	118.28	120.30
36	1	1167	U	C5-C4-O4	5.06	128.94	125.90
36	1	1431	G	N3-C4-C5	-5.06	126.07	128.60
36	1	3010	U	C6-N1-C2	-5.06	117.96	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	611	U	C2-N1-C1'	5.06	123.78	117.70
36	5	683	U	N3-C4-C5	-5.06	111.56	114.60
36	5	1837	U	N1-C2-O2	-5.06	119.26	122.80
36	5	2968	G	N1-C2-N3	5.06	126.94	123.90
36	5	3309	G	O4'-C1'-N9	5.06	112.25	108.20
36	1	1850	A	C5-N7-C8	-5.06	101.37	103.90
36	1	2599	U	C5-C6-N1	5.06	125.23	122.70
36	1	2814	G	OP1-P-O3'	5.06	116.33	105.20
1	6	1596	C	N3-C4-N4	-5.06	114.46	118.00
36	1	80	G	C5-C6-N1	5.06	114.03	111.50
36	1	885	U	N3-C4-O4	-5.06	115.86	119.40
36	1	2983	C	C5-C6-N1	-5.06	118.47	121.00
1	6	695	U	C5-C6-N1	5.06	125.23	122.70
1	6	1600	A	C4-C5-N7	5.06	113.23	110.70
1	6	1704	U	C2-N1-C1'	5.06	123.77	117.70
36	5	2651	G	N3-C4-C5	5.06	131.13	128.60
42	15	158	ARG	NE-CZ-NH2	-5.06	117.77	120.30
36	1	649	A	N1-C6-N6	-5.06	115.56	118.60
36	1	856	G	N1-C6-O6	5.06	122.93	119.90
36	1	900	G	C4-C5-N7	-5.06	108.78	110.80
1	6	106	U	C6-N1-C1'	5.06	128.28	121.20
1	6	459	G	C8-N9-C4	-5.06	104.38	106.40
1	6	1794	A	N1-C6-N6	-5.06	115.56	118.60
36	5	543	C	C6-N1-C2	-5.06	118.28	120.30
36	5	919	U	C5-C4-O4	-5.06	122.87	125.90
36	5	1342	C	C5-C6-N1	-5.06	118.47	121.00
36	5	1352	A	P-O3'-C3'	5.06	125.77	119.70
36	5	1665	C	N3-C4-C5	5.06	123.92	121.90
36	5	2353	G	C8-N9-C4	5.06	108.42	106.40
36	5	808	A	C8-N9-C4	-5.06	103.78	105.80
36	5	3212	C	C2-N1-C1'	-5.06	113.24	118.80
36	1	1207	G	N9-C4-C5	-5.05	103.38	105.40
36	1	2871	G	C5-C6-O6	-5.05	125.57	128.60
1	6	1761	U	N3-C2-O2	-5.05	118.66	122.20
36	5	1210	U	C5-C4-O4	5.05	128.93	125.90
36	5	2204	C	P-O3'-C3'	5.05	125.77	119.70
36	5	2923	U	N3-C2-O2	-5.05	118.66	122.20
36	1	2336	U	C5-C6-N1	-5.05	120.17	122.70
1	6	1016	C	N3-C2-O2	5.05	125.44	121.90
36	5	1166	G	C5-C6-O6	-5.05	125.57	128.60
36	5	2130	G	N3-C4-N9	-5.05	122.97	126.00
1	2	447	U	N3-C4-C5	-5.05	111.57	114.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1486	G	C5-N7-C8	-5.05	101.77	104.30
1	2	1573	A	P-O3'-C3'	5.05	125.76	119.70
36	1	1430	U	N3-C2-O2	5.05	125.74	122.20
38	4	28	C	OP2-P-O3'	5.05	116.31	105.20
33	e1	100	LEU	CA-CB-CG	5.05	126.92	115.30
36	5	1442	U	OP1-P-O3'	5.05	116.31	105.20
36	5	2804	A	C5-C6-N6	5.05	127.74	123.70
36	5	2968	G	N3-C4-N9	5.05	129.03	126.00
36	5	3287	U	N1-C2-O2	5.05	126.34	122.80
37	7	92	A	N9-C4-C5	-5.05	103.78	105.80
36	1	939	U	O5'-P-OP2	-5.05	101.16	105.70
36	1	1397	C	C2-N1-C1'	-5.05	113.25	118.80
36	1	1450	G	O5'-P-OP1	-5.05	101.16	105.70
36	1	2617	U	O5'-P-OP1	5.05	116.76	110.70
37	3	117	A	N9-C4-C5	-5.05	103.78	105.80
36	5	352	A	N1-C6-N6	5.05	121.63	118.60
36	5	2689	A	N1-C2-N3	5.05	131.82	129.30
36	5	2699	G	N7-C8-N9	-5.05	110.58	113.10
36	5	2717	U	C2-N1-C1'	-5.05	111.64	117.70
36	5	3125	U	OP1-P-O3'	5.05	116.31	105.20
36	5	3392	U	N1-C2-N3	5.05	117.93	114.90
36	1	1303	A	C8-N9-C4	5.05	107.82	105.80
36	1	1414	G	C5-C6-O6	-5.05	125.57	128.60
36	5	23	A	C8-N9-C4	5.05	107.82	105.80
38	4	72	A	N1-C6-N6	5.05	121.63	118.60
36	5	806	A	N1-C6-N6	-5.05	115.57	118.60
36	5	2360	C	OP2-P-O3'	5.05	116.30	105.20
36	5	2556	C	N3-C2-O2	-5.05	118.37	121.90
36	5	3383	G	N1-C6-O6	5.05	122.93	119.90
36	1	709	A	N7-C8-N9	-5.04	111.28	113.80
36	5	705	A	OP1-P-OP2	-5.04	112.03	119.60
37	7	84	A	OP1-P-O3'	5.04	116.30	105.20
36	1	192	C	C6-N1-C2	-5.04	118.28	120.30
36	1	1475	A	N7-C8-N9	-5.04	111.28	113.80
36	1	1724	U	N1-C2-O2	-5.04	119.27	122.80
36	1	2177	G	N3-C4-N9	5.04	129.03	126.00
36	1	3278	C	C2-N3-C4	5.04	122.42	119.90
1	6	337	G	N1-C2-N2	-5.04	111.66	116.20
1	6	792	U	C6-N1-C2	-5.04	117.97	121.00
1	6	938	G	C6-C5-N7	-5.04	127.37	130.40
1	6	1748	G	N7-C8-N9	-5.04	110.58	113.10
36	5	938	C	OP1-P-O3'	5.04	116.30	105.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2792	A	C8-N9-C4	-5.04	103.78	105.80
36	1	2851	A	C8-N9-C4	5.04	107.82	105.80
36	1	2964	G	N3-C4-N9	-5.04	122.97	126.00
36	1	3056	U	N1-C2-O2	-5.04	119.27	122.80
36	1	3278	C	C6-N1-C2	-5.04	118.28	120.30
1	6	1498	G	C6-C5-N7	-5.04	127.38	130.40
36	5	579	G	N3-C4-N9	-5.04	122.98	126.00
36	5	1116	G	N9-C4-C5	5.04	107.42	105.40
36	5	1667	A	C4-C5-N7	5.04	113.22	110.70
36	5	1844	C	C2-N1-C1'	5.04	124.35	118.80
36	5	2616	C	OP2-P-O3'	5.04	116.29	105.20
36	1	227	G	C5-C6-O6	-5.04	125.58	128.60
36	5	1493	G	O4'-C1'-N9	5.04	112.23	108.20
36	1	60	A	N9-C4-C5	-5.04	103.78	105.80
36	1	324	A	OP1-P-O3'	5.04	116.29	105.20
36	1	420	G	O5'-P-OP2	-5.04	101.17	105.70
36	1	1513	G	N3-C4-C5	-5.04	126.08	128.60
36	1	1556	C	N3-C2-O2	-5.04	118.37	121.90
36	1	2651	G	O5'-P-OP1	-5.04	101.17	105.70
1	6	1568	C	C2-N1-C1'	5.04	124.34	118.80
36	5	1261	G	O4'-C1'-N9	5.04	112.23	108.20
36	5	1547	G	C8-N9-C4	5.04	108.42	106.40
36	5	1939	G	C4-N9-C1'	5.04	133.05	126.50
36	5	2599	U	C5-C6-N1	-5.04	120.18	122.70
36	1	221	A	N9-C4-C5	5.04	107.81	105.80
1	6	1602	C	N3-C2-O2	-5.04	118.37	121.90
36	1	107	A	N9-C4-C5	-5.04	103.79	105.80
36	1	2874	G	O5'-P-OP1	5.04	116.74	110.70
1	6	406	U	C5-C6-N1	-5.04	120.18	122.70
36	5	2139	A	C2-N3-C4	-5.04	108.08	110.60
37	7	32	U	OP1-P-O3'	5.04	116.28	105.20
38	8	17	A	C2-N3-C4	-5.04	108.08	110.60
1	2	378	A	C4-C5-N7	5.03	113.22	110.70
36	1	188	U	C6-N1-C2	-5.03	117.98	121.00
36	5	1877	U	C6-N1-C2	5.03	124.02	121.00
36	5	2381	G	C4-C5-C6	5.03	121.82	118.80
36	5	2701	U	O5'-P-OP1	-5.03	101.17	105.70
38	8	40	A	C8-N9-C4	-5.03	103.79	105.80
36	1	292	U	N1-C2-O2	-5.03	119.28	122.80
36	1	2293	C	C6-N1-C2	-5.03	118.29	120.30
1	2	378	A	N9-C4-C5	-5.03	103.79	105.80
1	2	1796	C	C4-C5-C6	5.03	119.92	117.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	713	U	C5-C6-N1	-5.03	120.19	122.70
36	1	881	C	N1-C2-O2	5.03	121.92	118.90
36	1	934	G	C8-N9-C1'	-5.03	120.46	127.00
36	5	510	G	N1-C6-O6	-5.03	116.88	119.90
36	5	806	A	N9-C4-C5	5.03	107.81	105.80
36	5	2136	C	C6-N1-C2	5.03	122.31	120.30
1	2	42	G	C5-C6-O6	5.03	131.62	128.60
36	1	2697	A	C5-C6-N6	5.03	127.72	123.70
36	1	3101	G	C4-C5-C6	-5.03	115.78	118.80
36	5	666	A	O5'-P-OP1	-5.03	101.17	105.70
36	1	1439	U	C6-N1-C2	-5.03	117.98	121.00
36	1	1790	G	O5'-P-OP1	-5.03	101.17	105.70
1	6	1137	A	O5'-P-OP1	5.03	116.73	110.70
36	5	980	A	C5-C6-N1	5.03	120.21	117.70
36	5	1398	U	C6-N1-C1'	5.03	128.24	121.20
36	5	218	G	N1-C6-O6	-5.03	116.88	119.90
36	5	1159	A	O5'-P-OP2	-5.03	101.18	105.70
36	5	2339	C	O4'-C1'-N1	-5.03	104.18	108.20
36	5	2830	G	C4-N9-C1'	5.03	133.03	126.50
36	5	3208	G	N1-C6-O6	5.03	122.92	119.90
36	5	3326	G	N1-C2-N2	-5.03	111.68	116.20
1	2	1012	U	C2-N3-C4	5.02	130.01	127.00
36	1	352	A	O4'-C1'-N9	5.02	112.22	108.20
1	6	45	U	N3-C4-O4	-5.02	115.88	119.40
36	5	1338	C	C5-C4-N4	-5.02	116.68	120.20
36	5	2676	A	C8-N9-C4	-5.02	103.79	105.80
1	2	1432	U	C2-N1-C1'	-5.02	111.67	117.70
36	1	1168	U	N3-C4-O4	-5.02	115.89	119.40
36	1	1378	U	C6-N1-C1'	-5.02	114.17	121.20
36	1	3293	U	N3-C2-O2	5.02	125.72	122.20
1	6	794	U	N1-C2-O2	5.02	126.31	122.80
36	5	646	A	N1-C6-N6	-5.02	115.59	118.60
36	5	1939	G	C8-N9-C1'	-5.02	120.47	127.00
36	5	2375	G	C6-C5-N7	5.02	133.41	130.40
1	2	1651	A	C5-C6-N1	-5.02	115.19	117.70
36	1	24	G	C5-C6-N1	-5.02	108.99	111.50
36	1	3109	G	C2-N3-C4	5.02	114.41	111.90
1	2	1615	C	C6-N1-C2	-5.02	118.29	120.30
36	1	1164	G	C4-C5-C6	5.02	121.81	118.80
36	1	1483	G	O4'-C1'-N9	5.02	112.21	108.20
36	1	3248	C	C5-C6-N1	5.02	123.51	121.00
1	6	670	U	N1-C2-O2	5.02	126.31	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2698	G	C5-C6-O6	-5.02	125.59	128.60
42	15	15	ARG	NE-CZ-NH1	-5.02	117.79	120.30
36	1	1402	C	N3-C4-C5	5.02	123.91	121.90
36	1	3196	U	O4'-C1'-N1	5.02	112.21	108.20
36	5	873	C	P-O3'-C3'	5.02	125.72	119.70
36	5	919	U	C5-C6-N1	-5.02	120.19	122.70
36	5	2968	G	O4'-C1'-N9	-5.02	104.19	108.20
36	5	2988	C	N3-C4-N4	-5.02	114.49	118.00
36	1	1000	C	C6-N1-C1'	-5.01	114.78	120.80
36	1	1318	A	O4'-C1'-N9	-5.01	104.19	108.20
36	1	2521	U	C5-C6-N1	-5.01	120.19	122.70
36	1	2806	U	O5'-P-OP2	-5.01	101.19	105.70
36	1	3295	A	O4'-C1'-N9	5.01	112.21	108.20
1	6	375	U	C2-N1-C1'	-5.01	111.68	117.70
1	6	382	C	N3-C2-O2	5.01	125.41	121.90
1	6	1704	U	C5-C6-N1	5.01	125.21	122.70
36	5	834	U	N3-C4-O4	-5.01	115.89	119.40
36	5	1405	U	N1-C2-N3	5.01	117.91	114.90
36	5	2607	G	N1-C6-O6	-5.01	116.89	119.90
36	1	2223	A	N7-C8-N9	5.01	116.31	113.80
36	5	2218	G	C8-N9-C4	5.01	108.41	106.40
36	5	3176	G	N3-C4-C5	-5.01	126.09	128.60
36	1	60	A	C5-C6-N6	-5.01	119.69	123.70
1	6	751	G	O5'-P-OP1	-5.01	101.19	105.70
1	6	1428	G	C8-N9-C4	-5.01	104.39	106.40
36	5	504	A	N1-C2-N3	-5.01	126.79	129.30
36	5	2617	U	N3-C4-C5	-5.01	111.59	114.60
36	5	2626	A	O5'-P-OP1	-5.01	101.19	105.70
36	5	2707	C	C6-N1-C2	5.01	122.31	120.30
1	2	1659	A	C8-N9-C4	-5.01	103.80	105.80
36	1	1146	C	C5-C6-N1	5.01	123.50	121.00
36	1	3375	A	O5'-P-OP2	-5.01	101.19	105.70
1	6	687	G	N3-C4-C5	5.01	131.10	128.60
1	6	1208	A	O4'-C1'-N9	5.01	112.21	108.20
36	5	2761	G	C5-C6-N1	5.01	114.00	111.50
36	5	2989	U	N1-C2-N3	5.01	117.91	114.90
36	5	2992	U	C6-N1-C1'	-5.01	114.19	121.20
36	5	3097	C	C5-C6-N1	5.01	123.50	121.00
36	1	2400	G	P-O3'-C3'	5.01	125.71	119.70
36	1	3329	U	C6-N1-C2	-5.01	118.00	121.00
36	1	964	G	N1-C2-N2	5.01	120.71	116.20
36	5	6	A	C8-N9-C4	5.01	107.80	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	681	U	C5-C4-O4	-5.01	122.90	125.90
36	1	2944	U	O5'-P-OP1	-5.00	101.20	105.70
38	4	42	G	C2-N3-C4	-5.00	109.40	111.90
1	6	1003	A	O5'-P-OP2	5.00	116.71	110.70
1	6	1421	A	N1-C6-N6	5.00	121.60	118.60
36	5	779	G	N1-C6-O6	5.00	122.90	119.90
36	5	1339	C	C6-N1-C2	-5.00	118.30	120.30
1	2	101	U	C5-C6-N1	-5.00	120.20	122.70
1	2	548	G	N3-C4-C5	-5.00	126.10	128.60
36	1	2748	A	C8-N9-C4	5.00	107.80	105.80
1	6	50	C	N3-C4-C5	-5.00	119.90	121.90
36	5	71	A	O5'-P-OP1	-5.00	101.20	105.70
36	5	370	U	C6-N1-C1'	-5.00	114.19	121.20
36	5	521	A	C2-N3-C4	-5.00	108.10	110.60
36	5	716	A	N1-C6-N6	5.00	121.60	118.60
36	5	2163	C	N3-C2-O2	-5.00	118.40	121.90
36	5	2879	C	N1-C2-O2	-5.00	115.90	118.90
36	1	53	G	C4-C5-N7	-5.00	108.80	110.80
36	1	873	C	C6-N1-C1'	5.00	126.80	120.80
36	1	1329	U	C6-N1-C2	-5.00	118.00	121.00
36	1	1829	G	C2-N3-C4	5.00	114.40	111.90
36	1	2524	A	O4'-C1'-N9	5.00	112.20	108.20
36	1	3140	G	N3-C4-N9	5.00	129.00	126.00
1	6	1030	A	O4'-C1'-N9	-5.00	104.20	108.20
36	5	106	A	N7-C8-N9	-5.00	111.30	113.80
36	5	1117	G	C6-C5-N7	-5.00	127.40	130.40
36	5	1158	A	C4-C5-C6	5.00	119.50	117.00
36	5	1835	A	N1-C6-N6	5.00	121.60	118.60
36	5	3189	G	O5'-P-OP1	-5.00	101.20	105.70

There are no chirality outliers.

All (36) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
16	C4	123	SER	Peptide
16	C4	124	ASP	Peptide
19	C7	85	VAL	Peptide
25	D3	78	LYS	Peptide
27	D5	94	LYS	Peptide
28	D6	97	PRO	Peptide
33	E1	146	SER	Peptide
39	L2	142	ASP	Peptide

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
40	L3	141	GLY	Peptide
43	L6	51	ARG	Peptide
45	L8	30	THR	Peptide
46	L9	21	LYS	Peptide
48	M1	8	PRO	Peptide
52	M6	110	PRO	Peptide
56	N0	22	PRO	Peptide
65	N9	19	ASN	Peptide
65	N9	23	LYS	Peptide
67	O1	5	LYS	Peptide
72	O6	2	THR	Peptide
6	S4	167	GLY	Peptide
9	S7	131	PHE	Peptide
9	S7	30	SER	Peptide
18	c6	40	GLU	Peptide
39	l2	143	GLU	Peptide
43	l6	51	ARG	Peptide
44	l7	192	GLY	Peptide
81	m2	29	UNK	Peptide
52	m6	110	PRO	Peptide
54	m8	169	GLY	Peptide
56	n0	133	ALA	Peptide
59	n3	41	GLY	Peptide
64	n8	66	ALA	Peptide
7	s5	99	MET	Peptide
9	s7	130	VAL	Peptide
10	s8	60	ILE	Peptide
11	s9	89	ASP	Peptide

## 5.2 Too-close contacts [i](#)

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	2	37283	0	18757	1102	0
1	6	38238	0	19240	1042	0
2	S0	1577	0	1567	189	0
2	s0	1583	0	1578	0	0
3	S1	1709	0	1784	187	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	s1	1722	0	1793	0	0
4	S2	1635	0	1723	148	0
4	s2	1635	0	1723	0	0
5	S3	1734	0	1817	151	0
5	s3	1734	0	1817	0	0
6	S4	2068	0	2154	214	0
6	s4	2068	0	2154	0	0
7	S5	1609	0	1675	187	0
7	s5	1609	0	1675	0	0
8	S6	1799	0	1879	135	0
8	s6	1755	0	1846	0	0
9	S7	1481	0	1572	133	0
9	s7	1491	0	1578	0	0
10	S8	1489	0	1525	154	0
10	s8	1489	0	1525	0	0
11	S9	1494	0	1573	154	0
11	s9	1494	0	1573	0	0
12	C0	773	0	729	84	0
12	c0	762	0	699	0	0
13	C1	1214	0	1259	107	0
13	c1	1168	0	1231	0	0
14	C2	892	0	891	71	0
14	c2	892	0	891	0	0
15	C3	1192	0	1254	111	0
15	c3	1192	0	1255	0	0
16	C4	891	0	883	98	0
16	c4	949	0	985	0	0
17	C5	977	0	1002	112	0
17	c5	1039	0	1050	0	0
18	C6	1105	0	1166	137	0
18	c6	1111	0	1171	0	0
19	C7	926	0	930	96	0
19	c7	906	0	909	0	0
20	C8	1192	0	1222	137	0
20	c8	1192	0	1222	0	0
21	C9	1112	0	1124	113	0
21	c9	1112	0	1124	0	0
22	D0	855	0	917	95	0
22	d0	882	0	939	0	0
23	D1	684	0	672	81	0
23	d1	684	0	672	0	0
24	D2	1021	0	1060	105	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	d2	1021	0	1060	0	0
25	D3	1121	0	1196	104	0
25	d3	1121	0	1196	0	0
26	D4	1073	0	1132	101	0
26	d4	1073	0	1132	0	0
27	D5	563	0	603	74	0
27	d5	558	0	598	0	0
28	D6	769	0	814	119	0
28	d6	769	0	814	0	0
29	D7	610	0	631	49	0
29	d7	610	0	633	0	0
30	D8	497	0	535	58	0
30	d8	497	0	535	0	0
31	D9	442	0	428	48	0
31	d9	442	0	429	0	0
32	E0	475	0	525	38	0
33	E1	566	0	602	73	0
33	e1	608	0	657	0	0
34	SR	2441	0	2397	163	0
34	sR	2442	0	2392	0	0
35	SM	1104	0	996	82	0
35	sM	680	0	607	0	0
36	1	67355	0	33845	1582	1
36	5	67376	0	33858	1542	0
37	3	2579	0	1304	62	0
37	7	2579	0	1304	63	0
38	4	3353	0	1695	82	0
38	8	3353	0	1695	95	0
39	L2	1914	0	1981	220	0
39	l2	1912	0	1976	0	0
40	L3	3075	0	3142	272	0
40	l3	3075	0	3142	0	0
41	L4	2748	0	2859	247	0
41	l4	2748	0	2859	0	0
42	L5	2375	0	2325	231	0
42	l5	2359	0	2311	0	0
43	L6	1239	0	1326	97	0
43	l6	1248	0	1339	0	0
44	L7	1784	0	1862	165	0
44	l7	1791	0	1869	0	0
45	L8	1804	0	1877	140	0
45	l8	1763	0	1819	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	L9	1518	0	1587	160	0
46	l9	1518	0	1587	0	0
47	M0	1705	0	1735	170	0
47	m0	1722	0	1755	0	0
48	M1	1353	0	1383	117	0
48	m1	1353	0	1383	0	0
49	M3	1543	0	1608	158	0
49	m3	1548	0	1613	0	0
50	M4	1053	0	1149	104	0
50	m4	1059	0	1154	0	0
51	M5	1720	0	1779	184	0
51	m5	1720	0	1779	0	0
52	M6	1555	0	1659	150	0
52	m6	1555	0	1659	0	0
53	M7	1420	0	1437	114	0
53	m7	1227	0	1236	0	0
54	M8	1441	0	1543	132	0
54	m8	1441	0	1543	0	0
55	M9	1521	0	1617	123	0
55	m9	1521	0	1617	0	0
56	N0	1445	0	1487	135	0
56	n0	1445	0	1487	0	0
57	N1	1276	0	1323	123	0
57	n1	1276	0	1323	0	0
58	N2	796	0	812	58	0
58	n2	778	0	791	0	0
59	N3	1003	0	1048	86	0
59	n3	1003	0	1048	0	0
60	N4	699	0	640	36	0
60	n4	1038	0	1071	0	0
61	N5	964	0	1025	75	0
61	n5	959	0	1023	0	0
62	N6	993	0	1081	94	0
62	n6	993	0	1081	0	0
63	N7	1092	0	1155	120	0
63	n7	1092	0	1155	0	0
64	N8	1173	0	1214	111	0
64	n8	1173	0	1215	0	0
65	N9	462	0	491	44	0
65	n9	462	0	491	0	0
66	O0	743	0	797	72	0
66	o0	767	0	816	0	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
67	O1	876	0	912	72	0
67	o1	883	0	918	0	0
68	O2	1020	0	1090	87	0
68	o2	1020	0	1090	0	0
69	O3	850	0	880	58	0
69	o3	850	0	880	0	0
70	O4	880	0	945	97	0
70	o4	880	0	945	0	0
71	O5	969	0	1078	107	0
71	o5	965	0	1067	0	0
72	O6	771	0	849	73	0
72	o6	770	0	846	0	0
73	O7	681	0	683	52	0
73	o7	681	0	682	0	0
74	O8	612	0	682	64	0
74	o8	608	0	671	0	0
75	O9	436	0	475	44	0
75	o9	436	0	475	0	0
76	Q0	417	0	455	32	0
76	q0	417	0	456	0	0
77	Q1	233	0	284	21	0
77	q1	233	0	284	0	0
78	Q2	847	0	916	58	0
78	q2	847	0	917	0	0
79	Q3	694	0	734	61	0
79	q3	694	0	734	0	0
80	e0	491	0	542	0	0
81	m2	750	0	175	0	0
82	p0	1077	0	1041	0	0
83	p1	235	0	50	0	0
84	p2	230	0	51	0	0
85	1	471	0	0	0	0
85	2	123	0	0	0	0
85	3	14	0	0	0	0
85	4	20	0	0	0	0
85	5	496	0	0	0	0
85	6	147	0	0	0	0
85	7	18	0	0	0	0
85	8	15	0	0	0	0
85	C3	1	0	0	0	0
85	D0	1	0	0	0	0
85	D3	1	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
85	L2	3	0	0	0	0
85	L3	3	0	0	0	0
85	L4	2	0	0	0	0
85	L5	1	0	0	0	0
85	L7	2	0	0	0	0
85	L8	1	0	0	0	0
85	M0	3	0	0	0	0
85	M1	1	0	0	0	0
85	M3	3	0	0	0	0
85	M5	2	0	0	0	0
85	M6	1	0	0	0	0
85	M7	4	0	0	0	0
85	M9	2	0	0	0	0
85	N0	2	0	0	0	0
85	N3	3	0	0	0	0
85	N5	1	0	0	0	0
85	N8	5	0	0	0	0
85	O2	2	0	0	0	0
85	O3	1	0	0	0	0
85	O7	1	0	0	0	0
85	S2	1	0	0	0	0
85	S8	1	0	0	0	0
85	c1	1	0	0	0	0
85	c7	1	0	0	0	0
85	c8	2	0	0	0	0
85	d3	3	0	0	0	0
85	d6	1	0	0	0	0
85	l2	2	0	0	0	0
85	l3	3	0	0	0	0
85	l4	1	0	0	0	0
85	l5	3	0	0	0	0
85	l7	2	0	0	0	0
85	l9	1	0	0	0	0
85	m0	1	0	0	0	0
85	m1	1	0	0	0	0
85	m5	2	0	0	0	0
85	m6	2	0	0	0	0
85	m7	5	0	0	0	0
85	n0	2	0	0	0	0
85	n3	2	0	0	0	0
85	n6	2	0	0	0	0
85	n8	2	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
85	n9	1	0	0	0	0
85	o0	1	0	0	0	0
85	o1	1	0	0	0	0
85	o3	2	0	0	0	0
85	o4	1	0	0	0	0
85	q0	1	0	0	0	0
85	q3	2	0	0	0	0
85	s1	1	0	0	0	0
85	s8	2	0	0	0	0
85	s9	1	0	0	0	0
85	sM	2	0	0	0	0
86	1	2429	0	0	223	0
86	2	1099	0	0	115	0
86	3	84	0	0	5	0
86	4	112	0	0	10	0
86	5	2471	0	0	247	0
86	6	1120	0	0	126	0
86	7	70	0	0	4	0
86	8	112	0	0	16	0
86	C3	7	0	0	0	0
86	C5	7	0	0	2	0
86	C8	7	0	0	0	0
86	D3	7	0	0	1	0
86	D9	7	0	0	0	0
86	L3	14	0	0	3	0
86	L4	7	0	0	1	0
86	M0	7	0	0	0	0
86	M5	7	0	0	0	0
86	M7	14	0	0	1	0
86	M9	7	0	0	1	0
86	N9	7	0	0	0	0
86	O1	7	0	0	8	0
86	O3	7	0	0	1	0
86	O4	7	0	0	0	0
86	O6	7	0	0	1	0
86	O7	7	0	0	3	0
86	O9	7	0	0	1	0
86	Q2	7	0	0	5	0
86	S6	7	0	0	1	1
86	S8	7	0	0	1	0
86	SR	7	0	0	0	0
86	c3	7	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
86	c5	7	0	0	0	0
86	c8	7	0	0	0	0
86	d4	7	0	0	0	0
86	d9	7	0	0	0	0
86	l3	14	0	0	0	0
86	l4	14	0	0	0	0
86	l5	28	0	0	0	0
86	l9	7	0	0	0	0
86	m0	14	0	0	0	0
86	m1	7	0	0	0	0
86	m4	7	0	0	0	0
86	m5	7	0	0	0	0
86	m6	7	0	0	0	0
86	m7	7	0	0	0	0
86	m8	7	0	0	0	0
86	n3	14	0	0	0	0
86	n6	7	0	0	0	0
86	n9	7	0	0	0	0
86	o2	7	0	0	0	0
86	o3	7	0	0	0	0
86	o7	14	0	0	0	0
86	q2	7	0	0	0	0
86	s1	14	0	0	0	0
86	s8	7	0	0	0	0
86	sR	7	0	0	0	0
87	D6	1	0	0	0	0
87	D7	1	0	0	0	0
87	D9	1	0	0	0	0
87	E1	1	0	0	0	0
87	O7	1	0	0	0	0
87	Q0	1	0	0	0	0
87	Q2	1	0	0	0	0
87	Q3	1	0	0	0	0
87	d6	1	0	0	0	0
87	d7	1	0	0	0	0
87	d9	1	0	0	0	0
87	e1	1	0	0	0	0
87	o7	1	0	0	0	0
87	q0	1	0	0	0	0
87	q2	1	0	0	0	0
87	q3	1	0	0	0	0
88	1	21	0	20	3	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
88	5	21	0	20	7	0
All	All	411183	0	297329	12131	1

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 18.

All (12131) 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)
78:Q2:17:CYS:SG	78:Q2:17:CYS:CB	2.03	1.47
78:Q2:17:CYS:SG	78:Q2:77:CYS:HB3	2.03	1.07
36:5:3274:A:H3'	36:5:3275:U:H5''	1.36	1.07
78:Q2:17:CYS:SG	78:Q2:77:CYS:CB	2.70	1.05
36:1:3182:G:OP1	52:M6:160:ARG:NH2	1.90	1.03
43:L6:31:ARG:NH1	69:O3:107:ILE:O	2.42	1.02
47:M0:76:MET:HE1	47:M0:148:VAL:HA	2.32	1.02
1:6:1636:C:H4'	1:6:1637:C:H5'	1.44	1.00
40:L3:227:GLU:HG3	40:L3:270:ARG:HE	3.43	0.99
1:2:1508:U:O4	86:2:2031:OHX:N5	1.96	0.98
74:O8:46:ARG:NH2	36:5:1613:A:OP2	131.39	0.97
36:1:1481:A:O2'	36:1:1858:A:N3	1.98	0.96
36:5:2273:G:O6	86:5:4193:OHX:N5	1.99	0.96
47:M0:3:ARG:NH2	36:5:2854:U:OP2	290.44	0.96
56:N0:42:TRP:HE1	56:N0:58:ILE:HD11	2.40	0.95
24:D2:2:THR:N	1:6:1034:C:HO2'	337.46	0.95
63:N7:102:GLU:H	63:N7:107:ARG:HH21	3.98	0.95
41:L4:317:PRO:O	41:L4:319:LYS:N	1.98	0.94
57:N1:91:LEU:HD12	57:N1:96:ILE:HD11	1.46	0.94
42:L5:111:GLN:HA	42:L5:116:ASP:HB3	3.54	0.94
36:5:2233:A:OP2	86:5:3955:OHX:N5	1.99	0.94
65:N9:50:THR:HG22	36:5:1073:U:H1'	205.05	0.94
52:M6:160:ARG:NH2	36:5:3182:G:OP1	279.98	0.94
36:1:3164:C:HO2'	36:1:3165:A:H8	1.04	0.93
1:6:895:G:H1	1:6:917:U:H3	1.16	0.93
56:N0:6:GLU:OE1	56:N0:99:ARG:NH2	2.90	0.93
25:D3:64:PRO:O	86:6:2157:OHX:N2	360.09	0.93
41:L4:329:PRO:O	41:L4:331:ALA:N	3.75	0.93
1:6:1765:A:OP1	86:6:2124:OHX:N2	2.01	0.93
25:D3:79:ASN:HB3	25:D3:81:LYS:HG3	4.89	0.93
36:5:3153:U:H4'	36:5:3154:C:H5'	1.51	0.93
36:1:1951:C:H42	36:1:2095:G:H1	1.09	0.92

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:C9:119:LYS:NZ	1:6:1369:U:OP1	441.90	0.92
39:L2:21:ARG:HD3	36:5:824:C:H5''	170.05	0.92
36:5:3165:A:H61	36:5:3285:C:H42	1.09	0.92
40:L3:41:VAL:HA	40:L3:185:GLY:HA3	1.51	0.92
36:1:2392:C:O2'	40:L3:266:ARG:NH2	2.03	0.92
41:L4:292:SER:OG	41:L4:293:SER:N	2.00	0.91
70:O4:8:ARG:HH21	70:O4:31:ARG:HD2	2.42	0.91
52:M6:68:ARG:NH1	36:5:2988:C:OP1	217.49	0.91
1:2:320:U:H3'	1:2:321:C:H5''	1.52	0.91
6:S4:9:LEU:HB2	6:S4:30:ARG:HB2	1.73	0.91
54:M8:158:HIS:H	54:M8:186:VAL:HG12	1.36	0.90
62:N6:36:SER:OG	62:N6:106:ILE:O	1.89	0.90
45:L8:240:ASN:HA	45:L8:243:GLN:HB2	1.52	0.90
1:2:1796:C:OP1	28:D6:87:ARG:NH1	2.05	0.90
36:5:1239:C:H42	36:5:1249:G:H1	1.08	0.90
59:N3:87:ARG:HH22	59:N3:137:VAL:HG21	1.33	0.90
16:C4:85:ALA:H	16:C4:119:THR:HG22	1.37	0.89
1:2:140:A:N6	1:2:281:G:OP1	2.03	0.89
8:S6:120:GLU:HG3	8:S6:125:THR:HB	1.52	0.89
36:5:1877:U:H5''	36:5:1878:G:H5'	1.53	0.89
10:S8:162:ALA:HA	36:1:3353:G:H5'	1.54	0.89
12:C0:27:PHE:HB3	12:C0:40:LEU:HD23	1.54	0.89
68:O2:81:ASP:O	68:O2:84:THR:OG1	1.90	0.89
36:1:425:G:O6	86:1:3876:OHX:N6	2.05	0.89
42:L5:270:LYS:HD2	42:L5:272:TYR:HB2	9.06	0.89
36:5:3194:C:O2	36:5:3197:G:N2	2.06	0.89
54:M8:157:PRO:HD3	64:N8:47:LYS:HB2	1.55	0.89
41:L4:269:SER:O	41:L4:271:LYS:N	2.05	0.89
1:2:491:C:H42	1:2:496:G:H1	1.21	0.88
34:SR:64:HIS:ND1	34:SR:86:ASP:OD2	2.05	0.88
36:1:640:U:OP1	64:N8:21:ARG:NH2	2.07	0.88
36:1:687:U:OP2	49:M3:36:ARG:NH2	2.07	0.88
36:1:964:G:HO2'	64:N8:41:HIS:HE2	1.15	0.88
32:E0:28:LYS:NZ	1:6:542:A:N1	427.66	0.88
72:O6:28:TYR:O	86:O6:201:OHX:N1	2.07	0.88
7:S5:94:THR:HG22	7:S5:114:ILE:HG13	2.24	0.88
86:2:2039:OHX:N1	25:D3:64:PRO:O	2.07	0.88
79:Q3:36:ARG:HE	79:Q3:48:LYS:HE3	4.39	0.87
28:D6:38:ARG:HH21	28:D6:83:ILE:HG21	1.37	0.87
1:2:1585:U:H3	1:2:1611:A:H2	1.21	0.87
49:M3:157:ARG:NH1	64:N8:146:GLU:OE2	2.88	0.87

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1579:U:OP1	86:6:2182:OHX:N4	2.08	0.87
51:M5:110:ALA:HB1	51:M5:113:LEU:HD23	1.55	0.87
41:L4:181:VAL:HG11	41:L4:224:GLY:HA3	2.70	0.87
11:S9:109:LEU:HB2	11:S9:146:PHE:HB3	1.53	0.87
39:L2:30:ARG:NH2	39:L2:33:ASP:OD2	2.07	0.87
36:1:3050:U:OP2	86:1:4180:OHX:N4	2.08	0.86
36:1:2443:A:N6	36:1:2504:U:O4	2.07	0.86
36:1:1639:C:OP2	70:O4:74:ARG:NH2	2.09	0.86
2:S0:35:PRO:HB3	23:D1:87:ARG:HH21	1.40	0.86
64:N8:21:ARG:NH2	36:5:640:U:OP1	182.08	0.86
11:S9:110:GLN:HE22	11:S9:126:ARG:HG2	2.31	0.86
48:M1:94:ARG:O	48:M1:96:PHE:N	2.08	0.86
70:O4:74:ARG:NH2	36:5:1639:C:OP2	199.94	0.86
44:L7:139:PRO:HA	44:L7:237:ASN:HD21	1.38	0.86
36:1:1409:G:N7	86:1:4067:OHX:N3	2.24	0.86
36:5:2836:C:H5	36:5:2852:C:H42	1.23	0.86
36:5:1919:G:N7	86:5:4066:OHX:N4	2.24	0.86
42:L5:294:ALA:HB1	47:M0:217:PHE:HB3	1.57	0.86
76:Q0:96:CYS:SG	76:Q0:99:CYS:SG	3.06	0.86
50:M4:19:ARG:HA	50:M4:69:THR:HG22	2.13	0.86
48:M1:15:GLU:HB3	48:M1:130:VAL:HG23	1.57	0.86
7:S5:166:ARG:NH1	7:S5:170:GLN:OE1	2.09	0.86
62:N6:3:LYS:NZ	62:N6:5:SER:O	3.65	0.85
36:1:2208:A:N1	86:1:4044:OHX:N2	2.24	0.85
1:2:991:G:OP2	86:2:2131:OHX:N1	2.08	0.85
70:O4:65:VAL:O	70:O4:70:LYS:NZ	2.09	0.85
1:6:868:G:H1	1:6:960:U:H3	1.24	0.85
38:4:70:G:O6	86:O7:103:OHX:N4	2.08	0.85
36:1:317:A:OP2	72:O6:30:LYS:NZ	2.09	0.85
1:6:1011:G:OP2	86:6:2118:OHX:N3	2.09	0.85
36:5:863:C:OP1	86:5:3910:OHX:N3	2.10	0.85
1:2:559:C:N4	1:2:586:G:O6	2.09	0.85
40:L3:346:THR:O	40:L3:348:ARG:N	2.54	0.85
1:2:471:A:OP2	86:2:2076:OHX:N4	2.10	0.85
71:O5:85:THR:HG22	71:O5:87:ALA:H	1.58	0.85
13:C1:133:LYS:NZ	1:6:324:U:OP1	291.60	0.85
1:6:1230:A:H2	1:6:1255:G:H21	1.25	0.85
36:5:510:G:O6	86:5:4018:OHX:N2	2.10	0.84
86:5:3993:OHX:N4	37:7:86:U:O2	2.10	0.84
40:L3:291:GLU:OE1	40:L3:302:LYS:NZ	4.53	0.84
41:L4:354:VAL:HG11	57:N1:143:THR:HG21	1.58	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2818:U:H6	36:1:2818:U:H5'	1.41	0.84
71:O5:78:LYS:HA	71:O5:81:ARG:HD3	2.97	0.84
1:6:1680:G:O6	86:6:2189:OHX:N4	2.09	0.84
36:1:1315:U:OP2	52:M6:44:SER:OG	1.95	0.84
5:S3:74:GLN:HA	5:S3:79:TYR:HB2	2.54	0.84
78:Q2:50:PHE:O	86:Q2:502:OHX:N2	2.10	0.84
36:5:1878:G:OP1	86:5:3950:OHX:N5	2.10	0.84
39:L2:128:ARG:NH1	36:5:2177:G:OP2	197.82	0.84
67:O1:13:THR:HG22	67:O1:72:ARG:HH21	4.71	0.84
47:M0:140:THR:HG21	47:M0:144:ASN:HD22	1.41	0.84
47:M0:4:ARG:NH1	36:5:2828:G:O2'	263.78	0.84
72:O6:63:ASN:O	72:O6:65:GLY:N	4.80	0.84
36:1:679:U:O4	86:1:3973:OHX:N1	2.10	0.83
39:L2:70:ARG:NH2	36:5:2522:G:O6	177.11	0.83
1:2:1488:G:H3'	1:2:1515:A:H61	1.42	0.83
4:S2:225:LEU:HD13	24:D2:68:ARG:HA	2.20	0.83
40:L3:169:THR:HG23	40:L3:171:LEU:H	2.57	0.83
1:6:1280:C:H2'	1:6:1281:G:H8	1.42	0.83
13:C1:21:ASN:HD22	13:C1:31:THR:HA	3.92	0.83
16:C4:108:SER:OG	16:C4:109:GLY:N	2.08	0.83
1:6:1584:G:N2	1:6:1611:A:OP2	2.09	0.83
54:M8:133:LYS:HB2	54:M8:135:GLN:HE22	2.18	0.83
36:5:272:G:O6	36:5:293:C:N4	2.12	0.83
55:M9:74:ARG:NH1	36:5:1942:U:OP2	209.54	0.83
78:Q2:12:CYS:SG	78:Q2:17:CYS:HB2	2.58	0.83
1:2:788:A:OP2	6:S4:108:ARG:NH1	2.11	0.83
27:D5:43:ASP:HB2	27:D5:46:LYS:HB2	2.56	0.83
1:6:1670:G:O6	86:6:2190:OHX:N4	2.11	0.83
1:2:1529:C:OP1	7:S5:112:ARG:NH1	2.12	0.83
36:1:1466:G:O6	86:1:3880:OHX:N4	2.10	0.83
6:S4:79:ASP:HB3	6:S4:82:TYR:HB2	1.61	0.83
47:M0:175:ASN:OD1	47:M0:176:LEU:N	4.75	0.83
1:2:79:C:H1'	8:S6:174:LYS:HD3	1.59	0.83
44:L7:216:VAL:HG11	44:L7:227:GLY:HA3	4.62	0.83
36:1:1320:C:O2	56:N0:115:ARG:NH2	2.11	0.83
72:O6:74:LYS:HD2	72:O6:80:PHE:HD2	1.42	0.83
52:M6:18:ARG:NH2	36:5:1318:A:OP1	276.68	0.82
79:Q3:49:ARG:HD2	79:Q3:50:GLY:H	1.96	0.82
1:2:1097:U:O4	4:S2:201:ASN:ND2	2.12	0.82
50:M4:55:ARG:NH2	50:M4:76:ALA:O	2.12	0.82
35:SM:32:SER:HG	36:1:2666:C:HO2'	1.15	0.82

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:191:VAL:HG12	44:L7:192:GLY:H	4.01	0.82
1:2:513:U:OP1	11:S9:133:HIS:NE2	2.12	0.82
18:C6:58:ASP:O	18:C6:60:PHE:N	2.12	0.82
73:O7:65:ARG:HH11	73:O7:65:ARG:HG3	1.50	0.82
42:L5:152:ARG:HH11	42:L5:152:ARG:HG3	2.56	0.82
53:M7:25:SER:HB3	53:M7:28:ASN:HB2	1.97	0.82
28:D6:87:ARG:NH2	28:D6:94:ASN:O	2.11	0.82
36:1:3376:A:OP2	86:1:3907:OHX:N5	2.11	0.82
16:C4:81:VAL:H	16:C4:115:ILE:HG22	1.43	0.82
67:O1:20:LEU:O	67:O1:28:ARG:NH2	2.11	0.82
43:L6:85:ILE:HG23	69:O3:107:ILE:HG21	3.60	0.82
63:N7:46:ILE:HD13	63:N7:68:ILE:HG23	1.59	0.82
39:L2:96:LEU:O	79:Q3:87:ARG:NH1	3.78	0.82
40:L3:218:ILE:HG12	40:L3:276:THR:HG23	3.17	0.82
24:D2:27:ILE:HD11	24:D2:61:ILE:HD12	1.59	0.82
36:1:371:G:O6	86:1:4179:OHX:N4	2.13	0.82
36:1:3375:A:O2'	36:1:3378:C:OP2	1.95	0.82
75:O9:23:LEU:HD22	75:O9:24:PRO:HD2	1.62	0.82
21:C9:16:ASN:OD1	21:C9:56:LYS:NZ	2.32	0.82
51:M5:31:ARG:NH1	51:M5:124:ASP:OD1	2.13	0.82
40:L3:152:LYS:HG2	40:L3:192:VAL:HG11	1.62	0.82
66:O0:74:ASN:HB2	66:O0:86:ARG:HG3	4.43	0.82
36:5:2404:A:C8	36:5:2404:A:H5''	2.14	0.82
52:M6:27:LEU:HD11	52:M6:102:LEU:HB2	1.61	0.82
13:C1:99:ARG:NH1	25:D3:7:ARG:O	2.26	0.81
36:1:3165:A:H61	36:1:3285:C:H42	1.27	0.81
7:S5:92:ARG:NH2	7:S5:169:ASN:OD1	2.13	0.81
9:S7:67:LEU:HG	9:S7:94:ALA:HB2	1.76	0.81
48:M1:53:THR:HG23	48:M1:60:ARG:HA	1.61	0.81
36:1:1126:G:OP2	47:M0:14:ASN:ND2	2.11	0.81
71:O5:81:ARG:NH2	36:5:18:G:OP1	76.82	0.81
19:C7:20:TYR:CZ	19:C7:38:ILE:HG13	2.15	0.81
36:1:1345:G:H21	41:L4:307:GLN:HE22	1.28	0.81
36:1:1789:G:N7	86:1:4168:OHX:N2	2.27	0.81
16:C4:38:THR:HG21	1:6:895:G:H21	262.46	0.81
1:2:1073:G:H2'	1:2:1074:G:H5''	1.63	0.81
1:2:1202:A:OP1	86:2:2111:OHX:N1	2.12	0.81
19:C7:63:LYS:HE3	34:SR:284:ALA:HB2	1.62	0.81
62:N6:9:SER:OG	36:5:336:A:OP2	79.13	0.81
36:1:2924:U:O4	86:1:4018:OHX:N1	2.13	0.81
36:5:1940:G:H21	36:5:3362:A:H8	1.28	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2216:G:OP1	72:O6:75:LYS:NZ	2.14	0.81
1:2:1500:C:OP1	21:C9:122:ARG:NH2	2.14	0.81
73:O7:24:ARG:NH1	36:5:361:A:OP1	120.17	0.81
38:8:79:A:H3'	38:8:80:A:C8	2.16	0.81
36:1:1722:U:OP1	55:M9:100:ARG:NH1	2.13	0.81
36:5:1239:C:N3	36:5:1249:G:N2	2.28	0.81
5:S3:170:THR:HG22	5:S3:187:LYS:HA	4.81	0.81
10:S8:182:TYR:OH	10:S8:188:GLU:OE1	1.97	0.81
57:N1:101:CYS:HB3	36:5:990:U:H1'	251.34	0.81
57:N1:51:GLY:HA3	57:N1:92:ARG:HG3	2.89	0.81
41:L4:145:ILE:HD11	41:L4:148:ILE:HG13	1.61	0.81
42:L5:56:THR:O	42:L5:58:LYS:N	2.14	0.81
40:L3:320:ASP:N	40:L3:320:ASP:OD2	2.12	0.81
7:S5:206:SER:O	7:S5:212:LYS:NZ	2.13	0.81
2:S0:139:VAL:HG23	4:S2:62:PRO:HG3	1.63	0.80
1:2:1424:A:H1'	4:S2:92:ALA:HB1	1.62	0.80
36:1:2794:G:N7	86:1:3935:OHX:N2	2.29	0.80
36:1:410:U:O4	86:1:4057:OHX:N5	2.14	0.80
36:1:979:U:H1'	36:1:980:A:C8	2.16	0.80
44:L7:217:PRO:O	86:5:3996:OHX:N3	259.28	0.80
36:1:76:G:O2'	49:M3:100:ARG:NH1	2.14	0.80
40:L3:347:SER:O	40:L3:349:LYS:N	2.71	0.80
40:L3:10:ARG:NH2	40:L3:263:SER:O	2.14	0.80
1:6:235:G:H2'	1:6:236:A:H8	1.45	0.80
36:1:3116:G:OP1	36:1:3116:G:N2	2.14	0.80
36:5:1015:U:O2'	36:5:1017:C:OP1	1.99	0.80
46:L9:28:VAL:HG13	46:L9:33:THR:HB	1.61	0.80
36:1:3215:A:H8	50:M4:121:MET:HE1	1.45	0.80
1:6:230:C:H42	1:6:235:G:H1	1.29	0.80
6:S4:187:ARG:NH1	1:6:753:A:OP2	376.51	0.80
36:5:955:U:H2'	36:5:956:U:C6	2.16	0.80
50:M4:113:THR:HG22	50:M4:116:GLU:HB2	3.75	0.80
4:S2:140:ARG:NH1	23:D1:1:MET:SD	2.54	0.80
60:N4:4:GLU:HG2	60:N4:30:ARG:HD3	1.64	0.80
38:4:136:G:OP1	61:N5:48:SER:OG	2.00	0.80
36:1:1334:U:O2'	44:L7:151:ARG:NH2	2.15	0.80
36:5:1231:A:H5''	36:5:1232:C:H5'	1.63	0.80
1:2:1620:C:OP2	86:2:2165:OHX:N6	2.15	0.80
48:M1:101:ASN:HB3	48:M1:130:VAL:HA	1.62	0.80
36:5:1170:A:OP2	86:5:3996:OHX:N4	2.14	0.80
22:D0:53:LYS:HB2	22:D0:92:ASP:HB2	2.87	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:151:GLN:OE1	42:L5:152:ARG:N	2.14	0.80
36:1:1230:G:H1	36:1:1279:C:H42	1.28	0.80
37:7:95:A:OP2	86:7:226:OHX:N1	2.15	0.79
51:M5:172:ARG:NH1	36:5:30:G:OP1	107.06	0.79
38:4:135:G:OP2	61:N5:56:ARG:NH2	2.15	0.79
34:SR:16:HIS:ND1	34:SR:39:ASP:OD2	2.31	0.79
23:D1:28:ASP:O	23:D1:30:ALA:N	3.32	0.79
70:O4:52:GLN:HG2	36:5:1639:C:H5'	195.65	0.79
70:O4:16:ARG:HB3	70:O4:37:LYS:HD3	1.63	0.79
44:L7:30:ARG:HD2	44:L7:33:ARG:HH21	1.47	0.79
39:L2:5:ILE:HG12	39:L2:8:GLN:HG3	1.64	0.79
61:N5:67:ILE:HD12	61:N5:121:LYS:HG3	1.65	0.79
5:S3:66:ILE:O	5:S3:70:THR:OG1	2.63	0.79
5:S3:94:ARG:NH1	35:SM:130:GLU:OE2	2.16	0.79
1:2:1203:A:OP2	86:2:2111:OHX:N5	2.15	0.79
1:6:1265:G:N7	86:6:2194:OHX:N6	2.31	0.79
27:D5:58:ARG:HB3	27:D5:103:ARG:HH11	9.31	0.79
41:L4:292:SER:HG	41:L4:293:SER:H	1.30	0.79
1:2:74:U:H1'	1:2:75:U:H5''	1.64	0.79
46:L9:12:VAL:HB	46:L9:51:GLN:HA	1.65	0.79
1:2:190:C:N4	1:2:196:G:O6	2.15	0.79
36:1:3155:U:H3'	36:1:3156:U:H4'	1.63	0.79
1:6:569:C:O2	1:6:574:G:N2	2.16	0.79
3:S1:117:TRP:HE1	3:S1:152:ARG:CZ	1.96	0.79
36:5:2404:A:H5''	36:5:2404:A:H8	1.48	0.79
69:O3:86:ARG:NH2	36:5:497:C:O3'	214.50	0.79
53:M7:50:GLN:OE1	53:M7:56:ARG:NH2	2.13	0.79
54:M8:134:GLY:O	54:M8:137:THR:OG1	2.32	0.79
6:S4:100:ARG:NH2	6:S4:121:TYR:O	2.59	0.79
36:5:2211:U:O4	86:5:3955:OHX:N4	2.16	0.79
36:1:2255:A:OP1	86:1:3934:OHX:N3	2.16	0.79
36:1:3272:C:OP2	43:L6:78:ARG:NH1	2.13	0.79
10:S8:76:THR:HG22	10:S8:105:ASP:HB3	3.78	0.79
17:C5:14:THR:HB	17:C5:22:LEU:HB2	1.65	0.79
36:1:1581:C:C2	36:1:1582:C:H5'	2.18	0.78
1:2:1291:G:N2	1:2:1324:G:H22	1.80	0.78
33:E1:88:PRO:HB2	33:E1:89:LYS:HD3	6.25	0.78
19:C7:7:LYS:N	1:6:1316:G:OP1	409.94	0.78
11:S9:93:LEU:HA	11:S9:96:VAL:HG13	1.66	0.78
40:L3:76:VAL:HG11	40:L3:323:MET:HE2	2.32	0.78
19:C7:27:ASP:O	19:C7:31:ASN:ND2	3.31	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:338:LYS:O	41:L4:340:GLY:N	2.17	0.78
3:S1:126:THR:HA	3:S1:136:ARG:HA	2.43	0.78
1:6:1160:A:O5'	86:6:2182:OHX:N2	2.15	0.78
36:1:562:C:OP2	50:M4:77:ARG:NH1	2.16	0.78
5:S3:211:PRO:HG2	19:C7:19:ARG:HB2	2.06	0.78
36:5:2818:U:H6	36:5:2818:U:H5'	1.48	0.78
37:3:77:G:N2	37:3:102:A:OP2	2.15	0.78
42:L5:76:ALA:HB3	42:L5:109:THR:HG22	2.77	0.78
39:L2:21:ARG:NH1	36:5:825:U:OP1	172.42	0.78
22:D0:27:THR:HG23	22:D0:113:ASP:HB3	1.64	0.78
33:E1:103:LEU:HD23	33:E1:105:TYR:HD2	3.28	0.78
67:O1:88:PRO:HG2	67:O1:89:LEU:HD22	1.66	0.78
38:4:83:C:H42	62:N6:52:ARG:HH22	1.30	0.78
37:3:4:U:H2'	37:3:5:G:C8	2.19	0.78
78:Q2:45:ARG:NH2	36:5:283:G:OP2	147.02	0.78
8:S6:2:LYS:HB3	8:S6:108:VAL:HG22	1.66	0.78
5:S3:94:ARG:O	5:S3:101:GLN:NE2	3.40	0.78
7:S5:35:GLN:O	7:S5:37:GLN:N	2.85	0.78
1:6:58:U:O2'	1:6:451:A:N3	2.17	0.78
59:N3:10:LYS:NZ	59:N3:53:SER:OG	2.72	0.78
39:L2:51:ASP:HB3	39:L2:54:ARG:HB3	1.64	0.78
36:1:12:A:OP1	86:1:4202:OHX:N6	2.17	0.78
1:6:1588:G:H1	1:6:1608:U:H3	1.31	0.78
41:L4:326:ARG:O	44:L7:41:ARG:NH2	3.42	0.78
3:S1:131:ASP:HB3	3:S1:180:THR:HG23	1.66	0.78
4:S2:170:ILE:HB	4:S2:197:TYR:HB2	1.66	0.78
56:N0:90:MET:HG3	36:5:1213:G:H4'	318.03	0.78
35:SM:72:ARG:NH1	1:6:1460:A:O3'	325.29	0.78
36:1:837:A:OP2	79:Q3:4:ARG:NH1	2.17	0.78
12:C0:21:VAL:HB	12:C0:66:TYR:HB2	2.62	0.78
40:L3:67:PHE:HD1	40:L3:72:VAL:HG12	1.49	0.78
1:6:1130:G:OP2	86:6:2111:OHX:N1	2.18	0.78
37:3:44:C:OP2	48:M1:137:ARG:NH2	2.16	0.77
17:C5:43:ARG:NH2	1:6:1552:U:OP2	402.45	0.77
17:C5:65:LEU:O	86:C5:201:OHX:N2	4.28	0.77
17:C5:81:ARG:NH1	17:C5:97:TYR:O	2.16	0.77
79:Q3:36:ARG:HB2	79:Q3:48:LYS:HE3	4.74	0.77
36:1:2108:C:H1'	36:1:3344:A:H8	1.49	0.77
36:1:978:G:O2'	36:1:979:U:O2	2.02	0.77
67:O1:51:LEU:HD22	67:O1:55:LEU:HD12	2.41	0.77
1:2:1592:A:H2'	1:2:1593:A:C8	2.19	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1350:U:OP1	18:C6:68:ARG:NH2	2.16	0.77
36:5:105:C:HO2'	36:5:684:G:HO2'	1.31	0.77
47:M0:98:ARG:HB3	47:M0:120:GLY:HA3	2.08	0.77
49:M3:180:ARG:HD3	72:O6:11:LEU:HD21	1.66	0.77
1:2:1010:C:OP2	86:2:2131:OHX:N6	2.18	0.77
50:M4:72:LEU:HD22	50:M4:73:PRO:HD2	2.42	0.77
36:1:1308:A:OP2	36:1:1308:A:C8	2.38	0.77
36:5:1178:G:H5'	36:5:1178:G:H8	1.48	0.77
36:5:343:U:OP2	86:5:3918:OHX:N3	2.18	0.77
6:S4:104:ASP:HB2	6:S4:108:ARG:H	1.97	0.77
36:1:1544:G:O6	86:1:4058:OHX:N4	2.18	0.77
36:5:419:G:N7	86:8:216:OHX:N3	2.32	0.77
36:1:200:C:OP1	62:N6:60:ARG:NH1	2.18	0.77
32:E0:17:GLN:NE2	1:6:563:U:H4'	383.28	0.77
36:1:1808:G:O6	86:1:3982:OHX:N3	2.17	0.77
36:5:1934:G:O6	86:5:3909:OHX:N2	2.18	0.77
67:O1:75:ILE:HG12	67:O1:93:VAL:HG13	2.42	0.77
1:2:270:C:O2	1:2:285:G:N2	2.17	0.77
34:SR:249:ARG:NH1	34:SR:298:GLY:O	2.91	0.77
1:6:1227:A:H4'	1:6:1228:G:H5'	1.66	0.77
73:O7:21:ARG:NH2	73:O7:41:ALA:O	2.18	0.77
36:5:1772:U:H5''	36:5:1773:C:H5'	1.67	0.77
17:C5:123:TYR:OH	20:C8:126:ARG:NH1	3.48	0.77
45:L8:160:ILE:HD12	45:L8:164:VAL:HG13	6.38	0.77
40:L3:25:ILE:H	40:L3:25:ILE:HD13	1.47	0.77
64:N8:9:ARG:NH2	36:5:1431:G:N7	148.05	0.77
42:L5:40:HIS:HD2	42:L5:42:ALA:H	1.33	0.77
47:M0:145:LYS:HD3	47:M0:167:LEU:HD21	1.67	0.77
39:L2:30:ARG:O	39:L2:163:ARG:NH2	2.18	0.77
57:N1:130:ARG:O	36:5:1098:A:O2'	256.04	0.77
51:M5:143:ARG:NH2	71:O5:91:ALA:O	3.22	0.77
36:1:2207:A:H2'	36:1:2208:A:C8	2.19	0.77
14:C2:74:LEU:HD11	33:E1:106:TYR:HB3	4.65	0.77
34:SR:20:VAL:O	34:SR:291:SER:OG	2.03	0.77
1:2:584:C:H1'	32:E0:18:THR:HG21	1.67	0.77
5:S3:40:ARG:HG2	22:D0:110:PRO:HB3	3.03	0.77
42:L5:269:SER:OG	37:7:1:G:N3	315.36	0.76
1:2:741:C:O2	9:S7:107:ARG:NH1	2.18	0.76
1:6:1695:G:H21	1:6:1706:C:H41	1.31	0.76
7:S5:163:SER:HB2	30:D8:48:VAL:HG22	2.86	0.76
35:SM:134:ASP:OD1	35:SM:135:ALA:N	2.19	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:22:SER:OG	46:L9:23:ARG:N	2.16	0.76
13:C1:17:PRO:HG2	1:6:249:U:H3	293.50	0.76
36:1:1243:G:N2	36:1:1244:A:N7	2.34	0.76
36:1:2656:A:H4'	78:Q2:98:LYS:HD2	1.68	0.76
36:1:410:U:O4	86:1:4057:OHX:N2	2.18	0.76
40:L3:116:ARG:HH22	40:L3:174:LYS:HD3	1.49	0.76
1:2:854:U:O4	55:M9:173:ARG:NH2	2.18	0.76
21:C9:28:LEU:HD13	21:C9:30:VAL:HG22	1.66	0.76
41:L4:204:GLY:O	41:L4:246:ARG:NH1	2.18	0.76
21:C9:105:LEU:HD13	21:C9:122:ARG:HD3	3.21	0.76
1:6:918:U:H2'	1:6:919:A:H8	1.50	0.76
61:N5:48:SER:OG	38:8:136:G:OP1	83.99	0.76
36:1:2732:G:OP2	86:1:4203:OHX:N2	2.19	0.76
74:O8:44:LYS:HG2	74:O8:53:THR:HB	1.90	0.76
41:L4:328:ASN:ND2	44:L7:48:ASN:OD1	6.10	0.76
41:L4:299:ILE:HG23	54:M8:39:ARG:HD2	2.90	0.76
22:D0:27:THR:HB	22:D0:88:LYS:HG3	1.68	0.76
26:D4:12:VAL:HG23	26:D4:23:PHE:HB3	4.82	0.76
23:D1:74:GLN:NE2	23:D1:81:ASN:O	2.19	0.76
3:S1:128:LYS:HE2	3:S1:132:ASP:HB3	1.67	0.76
52:M6:42:ASN:OD1	52:M6:125:ARG:NH1	2.97	0.76
62:N6:5:SER:HB2	62:N6:8:VAL:HG22	6.89	0.76
25:D3:75:GLN:NE2	25:D3:80:GLY:O	2.17	0.76
1:6:471:A:OP2	86:6:2101:OHX:N5	2.17	0.76
62:N6:83:ASP:O	62:N6:84:LYS:HB2	2.20	0.76
39:L2:201:GLY:O	39:L2:204:MET:HG2	1.86	0.76
36:1:2894:C:OP1	46:L9:168:ARG:NH2	2.19	0.76
71:O5:58:ILE:O	71:O5:62:GLN:NE2	5.68	0.76
21:C9:38:LYS:NZ	1:6:1564:U:OP1	374.75	0.76
66:O0:66:LYS:H	66:O0:66:LYS:HD2	3.03	0.76
1:2:1619:C:H1'	30:D8:22:ARG:HH21	1.51	0.76
41:L4:3:ARG:HH11	41:L4:22:LEU:HD12	1.51	0.76
47:M0:84:ALA:O	47:M0:140:THR:HG22	2.24	0.76
7:S5:57:SER:O	7:S5:59:VAL:N	2.19	0.76
36:1:3259:U:H6	36:1:3259:U:H5'	1.51	0.76
36:5:2255:A:H5'	36:5:2261:G:H22	1.51	0.76
36:1:1898:G:OP2	86:1:3932:OHX:N4	2.19	0.76
40:L3:171:LEU:O	86:L3:404:OHX:N6	2.18	0.75
31:D9:21:CYS:SG	31:D9:39:CYS:HB3	3.78	0.75
36:1:276:U:O2	51:M5:93:LYS:NZ	2.18	0.75
48:M1:49:LYS:HB3	48:M1:62:ASN:HA	1.67	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:109:LYS:O	3:S1:112:SER:OG	2.81	0.75
6:S4:158:ASP:OD2	6:S4:174:LYS:NZ	2.19	0.75
36:1:1369:A:OP1	64:N8:21:ARG:NH1	2.20	0.75
48:M1:164:LYS:HE3	48:M1:171:VAL:HB	1.67	0.75
16:C4:11:SER:OG	16:C4:12:GLN:N	4.24	0.75
41:L4:22:LEU:HD11	41:L4:26:PHE:HB2	1.67	0.75
38:4:133:G:O6	86:4:229:OHX:N5	2.20	0.75
63:N7:83:THR:HG22	63:N7:85:TYR:H	3.41	0.75
1:2:1056:U:O2'	3:S1:202:LYS:NZ	2.18	0.75
60:N4:9:SER:HA	60:N4:52:THR:HG22	1.67	0.75
36:1:314:U:O4	86:1:4150:OHX:N4	2.19	0.75
11:S9:79:ARG:NH1	1:6:762:A:OP1	408.70	0.75
1:6:1679:G:N7	86:6:2189:OHX:N3	2.35	0.75
41:L4:203:ARG:NH1	41:L4:226:GLU:OE2	2.19	0.75
1:2:702:G:O6	1:2:736:C:N4	2.19	0.75
47:M0:80:SER:HB3	47:M0:147:VAL:HG11	1.69	0.75
45:L8:160:ILE:HG22	45:L8:164:VAL:HG13	1.68	0.75
36:1:1129:A:OP1	47:M0:13:LYS:NZ	2.19	0.75
47:M0:43:VAL:HG21	47:M0:197:VAL:HB	2.32	0.75
49:M3:46:ILE:HG22	49:M3:49:ARG:HB2	1.66	0.75
54:M8:178:ARG:HD3	64:N8:50:PRO:HB2	3.77	0.75
37:3:14:U:O4	37:3:66:A:N6	2.19	0.75
79:Q3:4:ARG:NH2	36:5:838:G:O6	236.25	0.75
1:2:1254:U:OP2	14:C2:46:ARG:NH1	2.20	0.75
42:L5:270:LYS:HG3	42:L5:273:ARG:HB3	3.22	0.75
21:C9:52:GLY:O	21:C9:54:PHE:N	2.18	0.75
1:2:794:U:O2'	1:2:795:U:O2	2.04	0.75
36:5:2996:U:OP1	36:5:2996:U:H4'	1.87	0.75
28:D6:10:ARG:NE	1:6:1795:U:O2	328.23	0.75
67:O1:19:ARG:HD3	67:O1:35:GLU:HG2	1.69	0.75
51:M5:96:ARG:HG2	51:M5:96:ARG:HH11	1.53	0.75
36:1:1790:G:O6	86:1:4168:OHX:N4	2.18	0.75
1:2:885:G:H21	16:C4:123:SER:HB2	1.50	0.75
36:5:2821:C:H5'	88:5:4246:3J6:H2	1.69	0.75
36:1:1381:A:OP1	41:L4:197:ARG:NH1	2.20	0.75
47:M0:78:THR:OG1	47:M0:79:VAL:N	3.11	0.75
70:O4:41:ARG:O	70:O4:43:LYS:NZ	3.83	0.75
36:1:3107:U:P	76:Q0:112:LYS:HE3	2.26	0.74
41:L4:152:VAL:HG23	41:L4:172:VAL:HG21	1.69	0.74
36:1:1495:U:H5	36:1:1835:A:N1	1.84	0.74
47:M0:174:THR:HG23	47:M0:176:LEU:H	1.51	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:3074:G:OP1	86:5:4113:OHX:N4	2.19	0.74
67:O1:44:MET:O	67:O1:46:THR:N	3.51	0.74
36:1:2108:C:H1'	36:1:3344:A:C8	2.22	0.74
55:M9:173:ARG:HH21	55:M9:177:VAL:HG21	8.51	0.74
1:6:759:U:OP1	86:6:2177:OHX:N2	2.20	0.74
19:C7:47:ARG:NH1	19:C7:48:ASN:OD1	2.27	0.74
50:M4:21:VAL:HG12	50:M4:65:LEU:HA	1.67	0.74
1:2:142:G:H22	1:2:173:A:H2	1.36	0.74
36:1:1210:U:OP1	46:L9:62:ARG:NH1	2.20	0.74
47:M0:177:ASP:OD2	47:M0:177:ASP:N	2.86	0.74
28:D6:5:ARG:NH2	1:6:1795:U:OP2	337.09	0.74
70:O4:91:ARG:HG3	70:O4:95:ILE:HD13	1.70	0.74
23:D1:17:CYS:SG	23:D1:18:SER:N	2.60	0.74
36:1:2836:C:H5	36:1:2852:C:H42	1.33	0.74
49:M3:52:ASP:OD1	49:M3:52:ASP:N	2.56	0.74
1:6:1208:A:N1	1:6:1455:G:N2	2.35	0.74
62:N6:45:ILE:HD12	62:N6:119:ILE:HG23	1.70	0.74
10:S8:89:GLU:HA	10:S8:92:ARG:HB3	2.53	0.74
1:6:647:G:H1	1:6:687:G:H1	1.35	0.74
36:1:1485:G:N2	70:O4:4:ARG:HD2	2.03	0.74
36:1:2586:G:N7	45:L8:241:LYS:HB2	2.03	0.74
36:1:1720:U:P	55:M9:110:ARG:HH12	2.11	0.74
36:5:2975:U:OP1	86:5:4083:OHX:N3	2.21	0.74
29:D7:37:CYS:O	29:D7:39:GLY:N	2.19	0.74
3:S1:103:MET:HB3	3:S1:215:VAL:HG13	2.34	0.74
64:N8:4:ARG:NH2	36:5:1427:U:OP2	135.28	0.74
36:1:2821:C:N3	88:1:4213:3J6:H13	2.03	0.74
1:6:987:G:O6	86:6:2117:OHX:N4	2.21	0.74
1:6:140:A:N6	1:6:281:G:OP1	2.20	0.74
1:2:992:A:OP1	86:2:2035:OHX:N2	2.20	0.74
21:C9:69:LYS:NZ	1:6:1369:U:OP2	438.40	0.74
36:1:409:A:OP2	86:1:4057:OHX:N5	2.21	0.74
11:S9:96:VAL:HA	11:S9:99:LEU:HD22	1.70	0.74
33:E1:82:LYS:HE2	1:6:1447:C:C4	379.29	0.74
4:S2:137:ILE:HG12	4:S2:138:PRO:HD2	1.70	0.74
40:L3:135:ALA:O	40:L3:137:TYR:N	2.20	0.74
52:M6:68:ARG:HH12	36:5:2988:C:P	215.40	0.74
33:E1:108:VAL:HB	33:E1:114:VAL:HG22	1.68	0.74
39:L2:193:ARG:NH1	36:5:2174:G:OP2	191.30	0.74
13:C1:46:LYS:HE2	1:6:846:G:H21	311.77	0.74
22:D0:50:LEU:HD21	22:D0:95:ALA:HB2	1.68	0.74

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1280:C:O2	1:2:1428:G:N2	2.12	0.74
42:L5:151:GLN:HE21	42:L5:152:ARG:H	4.28	0.74
21:C9:57:ARG:HG3	21:C9:57:ARG:HH11	1.67	0.74
34:SR:19:TRP:HB2	34:SR:38:ARG:HG3	2.20	0.74
1:2:1773:C:OP2	77:Q1:2:ARG:NH1	2.21	0.74
1:6:1095:U:O4	86:6:2180:OHX:N2	2.21	0.74
63:N7:76:ASN:HB3	63:N7:79:HIS:ND1	2.57	0.74
1:2:901:G:N2	16:C4:54:GLU:OE1	2.21	0.74
45:L8:126:SER:O	36:5:120:G:N2	94.05	0.74
47:M0:76:MET:HE1	47:M0:148:VAL:HG13	1.67	0.73
11:S9:126:ARG:NH1	1:6:475:A:OP2	423.72	0.73
10:S8:52:ASN:OD1	86:6:2134:OHX:N3	309.55	0.73
36:5:1265:U:O4	36:5:1276:U:N3	2.18	0.73
40:L3:296:THR:HG22	40:L3:299:ASP:H	1.53	0.73
36:1:2120:A:OP2	86:1:4009:OHX:N2	2.21	0.73
1:2:1642:G:O6	86:2:2023:OHX:N6	2.20	0.73
42:L5:152:ARG:NH1	42:L5:152:ARG:HG3	2.86	0.73
36:1:1170:A:OP2	86:1:3959:OHX:N5	2.21	0.73
39:L2:193:ARG:NH2	36:5:2181:C:OP1	197.23	0.73
36:5:1952:G:H1	36:5:2094:C:H42	1.34	0.73
9:S7:66:SER:O	9:S7:68:ALA:N	2.95	0.73
86:1:3891:OHX:N5	57:N1:13:TYR:O	2.21	0.73
36:1:1594:A:OP1	70:O4:36:LYS:NZ	2.21	0.73
36:5:2128:C:OP1	86:5:4084:OHX:N3	2.21	0.73
21:C9:97:SER:O	21:C9:101:ASN:ND2	2.21	0.73
19:C7:29:GLN:HG2	34:SR:67:ILE:HD11	2.14	0.73
59:N3:81:GLN:O	59:N3:98:ASN:ND2	2.21	0.73
13:C1:122:ILE:H	13:C1:144:ALA:HB2	1.54	0.73
3:S1:101:HIS:HA	3:S1:217:LEU:HD22	1.68	0.73
9:S7:50:ASP:N	9:S7:50:ASP:OD1	2.20	0.73
48:M1:90:GLN:HG2	48:M1:170:ASP:HB2	1.68	0.73
56:N0:39:SER:OG	37:7:98:C:OP1	284.17	0.73
4:S2:168:ARG:NE	1:6:1098:U:OP2	383.74	0.73
47:M0:86:HIS:HB3	47:M0:139:ARG:CG	2.76	0.73
73:O7:87:SER:O	86:O7:103:OHX:N3	2.22	0.73
71:O5:90:ARG:NH1	36:5:20:A:OP2	85.88	0.73
6:S4:31:PRO:HB2	6:S4:38:LEU:HD22	2.11	0.73
30:D8:21:SER:HB3	30:D8:67:ARG:HG2	6.92	0.73
36:1:2292:U:O2	36:1:2300:G:N1	2.16	0.73
36:5:1238:C:O2'	36:5:1239:C:OP1	2.07	0.73
27:D5:56:THR:H	27:D5:103:ARG:HH11	1.34	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:116:ARG:NH2	40:L3:174:LYS:HD3	2.03	0.73
22:D0:106:ILE:HG23	22:D0:107:THR:HG23	1.71	0.73
36:1:413:U:OP1	53:M7:30:ARG:NH2	2.21	0.73
27:D5:41:ILE:HG13	27:D5:42:LEU:HG	1.71	0.73
3:S1:154:SER:O	3:S1:154:SER:OG	2.03	0.73
1:6:578:U:H4'	1:6:579:A:H5'	1.70	0.73
43:L6:31:ARG:NH2	43:L6:81:ALA:O	2.50	0.73
28:D6:37:LYS:O	28:D6:38:ARG:NH1	2.21	0.73
21:C9:49:ASP:HB3	21:C9:53:TRP:HB3	1.69	0.73
36:1:1949:G:OP1	55:M9:104:ARG:NH1	2.21	0.73
1:2:328:A:N3	10:S8:86:SER:OG	2.22	0.73
11:S9:168:ARG:HD3	11:S9:174:ARG:HD2	5.45	0.73
1:6:1294:G:O6	86:6:2067:OHX:N5	2.21	0.73
36:1:1659:U:O2	36:1:1790:G:N1	2.19	0.73
64:N8:6:THR:HG22	64:N8:9:ARG:HG2	1.71	0.73
20:C8:27:LYS:O	20:C8:31:ALA:N	2.70	0.73
36:1:2535:A:H61	36:1:2544:U:H3	1.37	0.73
64:N8:88:ASP:HA	64:N8:91:LEU:HB2	3.35	0.73
28:D6:87:ARG:NH2	28:D6:91:ASP:O	3.15	0.73
17:C5:129:GLY:HA3	35:SM:74:LYS:HD2	6.40	0.73
1:2:149:C:O2'	8:S6:132:ARG:NH1	2.22	0.73
1:2:770:A:OP2	86:2:2138:OHX:N6	2.21	0.73
15:C3:93:LYS:HG3	15:C3:150:VAL:HG11	1.69	0.73
36:5:1564:U:H2'	36:5:1565:G:C8	2.24	0.73
43:L6:56:LYS:NZ	43:L6:98:VAL:O	3.46	0.73
1:2:1330:G:N1	5:S3:204:ASP:OD1	2.20	0.72
41:L4:205:PRO:HG2	41:L4:225:VAL:HG13	1.70	0.72
16:C4:13:VAL:HG13	16:C4:77:THR:H	1.54	0.72
56:N0:42:TRP:NE1	56:N0:58:ILE:HD11	2.47	0.72
23:D1:60:ARG:HA	23:D1:65:SER:HB2	2.24	0.72
42:L5:22:ARG:HA	42:L5:25:GLU:HG3	3.47	0.72
55:M9:27:ASN:O	86:M9:203:OHX:N6	2.22	0.72
36:5:1541:G:OP2	86:5:4087:OHX:N4	2.22	0.72
36:5:1665:C:O2	36:5:1784:G:N2	2.20	0.72
52:M6:27:LEU:HD22	52:M6:101:ARG:HB2	1.83	0.72
20:C8:135:GLY:HA3	1:6:1559:A:H5''	365.60	0.72
41:L4:4:PRO:HG2	41:L4:22:LEU:HD12	4.15	0.72
1:2:1429:G:H1'	22:D0:74:GLU:HG2	1.72	0.72
36:1:31:C:OP2	51:M5:188:ARG:NH2	2.22	0.72
50:M4:24:LYS:HE2	50:M4:25:LYS:HE2	1.69	0.72
36:1:516:A:O3'	44:L7:60:ARG:NH2	2.23	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:O7:72:ARG:NH1	38:8:95:G:OP2	52.13	0.72
40:L3:232:ARG:NH1	40:L3:269:GLN:O	2.27	0.72
74:O8:24:THR:HG23	74:O8:44:LYS:HB2	1.89	0.72
1:2:1002:G:N1	1:2:1761:U:OP1	2.21	0.72
38:8:74:U:O2	86:8:221:OHX:N5	2.23	0.72
37:3:27:A:O5'	42:L5:57:ASN:ND2	2.22	0.72
2:S0:119:ARG:HE	4:S2:240:LEU:HD23	3.17	0.72
28:D6:36:ILE:HD12	28:D6:36:ILE:H	5.57	0.72
11:S9:146:PHE:HZ	1:6:765:G:N1	430.38	0.72
36:1:2179:C:O3'	39:L2:174:ARG:NH2	2.21	0.72
41:L4:170:LYS:HG2	41:L4:175:HIS:HB2	3.51	0.72
72:O6:4:LYS:O	72:O6:16:LYS:NZ	3.44	0.72
13:C1:6:THR:O	13:C1:8:GLN:N	2.23	0.72
36:1:860:G:OP1	79:Q3:17:ARG:NH1	2.22	0.72
7:S5:110:ALA:HA	7:S5:113:ILE:HD12	1.71	0.72
1:2:730:G:H21	1:2:731:C:H5''	1.53	0.72
66:O0:30:THR:HG22	66:O0:91:SER:HB2	3.32	0.72
39:L2:40:TYR:HA	39:L2:91:GLY:HA3	1.70	0.72
6:S4:102:VAL:HG23	6:S4:182:TYR:HE1	1.53	0.72
59:N3:54:LEU:HD21	59:N3:119:GLY:HA3	2.89	0.72
1:2:1726:G:N7	86:2:2099:OHX:N4	2.38	0.72
36:1:1103:A:OP2	36:1:1103:A:H4'	1.88	0.72
36:1:3066:U:O4	86:1:4135:OHX:N5	2.22	0.72
36:1:544:C:H1'	36:1:548:G:H22	1.53	0.72
36:1:1015:U:O2'	36:1:1017:C:OP2	2.07	0.72
36:1:1565:G:N2	36:1:1574:C:N3	2.37	0.72
36:1:191:U:H2'	36:1:192:C:C6	2.25	0.72
3:S1:111:ARG:HG3	28:D6:68:TYR:HB2	1.71	0.72
36:5:409:A:OP2	86:5:4096:OHX:N3	2.23	0.72
49:M3:47:ALA:HB1	49:M3:48:PRO:HD2	1.74	0.72
36:1:438:A:OP1	68:O2:118:LYS:NZ	2.23	0.72
11:S9:23:ARG:NH1	11:S9:27:GLU:OE2	2.22	0.72
36:5:3274:A:H3'	36:5:3275:U:C5'	2.16	0.72
69:O3:59:VAL:O	69:O3:61:GLY:N	2.79	0.72
40:L3:83:PRO:O	40:L3:165:GLN:NE2	3.43	0.72
27:D5:60:VAL:HG22	27:D5:101:TYR:HB2	1.72	0.72
57:N1:13:TYR:O	86:5:3904:OHX:N4	260.83	0.72
36:5:1565:G:N1	36:5:1574:C:N3	2.38	0.72
36:5:2841:G:OP2	86:5:4132:OHX:N1	2.23	0.72
18:C6:47:LYS:HZ1	18:C6:114:ARG:HH21	1.38	0.72
64:N8:77:LYS:O	64:N8:79:TRP:N	2.46	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1331:A:OP1	19:C7:45:ARG:NH2	2.23	0.72
37:3:17:A:OP1	42:L5:2:ALA:N	2.23	0.72
13:C1:21:ASN:N	13:C1:21:ASN:OD1	2.98	0.72
1:6:230:C:N3	1:6:235:G:N2	2.37	0.72
59:N3:125:LEU:HB3	59:N3:126:TRP:CD1	2.25	0.72
46:L9:9:GLN:HG2	46:L9:52:LEU:HD21	1.72	0.72
26:D4:47:VAL:O	26:D4:49:LYS:NZ	2.19	0.72
36:1:977:C:OP1	54:M8:141:ARG:NH2	2.23	0.72
36:5:2372:A:H5''	36:5:2373:A:H5'	1.72	0.72
66:O0:57:GLU:OE1	66:O0:69:TYR:OH	2.82	0.72
10:S8:23:LYS:NZ	1:6:391:A:OP2	304.85	0.72
26:D4:29:HIS:O	26:D4:31:ASN:N	3.78	0.72
36:1:2169:G:O6	86:1:3913:OHX:N4	2.23	0.72
6:S4:151:ASP:OD1	8:S6:215:ARG:NH1	3.72	0.72
36:5:1555:U:O4	36:5:1557:A:N6	2.18	0.72
22:D0:30:LYS:HD3	22:D0:33:GLN:HE21	1.53	0.72
1:6:218:A:H2'	1:6:219:A:H5''	1.72	0.72
1:6:1767:G:OP1	1:6:1770:U:H4'	1.90	0.72
1:2:583:C:OP1	86:2:2026:OHX:N3	2.23	0.71
1:2:452:A:OP2	86:2:2038:OHX:N5	2.23	0.71
16:C4:50:ALA:O	16:C4:52:ARG:N	2.22	0.71
36:1:3070:A:OP1	55:M9:62:ARG:NH2	2.22	0.71
8:S6:20:ASP:HB3	8:S6:23:ARG:HB2	1.71	0.71
34:SR:160:GLU:O	34:SR:162:ALA:N	2.20	0.71
35:SM:26:VAL:HG11	48:M1:49:LYS:HE3	1.73	0.71
36:5:980:A:H2'	36:5:981:U:C2	2.24	0.71
86:5:3936:OHX:N5	86:5:4228:OHX:N6	2.38	0.71
36:1:1934:G:N7	86:1:3886:OHX:N2	2.37	0.71
69:O3:72:THR:HG23	69:O3:83:ALA:HA	1.70	0.71
16:C4:66:ASP:O	16:C4:69:ALA:N	3.42	0.71
39:L2:214:GLY:O	39:L2:215:ASN:HB2	4.56	0.71
72:O6:30:LYS:NZ	36:5:317:A:OP2	102.41	0.71
12:C0:15:LEU:HD13	12:C0:21:VAL:HG23	1.71	0.71
22:D0:51:VAL:HG13	22:D0:94:GLU:HB2	1.72	0.71
1:2:1035:G:OP1	15:C3:2:GLY:N	2.24	0.71
26:D4:34:ASN:ND2	1:6:521:A:N3	424.90	0.71
53:M7:48:LEU:HD22	53:M7:88:VAL:HG13	3.08	0.71
1:2:1230:A:H2'	1:2:1258:U:H5	1.53	0.71
8:S6:163:THR:HG22	8:S6:168:THR:HG22	1.70	0.71
36:1:2572:C:O2'	36:1:2573:G:O4'	2.07	0.71
10:S8:184:LEU:HB3	10:S8:189:LEU:HB2	1.72	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1297:G:N2	1:6:1300:A:OP2	2.24	0.71
47:M0:81:GLY:O	47:M0:83:ASP:N	2.73	0.71
36:1:1015:U:O4	36:1:1035:G:N1	2.16	0.71
18:C6:127:LYS:HA	18:C6:134:ALA:HA	1.71	0.71
40:L3:2:SER:N	36:5:2943:G:N7	236.00	0.71
36:1:1492:G:O3'	75:O9:48:LYS:NZ	2.23	0.71
36:1:1158:A:OP2	44:L7:90:LYS:NZ	2.22	0.71
36:5:3053:G:O6	86:5:4167:OHX:N6	2.23	0.71
1:2:1745:G:O6	86:2:2086:OHX:N6	2.23	0.71
1:2:1584:G:H5''	18:C6:122:ARG:HG2	1.72	0.71
37:3:112:G:OP2	86:3:221:OHX:N1	2.23	0.71
51:M5:9:GLU:OE2	51:M5:13:LYS:NZ	2.21	0.71
1:2:1680:G:O6	86:2:2110:OHX:N5	2.23	0.71
1:2:1460:A:C8	17:C5:128:HIS:HB3	2.26	0.71
22:D0:20:ILE:HD13	22:D0:22:ILE:HD13	1.72	0.71
6:S4:129:VAL:HB	6:S4:139:VAL:HG12	1.72	0.71
10:S8:18:ARG:NH1	1:6:105:A:OP1	304.78	0.71
20:C8:82:PRO:O	20:C8:84:TRP:N	2.23	0.71
34:SR:238:ASP:OD1	34:SR:238:ASP:N	2.24	0.71
3:S1:146:GLN:HB3	3:S1:149:GLN:HE21	1.55	0.71
36:1:2296:A:OP1	86:1:4147:OHX:N2	2.24	0.71
36:1:2314:U:O2'	36:1:2315:G:OP1	2.09	0.71
54:M8:158:HIS:H	54:M8:186:VAL:CG1	2.03	0.71
22:D0:80:GLU:OE1	31:D9:44:ARG:NH1	2.23	0.71
16:C4:125:SER:OG	16:C4:126:THR:N	2.73	0.71
7:S5:163:SER:HB2	30:D8:48:VAL:HG23	1.73	0.71
36:1:956:U:OP1	86:1:4125:OHX:N1	2.22	0.71
36:1:1134:G:O2'	36:1:2642:A:N3	2.22	0.71
25:D3:68:ILE:O	25:D3:70:LYS:NZ	2.22	0.71
25:D3:93:LEU:HD21	32:E0:8:LEU:HD13	1.72	0.71
36:5:2667:A:O2'	36:5:2691:A:OP1	2.07	0.71
1:6:1561:U:H2'	1:6:1562:G:H8	1.53	0.71
75:O9:24:PRO:HB2	75:O9:27:ILE:HD12	2.56	0.71
27:D5:60:VAL:HG13	27:D5:101:TYR:HB2	3.27	0.71
2:S0:150:ASP:OD1	2:S0:165:ARG:NH2	2.23	0.71
1:6:1282:U:OP1	86:6:2135:OHX:N4	2.23	0.71
40:L3:188:ILE:HD12	40:L3:188:ILE:H	3.24	0.71
42:L5:265:TYR:OH	37:7:121:U:OP2	311.89	0.71
36:1:1238:C:N4	36:1:1245:A:OP2	2.23	0.71
41:L4:311:HIS:NE2	41:L4:314:LYS:HA	2.05	0.71
72:O6:28:TYR:O	86:5:4184:OHX:N2	104.26	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:49:ASN:HA	19:C7:109:LEU:HD21	3.34	0.71
36:1:1095:U:H4'	36:1:1096:U:H5'	1.73	0.71
56:N0:50:LYS:NZ	37:7:76:A:O2'	301.64	0.71
6:S4:105:VAL:HG22	6:S4:243:GLY:HA2	1.73	0.71
63:N7:57:HIS:CD2	63:N7:65:ARG:HH12	4.53	0.71
54:M8:122:ILE:HG23	54:M8:126:GLN:HB2	1.89	0.71
36:5:1650:G:N7	86:5:4176:OHX:N3	2.39	0.71
1:2:1041:G:H2'	1:2:1042:G:C8	2.25	0.71
36:5:2603:G:O6	86:5:3898:OHX:N1	2.23	0.71
38:4:79:A:H2'	38:4:80:A:H1'	1.71	0.71
1:6:1203:A:OP2	86:6:2128:OHX:N1	2.23	0.71
1:2:1738:U:O4	86:2:2041:OHX:N4	2.24	0.71
40:L3:266:ARG:NH2	36:5:2392:C:O2'	208.87	0.71
56:N0:70:THR:O	56:N0:70:THR:OG1	3.21	0.71
49:M3:76:THR:HG22	49:M3:101:ARG:HB3	1.71	0.71
17:C5:22:LEU:HA	17:C5:25:LEU:HD12	1.85	0.71
2:S0:55:GLU:HG2	23:D1:79:LEU:HD22	3.10	0.71
1:2:1761:U:O2'	1:2:1762:A:OP2	2.07	0.71
52:M6:110:PRO:O	52:M6:113:ASP:N	4.87	0.71
1:2:800:U:H2'	1:2:801:G:H8	1.55	0.71
10:S8:11:ARG:NH1	10:S8:15:GLY:O	2.23	0.71
39:L2:40:TYR:N	36:5:2550:U:O4	213.68	0.71
27:D5:88:ILE:HA	27:D5:104:ALA:HB2	1.72	0.71
3:S1:175:GLU:OE2	3:S1:187:LYS:NZ	4.79	0.71
9:S7:131:PHE:O	9:S7:133:THR:N	2.24	0.71
36:1:1362:G:H4'	44:L7:159:GLN:O	1.90	0.71
46:L9:9:GLN:HG2	46:L9:54:LYS:HG2	4.11	0.71
7:S5:225:ARG:NH2	30:D8:58:GLU:HB2	5.71	0.71
36:1:3085:G:OP2	86:1:3888:OHX:N2	2.23	0.71
51:M5:90:ASN:ND2	36:5:2424:A:OP1	166.21	0.71
20:C8:52:VAL:HG21	20:C8:69:ILE:HD11	1.72	0.71
20:C8:91:ASP:HB3	20:C8:95:GLY:H	1.55	0.71
36:1:2108:C:O2'	36:1:3362:A:N6	2.24	0.70
38:4:95:G:OP2	73:O7:72:ARG:NH1	2.24	0.70
1:2:68:A:H5'	8:S6:160:ARG:HH12	1.54	0.70
5:S3:70:THR:HG23	5:S3:86:LEU:HB2	2.08	0.70
46:L9:49:ASN:ND2	46:L9:51:GLN:H	1.89	0.70
41:L4:34:ILE:O	41:L4:38:VAL:HG23	1.92	0.70
55:M9:62:ARG:NH2	36:5:3068:U:OP2	172.71	0.70
34:SR:42:LEU:HD21	34:SR:82:SER:HB3	1.76	0.70
15:C3:132:VAL:HG23	15:C3:134:VAL:HG13	2.73	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:53:ILE:HA	4:S2:56:ILE:HG13	1.73	0.70
45:L8:94:PHE:HB3	45:L8:189:LEU:HD21	2.40	0.70
1:6:1765:A:OP2	86:6:2124:OHX:N4	2.24	0.70
61:N5:48:SER:OG	61:N5:49:LYS:N	3.65	0.70
12:C0:53:GLY:O	12:C0:55:VAL:N	2.23	0.70
20:C8:13:HIS:HA	20:C8:24:GLY:HA3	2.47	0.70
1:6:1700:C:O2'	1:6:1701:A:OP1	2.08	0.70
57:N1:118:GLU:OE1	57:N1:122:GLN:NE2	9.58	0.70
50:M4:16:GLU:HB3	56:N0:149:LYS:HB3	2.70	0.70
7:S5:205:SER:HG	7:S5:207:THR:HG1	3.87	0.70
11:S9:110:GLN:NE2	11:S9:126:ARG:HG2	2.79	0.70
42:L5:158:ARG:HB2	37:7:46:A:OP1	278.50	0.70
51:M5:173:GLY:O	51:M5:183:THR:OG1	2.90	0.70
64:N8:3:SER:OG	36:5:1430:U:O4	139.75	0.70
7:S5:61:TYR:OH	30:D8:52:ASP:OD1	3.38	0.70
62:N6:112:ASP:H	62:N6:115:ARG:HB2	1.75	0.70
9:S7:50:ASP:HA	9:S7:56:LYS:HA	1.74	0.70
1:6:564:G:O6	86:6:2152:OHX:N5	2.24	0.70
36:5:2369:G:OP2	86:5:3902:OHX:N5	2.24	0.70
15:C3:36:GLN:HG3	15:C3:39:LYS:HD2	8.88	0.70
74:O8:32:ASN:HD21	74:O8:36:LYS:H	1.38	0.70
48:M1:109:HIS:CD2	48:M1:114:ILE:HG21	2.79	0.70
50:M4:135:LEU:HD11	52:M6:178:VAL:HG22	1.73	0.70
41:L4:82:THR:HG23	41:L4:84:ARG:H	2.01	0.70
7:S5:97:LEU:O	7:S5:99:MET:N	3.15	0.70
1:6:991:G:OP2	86:6:2170:OHX:N2	2.25	0.70
1:2:885:G:OP1	3:S1:136:ARG:NH1	2.24	0.70
41:L4:38:VAL:O	41:L4:42:VAL:HG23	1.91	0.70
10:S8:50:GLY:HA2	1:6:397:A:O3'	314.82	0.70
1:2:1584:G:C8	18:C6:122:ARG:HB3	2.27	0.70
1:6:1699:G:H22	1:6:1701:A:H3'	1.56	0.70
13:C1:14:GLN:HB3	13:C1:54:ILE:HG13	3.89	0.70
59:N3:48:ARG:HG3	59:N3:48:ARG:HH11	1.74	0.70
45:L8:156:ASP:OD2	45:L8:156:ASP:N	2.19	0.70
1:2:823:G:H2'	1:2:824:G:C8	2.26	0.70
3:S1:123:ALA:HB2	3:S1:165:ARG:HG2	2.53	0.70
22:D0:58:LEU:HD12	22:D0:88:LYS:HD2	2.08	0.70
36:1:2433:U:H1'	51:M5:125:SER:HB3	1.73	0.70
36:1:2239:G:O6	86:1:3946:OHX:N5	2.25	0.70
36:1:530:G:N7	86:1:3921:OHX:N6	2.39	0.70
1:2:1435:G:N7	12:C0:25:LYS:NZ	2.38	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:O1:79:ARG:HE	67:O1:79:ARG:H	1.40	0.70
41:L4:157:GLU:HG2	41:L4:209:TYR:HB2	1.74	0.70
36:5:2249:G:OP1	86:5:4193:OHX:N6	2.24	0.70
1:2:491:C:N3	1:2:496:G:N2	2.37	0.70
72:O6:25:LYS:HB2	72:O6:28:TYR:HD2	1.57	0.70
36:1:1723:A:OP2	55:M9:103:ARG:NH2	2.23	0.70
4:S2:140:ARG:HH22	4:S2:228:ASN:HD21	1.38	0.70
19:C7:6:THR:HG23	19:C7:9:VAL:HG23	1.74	0.70
36:5:1393:A:N3	36:5:1419:A:O2'	2.24	0.70
2:S0:126:PRO:HB2	2:S0:152:PRO:HG2	2.46	0.70
36:5:22:G:H1'	38:8:104:A:N3	2.07	0.70
39:L2:147:ARG:HH12	39:L2:155:LYS:HD3	6.11	0.70
36:5:2444:C:H42	36:5:2503:G:H1	1.40	0.70
36:1:2683:U:H2'	36:1:2684:C:C6	2.27	0.70
36:5:2258:U:OP2	86:5:3942:OHX:N4	2.24	0.70
36:5:1194:G:OP1	86:5:4008:OHX:N6	2.25	0.70
31:D9:24:CYS:HB3	31:D9:42:CYS:SG	2.96	0.70
43:L6:31:ARG:HD3	69:O3:106:ASN:ND2	2.07	0.70
67:O1:44:MET:HB3	67:O1:77:ARG:HD3	1.74	0.70
62:N6:47:ALA:O	62:N6:122:LYS:NZ	2.70	0.70
20:C8:91:ASP:OD1	20:C8:92:ILE:N	3.09	0.70
10:S8:75:LYS:NZ	1:6:259:U:OP1	271.12	0.70
13:C1:2:SER:HB2	13:C1:82:ARG:H	1.56	0.70
46:L9:90:MET:HE1	46:L9:179:ILE:HG22	1.73	0.70
36:1:944:C:H4'	68:O2:33:ARG:NH1	2.06	0.70
1:6:833:U:O4	86:6:2099:OHX:N2	2.25	0.70
40:L3:229:VAL:HG11	40:L3:249:VAL:HG12	5.75	0.70
49:M3:58:VAL:HG13	36:5:75:G:H5''	87.52	0.70
10:S8:34:ALA:HB2	10:S8:56:ARG:HD3	2.94	0.70
1:2:1239:U:O4	86:2:2047:OHX:N2	2.24	0.70
1:2:1433:G:C8	31:D9:41:GLN:HG2	2.26	0.70
40:L3:105:VAL:HG21	40:L3:148:LEU:HD13	1.73	0.70
40:L3:299:ASP:OD1	40:L3:301:THR:OG1	2.32	0.70
1:6:578:U:O2	86:6:2152:OHX:N3	2.25	0.70
33:E1:144:CYS:HB3	33:E1:147:VAL:HG13	1.73	0.70
36:1:3338:C:O2	36:1:3366:G:N2	2.21	0.70
36:1:239:G:O2'	36:1:240:U:OP1	2.09	0.70
66:O0:103:THR:O	66:O0:105:ALA:N	3.18	0.70
64:N8:131:SER:HB3	64:N8:134:ALA:HB2	1.99	0.70
76:Q0:125:LYS:NZ	36:5:2898:G:O6	328.39	0.70
41:L4:89:ALA:O	41:L4:91:GLY:N	2.25	0.70

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1369:U:OP1	21:C9:119:LYS:NZ	2.25	0.69
1:2:197:A:H61	10:S8:138:ASN:HD22	1.40	0.69
1:2:1773:C:H2'	1:2:1774:G:C8	2.26	0.69
36:5:1236:G:N2	36:5:1244:A:OP1	2.25	0.69
53:M7:69:ARG:HG3	53:M7:79:THR:HG23	5.73	0.69
1:2:1173:C:OP1	20:C8:132:ARG:NH1	2.23	0.69
13:C1:109:VAL:HG12	13:C1:137:PHE:HB2	4.25	0.69
42:L5:85:ARG:NH1	42:L5:86:TYR:OH	2.25	0.69
19:C7:8:THR:HG21	1:6:1330:G:H21	419.22	0.69
1:2:930:A:OP1	28:D6:32:LYS:NZ	2.25	0.69
1:2:992:A:H2	1:2:1012:U:H3	1.39	0.69
8:S6:67:VAL:HG21	8:S6:99:GLY:HA2	2.00	0.69
2:S0:175:TYR:HE1	2:S0:197:ILE:HG22	1.56	0.69
36:1:3195:U:O2'	36:1:3197:G:N2	2.26	0.69
36:1:1207:G:N7	86:1:4063:OHX:N2	2.40	0.69
1:2:1290:U:H2'	1:2:1291:G:C8	2.28	0.69
17:C5:126:VAL:HG13	17:C5:127:ARG:H	1.56	0.69
1:6:486:G:O6	1:6:488:G:N2	2.25	0.69
1:6:1696:G:H2'	1:6:1698:G:O6	1.91	0.69
36:5:1066:G:OP1	86:5:4222:OHX:N2	2.25	0.69
36:5:1414:G:O6	86:5:4141:OHX:N1	2.25	0.69
36:1:1878:G:OP1	86:1:3928:OHX:N4	2.25	0.69
1:6:363:G:OP1	86:6:2110:OHX:N1	2.25	0.69
10:S8:185:GLU:HG2	13:C1:23:PRO:HG3	1.74	0.69
41:L4:300:ARG:HH11	41:L4:300:ARG:HG2	3.54	0.69
27:D5:49:ARG:O	27:D5:53:GLU:HB2	2.24	0.69
16:C4:123:SER:HB2	1:6:885:G:H21	286.96	0.69
26:D4:35:VAL:HG13	26:D4:36:SER:H	1.56	0.69
1:2:851:U:H2'	1:2:852:C:C6	2.28	0.69
34:SR:216:LYS:HA	34:SR:239:GLU:HG3	1.74	0.69
8:S6:137:ARG:NH2	1:6:169:A:OP2	318.43	0.69
56:N0:79:VAL:HG21	56:N0:106:LEU:HD21	1.74	0.69
34:SR:159:ASN:O	34:SR:161:LYS:N	4.29	0.69
63:N7:27:LYS:HB3	63:N7:42:LEU:HB2	2.57	0.69
39:L2:97:ASN:HA	79:Q3:87:ARG:HH12	4.35	0.69
35:SM:23:LYS:HE3	35:SM:24:GLU:H	6.69	0.69
23:D1:28:ASP:HB3	23:D1:31:SER:HB3	4.12	0.69
19:C7:104:ASN:O	19:C7:106:THR:N	3.46	0.69
1:2:1015:U:OP1	86:2:2045:OHX:N3	2.25	0.69
36:5:2236:G:OP1	86:5:4242:OHX:N3	2.24	0.69
24:D2:15:ASN:ND2	24:D2:72:CYS:O	2.75	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:656:G:O2'	1:2:657:U:O4'	2.10	0.69
36:1:684:G:OP2	49:M3:28:GLN:NE2	2.25	0.69
15:C3:12:SER:OG	1:6:956:C:OP2	334.71	0.69
36:1:829:U:H3	36:1:895:A:H62	1.40	0.69
36:5:1129:A:N6	36:5:2864:A:O2'	2.24	0.69
31:D9:20:GLN:HG3	31:D9:25:SER:HA	2.56	0.69
1:2:918:U:H2'	1:2:919:A:C8	2.27	0.69
1:6:1280:C:H2'	1:6:1281:G:C8	2.26	0.69
28:D6:58:VAL:HG22	28:D6:59:TYR:H	3.30	0.69
42:L5:64:ILE:HD12	42:L5:109:THR:HG21	1.74	0.69
17:C5:98:ASN:ND2	17:C5:121:ILE:O	2.25	0.69
46:L9:163:GLN:OE1	46:L9:166:ARG:NH1	3.31	0.69
66:O0:99:ASP:N	66:O0:99:ASP:OD2	2.26	0.69
1:2:1665:U:O4	86:2:2136:OHX:N4	2.25	0.69
36:1:2123:G:N7	86:1:4198:OHX:N2	2.41	0.69
1:6:76:A:H3'	86:6:2192:OHX:N1	2.07	0.69
1:2:1796:C:H5	28:D6:6:ALA:H	1.41	0.69
1:2:1592:A:H2'	1:2:1593:A:H8	1.57	0.69
44:L7:158:LYS:HD2	44:L7:159:GLN:H	3.81	0.69
26:D4:14:SER:HB2	26:D4:21:LYS:HE3	1.73	0.69
86:2:2036:OHX:N2	10:S8:17:LYS:O	2.26	0.69
45:L8:101:THR:HG23	45:L8:104:GLU:H	1.57	0.69
38:8:42:G:O6	38:8:102:U:N3	2.19	0.69
3:S1:191:GLU:HB2	3:S1:194:ASN:HB2	1.73	0.69
53:M7:122:ALA:HB3	53:M7:143:PRO:HB2	1.75	0.69
8:S6:155:ASP:OD1	86:S6:301:OHX:N2	2.25	0.69
44:L7:80:GLN:OE1	57:N1:136:ARG:HB2	2.56	0.69
17:C5:87:PRO:HA	17:C5:90:ILE:HG13	1.75	0.69
20:C8:120:ARG:NH2	35:SM:58:GLU:OE1	2.24	0.69
36:5:1586:G:OP1	86:5:3984:OHX:N3	2.25	0.69
7:S5:123:VAL:O	27:D5:58:ARG:NH1	2.26	0.69
67:O1:83:GLU:OE2	86:O1:201:OHX:N4	2.26	0.69
36:1:1233:G:H1	36:1:1255:C:H42	1.39	0.69
6:S4:49:ARG:NH1	1:6:448:C:OP2	378.83	0.69
1:6:837:G:O6	86:6:2099:OHX:N1	2.26	0.69
34:SR:161:LYS:O	34:SR:161:LYS:HG2	1.92	0.69
44:L7:219:LYS:HE2	36:5:1169:A:H4'	249.37	0.69
55:M9:4:LEU:HA	55:M9:7:GLN:HE21	5.62	0.69
1:2:9:U:O4	86:2:2155:OHX:N6	2.26	0.69
1:6:1650:U:H2'	1:6:1651:A:C8	2.28	0.69
54:M8:30:VAL:O	54:M8:34:THR:HG23	2.00	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:O6:45:ARG:NH2	72:O6:54:GLU:OE1	2.26	0.69
1:6:770:A:OP2	86:6:2136:OHX:N3	2.26	0.69
63:N7:26:VAL:HG21	63:N7:96:VAL:HB	1.75	0.69
1:6:915:A:OP1	86:6:2069:OHX:N6	2.26	0.69
44:L7:25:GLN:HG2	44:L7:29:GLU:HB2	1.75	0.69
20:C8:88:ARG:NH1	20:C8:112:ASP:OD1	2.25	0.69
36:5:3165:A:N6	36:5:3285:C:H42	1.88	0.69
78:Q2:50:PHE:O	86:Q2:502:OHX:N1	3.75	0.69
43:L6:78:ARG:NH1	36:5:3272:C:OP2	246.78	0.69
1:6:340:U:H2'	1:6:341:A:C8	2.28	0.69
66:O0:24:THR:HG22	66:O0:93:LEU:HD11	2.60	0.69
36:1:1363:A:OP2	86:1:4045:OHX:N6	2.26	0.69
51:M5:80:THR:HG21	51:M5:87:GLN:HA	1.73	0.69
26:D4:104:SER:HB3	26:D4:107:GLN:HG3	1.75	0.69
47:M0:66:GLU:OE1	47:M0:69:ARG:NH2	2.34	0.69
11:S9:163:PRO:O	11:S9:165:GLY:N	2.26	0.69
56:N0:137:ARG:HG2	56:N0:139:TYR:CZ	2.51	0.69
40:L3:50:LYS:HE2	40:L3:328:ILE:HG22	4.23	0.69
73:O7:45:ARG:NH2	36:5:361:A:O3'	123.80	0.69
20:C8:145:ARG:HG3	35:SM:68:ARG:HH22	4.03	0.69
41:L4:73:ARG:NH2	36:5:2814:G:OP1	171.87	0.69
2:S0:183:ARG:NH2	2:S0:191:ARG:O	2.25	0.69
19:C7:14:LYS:NZ	19:C7:18:GLU:OE2	2.25	0.69
78:Q2:3:ASN:HA	78:Q2:92:GLU:O	1.92	0.69
40:L3:43:LEU:HG	40:L3:181:ILE:HG21	2.59	0.69
20:C8:42:TYR:HE2	20:C8:73:MET:HG3	4.39	0.69
36:5:2123:G:N7	86:5:4093:OHX:N1	2.40	0.69
1:2:887:A:H1'	16:C4:122:PRO:HB3	1.75	0.69
46:L9:20:ILE:HG12	46:L9:25:VAL:HG22	5.20	0.69
62:N6:50:ILE:HD13	62:N6:51:ARG:H	4.32	0.68
18:C6:22:VAL:HG13	18:C6:65:ILE:HG12	1.75	0.68
2:S0:74:VAL:HG23	2:S0:118:PRO:HB3	2.33	0.68
39:L2:204:MET:HB2	39:L2:208:ASP:HB2	1.73	0.68
10:S8:2:GLY:N	1:6:393:C:OP2	291.94	0.68
1:2:237:C:H5''	1:2:238:U:H5'	1.74	0.68
29:D7:59:CYS:O	29:D7:61:THR:N	2.84	0.68
4:S2:116:LYS:HG2	4:S2:127:ALA:HB3	2.33	0.68
1:2:1160:A:H2'	1:2:1161:C:C6	2.28	0.68
4:S2:108:ASN:O	4:S2:108:ASN:ND2	3.96	0.68
59:N3:87:ARG:HH22	59:N3:137:VAL:CG2	2.05	0.68
18:C6:22:VAL:HG22	18:C6:65:ILE:HG23	2.47	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:151:ASP:HB3	6:S4:154:ILE:HG13	1.75	0.68
1:6:1698:G:N2	1:6:1699:G:N7	2.40	0.68
78:Q2:41:ARG:NH1	36:5:284:A:OP2	156.17	0.68
71:O5:95:PHE:CD2	36:5:136:G:H5'	63.23	0.68
40:L3:293:ASN:HB2	40:L3:304:THR:HA	1.74	0.68
74:O8:23:ALA:HB2	74:O8:73:LEU:HD21	1.73	0.68
58:N2:19:VAL:O	58:N2:23:THR:OG1	2.34	0.68
51:M5:49:ARG:HH11	51:M5:49:ARG:HB2	1.58	0.68
41:L4:327:LEU:HA	44:L7:166:ASN:HD21	1.58	0.68
7:S5:56:ALA:O	7:S5:58:LEU:N	3.60	0.68
66:O0:54:SER:HB3	70:O4:94:LEU:HD13	1.75	0.68
36:1:1674:G:OP2	86:1:3948:OHX:N2	2.26	0.68
25:D3:69:ARG:NH1	25:D3:116:ASP:OD1	2.26	0.68
25:D3:107:PHE:CD2	25:D3:114:LYS:HB2	2.28	0.68
1:2:1535:U:O2'	1:2:1536:G:N3	2.25	0.68
70:O4:66:SER:OG	36:5:1643:A:OP1	168.05	0.68
10:S8:136:SER:HB3	10:S8:139:ALA:HB3	1.75	0.68
1:6:194:U:O2	1:6:195:G:O2'	2.11	0.68
11:S9:102:GLU:HA	11:S9:105:LEU:HB2	2.21	0.68
20:C8:41:ARG:HD3	1:6:1565:C:OP1	369.28	0.68
1:6:833:U:O4	86:6:2099:OHX:N5	2.27	0.68
1:6:1600:A:H4'	1:6:1601:G:OP1	1.92	0.68
20:C8:125:ILE:HG12	35:SM:61:ILE:HG23	1.75	0.68
70:O4:9:ARG:NH2	36:5:1606:U:O4	140.21	0.68
58:N2:59:ASP:O	58:N2:61:THR:N	2.25	0.68
27:D5:37:GLN:N	27:D5:70:LYS:HZ3	10.68	0.68
10:S8:57:ALA:HB2	10:S8:177:GLY:HA2	1.89	0.68
36:1:917:A:OP2	86:1:4143:OHX:N2	2.27	0.68
13:C1:33:ARG:NH2	13:C1:51:GLY:O	3.38	0.68
34:SR:64:HIS:CE1	34:SR:84:SER:HB3	2.92	0.68
5:S3:75:LYS:HB3	12:C0:22:VAL:HG22	2.44	0.68
49:M3:56:PRO:HG3	49:M3:74:GLY:O	1.94	0.68
1:2:1533:C:H4'	1:2:1539:G:N1	2.08	0.68
36:1:2971:A:N3	36:1:2971:A:H3'	2.08	0.68
68:O2:97:ALA:HB3	68:O2:100:ILE:HG12	1.85	0.68
36:1:2828:G:OP1	47:M0:7:ARG:NH1	2.27	0.68
39:L2:116:VAL:HG13	39:L2:126:LEU:HB2	2.63	0.68
63:N7:51:LEU:HB3	63:N7:65:ARG:HH11	1.57	0.68
1:2:1539:G:H8	1:2:1539:G:H5'	1.58	0.68
24:D2:55:ASP:O	24:D2:57:ARG:N	2.90	0.68
11:S9:178:ALA:HA	11:S9:181:ALA:HB3	3.81	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1471:A:OP1	7:S5:185:ARG:NH1	2.26	0.68
36:1:3103:A:OP2	86:1:4167:OHX:N1	2.27	0.68
1:6:350:U:H5''	1:6:352:A:H5'	1.76	0.68
1:2:475:A:OP2	11:S9:126:ARG:NH1	2.26	0.68
40:L3:165:GLN:HB3	40:L3:168:LYS:HG3	3.48	0.68
21:C9:57:ARG:NH1	1:6:1479:A:OP1	392.46	0.68
86:5:3936:OHX:N2	86:5:4228:OHX:N4	2.42	0.68
73:O7:19:CYS:O	73:O7:23:GLY:N	2.23	0.68
1:6:1649:G:N7	86:6:2108:OHX:N2	2.41	0.68
10:S8:163:GLY:HA3	36:1:3354:U:H1'	1.75	0.68
86:1:4205:OHX:N4	38:4:16:G:OP1	2.27	0.68
36:1:2206:G:H1	36:1:2237:C:H42	1.39	0.68
7:S5:80:LYS:HB2	7:S5:83:ARG:HD3	3.83	0.68
36:1:582:G:O6	86:1:4172:OHX:N2	2.27	0.68
36:1:2526:C:OP1	39:L2:38:HIS:HE1	1.77	0.68
36:1:1387:G:OP1	86:1:4156:OHX:N6	2.27	0.68
17:C5:18:ARG:HH21	17:C5:38:PRO:HD3	1.96	0.68
36:5:3279:A:H2'	36:5:3280:U:H5'	1.76	0.68
10:S8:10:LYS:NZ	1:6:339:C:OP2	283.21	0.68
1:2:1795:U:N3	28:D6:9:GLY:O	2.27	0.68
41:L4:354:VAL:O	41:L4:358:THR:HG23	2.89	0.68
79:Q3:4:ARG:NH1	36:5:837:A:OP2	237.71	0.68
34:SR:42:LEU:HB2	34:SR:61:PHE:HB2	2.23	0.68
36:5:1898:G:OP2	86:5:3939:OHX:N5	2.27	0.68
52:M6:73:PHE:CG	52:M6:78:ARG:HG2	2.29	0.68
36:5:3035:A:OP2	86:5:4046:OHX:N5	2.27	0.68
37:7:91:G:H2'	37:7:92:A:H8	1.59	0.68
46:L9:122:LYS:HD3	46:L9:123:ILE:N	5.00	0.68
36:5:191:U:H2'	36:5:192:C:C6	2.29	0.68
53:M7:29:THR:HA	53:M7:32:THR:HG23	1.76	0.68
86:1:3959:OHX:N6	44:L7:217:PRO:O	2.26	0.68
3:S1:142:PHE:O	3:S1:207:LEU:HA	2.23	0.68
36:1:3246:G:O6	86:1:4107:OHX:N4	2.27	0.68
36:5:1526:U:OP1	36:5:1527:C:N4	2.24	0.68
36:1:3148:U:O4	86:1:4109:OHX:N2	2.27	0.68
47:M0:153:ARG:HG2	47:M0:156:ARG:NH2	4.72	0.68
74:O8:10:GLN:HA	74:O8:13:GLU:HG3	1.75	0.68
54:M8:89:ASP:OD1	54:M8:90:ASP:N	2.27	0.68
54:M8:64:VAL:HG22	54:M8:96:PHE:CE2	2.28	0.68
52:M6:12:LYS:O	56:N0:167:ARG:NH2	2.23	0.68
36:1:3344:A:H2	36:1:3361:G:H21	1.42	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1712:G:N2	36:1:1731:A:OP2	2.24	0.67
44:L7:88:ARG:HD2	44:L7:90:LYS:O	2.05	0.67
7:S5:225:ARG:NH1	30:D8:58:GLU:OE1	5.80	0.67
52:M6:12:LYS:HA	52:M6:40:GLU:O	2.14	0.67
77:Q1:21:ARG:NH1	1:6:1654:G:OP1	281.56	0.67
6:S4:141:THR:O	6:S4:144:GLY:N	2.26	0.67
15:C3:76:LYS:HA	15:C3:81:ALA:HB2	1.76	0.67
1:2:1595:U:H3	1:2:1600:A:H2	1.41	0.67
45:L8:144:GLU:OE1	72:O6:36:ARG:NH2	2.23	0.67
1:6:463:U:OP1	86:6:2204:OHX:N1	2.27	0.67
48:M1:81:GLU:OE2	48:M1:89:TYR:OH	2.98	0.67
1:6:263:C:H4'	1:6:292:U:H5'	1.75	0.67
3:S1:62:LYS:O	3:S1:64:ARG:N	2.27	0.67
36:1:314:U:H2'	36:1:315:C:C6	2.29	0.67
33:E1:126:CYS:HB3	33:E1:143:LYS:HG2	1.74	0.67
11:S9:171:ARG:CZ	11:S9:174:ARG:HD3	4.61	0.67
9:S7:118:LEU:N	1:6:639:U:OP1	366.14	0.67
15:C3:65:VAL:O	15:C3:67:THR:N	3.25	0.67
3:S1:157:GLN:O	3:S1:159:SER:N	2.26	0.67
77:Q1:8:LYS:HD3	77:Q1:12:ARG:NH2	2.48	0.67
28:D6:57:SER:OG	28:D6:58:VAL:O	4.80	0.67
19:C7:5:ARG:HB2	19:C7:10:LYS:HE2	1.89	0.67
36:5:118:U:O2	36:5:121:A:H5'	1.95	0.67
86:5:3936:OHX:N5	86:5:4228:OHX:N3	2.42	0.67
36:5:1070:U:O4	86:5:4105:OHX:N6	2.26	0.67
36:5:1523:U:OP2	36:5:1604:G:O2'	2.11	0.67
74:O8:16:ARG:O	74:O8:18:ALA:N	2.96	0.67
6:S4:251:GLU:O	6:S4:255:ARG:HG2	3.44	0.67
46:L9:70:THR:HG21	36:5:3122:A:N1	323.92	0.67
65:N9:58:LYS:HA	65:N9:58:LYS:NZ	3.39	0.67
36:5:1581:C:OP2	36:5:1581:C:H4'	1.94	0.67
1:6:947:U:H2'	1:6:948:G:C8	2.29	0.67
36:1:2310:U:OP1	86:1:4139:OHX:N2	2.27	0.67
36:1:824:C:H5''	39:L2:21:ARG:HD3	1.77	0.67
36:1:2736:A:OP1	57:N1:92:ARG:NH1	2.27	0.67
4:S2:89:GLN:HG3	4:S2:94:GLN:HA	4.11	0.67
39:L2:3:ARG:HG2	39:L2:4:VAL:H	1.58	0.67
67:O1:82:GLU:OE2	86:O1:201:OHX:N2	2.28	0.67
1:6:1595:U:H3	1:6:1600:A:H2	1.41	0.67
86:5:3984:OHX:N4	38:8:112:U:O2	2.26	0.67
52:M6:78:ARG:NH1	52:M6:78:ARG:HG3	2.55	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:40:ASN:ND2	3:S1:42:ASN:O	2.27	0.67
36:5:2732:G:OP2	86:5:4213:OHX:N1	2.27	0.67
4:S2:102:VAL:HG11	4:S2:129:ILE:HG12	1.76	0.67
42:L5:285:ARG:NH1	37:7:62:U:O3'	340.24	0.67
55:M9:76:SER:O	55:M9:81:ARG:NH1	2.26	0.67
1:6:826:U:O4	86:6:2064:OHX:N3	2.28	0.67
1:2:427:C:O2'	1:2:459:G:N3	2.26	0.67
28:D6:10:ARG:HD3	28:D6:34:LYS:HA	2.50	0.67
2:S0:118:PRO:HG2	2:S0:141:ILE:HD13	2.56	0.67
36:1:2683:U:H2'	36:1:2684:C:H6	1.57	0.67
13:C1:3:THR:HA	13:C1:81:HIS:NE2	2.10	0.67
9:S7:99:LEU:HB2	9:S7:112:ARG:HD2	3.46	0.67
1:6:145:A:O2'	1:6:146:U:OP1	2.10	0.67
36:1:770:G:OP1	49:M3:171:ARG:HD2	1.94	0.67
36:5:3327:G:O6	86:5:3951:OHX:N1	2.27	0.67
6:S4:176:ASP:N	6:S4:176:ASP:OD2	3.09	0.67
39:L2:211:HIS:O	39:L2:213:GLY:N	3.84	0.67
1:2:1338:C:H1'	1:2:1410:A:C4	2.29	0.67
52:M6:138:LEU:HD12	52:M6:141:LEU:HD23	2.47	0.67
36:5:2964:G:N7	86:5:3975:OHX:N6	2.42	0.67
1:2:1518:C:OP1	86:2:2121:OHX:N5	2.27	0.67
36:1:2854:U:OP2	47:M0:3:ARG:NH2	2.28	0.67
36:1:300:G:O6	86:1:4150:OHX:N1	2.27	0.67
7:S5:204:GLY:O	7:S5:206:SER:N	3.99	0.67
6:S4:139:VAL:HG13	6:S4:150:PRO:HG3	1.77	0.67
1:2:356:G:OP2	86:2:2036:OHX:N6	2.27	0.67
21:C9:15:ILE:HD13	21:C9:60:SER:HA	2.19	0.67
5:S3:27:ARG:HB3	12:C0:58:GLN:HE22	1.59	0.67
36:5:1025:A:H3'	36:5:1026:A:H4'	1.75	0.67
36:1:1633:C:H2'	36:1:1634:G:H8	1.60	0.67
51:M5:150:TRP:HZ3	51:M5:156:HIS:CD2	3.70	0.67
7:S5:161:ASP:OD2	30:D8:42:ARG:NH1	4.05	0.67
11:S9:8:TYR:O	86:6:2177:OHX:N4	383.14	0.67
27:D5:44:GLN:HA	27:D5:47:TYR:HB3	2.93	0.67
1:6:500:C:O2'	1:6:501:U:O4'	2.12	0.67
36:1:3122:A:N1	46:L9:70:THR:HG21	2.10	0.67
53:M7:138:LYS:HD2	53:M7:140:GLU:OE1	1.95	0.67
40:L3:194:TRP:O	40:L3:198:HIS:ND1	2.27	0.67
1:2:1274:C:H5	35:SM:96:ARG:H	1.40	0.67
6:S4:117:GLU:O	6:S4:119:ALA:N	3.24	0.67
36:1:742:G:N7	86:1:3975:OHX:N1	2.42	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:72:THR:H	13:C1:88:ARG:HH11	2.69	0.67
36:5:1170:A:OP2	86:5:3996:OHX:N6	2.28	0.67
50:M4:13:ARG:NH1	50:M4:65:LEU:O	2.70	0.67
4:S2:111:VAL:O	4:S2:137:ILE:HG22	3.22	0.67
22:D0:106:ILE:HG13	22:D0:107:THR:H	1.58	0.67
18:C6:82:ARG:NH1	18:C6:114:ARG:O	2.83	0.67
39:L2:20:THR:HA	39:L2:23:ARG:HD2	1.75	0.67
79:Q3:56:THR:HG22	79:Q3:63:THR:OG1	1.95	0.67
40:L3:383:LEU:N	40:L3:386:ASP:OD2	2.22	0.67
56:N0:98:SER:HB2	56:N0:101:ALA:H	1.60	0.67
1:2:416:A:H4'	1:2:417:A:OP2	1.94	0.67
36:5:3269:U:O2	36:5:3271:G:N1	2.27	0.67
67:O1:8:VAL:HG12	67:O1:9:THR:H	3.86	0.67
36:1:73:C:C4	72:O6:15:LYS:HD3	2.29	0.67
79:Q3:49:ARG:CD	79:Q3:50:GLY:H	2.18	0.67
7:S5:23:VAL:O	7:S5:34:GLN:NE2	2.57	0.67
36:5:2526:C:H1'	36:5:2588:U:H5''	1.77	0.67
52:M6:110:PRO:O	52:M6:112:TYR:N	3.02	0.67
36:1:73:C:N3	49:M3:59:ARG:NH1	2.42	0.67
1:6:1508:U:O4	86:6:2053:OHX:N4	2.28	0.67
54:M8:170:ARG:O	54:M8:171:LYS:HB2	2.09	0.67
1:6:938:G:N7	86:6:2104:OHX:N3	2.42	0.67
36:5:1301:A:OP1	36:5:1301:A:H8	1.77	0.67
16:C4:29:HIS:HB3	16:C4:41:ARG:HG3	1.76	0.67
1:6:1726:G:N7	86:6:2145:OHX:N5	2.43	0.67
20:C8:94:ASP:OD2	20:C8:96:LYS:N	2.82	0.67
41:L4:300:ARG:O	54:M8:39:ARG:NH1	2.28	0.67
31:D9:44:ARG:HH22	1:6:1280:C:H5'	399.60	0.67
56:N0:71:LYS:HG2	56:N0:73:LYS:HD3	4.33	0.67
36:1:1662:G:O6	86:1:3887:OHX:N2	2.26	0.67
1:2:820:U:H2'	1:2:821:U:H4'	1.77	0.67
24:D2:83:ILE:HG12	24:D2:117:ARG:HH12	1.60	0.67
4:S2:159:THR:HG21	1:6:1097:U:O3'	382.91	0.67
86:5:3936:OHX:N1	86:5:4228:OHX:N4	2.43	0.67
36:1:2573:G:O6	86:1:3998:OHX:N3	2.27	0.67
46:L9:90:MET:HB2	46:L9:144:ILE:HG22	1.77	0.67
36:5:136:G:H2'	36:5:137:G:H8	1.59	0.67
1:2:1201:G:N2	1:2:1600:A:H5''	2.10	0.67
55:M9:18:GLY:HA3	36:5:1874:A:H5''	136.22	0.67
1:6:176:C:OP1	86:6:2094:OHX:N6	2.28	0.67
55:M9:180:LYS:HA	55:M9:183:ALA:HB3	1.77	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:166:ALA:HB1	64:N8:147:LEU:HD21	2.13	0.67
36:1:1413:G:N7	86:1:4122:OHX:N4	2.43	0.67
74:O8:42:LYS:HG2	74:O8:55:VAL:HG13	2.72	0.67
47:M0:116:ARG:HH21	36:5:2618:G:H5'	228.15	0.67
1:2:463:U:H2'	1:2:464:A:H8	1.60	0.67
36:5:155:G:H5''	36:5:156:G:C8	2.31	0.66
2:S0:157:ASP:OD2	23:D1:60:ARG:NH2	2.27	0.66
19:C7:108:ASP:HA	19:C7:111:LYS:HD2	5.72	0.66
77:Q1:8:LYS:O	77:Q1:12:ARG:HG3	2.37	0.66
51:M5:27:VAL:HB	51:M5:122:ASN:ND2	2.10	0.66
40:L3:204:ALA:O	40:L3:207:SER:OG	2.60	0.66
36:5:3350:C:N4	36:5:3353:G:O6	2.19	0.66
37:7:41:G:O6	86:7:227:OHX:N2	2.27	0.66
34:SR:76:ASP:OD1	34:SR:76:ASP:N	2.18	0.66
1:6:1542:G:N2	1:6:1569:A:OP2	2.26	0.66
40:L3:146:ARG:NE	40:L3:146:ARG:HA	2.11	0.66
36:5:3341:U:H5''	36:5:3342:A:OP2	1.95	0.66
2:S0:126:PRO:HG2	2:S0:152:PRO:HD2	2.19	0.66
52:M6:78:ARG:HH11	52:M6:78:ARG:HG3	2.25	0.66
1:2:639:U:OP1	9:S7:117:THR:OG1	2.11	0.66
57:N1:57:TYR:OH	36:5:2724:U:OP1	222.75	0.66
36:1:368:G:OP1	86:1:3885:OHX:N1	2.28	0.66
2:S0:41:ARG:HH11	2:S0:45:VAL:HG21	3.35	0.66
43:L6:7:PRO:HD3	68:O2:74:PHE:HE1	3.48	0.66
36:1:768:C:OP1	49:M3:186:ARG:NH2	2.28	0.66
63:N7:14:VAL:HG22	70:O4:86:LYS:HG2	2.84	0.66
24:D2:37:PHE:CE2	24:D2:103:ILE:HD11	3.96	0.66
36:5:1613:A:H2'	36:5:1614:C:C6	2.29	0.66
36:1:283:G:OP1	78:Q2:45:ARG:NH2	2.28	0.66
1:2:1564:U:H2'	1:2:1565:C:C6	2.31	0.66
22:D0:105:GLN:HA	22:D0:108:ILE:HD13	7.98	0.66
50:M4:38:ILE:HD11	56:N0:150:PHE:HE2	1.59	0.66
68:O2:33:ARG:NH1	36:5:944:C:H4'	161.64	0.66
1:6:75:U:O2'	1:6:76:A:O5'	2.10	0.66
34:SR:52:GLN:HG2	34:SR:53:LYS:H	2.13	0.66
36:5:604:G:N7	86:5:4162:OHX:N2	2.43	0.66
6:S4:160:VAL:HG12	6:S4:162:ILE:HG12	1.75	0.66
52:M6:182:ASN:OD1	52:M6:186:ALA:HB2	6.15	0.66
39:L2:143:GLU:O	39:L2:145:LYS:N	2.28	0.66
3:S1:147:ALA:O	3:S1:148:ASN:ND2	2.25	0.66
31:D9:15:GLY:O	31:D9:17:GLY:N	3.22	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:24:LEU:O	2:S0:163:ASN:ND2	2.28	0.66
3:S1:141:ALA:HB1	3:S1:207:LEU:HD22	3.83	0.66
64:N8:6:THR:HG23	64:N8:8:THR:H	1.60	0.66
36:1:2940:A:N7	40:L3:2:SER:N	2.43	0.66
17:C5:86:VAL:HG22	17:C5:88:GLU:H	1.60	0.66
1:2:638:U:H1'	9:S7:112:ARG:HH12	1.60	0.66
36:5:1346:G:H1	36:5:1358:C:H42	1.41	0.66
36:5:1765:U:OP1	36:5:1765:U:H4'	1.94	0.66
36:1:2579:G:O6	86:1:3927:OHX:N2	2.28	0.66
11:S9:52:ILE:HD13	11:S9:76:LEU:HD11	3.55	0.66
1:2:1067:C:H2'	1:2:1068:C:H6	1.60	0.66
36:1:2202:C:O2'	39:L2:240:ALA:O	2.09	0.66
50:M4:14:LEU:H	50:M4:19:ARG:NH1	2.43	0.66
51:M5:96:ARG:HD2	36:5:31:C:H4'	124.07	0.66
1:2:734:A:H5''	1:2:735:C:OP1	1.94	0.66
1:2:1773:C:H2'	1:2:1774:G:H8	1.61	0.66
1:2:399:A:OP1	10:S8:49:ARG:NH2	2.27	0.66
36:1:1310:G:O6	86:1:4028:OHX:N1	2.29	0.66
49:M3:73:ARG:NH2	36:5:77:A:N7	79.70	0.66
45:L8:41:GLN:HG3	45:L8:44:ARG:HH12	1.58	0.66
44:L7:121:LYS:HB2	57:N1:133:ALA:HB3	2.39	0.66
36:5:953:G:H2'	36:5:1117:G:H5''	1.76	0.66
1:2:377:G:O6	86:2:2078:OHX:N5	2.29	0.66
1:2:385:A:OP1	10:S8:25:ARG:NH1	2.26	0.66
1:2:1588:G:H1	1:2:1608:U:H3	1.42	0.66
7:S5:33:VAL:HG13	7:S5:37:GLN:HE22	2.57	0.66
17:C5:122:THR:HG21	1:6:1455:G:OP1	368.51	0.66
56:N0:170:THR:HG1	36:5:3185:U:HO2'	304.65	0.66
46:L9:171:ASP:OD1	46:L9:173:ARG:HD3	1.95	0.66
1:6:463:U:H2'	1:6:464:A:C8	2.31	0.66
1:2:463:U:H2'	1:2:464:A:C8	2.31	0.66
55:M9:35:ALA:O	55:M9:37:SER:N	4.06	0.66
1:2:1622:G:H2'	1:2:1623:C:C6	2.31	0.66
42:L5:164:LYS:HD2	42:L5:199:ILE:HD11	1.77	0.66
62:N6:81:GLN:NE2	62:N6:98:ASN:OD1	2.28	0.66
28:D6:44:ILE:HD12	28:D6:44:ILE:H	1.59	0.66
59:N3:87:ARG:HH12	59:N3:137:VAL:HG11	2.59	0.66
72:O6:25:LYS:HB2	72:O6:28:TYR:CD2	2.30	0.66
6:S4:166:SER:OG	6:S4:167:GLY:N	2.28	0.66
64:N8:3:SER:O	64:N8:6:THR:HG22	2.66	0.66
1:2:703:G:H2'	1:2:704:C:H5'	1.76	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:M0:177:ASP:O	47:M0:180:GLU:N	3.04	0.66
1:2:116:U:H2'	1:2:117:U:C6	2.30	0.66
44:L7:100:ARG:NH2	54:M8:4:ASP:OD1	2.45	0.66
15:C3:119:GLU:O	15:C3:123:HIS:ND1	3.00	0.66
25:D3:71:CYS:HB3	25:D3:86:PHE:HA	1.78	0.66
36:1:3131:U:H2'	36:1:3132:C:H6	1.60	0.66
42:L5:54:ARG:NH1	42:L5:147:ASP:O	2.28	0.66
4:S2:139:ILE:HD12	4:S2:191:ALA:HB1	1.78	0.66
11:S9:109:LEU:HD22	11:S9:113:VAL:HG23	1.76	0.66
56:N0:96:ASP:OD1	56:N0:97:VAL:N	2.55	0.66
2:S0:110:TYR:HA	2:S0:115:PHE:CD1	2.86	0.66
1:2:1230:A:H2'	1:2:1258:U:C5	2.31	0.66
66:O0:40:LYS:HB3	66:O0:101:LEU:HD21	1.77	0.66
36:5:3279:A:C2'	36:5:3280:U:H5'	2.26	0.66
4:S2:80:VAL:HA	4:S2:102:VAL:HG22	1.78	0.66
19:C7:60:ARG:NH1	1:6:1401:A:OP1	411.38	0.66
1:2:649:U:O2'	1:2:650:U:O5'	2.13	0.66
49:M3:159:VAL:HB	64:N8:96:LYS:HG2	1.77	0.66
16:C4:102:LEU:HD13	28:D6:53:LEU:HD21	5.24	0.66
36:1:2278:C:OP1	86:1:3958:OHX:N3	2.29	0.66
38:4:137:C:OP2	86:4:232:OHX:N5	2.28	0.66
53:M7:16:SER:HB2	53:M7:149:VAL:HG22	2.31	0.66
36:1:528:U:H2'	36:1:529:A:C8	2.30	0.66
75:O9:10:LYS:HA	75:O9:13:MET:HE3	1.77	0.66
36:1:729:C:H2'	36:1:730:C:H6	1.61	0.66
36:5:2209:U:O4	86:5:3955:OHX:N4	2.29	0.66
36:1:2503:G:H1'	36:1:2504:U:H5	1.61	0.66
62:N6:3:LYS:HG3	62:N6:8:VAL:HG13	1.78	0.66
5:S3:105:MET:HA	5:S3:108:LYS:HB2	1.78	0.66
55:M9:103:ARG:HD2	55:M9:124:TYR:CE1	2.30	0.66
41:L4:128:ALA:HB1	41:L4:134:LEU:HD12	1.78	0.66
41:L4:36:HIS:O	41:L4:40:THR:HG23	1.96	0.66
1:2:1681:A:H1'	8:S6:66:GLY:HA3	1.78	0.66
46:L9:171:ASP:OD2	46:L9:173:ARG:NH1	2.29	0.66
47:M0:161:GLY:O	47:M0:163:GLN:NE2	3.67	0.66
14:C2:124:LYS:O	14:C2:126:TRP:N	2.28	0.66
1:6:1524:A:H2'	1:6:1525:A:C8	2.31	0.66
74:O8:66:ILE:HA	74:O8:69:LEU:HD23	1.77	0.66
54:M8:25:TYR:HA	54:M8:28:LEU:HD12	2.21	0.66
49:M3:133:PRO:O	49:M3:135:ALA:N	3.30	0.66
1:2:1588:G:OP1	86:2:2117:OHX:N3	2.29	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:135:GLN:CD	54:M8:135:GLN:H	2.25	0.66
42:L5:22:ARG:NH2	42:L5:28:THR:OG1	2.28	0.66
19:C7:104:ASN:ND2	19:C7:105:GLN:OE1	5.41	0.66
39:L2:114:SER:HB2	39:L2:169:ILE:HD12	1.77	0.66
47:M0:21:ARG:NH2	47:M0:22:TYR:OH	2.29	0.66
46:L9:188:THR:HG22	46:L9:189:GLU:H	4.41	0.66
1:6:357:G:OP2	86:6:2073:OHX:N6	2.29	0.66
36:5:2953:U:H2'	36:5:2954:U:H2'	1.76	0.66
36:1:162:G:N2	36:1:259:C:O2	2.29	0.66
55:M9:90:PRO:HB2	55:M9:93:VAL:HG23	1.77	0.66
28:D6:38:ARG:NH2	28:D6:83:ILE:HG21	2.10	0.65
48:M1:15:GLU:HB3	48:M1:130:VAL:HG22	2.74	0.65
45:L8:100:GLU:OE2	45:L8:108:ARG:NH1	2.86	0.65
41:L4:282:SER:HB3	54:M8:126:GLN:HE21	1.61	0.65
1:2:1600:A:H4'	1:2:1601:G:OP1	1.96	0.65
10:S8:79:ALA:HB3	10:S8:103:GLN:HB3	1.78	0.65
66:O0:9:SER:OG	66:O0:10:ILE:N	2.42	0.65
18:C6:40:GLU:HA	18:C6:42:GLU:N	2.11	0.65
61:N5:108:LEU:HD23	61:N5:127:THR:HG22	3.44	0.65
28:D6:40:ALA:HB3	28:D6:69:ASN:HB3	4.54	0.65
36:5:3078:U:O2'	86:5:4190:OHX:N1	2.28	0.65
36:5:1688:U:H2'	36:5:1689:U:C6	2.32	0.65
1:6:1585:U:H2'	1:6:1586:A:H8	1.60	0.65
49:M3:89:TYR:CE1	49:M3:93:ILE:HG13	2.31	0.65
37:7:3:U:H2'	37:7:4:U:H6	1.59	0.65
23:D1:17:CYS:HB2	23:D1:56:SER:HB3	1.77	0.65
1:6:755:A:HO2'	1:6:756:A:H8	1.41	0.65
33:E1:144:CYS:O	33:E1:146:SER:N	2.58	0.65
1:6:73:U:H2'	1:6:74:U:C6	2.31	0.65
4:S2:132:ALA:O	4:S2:135:SER:OG	2.47	0.65
56:N0:98:SER:HB2	56:N0:100:VAL:HG12	1.77	0.65
7:S5:143:ARG:NH1	7:S5:218:GLU:OE1	2.28	0.65
1:6:1057:U:O2'	1:6:1059:U:OP1	2.12	0.65
36:5:1103:A:H3'	36:5:1104:G:H5'	1.78	0.65
64:N8:34:MET:HB2	36:5:95:A:H5''	163.06	0.65
66:O0:22:LYS:HB2	66:O0:94:GLU:HB2	1.95	0.65
47:M0:81:GLY:C	47:M0:83:ASP:H	2.52	0.65
64:N8:47:LYS:HE2	64:N8:48:TYR:CZ	2.31	0.65
1:6:542:A:O2'	1:6:543:C:O5'	2.14	0.65
42:L5:151:GLN:NE2	37:7:45:A:OP1	280.49	0.65
64:N8:6:THR:HG23	64:N8:8:THR:HG23	1.79	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:M7:52:LEU:HD13	53:M7:88:VAL:HG11	1.77	0.65
1:2:399:A:H4'	6:S4:3:ARG:HG2	1.78	0.65
25:D3:62:LYS:HD2	25:D3:118:PRO:HB3	1.77	0.65
15:C3:63:ALA:O	15:C3:67:THR:OG1	2.51	0.65
42:L5:233:ALA:O	42:L5:235:SER:N	2.30	0.65
36:1:1454:A:OP2	86:1:4207:OHX:N6	2.29	0.65
6:S4:146:THR:HG21	1:6:123:G:H21	342.17	0.65
39:L2:242:ARG:HH12	39:L2:246:LEU:HD12	4.28	0.65
36:5:2998:U:O4	86:5:4136:OHX:N4	2.30	0.65
1:2:280:U:O2'	1:2:281:G:OP2	2.13	0.65
11:S9:149:ARG:HG3	1:6:765:G:O6	432.24	0.65
53:M7:25:SER:CB	53:M7:28:ASN:HB2	2.64	0.65
3:S1:181:LEU:HD13	3:S1:181:LEU:H	1.61	0.65
1:2:1459:C:N4	20:C8:139:LYS:HE2	2.11	0.65
9:S7:56:LYS:HB2	9:S7:88:ARG:HH11	2.09	0.65
40:L3:232:ARG:HG2	40:L3:233:TRP:CD1	2.67	0.65
36:5:3364:C:OP1	86:5:3936:OHX:N1	2.29	0.65
36:1:1933:A:OP2	86:1:3886:OHX:N6	2.28	0.65
1:2:802:G:H21	24:D2:107:SER:HB3	1.62	0.65
2:S0:13:ASP:HA	2:S0:16:LEU:HD12	1.77	0.65
18:C6:42:GLU:HA	18:C6:45:ARG:HB2	1.78	0.65
12:C0:29:GLN:NE2	12:C0:31:LYS:O	4.94	0.65
36:1:807:A:H61	36:1:934:G:H22	1.44	0.65
34:SR:157:VAL:HB	34:SR:168:THR:HG22	3.26	0.65
36:1:1815:U:O2'	36:1:1816:A:OP2	2.13	0.65
9:S7:30:SER:HB2	9:S7:34:LEU:HB2	2.16	0.65
42:L5:111:GLN:HE22	42:L5:252:ALA:HB2	3.20	0.65
70:O4:8:ARG:HB2	70:O4:34:HIS:NE2	2.12	0.65
38:4:83:C:H42	62:N6:52:ARG:NH2	1.94	0.65
53:M7:25:SER:O	53:M7:29:THR:HG23	1.97	0.65
5:S3:164:VAL:HG13	5:S3:168:ILE:HD11	1.78	0.65
41:L4:120:TYR:CE2	41:L4:277:PRO:HB3	2.31	0.65
63:N7:52:LYS:O	63:N7:65:ARG:NH1	2.29	0.65
8:S6:57:ASP:HA	8:S6:106:LEU:HA	1.79	0.65
36:1:2356:A:H61	36:1:2983:C:H5	1.45	0.65
31:D9:15:GLY:O	31:D9:18:SER:OG	2.13	0.65
65:N9:3:LYS:HD3	36:5:2617:U:H3'	224.53	0.65
26:D4:120:GLY:O	26:D4:122:GLY:N	3.83	0.65
62:N6:87:LYS:HB2	62:N6:97:ILE:HD11	4.26	0.65
25:D3:92:CYS:HA	25:D3:95:PHE:CD2	2.31	0.65
63:N7:48:ARG:HB3	63:N7:69:LYS:HB3	2.27	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1297:G:N2	1:2:1300:A:OP2	2.29	0.65
46:L9:50:ASN:ND2	50:M4:4:ASP:OD1	5.79	0.65
28:D6:10:ARG:HB2	28:D6:34:LYS:HA	2.53	0.65
36:1:3107:U:OP1	76:Q0:114:LYS:NZ	2.25	0.65
6:S4:121:TYR:OH	6:S4:235:TYR:O	2.66	0.65
36:5:408:A:N6	38:8:15:G:H1'	2.11	0.65
1:2:1248:C:H2'	1:2:1249:U:H6	1.62	0.65
54:M8:64:VAL:HG13	54:M8:93:ILE:HD11	1.78	0.65
42:L5:231:ILE:HG21	42:L5:239:ILE:HD11	1.78	0.65
36:1:670:C:OP1	54:M8:147:ARG:NH2	2.29	0.65
36:5:2568:C:N4	36:5:2574:G:O6	2.30	0.65
5:S3:194:LYS:O	5:S3:196:ARG:N	2.29	0.65
54:M8:16:ARG:HH12	54:M8:55:SER:HB3	1.61	0.65
22:D0:118:VAL:HG13	22:D0:119:ALA:H	2.70	0.65
28:D6:18:VAL:O	28:D6:19:LYS:HB2	1.97	0.65
6:S4:106:LYS:HG3	6:S4:108:ARG:HH11	1.62	0.65
50:M4:24:LYS:NZ	50:M4:61:GLY:O	2.28	0.65
36:5:410:U:O4	86:5:4096:OHX:N1	2.30	0.65
86:5:3936:OHX:N1	86:5:4228:OHX:N3	2.44	0.65
1:2:68:A:OP1	8:S6:160:ARG:NH2	2.28	0.65
1:2:283:U:H5''	8:S6:188:ARG:HD3	1.78	0.65
1:6:870:C:H42	1:6:957:G:H1	1.44	0.65
36:5:430:U:OP2	86:5:3976:OHX:N5	2.29	0.65
41:L4:264:SER:O	41:L4:266:THR:N	2.27	0.65
71:O5:68:GLN:HA	71:O5:71:LYS:HB2	1.78	0.65
43:L6:13:GLU:OE1	68:O2:90:LYS:HB2	2.21	0.65
14:C2:49:THR:O	14:C2:53:THR:OG1	4.19	0.65
42:L5:68:THR:HG22	42:L5:70:THR:H	1.62	0.65
49:M3:13:HIS:NE2	36:5:98:G:N7	138.94	0.65
51:M5:118:SER:HB3	51:M5:132:VAL:HG22	2.24	0.65
41:L4:269:SER:C	41:L4:271:LYS:H	2.00	0.65
40:L3:361:THR:HG22	40:L3:371:GLN:HB3	2.15	0.65
86:5:3936:OHX:N2	86:5:4228:OHX:N6	2.44	0.65
50:M4:38:ILE:HD11	56:N0:150:PHE:CE2	2.32	0.65
46:L9:91:ARG:NH2	46:L9:141:LYS:O	5.94	0.65
40:L3:150:ARG:HG2	40:L3:150:ARG:HH11	2.04	0.65
1:2:918:U:H2'	1:2:919:A:H8	1.60	0.65
65:N9:14:ARG:HH12	65:N9:18:ARG:HD3	3.77	0.65
39:L2:171:GLY:O	79:Q3:68:ALA:HB2	2.40	0.65
54:M8:120:GLU:OE2	54:M8:130:ARG:NH2	2.42	0.65
47:M0:208:ASN:HA	47:M0:211:ARG:HD2	2.00	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:17:C:H2'	1:2:18:C:C6	2.31	0.65
19:C7:13:SER:HA	19:C7:54:THR:HG22	3.31	0.65
40:L3:56:ILE:HD11	40:L3:359:ILE:HG12	1.78	0.65
1:6:1207:C:H42	1:6:1456:C:H5	1.45	0.65
36:5:3192:U:O4	86:5:4138:OHX:N6	2.29	0.65
52:M6:65:ASN:OD1	52:M6:67:THR:HB	2.02	0.65
1:2:321:C:H4'	1:2:322:G:OP2	1.96	0.65
1:6:845:G:H2'	1:6:846:G:H8	1.60	0.65
8:S6:98:ARG:NH2	8:S6:101:ILE:O	2.91	0.65
10:S8:36:THR:HG21	10:S8:173:PRO:HB2	1.88	0.65
36:5:1345:G:N7	86:5:4060:OHX:N5	2.44	0.65
9:S7:74:GLN:HE22	9:S7:92:PHE:HB2	1.62	0.65
36:1:3042:U:OP2	36:1:3092:C:N4	2.29	0.65
49:M3:128:ARG:NH1	71:O5:109:ILE:O	3.97	0.65
53:M7:139:TYR:CE2	36:5:2355:G:H4'	147.35	0.65
15:C3:136:PRO:O	15:C3:138:ASN:N	2.30	0.65
1:6:1645:G:H22	1:6:1756:A:H2	1.45	0.65
64:N8:82:ILE:HG22	64:N8:87:ARG:HG3	3.29	0.65
31:D9:5:ASN:OD1	31:D9:7:TRP:NE1	2.28	0.65
42:L5:107:ARG:O	42:L5:111:GLN:N	2.90	0.65
36:5:3164:C:H1'	36:5:3165:A:H5'	1.77	0.65
40:L3:76:VAL:HG12	40:L3:325:LYS:HA	1.78	0.65
36:1:1942:U:OP2	55:M9:74:ARG:NH1	2.30	0.65
86:1:3959:OHX:N3	44:L7:217:PRO:O	2.29	0.65
1:2:397:A:O3'	10:S8:50:GLY:HA2	1.97	0.65
63:N7:51:LEU:HB3	63:N7:65:ARG:NH1	2.12	0.65
20:C8:87:ASN:OD1	20:C8:88:ARG:N	2.30	0.65
1:2:123:G:H21	6:S4:146:THR:HG21	1.60	0.65
8:S6:78:THR:HG23	8:S6:92:ARG:HG2	1.79	0.65
57:N1:43:LYS:HG3	57:N1:58:GLN:HE22	1.61	0.65
74:O8:8:ILE:HD12	74:O8:8:ILE:H	1.76	0.65
1:6:453:U:O4	86:6:2060:OHX:N4	2.30	0.65
42:L5:270:LYS:HD3	37:7:22:A:N6	324.07	0.64
47:M0:4:ARG:NH2	47:M0:99:ILE:HG22	5.95	0.64
36:1:1722:U:H5''	55:M9:99:LEU:HD12	1.79	0.64
49:M3:74:GLY:O	49:M3:101:ARG:NH1	2.29	0.64
59:N3:2:SER:N	59:N3:56:ASP:OD1	4.17	0.64
25:D3:70:LYS:HB3	25:D3:93:LEU:HD22	1.77	0.64
34:SR:82:SER:OG	34:SR:92:TRP:NE1	2.76	0.64
36:1:3094:A:H2'	36:1:3095:U:C6	2.32	0.64
36:1:2703:A:OP2	42:L5:23:ARG:NH1	2.30	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:439:C:H3'	36:1:440:A:C8	2.32	0.64
36:1:2842:U:OP1	36:1:2844:C:N4	2.30	0.64
8:S6:56:ASN:H	8:S6:108:VAL:HG23	5.27	0.64
36:5:980:A:H2'	36:5:981:U:N1	2.11	0.64
68:O2:33:ARG:HH11	36:5:944:C:H4'	161.84	0.64
1:2:169:A:H5''	8:S6:176:GLN:HG2	1.78	0.64
36:5:1024:G:N2	36:5:1026:A:OP2	2.30	0.64
36:1:1508:C:OP1	53:M7:127:ARG:NH2	2.30	0.64
4:S2:153:SER:OG	4:S2:195:ASP:O	2.23	0.64
51:M5:8:GLU:HG3	51:M5:50:ARG:HH12	3.52	0.64
56:N0:26:ARG:HH11	57:N1:150:THR:HG21	2.34	0.64
36:5:3128:G:OP2	86:5:4153:OHX:N3	2.30	0.64
36:1:3074:G:OP1	86:1:4039:OHX:N1	2.30	0.64
36:5:2101:C:O2'	36:5:2102:U:OP1	2.15	0.64
36:5:549:U:O4	86:5:4007:OHX:N4	2.30	0.64
1:6:709:C:O2	1:6:730:G:N2	2.30	0.64
49:M3:105:ASN:OD1	49:M3:107:GLU:HG2	2.09	0.64
1:2:651:G:N7	86:2:2104:OHX:N6	2.45	0.64
1:6:1515:A:O2'	1:6:1517:U:OP2	2.11	0.64
36:1:223:U:O4	86:1:4195:OHX:N5	2.30	0.64
47:M0:86:HIS:HB3	47:M0:139:ARG:HG3	3.40	0.64
71:O5:76:GLN:O	71:O5:81:ARG:NH1	2.96	0.64
1:2:1524:A:N3	1:2:1590:G:O2'	2.28	0.64
51:M5:68:ARG:HD2	51:M5:128:LYS:HG2	4.88	0.64
37:3:49:G:O6	42:L5:58:LYS:NZ	2.18	0.64
1:6:1799:U:H4'	1:6:1800:A:H2'	1.80	0.64
36:1:1427:U:OP2	64:N8:4:ARG:NH2	2.30	0.64
41:L4:42:VAL:O	41:L4:44:LYS:N	3.50	0.64
39:L2:130:SER:HG	36:5:2179:C:HO2'	215.34	0.64
36:1:2697:A:H2'	36:1:2698:G:C8	2.31	0.64
22:D0:64:LYS:O	31:D9:33:LYS:NZ	2.82	0.64
34:SR:171:SER:OG	34:SR:181:TRP:NE1	3.22	0.64
45:L8:89:GLU:HA	45:L8:92:LYS:HD3	1.78	0.64
15:C3:22:ALA:HB1	15:C3:23:PRO:HA	2.39	0.64
36:5:1778:G:O2'	36:5:1780:G:OP2	2.13	0.64
16:C4:30:VAL:HG22	16:C4:39:ILE:HG13	1.78	0.64
36:1:1951:C:N4	36:1:2095:G:H1	1.91	0.64
62:N6:5:SER:HB3	62:N6:7:ASP:H	3.30	0.64
41:L4:145:ILE:HD11	41:L4:148:ILE:HG22	5.60	0.64
42:L5:56:THR:OG1	42:L5:59:ASP:HB3	1.97	0.64
1:2:739:G:O6	86:2:2097:OHX:N4	2.30	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2686:A:OP2	86:1:3901:OHX:N2	2.30	0.64
56:N0:12:ARG:HB3	56:N0:24:LEU:HD23	1.78	0.64
3:S1:92:GLN:O	3:S1:94:LYS:N	2.31	0.64
76:Q0:91:CYS:O	76:Q0:126:LYS:NZ	2.29	0.64
36:1:3329:U:H5''	40:L3:308:MET:HE3	1.78	0.64
36:1:2264:U:OP2	86:1:3986:OHX:N5	2.31	0.64
36:5:2437:G:H2'	36:5:2438:A:O4'	1.98	0.64
36:5:1317:A:OP1	86:5:4091:OHX:N1	2.31	0.64
36:5:3276:G:OP2	36:5:3276:G:H2'	1.97	0.64
1:2:1034:C:HO2'	24:D2:2:THR:N	1.95	0.64
23:D1:9:VAL:HG22	23:D1:10:GLU:H	1.94	0.64
41:L4:22:LEU:HD22	41:L4:23:PRO:HD2	1.79	0.64
36:1:75:G:H5''	49:M3:58:VAL:HG13	1.78	0.64
36:1:3174:A:H2'	36:1:3175:U:H5'	1.79	0.64
36:1:1946:A:H5''	55:M9:136:ARG:HH12	1.63	0.64
36:5:1611:G:H2'	36:5:1612:A:C8	2.32	0.64
58:N2:58:GLU:O	58:N2:60:GLY:N	2.30	0.64
36:5:1536:G:O6	86:5:3916:OHX:N2	2.31	0.64
36:5:2299:A:OP2	86:5:3953:OHX:N1	2.31	0.64
36:1:603:A:H2'	36:1:604:G:O4'	1.96	0.64
19:C7:57:LEU:O	19:C7:61:ILE:N	3.25	0.64
1:2:484:C:H42	1:2:503:G:H22	1.44	0.64
30:D8:36:THR:OG1	30:D8:37:SER:N	2.31	0.64
36:1:2376:G:H2'	36:1:2377:G:C8	2.33	0.64
36:1:2209:U:H6	36:1:2209:U:OP2	1.80	0.64
36:5:2514:U:H6	36:5:2514:U:OP1	1.81	0.64
36:1:1752:A:OP2	86:1:4048:OHX:N3	2.29	0.64
10:S8:8:ARG:NH2	10:S8:19:ALA:O	2.30	0.64
62:N6:107:THR:O	62:N6:108:LYS:HD3	2.56	0.64
86:5:4015:OHX:N5	86:5:4211:OHX:N1	2.45	0.64
47:M0:14:ASN:O	47:M0:128:ARG:NH2	2.31	0.64
2:S0:120:LEU:HD13	2:S0:142:PRO:HB2	1.80	0.64
3:S1:181:LEU:O	3:S1:185:THR:N	2.19	0.64
7:S5:222:LYS:HA	7:S5:225:ARG:HD2	3.95	0.64
20:C8:52:VAL:HG13	20:C8:61:LEU:HD21	2.37	0.64
2:S0:185:ARG:HB2	23:D1:45:ALA:HB3	1.80	0.64
36:1:2526:C:OP1	39:L2:38:HIS:CE1	2.50	0.64
65:N9:14:ARG:NH1	65:N9:18:ARG:HD3	3.98	0.64
46:L9:174:LYS:HB2	76:Q0:127:LEU:HD11	1.79	0.64
36:1:2744:U:OP1	86:1:4077:OHX:N1	2.31	0.64
1:6:372:G:OP2	86:6:2186:OHX:N6	2.30	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1366:U:O2'	21:C9:7:ARG:HD2	1.97	0.64
1:2:1570:A:OP1	86:2:2154:OHX:N5	2.30	0.64
36:5:1596:C:H2'	36:5:1597:C:C6	2.33	0.64
1:2:775:G:O6	26:D4:11:LYS:NZ	2.27	0.64
36:5:1877:U:OP2	86:5:3950:OHX:N1	2.31	0.64
36:5:300:G:O6	86:5:4186:OHX:N2	2.30	0.64
7:S5:43:PHE:CZ	7:S5:90:ILE:HG21	2.33	0.64
49:M3:157:ARG:HG2	49:M3:158:ALA:H	1.63	0.64
36:1:1278:A:O2'	36:1:1279:C:O5'	2.14	0.64
49:M3:177:LYS:HG3	72:O6:11:LEU:HD13	2.17	0.64
1:2:818:C:N4	1:2:819:G:O6	2.30	0.64
39:L2:227:ARG:NH2	36:5:2155:G:O2'	205.64	0.64
28:D6:50:VAL:O	28:D6:54:SER:N	2.96	0.64
34:SR:25:THR:OG1	34:SR:26:SER:N	3.04	0.64
3:S1:34:ALA:N	3:S1:41:ARG:O	2.25	0.64
37:3:60:G:H2'	37:3:61:G:C8	2.32	0.64
1:2:1776:A:H2'	1:2:1777:G:C8	2.32	0.64
36:1:1443:G:O6	86:1:3977:OHX:N3	2.29	0.64
54:M8:157:PRO:HA	54:M8:186:VAL:HG12	2.36	0.64
1:2:1430:U:O4'	22:D0:72:ASN:ND2	2.31	0.64
6:S4:57:ASN:HB2	6:S4:60:GLU:H	1.77	0.64
86:2:2032:OHX:N3	15:C3:12:SER:O	2.31	0.64
36:5:191:U:H2'	36:5:192:C:H6	1.62	0.64
74:O8:5:ILE:HD11	74:O8:10:GLN:HE22	1.63	0.64
36:5:1580:A:O2'	36:5:1581:C:OP2	2.15	0.64
13:C1:72:THR:H	13:C1:88:ARG:NH1	3.17	0.64
1:2:151:G:O6	26:D4:124:ARG:NH2	2.24	0.64
1:6:152:U:O2	1:6:163:G:N2	2.31	0.64
71:O5:45:LYS:NZ	38:8:49:G:OP1	47.36	0.64
62:N6:32:SER:HA	62:N6:49:PRO:HA	2.22	0.64
46:L9:105:GLU:HG3	46:L9:109:ALA:HB3	1.80	0.64
36:5:1638:A:N1	36:5:1736:G:O2'	2.27	0.64
17:C5:41:VAL:HG13	17:C5:84:ILE:HG21	1.80	0.64
55:M9:86:GLU:OE2	55:M9:91:SER:N	2.30	0.64
5:S3:115:ILE:HG21	35:SM:110:TRP:HA	1.78	0.64
42:L5:79:TYR:HB2	42:L5:81:HIS:CE1	2.33	0.64
36:1:2960:C:H2'	36:1:2961:G:C8	2.32	0.64
61:N5:64:GLU:HB2	61:N5:85:GLN:HG2	1.80	0.64
16:C4:84:ARG:HA	16:C4:119:THR:HG22	2.77	0.64
22:D0:89:ARG:NH2	1:6:1383:G:OP1	446.31	0.64
32:E0:18:THR:HG21	1:6:584:C:H1'	389.03	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:105:LEU:HD23	55:M9:135:LYS:HD2	6.79	0.64
20:C8:123:ARG:HG3	20:C8:133:VAL:HG21	1.79	0.64
1:6:1489:U:H6	1:6:1492:A:H2	1.45	0.64
36:1:822:G:H4'	39:L2:194:ASN:HB2	1.80	0.64
15:C3:94:LYS:HE3	1:6:952:A:H5''	298.65	0.64
42:L5:132:THR:HG21	42:L5:170:GLY:HA2	1.80	0.64
36:1:3152:U:O2'	36:1:3153:U:H5'	1.97	0.64
7:S5:64:VAL:HG13	7:S5:89:ILE:HD11	4.19	0.64
36:1:3039:C:OP1	40:L3:62:ARG:NH1	2.30	0.64
69:O3:18:ARG:HD3	36:5:1178:G:H5''	238.07	0.64
45:L8:241:LYS:HD3	36:5:2586:G:C8	183.63	0.64
53:M7:51:VAL:O	53:M7:54:HIS:N	2.31	0.64
36:1:2185:G:O2'	36:1:2314:U:OP2	2.14	0.64
38:4:79:A:O3'	38:4:80:A:H4'	1.98	0.64
26:D4:51:GLU:O	26:D4:51:GLU:HG2	3.26	0.64
36:5:3242:G:H5'	36:5:3245:A:H8	1.62	0.64
52:M6:158:ALA:O	52:M6:162:VAL:HG23	2.22	0.64
9:S7:13:PRO:HB3	9:S7:14:THR:HB	1.79	0.64
29:D7:62:ILE:HG13	29:D7:63:LEU:H	1.62	0.64
1:2:545:A:H4'	1:2:546:U:OP1	1.99	0.63
7:S5:51:VAL:HG22	7:S5:131:GLN:HB2	2.13	0.63
47:M0:174:THR:OG1	47:M0:175:ASN:N	2.96	0.63
5:S3:168:ILE:HD13	5:S3:187:LYS:HE3	1.91	0.63
21:C9:31:PRO:HG3	21:C9:103:LYS:HG2	1.78	0.63
36:1:3308:C:N3	53:M7:69:ARG:NH1	2.46	0.63
57:N1:54:HIS:CD2	36:5:2724:U:H4'	228.63	0.63
57:N1:17:ARG:O	57:N1:18:ASP:HB2	1.97	0.63
36:5:731:U:H2'	36:5:732:C:H6	1.63	0.63
36:5:2696:A:H2'	36:5:2697:A:C8	2.33	0.63
9:S7:28:GLU:HG2	9:S7:35:LYS:HG3	1.79	0.63
40:L3:238:LEU:HB3	40:L3:242:THR:HG21	2.66	0.63
1:6:477:A:H2'	1:6:478:A:H8	1.63	0.63
1:6:990:C:OP2	86:6:2118:OHX:N2	2.31	0.63
50:M4:36:VAL:HB	50:M4:45:LEU:HD23	2.93	0.63
42:L5:146:LEU:HB3	36:5:2746:A:H2	258.92	0.63
1:6:1114:G:O2'	1:6:1130:G:O6	2.14	0.63
36:5:1276:U:OP2	86:5:4001:OHX:N1	2.30	0.63
16:C4:50:ALA:HB3	16:C4:53:ASP:HB2	2.71	0.63
36:5:3023:U:OP2	36:5:3031:G:N1	2.29	0.63
67:O1:79:ARG:NE	67:O1:79:ARG:H	1.96	0.63
54:M8:34:THR:HG22	54:M8:49:LEU:HD21	1.78	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D3:107:PHE:CD2	25:D3:114:LYS:HB3	3.65	0.63
34:SR:50:ASP:O	34:SR:52:GLN:N	2.31	0.63
1:2:1786:G:OP1	16:C4:136:ARG:NH2	2.32	0.63
40:L3:161:LEU:HD22	40:L3:178:LEU:HD11	1.80	0.63
1:2:1393:C:H2'	1:2:1394:G:O4'	1.99	0.63
55:M9:148:ASP:OD1	55:M9:151:ARG:NH2	2.31	0.63
52:M6:167:TYR:OH	52:M6:171:LYS:NZ	3.14	0.63
5:S3:162:GLN:O	5:S3:162:GLN:NE2	2.32	0.63
36:1:1222:G:O2'	36:1:1285:G:N1	2.30	0.63
40:L3:169:THR:HG22	40:L3:171:LEU:H	1.64	0.63
36:1:595:G:N1	36:1:609:G:H5''	2.13	0.63
1:2:197:A:H61	10:S8:138:ASN:ND2	1.95	0.63
55:M9:104:ARG:NH2	55:M9:105:LEU:HB2	2.14	0.63
1:6:1202:A:OP1	86:6:2128:OHX:N2	2.31	0.63
11:S9:31:ALA:HA	11:S9:36:LEU:HD12	1.80	0.63
20:C8:50:ALA:HB2	20:C8:72:ILE:HD11	1.80	0.63
1:2:1483:A:H2'	1:2:1484:G:C8	2.33	0.63
43:L6:149:ILE:O	43:L6:151:LYS:N	2.32	0.63
61:N5:105:VAL:HA	61:N5:130:TYR:CE2	2.33	0.63
2:S0:86:VAL:HG12	2:S0:174:TRP:CE2	3.52	0.63
36:5:742:G:N7	86:5:3997:OHX:N4	2.46	0.63
1:6:1370:U:H4'	1:6:1371:A:H4'	1.81	0.63
2:S0:70:PRO:HB2	2:S0:94:GLY:HA3	2.06	0.63
62:N6:27:ARG:HG2	62:N6:78:PHE:CE1	2.33	0.63
58:N2:28:PHE:O	58:N2:30:PRO:HD3	3.20	0.63
47:M0:3:ARG:CZ	47:M0:63:GLU:HG3	2.37	0.63
41:L4:292:SER:OG	41:L4:295:ILE:N	2.26	0.63
10:S8:5:ARG:NH1	10:S8:29:LEU:O	2.27	0.63
40:L3:53:MET:HE3	36:5:3048:A:H5'	233.76	0.63
36:1:1659:U:H2'	36:1:1660:C:C6	2.33	0.63
3:S1:71:ALA:HB3	16:C4:114:ARG:HH12	2.35	0.63
6:S4:15:PRO:HG2	6:S4:18:TRP:CE2	2.34	0.63
36:1:2897:A:H2'	36:1:2899:C:H5''	1.79	0.63
1:6:86:A:OP2	86:6:2188:OHX:N1	2.32	0.63
51:M5:12:ARG:HG2	36:5:268:A:C4	127.81	0.63
1:6:1688:U:H2'	1:6:1689:A:C8	2.34	0.63
36:1:3200:G:O6	86:1:4128:OHX:N4	2.31	0.63
46:L9:88:TYR:CZ	46:L9:184:LYS:HD3	3.39	0.63
34:SR:132:LYS:HG2	34:SR:143:THR:HG23	1.79	0.63
49:M3:165:SER:OG	49:M3:165:SER:O	2.10	0.63
34:SR:164:ASP:O	34:SR:166:SER:N	2.48	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2664:C:OP2	48:M1:142:LYS:NZ	2.30	0.63
36:1:2554:A:C8	36:1:2554:A:H5'	2.34	0.63
36:5:917:A:OP2	86:5:4218:OHX:N3	2.31	0.63
10:S8:172:ARG:HE	10:S8:175:GLN:HG3	1.63	0.63
56:N0:135:VAL:O	56:N0:141:LYS:NZ	2.30	0.63
57:N1:48:ILE:HG13	57:N1:94:GLU:HG2	2.64	0.63
52:M6:3:VAL:HG13	52:M6:4:GLU:H	1.64	0.63
47:M0:76:MET:CE	47:M0:148:VAL:HA	2.73	0.63
71:O5:85:THR:HG22	71:O5:88:LEU:H	1.64	0.63
22:D0:35:GLU:OE1	22:D0:89:ARG:NH1	5.64	0.63
36:1:291:C:OP1	51:M5:68:ARG:NH1	2.31	0.63
49:M3:91:ARG:NH1	49:M3:97:VAL:HB	2.13	0.63
3:S1:87:ARG:NH2	3:S1:89:ASP:OD1	5.99	0.63
17:C5:130:ARG:NH1	35:SM:71:ASN:OD1	2.94	0.63
2:S0:55:GLU:OE2	23:D1:80:LYS:N	2.31	0.63
41:L4:47:ARG:NH1	41:L4:109:TRP:O	2.45	0.63
36:1:3308:C:O2	53:M7:69:ARG:HD3	1.99	0.63
25:D3:109:ARG:NH2	25:D3:114:LYS:O	2.31	0.63
36:5:1596:C:O2'	36:5:1696:A:N3	2.30	0.63
15:C3:55:ARG:HD3	29:D7:47:PHE:CD1	2.33	0.63
33:E1:109:ASP:O	33:E1:111:GLU:N	2.31	0.63
11:S9:108:ARG:HB2	11:S9:111:THR:HG23	2.23	0.63
36:5:2112:U:O2	86:5:3969:OHX:N1	2.32	0.63
79:Q3:73:THR:HB	79:Q3:76:ALA:H	4.37	0.63
58:N2:43:VAL:HB	58:N2:49:ASN:HB3	1.95	0.63
68:O2:46:PHE:CE1	36:5:1145:G:H5'	210.36	0.63
36:1:568:G:H2'	36:1:569:A:O4'	1.98	0.63
47:M0:48:LEU:HD11	47:M0:145:LYS:HG2	1.79	0.63
42:L5:86:TYR:CE1	42:L5:247:ILE:HA	2.34	0.63
36:1:2233:A:OP2	86:1:4044:OHX:N5	2.32	0.63
14:C2:33:ARG:HA	14:C2:36:LEU:HD12	1.79	0.63
1:6:1680:G:O6	86:6:2189:OHX:N3	2.31	0.63
1:6:1680:G:O6	86:6:2189:OHX:N1	2.32	0.63
36:1:289:A:O2'	51:M5:94:TYR:O	2.15	0.63
36:1:498:A:OP1	69:O3:86:ARG:NE	2.23	0.63
1:2:883:C:H2'	1:2:884:A:H8	1.64	0.63
36:1:829:U:H3	36:1:895:A:N6	1.96	0.63
1:2:641:G:H1	1:2:693:U:H3	1.46	0.63
36:1:1747:G:OP1	74:O8:42:LYS:NZ	2.27	0.63
9:S7:11:GLN:HG3	9:S7:13:PRO:HD2	1.79	0.63
9:S7:49:ILE:O	9:S7:57:ALA:N	2.23	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:M0:42:THR:HG23	47:M0:45:GLU:HG3	4.71	0.63
52:M6:85:ARG:HD3	52:M6:90:HIS:ND1	3.04	0.63
35:SM:102:THR:HG23	35:SM:105:LYS:HB2	1.80	0.63
41:L4:93:MET:HE2	41:L4:93:MET:H	4.59	0.63
48:M1:110:ILE:O	48:M1:112:LEU:N	2.69	0.63
41:L4:178:LEU:O	41:L4:182:LEU:HD23	3.09	0.63
17:C5:122:THR:CG2	1:6:1558:U:H3	366.32	0.63
2:S0:182:LEU:HB3	2:S0:188:LEU:HD23	1.80	0.63
25:D3:69:ARG:NH2	1:6:568:G:N7	365.21	0.63
36:5:2385:G:O6	86:5:3927:OHX:N4	2.31	0.63
1:6:25:C:O2	86:6:2106:OHX:N5	2.32	0.63
42:L5:115:LEU:HD22	42:L5:115:LEU:H	1.64	0.63
4:S2:99:LYS:HA	4:S2:117:THR:HA	2.11	0.63
1:2:542:A:H5''	1:2:544:A:C8	2.33	0.63
5:S3:114:ALA:HB3	5:S3:117:ARG:HB2	1.79	0.63
7:S5:133:VAL:HG22	7:S5:198:LEU:HD13	1.79	0.63
86:1:4197:OHX:N2	86:O1:201:OHX:N5	2.46	0.63
21:C9:28:LEU:HD12	21:C9:29:GLU:H	1.63	0.63
1:2:329:G:H5''	10:S8:98:LYS:HB3	1.79	0.63
56:N0:137:ARG:HG2	56:N0:139:TYR:CE1	2.59	0.63
36:5:94:G:H2'	36:5:95:A:C8	2.34	0.63
2:S0:124:THR:HG22	2:S0:174:TRP:HE1	1.62	0.63
49:M3:165:SER:O	49:M3:167:PHE:N	2.32	0.63
36:5:655:C:H2'	36:5:656:A:H8	1.63	0.63
28:D6:23:CYS:SG	28:D6:74:CYS:HB3	2.38	0.63
36:1:1403:C:H42	36:1:1408:G:H1	1.47	0.63
36:1:789:A:H2'	36:1:790:U:H6	1.63	0.63
36:5:1819:U:O4	86:5:4045:OHX:N3	2.32	0.63
45:L8:163:VAL:HG22	45:L8:166:LEU:HD12	1.90	0.63
1:2:539:G:OP2	1:2:539:G:H8	1.81	0.63
36:5:3263:G:O6	86:5:4114:OHX:N2	2.31	0.63
36:1:58:G:OP1	51:M5:157:LYS:NZ	2.31	0.63
36:5:314:U:O4	86:5:4186:OHX:N5	2.32	0.63
67:O1:27:LYS:O	67:O1:30:PRO:HD2	1.99	0.63
1:6:1315:U:OP1	1:6:1328:G:N2	2.25	0.63
22:D0:48:HIS:O	22:D0:48:HIS:ND1	2.32	0.63
63:N7:15:ARG:HG3	63:N7:79:HIS:HD2	2.58	0.63
36:1:2571:U:H1'	36:1:2572:C:H5'	1.81	0.63
18:C6:97:VAL:HG12	18:C6:98:ASP:H	1.89	0.63
36:5:2298:U:O4	36:5:2923:U:H5	1.82	0.63
36:1:3115:C:O2'	36:1:3117:C:N4	2.32	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:O6:35:ASN:OD1	72:O6:35:ASN:N	2.85	0.63
36:1:801:A:O2'	86:1:3981:OHX:N2	2.32	0.63
48:M1:155:THR:O	48:M1:159:THR:HG23	5.52	0.63
19:C7:86:PRO:HG2	19:C7:88:VAL:HA	9.43	0.63
1:6:213:A:OP2	86:6:2148:OHX:N1	2.32	0.63
40:L3:41:VAL:CA	40:L3:185:GLY:HA3	2.28	0.62
36:1:2988:C:O2	40:L3:266:ARG:NH1	2.32	0.62
36:5:892:U:OP2	86:5:3910:OHX:N6	2.32	0.62
40:L3:347:SER:HB3	40:L3:350:ALA:H	1.64	0.62
41:L4:152:VAL:HG11	41:L4:156:LEU:HD12	1.80	0.62
7:S5:113:ILE:HD13	7:S5:190:ILE:HG13	3.91	0.62
15:C3:67:THR:O	15:C3:69:ASN:N	2.31	0.62
1:2:15:U:H2'	1:2:16:G:O4'	1.99	0.62
14:C2:70:ASN:HD22	14:C2:73:LYS:HE2	1.63	0.62
1:2:532:U:O2'	26:D4:33:ALA:HB1	1.99	0.62
73:O7:2:GLY:O	73:O7:7:SER:HB3	2.65	0.62
36:5:188:U:H1'	36:5:208:C:H1'	1.81	0.62
1:2:51:A:OP2	86:2:2072:OHX:N3	2.32	0.62
42:L5:8:LYS:NZ	37:7:15:C:O3'	311.59	0.62
59:N3:75:PRO:HG2	59:N3:103:ALA:O	3.66	0.62
9:S7:150:GLN:HB2	9:S7:181:ILE:HD12	1.81	0.62
42:L5:85:ARG:HH12	42:L5:254:LYS:H	3.53	0.62
3:S1:48:VAL:HG13	3:S1:61:LEU:HD21	1.80	0.62
1:6:1766:A:H5''	86:6:2124:OHX:N3	2.14	0.62
7:S5:57:SER:OG	7:S5:58:LEU:N	2.84	0.62
1:6:1230:A:H8	1:6:1258:U:C4	2.16	0.62
36:1:1554:U:HO2'	36:1:1582:C:H5	1.45	0.62
36:1:3361:G:O6	86:1:4160:OHX:N6	2.33	0.62
1:2:702:G:N1	1:2:736:C:N3	2.43	0.62
10:S8:84:HIS:CE1	10:S8:86:SER:HB2	2.35	0.62
1:2:1370:U:O4	86:2:2121:OHX:N1	2.32	0.62
36:1:3348:G:H1	36:1:3357:U:H3	1.46	0.62
68:O2:126:LEU:O	68:O2:128:LEU:N	2.32	0.62
5:S3:12:VAL:O	5:S3:15:GLY:N	3.00	0.62
1:2:1101:G:H5''	24:D2:76:SER:HB3	1.80	0.62
1:2:1347:U:O2	1:2:1516:A:H5'	1.98	0.62
1:6:383:G:N7	86:6:2147:OHX:N5	2.47	0.62
40:L3:334:ARG:NH2	36:5:3304:U:O3'	213.00	0.62
36:1:1596:C:H2'	36:1:1597:C:C6	2.34	0.62
7:S5:100:ASN:O	7:S5:102:ARG:N	2.31	0.62
36:1:2177:G:OP2	39:L2:128:ARG:NH1	2.33	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:272:G:OP2	86:5:4068:OHX:N6	2.32	0.62
51:M5:172:ARG:HH11	36:5:30:G:P	107.25	0.62
2:S0:66:ALA:HB1	23:D1:50:TYR:CE1	3.54	0.62
1:6:353:A:OP2	86:6:2050:OHX:N5	2.33	0.62
18:C6:44:LEU:O	18:C6:47:LYS:HB2	1.99	0.62
53:M7:126:ARG:HD3	53:M7:140:GLU:OE2	3.36	0.62
55:M9:181:ARG:NH1	55:M9:182:ASP:OD1	5.85	0.62
36:5:1346:G:O6	86:5:4060:OHX:N2	2.32	0.62
57:N1:17:ARG:HD3	57:N1:22:HIS:HA	4.30	0.62
36:1:1286:A:N3	36:1:1287:A:H1'	2.15	0.62
45:L8:63:LYS:O	45:L8:67:ILE:HG13	1.99	0.62
1:2:1169:G:N1	1:2:1575:G:OP2	2.27	0.62
36:5:1464:G:N7	86:5:3967:OHX:N3	2.47	0.62
33:E1:91:ILE:HG12	33:E1:92:LYS:HG2	6.33	0.62
36:1:619:A:H5'	36:1:620:U:OP1	1.99	0.62
36:5:2704:A:OP2	86:5:3893:OHX:N5	2.32	0.62
7:S5:37:GLN:HG2	18:C6:53:LEU:HD13	1.79	0.62
61:N5:49:LYS:O	61:N5:51:VAL:N	2.30	0.62
86:1:4197:OHX:N6	86:O1:201:OHX:N5	2.46	0.62
1:2:1459:C:OP2	20:C8:138:THR:OG1	2.16	0.62
20:C8:139:LYS:HB2	1:6:1458:G:OP2	352.85	0.62
14:C2:54:ARG:O	14:C2:56:GLU:N	2.30	0.62
36:5:789:A:H2'	36:5:790:U:C6	2.34	0.62
1:2:1766:A:N1	28:D6:80:HIS:ND1	2.40	0.62
44:L7:173:LEU:HD23	44:L7:178:ILE:HG21	1.80	0.62
49:M3:36:ARG:HG3	49:M3:39:ARG:HH21	3.27	0.62
11:S9:117:GLY:O	11:S9:119:ALA:N	2.38	0.62
51:M5:68:ARG:HG3	36:5:291:C:OP1	144.63	0.62
39:L2:201:GLY:O	39:L2:204:MET:N	2.25	0.62
17:C5:122:THR:HG22	1:6:1558:U:H3	366.68	0.62
17:C5:79:HIS:O	17:C5:81:ARG:N	2.33	0.62
36:1:1240:A:H3'	36:1:1241:U:H5'	1.79	0.62
1:6:315:A:O2'	86:6:2158:OHX:N1	2.33	0.62
36:5:408:A:H61	38:8:15:G:H1'	1.62	0.62
1:2:1681:A:N6	1:2:1720:G:O2'	2.33	0.62
20:C8:84:TRP:HA	20:C8:89:GLN:OE1	2.33	0.62
45:L8:94:PHE:HB3	45:L8:189:LEU:HD11	1.81	0.62
24:D2:15:ASN:HD21	24:D2:71:LYS:HG3	2.54	0.62
10:S8:36:THR:HB	10:S8:57:ALA:O	2.04	0.62
9:S7:98:ILE:HD13	9:S7:118:LEU:HD23	1.82	0.62
76:Q0:127:LEU:HD22	76:Q0:128:LYS:H	1.63	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:3:60:G:H2'	37:3:61:G:H8	1.64	0.62
36:5:3241:G:H2'	36:5:3245:A:C8	2.33	0.62
41:L4:93:MET:HB2	36:5:658:G:N2	145.40	0.62
68:O2:27:ARG:NH1	36:5:1433:A:N3	168.86	0.62
40:L3:332:ARG:NH1	40:L3:333:LYS:HD2	2.46	0.62
36:1:3369:G:N1	40:L3:380:MET:O	2.29	0.62
1:2:81:G:OP2	86:2:2140:OHX:N5	2.33	0.62
61:N5:137:ASN:OD1	61:N5:137:ASN:N	2.30	0.62
38:4:154:C:O2'	45:L8:185:ARG:HG3	1.99	0.62
1:6:1628:U:H2'	1:6:1629:G:C8	2.34	0.62
70:O4:8:ARG:NH2	70:O4:31:ARG:HD2	3.25	0.62
1:2:513:U:H2'	1:2:514:G:C8	2.34	0.62
1:6:1160:A:H2'	1:6:1161:C:C6	2.34	0.62
51:M5:106:VAL:O	51:M5:109:ARG:N	2.32	0.62
63:N7:46:ILE:HG12	63:N7:49:TYR:CE1	3.37	0.62
49:M3:75:PHE:O	49:M3:79:GLU:HB2	1.99	0.62
34:SR:38:ARG:HG2	34:SR:67:ILE:HG23	1.80	0.62
3:S1:89:ASP:HB3	3:S1:223:PHE:HE2	1.65	0.62
36:5:571:U:H2'	36:5:572:A:H8	1.64	0.62
1:6:1592:A:H2'	1:6:1593:A:C8	2.33	0.62
6:S4:3:ARG:HB3	1:6:93:A:H1'	326.15	0.62
1:2:693:U:C5'	1:2:694:U:H5'	2.30	0.62
36:5:1192:C:H41	36:5:1302:A:P	2.22	0.62
36:5:549:U:H2'	36:5:550:A:C8	2.34	0.62
38:4:155:A:H5'	45:L8:185:ARG:CZ	2.29	0.62
68:O2:119:VAL:O	68:O2:122:PRO:HD3	2.86	0.62
1:2:373:G:N7	86:2:2159:OHX:N6	2.47	0.62
34:SR:260:ILE:HB	34:SR:274:LEU:HB2	1.80	0.62
36:5:59:G:H4'	36:5:60:A:H4'	1.79	0.62
45:L8:50:VAL:HG12	61:N5:30:ALA:HA	4.63	0.62
1:2:365:G:N7	86:2:2106:OHX:N5	2.47	0.62
1:2:1472:C:OP1	7:S5:102:ARG:NH2	2.27	0.62
36:1:2503:G:H1'	36:1:2504:U:C5	2.35	0.62
86:5:4015:OHX:N6	86:5:4211:OHX:N2	2.47	0.62
36:1:1441:G:O6	86:1:3926:OHX:N1	2.33	0.62
34:SR:37:SER:OG	34:SR:38:ARG:N	2.68	0.62
64:N8:2:PRO:HD2	64:N8:5:PHE:HD2	2.14	0.62
44:L7:60:ARG:NH2	36:5:516:A:O3'	303.93	0.62
52:M6:110:PRO:O	52:M6:111:PRO:C	3.33	0.62
2:S0:10:THR:OG1	2:S0:13:ASP:OD2	2.98	0.62
1:6:491:C:H42	1:6:497:G:H21	1.48	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:C5:29:SER:HB2	17:C5:32:ASP:H	4.26	0.62
53:M7:59:PRO:HG3	53:M7:76:PHE:CD1	2.38	0.62
36:1:1043:C:O3'	47:M0:90:ARG:NH1	2.33	0.62
36:1:2677:G:H2'	36:1:2679:A:H2	1.65	0.62
49:M3:192:GLU:O	49:M3:194:GLU:N	2.32	0.62
36:1:3218:A:H4'	36:1:3219:G:O5'	1.99	0.62
36:5:1662:G:N2	36:5:1788:C:O2	2.32	0.62
39:L2:152:SER:OG	36:5:2157:G:N7	217.06	0.62
36:5:132:C:H2'	36:5:133:U:H5''	1.81	0.62
36:5:3287:U:H2'	36:5:3288:G:H5'	1.82	0.62
36:1:1114:U:H5''	64:N8:22:ILE:HD13	1.82	0.62
66:O0:74:ASN:OD1	66:O0:74:ASN:N	2.64	0.62
36:1:838:G:O6	79:Q3:4:ARG:NH2	2.32	0.62
7:S5:121:ILE:HA	7:S5:199:ILE:HD11	1.82	0.62
1:2:1428:G:H8	1:2:1428:G:H5'	1.64	0.62
1:2:1775:U:O4	77:Q1:4:LYS:NZ	2.33	0.62
1:2:1235:C:H42	33:E1:135:HIS:HE1	1.48	0.62
36:1:1877:U:OP2	86:1:3928:OHX:N2	2.32	0.62
44:L7:80:GLN:HB2	57:N1:135:PRO:HB2	1.81	0.62
1:2:641:G:H2'	1:2:642:G:C8	2.34	0.62
56:N0:101:ALA:O	56:N0:104:GLU:HB3	2.27	0.62
14:C2:30:VAL:HB	14:C2:132:GLU:HG3	2.36	0.62
36:1:2705:A:OP2	86:1:3870:OHX:N1	2.32	0.62
63:N7:136:PHE:CD2	70:O4:89:ILE:HG12	2.35	0.62
36:1:2759:U:H5''	36:1:2760:C:H5'	1.82	0.62
11:S9:164:PHE:HE2	1:6:512:A:H4'	452.20	0.62
1:6:1305:U:OP2	1:6:1306:C:N4	2.29	0.62
47:M0:77:THR:O	47:M0:81:GLY:N	2.46	0.62
28:D6:7:SER:O	28:D6:9:GLY:N	3.90	0.62
36:5:1724:U:H1'	36:5:1725:C:C6	2.35	0.62
15:C3:5:HIS:CE1	15:C3:121:ARG:HG3	2.35	0.62
5:S3:64:ARG:O	5:S3:67:ASN:N	2.32	0.62
51:M5:155:VAL:O	51:M5:162:ARG:NH2	2.26	0.62
7:S5:81:ARG:HD2	1:6:1615:C:H3'	373.48	0.62
36:1:2588:U:OP1	45:L8:48:ARG:NH2	2.28	0.62
55:M9:25:ASP:OD1	55:M9:25:ASP:N	2.32	0.62
54:M8:38:ARG:NH2	36:5:1348:U:OP2	187.21	0.62
46:L9:111:PHE:HD1	46:L9:127:PRO:HA	2.85	0.62
36:5:714:G:HO2'	36:5:753:C:HO2'	1.45	0.62
54:M8:73:GLN:HB3	54:M8:76:ALA:HB3	1.82	0.62
36:1:2651:G:H4'	36:1:2652:U:OP2	1.98	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:54:TYR:O	26:D4:15:ASN:ND2	2.33	0.62
23:D1:3:ASN:ND2	23:D1:7:GLN:HB3	3.71	0.62
63:N7:97:SER:HB3	63:N7:99:GLU:HG3	2.90	0.62
1:2:1796:C:OP2	28:D6:5:ARG:NH1	2.31	0.62
36:5:864:G:OP2	86:5:3910:OHX:N4	2.33	0.62
1:2:1413:U:O2	86:2:2071:OHX:N4	2.33	0.62
63:N7:83:THR:HG23	63:N7:85:TYR:N	2.15	0.62
53:M7:41:LEU:O	53:M7:45:GLN:HG3	2.00	0.62
75:O9:2:ALA:N	36:5:1493:G:O6	122.39	0.62
4:S2:121:VAL:O	4:S2:125:ILE:HG13	1.98	0.62
36:5:655:C:H2'	36:5:656:A:C8	2.35	0.62
1:2:1118:G:O6	86:2:2148:OHX:N1	2.32	0.62
36:1:499:G:H2'	36:1:500:C:H6	1.65	0.62
39:L2:216:HIS:O	39:L2:218:HIS:HD2	2.56	0.62
10:S8:147:ALA:HA	10:S8:150:ALA:HB2	2.45	0.62
8:S6:136:LYS:HG3	8:S6:173:PRO:HB3	2.38	0.62
36:1:2916:U:H1'	59:N3:44:SER:HB3	1.82	0.62
46:L9:34:LEU:HD21	46:L9:149:ASN:HB3	1.80	0.62
1:2:337:G:H3'	13:C1:133:LYS:HB2	1.81	0.61
11:S9:118:LEU:HD23	11:S9:158:PHE:CE1	2.87	0.61
36:5:1178:G:H5'	36:5:1178:G:C8	2.34	0.61
63:N7:73:LYS:HB3	63:N7:75:VAL:HG12	1.82	0.61
55:M9:109:TYR:HB3	55:M9:115:ILE:HB	1.82	0.61
38:8:15:G:OP2	86:8:217:OHX:N3	2.33	0.61
68:O2:74:PHE:HB3	68:O2:85:LEU:HD11	2.54	0.61
2:S0:172:LEU:HD13	2:S0:176:LEU:HD11	1.81	0.61
1:6:1756:A:H2'	1:6:1757:G:H8	1.63	0.61
51:M5:46:ASP:OD1	51:M5:50:ARG:NH2	2.46	0.61
41:L4:146:PRO:O	86:L4:403:OHX:N5	2.33	0.61
36:5:181:U:H1'	36:5:236:G:N2	2.15	0.61
53:M7:178:ALA:HA	53:M7:181:ARG:HB3	1.82	0.61
14:C2:81:ASP:O	14:C2:83:GLU:N	2.80	0.61
36:1:3384:U:H2'	36:1:3385:U:H6	1.64	0.61
35:SM:79:SER:HA	35:SM:82:THR:HG23	1.80	0.61
43:L6:54:TYR:CE2	43:L6:63:LEU:HD22	2.34	0.61
73:O7:66:TYR:OH	73:O7:73:ARG:NH2	3.45	0.61
36:5:3066:U:O4	86:5:4099:OHX:N4	2.32	0.61
1:6:1637:C:H5''	1:6:1637:C:H6	1.64	0.61
28:D6:5:ARG:HD2	28:D6:8:ASN:O	2.49	0.61
27:D5:43:ASP:O	27:D5:45:GLU:N	2.33	0.61
2:S0:52:LYS:HD2	23:D1:82:VAL:HA	1.81	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:992:A:H2'	1:2:993:A:H5'	1.82	0.61
36:1:191:U:H2'	36:1:192:C:H6	1.65	0.61
2:S0:26:ALA:HB3	2:S0:149:LEU:HB2	1.97	0.61
36:5:2897:A:H2'	36:5:2899:C:H5''	1.82	0.61
15:C3:99:ARG:O	15:C3:103:GLU:HG2	2.01	0.61
74:O8:56:ILE:HG21	74:O8:62:ALA:HB2	3.36	0.61
51:M5:50:ARG:HH11	36:5:267:G:H4'	111.44	0.61
26:D4:51:GLU:O	26:D4:53:ASP:N	3.28	0.61
9:S7:9:LEU:HD21	9:S7:17:GLU:HB3	2.59	0.61
21:C9:77:ASN:ND2	21:C9:96:ALA:O	2.33	0.61
36:5:2730:G:OP2	86:5:3952:OHX:N4	2.32	0.61
34:SR:72:THR:HG22	34:SR:81:LEU:HB2	2.42	0.61
1:2:652:G:H1	1:2:682:C:H42	1.48	0.61
63:N7:70:PRO:HD3	63:N7:115:LYS:HD2	3.16	0.61
16:C4:43:THR:OG1	1:6:900:A:OP1	278.74	0.61
36:5:1409:G:O6	86:5:4156:OHX:N6	2.33	0.61
36:1:1844:C:H2'	36:1:1845:G:H5''	1.82	0.61
36:5:2234:G:N7	86:5:3955:OHX:N1	2.49	0.61
7:S5:43:PHE:HZ	7:S5:90:ILE:HG21	1.64	0.61
14:C2:76:GLU:OE2	14:C2:90:LYS:NZ	2.26	0.61
86:5:4015:OHX:N5	86:5:4211:OHX:N2	2.49	0.61
47:M0:47:PRO:HD2	47:M0:141:LYS:HA	1.83	0.61
1:6:1564:U:H2'	1:6:1565:C:C6	2.35	0.61
36:1:1483:G:O6	70:O4:4:ARG:NH2	2.30	0.61
39:L2:174:ARG:NH2	36:5:2179:C:O3'	213.32	0.61
6:S4:18:TRP:HH2	6:S4:31:PRO:HD3	1.92	0.61
26:D4:43:LYS:O	26:D4:47:VAL:HG13	5.58	0.61
8:S6:135:PRO:HB2	8:S6:141:ILE:HG13	1.82	0.61
47:M0:153:ARG:O	47:M0:156:ARG:HB2	2.00	0.61
1:2:1595:U:N3	1:2:1600:A:H2	1.98	0.61
1:6:1518:C:OP2	86:6:2141:OHX:N1	2.33	0.61
40:L3:44:THR:HA	40:L3:340:LYS:HD3	4.94	0.61
39:L2:185:ALA:O	39:L2:188:LYS:HB3	2.30	0.61
1:2:1578:U:O2'	1:2:1579:U:H5'	2.00	0.61
36:5:2677:G:OP2	86:5:4151:OHX:N5	2.33	0.61
39:L2:48:ILE:HD11	79:Q3:54:ILE:HG12	1.81	0.61
8:S6:142:ARG:HA	8:S6:147:LEU:HD12	1.80	0.61
11:S9:59:LEU:HD22	11:S9:69:ARG:HA	3.87	0.61
8:S6:87:ARG:NH2	1:6:161:U:OP2	315.55	0.61
1:6:107:C:H42	1:6:307:G:H1	1.48	0.61
32:E0:41:THR:HA	32:E0:45:VAL:HB	1.83	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Q2:78:LYS:HE2	78:Q2:79:THR:HG22	4.12	0.61
36:1:18:G:OP1	71:O5:81:ARG:NH2	2.33	0.61
39:L2:118:GLU:HG2	39:L2:156:LYS:NZ	2.15	0.61
36:1:361:A:H5'	73:O7:35:SER:OG	2.00	0.61
5:S3:168:ILE:HG22	5:S3:189:MET:HB2	2.01	0.61
49:M3:101:ARG:HH22	49:M3:112:ASN:ND2	2.52	0.61
23:D1:59:VAL:HG12	23:D1:64:GLU:HB2	1.81	0.61
6:S4:246:LEU:HD21	6:S4:254:ARG:CZ	2.31	0.61
1:6:1488:G:H3'	1:6:1515:A:H61	1.64	0.61
36:1:1145:G:OP1	68:O2:44:ARG:NH1	2.33	0.61
1:2:1386:G:OP2	19:C7:44:LYS:NZ	2.32	0.61
1:2:158:U:O2'	1:2:160:C:OP2	2.18	0.61
1:2:38:C:C2'	1:2:39:A:H5'	2.31	0.61
28:D6:75:VAL:O	28:D6:79:ILE:N	2.24	0.61
37:3:22:A:H2'	37:3:23:A:C8	2.35	0.61
5:S3:70:THR:O	5:S3:74:GLN:N	2.29	0.61
39:L2:70:ARG:HD2	39:L2:72:ARG:HD3	4.11	0.61
36:5:1171:G:O6	86:5:3996:OHX:N1	2.33	0.61
1:6:340:U:H2'	1:6:341:A:H8	1.65	0.61
72:O6:4:LYS:HD2	72:O6:14:GLY:HA3	1.93	0.61
35:SM:58:GLU:HA	35:SM:61:ILE:HD11	1.81	0.61
2:S0:14:ALA:O	2:S0:18:LEU:HG	2.01	0.61
54:M8:147:ARG:NH2	36:5:670:C:OP1	162.60	0.61
43:L6:129:GLU:HG2	43:L6:130:ILE:N	4.12	0.61
8:S6:208:TYR:HE1	8:S6:212:LEU:HD12	1.65	0.61
10:S8:33:PRO:HA	1:6:331:A:H5'	276.84	0.61
25:D3:5:LYS:NZ	1:6:611:U:OP2	348.63	0.61
30:D8:14:LYS:NZ	30:D8:50:GLU:OE2	5.37	0.61
1:6:1538:U:HO2'	1:6:1539:G:H8	1.48	0.61
1:2:264:G:N7	86:2:2034:OHX:N1	2.48	0.61
43:L6:105:TYR:HE1	43:L6:134:ARG:HD2	1.64	0.61
36:5:3195:U:O2'	36:5:3196:U:H5'	2.00	0.61
8:S6:31:ARG:HD2	8:S6:34:GLN:HE21	1.65	0.61
56:N0:52:LYS:NZ	37:7:101:G:OP2	281.46	0.61
86:2:2031:OHX:N6	86:2:2146:OHX:N5	2.48	0.61
1:6:894:U:H2'	1:6:895:G:C8	2.36	0.61
36:1:263:C:H2'	36:1:264:G:O4'	2.01	0.61
13:C1:21:ASN:ND2	13:C1:31:THR:HA	3.53	0.61
39:L2:204:MET:HG3	39:L2:209:HIS:HB2	1.82	0.61
10:S8:62:THR:HA	10:S8:76:THR:O	2.62	0.61
51:M5:143:ARG:HH21	71:O5:92:LEU:HA	1.65	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:SR:258:THR:O	34:SR:275:ARG:NH1	2.33	0.61
1:6:1699:G:H22	1:6:1702:A:H5''	1.65	0.61
6:S4:60:GLU:OE1	26:D4:20:ARG:NH1	2.78	0.61
1:6:85:A:OP1	86:6:2188:OHX:N4	2.33	0.61
25:D3:92:CYS:O	25:D3:95:PHE:N	2.31	0.61
70:O4:42:PRO:O	70:O4:51:LEU:HD23	2.01	0.61
36:1:3214:U:OP2	50:M4:128:ARG:NH2	2.33	0.61
35:SM:78:ASP:N	35:SM:78:ASP:OD2	4.13	0.61
36:1:2771:U:O2'	36:1:2772:C:O4'	2.17	0.61
6:S4:212:ASP:OD1	6:S4:214:LEU:N	2.33	0.61
28:D6:10:ARG:NH1	28:D6:36:ILE:HG13	5.68	0.61
23:D1:18:SER:OG	23:D1:54:ALA:O	2.84	0.61
36:1:1492:G:O2'	75:O9:48:LYS:NZ	2.32	0.61
13:C1:73:GLY:HA3	13:C1:86:ILE:HD12	1.83	0.61
47:M0:153:ARG:HG3	47:M0:165:ILE:HD12	4.34	0.61
74:O8:17:ARG:NH2	36:5:1824:U:O3'	138.53	0.61
79:Q3:39:CYS:HB2	79:Q3:57:CYS:SG	2.41	0.61
1:2:1142:A:H5''	28:D6:2:PRO:HG3	1.83	0.61
18:C6:93:HIS:HA	18:C6:97:VAL:HG23	2.42	0.61
19:C7:88:VAL:HG22	19:C7:89:SER:H	1.64	0.61
6:S4:157:ASN:OD1	6:S4:222:LEU:HD11	5.01	0.61
36:1:3186:A:N3	46:L9:44:THR:OG1	2.34	0.61
65:N9:21:ILE:O	65:N9:22:LYS:NZ	7.33	0.61
1:2:480:G:N2	1:2:509:G:H1'	2.16	0.61
54:M8:115:VAL:O	54:M8:118:GLY:N	2.24	0.61
1:2:1321:A:OP2	2:S0:101:ARG:NH2	2.33	0.61
36:5:1936:A:H2'	36:5:1937:U:O4'	1.99	0.61
36:1:900:G:H1'	36:1:1589:A:N6	2.16	0.61
1:2:1339:C:O2'	1:2:1341:A:N7	2.25	0.61
1:2:274:G:H3'	1:2:275:C:C6	2.35	0.61
45:L8:45:ASN:HD21	45:L8:47:SER:HB3	1.65	0.61
18:C6:12:LYS:HD2	18:C6:17:THR:HG22	1.82	0.61
1:2:1212:G:O6	86:2:2029:OHX:N3	2.33	0.61
36:1:1429:G:C5	41:L4:99:MET:HE1	2.35	0.61
1:2:647:G:H22	1:2:687:G:H1	1.48	0.61
36:1:3353:G:O2'	36:1:3356:G:OP2	2.18	0.61
1:6:542:A:H1'	1:6:543:C:OP1	2.01	0.61
36:1:314:U:H2'	36:1:315:C:H6	1.66	0.61
1:2:1611:A:O2'	7:S5:95:ASN:O	2.15	0.61
1:6:1010:C:OP2	86:6:2170:OHX:N3	2.34	0.61
51:M5:68:ARG:NE	51:M5:124:ASP:O	2.33	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:58:LYS:HD3	42:L5:58:LYS:N	2.16	0.61
3:S1:77:GLU:OE1	16:C4:114:ARG:NH2	2.17	0.61
7:S5:205:SER:OG	7:S5:207:THR:OG1	4.24	0.61
36:1:992:A:H5'	57:N1:43:LYS:HD3	1.83	0.61
55:M9:175:GLN:HA	55:M9:178:ALA:HB3	1.82	0.61
36:1:2338:C:H1'	59:N3:49:LEU:HD12	1.82	0.61
34:SR:41:THR:HG22	34:SR:62:LYS:HG2	1.83	0.61
14:C2:52:LEU:O	14:C2:85:LYS:NZ	2.32	0.61
1:2:1769:U:OP2	86:2:2145:OHX:N1	2.34	0.61
71:O5:118:ILE:HG22	71:O5:119:LYS:H	1.66	0.61
16:C4:87:GLY:HA3	16:C4:120:PRO:HG2	2.15	0.61
22:D0:24:ILE:HG12	22:D0:116:VAL:HG12	3.55	0.61
56:N0:42:TRP:O	56:N0:46:GLN:HG3	2.27	0.61
42:L5:270:LYS:HG3	42:L5:273:ARG:CB	3.67	0.61
1:2:1585:U:N3	1:2:1611:A:H2	1.96	0.61
40:L3:347:SER:HB2	40:L3:350:ALA:HB2	3.07	0.61
21:C9:97:SER:OG	1:6:1504:G:OP1	394.22	0.61
47:M0:16:PRO:HG3	47:M0:128:ARG:NH1	3.20	0.61
3:S1:113:MET:HB3	3:S1:142:PHE:CE2	3.05	0.61
3:S1:144:ARG:HG2	3:S1:206:PRO:HB3	1.83	0.61
3:S1:70:LEU:HB3	3:S1:79:HIS:HB3	5.14	0.61
1:2:702:G:O6	1:2:737:A:N6	2.33	0.61
1:2:1173:C:H3'	20:C8:141:THR:HG21	1.83	0.61
24:D2:71:LYS:NZ	1:6:1099:U:OP1	374.26	0.61
41:L4:361:HIS:CG	41:L4:362:ASP:N	2.98	0.61
36:1:912:G:OP2	39:L2:9:ARG:NH1	2.25	0.61
9:S7:144:VAL:HG22	24:D2:49:GLU:HB3	1.83	0.61
50:M4:123:LEU:HD22	52:M6:190:VAL:HG23	1.81	0.61
1:2:732:G:O2'	1:2:733:A:O4'	2.18	0.61
1:2:1664:C:H42	1:2:1737:G:H1	1.48	0.61
36:5:3165:A:H61	36:5:3285:C:N4	1.91	0.61
28:D6:25:ASN:ND2	28:D6:77:CYS:SG	2.74	0.61
64:N8:22:ILE:H	64:N8:22:ILE:HD12	2.07	0.61
72:O6:25:LYS:HE2	72:O6:28:TYR:HE2	1.66	0.61
22:D0:71:PRO:O	22:D0:72:ASN:ND2	5.96	0.61
1:6:235:G:H2'	1:6:236:A:C8	2.32	0.61
18:C6:99:GLU:HG2	34:SR:57:PRO:HB2	2.67	0.61
10:S8:142:LYS:NZ	1:6:187:G:OP2	271.94	0.61
46:L9:48:VAL:HG13	46:L9:52:LEU:HB3	1.82	0.61
52:M6:174:PHE:O	52:M6:178:VAL:HG23	2.01	0.61
1:6:1595:U:N3	1:6:1600:A:H2	1.99	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:153:VAL:O	8:S6:155:ASP:N	2.61	0.61
52:M6:3:VAL:HG13	52:M6:4:GLU:HG3	1.83	0.61
52:M6:189:ASP:O	52:M6:193:GLN:HG3	2.00	0.61
6:S4:159:THR:HG22	6:S4:173:ILE:HB	2.27	0.61
44:L7:142:SER:O	44:L7:146:GLN:HG3	2.49	0.61
1:2:516:G:OP2	86:2:2070:OHX:N6	2.33	0.61
64:N8:104:THR:HG21	64:N8:112:ILE:HD11	1.83	0.61
25:D3:137:LYS:O	25:D3:139:LYS:N	3.78	0.61
5:S3:28:GLU:OE2	12:C0:56:LYS:NZ	2.32	0.61
1:2:778:G:H1	26:D4:10:ARG:HG2	1.65	0.61
1:6:1761:U:O4	86:6:2187:OHX:N2	2.33	0.61
63:N7:95:VAL:O	63:N7:100:THR:OG1	2.17	0.60
18:C6:60:PHE:HA	18:C6:63:ILE:HG13	2.42	0.60
20:C8:53:ASP:HB3	20:C8:56:LYS:HG3	1.81	0.60
44:L7:60:ARG:HH22	36:5:517:G:P	306.02	0.60
36:1:1362:G:OP1	86:1:4032:OHX:N6	2.34	0.60
6:S4:49:ARG:HH12	1:6:448:C:P	377.71	0.60
1:2:1201:G:H22	1:2:1600:A:H5''	1.64	0.60
6:S4:246:LEU:HB2	6:S4:251:GLU:HG3	1.81	0.60
1:6:151:G:H1	1:6:163:G:H1	1.49	0.60
6:S4:159:THR:HB	6:S4:227:VAL:HG23	1.83	0.60
58:N2:104:ARG:HH12	58:N2:106:ALA:HB2	4.19	0.60
25:D3:6:PRO:HG3	25:D3:14:LYS:HG2	1.83	0.60
34:SR:172:ALA:HB2	34:SR:202:LEU:HD13	1.83	0.60
5:S3:42:THR:OG1	5:S3:44:THR:O	5.35	0.60
1:2:115:G:OP1	13:C1:67:ARG:NH1	2.34	0.60
56:N0:89:ASN:HD21	57:N1:156:TYR:HB3	1.65	0.60
1:6:918:U:H2'	1:6:919:A:C8	2.35	0.60
40:L3:284:ARG:HB3	40:L3:323:MET:HB3	1.83	0.60
1:2:1481:C:O2'	1:2:1482:C:O5'	2.15	0.60
2:S0:71:GLU:O	2:S0:96:THR:HG22	2.09	0.60
62:N6:120:GLN:OE1	62:N6:126:LEU:HA	8.14	0.60
68:O2:27:ARG:HB3	36:5:655:C:OP1	161.59	0.60
23:D1:3:ASN:HD21	23:D1:7:GLN:HB3	3.95	0.60
49:M3:144:THR:O	49:M3:146:PRO:HD3	2.85	0.60
36:5:3110:C:H2'	36:5:3111:U:C6	2.36	0.60
24:D2:67:GLY:O	24:D2:69:LEU:N	3.22	0.60
1:2:205:U:O4	86:2:2067:OHX:N3	2.34	0.60
36:1:624:G:OP2	86:1:4132:OHX:N3	2.33	0.60
48:M1:117:ASP:O	48:M1:120:ILE:HG22	2.02	0.60
86:2:2031:OHX:N3	86:2:2146:OHX:N5	2.48	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:94:ARG:NH1	48:M1:173:ASP:OD2	2.33	0.60
78:Q2:46:LYS:O	86:Q2:502:OHX:N3	4.50	0.60
4:S2:230:TRP:CE2	24:D2:68:ARG:HD3	2.92	0.60
27:D5:54:VAL:HG13	27:D5:57:TYR:CD1	2.36	0.60
3:S1:37:THR:HG21	3:S1:185:THR:HB	5.29	0.60
33:E1:126:CYS:HB3	33:E1:130:VAL:HG21	3.32	0.60
1:2:740:A:H2'	1:2:741:C:H5''	1.82	0.60
46:L9:48:VAL:HG23	46:L9:52:LEU:O	5.41	0.60
63:N7:53:VAL:HA	63:N7:57:HIS:HD2	1.99	0.60
66:O0:13:LYS:HB3	66:O0:100:ILE:CG2	2.31	0.60
1:2:1067:C:H2'	1:2:1068:C:C6	2.36	0.60
36:5:3242:G:H5'	36:5:3245:A:C8	2.35	0.60
9:S7:35:LYS:HG2	9:S7:36:ALA:H	1.65	0.60
15:C3:127:ARG:HH11	15:C3:127:ARG:HG2	1.66	0.60
53:M7:27:LYS:HD3	53:M7:63:PHE:HB3	1.88	0.60
38:4:62:C:O2	86:4:228:OHX:N5	2.34	0.60
54:M8:85:GLY:O	54:M8:104:LEU:HB2	2.76	0.60
1:6:245:U:O4	86:6:2120:OHX:N4	2.34	0.60
54:M8:21:SER:OG	36:5:673:U:OP1	149.92	0.60
28:D6:36:ILE:HD12	28:D6:78:ALA:HB1	1.82	0.60
79:Q3:36:ARG:HH22	36:5:1725:C:H5'	228.03	0.60
7:S5:33:VAL:HG13	7:S5:37:GLN:NE2	2.72	0.60
3:S1:70:LEU:HA	3:S1:73:LEU:HG	1.83	0.60
17:C5:127:ARG:CZ	35:SM:66:ALA:HB2	4.80	0.60
56:N0:84:ARG:NH2	36:5:1296:C:OP1	288.61	0.60
13:C1:2:SER:O	13:C1:3:THR:OG1	5.04	0.60
1:2:383:G:N7	86:2:2130:OHX:N4	2.49	0.60
1:2:459:G:OP1	26:D4:109:LYS:NZ	2.33	0.60
1:6:151:G:N2	1:6:163:G:H22	1.98	0.60
36:5:626:U:O4	86:5:3976:OHX:N4	2.35	0.60
3:S1:30:PHE:HB3	3:S1:96:LEU:HD22	3.77	0.60
61:N5:92:LYS:HG3	36:5:1831:U:P	100.59	0.60
36:5:182:U:H2'	36:5:183:G:C8	2.37	0.60
36:1:2548:C:OP2	39:L2:93:LYS:NZ	2.33	0.60
25:D3:96:VAL:HG23	25:D3:97:ASP:H	1.66	0.60
36:5:395:A:H5''	36:5:396:A:OP2	2.00	0.60
36:5:842:G:N2	36:5:851:C:O2	2.26	0.60
32:E0:50:VAL:HA	32:E0:54:ARG:HA	3.77	0.60
11:S9:38:ASN:HB2	11:S9:41:GLU:H	1.66	0.60
48:M1:137:ARG:O	48:M1:140:ARG:N	2.29	0.60
3:S1:152:ARG:NH1	1:6:1799:U:O2'	342.78	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:190:PRO:HG2	3:S1:192:VAL:HG23	2.46	0.60
1:2:1253:U:H5''	33:E1:130:VAL:HB	1.82	0.60
9:S7:133:THR:HG21	9:S7:162:ILE:HD11	1.83	0.60
36:1:169:U:H4'	49:M3:128:ARG:NH1	2.17	0.60
36:1:3198:U:O4	46:L9:26:LYS:HB2	2.01	0.60
15:C3:54:LEU:HB3	15:C3:60:VAL:CG1	3.11	0.60
45:L8:91:PHE:CE2	45:L8:185:ARG:HD3	4.70	0.60
36:1:1770:G:H5'	36:1:1771:C:OP2	2.02	0.60
1:6:761:G:O6	86:6:2082:OHX:N1	2.34	0.60
62:N6:86:THR:HG22	62:N6:96:PRO:HA	1.90	0.60
47:M0:192:ASP:HA	47:M0:197:VAL:HG23	3.00	0.60
1:6:1429:G:H2'	1:6:1430:U:C6	2.37	0.60
40:L3:221:THR:HG22	40:L3:272:TYR:N	2.60	0.60
20:C8:88:ARG:NH1	20:C8:112:ASP:OD2	3.49	0.60
9:S7:101:LYS:HD3	1:6:639:U:H5''	364.79	0.60
36:5:1701:C:H2'	36:5:1702:U:O4'	2.02	0.60
35:SM:34:LYS:NZ	36:1:2707:C:OP1	2.29	0.60
42:L5:95:TRP:CH2	42:L5:181:PRO:HD3	5.01	0.60
4:S2:118:ALA:HB3	4:S2:124:ALA:HB2	2.04	0.60
36:1:2528:G:N7	86:1:4182:OHX:N3	2.49	0.60
36:1:659:G:H2'	36:1:1432:C:H42	1.67	0.60
40:L3:41:VAL:HA	40:L3:185:GLY:CA	2.33	0.60
1:2:514:G:H1	1:2:543:C:H5	1.48	0.60
36:1:155:G:H5''	36:1:156:G:C8	2.36	0.60
36:1:1543:G:O6	86:1:4058:OHX:N2	2.35	0.60
3:S1:137:ILE:HD12	3:S1:172:LEU:HD22	1.84	0.60
69:O3:86:ARG:O	86:O3:202:OHX:N1	2.35	0.60
42:L5:265:TYR:HE1	37:7:121:U:H5''	315.92	0.60
37:7:3:U:H2'	37:7:4:U:C6	2.36	0.60
65:N9:11:ASN:OD1	65:N9:14:ARG:HD3	4.39	0.60
64:N8:90:TYR:CD1	64:N8:100:PRO:HG3	2.36	0.60
36:1:3304:U:O3'	40:L3:334:ARG:NH2	2.33	0.60
1:2:1580:C:H2'	1:2:1581:C:C6	2.37	0.60
50:M4:48:GLY:HA3	50:M4:53:VAL:HG13	2.05	0.60
40:L3:219:ALA:HB2	40:L3:336:VAL:HG13	1.84	0.60
24:D2:34:ILE:O	24:D2:38:LEU:HG	3.56	0.60
25:D3:38:PHE:CE1	1:6:359:A:H1'	331.62	0.60
1:2:1499:G:OP1	21:C9:122:ARG:NH1	2.32	0.60
74:O8:44:LYS:HB3	74:O8:51:LEU:HD11	2.86	0.60
7:S5:57:SER:HB2	30:D8:53:ILE:HB	2.83	0.60
51:M5:174:ILE:HA	51:M5:184:LYS:HA	2.41	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:117:THR:HG21	7:S5:194:LEU:HD13	2.76	0.60
39:L2:179:LEU:O	39:L2:181:LYS:N	2.35	0.60
36:1:1103:A:H1'	36:1:1104:G:OP1	2.01	0.60
10:S8:184:LEU:HB3	10:S8:189:LEU:HD13	2.77	0.60
39:L2:32:LEU:HD13	39:L2:37:ARG:HD3	1.83	0.60
5:S3:201:ALA:HB3	19:C7:42:GLN:HE21	2.81	0.60
45:L8:148:ALA:HA	45:L8:201:THR:HG22	1.84	0.60
75:O9:35:ILE:H	75:O9:35:ILE:HD12	3.66	0.60
36:1:1288:U:H2'	36:1:1289:G:H8	1.66	0.60
67:O1:78:LYS:HB2	67:O1:90:PHE:HB2	5.76	0.60
1:6:301:A:OP2	86:6:2091:OHX:N1	2.35	0.60
1:6:1638:G:C2	1:6:1639:C:H1'	2.37	0.60
1:2:541:A:O2'	1:2:542:A:H4'	2.02	0.60
45:L8:37:GLY:HA3	36:5:2550:U:C6	211.20	0.60
78:Q2:48:SER:O	86:Q2:502:OHX:N3	5.06	0.60
2:S0:142:PRO:HB3	23:D1:34:ILE:HD13	2.42	0.60
4:S2:89:GLN:HA	4:S2:94:GLN:HA	2.80	0.60
16:C4:114:ARG:HA	28:D6:62:TYR:CZ	2.37	0.60
28:D6:60:PRO:C	28:D6:62:TYR:H	2.05	0.60
45:L8:164:VAL:O	45:L8:167:PRO:HD2	2.02	0.60
66:O0:13:LYS:HB3	66:O0:100:ILE:HG22	2.06	0.60
52:M6:119:VAL:HG23	56:N0:164:SER:HB3	1.84	0.60
15:C3:92:ILE:HA	15:C3:122:ILE:HD11	2.40	0.60
1:2:14:C:H2'	1:2:15:U:H6	1.67	0.60
1:6:1118:G:O6	86:6:2175:OHX:N2	2.34	0.60
2:S0:117:GLU:O	4:S2:40:LYS:NZ	2.30	0.60
36:1:2850:G:O6	86:1:4076:OHX:N6	2.35	0.60
64:N8:92:LYS:O	64:N8:93:SER:HB3	2.01	0.60
39:L2:79:ASN:O	39:L2:82:VAL:HG13	2.02	0.60
68:O2:11:LYS:O	68:O2:13:HIS:N	2.32	0.60
5:S3:141:LYS:NZ	1:6:1275:A:N3	390.06	0.60
1:2:1175:U:H2'	1:2:1176:G:C8	2.37	0.60
1:2:1186:U:O4	1:2:1200:G:N2	2.34	0.60
41:L4:290:ILE:HG23	54:M8:35:PHE:CE2	2.37	0.60
36:1:3375:A:H5"	36:1:3378:C:H5	1.67	0.60
1:6:190:C:N4	1:6:196:G:O6	2.34	0.60
53:M7:30:ARG:HA	53:M7:119:VAL:HG11	2.20	0.60
36:1:2534:G:H2'	36:1:2535:A:H8	1.66	0.60
1:6:829:A:OP1	1:6:829:A:H4'	2.01	0.60
36:1:2573:G:N7	86:1:3998:OHX:N1	2.50	0.60
1:2:446:A:H2'	1:2:447:U:H6	1.65	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:694:U:H3	9:S7:98:ILE:HD12	1.66	0.60
36:1:2960:C:H2'	36:1:2961:G:H8	1.67	0.60
18:C6:143:ARG:NH2	1:6:1191:U:OP2	347.64	0.60
1:6:1405:G:H2'	1:6:1406:A:C8	2.37	0.60
36:1:600:G:N7	86:1:4096:OHX:N1	2.49	0.60
26:D4:8:ARG:NH1	26:D4:26:ASP:OD1	2.35	0.60
45:L8:151:VAL:HG13	45:L8:199:ALA:HB2	2.92	0.60
61:N5:38:LEU:HD11	61:N5:40:LEU:HD22	1.84	0.60
54:M8:66:ARG:NH2	36:5:744:A:OP1	165.88	0.60
71:O5:83:LYS:O	71:O5:89:ARG:NE	2.51	0.59
51:M5:93:LYS:HG3	36:5:289:A:C2	145.63	0.59
53:M7:56:ARG:O	53:M7:83:TRP:NE1	3.25	0.59
39:L2:181:LYS:HB3	36:5:860:G:C5	213.03	0.59
1:6:219:A:C6	1:6:843:U:H1'	2.37	0.59
55:M9:43:LYS:HZ3	36:5:1765:U:H6	91.73	0.59
9:S7:78:THR:HG23	9:S7:92:PHE:HE1	3.70	0.59
58:N2:36:TYR:CD2	58:N2:83:TYR:HB2	3.32	0.59
51:M5:157:LYS:NZ	36:5:58:G:OP1	84.87	0.59
36:1:2416:U:H2'	36:1:2417:U:C6	2.37	0.59
36:1:128:G:H2'	36:1:129:U:O4'	2.02	0.59
18:C6:16:ALA:HB2	18:C6:72:GLY:HA3	1.83	0.59
36:1:1348:U:O2	36:1:1349:G:N2	2.35	0.59
36:5:1790:G:O6	86:5:4192:OHX:N4	2.35	0.59
42:L5:120:LYS:O	42:L5:248:ARG:NH2	2.45	0.59
37:7:107:C:H2'	37:7:108:A:C8	2.37	0.59
40:L3:166:ILE:O	40:L3:169:THR:HG22	3.71	0.59
34:SR:83:ALA:HB1	34:SR:110:VAL:HG12	1.83	0.59
57:N1:12:ARG:HD2	57:N1:13:TYR:CE2	2.37	0.59
42:L5:278:SER:O	42:L5:280:GLU:N	3.43	0.59
49:M3:94:GLY:HA3	49:M3:119:TYR:OH	3.20	0.59
1:2:1385:G:N7	86:2:2132:OHX:N3	2.50	0.59
10:S8:99:ALA:HB3	1:6:329:G:H5'	270.41	0.59
46:L9:147:SER:HB2	46:L9:187:ILE:HD11	2.06	0.59
1:2:826:U:H2'	1:2:827:C:C6	2.37	0.59
86:2:2031:OHX:N3	86:2:2146:OHX:N1	2.50	0.59
86:2:2031:OHX:N4	86:2:2146:OHX:N2	2.50	0.59
11:S9:149:ARG:CG	11:S9:149:ARG:HH11	3.94	0.59
35:SM:64:LYS:O	35:SM:66:ALA:N	3.56	0.59
5:S3:40:ARG:HD2	5:S3:49:ILE:HD11	2.50	0.59
30:D8:44:VAL:HG21	30:D8:48:VAL:HG21	3.61	0.59
1:2:1240:U:OP2	86:2:2144:OHX:N1	2.34	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1539:G:C8	1:2:1539:G:H5'	2.36	0.59
36:1:2355:G:H4'	53:M7:139:TYR:CE2	2.36	0.59
58:N2:28:PHE:HE1	58:N2:83:TYR:HE2	2.04	0.59
11:S9:108:ARG:HH21	11:S9:145:SER:HB2	1.66	0.59
18:C6:93:HIS:ND1	18:C6:101:SER:OG	2.32	0.59
40:L3:160:VAL:HG22	40:L3:183:LEU:HD22	2.06	0.59
63:N7:25:ILE:HG23	63:N7:41:ALA:HB1	3.69	0.59
25:D3:2:GLY:HA2	86:D3:202:OHX:N2	2.18	0.59
21:C9:20:SER:O	21:C9:24:ARG:HB2	2.02	0.59
5:S3:34:TYR:HE2	5:S3:37:VAL:HG22	4.15	0.59
1:2:5:U:H2'	1:2:6:G:H8	1.67	0.59
16:C4:85:ALA:HB2	16:C4:94:PRO:HA	2.19	0.59
1:2:542:A:O2'	1:2:543:C:O5'	2.20	0.59
39:L2:204:MET:HE2	39:L2:209:HIS:HB2	1.84	0.59
1:2:1417:A:OP1	86:2:2071:OHX:N5	2.34	0.59
42:L5:105:ILE:O	42:L5:109:THR:HG23	2.02	0.59
37:3:4:U:H2'	37:3:5:G:H8	1.66	0.59
1:2:1460:A:O3'	35:SM:72:ARG:NH2	2.34	0.59
66:O0:54:SER:HA	66:O0:57:GLU:HB2	2.24	0.59
2:S0:31:VAL:HG12	2:S0:33:GLN:H	1.66	0.59
41:L4:229:ASN:OD1	41:L4:231:ALA:N	3.06	0.59
2:S0:195:TRP:NE1	2:S0:197:ILE:HB	2.95	0.59
36:5:2207:A:H62	36:5:2236:G:H1	1.48	0.59
6:S4:141:THR:OG1	6:S4:143:ASP:OD2	2.19	0.59
1:6:145:A:HO2'	1:6:146:U:P	2.24	0.59
14:C2:40:GLY:O	14:C2:124:LYS:N	3.56	0.59
1:6:1058:U:H4'	1:6:1059:U:OP1	2.02	0.59
54:M8:58:ASN:HB3	54:M8:144:ARG:HD3	4.09	0.59
64:N8:84:GLU:O	64:N8:87:ARG:HB2	3.25	0.59
1:2:782:U:H4'	1:2:783:G:OP2	2.02	0.59
41:L4:206:LEU:HB3	41:L4:248:VAL:HG22	2.58	0.59
1:2:263:C:H4'	1:2:292:U:H5'	1.84	0.59
4:S2:163:GLY:O	4:S2:165:VAL:N	4.12	0.59
1:2:488:G:H4'	1:2:488:G:OP1	2.02	0.59
1:2:771:A:OP1	11:S9:9:SER:OG	2.20	0.59
36:1:2357:A:H2'	36:1:2358:A:C8	2.37	0.59
56:N0:40:ARG:O	56:N0:43:TYR:HB3	2.02	0.59
36:5:1544:G:O6	86:5:4196:OHX:N5	2.35	0.59
38:4:77:A:OP2	86:4:226:OHX:N2	2.35	0.59
36:5:2234:G:O6	86:5:3955:OHX:N1	2.35	0.59
41:L4:299:ILE:HG23	54:M8:39:ARG:HB3	1.84	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:438:A:H2'	36:5:494:G:N2	2.18	0.59
36:1:979:U:H4'	36:1:980:A:O5'	2.02	0.59
36:1:3215:A:H8	50:M4:121:MET:CE	2.15	0.59
49:M3:48:PRO:HB2	71:O5:117:ALA:HB2	2.01	0.59
53:M7:88:VAL:O	53:M7:92:GLN:HG2	2.03	0.59
48:M1:107:ASP:N	48:M1:107:ASP:OD1	2.36	0.59
1:2:7:G:O6	4:S2:205:ARG:NH2	2.35	0.59
1:2:1748:G:O6	86:2:2105:OHX:N4	2.35	0.59
12:C0:59:PHE:CZ	12:C0:62:GLN:HA	2.67	0.59
61:N5:58:ASP:O	61:N5:62:VAL:HG23	2.62	0.59
41:L4:16:THR:HG23	41:L4:18:ASN:N	3.29	0.59
15:C3:13:SER:OG	15:C3:14:SER:O	2.21	0.59
64:N8:26:ARG:HH12	36:5:938:C:H3'	180.70	0.59
36:5:679:U:O4	86:5:4009:OHX:N2	2.35	0.59
1:2:700:C:H42	1:2:738:G:H1	1.50	0.59
78:Q2:14:GLY:C	78:Q2:16:THR:H	2.04	0.59
2:S0:35:PRO:HB3	23:D1:87:ARG:NH2	2.16	0.59
40:L3:76:VAL:HG21	40:L3:323:MET:HE3	2.91	0.59
16:C4:81:VAL:HG22	16:C4:115:ILE:HB	1.85	0.59
34:SR:19:TRP:CD2	34:SR:306:THR:HG22	2.37	0.59
42:L5:109:THR:O	42:L5:113:LEU:N	2.35	0.59
22:D0:95:ALA:HB1	22:D0:99:ILE:HG13	3.28	0.59
10:S8:48:THR:HG21	10:S8:54:LYS:HG3	1.84	0.59
56:N0:8:GLN:HG3	56:N0:26:ARG:HE	4.56	0.59
61:N5:103:TYR:HB3	61:N5:135:ILE:HD11	3.95	0.59
42:L5:38:THR:HG22	57:N1:30:TYR:HB3	1.85	0.59
79:Q3:29:LEU:O	79:Q3:33:GLN:HG2	2.10	0.59
1:2:412:A:H2'	1:2:413:U:H6	1.66	0.59
1:6:714:G:N2	1:6:724:C:O2	2.35	0.59
36:1:1620:U:H2'	36:1:1621:A:C8	2.37	0.59
41:L4:62:ALA:HB3	41:L4:90:PHE:HE2	1.66	0.59
40:L3:159:ARG:HG2	40:L3:182:GLN:HA	1.84	0.59
11:S9:113:VAL:HG12	11:S9:119:ALA:HB2	2.32	0.59
17:C5:15:HIS:H	17:C5:22:LEU:HD22	2.85	0.59
1:2:1316:G:OP1	19:C7:7:LYS:N	2.36	0.59
67:O1:84:ASP:N	67:O1:84:ASP:OD1	2.35	0.59
40:L3:70:ARG:HH22	59:N3:120:LYS:HE3	1.66	0.59
36:1:2307:G:O2'	36:1:2310:U:OP2	2.21	0.59
36:5:2568:C:O2'	36:5:2569:A:O5'	2.16	0.59
36:5:1818:U:H2'	36:5:1819:U:C6	2.38	0.59
11:S9:172:VAL:HG22	1:6:511:A:H5"	458.47	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:592:A:O2'	1:6:596:C:OP1	2.19	0.59
36:5:339:C:OP1	36:5:1380:G:O2'	2.19	0.59
36:5:1808:G:O6	86:5:4019:OHX:N3	2.36	0.59
40:L3:259:HIS:CE1	36:5:2366:C:H5'	218.27	0.59
7:S5:158:GLN:HG2	30:D8:66:LEU:HD11	1.85	0.59
36:1:72:C:H5'	49:M3:63:VAL:HG22	1.84	0.59
6:S4:191:ARG:NH1	6:S4:245:LYS:HG2	4.21	0.59
21:C9:71:VAL:HG21	21:C9:76:LEU:HD21	4.28	0.59
1:6:489:C:O2'	1:6:490:C:O4'	2.19	0.59
78:Q2:14:GLY:O	78:Q2:16:THR:N	2.35	0.59
11:S9:78:ARG:HG3	11:S9:79:ARG:N	2.18	0.59
48:M1:63:GLU:HB3	48:M1:65:ILE:HD13	1.84	0.59
86:1:4197:OHX:N2	86:O1:201:OHX:N1	2.50	0.59
36:1:1235:U:H4'	36:1:1236:G:H5'	1.85	0.59
26:D4:56:SER:HB3	26:D4:74:LEU:HB2	4.09	0.59
66:O0:102:THR:O	66:O0:102:THR:OG1	2.16	0.59
1:6:193:U:C2	1:6:195:G:H1'	2.38	0.59
86:1:4004:OHX:N6	86:1:4172:OHX:N1	2.50	0.59
36:5:1560:G:O2'	36:5:1561:G:OP1	2.20	0.59
36:1:2356:A:H5'	53:M7:138:LYS:HE3	1.84	0.59
36:1:1024:G:N7	86:1:4165:OHX:N6	2.51	0.59
6:S4:91:THR:OG1	6:S4:98:ASN:OD1	2.16	0.59
1:2:1505:A:H5''	1:2:1506:G:OP2	2.03	0.59
53:M7:108:ASP:O	53:M7:110:THR:N	2.35	0.59
1:2:755:A:H2'	1:2:756:A:C8	2.36	0.59
36:1:7:C:H2'	36:1:8:C:C6	2.38	0.59
1:2:913:G:H4'	1:2:914:G:OP2	2.03	0.59
21:C9:61:VAL:HG11	21:C9:105:LEU:HD21	2.72	0.59
16:C4:37:GLU:HA	1:6:895:G:O2'	258.34	0.59
62:N6:55:GLU:HG3	62:N6:69:LYS:HG3	1.85	0.59
12:C0:44:LYS:HG3	1:6:1217:A:H5''	428.32	0.59
14:C2:41:LEU:O	14:C2:43:ARG:N	2.36	0.59
50:M4:55:ARG:HD3	56:N0:70:THR:HB	1.85	0.59
36:1:3376:A:O3'	86:1:4177:OHX:N2	2.36	0.59
50:M4:113:THR:HG22	50:M4:115:PHE:H	1.68	0.59
36:1:595:G:H1	36:1:609:G:H5''	1.68	0.59
44:L7:30:ARG:HD2	44:L7:33:ARG:NH2	2.16	0.59
27:D5:61:SER:H	27:D5:64:VAL:HB	1.75	0.59
42:L5:22:ARG:NH1	42:L5:28:THR:OG1	4.27	0.59
18:C6:19:VAL:HG23	18:C6:68:ARG:HG2	1.85	0.59
6:S4:57:ASN:HB2	6:S4:60:GLU:HB2	1.85	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:64:LYS:HZ1	8:S6:81:VAL:HG22	1.67	0.59
36:5:3121:U:H1'	36:5:3122:A:H5''	1.83	0.59
34:SR:170:ILE:HG21	34:SR:211:ILE:HD11	1.84	0.59
36:1:3151:U:H4'	36:1:3294:A:H1'	1.85	0.59
1:6:800:U:H2'	1:6:801:G:H8	1.68	0.59
42:L5:15:ARG:NH2	36:5:1003:A:H1'	288.48	0.59
29:D7:67:THR:O	1:6:871:G:O2'	327.87	0.59
11:S9:6:ARG:HB2	11:S9:6:ARG:HH11	1.68	0.59
36:1:2340:U:OP1	40:L3:236:LYS:HE3	2.03	0.59
10:S8:61:GLU:HG2	10:S8:62:THR:HG23	3.95	0.59
2:S0:66:ALA:HB1	23:D1:50:TYR:HE1	2.97	0.59
20:C8:30:TYR:HE2	20:C8:40:ARG:HH11	1.50	0.59
1:2:693:U:H5''	1:2:694:U:H5'	1.85	0.59
36:5:1579:C:H2'	36:5:1580:A:H8	1.68	0.59
15:C3:25:TRP:HA	15:C3:27:LYS:HE2	6.80	0.59
36:1:2810:C:OP1	86:1:4082:OHX:N6	2.35	0.59
36:5:1804:A:H2'	36:5:1805:C:C6	2.38	0.59
69:O3:23:ASN:ND2	36:5:633:C:H1'	221.40	0.59
53:M7:22:LEU:O	53:M7:24:VAL:N	2.34	0.59
36:1:1460:A:H2'	36:1:1461:A:H8	1.67	0.59
39:L2:45:VAL:HG22	39:L2:84:THR:HA	2.22	0.59
1:2:1615:C:O2'	1:2:1616:G:OP2	2.20	0.59
59:N3:74:MET:HG3	59:N3:102:ILE:HG23	5.96	0.59
46:L9:18:VAL:HB	46:L9:27:VAL:HG22	1.85	0.59
43:L6:68:PRO:HB2	43:L6:71:VAL:HG23	1.85	0.59
1:2:542:A:N1	32:E0:28:LYS:HD2	2.17	0.58
67:O1:31:ARG:O	67:O1:35:GLU:HB2	2.73	0.58
19:C7:37:GLU:OE2	34:SR:129:LYS:NZ	4.64	0.58
52:M6:195:ALA:O	52:M6:198:GLY:N	2.68	0.58
27:D5:59:TYR:HD2	27:D5:60:VAL:N	2.01	0.58
59:N3:10:LYS:NZ	59:N3:56:ASP:OD1	2.75	0.58
12:C0:50:THR:HG22	12:C0:55:VAL:HG22	1.88	0.58
22:D0:97:VAL:HG13	22:D0:98:GLN:H	2.20	0.58
25:D3:91:GLY:O	25:D3:93:LEU:N	2.37	0.58
20:C8:35:ILE:HB	20:C8:38:VAL:HG13	3.55	0.58
27:D5:39:ALA:N	27:D5:70:LYS:O	4.33	0.58
45:L8:136:LEU:HD11	45:L8:162:LEU:O	2.02	0.58
1:2:1191:U:H4'	18:C6:143:ARG:HB3	1.84	0.58
41:L4:16:THR:HG23	41:L4:18:ASN:H	2.47	0.58
41:L4:220:ARG:NH1	62:N6:4:GLN:OE1	2.53	0.58
36:1:1040:A:N3	47:M0:198:LYS:NZ	2.46	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
66:O0:15:ALA:O	66:O0:18:ILE:HG22	2.03	0.58
39:L2:52:SER:HB3	39:L2:191:LEU:HD12	5.76	0.58
11:S9:54:ARG:HA	11:S9:57:ARG:HE	2.18	0.58
48:M1:8:PRO:HD2	48:M1:10:ARG:H	1.68	0.58
51:M5:14:LYS:HA	51:M5:19:LEU:HD23	1.83	0.58
48:M1:37:LEU:HD13	48:M1:69:VAL:HG12	1.85	0.58
39:L2:247:ARG:HH12	1:6:993:A:H2	253.59	0.58
70:O4:44:CYS:SG	70:O4:81:CYS:HB3	2.72	0.58
19:C7:52:GLY:HA3	1:6:1389:C:O2'	422.73	0.58
50:M4:73:PRO:HG2	50:M4:76:ALA:HB2	3.17	0.58
2:S0:69:ASN:HB3	2:S0:71:GLU:OE1	2.02	0.58
6:S4:100:ARG:O	6:S4:102:VAL:HG12	2.14	0.58
2:S0:32:HIS:O	2:S0:32:HIS:ND1	2.35	0.58
4:S2:45:VAL:HG21	4:S2:68:ILE:HG23	1.85	0.58
36:5:2418:G:O6	86:5:4242:OHX:N2	2.35	0.58
57:N1:136:ARG:HD3	57:N1:139:ARG:CZ	3.70	0.58
54:M8:144:ARG:NH2	36:5:976:U:OP1	174.00	0.58
36:5:2569:A:H4'	36:5:2570:U:H5'	1.85	0.58
18:C6:30:LYS:NZ	21:C9:8:ASP:OD2	2.29	0.58
42:L5:120:LYS:NZ	42:L5:122:VAL:O	11.33	0.58
13:C1:87:ARG:HH21	13:C1:104:HIS:CE1	2.21	0.58
5:S3:190:ARG:HH12	5:S3:195:SER:HA	2.04	0.58
36:1:523:A:O2'	56:N0:69:PRO:HD2	2.03	0.58
1:2:181:A:H2'	1:2:182:A:C8	2.37	0.58
63:N7:21:LYS:NZ	63:N7:47:GLU:O	2.96	0.58
40:L3:339:ARG:HH12	40:L3:342:LEU:HD11	1.68	0.58
36:5:2440:G:H2'	36:5:2441:A:C8	2.38	0.58
67:O1:46:THR:HG23	67:O1:47:ASP:H	4.46	0.58
36:1:1334:U:H1'	44:L7:208:SER:HB2	1.85	0.58
3:S1:70:LEU:O	3:S1:74:GLN:N	2.36	0.58
13:C1:46:LYS:O	13:C1:50:GLU:HG2	4.60	0.58
7:S5:113:ILE:HG21	7:S5:190:ILE:HG22	1.85	0.58
1:2:93:A:H1'	6:S4:3:ARG:O	2.02	0.58
15:C3:113:PHE:HD1	15:C3:114:ARG:HH11	5.05	0.58
58:N2:43:VAL:C	58:N2:45:GLY:H	2.85	0.58
1:6:25:C:O2	86:6:2106:OHX:N6	2.37	0.58
1:2:206:A:OP2	86:2:2101:OHX:N5	2.36	0.58
1:2:485:A:H2'	1:2:486:G:O4'	2.03	0.58
29:D7:28:PRO:HB3	1:6:959:U:H5''	351.18	0.58
36:5:3372:A:OP2	86:5:4231:OHX:N6	2.36	0.58
1:2:1550:A:P	17:C5:42:ARG:HH22	2.26	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:706:A:H4'	36:1:781:G:O2'	2.03	0.58
52:M6:143:THR:OG1	52:M6:150:GLU:HB2	2.76	0.58
48:M1:133:ARG:HD2	48:M1:152:HIS:O	2.03	0.58
36:1:2274:U:OP2	86:1:3966:OHX:N4	2.36	0.58
36:1:1471:U:H2'	36:1:1472:U:C6	2.38	0.58
1:6:1385:G:N7	86:6:2119:OHX:N6	2.51	0.58
46:L9:117:PHE:HE1	46:L9:178:GLY:HA2	1.68	0.58
62:N6:73:VAL:HA	62:N6:80:VAL:HG23	2.50	0.58
47:M0:7:ARG:NH1	36:5:2828:G:OP1	269.37	0.58
1:2:1525:A:H5'	21:C9:93:HIS:HB2	1.84	0.58
59:N3:13:ILE:HD12	59:N3:53:SER:HB2	3.78	0.58
9:S7:89:HIS:CE1	9:S7:165:LYS:HA	2.99	0.58
48:M1:109:HIS:HD2	48:M1:114:ILE:HG21	1.94	0.58
13:C1:3:THR:OG1	13:C1:82:ARG:NE	2.34	0.58
36:5:2102:U:H2'	36:5:2103:U:C6	2.38	0.58
64:N8:13:GLY:HA2	36:5:943:U:H3'	163.29	0.58
57:N1:82:ASN:O	65:N9:21:ILE:HA	2.03	0.58
5:S3:42:THR:OG1	5:S3:45:LYS:O	2.83	0.58
36:5:767:U:H1'	36:5:768:C:C6	2.38	0.58
41:L4:351:PRO:HB3	44:L7:70:LYS:HB3	1.83	0.58
4:S2:52:THR:HB	4:S2:54:GLU:HG2	1.85	0.58
66:O0:76:GLU:O	66:O0:80:ALA:N	2.36	0.58
39:L2:59:ALA:HB2	39:L2:78:ALA:HB2	1.86	0.58
22:D0:43:LYS:O	22:D0:47:GLN:N	2.30	0.58
78:Q2:77:CYS:SG	78:Q2:79:THR:HG23	3.86	0.58
36:5:2311:G:OP2	86:5:4193:OHX:N1	2.36	0.58
1:6:191:C:O2'	1:6:192:U:O5'	2.21	0.58
1:2:549:G:OP2	86:2:2026:OHX:N2	2.36	0.58
41:L4:131:VAL:O	41:L4:135:VAL:HG23	3.14	0.58
36:1:1491:A:N7	75:O9:2:ALA:HB3	2.18	0.58
21:C9:60:SER:OG	1:6:1480:G:OP1	399.26	0.58
55:M9:134:HIS:CE1	55:M9:136:ARG:HB3	2.71	0.58
63:N7:25:ILE:HA	63:N7:43:VAL:HG12	1.84	0.58
1:2:291:G:H2'	1:2:292:U:C6	2.38	0.58
36:1:2986:U:H2'	36:1:2987:A:C8	2.38	0.58
54:M8:40:THR:OG1	54:M8:40:THR:O	2.12	0.58
29:D7:15:GLU:OE2	29:D7:24:LEU:N	2.89	0.58
9:S7:143:LEU:HB2	9:S7:147:ASN:O	2.30	0.58
1:2:603:U:H2'	1:2:604:A:H8	1.68	0.58
36:1:3192:U:OP2	52:M6:176:LYS:NZ	2.35	0.58
57:N1:84:TYR:O	57:N1:85:LEU:HD23	2.19	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1852:G:N7	86:5:4034:OHX:N6	2.52	0.58
7:S5:36:ALA:HB1	7:S5:45:LYS:HD2	2.68	0.58
36:1:2207:A:H2'	36:1:2208:A:H8	1.68	0.58
36:1:2746:A:H2	42:L5:146:LEU:HB3	1.68	0.58
66:O0:75:ASN:HA	66:O0:86:ARG:HB2	3.21	0.58
86:1:4197:OHX:N4	86:O1:201:OHX:N3	2.50	0.58
1:2:901:G:H22	16:C4:54:GLU:CD	2.06	0.58
15:C3:33:VAL:HA	15:C3:36:GLN:HB2	1.86	0.58
47:M0:36:LEU:HD11	47:M0:69:ARG:HD3	1.86	0.58
36:5:3112:G:O6	86:5:3911:OHX:N6	2.36	0.58
1:2:16:G:H2'	1:2:17:C:C6	2.38	0.58
1:6:214:G:N7	86:6:2148:OHX:N4	2.51	0.58
63:N7:136:PHE:CE1	70:O4:89:ILE:HG12	4.84	0.58
1:2:936:G:N7	28:D6:15:ARG:NH1	2.52	0.58
36:1:863:C:H2'	36:1:864:G:O4'	2.03	0.58
36:1:873:C:H5''	36:1:874:U:O5'	2.04	0.58
36:1:2186:U:OP2	39:L2:200:ARG:NH2	2.31	0.58
1:6:1092:A:C8	1:6:1094:G:C8	2.91	0.58
40:L3:75:ALA:HB2	36:5:3049:A:C2	245.93	0.58
39:L2:225:ILE:HG21	39:L2:234:LYS:HA	1.85	0.58
62:N6:100:HIS:CD2	62:N6:101:PRO:HD2	3.01	0.58
1:2:320:U:H3'	1:2:321:C:C5'	2.30	0.58
48:M1:16:LYS:HG2	48:M1:130:VAL:HG13	3.82	0.58
86:5:4015:OHX:N3	86:5:4211:OHX:N1	2.51	0.58
5:S3:64:ARG:HG2	5:S3:65:ARG:H	2.44	0.58
36:1:1225:A:H1'	36:1:3116:G:C2	2.39	0.58
50:M4:120:VAL:O	50:M4:124:ARG:HG3	2.04	0.58
44:L7:151:ARG:NH1	44:L7:244:ASN:O	3.64	0.58
10:S8:138:ASN:HA	10:S8:141:ARG:HB2	2.55	0.58
3:S1:70:LEU:HG	3:S1:84:ILE:HD11	5.09	0.58
36:5:1307:G:O2'	36:5:1308:A:OP2	2.21	0.58
64:N8:27:LYS:NZ	36:5:801:A:OP1	153.80	0.58
50:M4:65:LEU:HD11	56:N0:152:LEU:HD12	1.86	0.58
20:C8:33:THR:HA	20:C8:38:VAL:HG22	3.33	0.58
74:O8:5:ILE:HG22	74:O8:54:LEU:HB2	2.14	0.58
36:5:2964:G:N2	36:5:2967:A:OP2	2.31	0.58
29:D7:46:VAL:HG13	29:D7:54:VAL:HG21	1.86	0.58
36:1:1317:A:OP1	86:1:4064:OHX:N2	2.36	0.58
42:L5:9:SER:OG	42:L5:10:SER:N	2.33	0.58
29:D7:23:THR:CG2	29:D7:29:ARG:HH21	3.11	0.58
36:5:308:A:H5'	36:5:2223:A:O2'	2.03	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
69:O3:60:ARG:HD2	36:5:3275:U:C4	213.88	0.58
25:D3:42:PRO:O	25:D3:79:ASN:ND2	3.79	0.58
41:L4:288:ARG:O	41:L4:291:ASN:N	2.88	0.58
7:S5:128:ASN:O	7:S5:131:GLN:N	2.76	0.58
4:S2:140:ARG:HH12	4:S2:229:LEU:HD11	4.95	0.58
45:L8:48:ARG:NH2	36:5:2588:U:OP1	183.29	0.58
40:L3:296:THR:HG22	40:L3:297:SER:N	3.50	0.58
36:1:412:G:O2'	53:M7:119:VAL:O	2.19	0.58
1:2:641:G:H2'	1:2:642:G:H8	1.68	0.58
4:S2:152:HIS:HD2	4:S2:153:SER:H	2.68	0.58
24:D2:104:LEU:HB2	24:D2:125:ILE:HA	1.85	0.58
44:L7:178:ILE:HA	44:L7:183:ASP:HB3	1.91	0.58
1:6:5:U:H2'	1:6:6:G:H8	1.69	0.58
36:1:1563:C:O2	36:1:1577:G:N2	2.29	0.58
1:2:580:A:H5''	5:S3:143:ARG:HH12	1.68	0.58
36:5:1363:A:OP2	86:5:4194:OHX:N3	2.37	0.58
1:6:8:U:O2'	86:6:2070:OHX:N2	2.37	0.58
36:1:1033:U:H2'	36:1:1034:U:C6	2.39	0.58
1:2:59:C:H1'	1:2:60:U:C5	2.38	0.58
1:6:1535:U:O2'	1:6:1536:G:O5'	2.21	0.58
66:O0:58:TYR:OH	70:O4:97:GLU:OE2	2.11	0.58
1:6:1681:A:H2	1:6:1720:G:H21	1.51	0.58
60:N4:34:SER:HA	60:N4:37:ALA:HB3	1.84	0.58
36:1:2429:G:OP2	86:1:3987:OHX:N4	2.36	0.58
36:1:1383:G:O6	86:1:3882:OHX:N3	2.37	0.58
36:5:3164:C:H42	36:5:3286:G:H1	1.52	0.58
7:S5:94:THR:O	7:S5:97:LEU:N	2.36	0.58
36:1:2503:G:HO2'	36:1:2504:U:H5	1.52	0.58
48:M1:92:ARG:HH12	48:M1:94:ARG:HD2	6.60	0.58
71:O5:83:LYS:HA	38:8:38:U:C5	66.40	0.58
47:M0:4:ARG:HH11	36:5:2828:G:HO2'	264.29	0.58
36:1:562:C:H2'	36:1:563:U:H6	1.69	0.58
53:M7:32:THR:HG21	53:M7:87:SER:HB3	1.96	0.58
1:2:875:G:H1	1:2:952:A:H61	1.51	0.58
1:2:1280:C:H2'	1:2:1281:G:H8	1.69	0.58
8:S6:23:ARG:NH2	8:S6:42:GLY:HA2	4.45	0.58
59:N3:48:ARG:HH22	36:5:3043:C:P	250.42	0.58
17:C5:33:PHE:O	17:C5:36:LEU:HD22	4.19	0.58
36:5:1070:U:C4	36:5:1071:U:C4	2.92	0.58
36:1:3131:U:H2'	36:1:3132:C:C6	2.39	0.58
8:S6:92:ARG:O	1:6:405:C:O2'	303.22	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3295:A:H2'	36:1:3296:A:C8	2.39	0.58
42:L5:140:ARG:HD3	36:5:1080:A:OP1	226.07	0.58
39:L2:144:ASN:ND2	39:L2:161:ASP:OD1	3.33	0.58
1:2:1670:G:N7	86:2:2123:OHX:N5	2.52	0.58
42:L5:261:THR:H	42:L5:264:GLN:NE2	3.70	0.58
55:M9:85:ARG:HH21	36:5:1916:U:H4'	228.42	0.58
1:6:550:A:OP2	86:6:2048:OHX:N2	2.36	0.58
51:M5:104:GLU:O	51:M5:108:ARG:HG3	2.04	0.58
36:5:299:G:N7	86:5:4184:OHX:N1	2.51	0.58
36:1:2828:G:P	47:M0:7:ARG:HH12	2.26	0.58
51:M5:124:ASP:OD2	51:M5:126:THR:N	2.32	0.58
51:M5:96:ARG:CG	51:M5:96:ARG:HH11	2.31	0.58
2:S0:121:VAL:HG23	2:S0:141:ILE:HG21	1.86	0.58
86:1:4197:OHX:N4	86:O1:201:OHX:N1	2.51	0.58
51:M5:138:GLN:HA	51:M5:143:ARG:HD2	1.86	0.58
36:5:2255:A:OP2	36:5:2261:G:N1	2.30	0.58
22:D0:18:GLN:O	22:D0:96:PRO:HA	2.04	0.58
50:M4:38:ILE:HD13	56:N0:150:PHE:HE2	2.73	0.58
24:D2:5:SER:HB2	1:6:1101:G:O2'	352.93	0.58
4:S2:128:GLY:O	4:S2:132:ALA:N	2.45	0.58
1:2:1409:G:N2	1:2:1411:A:H3'	2.19	0.58
34:SR:52:GLN:HG2	34:SR:53:LYS:HG2	2.58	0.58
61:N5:132:ALA:O	61:N5:135:ILE:HG22	3.31	0.58
54:M8:62:VAL:HG13	54:M8:66:ARG:HD3	2.69	0.58
36:5:240:U:HO2'	36:5:241:G:H8	1.52	0.58
36:1:2984:C:H2'	36:1:2985:C:H6	1.69	0.58
17:C5:116:LEU:O	17:C5:118:GLU:N	2.84	0.58
73:O7:59:THR:HG22	38:8:41:A:O2'	91.76	0.58
1:6:1714:A:H2'	1:6:1715:G:O4'	2.04	0.58
1:6:615:A:O2'	1:6:621:A:N1	2.31	0.58
56:N0:2:ALA:HB3	56:N0:32:SER:HB3	1.84	0.58
36:1:1445:U:H5''	36:1:1446:A:OP2	2.04	0.58
1:2:277:U:H6	1:2:279:G:H22	1.50	0.58
36:5:1220:U:OP1	36:5:1221:A:O2'	2.17	0.58
8:S6:109:LEU:HD13	8:S6:111:LEU:HD21	2.13	0.58
54:M8:176:ARG:NH1	64:N8:46:ASP:OD2	2.37	0.57
62:N6:35:LEU:HA	62:N6:106:ILE:HB	1.86	0.57
28:D6:79:ILE:HA	28:D6:84:VAL:HG11	1.86	0.57
39:L2:65:ASP:HB3	39:L2:68:LYS:O	2.49	0.57
50:M4:113:THR:CG2	50:M4:116:GLU:H	2.60	0.57
44:L7:123:THR:HA	44:L7:126:LEU:HD12	2.57	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1542:G:N2	1:2:1568:C:H1'	2.18	0.57
6:S4:147:ILE:HG21	6:S4:169:ILE:HG13	1.99	0.57
63:N7:70:PRO:HG3	63:N7:115:LYS:HB2	1.86	0.57
62:N6:33:ALA:HB2	62:N6:101:PRO:HB2	3.53	0.57
47:M0:24:ARG:HB2	47:M0:24:ARG:HH11	1.69	0.57
1:2:560:U:H2'	1:2:561:G:H8	1.68	0.57
14:C2:88:LEU:HB3	14:C2:140:PHE:HZ	1.66	0.57
49:M3:24:VAL:O	49:M3:26:PHE:N	2.37	0.57
74:O8:2:ALA:HA	36:5:1747:G:H21	144.31	0.57
47:M0:119:TRP:HZ3	36:5:1126:G:H5''	256.35	0.57
1:6:1504:G:H2'	1:6:1505:A:C8	2.39	0.57
36:1:2697:A:H2'	36:1:2698:G:H8	1.68	0.57
17:C5:37:ALA:HB1	17:C5:38:PRO:HD2	2.15	0.57
36:1:1752:A:OP2	86:1:4048:OHX:N5	2.36	0.57
34:SR:33:LEU:O	34:SR:45:TRP:HD1	1.86	0.57
45:L8:45:ASN:ND2	45:L8:47:SER:HB3	2.19	0.57
36:1:2986:U:H2'	36:1:2987:A:H8	1.69	0.57
38:8:6:U:H2'	38:8:7:U:H6	1.69	0.57
76:Q0:78:ILE:HG12	76:Q0:83:LYS:HD2	1.86	0.57
51:M5:15:GLN:HG3	51:M5:20:ARG:HD3	5.94	0.57
79:Q3:8:VAL:HG22	36:5:1927:G:OP1	245.32	0.57
1:6:700:C:H2'	1:6:701:U:C6	2.39	0.57
36:5:1456:A:H4'	36:5:1457:U:O5'	2.03	0.57
36:5:277:G:OP1	86:5:3915:OHX:N4	2.37	0.57
1:2:1061:A:H2'	1:2:1062:A:H5'	1.85	0.57
18:C6:139:GLN:NE2	1:6:1465:C:OP1	352.48	0.57
36:1:3362:A:H2'	36:1:3363:U:O4'	2.05	0.57
3:S1:137:ILE:HG13	3:S1:172:LEU:HD13	1.86	0.57
1:2:1280:C:H2'	1:2:1281:G:C8	2.38	0.57
77:Q1:2:ARG:HB3	77:Q1:5:TRP:CD1	2.63	0.57
2:S0:119:ARG:HH21	4:S2:240:LEU:HD23	1.67	0.57
1:2:823:G:O2'	1:2:824:G:O4'	2.18	0.57
1:2:355:G:OP2	86:2:2036:OHX:N4	2.36	0.57
41:L4:327:LEU:HA	44:L7:166:ASN:ND2	2.19	0.57
31:D9:33:LYS:O	31:D9:36:LEU:HB3	2.04	0.57
55:M9:36:ASN:OD1	55:M9:37:SER:N	2.37	0.57
27:D5:77:ARG:NH1	1:6:1533:C:OP2	352.78	0.57
16:C4:88:GLY:H	16:C4:120:PRO:HG2	1.68	0.57
53:M7:108:ASP:N	53:M7:152:GLU:OE2	2.35	0.57
26:D4:52:LYS:O	26:D4:54:ALA:N	2.60	0.57
66:O0:88:GLY:N	36:5:1729:A:OP1	246.19	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:978:A:H2'	1:2:979:A:O4'	2.04	0.57
36:1:2662:G:H2'	36:1:2663:G:C8	2.38	0.57
1:6:539:G:H8	1:6:539:G:OP2	1.87	0.57
72:O6:74:LYS:NZ	36:5:2224:A:OP1	158.90	0.57
65:N9:28:LYS:HB3	65:N9:29:TYR:HD1	1.69	0.57
1:6:190:C:O2'	1:6:191:C:O5'	2.21	0.57
12:C0:50:THR:HG21	12:C0:57:THR:HB	4.09	0.57
36:1:3187:A:H5'	46:L9:22:SER:HA	1.85	0.57
26:D4:12:VAL:HG12	1:6:783:G:H8	422.84	0.57
1:2:1236:A:C1'	33:E1:138:ARG:HH22	2.17	0.57
24:D2:8:ALA:HB2	24:D2:74:VAL:HG11	2.64	0.57
36:1:2206:G:H8	36:1:2206:G:OP2	1.88	0.57
49:M3:167:PHE:HA	49:M3:170:LEU:HD12	1.87	0.57
1:6:591:A:H2'	1:6:592:A:C8	2.39	0.57
61:N5:57:LEU:HA	61:N5:61:LYS:HD3	3.78	0.57
36:5:2509:U:H2'	36:5:2510:U:H5''	1.86	0.57
26:D4:87:PRO:HG2	26:D4:90:ARG:CZ	2.34	0.57
20:C8:25:ASN:HB2	27:D5:40:VAL:HG21	1.85	0.57
1:2:1604:U:C4	1:2:1605:G:N7	2.72	0.57
59:N3:33:ASN:ND2	59:N3:64:LYS:HB2	2.84	0.57
1:6:822:U:H2'	1:6:823:G:H5''	1.85	0.57
36:5:3167:A:O5'	36:5:3167:A:H8	1.87	0.57
1:6:1662:G:O6	86:6:2061:OHX:N6	2.38	0.57
36:1:1951:C:H5'	36:1:1952:G:OP1	2.04	0.57
67:O1:43:HIS:O	67:O1:44:MET:HE2	6.14	0.57
3:S1:167:VAL:HA	3:S1:170:GLU:HB3	1.87	0.57
3:S1:183:GLN:O	3:S1:187:LYS:N	2.37	0.57
36:5:283:G:O6	36:5:304:G:H1'	2.04	0.57
59:N3:2:SER:OG	59:N3:3:GLY:N	4.13	0.57
17:C5:43:ARG:O	17:C5:47:ARG:HG3	2.04	0.57
36:1:662:U:OP1	64:N8:8:THR:HG21	2.05	0.57
36:1:3305:A:H2'	36:1:3306:U:O2	2.05	0.57
40:L3:2:SER:HA	36:5:2940:A:N7	238.24	0.57
36:1:795:G:O6	86:1:3896:OHX:N3	2.38	0.57
18:C6:67:VAL:HG21	18:C6:85:ILE:HD11	3.30	0.57
36:5:2101:C:H2'	36:5:2102:U:C6	2.39	0.57
61:N5:38:LEU:HD21	61:N5:40:LEU:HD13	1.85	0.57
62:N6:4:GLN:HB2	36:5:229:G:H5''	69.01	0.57
36:5:322:U:H5''	36:5:323:A:OP1	2.04	0.57
36:1:2766:U:O4	86:1:4038:OHX:N2	2.37	0.57
33:E1:97:LYS:NZ	1:6:1232:U:O4	437.54	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:45:ILE:HA	6:S4:61:VAL:HG11	1.97	0.57
49:M3:153:ASP:OD1	49:M3:157:ARG:NH2	2.37	0.57
11:S9:125:ALA:O	11:S9:129:ILE:HG13	2.08	0.57
36:5:439:C:H4'	36:5:440:A:H5'	1.86	0.57
2:S0:120:LEU:HD11	2:S0:144:ILE:HG13	1.84	0.57
7:S5:121:ILE:HG23	7:S5:199:ILE:HG12	1.86	0.57
36:1:2261:G:H21	36:1:2262:A:N6	2.03	0.57
12:C0:46:LEU:HA	12:C0:49:LEU:HB2	2.10	0.57
41:L4:128:ALA:O	41:L4:131:VAL:HG23	3.97	0.57
36:5:2821:C:N3	88:5:4246:3J6:H13	2.20	0.57
9:S7:132:PRO:O	9:S7:133:THR:OG1	4.51	0.57
1:2:1236:A:O4'	33:E1:138:ARG:NH2	2.29	0.57
36:5:3309:G:H2'	36:5:3310:A:O5'	2.04	0.57
1:2:93:A:H4'	1:2:94:U:OP2	2.04	0.57
36:5:2416:U:O4	86:5:4168:OHX:N5	2.37	0.57
55:M9:20:ARG:HD2	36:5:1874:A:OP2	141.59	0.57
39:L2:224:THR:HG21	36:5:2201:G:H21	222.64	0.57
36:1:391:A:OP2	86:1:4146:OHX:N1	2.38	0.57
36:5:499:G:H2'	36:5:500:C:C6	2.40	0.57
1:6:702:G:N7	86:6:2097:OHX:N4	2.52	0.57
36:1:1785:U:H2'	36:1:1786:G:C8	2.39	0.57
36:1:1051:U:H4'	57:N1:19:PHE:CD2	2.40	0.57
36:1:2681:U:OP2	48:M1:51:ARG:NH2	2.37	0.57
1:6:1392:U:H2'	1:6:1393:C:C6	2.40	0.57
13:C1:97:TYR:CE2	25:D3:16:ARG:HB3	2.39	0.57
45:L8:238:LEU:HB2	45:L8:243:GLN:HG2	1.85	0.57
40:L3:284:ARG:NH1	40:L3:356:LEU:HD12	2.19	0.57
50:M4:115:PHE:O	50:M4:119:GLN:HG3	2.05	0.57
1:2:883:C:H2'	1:2:884:A:C8	2.39	0.57
36:5:662:U:H2'	36:5:663:C:C6	2.39	0.57
41:L4:31:ARG:HG3	41:L4:120:TYR:CE1	2.81	0.57
55:M9:23:TRP:CZ2	55:M9:25:ASP:HB3	2.39	0.57
1:2:311:U:OP2	25:D3:20:ARG:HD2	2.04	0.57
10:S8:103:GLN:HG2	10:S8:164:ARG:HB3	1.86	0.57
1:2:1785:U:OP2	16:C4:133:ARG:NH2	2.38	0.57
36:1:499:G:H2'	36:1:500:C:C6	2.38	0.57
40:L3:92:TYR:OH	40:L3:180:GLU:OE1	2.17	0.57
36:5:277:G:H2'	36:5:278:U:H6	1.68	0.57
1:6:823:G:H2'	1:6:824:G:O4'	2.04	0.57
41:L4:191:LYS:HG3	41:L4:194:TYR:CE2	4.02	0.57
56:N0:20:PRO:O	56:N0:21:GLU:HB3	3.76	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:75:ILE:HG22	45:L8:76:ALA:H	1.69	0.57
67:O1:74:ARG:NH1	67:O1:109:VAL:HG21	2.20	0.57
36:1:521:A:N3	56:N0:65:ASN:ND2	2.52	0.57
1:2:1183:A:N1	17:C5:99:GLY:HA3	2.20	0.57
64:N8:16:SER:HA	36:5:942:U:N3	169.45	0.57
36:5:583:G:O6	86:5:4015:OHX:N1	2.37	0.57
38:8:80:A:H2	38:8:83:C:H41	1.53	0.57
44:L7:217:PRO:O	86:5:3996:OHX:N6	258.90	0.57
3:S1:129:THR:OG1	3:S1:131:ASP:OD1	6.41	0.57
6:S4:161:LYS:HB3	6:S4:170:THR:O	4.40	0.57
1:2:1291:G:H22	1:2:1324:G:H1	1.53	0.57
49:M3:177:LYS:HB2	72:O6:11:LEU:HD13	1.85	0.57
2:S0:59:LEU:HD12	23:D1:79:LEU:HD11	2.45	0.57
1:6:218:A:H61	1:6:829:A:H2	1.51	0.57
1:2:916:U:H3	16:C4:41:ARG:NH2	2.03	0.57
36:5:2705:A:OP2	86:5:3893:OHX:N2	2.37	0.57
45:L8:180:VAL:HG11	45:L8:186:LEU:HD21	2.58	0.57
26:D4:10:ARG:NH1	1:6:778:G:O6	429.63	0.57
79:Q3:8:VAL:O	79:Q3:11:THR:HB	2.05	0.57
25:D3:43:PHE:CE1	25:D3:49:ALA:HB3	2.40	0.57
43:L6:24:ALA:N	36:5:607:A:OP1	245.88	0.57
40:L3:274:SER:OG	36:5:3139:A:OP1	228.34	0.57
36:1:1132:C:H2'	36:1:1133:A:H8	1.69	0.57
1:2:1226:A:O2'	1:2:1227:A:OP1	2.22	0.57
36:1:2767:U:OP2	86:1:4133:OHX:N2	2.37	0.57
59:N3:21:ALA:HB3	59:N3:36:ILE:HD12	1.87	0.57
49:M3:104:ARG:C	72:O6:20:MET:HB2	2.25	0.57
36:1:1740:U:H1'	36:1:1741:A:C2	2.40	0.57
34:SR:193:ILE:HD12	34:SR:193:ILE:H	4.48	0.57
36:1:3276:G:H1	69:O3:60:ARG:HH12	1.53	0.57
7:S5:42:LEU:HB2	7:S5:46:TRP:O	2.05	0.57
7:S5:62:VAL:HG13	7:S5:89:ILE:HG12	2.22	0.57
7:S5:91:GLU:HG2	7:S5:95:ASN:ND2	2.20	0.57
71:O5:86:ARG:O	71:O5:90:ARG:NE	2.38	0.57
53:M7:25:SER:OG	36:5:1447:G:N7	150.16	0.57
39:L2:8:GLN:HA	36:5:2163:C:H4'	183.80	0.57
6:S4:170:THR:OG1	6:S4:170:THR:O	3.16	0.57
11:S9:60:LEU:HG	11:S9:93:LEU:HD11	1.87	0.57
17:C5:122:THR:O	1:6:1183:A:N6	363.22	0.57
42:L5:40:HIS:CD2	42:L5:42:ALA:HB3	2.40	0.57
56:N0:155:ARG:NH1	36:5:3206:C:O2	310.73	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:84:ARG:O	41:L4:87:GLN:HG3	2.04	0.57
1:2:1236:A:H1'	33:E1:138:ARG:HH12	1.70	0.57
5:S3:116:ARG:HG2	5:S3:152:PHE:HE1	3.26	0.57
11:S9:69:ARG:O	11:S9:73:GLY:N	3.02	0.57
49:M3:94:GLY:HA3	71:O5:116:TYR:OH	2.05	0.57
9:S7:147:ASN:OD1	9:S7:147:ASN:N	2.37	0.57
39:L2:144:ASN:O	39:L2:160:SER:N	2.36	0.57
7:S5:216:GLU:OE2	7:S5:219:ARG:HD3	3.21	0.57
1:2:937:C:N4	28:D6:14:GLY:O	2.37	0.57
48:M1:48:SER:N	48:M1:66:ALA:O	3.15	0.57
41:L4:64:SER:HA	41:L4:75:PRO:HA	1.86	0.57
56:N0:108:GLN:NE2	36:5:1322:U:O2	292.54	0.57
1:6:848:C:H2'	1:6:849:C:C6	2.40	0.57
42:L5:46:THR:HG21	36:5:1078:U:H4'	236.88	0.57
36:5:2694:A:C6	36:5:2695:A:C6	2.93	0.57
78:Q2:35:LEU:HD23	78:Q2:35:LEU:H	1.69	0.57
36:1:160:G:O6	86:1:4194:OHX:N6	2.38	0.57
56:N0:46:GLN:HG2	56:N0:51:VAL:O	2.12	0.57
10:S8:25:ARG:O	10:S8:28:GLU:HG2	2.63	0.57
42:L5:290:ILE:O	42:L5:294:ALA:N	3.75	0.57
71:O5:83:LYS:HA	38:8:38:U:H5	65.57	0.57
53:M7:29:THR:HG22	53:M7:87:SER:OG	2.05	0.57
36:5:955:U:H2'	36:5:956:U:H6	1.67	0.57
1:2:75:U:H2'	1:2:76:A:O4'	2.05	0.57
6:S4:73:ASP:OD2	6:S4:122:LYS:NZ	2.37	0.57
86:1:4197:OHX:N6	86:O1:201:OHX:N3	2.53	0.57
32:E0:13:LYS:O	32:E0:16:SER:OG	3.20	0.57
36:1:338:A:N7	41:L4:47:ARG:HD2	2.19	0.57
10:S8:84:HIS:HE1	10:S8:86:SER:HB2	1.69	0.57
36:1:2535:A:N6	36:1:2544:U:H3	2.01	0.57
36:1:1237:G:N7	36:1:1263:A:O2'	2.32	0.57
1:2:68:A:H5''	8:S6:162:VAL:HG21	1.85	0.57
1:2:1338:C:N3	1:2:1387:G:N2	2.53	0.57
64:N8:82:ILE:CG2	64:N8:87:ARG:HG3	3.42	0.57
1:6:1491:U:H4'	1:6:1492:A:H5''	1.86	0.57
36:1:2734:A:OP1	86:1:4007:OHX:N3	2.37	0.57
57:N1:157:GLU:HB3	57:N1:159:PHE:CE1	2.98	0.57
1:2:1267:G:HO2'	1:2:1448:G:HO2'	1.43	0.57
36:1:3301:U:O4	86:1:3898:OHX:N2	2.38	0.57
73:O7:76:ASN:O	73:O7:79:GLN:HG3	2.22	0.57
36:1:3389:U:O2'	36:1:3390:G:OP2	2.22	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:520:A:H2'	1:2:521:A:C8	2.40	0.57
57:N1:111:ALA:O	57:N1:115:LYS:HG3	3.11	0.57
1:6:1398:U:H4'	1:6:1399:C:OP2	2.04	0.57
68:O2:59:SER:OG	36:5:1405:U:OP2	184.97	0.57
13:C1:112:SER:O	13:C1:114:ALA:N	2.64	0.57
24:D2:47:ILE:HG22	24:D2:65:LEU:HD12	4.52	0.57
7:S5:90:ILE:O	7:S5:94:THR:HG23	2.36	0.56
11:S9:141:VAL:HG11	11:S9:146:PHE:CD2	2.71	0.56
21:C9:39:THR:HA	21:C9:100:ILE:HD12	1.95	0.56
7:S5:195:ALA:O	7:S5:199:ILE:HG13	2.29	0.56
5:S3:40:ARG:HB2	5:S3:47:GLU:HB2	1.86	0.56
19:C7:105:GLN:CD	19:C7:105:GLN:H	2.09	0.56
59:N3:48:ARG:NH2	36:5:3043:C:OP2	251.20	0.56
1:2:1172:G:H4'	1:2:1569:A:H2	1.69	0.56
20:C8:49:LYS:NZ	20:C8:80:LYS:O	2.32	0.56
58:N2:19:VAL:HG12	58:N2:105:LEU:HD22	4.35	0.56
36:1:3191:G:O6	86:1:4128:OHX:N3	2.38	0.56
36:5:1661:G:N7	86:5:3913:OHX:N5	2.53	0.56
1:6:848:C:H2'	1:6:849:C:H6	1.70	0.56
43:L6:80:ASN:O	43:L6:82:ARG:N	2.37	0.56
70:O4:104:VAL:HA	70:O4:107:GLU:HB2	2.01	0.56
19:C7:33:ARG:NH2	34:SR:109:ASP:OD1	2.37	0.56
64:N8:120:ASN:O	64:N8:141:ALA:HB1	2.65	0.56
34:SR:112:SER:HB2	34:SR:153:GLN:HA	1.87	0.56
36:5:1081:U:O2'	36:5:1082:U:O5'	2.17	0.56
1:6:17:C:H2'	1:6:18:C:C6	2.40	0.56
25:D3:125:VAL:HG12	25:D3:126:LYS:HG3	2.71	0.56
49:M3:64:LYS:HG3	64:N8:69:TRP:CG	2.41	0.56
36:1:1524:A:O2'	36:1:1526:U:OP2	2.22	0.56
36:1:1119:C:OP2	86:1:3955:OHX:N1	2.38	0.56
66:O0:27:TYR:O	66:O0:31:VAL:HG23	2.05	0.56
16:C4:20:TYR:HB3	16:C4:27:PHE:HB2	1.86	0.56
31:D9:4:GLU:N	31:D9:4:GLU:OE1	4.96	0.56
54:M8:176:ARG:HG3	36:5:2763:U:H5'	181.60	0.56
1:2:932:U:H4'	1:2:933:A:O4'	2.05	0.56
11:S9:38:ASN:HB3	11:S9:40:LYS:H	1.68	0.56
40:L3:286:GLY:HA3	40:L3:321:PHE:CE2	2.40	0.56
33:E1:103:LEU:HD23	33:E1:105:TYR:CD2	3.97	0.56
59:N3:13:ILE:HG12	59:N3:53:SER:HB2	1.88	0.56
48:M1:166:LYS:O	48:M1:168:ASP:N	4.57	0.56
36:1:1636:U:H5''	63:N7:73:LYS:NZ	2.21	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:C6:14:LYS:O	18:C6:123:ARG:NH2	2.38	0.56
3:S1:157:GLN:HB2	3:S1:160:HIS:ND1	2.19	0.56
53:M7:116:HIS:NE2	53:M7:147:GLU:OE2	2.64	0.56
53:M7:127:ARG:NH2	36:5:1508:C:OP1	137.95	0.56
36:5:549:U:H2'	36:5:550:A:H8	1.68	0.56
40:L3:88:GLY:O	40:L3:161:LEU:N	2.46	0.56
5:S3:162:GLN:HE22	5:S3:165:ASN:HB2	1.71	0.56
9:S7:49:ILE:HG13	9:S7:57:ALA:HB3	2.81	0.56
1:2:1101:G:O3'	24:D2:76:SER:HB2	2.04	0.56
63:N7:136:PHE:HD2	70:O4:89:ILE:HG12	1.70	0.56
7:S5:76:ARG:HG3	7:S5:79:ASN:HD21	1.70	0.56
69:O3:35:VAL:HG13	69:O3:40:ASP:HB3	1.88	0.56
51:M5:57:GLN:HB3	51:M5:139:HIS:CE1	3.91	0.56
16:C4:117:ASP:OD1	16:C4:118:VAL:N	2.37	0.56
71:O5:15:GLU:HA	71:O5:18:ALA:HB3	2.55	0.56
86:8:218:OHX:N2	86:8:226:OHX:N1	2.53	0.56
54:M8:165:ILE:HD12	54:M8:167:SER:O	5.00	0.56
29:D7:56:CYS:SG	29:D7:57:GLU:N	2.78	0.56
1:2:336:G:N2	10:S8:7:SER:HB2	2.20	0.56
1:2:248:U:OP1	86:2:2093:OHX:N6	2.37	0.56
2:S0:143:VAL:HB	2:S0:156:VAL:HA	1.86	0.56
36:5:2256:A:H2'	36:5:2256:A:OP2	2.05	0.56
36:1:1887:A:OP2	86:1:3894:OHX:N4	2.37	0.56
36:5:2209:U:H4'	36:5:2210:G:OP1	2.05	0.56
54:M8:185:LYS:HD3	54:M8:186:VAL:HG23	2.10	0.56
45:L8:240:ASN:N	45:L8:240:ASN:OD1	2.38	0.56
64:N8:21:ARG:H	64:N8:22:ILE:HD12	3.08	0.56
36:1:2818:U:C6	36:1:2818:U:H5'	2.31	0.56
42:L5:151:GLN:HE21	42:L5:152:ARG:N	4.97	0.56
23:D1:9:VAL:O	23:D1:10:GLU:HB3	2.64	0.56
44:L7:27:ALA:O	44:L7:30:ARG:HB3	2.06	0.56
6:S4:102:VAL:HG23	6:S4:182:TYR:CE1	2.39	0.56
40:L3:60:LEU:HD23	40:L3:67:PHE:HB3	2.24	0.56
67:O1:55:LEU:O	67:O1:58:ALA:HB3	2.31	0.56
63:N7:10:VAL:HB	63:N7:83:THR:HG21	1.86	0.56
39:L2:133:TYR:HB3	39:L2:168:VAL:HG12	1.86	0.56
1:6:846:G:H2'	1:6:847:A:C8	2.40	0.56
1:2:1783:C:H2'	1:2:1784:C:H6	1.69	0.56
40:L3:296:THR:HG22	40:L3:298:PHE:H	2.95	0.56
10:S8:87:ASN:OD1	10:S8:88:ASN:N	2.39	0.56
38:8:16:G:O6	86:8:217:OHX:N6	2.39	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:146:GLN:HB3	3:S1:149:GLN:NE2	2.20	0.56
1:6:1561:U:H2'	1:6:1562:G:C8	2.39	0.56
40:L3:187:SER:O	40:L3:190:GLU:N	2.34	0.56
36:1:1093:A:N3	36:1:1096:U:N3	2.53	0.56
46:L9:122:LYS:HD3	46:L9:123:ILE:H	4.77	0.56
4:S2:121:VAL:HG11	35:SM:117:LEU:HB2	1.87	0.56
52:M6:38:ALA:O	52:M6:41:LEU:HB2	2.05	0.56
2:S0:41:ARG:NH1	2:S0:45:VAL:HG21	3.61	0.56
55:M9:35:ALA:HB1	55:M9:41:ILE:HD12	1.88	0.56
14:C2:56:GLU:OE1	14:C2:124:LYS:NZ	3.49	0.56
26:D4:124:ARG:O	26:D4:127:LYS:HG3	2.05	0.56
62:N6:120:GLN:CD	62:N6:126:LEU:HA	8.51	0.56
64:N8:100:PRO:HG2	64:N8:123:VAL:HG13	3.69	0.56
31:D9:5:ASN:CG	31:D9:7:TRP:HE1	2.08	0.56
56:N0:26:ARG:HH22	56:N0:28:ARG:HD2	1.69	0.56
42:L5:132:THR:OG1	42:L5:132:THR:O	3.31	0.56
40:L3:178:LEU:HD12	40:L3:179:ALA:N	2.20	0.56
1:6:1370:U:O4	86:6:2141:OHX:N6	2.38	0.56
1:6:1688:U:H3	1:6:1713:G:H1	1.51	0.56
1:2:1445:G:C5	33:E1:91:ILE:HB	2.39	0.56
70:O4:46:ASP:OD2	70:O4:80:ARG:HD2	3.37	0.56
49:M3:140:SER:OG	49:M3:143:ALA:N	2.59	0.56
54:M8:83:VAL:O	54:M8:85:GLY:N	2.87	0.56
1:2:1165:G:C6	1:2:1166:A:C6	2.93	0.56
1:2:488:G:N2	1:2:500:C:O2	2.38	0.56
36:5:1807:G:C6	36:5:1808:G:N1	2.73	0.56
46:L9:120:ASP:OD1	46:L9:124:ARG:NH2	2.54	0.56
64:N8:14:HIS:ND1	68:O2:36:LYS:HE2	2.81	0.56
41:L4:179:LEU:O	41:L4:183:LYS:HG2	2.06	0.56
38:4:45:C:H2'	38:4:46:G:O4'	2.05	0.56
62:N6:58:VAL:O	62:N6:65:GLY:N	2.73	0.56
36:1:86:G:O2'	49:M3:11:LYS:HD3	2.06	0.56
36:1:402:A:C6	53:M7:21:TYR:CE2	2.93	0.56
37:3:39:C:N3	48:M1:70:THR:HG23	2.19	0.56
64:N8:74:ASN:HB2	64:N8:76:ASP:HB2	2.74	0.56
36:1:2298:U:O4	36:1:2923:U:H5	1.87	0.56
77:Q1:15:ARG:NH1	1:6:1126:G:OP1	281.15	0.56
15:C3:109:LYS:HZ2	15:C3:109:LYS:HB3	1.69	0.56
36:1:2789:U:H2'	36:1:2790:A:H8	1.70	0.56
46:L9:53:ILE:HD13	50:M4:7:VAL:HG21	1.87	0.56
76:Q0:99:CYS:HB3	76:Q0:114:LYS:HD3	2.32	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:132:ASN:HD22	48:M1:132:ASN:N	4.53	0.56
31:D9:43:PHE:O	31:D9:47:ALA:N	2.39	0.56
6:S4:79:ASP:OD1	6:S4:82:TYR:N	2.39	0.56
56:N0:96:ASP:OD1	56:N0:97:VAL:HG12	2.05	0.56
7:S5:30:PRO:O	7:S5:33:VAL:HB	2.05	0.56
40:L3:305:ILE:HG12	40:L3:321:PHE:CZ	2.40	0.56
66:O0:24:THR:CG2	66:O0:91:SER:HB3	2.55	0.56
36:1:192:C:H2'	36:1:193:C:C6	2.41	0.56
18:C6:83:GLN:HG2	18:C6:116:LEU:O	2.87	0.56
72:O6:45:ARG:HH21	72:O6:50:LEU:HA	3.31	0.56
18:C6:38:LEU:O	18:C6:40:GLU:N	2.74	0.56
1:6:151:G:N2	1:6:163:G:N2	2.53	0.56
36:1:3060:C:H1'	36:1:3332:U:H1'	1.86	0.56
3:S1:28:GLU:OE2	3:S1:94:LYS:NZ	2.38	0.56
29:D7:47:PHE:HE1	29:D7:49:HIS:HB2	1.69	0.56
24:D2:104:LEU:HD23	24:D2:125:ILE:HA	5.18	0.56
70:O4:80:ARG:HG3	70:O4:88:ARG:HH21	2.35	0.56
23:D1:5:LYS:O	23:D1:7:GLN:N	3.17	0.56
36:5:3195:U:H1'	36:5:3196:U:OP1	2.05	0.56
4:S2:40:LYS:HA	4:S2:43:ARG:NH1	2.20	0.56
1:2:1:U:C4	11:S9:54:ARG:HG3	2.41	0.56
47:M0:19:LYS:HG3	47:M0:26:VAL:CG1	2.69	0.56
36:1:2415:C:OP1	39:L2:2:GLY:HA2	2.05	0.56
36:5:897:U:H2'	36:5:898:U:C6	2.41	0.56
40:L3:252:ILE:HD12	40:L3:264:VAL:HG21	2.32	0.56
45:L8:78:PHE:O	45:L8:80:TYR:N	2.34	0.56
61:N5:91:ASN:OD1	61:N5:94:GLN:HG3	2.06	0.56
1:6:711:U:H5'	1:6:712:G:OP2	2.05	0.56
1:2:99:C:O2	1:2:100:A:N6	2.33	0.56
2:S0:53:THR:HA	2:S0:161:PRO:HG2	2.12	0.56
17:C5:24:LYS:O	17:C5:28:MET:HB2	2.05	0.56
24:D2:27:ILE:HG12	24:D2:61:ILE:HB	1.86	0.56
41:L4:48:GLN:HG3	36:5:337:G:H4'	97.90	0.56
40:L3:139:GLN:O	40:L3:141:GLY:N	2.36	0.56
1:6:845:G:H2'	1:6:846:G:C8	2.40	0.56
2:S0:148:ASP:OD1	2:S0:149:LEU:N	2.98	0.56
63:N7:54:THR:OG1	63:N7:55:LYS:N	2.36	0.56
36:1:3055:U:H1'	36:1:3057:U:OP2	2.06	0.56
46:L9:90:MET:HG2	46:L9:181:VAL:HG22	1.87	0.56
46:L9:91:ARG:NH2	46:L9:140:VAL:HG12	5.21	0.56
2:S0:195:TRP:CE2	2:S0:197:ILE:HB	2.52	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:O6:54:GLU:OE2	72:O6:86:LYS:NZ	2.38	0.56
34:SR:133:VAL:O	34:SR:141:LEU:N	2.56	0.56
1:2:264:G:O2'	8:S6:194:LYS:NZ	2.33	0.56
39:L2:245:LEU:O	39:L2:247:ARG:N	2.38	0.56
33:E1:97:LYS:HE2	1:6:1231:U:C5	438.50	0.56
50:M4:106:ARG:HD3	36:5:3209:A:C8	293.55	0.56
78:Q2:59:HIS:O	78:Q2:61:LYS:N	2.74	0.56
43:L6:38:THR:HA	43:L6:90:LYS:HG3	1.88	0.56
1:2:209:U:H5'	10:S8:171:SER:HB3	1.86	0.56
1:6:1354:G:H5'	1:6:1355:C:OP2	2.05	0.56
1:2:1079:U:H2'	1:2:1080:U:C6	2.40	0.56
1:2:891:A:H2'	1:2:892:A:C8	2.40	0.56
51:M5:63:ARG:NH2	51:M5:131:GLU:OE2	2.46	0.56
57:N1:131:GLN:HG3	57:N1:132:PRO:HD2	1.88	0.56
53:M7:172:GLN:NE2	69:O3:60:ARG:O	2.38	0.56
41:L4:302:ALA:HB2	54:M8:39:ARG:CZ	2.36	0.56
1:2:322:G:O2'	10:S8:10:LYS:NZ	2.36	0.56
42:L5:40:HIS:HB3	42:L5:43:LYS:HG3	1.88	0.56
41:L4:44:LYS:HB3	41:L4:47:ARG:NH1	2.99	0.56
40:L3:299:ASP:O	40:L3:300:ARG:HB2	2.05	0.56
36:5:1564:U:H2'	36:5:1565:G:H8	1.69	0.56
40:L3:21:ARG:HG2	40:L3:269:GLN:HG2	1.87	0.56
46:L9:173:ARG:NH2	36:5:2898:G:OP2	330.16	0.56
1:2:1171:A:H2'	1:2:1172:G:C8	2.41	0.56
26:D4:36:SER:O	26:D4:40:LEU:HG	2.06	0.56
25:D3:109:ARG:HB3	25:D3:112:LYS:HB2	1.88	0.56
48:M1:81:GLU:HA	48:M1:84:LEU:HB2	1.87	0.56
36:1:789:A:H2'	36:1:790:U:C6	2.41	0.56
70:O4:85:VAL:O	70:O4:89:ILE:HG13	2.24	0.56
36:5:181:U:H1'	36:5:236:G:H22	1.70	0.56
67:O1:76:SER:HB2	67:O1:78:LYS:HE3	1.86	0.56
36:5:2166:A:H2'	36:5:2167:A:C8	2.40	0.56
8:S6:73:ILE:HD11	8:S6:75:LEU:HD21	2.80	0.56
57:N1:9:SER:O	57:N1:11:THR:HG23	2.07	0.56
1:6:428:A:N3	1:6:440:U:O2'	2.33	0.56
26:D4:111:LYS:NZ	26:D4:115:ASP:OD2	8.55	0.56
36:1:1605:A:O2'	36:1:1607:U:OP2	2.16	0.56
49:M3:55:ARG:O	49:M3:115:ARG:NH2	3.73	0.56
36:5:2970:C:H4'	36:5:2971:A:C6	2.41	0.56
36:1:2680:A:C2	48:M1:24:GLY:HA2	2.41	0.56
36:1:2320:A:H2	79:Q3:16:VAL:HG12	1.70	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2248:C:OP2	86:5:3971:OHX:N6	2.39	0.56
11:S9:107:ARG:NH1	11:S9:112:GLN:OE1	2.39	0.56
40:L3:303:LYS:HD2	40:L3:361:THR:HG21	1.87	0.56
7:S5:92:ARG:HG2	7:S5:92:ARG:HH11	2.54	0.56
61:N5:56:ARG:HG2	38:8:134:G:OP1	78.36	0.56
3:S1:125:VAL:HG11	3:S1:173:THR:HG23	2.18	0.56
44:L7:229:PHE:CD1	44:L7:229:PHE:C	3.01	0.56
59:N3:48:ARG:HG3	59:N3:48:ARG:NH1	2.41	0.56
42:L5:278:SER:C	42:L5:280:GLU:H	3.14	0.56
1:6:404:G:H2'	1:6:405:C:H6	1.71	0.56
58:N2:36:TYR:OH	58:N2:82:LYS:HG2	2.05	0.56
1:2:780:A:C8	26:D4:8:ARG:HB3	2.40	0.56
86:8:218:OHX:N6	86:8:226:OHX:N3	2.54	0.56
49:M3:57:VAL:HG22	49:M3:147:ILE:HD13	1.88	0.56
46:L9:1:MET:SD	56:N0:138:GLN:HG2	2.46	0.56
78:Q2:43:TYR:CZ	78:Q2:47:GLN:NE2	2.74	0.56
11:S9:42:ILE:O	11:S9:46:SER:OG	2.24	0.56
1:2:481:A:H61	1:2:505:A:H62	1.51	0.56
58:N2:21:SER:HA	58:N2:24:GLU:HG2	1.86	0.56
59:N3:66:LYS:HB3	59:N3:68:GLU:OE1	2.06	0.56
29:D7:50:ALA:O	29:D7:52:THR:N	2.38	0.56
36:5:847:A:H2'	36:5:848:A:C8	2.41	0.56
43:L6:131:LYS:HE2	43:L6:131:LYS:HA	5.06	0.56
4:S2:143:TYR:OH	4:S2:150:GLN:N	2.39	0.56
36:1:505:G:OP1	41:L4:320:ASN:ND2	2.33	0.56
72:O6:30:LYS:HD3	36:5:316:U:O2'	103.18	0.56
1:2:1488:G:H5'	1:2:1489:U:OP1	2.06	0.56
51:M5:168:GLY:O	51:M5:172:ARG:HB2	2.06	0.56
1:6:188:A:H2'	1:6:189:C:O4'	2.06	0.56
36:1:955:U:H2'	36:1:956:U:C6	2.40	0.56
51:M5:84:PRO:HA	51:M5:87:GLN:HB2	2.01	0.56
15:C3:66:ILE:HG13	15:C3:67:THR:HG23	2.27	0.56
18:C6:31:VAL:HG13	18:C6:67:VAL:HB	1.86	0.56
5:S3:116:ARG:NH2	35:SM:111:GLY:O	2.39	0.56
1:2:38:C:H2'	1:2:39:A:H5'	1.88	0.56
12:C0:56:LYS:N	12:C0:67:THR:O	2.83	0.56
1:6:1119:G:O6	86:6:2175:OHX:N2	2.38	0.56
36:1:129:U:OP1	61:N5:45:LYS:NZ	2.39	0.56
36:5:1927:G:N2	36:5:1928:G:C8	2.73	0.56
34:SR:22:SER:OG	34:SR:70:ASP:HA	2.96	0.56
8:S6:114:VAL:HG12	8:S6:115:LYS:HD2	1.88	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:SR:90:ARG:HH21	34:SR:102:ARG:HE	2.82	0.56
7:S5:145:ASP:CG	7:S5:146:THR:H	2.08	0.56
55:M9:125:LYS:NZ	36:5:1720:U:O4	240.44	0.56
36:5:36:C:H2'	36:5:37:U:H5'	1.88	0.56
36:1:820:A:OP1	86:1:3942:OHX:N5	2.39	0.56
36:5:1641:U:O2'	36:5:1642:A:H3'	2.05	0.56
1:6:914:G:H8	1:6:914:G:H5'	1.71	0.56
9:S7:158:ASP:O	9:S7:160:GLN:N	2.39	0.56
1:2:1277:G:H5'	5:S3:140:GLY:HA2	1.87	0.56
11:S9:79:ARG:HH12	1:6:762:A:P	406.85	0.56
14:C2:36:LEU:HG	14:C2:41:LEU:HD12	2.40	0.56
1:6:1482:C:OP2	1:6:1521:G:N1	2.39	0.56
67:O1:23:VAL:O	67:O1:28:ARG:NH1	2.98	0.56
36:5:835:G:N2	36:5:857:G:O2'	2.39	0.56
2:S0:140:ASN:ND2	23:D1:29:HIS:HA	2.21	0.56
10:S8:76:THR:HG22	10:S8:108:PRO:HG2	1.88	0.56
70:O4:95:ILE:O	70:O4:99:LYS:HB2	2.06	0.56
36:1:185:C:H2'	36:1:186:U:H6	1.71	0.56
1:6:978:A:O2'	1:6:1787:C:O2	2.23	0.56
1:6:219:A:H2'	1:6:831:U:O2	2.06	0.56
15:C3:36:GLN:HA	15:C3:39:LYS:HB3	3.62	0.56
36:5:2339:C:O5'	36:5:2339:C:H6	1.89	0.56
20:C8:30:TYR:O	20:C8:33:THR:OG1	2.73	0.56
1:2:1576:A:H2'	1:2:1577:A:O4'	2.05	0.56
39:L2:188:LYS:HD3	39:L2:189:TYR:CZ	2.98	0.56
36:5:900:G:H1'	36:5:1589:A:N6	2.21	0.56
1:2:780:A:H8	26:D4:8:ARG:HB3	1.71	0.56
38:4:21:C:H5''	41:L4:194:TYR:HE1	1.69	0.56
8:S6:49:VAL:HB	8:S6:115:LYS:HG2	4.42	0.56
62:N6:37:LYS:CD	62:N6:37:LYS:H	2.33	0.56
36:5:1335:C:H2'	36:5:1336:U:C6	2.41	0.56
1:6:887:A:H2'	1:6:888:U:C6	2.41	0.56
58:N2:14:THR:HG23	58:N2:66:VAL:HG13	3.52	0.56
1:6:1244:A:N3	1:6:1244:A:H3'	2.21	0.56
36:5:712:G:H2'	36:5:713:U:C6	2.40	0.56
42:L5:251:PRO:O	42:L5:253:PHE:N	2.38	0.56
34:SR:218:GLY:HA2	34:SR:240:VAL:HG23	2.87	0.56
36:5:1088:U:H2'	36:5:1089:G:H8	1.71	0.56
36:1:502:U:OP1	86:1:3869:OHX:N3	2.39	0.56
1:6:1267:G:H2'	1:6:1268:G:C8	2.41	0.56
43:L6:26:ARG:HB3	43:L6:27:PRO:HD2	1.87	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:21:PHE:HD2	51:M5:22:LEU:HD12	4.26	0.56
36:1:733:G:O6	86:1:4066:OHX:N2	2.39	0.56
27:D5:85:LYS:HG3	27:D5:86:GLU:N	2.20	0.56
36:1:3136:G:OP2	86:1:4099:OHX:N6	2.39	0.56
36:5:324:A:H8	36:5:324:A:O5'	1.89	0.56
37:7:57:G:H3'	37:7:58:C:H6	1.69	0.56
3:S1:62:LYS:O	3:S1:88:VAL:HB	2.06	0.56
41:L4:302:ALA:HB2	54:M8:39:ARG:NH2	2.21	0.56
36:5:314:U:H2'	36:5:315:C:C6	2.41	0.56
37:3:49:G:N7	42:L5:58:LYS:HG3	2.21	0.56
60:N4:13:ILE:HG12	60:N4:32:GLN:HB2	2.70	0.56
46:L9:9:GLN:HB3	46:L9:52:LEU:HD21	3.47	0.56
1:2:1584:G:C8	18:C6:122:ARG:HD2	2.41	0.56
44:L7:92:ILE:HD11	54:M8:4:ASP:H	1.71	0.56
74:O8:70:PRO:C	74:O8:72:THR:H	2.29	0.56
6:S4:136:VAL:HG11	6:S4:148:ARG:NH2	2.21	0.56
68:O2:123:LYS:HA	68:O2:126:LEU:HG	2.53	0.56
61:N5:137:ASN:HB3	61:N5:142:ILE:HG12	1.87	0.56
1:6:1405:G:H2'	1:6:1406:A:H8	1.71	0.56
13:C1:101:GLU:OE1	13:C1:103:ARG:NH2	2.97	0.56
36:5:231:G:O6	86:5:4127:OHX:N4	2.39	0.56
1:6:1122:G:O6	86:6:2160:OHX:N6	2.39	0.56
26:D4:2:SER:N	26:D4:32:ARG:HD2	2.99	0.56
1:2:839:U:H2'	1:2:840:U:H5'	1.86	0.56
1:6:1041:G:OP1	86:6:2174:OHX:N4	2.39	0.56
3:S1:193:ILE:O	3:S1:197:ILE:HG12	2.06	0.56
36:5:811:U:H2'	36:5:812:G:C8	2.41	0.56
1:2:968:U:O3'	1:2:1032:G:N2	2.39	0.56
18:C6:55:VAL:HG21	18:C6:105:LEU:HG	1.87	0.56
58:N2:51:GLY:O	58:N2:52:ASN:ND2	2.29	0.56
1:6:407:A:H2'	1:6:408:C:C6	2.40	0.56
1:6:811:A:C2	1:6:858:G:H1'	2.41	0.56
86:2:2031:OHX:N4	86:2:2146:OHX:N1	2.53	0.55
16:C4:31:THR:OG1	16:C4:35:GLY:HA2	2.51	0.55
10:S8:10:LYS:HG2	13:C1:133:LYS:HE3	2.05	0.55
52:M6:18:ARG:O	52:M6:22:VAL:HG13	2.06	0.55
13:C1:93:TYR:CE2	13:C1:95:PRO:HA	2.56	0.55
36:5:1064:A:H4'	36:5:1065:A:O5'	2.05	0.55
1:6:197:A:H2'	1:6:198:A:C8	2.41	0.55
3:S1:70:LEU:HB3	3:S1:79:HIS:CB	6.01	0.55
52:M6:42:ASN:OD1	52:M6:125:ARG:HD3	2.24	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:126:PHE:HD2	71:O5:115:LYS:HG2	2.25	0.55
1:6:831:U:O2'	1:6:832:U:H5'	2.06	0.55
1:2:1681:A:H2'	1:2:1682:U:H5'	1.87	0.55
36:5:1587:A:OP1	86:5:3984:OHX:N5	2.40	0.55
74:O8:5:ILE:HD11	74:O8:10:GLN:NE2	2.21	0.55
54:M8:65:SER:OG	54:M8:90:ASP:OD2	2.14	0.55
36:5:850:U:H2'	36:5:851:C:C6	2.41	0.55
61:N5:38:LEU:O	61:N5:39:LYS:HB2	4.01	0.55
16:C4:82:LYS:HB3	16:C4:118:VAL:HG21	1.88	0.55
66:O0:20:SER:OG	66:O0:96:GLY:HA3	2.06	0.55
19:C7:41:ILE:HD13	19:C7:50:ILE:HD12	2.18	0.55
36:1:353:G:N7	73:O7:55:ARG:HD3	2.20	0.55
36:5:2386:A:N6	36:5:2993:G:O2'	2.34	0.55
16:C4:97:GLY:O	16:C4:99:GLN:N	4.08	0.55
55:M9:123:LEU:O	55:M9:127:SER:OG	2.24	0.55
38:4:124:G:H3'	38:4:125:U:C5'	2.33	0.55
1:6:577:G:H3'	1:6:577:G:H8	1.72	0.55
1:6:1218:G:O2'	1:6:1219:A:OP2	2.20	0.55
36:1:2795:U:O2	36:1:2800:G:O2'	2.14	0.55
42:L5:270:LYS:HG2	42:L5:273:ARG:HD2	1.88	0.55
5:S3:94:ARG:NH2	5:S3:125:TYR:OH	4.04	0.55
35:SM:134:ASP:HA	35:SM:137:GLU:HB3	1.87	0.55
6:S4:19:LEU:HD22	1:6:788:A:H2'	389.60	0.55
44:L7:217:PRO:HA	86:5:3996:OHX:N5	261.83	0.55
3:S1:110:LEU:O	3:S1:113:MET:N	2.39	0.55
34:SR:7:LEU:HD23	34:SR:315:VAL:HG22	1.87	0.55
8:S6:20:ASP:OD2	8:S6:22:HIS:HB2	5.62	0.55
1:6:1745:G:O6	86:6:2076:OHX:N4	2.40	0.55
4:S2:125:ILE:O	4:S2:129:ILE:HG13	2.22	0.55
63:N7:14:VAL:HG21	70:O4:90:ILE:HD11	1.88	0.55
39:L2:42:ARG:HG3	39:L2:89:TYR:CE1	3.16	0.55
36:5:1090:G:O6	86:5:4185:OHX:N5	2.40	0.55
8:S6:24:ILE:O	8:S6:26:VAL:N	2.40	0.55
36:5:1572:U:HO2'	36:5:1573:G:H8	1.52	0.55
36:5:3177:G:O2'	36:5:3179:U:OP1	2.22	0.55
78:Q2:38:GLN:HE21	78:Q2:38:GLN:HA	1.71	0.55
39:L2:35:ALA:HA	45:L8:36:ILE:HG21	3.10	0.55
36:5:1593:A:N3	36:5:1615:C:O2'	2.38	0.55
11:S9:30:LEU:HD21	11:S9:102:GLU:HG3	3.09	0.55
48:M1:96:PHE:CD1	48:M1:160:VAL:HG22	2.98	0.55
70:O4:67:LYS:HA	70:O4:70:LYS:HE2	2.19	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:O5:85:THR:HB	71:O5:88:LEU:HB2	2.17	0.55
2:S0:76:ILE:HB	2:S0:123:VAL:HG22	1.88	0.55
4:S2:88:LYS:HG2	4:S2:89:GLN:H	3.38	0.55
34:SR:43:ILE:HD13	34:SR:60:SER:HA	1.88	0.55
36:1:1492:G:N7	75:O9:2:ALA:HB1	2.21	0.55
74:O8:14:LEU:O	74:O8:20:VAL:HG21	2.06	0.55
44:L7:121:LYS:O	44:L7:121:LYS:HD3	3.55	0.55
34:SR:123:ILE:HG21	34:SR:169:ILE:HD13	1.88	0.55
11:S9:106:GLU:O	11:S9:111:THR:OG1	2.95	0.55
44:L7:176:TYR:CZ	44:L7:197:GLN:HG2	2.41	0.55
63:N7:119:GLU:O	63:N7:123:GLN:HG2	2.06	0.55
49:M3:141:ALA:HA	49:M3:144:THR:HB	2.60	0.55
61:N5:62:VAL:O	61:N5:87:SER:N	2.76	0.55
79:Q3:33:GLN:HG3	79:Q3:34:HIS:CD2	3.19	0.55
47:M0:198:LYS:NZ	36:5:1040:A:N3	332.74	0.55
36:5:2439:A:H3'	36:5:2440:G:H8	1.71	0.55
1:6:1218:G:N2	1:6:1443:U:H2'	2.21	0.55
1:6:1239:U:O4	86:6:2095:OHX:N5	2.38	0.55
36:1:1352:A:H4'	36:1:1353:U:OP1	2.05	0.55
48:M1:15:GLU:OE2	48:M1:132:ASN:ND2	2.40	0.55
36:1:856:G:C6	36:1:857:G:N1	2.74	0.55
49:M3:87:ALA:O	49:M3:91:ARG:HG3	2.06	0.55
50:M4:113:THR:HG22	50:M4:115:PHE:N	2.21	0.55
40:L3:173:GLN:O	40:L3:173:GLN:HG3	2.06	0.55
1:2:705:U:H2'	1:2:706:A:C8	2.41	0.55
36:1:2533:G:H2'	36:1:2534:G:O4'	2.07	0.55
36:1:1095:U:O2	57:N1:128:LEU:N	2.39	0.55
36:5:1235:U:H4'	36:5:1236:G:H5'	1.89	0.55
1:2:917:U:OP2	86:2:2147:OHX:N3	2.39	0.55
86:1:4004:OHX:N3	86:1:4172:OHX:N5	2.55	0.55
9:S7:118:LEU:HD11	9:S7:122:HIS:CE1	3.54	0.55
4:S2:114:GLY:HA3	4:S2:132:ALA:HB2	1.89	0.55
36:1:73:C:O2	49:M3:59:ARG:HD3	2.07	0.55
2:S0:41:ARG:HD2	2:S0:42:PRO:O	2.06	0.55
49:M3:16:LYS:NZ	36:5:98:G:OP1	132.63	0.55
2:S0:124:THR:HA	2:S0:146:LEU:HB2	2.48	0.55
58:N2:79:LEU:O	58:N2:82:LYS:HB3	2.05	0.55
48:M1:19:LEU:HD12	48:M1:125:MET:SD	4.95	0.55
56:N0:89:ASN:ND2	57:N1:156:TYR:HB3	2.22	0.55
56:N0:1:MET:HB2	56:N0:118:PHE:CD1	2.41	0.55
36:5:897:U:H2'	36:5:898:U:H6	1.71	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:209:U:H2'	1:2:210:A:C8	2.42	0.55
14:C2:66:VAL:HG11	14:C2:71:ILE:HD12	1.88	0.55
5:S3:137:VAL:HG22	5:S3:151:LYS:HE2	1.88	0.55
34:SR:232:TYR:OH	34:SR:268:GLN:OE1	3.12	0.55
1:2:616:G:C2	1:2:622:A:N7	2.74	0.55
36:1:2623:G:H2'	36:1:2624:G:C8	2.41	0.55
1:6:518:A:O2'	1:6:534:A:N6	2.39	0.55
36:5:381:U:H2'	36:5:382:U:H6	1.71	0.55
40:L3:79:VAL:HG11	40:L3:338:LEU:HD21	1.87	0.55
77:Q1:6:ARG:O	77:Q1:10:THR:HG22	2.06	0.55
1:2:1756:A:H8	1:2:1756:A:OP2	1.89	0.55
36:1:2400:G:H5''	36:1:2401:A:OP2	2.07	0.55
44:L7:108:LEU:HD21	44:L7:115:THR:HG23	1.89	0.55
21:C9:49:ASP:O	21:C9:51:GLU:N	2.40	0.55
36:5:438:A:C8	36:5:439:C:H5	2.25	0.55
42:L5:58:LYS:HD2	42:L5:93:THR:OG1	2.07	0.55
86:1:3959:OHX:N4	44:L7:217:PRO:HA	2.21	0.55
49:M3:75:PHE:H	49:M3:97:VAL:HA	1.71	0.55
1:6:1773:C:H2'	1:6:1774:G:H8	1.72	0.55
1:2:1331:A:N6	5:S3:161:GLY:HA3	2.22	0.55
51:M5:90:ASN:O	51:M5:92:LEU:N	3.22	0.55
8:S6:176:GLN:HG3	8:S6:177:ARG:H	1.72	0.55
1:2:895:G:H1	1:2:917:U:H3	1.54	0.55
36:5:656:A:H2'	36:5:657:A:C8	2.42	0.55
36:5:789:A:H2'	36:5:790:U:H6	1.70	0.55
30:D8:13:ILE:HG12	30:D8:31:GLU:HB2	4.11	0.55
36:5:1729:A:H4'	36:5:1730:G:OP2	2.04	0.55
36:5:2970:C:H4'	36:5:2971:A:N1	2.21	0.55
36:5:2942:C:O2	86:5:4103:OHX:N2	2.40	0.55
78:Q2:29:LYS:HG2	78:Q2:30:ALA:H	1.72	0.55
15:C3:142:GLU:HB2	15:C3:145:THR:HG23	1.87	0.55
36:1:1141:C:O2'	36:1:1153:A:N3	2.33	0.55
11:S9:120:LYS:O	11:S9:121:SER:HB3	2.07	0.55
47:M0:29:SER:HB2	47:M0:125:LEU:HD12	2.61	0.55
36:1:716:A:C6	64:N8:117:ARG:HD2	2.42	0.55
62:N6:39:LEU:HD12	62:N6:43:TYR:CE2	5.73	0.55
7:S5:59:VAL:HG12	7:S5:60:ASP:H	2.23	0.55
42:L5:152:ARG:CG	42:L5:152:ARG:HH11	2.82	0.55
13:C1:98:ASN:ND2	13:C1:98:ASN:O	2.39	0.55
39:L2:201:GLY:O	39:L2:203:ALA:N	2.39	0.55
22:D0:16:GLN:HG3	22:D0:17:GLN:H	3.93	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1071:U:O4	86:5:4105:OHX:N6	2.40	0.55
36:1:1763:U:H5'	36:1:1764:U:OP2	2.07	0.55
64:N8:96:LYS:O	64:N8:98:THR:N	2.39	0.55
43:L6:166:LYS:HZ1	36:5:3214:U:H6	274.73	0.55
6:S4:11:ARG:H	6:S4:27:TYR:HA	1.70	0.55
60:N4:33:ASN:OD1	60:N4:35:LYS:N	2.40	0.55
36:5:1915:A:H2'	36:5:1916:U:C6	2.42	0.55
1:2:1266:U:H2'	1:2:1267:G:C8	2.40	0.55
1:6:980:G:H4'	1:6:1776:A:H4'	1.88	0.55
1:6:1590:G:H2'	1:6:1591:C:H6	1.72	0.55
36:5:3218:A:H4'	36:5:3219:G:O5'	2.07	0.55
1:2:1492:A:HO2'	1:2:1493:A:H8	1.52	0.55
58:N2:13:LYS:HB3	58:N2:15:PHE:CE2	2.42	0.55
69:O3:52:VAL:HG21	69:O3:99:ARG:NH1	3.89	0.55
36:1:2318:U:O4	86:1:4040:OHX:N2	2.39	0.55
59:N3:92:PHE:CE1	36:5:3051:U:H1'	246.02	0.55
71:O5:10:ARG:NH1	71:O5:60:GLU:OE1	2.90	0.55
1:2:25:C:OP2	1:2:25:C:H4'	2.07	0.55
5:S3:106:LYS:O	5:S3:110:LEU:HB2	2.07	0.55
3:S1:61:LEU:HD23	3:S1:62:LYS:H	1.71	0.55
1:6:475:A:H2'	1:6:476:U:O4'	2.07	0.55
86:6:2118:OHX:N2	86:6:2170:OHX:N1	2.55	0.55
5:S3:104:SER:OG	5:S3:105:MET:N	2.38	0.55
44:L7:191:VAL:HG12	44:L7:192:GLY:N	3.58	0.55
1:2:1456:C:OP1	1:2:1457:C:O2'	2.20	0.55
51:M5:172:ARG:NH2	36:5:63:A:OP1	102.72	0.55
36:1:2254:U:H2'	36:1:2261:G:N2	2.22	0.55
20:C8:138:THR:HB	1:6:1459:C:H2'	345.09	0.55
36:1:1807:G:C6	36:1:1808:G:N1	2.74	0.55
30:D8:12:VAL:HA	30:D8:30:VAL:HG12	1.87	0.55
36:1:1899:G:N7	86:1:3932:OHX:N3	2.55	0.55
88:1:4213:3J6:H4	88:1:4213:3J6:H12	1.88	0.55
40:L3:233:TRP:CD1	40:L3:265:ALA:HB1	2.62	0.55
36:1:1362:G:H2'	36:1:1363:A:C8	2.41	0.55
20:C8:35:ILE:HB	20:C8:38:VAL:HG22	1.87	0.55
37:7:91:G:H2'	37:7:92:A:C8	2.40	0.55
41:L4:264:SER:C	41:L4:266:THR:H	2.09	0.55
1:2:1391:A:H2'	1:2:1392:U:C6	2.42	0.55
13:C1:67:ARG:O	13:C1:127:GLN:HB3	2.69	0.55
36:1:2357:A:H2'	36:1:2358:A:H8	1.71	0.55
40:L3:92:TYR:HE1	40:L3:159:ARG:HD2	1.71	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:513:U:H2'	1:6:514:G:C8	2.42	0.55
36:5:2971:A:H5''	36:5:2972:G:C5'	2.37	0.55
36:1:1688:U:H2'	36:1:1689:U:C6	2.41	0.55
49:M3:161:ASP:O	49:M3:163:GLY:N	3.34	0.55
34:SR:214:ALA:HB2	34:SR:220:ILE:HA	1.88	0.55
1:6:1145:U:H3	1:6:1633:A:H61	1.52	0.55
36:5:1107:C:H2'	36:5:1108:U:H6	1.72	0.55
4:S2:67:GLN:HA	4:S2:70:ASP:HB2	1.89	0.55
70:O4:83:ASN:OD1	70:O4:83:ASN:N	3.48	0.55
43:L6:174:LEU:HD22	50:M4:117:ARG:CZ	4.28	0.55
1:2:565:C:O2	86:2:2039:OHX:N5	2.40	0.55
1:6:1257:U:O2'	1:6:1258:U:O4'	2.24	0.55
52:M6:27:LEU:HD13	52:M6:98:ALA:O	2.07	0.55
10:S8:188:GLU:OE2	13:C1:15:LYS:NZ	2.39	0.55
4:S2:90:THR:O	4:S2:92:ALA:N	2.59	0.55
3:S1:176:VAL:HG12	3:S1:177:GLN:H	1.72	0.55
20:C8:145:ARG:HB3	35:SM:68:ARG:HH12	4.47	0.55
32:E0:13:LYS:NZ	1:6:566:C:O2	375.61	0.55
71:O5:58:ILE:O	71:O5:61:GLN:HB2	3.68	0.55
44:L7:229:PHE:HD1	44:L7:229:PHE:C	2.55	0.55
44:L7:88:ARG:NH1	44:L7:91:GLY:O	2.41	0.55
63:N7:88:ASP:OD1	63:N7:89:VAL:N	2.39	0.55
52:M6:38:ALA:O	52:M6:41:LEU:HB3	3.43	0.55
1:2:417:A:H4'	1:2:418:G:O5'	2.06	0.55
41:L4:112:LYS:O	36:5:790:U:H4'	122.46	0.55
8:S6:87:ARG:N	8:S6:91:GLU:OE1	2.37	0.55
25:D3:96:VAL:HB	25:D3:127:VAL:HG21	5.85	0.55
18:C6:143:ARG:NH1	1:6:1191:U:H5'	350.13	0.55
41:L4:16:THR:HG22	41:L4:18:ASN:H	1.72	0.55
6:S4:191:ARG:HD3	6:S4:245:LYS:HB3	2.69	0.55
61:N5:50:ALA:HB2	71:O5:79:ASP:HB3	5.51	0.55
38:4:131:A:H2'	38:4:132:G:H8	1.72	0.55
36:1:1316:C:C2	52:M6:130:LYS:HG3	2.42	0.55
12:C0:16:PHE:HD2	12:C0:76:LEU:HB3	1.71	0.55
69:O3:13:HIS:CD2	69:O3:28:SER:HB3	2.96	0.55
53:M7:132:ALA:O	53:M7:133:HIS:HB2	2.45	0.55
41:L4:192:GLY:HA2	41:L4:195:ARG:HG3	3.78	0.55
42:L5:184:ASP:HB3	42:L5:187:THR:HG22	1.88	0.55
41:L4:312:VAL:HG21	36:5:610:G:C8	222.78	0.55
15:C3:121:ARG:NH1	1:6:868:G:OP1	310.93	0.55
71:O5:85:THR:HB	71:O5:88:LEU:HD12	1.89	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2404:A:C5'	36:5:2404:A:H8	2.20	0.55
1:2:1345:A:H5'	22:D0:53:LYS:HD2	1.89	0.55
70:O4:37:LYS:NZ	36:5:1591:G:OP1	160.20	0.55
41:L4:20:LEU:HD11	41:L4:252:GLU:HG3	1.98	0.55
36:5:979:U:H1'	36:5:980:A:C4	2.42	0.55
1:2:639:U:O2'	1:2:640:U:OP2	2.22	0.55
75:O9:10:LYS:HA	75:O9:13:MET:CE	2.37	0.55
36:1:259:C:H2'	36:1:260:C:C6	2.42	0.55
36:5:2697:A:H2'	36:5:2698:G:C8	2.42	0.55
9:S7:173:TYR:CE1	9:S7:181:ILE:HD11	3.84	0.55
1:2:292:U:H2'	1:2:293:U:C6	2.42	0.55
51:M5:15:GLN:HB3	72:O6:51:SER:HB2	2.65	0.55
19:C7:46:LEU:HD22	19:C7:46:LEU:O	2.06	0.55
1:2:623:A:OP1	86:2:2157:OHX:N1	2.40	0.55
59:N3:80:ARG:HH12	59:N3:116:GLY:HA3	1.71	0.55
36:1:2173:U:H2'	36:1:2174:G:C8	2.42	0.55
47:M0:207:GLU:C	47:M0:209:ASN:H	2.10	0.55
36:5:916:G:N7	36:5:924:G:C5	2.75	0.55
27:D5:65:LEU:HB3	27:D5:71:ILE:HD12	1.89	0.55
36:1:1162:U:H4'	68:O2:57:TYR:CE1	2.41	0.55
34:SR:198:ASN:O	34:SR:215:GLY:HA3	2.09	0.55
47:M0:63:GLU:HB2	36:5:2853:A:H5'	296.74	0.55
7:S5:40:ILE:HG23	7:S5:42:LEU:HD22	1.89	0.55
1:6:1166:A:H2'	1:6:1167:G:O4'	2.07	0.55
36:1:3048:A:H5'	40:L3:53:MET:HE1	1.88	0.55
47:M0:8:CYS:SG	36:5:2828:G:H5'	269.85	0.55
4:S2:90:THR:HG22	4:S2:92:ALA:H	1.71	0.55
1:6:190:C:HO2'	1:6:191:C:C5'	2.20	0.55
22:D0:22:ILE:HG22	22:D0:93:LEU:HB2	1.88	0.55
1:2:823:G:H2'	1:2:824:G:H8	1.70	0.55
1:6:333:A:C6	1:6:334:G:C6	2.95	0.55
1:2:93:A:O2'	1:2:398:G:N2	2.39	0.55
15:C3:18:TYR:CE2	24:D2:56:HIS:CE1	3.33	0.55
45:L8:34:PHE:CD2	45:L8:42:PRO:HD3	3.08	0.55
15:C3:55:ARG:HD3	29:D7:47:PHE:CG	2.41	0.55
30:D8:11:LYS:O	30:D8:31:GLU:N	2.71	0.55
41:L4:8:VAL:HB	41:L4:16:THR:HG21	3.03	0.55
41:L4:351:PRO:HA	44:L7:71:ALA:HA	2.21	0.55
34:SR:22:SER:HB3	34:SR:36:ALA:HB3	1.88	0.55
36:1:2947:G:H4'	36:1:2947:G:OP2	2.07	0.55
48:M1:25:GLU:OE1	48:M1:29:ARG:HD2	2.05	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:126:ASP:OD2	8:S6:127:THR:HG22	2.07	0.55
41:L4:159:ILE:HD13	41:L4:164:GLU:HG2	2.49	0.55
36:1:3380:U:H2'	36:1:3381:U:C6	2.41	0.55
17:C5:76:VAL:O	17:C5:95:GLY:N	2.70	0.55
21:C9:113:ILE:HA	21:C9:128:GLY:HA3	3.22	0.55
36:5:3089:C:H2'	36:5:3090:U:O4'	2.07	0.55
13:C1:36:LYS:HD2	1:6:248:U:H4'	312.95	0.55
37:3:92:A:H8	37:3:92:A:O5'	1.89	0.55
19:C7:49:LYS:NZ	1:6:1390:U:OP2	414.69	0.55
5:S3:220:PRO:O	5:S3:221:SER:OG	2.31	0.55
46:L9:156:GLN:NE2	46:L9:160:ASP:OD1	4.77	0.55
12:C0:77:ARG:HD3	12:C0:84:GLU:HA	1.89	0.55
36:1:5:G:H2'	36:1:6:A:O4'	2.07	0.55
18:C6:18:ALA:HB2	18:C6:69:VAL:HG13	1.88	0.55
11:S9:176:ASN:HA	11:S9:179:ARG:HG3	3.40	0.55
43:L6:31:ARG:HD3	69:O3:106:ASN:HD22	1.71	0.54
47:M0:76:MET:HB3	47:M0:85:PHE:CE2	2.42	0.54
36:1:1952:G:H3'	36:1:1953:G:H5''	1.89	0.54
1:6:478:A:C2	1:6:479:C:C2	2.94	0.54
1:2:990:C:H2'	1:2:991:G:O4'	2.08	0.54
19:C7:20:TYR:CE2	19:C7:38:ILE:HG13	2.42	0.54
40:L3:81:THR:HB	40:L3:321:PHE:HA	2.48	0.54
40:L3:46:PHE:CE2	40:L3:205:VAL:HG13	3.10	0.54
3:S1:129:THR:HA	3:S1:177:GLN:HA	1.88	0.54
67:O1:58:ALA:O	67:O1:61:LYS:NZ	7.38	0.54
49:M3:42:ARG:HH21	49:M3:51:LEU:HD22	5.99	0.54
70:O4:99:LYS:O	70:O4:103:LYS:HG2	2.28	0.54
36:1:1014:U:H2'	36:1:1015:U:H5''	1.89	0.54
1:2:330:G:C6	1:2:331:A:C6	2.95	0.54
1:2:1388:A:HO2'	1:2:1411:A:H2	1.55	0.54
66:O0:51:LEU:HD11	70:O4:90:ILE:HG22	3.24	0.54
70:O4:86:LYS:O	70:O4:90:ILE:HG12	2.07	0.54
34:SR:171:SER:OG	34:SR:179:LYS:HB2	2.06	0.54
71:O5:28:LEU:HA	71:O5:31:LEU:HD12	1.88	0.54
36:5:1831:U:H2'	36:5:1832:C:H6	1.72	0.54
1:2:6:G:OP2	4:S2:205:ARG:HD2	2.07	0.54
6:S4:26:CYS:HB3	6:S4:27:TYR:CE2	3.55	0.54
36:1:3295:A:OP2	40:L3:126:LYS:N	2.32	0.54
46:L9:124:ARG:HD3	46:L9:164:ILE:O	2.07	0.54
36:1:2236:G:OP1	86:1:4118:OHX:N6	2.40	0.54
1:6:1317:C:H2'	1:6:1318:G:O4'	2.07	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:599:C:OP1	41:L4:332:LYS:NZ	2.40	0.54
15:C3:42:ARG:HH21	15:C3:80:LEU:HD21	1.73	0.54
36:1:210:U:C2	36:1:230:U:H4'	2.42	0.54
36:1:796:U:H2'	36:1:797:U:C6	2.42	0.54
36:1:428:A:H2'	36:1:429:U:C6	2.42	0.54
5:S3:124:ARG:NH2	35:SM:128:ALA:HB2	8.61	0.54
1:2:717:C:H42	1:2:720:G:H22	1.54	0.54
1:6:950:C:H2'	1:6:951:A:C8	2.42	0.54
3:S1:68:VAL:HB	3:S1:73:LEU:HD21	5.71	0.54
36:5:2818:U:C6	36:5:2818:U:H5'	2.36	0.54
36:1:1464:G:N7	86:1:4197:OHX:N6	2.55	0.54
40:L3:25:ILE:HD13	40:L3:25:ILE:N	2.19	0.54
21:C9:29:GLU:OE1	21:C9:110:LYS:HD2	2.07	0.54
2:S0:38:PHE:HB2	2:S0:49:ASN:HB2	1.89	0.54
41:L4:42:VAL:C	41:L4:44:LYS:H	2.68	0.54
1:6:486:G:N2	1:6:487:G:N7	2.55	0.54
39:L2:149:ARG:NH2	39:L2:252:THR:O	5.00	0.54
53:M7:69:ARG:HB2	36:5:3308:C:O2	183.99	0.54
36:5:136:G:H2'	36:5:137:G:C8	2.40	0.54
13:C1:71:LEU:HB3	13:C1:88:ARG:NH1	2.83	0.54
58:N2:43:VAL:O	58:N2:45:GLY:N	2.97	0.54
36:1:501:A:H5''	43:L6:28:GLN:HE21	1.73	0.54
1:2:273:G:H2'	1:2:274:G:O4'	2.07	0.54
36:1:2987:A:O2'	40:L3:259:HIS:HB3	2.07	0.54
53:M7:22:LEU:HB3	53:M7:90:PHE:HE2	1.71	0.54
60:N4:33:ASN:OD1	60:N4:34:SER:N	2.40	0.54
16:C4:121:VAL:O	1:6:886:U:O2'	287.02	0.54
36:1:1390:A:N6	36:1:1418:A:O2'	2.40	0.54
36:1:3178:A:C2	52:M6:115:LYS:HG2	2.42	0.54
36:5:3393:U:H2'	36:5:3394:U:H6	1.73	0.54
47:M0:37:GLY:O	47:M0:39:LYS:N	2.40	0.54
59:N3:113:ALA:HA	59:N3:132:ASN:HB3	1.89	0.54
36:1:85:A:O2'	86:1:4141:OHX:N6	2.40	0.54
13:C1:55:ASP:OD2	13:C1:58:CYS:HB2	2.30	0.54
3:S1:51:SER:HA	3:S1:57:ALA:H	1.70	0.54
36:5:1284:C:O2'	36:5:1285:G:H5'	2.07	0.54
60:N4:47:ARG:HD3	60:N4:58:HIS:HD2	5.06	0.54
9:S7:155:ASP:OD2	9:S7:156:SER:N	2.97	0.54
36:1:2927:C:H2'	36:1:2928:C:C6	2.42	0.54
61:N5:34:LEU:HD22	61:N5:35:PRO:HD2	1.88	0.54
36:1:2218:G:H2'	36:1:2219:A:H8	1.72	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:N1:68:THR:HG22	57:N1:71:SER:O	5.30	0.54
32:E0:31:LYS:HD2	1:6:545:A:H2'	415.29	0.54
72:O6:26:ILE:HD13	36:5:155:G:H1'	87.64	0.54
11:S9:113:VAL:HG21	11:S9:134:ILE:HD12	1.89	0.54
40:L3:347:SER:O	40:L3:348:ARG:HB3	2.06	0.54
1:2:1480:G:H3'	1:2:1481:C:C6	2.43	0.54
49:M3:42:ARG:O	49:M3:46:ILE:HB	2.74	0.54
45:L8:241:LYS:HB2	36:5:2586:G:N7	184.54	0.54
46:L9:9:GLN:CG	46:L9:52:LEU:HD21	2.35	0.54
20:C8:82:PRO:HG3	21:C9:36:ILE:HD12	2.53	0.54
40:L3:187:SER:OG	40:L3:187:SER:O	2.16	0.54
2:S0:13:ASP:OD1	2:S0:179:ARG:NH2	2.35	0.54
46:L9:122:LYS:HG3	46:L9:123:ILE:N	2.22	0.54
9:S7:118:LEU:HB2	1:6:639:U:O2	369.72	0.54
36:1:3121:U:H1'	36:1:3122:A:H5''	1.89	0.54
42:L5:53:VAL:O	42:L5:54:ARG:HD3	2.07	0.54
36:1:1048:A:H2'	47:M0:22:TYR:CZ	2.41	0.54
41:L4:359:LEU:HA	56:N0:8:GLN:NE2	3.10	0.54
36:5:1355:A:H1'	36:5:1356:U:OP2	2.08	0.54
71:O5:119:LYS:HZ3	71:O5:120:ALA:HB2	1.72	0.54
38:8:6:U:H2'	38:8:7:U:C6	2.41	0.54
6:S4:45:ILE:HB	6:S4:80:THR:HG23	3.19	0.54
6:S4:230:GLU:HB2	6:S4:233:LYS:HB2	1.89	0.54
9:S7:23:ALA:O	9:S7:27:LEU:HG	2.06	0.54
42:L5:60:ILE:H	42:L5:80:SER:HB3	1.72	0.54
36:5:2560:C:O2	86:5:4026:OHX:N2	2.41	0.54
55:M9:21:LYS:O	55:M9:53:LYS:HB2	2.07	0.54
1:6:927:C:OP1	86:6:2191:OHX:N3	2.40	0.54
12:C0:24:LYS:HD3	12:C0:63:TYR:CE1	4.07	0.54
46:L9:94:TYR:CE2	46:L9:98:PRO:HA	2.43	0.54
36:1:2552:C:H5	66:O0:53:LYS:HE3	1.73	0.54
36:1:1818:U:H3'	36:1:1819:U:H5''	1.89	0.54
59:N3:104:ASN:O	59:N3:107:GLY:N	2.37	0.54
16:C4:16:VAL:HG21	16:C4:18:ARG:NH2	2.22	0.54
1:6:538:A:H2	1:6:542:A:H62	1.54	0.54
1:6:538:A:C4	1:6:543:C:H5	2.25	0.54
39:L2:31:THR:HG23	39:L2:123:ARG:HD2	3.37	0.54
40:L3:292:ALA:HB1	40:L3:295:ALA:HB3	1.89	0.54
8:S6:174:LYS:HG3	1:6:79:C:H1'	341.89	0.54
7:S5:25:LEU:HD22	7:S5:25:LEU:H	1.72	0.54
44:L7:151:ARG:HD2	44:L7:244:ASN:ND2	2.21	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1230:G:H1	36:1:1279:C:N4	2.03	0.54
17:C5:15:HIS:O	17:C5:21:ASP:HA	2.07	0.54
7:S5:161:ASP:OD2	30:D8:42:ARG:NH2	2.41	0.54
63:N7:87:LEU:HB2	63:N7:127:ASN:OD1	2.07	0.54
50:M4:22:LEU:HD12	50:M4:31:LYS:O	2.07	0.54
47:M0:68:ALA:HB2	47:M0:158:LYS:HB2	1.88	0.54
11:S9:169:PRO:HD2	11:S9:174:ARG:HD2	1.90	0.54
44:L7:158:LYS:O	44:L7:160:ARG:N	2.37	0.54
53:M7:41:LEU:HD23	53:M7:95:LEU:HD22	1.88	0.54
57:N1:120:LYS:O	57:N1:123:GLY:N	3.27	0.54
36:1:147:U:O4	45:L8:157:VAL:HA	2.07	0.54
36:1:2992:U:H1'	53:M7:69:ARG:NH2	2.23	0.54
13:C1:109:VAL:HA	13:C1:135:VAL:HG13	1.88	0.54
55:M9:46:LYS:O	55:M9:47:ASN:HB3	2.08	0.54
61:N5:100:LYS:HE3	61:N5:106:ASP:OD2	3.48	0.54
6:S4:11:ARG:O	6:S4:12:LEU:HB2	2.07	0.54
48:M1:8:PRO:CG	48:M1:9:MET:H	3.38	0.54
36:5:277:G:H2'	36:5:278:U:C6	2.43	0.54
79:Q3:46:THR:HB	79:Q3:58:SER:HB2	1.89	0.54
43:L6:153:PRO:O	43:L6:154:LEU:HB2	2.07	0.54
36:5:3055:U:O2'	36:5:3057:U:OP1	2.23	0.54
57:N1:15:PHE:CE2	57:N1:44:ALA:HB3	2.42	0.54
36:5:1461:A:H2'	36:5:1462:A:O4'	2.08	0.54
86:5:4101:OHX:N5	38:8:139:U:O4	2.40	0.54
1:2:792:U:H2'	1:2:793:A:O4'	2.08	0.54
65:N9:41:ARG:NE	36:5:776:U:OP1	198.04	0.54
36:5:112:U:O2'	36:5:113:C:OP2	2.25	0.54
21:C9:123:ARG:HG2	21:C9:124:ILE:N	2.22	0.54
62:N6:39:LEU:HD21	62:N6:107:THR:O	3.62	0.54
50:M4:17:VAL:HG21	50:M4:74:ARG:HB2	1.89	0.54
21:C9:23:GLN:HG2	21:C9:55:TYR:CG	2.43	0.54
27:D5:55:PRO:C	27:D5:57:TYR:H	2.11	0.54
1:2:1559:A:H4'	1:2:1559:A:OP1	2.08	0.54
51:M5:138:GLN:HA	51:M5:143:ARG:HH11	1.73	0.54
36:1:2178:A:H3'	39:L2:132:ASN:ND2	2.22	0.54
40:L3:17:LEU:HD11	40:L3:233:TRP:HH2	1.73	0.54
36:1:1019:G:O6	86:1:4059:OHX:N1	2.41	0.54
36:5:2257:C:H2'	36:5:2258:U:H6	1.73	0.54
13:C1:5:LEU:O	13:C1:7:VAL:N	2.31	0.54
46:L9:137:SER:HB2	46:L9:143:GLU:HB3	3.54	0.54
2:S0:175:TYR:CE1	2:S0:197:ILE:HG22	2.40	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:139:ASN:HA	8:S6:142:ARG:HB3	1.89	0.54
36:5:1335:C:H2'	36:5:1336:U:H6	1.71	0.54
48:M1:23:VAL:O	48:M1:25:GLU:N	2.40	0.54
36:1:541:U:O4	86:1:4192:OHX:N2	2.40	0.54
36:5:701:G:H2'	36:5:702:C:C6	2.42	0.54
36:1:685:G:P	49:M3:35:ARG:HH11	2.30	0.54
1:6:1240:U:H3	1:6:1242:A:H5''	1.73	0.54
26:D4:63:GLN:HB2	26:D4:68:LYS:HB3	2.32	0.54
26:D4:112:LYS:NZ	26:D4:113:ASN:OD1	2.23	0.54
64:N8:83:PRO:HG2	64:N8:86:LYS:HG3	3.84	0.54
36:1:1176:C:H2'	36:1:1177:G:N2	2.23	0.54
5:S3:59:LEU:HG	5:S3:63:GLY:HA2	1.89	0.54
46:L9:41:ILE:HD13	46:L9:41:ILE:O	2.08	0.54
36:5:787:G:H2'	36:5:788:C:C6	2.43	0.54
36:5:764:U:O4	86:5:4033:OHX:N4	2.40	0.54
28:D6:35:ALA:HB3	28:D6:37:LYS:HE2	1.88	0.54
36:5:3194:C:C2	36:5:3197:G:N2	2.68	0.54
36:5:3343:G:N2	36:5:3361:G:H2'	2.23	0.54
36:5:3343:G:H21	36:5:3362:A:H2	1.50	0.54
49:M3:98:ASP:OD2	36:5:76:G:O2'	81.67	0.54
6:S4:100:ARG:HH21	6:S4:122:LYS:HA	1.72	0.54
71:O5:5:LYS:O	71:O5:9:LEU:HG	2.08	0.54
47:M0:75:TYR:CE2	47:M0:79:VAL:HG21	3.28	0.54
9:S7:89:HIS:CD2	9:S7:165:LYS:HG2	4.70	0.54
1:6:1592:A:H2'	1:6:1593:A:H8	1.71	0.54
24:D2:15:ASN:ND2	24:D2:71:LYS:HG3	3.30	0.54
2:S0:9:LEU:HD11	2:S0:14:ALA:HB2	2.25	0.54
36:1:3007:U:H5'	52:M6:73:PHE:CD1	2.43	0.54
1:2:1595:U:H5	1:2:1596:C:C5	2.26	0.54
15:C3:66:ILE:HG13	15:C3:67:THR:N	2.45	0.54
54:M8:100:THR:HG23	54:M8:120:GLU:HB3	1.90	0.54
9:S7:74:GLN:O	9:S7:78:THR:OG1	2.61	0.54
23:D1:3:ASN:ND2	23:D1:5:LYS:O	4.64	0.54
1:2:1303:U:O4	86:2:2077:OHX:N6	2.41	0.54
1:6:17:C:H2'	1:6:18:C:H6	1.72	0.54
5:S3:177:MET:HG3	5:S3:178:ARG:H	4.43	0.54
36:1:2808:A:H4'	36:1:2809:C:O5'	2.06	0.54
36:5:2537:U:O2'	36:5:2538:U:O4'	2.21	0.54
62:N6:39:LEU:HD12	62:N6:43:TYR:HE2	5.04	0.54
62:N6:52:ARG:HA	62:N6:70:ILE:HG22	2.31	0.54
72:O6:26:ILE:C	72:O6:28:TYR:H	2.11	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:3:46:A:OP1	42:L5:158:ARG:HG2	2.08	0.54
2:S0:139:VAL:HG23	4:S2:62:PRO:CG	2.33	0.54
51:M5:172:ARG:HB3	51:M5:174:ILE:HD12	1.89	0.54
1:6:196:G:O2'	1:6:197:A:OP2	2.22	0.54
28:D6:62:TYR:CG	28:D6:63:ALA:N	2.84	0.54
20:C8:145:ARG:HG3	35:SM:68:ARG:NH2	4.47	0.54
30:D8:12:VAL:HB	30:D8:52:ASP:H	1.71	0.54
36:5:1895:A:O2'	36:5:3053:G:H4'	2.07	0.54
36:1:2310:U:OP1	86:1:4139:OHX:N1	2.40	0.54
36:5:167:U:H2'	36:5:168:U:C6	2.43	0.54
68:O2:40:SER:O	68:O2:44:ARG:HG3	2.21	0.54
8:S6:208:TYR:CE1	8:S6:212:LEU:HD12	2.43	0.54
36:1:1460:A:H2'	36:1:1461:A:C8	2.43	0.54
46:L9:93:VAL:HG22	76:Q0:82:LEU:HB3	1.90	0.54
9:S7:163:ASP:HA	9:S7:166:LEU:HD22	1.89	0.54
69:O3:8:TYR:CE2	69:O3:99:ARG:HG2	5.02	0.54
43:L6:51:ARG:NH1	50:M4:114:ASP:OD2	2.40	0.54
36:1:1218:U:HO2'	36:1:1223:A:HO2'	1.54	0.54
74:O8:26:LYS:NZ	74:O8:27:ILE:O	4.11	0.54
22:D0:23:ARG:NH2	1:6:1347:U:OP2	457.28	0.54
1:2:523:G:OP2	26:D4:37:LYS:NZ	2.32	0.54
11:S9:63:ASP:O	11:S9:66:ASP:HB2	2.68	0.54
29:D7:36:LYS:HG2	29:D7:43:ILE:HG22	1.89	0.54
36:1:718:G:C2	36:1:721:G:H1'	2.42	0.54
36:5:2837:A:OP2	36:5:2837:A:H8	1.90	0.54
55:M9:160:GLU:OE1	55:M9:163:ARG:NE	7.10	0.54
42:L5:224:LYS:NZ	37:7:50:U:O2'	318.95	0.54
86:5:3971:OHX:N4	86:5:4193:OHX:N3	2.56	0.54
1:6:1579:U:H2'	1:6:1580:C:C6	2.43	0.54
16:C4:89:THR:O	16:C4:90:ARG:HD3	3.77	0.54
31:D9:39:CYS:O	31:D9:43:PHE:N	2.52	0.54
7:S5:34:GLN:HG2	18:C6:57:LEU:CD1	2.37	0.54
36:5:2748:A:OP1	86:5:4155:OHX:N5	2.41	0.54
36:1:2746:A:C6	42:L5:148:ILE:HD12	2.43	0.54
36:1:77:A:H5'	49:M3:100:ARG:NH1	2.23	0.54
40:L3:60:LEU:HD11	40:L3:62:ARG:HB2	3.43	0.54
1:2:702:G:O2'	1:2:703:G:O4'	2.25	0.54
36:5:2821:C:H2'	36:5:2822:U:O5'	2.08	0.54
1:6:1270:G:H1'	1:6:1447:C:O2	2.07	0.54
1:2:1738:U:H2'	1:2:1739:C:C6	2.42	0.54
40:L3:147:GLU:O	40:L3:151:ILE:HD12	4.73	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:179:ARG:HD3	2:S0:183:ARG:HH11	1.72	0.54
10:S8:169:ILE:HD12	10:S8:179:CYS:SG	2.54	0.54
36:1:924:G:OP1	86:1:4143:OHX:N5	2.40	0.54
36:1:729:C:O2'	54:M8:79:LYS:HE2	2.07	0.54
54:M8:79:LYS:HG3	54:M8:136:ASN:OD1	3.20	0.54
54:M8:16:ARG:NH1	54:M8:55:SER:HB3	2.23	0.54
36:5:3245:A:H2	36:5:3246:G:N1	2.04	0.54
61:N5:136:ALA:O	61:N5:139:ILE:HG23	2.08	0.54
30:D8:13:ILE:HD11	30:D8:29:ARG:HG2	1.90	0.54
40:L3:236:LYS:HD2	36:5:2340:U:OP1	234.04	0.54
36:1:1051:U:H4'	57:N1:19:PHE:CE2	2.42	0.54
70:O4:24:LYS:HD3	70:O4:30:LEU:HD23	3.07	0.54
65:N9:23:LYS:HD2	65:N9:24:PRO:HG3	4.20	0.54
36:5:1262:G:H5''	36:5:1263:A:OP2	2.07	0.54
37:3:64:A:H3'	47:M0:204:GLY:O	2.08	0.54
39:L2:112:ILE:HD11	79:Q3:79:VAL:HG11	5.71	0.54
47:M0:130:ASP:OD1	47:M0:131:ILE:N	2.41	0.54
36:5:3288:G:C4	36:5:3289:G:C8	2.96	0.54
10:S8:26:LYS:O	10:S8:29:LEU:HB3	2.07	0.54
39:L2:36:GLU:O	39:L2:91:GLY:HA2	2.08	0.54
42:L5:289:LYS:HD3	47:M0:206:LEU:HD23	1.89	0.54
36:1:2407:C:H1'	36:1:2818:U:O2	2.08	0.54
38:8:83:C:H4'	38:8:85:G:C2	2.43	0.54
36:1:1720:U:OP2	55:M9:110:ARG:NH1	2.40	0.54
49:M3:101:ARG:HH22	49:M3:112:ASN:HD22	2.31	0.54
37:3:3:U:H2'	37:3:4:U:H6	1.73	0.54
64:N8:27:LYS:HZ2	36:5:801:A:P	153.20	0.54
30:D8:52:ASP:N	30:D8:52:ASP:OD2	3.85	0.54
36:1:3185:U:HO2'	56:N0:170:THR:HG1	1.56	0.54
8:S6:25:ARG:HG3	8:S6:28:PHE:CD1	2.43	0.54
37:3:112:G:H2'	37:3:113:C:C6	2.43	0.54
35:SM:31:SER:OG	36:1:2667:A:OP1	2.12	0.54
2:S0:148:ASP:N	2:S0:151:SER:OG	2.33	0.54
1:6:1202:A:OP1	86:6:2128:OHX:N1	2.41	0.54
36:5:22:G:O4'	38:8:104:A:H1'	2.08	0.54
6:S4:57:ASN:HB2	6:S4:60:GLU:HG3	3.41	0.54
36:1:2898:G:H5''	36:1:2899:C:H5'	1.90	0.54
1:6:1066:C:C2'	1:6:1067:C:H5'	2.38	0.54
36:1:2154:U:OP1	39:L2:242:ARG:NH1	2.41	0.54
22:D0:118:VAL:HG22	22:D0:119:ALA:H	1.72	0.54
26:D4:10:ARG:HD2	1:6:778:G:O6	430.07	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:181:PRO:HB2	42:L5:194:LEU:HD13	4.18	0.54
1:2:1183:A:C6	1:2:1184:A:N1	2.76	0.54
36:1:715:A:H4'	36:1:716:A:OP1	2.07	0.54
42:L5:13:SER:O	37:7:11:A:N6	298.85	0.54
1:2:645:C:H42	1:2:689:G:H1	1.55	0.54
36:1:1068:C:N4	36:1:1090:G:H1	2.06	0.54
36:1:424:G:O2'	68:O2:23:ASP:OD2	2.23	0.54
26:D4:91:LEU:HA	26:D4:96:LEU:HD12	1.90	0.54
39:L2:64:ARG:HH22	45:L8:39:ALA:N	2.06	0.54
36:1:1273:A:O2'	36:1:1274:A:OP1	2.23	0.54
44:L7:48:ASN:HD22	44:L7:48:ASN:N	4.74	0.54
64:N8:22:ILE:HD13	36:5:1114:U:H5''	190.67	0.54
14:C2:41:LEU:O	14:C2:43:ARG:HD2	2.07	0.54
1:2:1617:U:O2	1:2:1619:C:N4	2.39	0.54
11:S9:93:LEU:O	11:S9:96:VAL:HG22	2.08	0.54
19:C7:109:LEU:O	19:C7:113:LEU:HB2	4.49	0.54
4:S2:241:ASP:O	4:S2:244:SER:HB3	2.48	0.54
66:O0:68:TYR:HD2	66:O0:69:TYR:N	3.57	0.54
36:5:1554:U:H4'	36:5:1555:U:OP1	2.08	0.54
36:1:3084:C:OP2	86:1:3888:OHX:N5	2.41	0.54
39:L2:149:ARG:HH22	39:L2:155:LYS:HE2	1.74	0.54
36:1:1213:G:OP1	56:N0:139:TYR:OH	2.15	0.54
1:6:1542:G:N2	1:6:1568:C:H1'	2.23	0.54
3:S1:30:PHE:CZ	3:S1:94:LYS:HA	2.43	0.54
8:S6:148:SER:O	8:S6:150:GLU:N	2.41	0.54
25:D3:53:VAL:HG23	25:D3:100:ASP:O	2.07	0.54
21:C9:20:SER:OG	21:C9:24:ARG:NH2	8.01	0.54
57:N1:79:MET:HB3	57:N1:84:TYR:CD2	2.43	0.54
42:L5:140:ARG:HB2	42:L5:140:ARG:HH21	1.73	0.54
1:2:1466:G:OP1	18:C6:139:GLN:HB3	2.08	0.54
43:L6:158:TYR:OH	50:M4:114:ASP:OD2	2.13	0.54
36:5:123:A:C6	36:5:150:A:C5	2.97	0.54
1:2:482:U:H2'	1:2:483:A:C8	2.42	0.54
36:5:2513:U:OP2	86:5:3958:OHX:N3	2.41	0.54
36:5:3155:U:H4'	36:5:3156:U:OP2	2.08	0.54
1:6:548:G:H2'	1:6:549:G:C8	2.43	0.54
34:SR:236:ALA:O	34:SR:261:LYS:NZ	3.21	0.54
1:6:782:U:O2	1:6:782:U:H5''	2.08	0.54
36:5:1858:A:O2'	36:5:1859:A:OP2	2.26	0.54
76:Q0:94:SER:O	76:Q0:103:LEU:N	2.39	0.53
62:N6:3:LYS:HD2	62:N6:8:VAL:HG23	4.89	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:185:ALA:O	52:M6:188:SER:N	3.61	0.53
27:D5:58:ARG:HB3	27:D5:103:ARG:NH1	9.73	0.53
10:S8:138:ASN:N	10:S8:138:ASN:OD1	2.26	0.53
16:C4:112:ILE:H	28:D6:57:SER:HA	1.73	0.53
30:D8:12:VAL:HG22	30:D8:28:VAL:HG11	1.90	0.53
36:1:517:G:P	44:L7:60:ARG:HH22	2.31	0.53
36:1:744:A:H1'	54:M8:141:ARG:HH11	1.73	0.53
36:5:3022:G:O2'	36:5:3031:G:O6	2.25	0.53
26:D4:20:ARG:HD2	26:D4:74:LEU:HD22	2.58	0.53
77:Q1:21:ARG:HH11	1:6:1654:G:P	282.49	0.53
16:C4:92:LYS:HD3	28:D6:69:ASN:OD1	2.08	0.53
12:C0:88:PRO:C	12:C0:90:THR:H	2.12	0.53
27:D5:66:VAL:HA	27:D5:71:ILE:HG22	5.78	0.53
18:C6:11:GLY:N	18:C6:18:ALA:O	2.41	0.53
39:L2:64:ARG:HH12	45:L8:38:GLN:HA	1.72	0.53
36:5:414:U:O4	86:5:3931:OHX:N6	2.41	0.53
1:6:65:A:H2	1:6:84:A:H62	1.55	0.53
36:5:145:G:O6	86:5:4012:OHX:N5	2.41	0.53
11:S9:53:ARG:NH2	11:S9:53:ARG:HB3	3.38	0.53
36:1:2369:G:H2'	36:1:2370:G:O4'	2.09	0.53
64:N8:133:LEU:HD11	64:N8:137:LYS:HE3	2.25	0.53
36:1:3035:A:OP2	86:1:4075:OHX:N4	2.40	0.53
1:6:922:G:H2'	1:6:923:A:H8	1.73	0.53
24:D2:97:ARG:HB3	24:D2:97:ARG:HH11	1.74	0.53
36:5:2733:A:OP1	86:5:4128:OHX:N1	2.42	0.53
67:O1:19:ARG:HD3	67:O1:35:GLU:HG3	2.94	0.53
2:S0:142:PRO:HG3	23:D1:32:VAL:HG22	2.46	0.53
1:2:882:U:H2'	1:2:883:C:C6	2.44	0.53
45:L8:161:GLU:HA	45:L8:164:VAL:HG22	2.06	0.53
49:M3:19:GLN:HE22	36:5:801:A:H61	130.69	0.53
50:M4:23:ILE:HA	50:M4:63:VAL:HG23	1.89	0.53
36:1:2852:C:N3	47:M0:158:LYS:NZ	2.55	0.53
43:L6:137:ASP:O	43:L6:141:VAL:HG23	2.07	0.53
36:5:408:A:OP1	86:5:4096:OHX:N6	2.42	0.53
21:C9:33:TYR:O	21:C9:34:VAL:HB	4.67	0.53
1:2:1238:A:OP2	86:2:2047:OHX:N2	2.41	0.53
39:L2:18:SER:O	39:L2:20:THR:HG23	5.06	0.53
86:6:2058:OHX:N1	86:6:2145:OHX:N3	2.55	0.53
2:S0:162:CYS:SG	2:S0:163:ASN:N	2.81	0.53
15:C3:85:PRO:HD2	15:C3:88:LEU:HD12	3.83	0.53
46:L9:106:LYS:O	46:L9:109:ALA:HB2	2.17	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:SR:156:VAL:HG22	34:SR:169:ILE:HG22	1.88	0.53
26:D4:38:ASP:OD2	26:D4:52:LYS:NZ	4.36	0.53
67:O1:74:ARG:HH12	67:O1:109:VAL:HG11	2.28	0.53
1:2:1278:G:H4'	5:S3:174:HIS:HE1	1.73	0.53
14:C2:119:SER:OG	14:C2:120:VAL:HG23	2.07	0.53
36:1:685:G:OP1	49:M3:35:ARG:HD2	2.07	0.53
5:S3:177:MET:HG3	5:S3:178:ARG:HG2	5.31	0.53
1:2:289:U:H2'	1:2:290:G:O4'	2.09	0.53
36:1:573:C:H2'	36:1:574:U:C6	2.43	0.53
36:1:1397:C:C2'	36:1:1398:U:H5'	2.39	0.53
36:5:601:U:H2'	36:5:602:A:O4'	2.08	0.53
73:O7:28:HIS:ND1	73:O7:31:LYS:HB2	2.23	0.53
7:S5:136:ALA:HA	7:S5:201:ALA:O	2.09	0.53
71:O5:59:ASN:O	71:O5:63:ARG:HG2	4.36	0.53
46:L9:57:VAL:HG23	46:L9:68:LEU:HG	2.22	0.53
1:6:1350:U:H2'	1:6:1351:G:C8	2.43	0.53
36:5:2673:A:H61	36:5:2681:U:H3	1.56	0.53
19:C7:82:ASP:O	19:C7:83:GLN:HB2	2.08	0.53
6:S4:95:THR:O	6:S4:97:GLU:N	2.73	0.53
36:5:3165:A:H2'	36:5:3166:C:H6	1.73	0.53
68:O2:38:ILE:N	36:5:640:U:OP2	186.77	0.53
36:1:262:U:H2'	36:1:263:C:O4'	2.09	0.53
71:O5:86:ARG:HG3	71:O5:90:ARG:NH2	2.50	0.53
86:5:4015:OHX:N6	86:5:4211:OHX:N4	2.57	0.53
39:L2:97:ASN:HA	79:Q3:87:ARG:NH1	4.06	0.53
19:C7:30:THR:HG22	34:SR:127:ARG:HH22	4.99	0.53
3:S1:109:LYS:HE3	3:S1:113:MET:HE2	1.90	0.53
1:2:1320:U:O2	1:2:1322:A:H5'	2.09	0.53
12:C0:69:THR:O	12:C0:73:VAL:HG23	2.08	0.53
40:L3:73:VAL:HG13	59:N3:90:GLY:HA3	2.25	0.53
32:E0:14:VAL:O	32:E0:18:THR:HG23	2.11	0.53
36:1:120:G:N2	45:L8:126:SER:HB3	2.23	0.53
2:S0:109:ASN:O	2:S0:112:THR:HG22	2.08	0.53
79:Q3:17:ARG:NH1	36:5:860:G:OP1	219.74	0.53
36:1:192:C:H2'	36:1:193:C:H6	1.73	0.53
2:S0:148:ASP:HB3	2:S0:150:ASP:OD2	2.09	0.53
36:1:3365:U:H2'	36:1:3366:G:C8	2.43	0.53
1:2:850:A:H5'	55:M9:165:LYS:HD3	1.90	0.53
24:D2:8:ALA:HA	24:D2:74:VAL:HG11	1.90	0.53
20:C8:117:LYS:HE2	20:C8:128:PHE:HB2	1.90	0.53
77:Q1:21:ARG:HD2	1:6:1653:C:O3'	284.26	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:138:LEU:O	52:M6:142:SER:N	2.90	0.53
1:6:138:A:H5''	1:6:138:A:N3	2.23	0.53
1:6:1309:C:O2'	1:6:1401:A:N1	2.30	0.53
1:6:1489:U:H5'	1:6:1494:C:H1'	1.90	0.53
19:C7:57:LEU:O	19:C7:61:ILE:HG13	2.09	0.53
1:2:959:U:C6	15:C3:61:THR:HB	2.44	0.53
78:Q2:28:TYR:HB3	78:Q2:69:VAL:HB	1.91	0.53
36:5:2734:A:OP1	86:5:4041:OHX:N6	2.41	0.53
42:L5:90:HIS:NE2	42:L5:229:ASP:OD2	2.39	0.53
41:L4:39:PHE:CD2	41:L4:242:ALA:HB2	2.94	0.53
36:1:1603:A:OP1	55:M9:38:ARG:NH1	2.41	0.53
67:O1:70:ARG:HE	67:O1:102:LYS:NZ	5.43	0.53
76:Q0:97:ARG:HH21	36:5:2847:A:P	321.55	0.53
8:S6:10:ASN:OD1	8:S6:10:ASN:N	2.93	0.53
36:5:261:U:H2'	36:5:262:U:C6	2.43	0.53
3:S1:83:LYS:N	3:S1:104:ASP:O	2.38	0.53
14:C2:31:VAL:HG21	14:C2:136:ILE:HD11	1.98	0.53
62:N6:2:ALA:HA	36:5:213:A:H5''	80.38	0.53
1:2:1256:A:OP1	12:C0:5:LYS:NZ	2.29	0.53
36:1:304:G:H3'	36:1:304:G:OP2	2.09	0.53
68:O2:101:SER:O	68:O2:105:ARG:HG3	2.07	0.53
86:2:2031:OHX:N6	86:2:2146:OHX:N2	2.56	0.53
28:D6:95:ARG:HG2	1:6:1797:A:H5'	343.06	0.53
42:L5:286:VAL:HG13	47:M0:206:LEU:HD21	2.63	0.53
2:S0:140:ASN:O	2:S0:142:PRO:HD3	2.69	0.53
4:S2:90:THR:HB	4:S2:93:GLY:O	2.09	0.53
46:L9:49:ASN:O	46:L9:51:GLN:N	2.42	0.53
3:S1:172:LEU:O	3:S1:176:VAL:HG23	2.17	0.53
16:C4:124:ASP:O	16:C4:125:SER:HB2	2.09	0.53
40:L3:221:THR:HB	40:L3:273:HIS:O	2.45	0.53
72:O6:10:GLY:O	72:O6:13:LYS:HB2	2.09	0.53
86:2:2044:OHX:N1	86:2:2099:OHX:N3	2.56	0.53
40:L3:188:ILE:CD1	40:L3:189:SER:H	2.21	0.53
36:5:1208:U:H6	36:5:3115:C:H42	1.57	0.53
72:O6:45:ARG:NH2	72:O6:50:LEU:HA	3.78	0.53
20:C8:35:ILE:HB	20:C8:38:VAL:CG1	3.88	0.53
86:6:2058:OHX:N5	86:6:2145:OHX:N6	2.57	0.53
24:D2:37:PHE:CD2	24:D2:103:ILE:HD12	2.44	0.53
6:S4:160:VAL:HG13	6:S4:169:ILE:HG23	1.90	0.53
40:L3:376:LYS:HG2	40:L3:380:MET:HG3	2.83	0.53
36:5:1831:U:H2'	36:5:1832:C:C6	2.43	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:82:PRO:HG2	66:O0:59:TYR:CE2	2.43	0.53
36:1:2789:U:H2'	36:1:2790:A:C8	2.44	0.53
59:N3:66:LYS:HB2	59:N3:69:LEU:HD22	1.89	0.53
75:O9:4:GLN:HG2	36:5:1588:A:N1	125.15	0.53
63:N7:4:PHE:HE2	66:O0:63:SER:HB3	2.62	0.53
36:1:247:C:H2'	36:1:248:U:H6	1.73	0.53
49:M3:68:LYS:HE2	36:5:699:A:OP1	97.43	0.53
36:1:209:A:H4'	36:1:211:A:C8	2.43	0.53
19:C7:119:LEU:H	19:C7:119:LEU:HD12	1.73	0.53
36:1:634:C:H4'	68:O2:47:ARG:NH1	2.24	0.53
68:O2:64:LYS:O	68:O2:65:PHE:HB2	2.19	0.53
7:S5:36:ALA:HB1	7:S5:42:LEU:HD12	4.74	0.53
48:M1:160:VAL:HG13	48:M1:171:VAL:HG21	1.92	0.53
2:S0:76:ILE:HD13	2:S0:98:ILE:HB	1.89	0.53
7:S5:132:VAL:HG13	7:S5:202:ALA:HB2	1.90	0.53
3:S1:181:LEU:HA	3:S1:184:LEU:HB3	1.91	0.53
12:C0:12:HIS:HA	12:C0:15:LEU:HB2	3.37	0.53
2:S0:49:ASN:HB3	2:S0:52:LYS:HG3	1.90	0.53
41:L4:23:PRO:O	41:L4:25:VAL:N	2.65	0.53
41:L4:135:VAL:HA	41:L4:245:GLY:O	2.08	0.53
10:S8:51:GLY:H	1:6:397:A:H5"	313.30	0.53
11:S9:27:GLU:HB3	11:S9:39:LYS:HD2	4.46	0.53
36:1:2881:C:H2'	36:1:2882:U:C6	2.43	0.53
1:2:1720:G:O6	86:2:2082:OHX:N5	2.41	0.53
1:6:1698:G:O2'	1:6:1699:G:O5'	2.25	0.53
6:S4:46:VAL:O	6:S4:50:ASN:HB2	2.19	0.53
1:2:123:G:N2	6:S4:146:THR:HG21	2.21	0.53
1:2:14:C:H2'	1:2:15:U:C6	2.42	0.53
15:C3:52:VAL:HG22	15:C3:55:ARG:HH12	1.73	0.53
70:O4:78:GLY:O	70:O4:80:ARG:N	4.52	0.53
1:2:560:U:H2'	1:2:561:G:C8	2.44	0.53
36:1:3316:A:OP1	36:1:3318:G:N2	2.42	0.53
36:1:3317:U:H4'	36:1:3318:G:O5'	2.09	0.53
19:C7:4:VAL:HA	1:6:1402:G:OP1	404.12	0.53
2:S0:62:ARG:HE	23:D1:39:VAL:HG13	1.73	0.53
1:6:694:U:H3'	1:6:695:U:O2	2.08	0.53
36:1:677:A:C8	36:1:786:A:C6	2.97	0.53
71:O5:101:THR:HG23	71:O5:104:GLN:H	2.17	0.53
78:Q2:73:GLU:OE1	78:Q2:80:ARG:NH1	4.96	0.53
36:1:1798:A:H2'	36:1:1799:A:C8	2.43	0.53
49:M3:37:ASN:O	49:M3:41:THR:HG23	5.31	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Q2:39:GLY:HA3	36:5:2765:C:O3'	173.14	0.53
36:1:3026:G:O6	86:1:3940:OHX:N4	2.42	0.53
51:M5:167:THR:O	51:M5:170:LYS:HB3	2.76	0.53
36:1:926:A:H2'	36:1:927:C:C6	2.44	0.53
36:1:2592:G:H4'	36:1:2594:C:C2	2.43	0.53
12:C0:87:VAL:O	12:C0:89:ALA:N	4.58	0.53
47:M0:3:ARG:NH2	47:M0:63:GLU:HG3	2.24	0.53
47:M0:210:ILE:HA	47:M0:217:PHE:CE2	2.49	0.53
22:D0:69:LYS:HE2	22:D0:80:GLU:HB2	1.91	0.53
6:S4:106:LYS:HG3	6:S4:108:ARG:NH1	2.23	0.53
7:S5:25:LEU:HB2	18:C6:27:GLY:O	2.37	0.53
1:2:955:A:H4'	1:2:1073:G:O2'	2.09	0.53
30:D8:15:VAL:HA	30:D8:28:VAL:HG22	1.91	0.53
30:D8:39:THR:O	30:D8:40:ILE:HG13	2.09	0.53
1:2:702:G:HO2'	1:2:703:G:H8	1.56	0.53
1:2:702:G:O2'	1:2:703:G:H8	1.92	0.53
24:D2:114:GLU:O	24:D2:118:ARG:HG3	2.08	0.53
1:6:1773:C:H2'	1:6:1774:G:C8	2.44	0.53
20:C8:56:LYS:HB3	20:C8:60:GLU:HG3	1.90	0.53
1:2:1248:C:H2'	1:2:1249:U:C6	2.42	0.53
36:1:2724:U:O4	86:1:3910:OHX:N6	2.41	0.53
36:5:1346:G:H1	36:5:1358:C:N4	2.07	0.53
55:M9:41:ILE:O	55:M9:45:VAL:HG23	2.09	0.53
36:1:1454:A:H5''	36:1:1455:U:H5'	1.90	0.53
22:D0:117:VAL:HG22	22:D0:118:VAL:H	1.73	0.53
36:1:3174:A:C2'	36:1:3175:U:H5'	2.39	0.53
36:5:3241:G:H2'	36:5:3245:A:H8	1.73	0.53
5:S3:141:LYS:HD3	1:6:1275:A:O2'	388.02	0.53
1:2:1550:A:OP2	17:C5:42:ARG:NH2	2.41	0.53
1:6:1248:C:H2'	1:6:1249:U:C6	2.43	0.53
64:N8:73:LEU:HB2	64:N8:109:TYR:CD2	2.43	0.53
71:O5:10:ARG:NH1	71:O5:60:GLU:OE2	2.42	0.53
36:5:169:U:H4'	36:5:170:G:OP1	2.08	0.53
38:4:5:U:H2'	38:4:6:U:O4'	2.08	0.53
46:L9:86:TYR:CD1	46:L9:151:VAL:HG13	2.43	0.53
36:1:2841:G:OP2	86:1:4142:OHX:N2	2.41	0.53
55:M9:152:GLU:O	55:M9:156:ASN:HB2	3.65	0.53
47:M0:89:VAL:HG22	47:M0:136:PHE:CE1	3.60	0.53
20:C8:140:THR:HA	20:C8:143:ARG:NH1	2.34	0.53
39:L2:70:ARG:HG2	39:L2:71:LEU:N	4.91	0.53
24:D2:45:GLY:O	24:D2:68:ARG:HD2	2.84	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:96:ILE:O	55:M9:100:ARG:HG3	2.09	0.53
30:D8:22:ARG:HD2	1:6:1619:C:C2	343.21	0.53
51:M5:156:HIS:O	51:M5:159:ARG:HG2	2.08	0.53
27:D5:88:ILE:O	27:D5:104:ALA:HA	2.81	0.53
1:6:1458:G:C2	1:6:1459:C:C4	2.97	0.53
51:M5:143:ARG:NH2	71:O5:92:LEU:HD23	2.23	0.53
66:O0:26:GLY:O	66:O0:30:THR:HG23	2.09	0.53
1:2:1235:C:O4'	33:E1:146:SER:HB3	2.08	0.53
24:D2:73:GLY:HA3	24:D2:128:PHE:CZ	2.74	0.53
58:N2:49:ASN:ND2	58:N2:49:ASN:O	2.40	0.53
48:M1:48:SER:HB2	48:M1:66:ALA:HB3	2.21	0.53
46:L9:1:MET:HG2	46:L9:3:TYR:CE1	3.77	0.53
1:6:922:G:H2'	1:6:923:A:C8	2.44	0.53
37:7:114:U:H2'	37:7:115:G:H8	1.73	0.53
62:N6:56:VAL:HG11	62:N6:104:LEU:HD13	1.97	0.53
54:M8:106:PHE:CE2	54:M8:121:CYS:HB3	2.44	0.53
36:1:3002:C:H1'	36:1:3147:G:N2	2.24	0.53
39:L2:230:VAL:O	39:L2:233:GLN:HB2	2.09	0.53
39:L2:80:GLU:HG3	79:Q3:66:GLY:HA2	1.89	0.53
1:2:1407:U:H2'	1:2:1408:G:O4'	2.08	0.53
1:6:906:A:H2'	1:6:907:A:C8	2.43	0.53
64:N8:111:LYS:HA	64:N8:129:PHE:O	2.37	0.53
67:O1:36:ILE:HD12	67:O1:59:ILE:HD11	1.89	0.53
1:6:180:A:H2'	1:6:181:A:O4'	2.09	0.53
36:5:2400:G:H5''	36:5:2401:A:OP2	2.08	0.53
36:1:1902:G:C6	36:1:1903:U:C2	2.97	0.53
36:1:539:C:H2'	36:1:540:U:C6	2.44	0.53
63:N7:97:SER:O	63:N7:100:THR:HB	2.09	0.53
36:1:1597:C:OP1	70:O4:31:ARG:HD2	2.08	0.53
1:2:933:A:OP2	28:D6:37:LYS:NZ	2.31	0.53
28:D6:84:VAL:O	28:D6:86:VAL:N	2.40	0.53
8:S6:48:TYR:CZ	8:S6:121:LEU:HD22	5.12	0.53
36:5:1725:C:H2'	36:5:1726:C:H6	1.72	0.53
11:S9:107:ARG:O	11:S9:147:MET:HA	2.09	0.53
5:S3:10:LYS:HG2	5:S3:11:LEU:HD23	3.32	0.53
36:1:1319:G:H2'	36:1:1320:C:H6	1.74	0.53
73:O7:35:SER:OG	36:5:361:A:H5'	126.18	0.53
36:5:1063:G:OP2	36:5:1097:G:H5''	2.09	0.53
39:L2:203:ALA:HB1	36:5:2146:C:H5''	206.22	0.53
3:S1:166:LYS:O	3:S1:170:GLU:HB2	2.88	0.53
6:S4:163:ASP:OD1	6:S4:166:SER:N	2.29	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:161:ASP:O	30:D8:44:VAL:HA	2.33	0.53
40:L3:117:ARG:CZ	40:L3:175:LYS:HD3	2.90	0.53
39:L2:114:SER:HB2	39:L2:169:ILE:CD1	2.39	0.53
55:M9:104:ARG:HH21	55:M9:105:LEU:HB2	1.74	0.53
43:L6:76:LEU:HD11	43:L6:141:VAL:HG21	1.89	0.53
1:6:1235:C:OP2	1:6:1245:G:H8	1.92	0.53
36:1:1674:G:H2'	36:1:1675:G:O4'	2.09	0.53
36:5:1824:U:H2'	36:5:1825:G:C8	2.44	0.53
9:S7:102:PRO:HD3	9:S7:112:ARG:NH1	3.96	0.53
55:M9:182:ASP:O	55:M9:184:LEU:N	3.56	0.53
44:L7:125:GLU:OE1	44:L7:128:LYS:HE2	2.08	0.53
36:1:2209:U:OP2	36:1:2209:U:C6	2.61	0.53
57:N1:18:ASP:HB2	57:N1:21:LYS:HB2	3.42	0.53
45:L8:142:LEU:HD22	45:L8:201:THR:HG21	1.90	0.53
78:Q2:73:GLU:CD	78:Q2:80:ARG:HH21	2.12	0.53
1:2:996:U:O2	1:2:1008:G:N2	2.42	0.53
3:S1:22:ASP:OD2	3:S1:25:THR:OG1	5.26	0.53
46:L9:13:PRO:HG2	46:L9:16:VAL:HG11	2.81	0.53
36:1:698:U:H2'	36:1:699:A:O4'	2.09	0.53
21:C9:25:GLN:OE1	21:C9:27:LYS:HB2	2.09	0.53
24:D2:89:TRP:O	24:D2:93:LEU:HD22	2.09	0.53
36:1:2193:U:H5'	36:1:2194:G:H5'	1.91	0.53
36:1:1724:U:H1'	36:1:1725:C:C6	2.44	0.53
2:S0:198:MET:SD	2:S0:199:PRO:HD2	2.49	0.53
47:M0:85:PHE:HA	47:M0:140:THR:HG22	1.91	0.53
47:M0:38:LYS:HG2	47:M0:41:ALA:HB2	2.18	0.53
47:M0:206:LEU:O	47:M0:210:ILE:HG12	3.76	0.53
19:C7:24:LEU:HD23	19:C7:34:LEU:HD13	1.89	0.53
34:SR:106:HIS:CE1	34:SR:126:SER:HB3	2.44	0.53
33:E1:126:CYS:CB	33:E1:143:LYS:HG2	2.39	0.53
50:M4:60:LEU:HD13	56:N0:152:LEU:HD11	1.89	0.53
36:5:119:U:H4'	36:5:120:G:H3'	1.91	0.53
41:L4:205:PRO:HB3	41:L4:247:PHE:CD2	2.50	0.53
36:1:1245:A:N6	36:1:1272:C:O2'	2.41	0.53
4:S2:60:SER:OG	23:D1:15:ARG:NH2	2.42	0.53
1:6:1699:G:N1	1:6:1701:A:H5''	2.23	0.53
10:S8:31:ARG:NH2	1:6:333:A:OP1	297.94	0.53
13:C1:86:ILE:HD11	13:C1:125:VAL:HG11	3.46	0.53
2:S0:190:ASP:C	2:S0:192:THR:H	4.72	0.53
20:C8:20:THR:OG1	20:C8:21:ASN:N	2.41	0.53
10:S8:96:LEU:HD13	10:S8:179:CYS:SG	2.48	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:241:ARG:HA	36:5:2203:U:H4'	220.46	0.53
46:L9:117:PHE:CE1	46:L9:165:CYS:HB3	2.59	0.53
17:C5:100:LYS:HG3	1:6:1211:A:H4'	367.79	0.53
36:1:1740:U:H1'	36:1:1741:A:H2	1.73	0.53
37:3:11:A:H4'	37:3:13:A:C8	2.44	0.53
73:O7:28:HIS:CG	73:O7:31:LYS:HB2	2.43	0.53
2:S0:154:GLU:HA	23:D1:63:GLY:HA2	1.92	0.53
42:L5:91:GLY:HA3	42:L5:94:ASN:ND2	4.38	0.53
36:5:595:G:H1	36:5:609:G:H5''	1.74	0.53
1:6:1158:C:H42	1:6:1163:A:H61	1.56	0.53
1:6:1703:C:H2'	1:6:1704:U:H6	1.73	0.53
40:L3:375:GLU:O	40:L3:378:ALA:HB3	2.09	0.53
41:L4:139:GLY:O	41:L4:180:LYS:HE2	6.50	0.53
6:S4:200:ARG:HG2	6:S4:201:HIS:N	3.64	0.53
21:C9:72:GLY:HA3	1:6:1498:G:H5''	420.78	0.53
74:O8:46:ARG:NH1	74:O8:47:GLY:O	3.21	0.53
42:L5:254:LYS:HG3	42:L5:254:LYS:O	3.47	0.53
11:S9:134:ILE:HA	11:S9:158:PHE:HA	1.90	0.53
1:2:1013:A:H2'	1:2:1014:G:O4'	2.09	0.53
18:C6:129:PHE:CE1	22:D0:78:THR:HA	2.43	0.53
41:L4:148:ILE:HA	41:L4:149:PRO:C	2.56	0.53
51:M5:150:TRP:CZ3	51:M5:156:HIS:CD2	4.09	0.53
28:D6:60:PRO:O	28:D6:61:GLU:HB3	2.87	0.53
1:6:647:G:N2	1:6:687:G:H22	2.07	0.53
63:N7:5:LEU:HD22	63:N7:77:TYR:CE2	5.94	0.53
44:L7:159:GLN:O	44:L7:160:ARG:HB3	2.09	0.53
18:C6:46:PHE:O	18:C6:50:GLU:HG3	2.09	0.53
51:M5:28:TRP:O	51:M5:32:GLN:HG2	2.09	0.53
2:S0:150:ASP:N	2:S0:150:ASP:OD2	2.41	0.53
1:6:1698:G:H1'	1:6:1699:G:OP1	2.09	0.53
36:1:1407:A:O3'	68:O2:33:ARG:NH2	2.42	0.53
1:6:351:C:OP1	1:6:630:A:O2'	2.27	0.53
36:5:2922:G:N1	36:5:2923:U:O2	2.41	0.53
8:S6:173:PRO:HG3	1:6:66:U:C5	333.51	0.53
39:L2:113:VAL:HG12	39:L2:166:ILE:HD13	2.03	0.53
42:L5:122:VAL:HG23	42:L5:123:GLU:N	3.16	0.53
46:L9:117:PHE:O	46:L9:120:ASP:HB2	2.41	0.53
67:O1:26:LYS:NZ	36:5:1456:A:N7	167.05	0.53
36:1:1068:C:H42	36:1:1090:G:H1	1.57	0.53
68:O2:22:SER:HA	68:O2:28:VAL:HG12	1.90	0.53
36:1:849:C:H2'	36:1:850:U:H6	1.74	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:O2:76:VAL:HG21	68:O2:94:ALA:HB1	2.42	0.53
36:1:2389:C:H42	36:1:2990:G:H1	1.57	0.53
2:S0:200:ASP:HA	2:S0:203:PHE:CE1	2.44	0.53
36:5:3377:G:O6	86:5:4082:OHX:N1	2.42	0.53
1:6:841:U:H2'	1:6:842:C:O4'	2.09	0.53
6:S4:66:MET:HB3	1:6:454:U:C4	375.95	0.53
36:1:534:U:O3'	56:N0:146:LYS:HD3	2.09	0.53
36:5:2985:C:H2'	36:5:2986:U:C6	2.43	0.53
36:5:1944:U:H2'	36:5:1945:A:H8	1.74	0.53
1:2:434:G:N7	86:2:2048:OHX:N4	2.56	0.53
1:6:67:A:O2'	1:6:69:G:OP1	2.08	0.53
2:S0:167:LYS:HB3	2:S0:168:HIS:CD2	3.03	0.53
64:N8:10:LYS:HE3	36:5:1375:G:O6	159.67	0.53
28:D6:10:ARG:HG2	28:D6:10:ARG:NH2	3.67	0.52
8:S6:116:LYS:HG3	8:S6:117:GLY:N	3.47	0.52
3:S1:117:TRP:HZ2	1:6:1799:U:H5''	336.32	0.52
3:S1:100:PHE:HB3	3:S1:181:LEU:HD13	5.64	0.52
37:3:3:U:H2'	37:3:4:U:C6	2.44	0.52
40:L3:67:PHE:CE1	59:N3:88:ARG:HB3	2.44	0.52
41:L4:255:PHE:O	41:L4:258:LEU:HB2	2.18	0.52
53:M7:48:LEU:HB3	53:M7:88:VAL:HG13	1.90	0.52
50:M4:38:ILE:HD13	56:N0:150:PHE:CE2	3.56	0.52
7:S5:185:ARG:NH1	1:6:1471:A:OP1	333.38	0.52
53:M7:126:ARG:HD2	53:M7:140:GLU:OE2	2.09	0.52
36:1:2960:C:OP1	86:1:4002:OHX:N4	2.42	0.52
9:S7:14:THR:HG22	9:S7:17:GLU:H	3.05	0.52
40:L3:313:HIS:O	40:L3:333:LYS:HE3	2.44	0.52
38:4:103:G:O6	86:4:223:OHX:N4	2.42	0.52
49:M3:63:VAL:HG22	36:5:72:C:H5'	112.54	0.52
54:M8:40:THR:O	54:M8:42:ALA:N	2.42	0.52
36:5:126:U:H2'	36:5:127:G:O4'	2.08	0.52
71:O5:18:ALA:O	71:O5:22:VAL:HG23	2.09	0.52
68:O2:72:LYS:O	68:O2:92:TYR:HA	2.31	0.52
21:C9:139:THR:O	21:C9:142:GLU:N	3.46	0.52
9:S7:63:PRO:O	9:S7:64:VAL:HB	2.20	0.52
26:D4:62:THR:HB	26:D4:69:SER:OG	2.88	0.52
26:D4:62:THR:HG23	1:6:531:C:O2	420.80	0.52
36:1:3027:A:H2'	36:1:3028:G:O4'	2.09	0.52
11:S9:89:ASP:HB2	11:S9:90:LYS:HE2	1.91	0.52
57:N1:39:ILE:HG13	57:N1:102:ARG:HG2	6.20	0.52
54:M8:150:VAL:HA	54:M8:153:PHE:CD1	2.44	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2403:G:H5'	36:1:2872:A:C2	2.44	0.52
36:5:1615:C:H2'	36:5:1616:U:C6	2.43	0.52
36:1:1633:C:H2'	36:1:1634:G:C8	2.41	0.52
3:S1:61:LEU:O	3:S1:63:GLY:N	2.42	0.52
28:D6:79:ILE:HA	28:D6:84:VAL:HG21	1.89	0.52
7:S5:166:ARG:HB2	30:D8:46:GLY:HA3	1.91	0.52
12:C0:1:MET:HG3	12:C0:2:LEU:H	3.20	0.52
5:S3:64:ARG:O	5:S3:66:ILE:N	2.42	0.52
72:O6:62:ARG:HH22	72:O6:98:ARG:NH1	2.07	0.52
36:1:562:C:H2'	36:1:563:U:C6	2.44	0.52
56:N0:71:LYS:NZ	36:5:563:U:OP1	340.68	0.52
53:M7:29:THR:HA	53:M7:32:THR:CG2	2.38	0.52
57:N1:130:ARG:NH1	36:5:1098:A:OP2	253.09	0.52
36:1:598:A:OP1	44:L7:41:ARG:NH1	2.42	0.52
42:L5:40:HIS:CE1	57:N1:69:LYS:HA	2.87	0.52
41:L4:26:PHE:HA	41:L4:127:ALA:HA	2.38	0.52
36:1:3306:U:H5''	40:L3:21:ARG:NH1	2.25	0.52
18:C6:10:PHE:O	18:C6:87:LYS:HD3	3.38	0.52
1:2:67:A:O3'	1:2:68:A:H3'	2.09	0.52
36:5:2370:G:N7	86:5:3902:OHX:N6	2.58	0.52
55:M9:43:LYS:HZ2	36:5:1765:U:H5'	94.35	0.52
1:2:1250:U:O2'	1:2:1251:U:OP1	2.26	0.52
36:5:976:U:H2'	36:5:977:C:O4'	2.08	0.52
36:5:1595:U:C2	36:5:1596:C:C5	2.98	0.52
57:N1:30:TYR:OH	57:N1:94:GLU:OE2	2.72	0.52
1:2:1294:G:O2'	1:2:1321:A:N1	2.35	0.52
36:1:345:G:OP1	36:1:1429:G:N1	2.32	0.52
41:L4:141:ARG:NH2	36:5:1385:C:OP1	126.63	0.52
51:M5:15:GLN:HG2	72:O6:52:PRO:HG2	3.08	0.52
25:D3:48:HIS:HB3	25:D3:103:LEU:HD21	2.13	0.52
77:Q1:6:ARG:HA	77:Q1:9:ARG:HB2	1.91	0.52
71:O5:10:ARG:NH2	38:8:65:A:O3'	33.85	0.52
42:L5:211:LEU:HD22	42:L5:215:ASP:HB3	2.20	0.52
36:5:887:G:H2'	36:5:888:A:C8	2.44	0.52
1:2:3:U:H5'	4:S2:198:THR:O	2.09	0.52
42:L5:237:GLU:O	42:L5:241:THR:HB	2.86	0.52
34:SR:300:THR:HG23	34:SR:314:GLN:HG3	1.91	0.52
9:S7:86:GLN:HG2	9:S7:87:ASP:H	1.74	0.52
18:C6:9:THR:HG21	18:C6:88:GLY:HA2	1.89	0.52
15:C3:143:SER:OG	15:C3:144:ALA:N	2.42	0.52
41:L4:322:GLN:OE1	36:5:598:A:H1'	255.80	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1078:U:O4	86:1:3967:OHX:N2	2.42	0.52
36:1:1915:A:H5''	55:M9:84:THR:HG22	1.91	0.52
1:6:1735:U:O4	86:6:2121:OHX:N5	2.43	0.52
57:N1:64:VAL:HG13	57:N1:72:VAL:HB	2.60	0.52
6:S4:195:ILE:HG22	6:S4:196:VAL:N	3.10	0.52
36:5:2795:U:O2	36:5:2800:G:O2'	2.18	0.52
1:2:1637:C:O2'	35:SM:94:HIS:NE2	2.34	0.52
41:L4:295:ILE:O	41:L4:299:ILE:HG12	2.24	0.52
67:O1:20:LEU:HD21	67:O1:31:ARG:HB3	1.90	0.52
21:C9:37:VAL:HG23	1:6:1503:A:O2'	386.15	0.52
7:S5:92:ARG:HH21	7:S5:169:ASN:HA	1.74	0.52
44:L7:26:VAL:HG23	44:L7:27:ALA:H	1.74	0.52
1:2:929:A:H1'	16:C4:124:ASP:H	1.75	0.52
40:L3:67:PHE:HA	40:L3:70:ARG:HG3	3.29	0.52
19:C7:104:ASN:OD1	19:C7:104:ASN:N	2.42	0.52
19:C7:105:GLN:NE2	19:C7:105:GLN:H	2.06	0.52
1:2:795:U:OP2	24:D2:82:LYS:NZ	2.38	0.52
50:M4:22:LEU:HD22	50:M4:94:TRP:CH2	2.69	0.52
23:D1:18:SER:O	23:D1:72:LEU:HD11	3.31	0.52
3:S1:138:PHE:CD2	3:S1:214:LYS:HB3	2.45	0.52
1:6:846:G:C2	1:6:847:A:C4	2.98	0.52
22:D0:102:ARG:HG3	22:D0:103:ILE:N	4.56	0.52
77:Q1:2:ARG:NH1	1:6:1773:C:OP2	309.11	0.52
63:N7:75:VAL:HG13	63:N7:80:LEU:HD11	4.47	0.52
55:M9:101:VAL:HG13	55:M9:104:ARG:NH1	2.24	0.52
1:6:485:A:C5	1:6:486:G:H1'	2.45	0.52
46:L9:67:ALA:HA	46:L9:70:THR:HG23	1.91	0.52
86:6:2058:OHX:N2	86:6:2145:OHX:N4	2.58	0.52
39:L2:224:THR:HG23	36:5:2202:C:O4'	218.99	0.52
18:C6:41:PRO:O	18:C6:42:GLU:HB3	2.10	0.52
53:M7:75:GLU:HG2	53:M7:76:PHE:CE2	2.45	0.52
48:M1:8:PRO:HD2	48:M1:10:ARG:HG3	2.62	0.52
36:1:391:A:C5	36:1:392:G:C8	2.97	0.52
47:M0:19:LYS:HG3	47:M0:26:VAL:HG13	2.08	0.52
73:O7:55:ARG:NH1	36:5:353:G:O6	112.33	0.52
1:6:1239:U:O4	86:6:2095:OHX:N1	2.42	0.52
36:5:213:A:N6	36:5:227:G:O2'	2.40	0.52
1:2:927:C:H2'	1:2:928:U:C6	2.44	0.52
49:M3:168:ARG:CZ	49:M3:172:LEU:HD21	3.48	0.52
11:S9:65:LYS:HA	11:S9:70:LEU:HD11	2.17	0.52
53:M7:97:ASN:OD1	53:M7:101:ASN:ND2	2.99	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1273:G:H4'	1:6:1274:C:H5''	1.92	0.52
68:O2:20:HIS:O	68:O2:21:HIS:HB2	2.08	0.52
36:1:2384:A:N1	52:M6:96:LYS:HE2	2.24	0.52
38:8:10:A:H2'	38:8:11:C:C6	2.45	0.52
36:1:3248:C:O5'	36:1:3248:C:H6	1.92	0.52
62:N6:12:ARG:HG2	36:5:215:G:OP1	87.74	0.52
36:1:3:U:C2	38:4:157:U:C2	2.98	0.52
42:L5:85:ARG:NH1	42:L5:254:LYS:H	3.58	0.52
3:S1:48:VAL:HG23	3:S1:64:ARG:NH2	4.98	0.52
11:S9:38:ASN:HB2	11:S9:41:GLU:HG3	1.91	0.52
1:2:558:U:O2'	1:2:559:C:O5'	2.24	0.52
67:O1:13:THR:HG22	67:O1:72:ARG:HD3	1.91	0.52
1:2:1199:G:N7	31:D9:40:ARG:HD3	2.24	0.52
86:6:2103:OHX:N5	86:6:2190:OHX:N6	2.58	0.52
21:C9:57:ARG:CG	21:C9:57:ARG:HH11	2.23	0.52
2:S0:74:VAL:HG22	2:S0:96:THR:HG23	2.05	0.52
36:1:1308:A:H8	36:1:1308:A:OP2	1.91	0.52
55:M9:23:TRP:CH2	55:M9:25:ASP:HB3	2.45	0.52
1:6:1696:G:O2'	1:6:1698:G:N7	2.39	0.52
56:N0:77:VAL:HG11	56:N0:106:LEU:HG	1.91	0.52
24:D2:11:LEU:HD12	24:D2:74:VAL:HB	1.92	0.52
1:2:925:G:N2	1:2:988:A:N3	2.44	0.52
1:2:1157:A:H2'	1:2:1160:A:N7	2.24	0.52
42:L5:281:GLU:O	42:L5:285:ARG:HG3	2.27	0.52
1:2:1346:A:H8	1:2:1370:U:O2	1.93	0.52
5:S3:27:ARG:HD2	12:C0:60:SER:HB2	1.94	0.52
1:2:416:A:H5''	1:2:417:A:N7	2.25	0.52
62:N6:116:LYS:HG2	62:N6:126:LEU:HD22	1.92	0.52
36:5:541:U:H2'	36:5:542:G:C8	2.44	0.52
36:5:1611:G:H2'	36:5:1612:A:H8	1.74	0.52
45:L8:136:LEU:HD21	45:L8:166:LEU:HD11	1.90	0.52
36:1:2704:A:OP2	86:1:3870:OHX:N4	2.42	0.52
48:M1:10:ARG:NH2	48:M1:151:SER:O	2.43	0.52
71:O5:14:LYS:HB3	71:O5:15:GLU:OE2	7.79	0.52
86:8:218:OHX:N6	86:8:226:OHX:N4	2.57	0.52
35:SM:25:ILE:HD13	37:3:39:C:H5'	1.92	0.52
1:2:1277:G:H2'	1:2:1278:G:O4'	2.10	0.52
36:1:3326:G:H2'	36:1:3327:G:H8	1.74	0.52
18:C6:7:VAL:HG21	18:C6:92:TYR:HA	3.37	0.52
5:S3:175:VAL:O	5:S3:181:VAL:HB	3.30	0.52
46:L9:170:LYS:HE3	36:5:2902:A:OP1	319.31	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:619:A:H8	36:5:619:A:OP2	1.91	0.52
36:1:2859:U:H4'	36:1:2860:U:OP1	2.08	0.52
1:6:1758:U:O2'	36:5:2262:A:N1	2.34	0.52
11:S9:129:ILE:HA	11:S9:134:ILE:CG1	3.71	0.52
51:M5:65:ARG:HG2	51:M5:127:TYR:CG	3.54	0.52
36:5:336:A:O2'	36:5:337:G:H5'	2.09	0.52
70:O4:58:ARG:NH1	36:5:1592:G:OP1	160.80	0.52
36:1:2261:G:O2'	36:1:2263:C:N4	2.42	0.52
36:5:1307:G:C2	36:5:1308:A:C2	2.98	0.52
41:L4:3:ARG:NH2	41:L4:259:ASP:OD2	9.07	0.52
10:S8:50:GLY:O	10:S8:52:ASN:ND2	2.42	0.52
57:N1:120:LYS:O	57:N1:122:GLN:N	2.72	0.52
1:6:836:U:H2'	1:6:837:G:H8	1.75	0.52
16:C4:42:VAL:HG23	16:C4:63:ALA:HB1	1.92	0.52
36:1:1875:G:N7	55:M9:20:ARG:NE	2.58	0.52
36:1:2560:C:O2	86:1:3927:OHX:N1	2.43	0.52
28:D6:45:VAL:O	28:D6:46:GLU:HB3	2.34	0.52
15:C3:115:LEU:HD22	15:C3:119:GLU:HG3	1.92	0.52
49:M3:18:TRP:C	49:M3:20:GLU:H	2.11	0.52
36:1:2355:G:H4'	53:M7:139:TYR:CZ	2.44	0.52
1:2:1151:A:H4'	1:2:1766:A:N7	2.24	0.52
53:M7:24:VAL:HG12	53:M7:86:LYS:HG2	1.92	0.52
79:Q3:8:VAL:HG23	79:Q3:9:GLY:H	2.35	0.52
36:1:2552:C:C5	66:O0:53:LYS:HE3	2.44	0.52
36:1:2589:G:H2'	36:1:2590:A:H8	1.74	0.52
1:2:577:G:C2	35:SM:99:LYS:HG2	2.44	0.52
36:5:528:U:H2'	36:5:529:A:C8	2.44	0.52
36:5:2846:U:O2	86:5:4047:OHX:N5	2.42	0.52
1:2:1153:G:N7	86:2:2166:OHX:N1	2.57	0.52
36:1:2890:A:N1	36:1:2913:C:N3	2.57	0.52
36:1:2199:G:C5	36:1:2200:U:C5	2.98	0.52
40:L3:107:ALA:HA	40:L3:199:PHE:CD2	2.60	0.52
36:1:2390:A:H2'	36:1:2391:G:O4'	2.09	0.52
53:M7:40:GLU:OE2	53:M7:43:LYS:HG3	2.09	0.52
28:D6:10:ARG:HD3	28:D6:34:LYS:CA	3.12	0.52
71:O5:89:ARG:HG2	71:O5:89:ARG:HH11	1.75	0.52
5:S3:91:VAL:HG21	5:S3:94:ARG:HB3	5.56	0.52
35:SM:121:LYS:O	35:SM:123:ALA:N	2.84	0.52
5:S3:94:ARG:HH21	35:SM:134:ASP:HB3	1.74	0.52
7:S5:29:ILE:O	7:S5:34:GLN:NE2	2.42	0.52
27:D5:50:ILE:O	27:D5:54:VAL:HG23	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D5:55:PRO:HG3	27:D5:88:ILE:HG23	6.23	0.52
7:S5:117:THR:HG21	7:S5:194:LEU:HD12	1.92	0.52
3:S1:126:THR:HG22	3:S1:136:ARG:HE	1.85	0.52
1:2:1460:A:OP2	35:SM:68:ARG:HD3	2.09	0.52
33:E1:121:CYS:HB3	33:E1:130:VAL:HG11	5.24	0.52
23:D1:50:TYR:HB2	23:D1:52:THR:HG22	1.92	0.52
50:M4:13:ARG:CZ	50:M4:67:PRO:HD3	2.40	0.52
66:O0:30:THR:HB	66:O0:91:SER:HB2	1.91	0.52
22:D0:30:LYS:HD3	22:D0:33:GLN:NE2	2.21	0.52
1:6:220:A:H3'	1:6:832:U:H1'	1.92	0.52
1:6:829:A:H61	1:6:843:U:H3	1.56	0.52
1:6:1700:C:HO2'	1:6:1701:A:P	2.31	0.52
24:D2:55:ASP:OD2	24:D2:57:ARG:HB2	2.78	0.52
36:1:2278:C:O2'	36:1:2279:A:H5''	2.08	0.52
6:S4:132:GLY:N	6:S4:136:VAL:O	2.95	0.52
15:C3:54:LEU:HB3	15:C3:60:VAL:HG11	2.64	0.52
11:S9:172:VAL:HG13	1:6:512:A:OP2	454.71	0.52
1:2:778:G:H22	26:D4:10:ARG:CZ	2.23	0.52
1:2:892:A:H2'	1:2:893:U:C6	2.44	0.52
11:S9:89:ASP:HB3	1:6:660:G:N2	444.14	0.52
57:N1:38:ASP:O	57:N1:64:VAL:HG23	2.40	0.52
36:5:2977:G:OP1	86:5:4147:OHX:N4	2.43	0.52
61:N5:113:LEU:HD22	36:5:1522:U:H3'	100.26	0.52
1:2:855:A:C2	1:2:857:U:H1'	2.45	0.52
36:5:1438:U:H2'	36:5:1439:U:C6	2.45	0.52
45:L8:95:ASN:O	45:L8:98:ARG:HG3	2.09	0.52
36:5:1838:G:H4'	36:5:1839:A:N3	2.24	0.52
50:M4:39:ILE:HB	50:M4:43:LYS:HB2	1.90	0.52
41:L4:316:ASN:OD1	41:L4:318:LEU:HB2	2.09	0.52
21:C9:112:GLY:O	21:C9:125:SER:OG	3.55	0.52
21:C9:102:ARG:NH2	1:6:1502:G:N7	405.03	0.52
16:C4:35:GLY:HA3	1:6:919:A:H5'	269.30	0.52
64:N8:46:ASP:O	64:N8:47:LYS:HB3	2.10	0.52
28:D6:5:ARG:HB3	1:6:1796:C:C6	341.10	0.52
34:SR:84:SER:OG	34:SR:85:TRP:N	2.79	0.52
1:2:543:C:H5'	1:2:543:C:O2	2.10	0.52
40:L3:77:THR:HG23	40:L3:327:CYS:HA	1.97	0.52
51:M5:96:ARG:HG2	51:M5:96:ARG:NH1	2.25	0.52
6:S4:163:ASP:O	6:S4:165:ALA:N	2.42	0.52
36:1:1240:A:H2	36:1:1248:C:H41	1.58	0.52
36:5:2820:A:C5	88:5:4246:3J6:H1	2.45	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1495:U:C5	36:1:1835:A:N1	2.72	0.52
50:M4:22:LEU:HB3	50:M4:64:VAL:HG13	2.22	0.52
20:C8:28:ILE:HD11	20:C8:56:LYS:HB2	7.21	0.52
40:L3:19:ARG:HB3	40:L3:232:ARG:NH1	2.37	0.52
25:D3:68:ILE:HB	25:D3:70:LYS:NZ	2.63	0.52
2:S0:29:VAL:HG22	2:S0:150:ASP:HB3	1.91	0.52
63:N7:88:ASP:O	63:N7:121:ARG:NH2	2.82	0.52
39:L2:240:ALA:O	36:5:2202:C:O2'	218.40	0.52
1:6:373:G:N7	86:6:2186:OHX:N3	2.58	0.52
38:4:104:A:C8	38:4:105:A:C8	2.97	0.52
43:L6:105:TYR:CE1	43:L6:134:ARG:HD2	2.44	0.52
36:5:1657:C:C5	36:5:1797:A:H5''	2.44	0.52
39:L2:200:ARG:HG3	36:5:2147:A:OP1	208.63	0.52
1:6:914:G:C8	1:6:914:G:H5'	2.45	0.52
36:5:2582:C:H2'	36:5:2583:C:H6	1.74	0.52
35:SM:129:ALA:O	35:SM:133:GLU:HG3	2.09	0.52
1:2:1474:G:H2'	1:2:1475:A:C8	2.44	0.52
34:SR:79:TYR:HE1	34:SR:100:TYR:HE1	2.53	0.52
36:1:2223:A:H5''	36:1:2223:A:H8	1.75	0.52
1:2:1765:A:H5'	1:2:1767:G:N7	2.25	0.52
51:M5:140:LYS:O	51:M5:144:ARG:HD2	2.10	0.52
65:N9:39:PHE:O	65:N9:43:HIS:N	2.78	0.52
1:2:598:U:H2'	1:2:599:A:H8	1.74	0.52
40:L3:4:ARG:HH11	40:L3:4:ARG:HG3	3.29	0.52
21:C9:42:GLY:HA2	21:C9:84:LYS:HB2	2.34	0.52
1:6:9:U:O4	86:6:2144:OHX:N3	2.42	0.52
9:S7:41:LEU:HB3	9:S7:70:PHE:HE1	1.75	0.52
44:L7:104:GLN:C	44:L7:106:LEU:H	2.12	0.52
10:S8:35:ASN:HB3	10:S8:37:LYS:HZ3	4.22	0.52
54:M8:176:ARG:HA	54:M8:182:LYS:O	2.29	0.52
37:7:23:A:C6	37:7:24:A:C6	2.98	0.52
5:S3:113:LEU:HD12	5:S3:117:ARG:HD2	4.34	0.52
36:1:2747:A:H2'	36:1:2748:A:C8	2.44	0.52
42:L5:152:ARG:O	42:L5:154:THR:N	2.42	0.52
47:M0:16:PRO:O	47:M0:18:PRO:HD3	2.10	0.52
36:1:855:U:H2'	36:1:856:G:O4'	2.09	0.52
34:SR:38:ARG:HA	34:SR:67:ILE:HG23	2.44	0.52
7:S5:189:THR:OG1	7:S5:192:GLU:OE1	4.18	0.52
6:S4:163:ASP:HB3	6:S4:167:GLY:O	3.27	0.52
16:C4:123:SER:HB2	1:6:885:G:N2	286.15	0.52
33:E1:119:ARG:O	33:E1:132:LEU:HG	2.24	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:M4:21:VAL:CG1	50:M4:65:LEU:HD23	2.40	0.52
9:S7:58:LEU:HG	9:S7:88:ARG:HD2	1.91	0.52
36:1:1565:G:H1'	36:1:1575:A:H2	1.75	0.52
18:C6:115:THR:HG23	18:C6:118:ILE:O	4.70	0.52
21:C9:33:TYR:O	21:C9:36:ILE:HG12	2.10	0.52
38:4:78:G:H2'	38:4:79:A:C8	2.45	0.52
46:L9:101:VAL:HG22	46:L9:114:VAL:HG22	2.09	0.52
1:6:87:C:O2'	1:6:169:A:N1	2.41	0.52
10:S8:42:ARG:O	10:S8:58:LEU:HD12	2.45	0.52
1:6:291:G:H2'	1:6:292:U:C6	2.45	0.52
36:1:2155:G:O2'	39:L2:227:ARG:NH2	2.43	0.52
1:6:162:A:H2'	1:6:163:G:C8	2.45	0.52
36:5:2101:C:H2'	36:5:2102:U:H6	1.74	0.52
57:N1:17:ARG:HD2	36:5:2701:U:OP1	265.81	0.52
10:S8:117:TYR:CD1	10:S8:150:ALA:HB2	2.45	0.52
36:5:394:G:N2	36:5:396:A:H3'	2.24	0.52
11:S9:72:GLU:OE1	1:6:761:G:H4'	397.95	0.52
40:L3:339:ARG:NH1	40:L3:342:LEU:HD11	2.24	0.52
38:4:41:A:H4'	73:O7:59:THR:HB	1.92	0.52
69:O3:13:HIS:HB3	69:O3:93:THR:O	2.10	0.52
65:N9:24:PRO:O	65:N9:25:LYS:HB2	2.10	0.52
36:5:600:G:H5'	36:5:601:U:OP2	2.10	0.52
6:S4:195:ILE:HA	6:S4:210:ILE:HD13	2.48	0.52
1:6:1314:U:OP1	86:6:2184:OHX:N1	2.43	0.52
37:3:40:C:O2'	48:M1:72:ARG:HG3	2.10	0.52
5:S3:13:ALA:HA	5:S3:16:VAL:HG22	4.74	0.52
2:S0:64:ILE:HG23	2:S0:73:VAL:HG11	1.92	0.52
17:C5:64:LYS:HG3	17:C5:73:PRO:HG3	1.92	0.52
20:C8:65:GLU:HG2	20:C8:68:ARG:HH22	3.06	0.52
1:2:524:U:H2'	1:2:525:A:H5''	1.90	0.52
1:2:43:A:H5''	1:2:437:A:N1	2.25	0.52
22:D0:46:GLU:HG2	22:D0:52:LYS:HZ3	1.73	0.52
36:1:3224:G:O6	86:1:3895:OHX:N4	2.43	0.52
13:C1:83:THR:HA	13:C1:111:VAL:HG12	1.92	0.52
36:5:501:A:H2'	36:5:502:U:C6	2.45	0.52
41:L4:330:TYR:CZ	44:L7:49:ALA:HA	2.71	0.52
86:5:4015:OHX:N3	86:5:4211:OHX:N4	2.57	0.52
40:L3:167:ARG:HH12	40:L3:168:LYS:NZ	2.08	0.52
22:D0:70:THR:HG22	22:D0:71:PRO:O	6.31	0.52
6:S4:104:ASP:HB3	6:S4:106:LYS:H	1.95	0.52
36:5:495:G:H2'	36:5:496:C:O4'	2.10	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:79:GLU:OE1	49:M3:101:ARG:NH2	2.41	0.52
63:N7:84:ARG:CZ	63:N7:85:TYR:HE1	3.68	0.52
20:C8:5:VAL:HG23	27:D5:42:LEU:HD23	1.91	0.52
1:6:836:U:H2'	1:6:837:G:C8	2.44	0.52
1:2:1433:G:C4	31:D9:41:GLN:HB3	2.45	0.52
1:2:144:U:O2'	1:2:145:A:H8	1.93	0.52
27:D5:38:HIS:ND1	27:D5:70:LYS:HG2	6.53	0.52
86:1:3972:OHX:N5	86:1:4156:OHX:N2	2.58	0.52
1:6:404:G:H2'	1:6:405:C:C6	2.44	0.52
36:5:658:G:OP1	86:8:224:OHX:N5	2.43	0.52
5:S3:26:THR:O	5:S3:30:ALA:HB2	3.01	0.52
37:7:55:A:H2'	37:7:56:A:O4'	2.10	0.52
1:2:622:A:H4'	1:2:623:A:OP1	2.10	0.52
12:C0:77:ARG:HA	12:C0:82:LEU:HD12	1.92	0.52
24:D2:50:PHE:HB3	24:D2:63:VAL:HG13	3.00	0.52
38:8:2:A:H3'	38:8:3:A:H8	1.75	0.52
43:L6:132:ALA:HA	43:L6:135:VAL:HB	1.91	0.52
36:5:612:U:H2'	36:5:613:G:C8	2.45	0.52
36:1:3233:C:H2'	36:1:3234:A:C8	2.45	0.52
78:Q2:99:GLN:HG2	78:Q2:102:GLN:HG2	3.58	0.52
36:5:23:A:OP1	86:5:3900:OHX:N4	2.43	0.52
49:M3:174:ARG:HG3	72:O6:9:ILE:HD11	6.21	0.52
45:L8:139:VAL:O	45:L8:143:ILE:HG13	2.30	0.52
59:N3:58:VAL:HG22	59:N3:76:ALA:HB3	2.56	0.52
8:S6:186:ARG:HD3	1:6:268:C:H41	342.37	0.52
36:1:2371:G:O6	86:1:3873:OHX:N3	2.42	0.52
1:6:1367:G:C2	1:6:1368:G:C8	2.97	0.52
37:3:86:U:O2	86:3:218:OHX:N5	2.43	0.52
36:5:1495:U:H4'	36:5:1514:G:H4'	1.91	0.52
36:1:1947:G:H1	36:1:2101:C:N4	2.07	0.52
36:5:2322:C:OP1	86:5:4154:OHX:N6	2.42	0.52
77:Q1:11:ARG:NH2	1:6:1127:G:OP1	293.55	0.52
47:M0:41:ALA:O	47:M0:139:ARG:NH2	2.42	0.52
1:2:1796:C:N1	28:D6:5:ARG:HG2	2.25	0.52
28:D6:75:VAL:O	28:D6:78:ALA:N	2.43	0.52
1:2:494:U:O2'	1:2:495:C:O5'	2.27	0.52
47:M0:4:ARG:NH2	47:M0:99:ILE:HG13	2.25	0.52
36:1:1940:G:H21	36:1:3362:A:H8	1.58	0.52
79:Q3:49:ARG:NH2	36:5:1793:C:OP2	216.71	0.52
36:5:622:A:H2'	36:5:623:U:O4'	2.09	0.52
39:L2:201:GLY:HA2	39:L2:204:MET:SD	2.95	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:77:GLU:C	3:S1:79:HIS:H	2.12	0.52
1:2:2:A:C2	4:S2:170:ILE:HG13	2.45	0.52
50:M4:32:LEU:HD11	50:M4:94:TRP:CG	2.45	0.52
86:2:2044:OHX:N1	86:2:2099:OHX:N5	2.58	0.52
18:C6:82:ARG:HH22	18:C6:114:ARG:HB3	1.75	0.52
1:2:1718:G:H2'	1:2:1719:A:O4'	2.09	0.52
36:1:2350:C:H4'	36:1:3308:C:O2'	2.10	0.52
53:M7:123:PRO:O	53:M7:143:PRO:HG2	2.09	0.52
35:SM:58:GLU:O	35:SM:62:ARG:HB2	2.42	0.52
25:D3:109:ARG:O	25:D3:112:LYS:HG3	2.79	0.52
26:D4:127:LYS:C	26:D4:127:LYS:HE3	2.30	0.52
1:2:1449:U:O4	86:2:2029:OHX:N1	2.43	0.52
36:1:776:U:C5	36:1:2719:U:O2	2.63	0.52
52:M6:115:LYS:HD3	36:5:3178:A:C2	260.38	0.52
42:L5:60:ILE:HB	42:L5:80:SER:HB3	2.38	0.52
37:3:11:A:N6	42:L5:13:SER:O	2.38	0.52
20:C8:140:THR:O	20:C8:143:ARG:NH1	2.43	0.52
8:S6:186:ARG:HD3	1:6:268:C:N4	343.00	0.52
36:1:2418:G:H4'	36:1:2419:A:OP2	2.10	0.52
69:O3:75:HIS:HB3	69:O3:80:VAL:HB	1.98	0.52
1:2:106:U:H2'	1:2:107:C:O4'	2.09	0.52
36:5:252:U:H4'	36:5:253:A:C5'	2.40	0.52
1:6:1102:G:H2'	1:6:1103:U:O4'	2.09	0.52
55:M9:5:ARG:NH1	36:5:1471:U:OP1	118.81	0.52
1:2:526:A:C6	1:2:527:A:C5	2.98	0.52
36:5:129:U:H2'	36:5:130:A:C8	2.45	0.52
36:5:566:G:N7	86:5:4125:OHX:N5	2.57	0.52
36:5:2186:U:H5'	36:5:2314:U:OP2	2.09	0.51
36:5:3163:A:C6	36:5:3288:G:O6	2.63	0.51
10:S8:8:ARG:CG	10:S8:8:ARG:HH21	2.23	0.51
38:4:141:C:OP1	51:M5:109:ARG:NH1	2.44	0.51
41:L4:181:VAL:HG11	41:L4:224:GLY:CA	3.07	0.51
5:S3:70:THR:HG23	5:S3:86:LEU:HD22	1.93	0.51
53:M7:67:ILE:HD12	53:M7:82:ARG:NH1	3.80	0.51
36:5:3343:G:N2	36:5:3362:A:H2	2.08	0.51
10:S8:192:TYR:O	10:S8:196:LEU:HB2	2.10	0.51
37:3:47:C:H2'	37:3:48:U:C6	2.46	0.51
18:C6:99:GLU:O	18:C6:102:LYS:N	2.66	0.51
36:1:2254:U:H2'	36:1:2261:G:H22	1.74	0.51
17:C5:22:LEU:O	17:C5:26:LEU:HD22	2.10	0.51
1:2:929:A:C8	16:C4:123:SER:HA	2.45	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1296:C:OP1	56:N0:84:ARG:NH2	2.37	0.51
41:L4:120:TYR:O	41:L4:124:SER:HB2	2.11	0.51
39:L2:57:PRO:HD2	39:L2:170:ALA:HB3	2.91	0.51
16:C4:54:GLU:OE1	1:6:901:G:N2	281.81	0.51
20:C8:28:ILE:HB	20:C8:58:ALA:HA	1.92	0.51
1:2:259:U:OP1	10:S8:75:LYS:NZ	2.43	0.51
1:2:52:U:OP2	86:2:2072:OHX:N5	2.43	0.51
43:L6:129:GLU:HG2	43:L6:130:ILE:H	3.57	0.51
36:1:1404:G:OP2	68:O2:11:LYS:NZ	2.43	0.51
1:2:413:U:H2'	1:2:414:C:C6	2.45	0.51
6:S4:26:CYS:HB3	6:S4:27:TYR:CD2	3.39	0.51
1:2:1616:G:O2'	30:D8:18:ARG:HD2	2.10	0.51
64:N8:74:ASN:OD1	64:N8:113:LEU:HB2	2.12	0.51
1:6:53:G:H2'	1:6:54:C:O4'	2.09	0.51
41:L4:192:GLY:O	41:L4:195:ARG:N	2.58	0.51
52:M6:5:PRO:HD2	36:5:3178:A:H5'	258.27	0.51
42:L5:211:LEU:O	42:L5:215:ASP:N	3.47	0.51
36:5:1471:U:H2'	36:5:1472:U:C6	2.44	0.51
72:O6:33:ALA:O	72:O6:34:SER:HB3	2.09	0.51
34:SR:89:LEU:HB2	34:SR:103:PHE:HB2	2.12	0.51
36:5:1155:C:H2'	36:5:1156:C:H6	1.75	0.51
46:L9:10:ILE:HD13	46:L9:75:VAL:HG11	2.52	0.51
36:5:1204:A:H2'	36:5:1205:A:H5'	1.92	0.51
36:5:3237:U:H2'	36:5:3238:G:O4'	2.10	0.51
1:6:1625:C:H2'	1:6:1626:U:C6	2.45	0.51
2:S0:134:LYS:O	2:S0:137:SER:OG	2.21	0.51
54:M8:148:GLU:OE1	54:M8:151:ARG:NH2	2.32	0.51
36:1:1813:A:OP1	36:1:1817:G:O2'	2.24	0.51
47:M0:142:ASP:CG	47:M0:178:ARG:HH22	2.13	0.51
1:6:278:U:H2'	1:6:278:U:OP2	2.10	0.51
47:M0:56:GLU:HG3	47:M0:162:GLN:H	1.75	0.51
47:M0:50:VAL:HG13	47:M0:167:LEU:HD13	6.08	0.51
67:O1:12:TYR:O	67:O1:72:ARG:HD2	2.10	0.51
1:2:1479:A:OP1	21:C9:57:ARG:NH1	2.44	0.51
10:S8:188:GLU:HG3	13:C1:13:PHE:CD2	2.44	0.51
36:5:990:U:O4	86:5:4179:OHX:N6	2.42	0.51
40:L3:10:ARG:HG3	40:L3:11:HIS:O	2.11	0.51
51:M5:183:THR:OG1	51:M5:184:LYS:N	3.81	0.51
1:6:196:G:N3	1:6:197:A:H1'	2.25	0.51
10:S8:105:ASP:O	10:S8:107:THR:N	2.39	0.51
59:N3:2:SER:N	59:N3:56:ASP:HA	3.35	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2180:G:P	39:L2:174:ARG:HH22	2.32	0.51
39:L2:193:ARG:O	39:L2:195:SER:N	2.43	0.51
27:D5:47:TYR:CZ	27:D5:51:LEU:HD11	2.90	0.51
28:D6:68:TYR:N	28:D6:68:TYR:CD2	2.78	0.51
63:N7:53:VAL:HG21	63:N7:62:VAL:HG13	1.93	0.51
6:S4:141:THR:O	6:S4:143:ASP:N	2.44	0.51
36:1:1478:C:H2'	36:1:1479:U:C6	2.45	0.51
49:M3:128:ARG:NH2	71:O5:109:ILE:O	2.44	0.51
15:C3:54:LEU:HD13	15:C3:60:VAL:HG11	3.31	0.51
8:S6:142:ARG:C	8:S6:144:PHE:H	3.21	0.51
1:2:647:G:N2	1:2:687:G:H1	2.09	0.51
12:C0:56:LYS:HD2	12:C0:67:THR:HB	1.92	0.51
42:L5:122:VAL:HG22	42:L5:125:VAL:H	1.75	0.51
42:L5:122:VAL:HG23	42:L5:123:GLU:H	3.13	0.51
5:S3:32:GLU:O	5:S3:54:ARG:HB2	3.23	0.51
64:N8:26:ARG:HB3	36:5:937:G:OP2	170.43	0.51
36:1:2662:G:H2'	36:1:2663:G:H8	1.74	0.51
86:8:218:OHX:N2	86:8:226:OHX:N4	2.57	0.51
51:M5:76:PRO:HA	36:5:2166:A:OP1	158.17	0.51
1:6:913:G:H3'	1:6:914:G:H5''	1.93	0.51
1:2:717:C:H2'	1:2:718:U:H5''	1.92	0.51
36:5:2537:U:O2	36:5:2543:U:N3	2.43	0.51
1:2:522:U:H5''	26:D4:37:LYS:HG3	1.92	0.51
73:O7:28:HIS:CG	73:O7:31:LYS:HG3	3.52	0.51
36:5:209:A:H4'	36:5:211:A:C8	2.46	0.51
18:C6:7:VAL:HG12	18:C6:8:GLN:H	4.22	0.51
50:M4:85:TRP:CD1	50:M4:90:VAL:HG13	2.45	0.51
36:5:3017:A:H2'	36:5:3018:C:C6	2.45	0.51
1:6:221:A:C2'	1:6:222:A:H5'	2.41	0.51
36:1:1584:U:H2'	36:1:1585:C:H6	1.76	0.51
7:S5:137:ILE:HD13	7:S5:175:LEU:HD12	1.92	0.51
36:1:973:A:OP1	54:M8:12:ARG:NH1	2.44	0.51
36:1:1342:C:H2'	36:1:1343:A:O4'	2.10	0.51
78:Q2:12:CYS:SG	78:Q2:74:CYS:SG	3.20	0.51
47:M0:80:SER:CB	47:M0:147:VAL:HG11	2.39	0.51
47:M0:77:THR:HG22	47:M0:82:ARG:HA	1.91	0.51
5:S3:105:MET:O	5:S3:109:LEU:HB2	3.22	0.51
67:O1:44:MET:O	67:O1:46:THR:HG22	3.79	0.51
16:C4:105:LEU:HA	16:C4:108:SER:HB3	1.93	0.51
40:L3:152:LYS:CG	40:L3:192:VAL:HG11	2.37	0.51
1:2:1344:A:H4'	1:2:1345:A:OP1	2.09	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:C9:99:SER:O	21:C9:103:LYS:HB2	2.91	0.51
41:L4:4:PRO:O	41:L4:5:GLN:HB2	2.36	0.51
56:N0:155:ARG:HG2	56:N0:155:ARG:HH21	2.63	0.51
13:C1:122:ILE:H	13:C1:144:ALA:CB	2.22	0.51
2:S0:110:TYR:HA	2:S0:115:PHE:CE1	2.81	0.51
86:1:3913:OHX:N6	51:M5:32:GLN:O	2.43	0.51
1:2:1228:G:H3'	1:2:1229:G:C8	2.45	0.51
8:S6:63:MET:HE1	8:S6:106:LEU:HD13	2.01	0.51
1:2:355:G:H2'	1:2:356:G:H8	1.76	0.51
1:2:1546:G:H2'	1:2:1547:A:H8	1.75	0.51
3:S1:39:GLU:HG3	3:S1:40:ASN:N	2.26	0.51
42:L5:61:ILE:HG23	42:L5:79:TYR:CE1	2.60	0.51
38:4:55:U:O2	86:4:228:OHX:N6	2.43	0.51
36:5:1804:A:H2'	36:5:1805:C:H6	1.75	0.51
1:2:1183:A:C5	1:2:1184:A:C6	2.99	0.51
36:1:1438:U:H5''	41:L4:74:ILE:HD11	1.92	0.51
40:L3:250:ALA:HB3	36:5:2880:U:H1'	224.03	0.51
36:1:1668:G:C6	36:1:1669:C:C4	2.98	0.51
36:5:2641:U:OP1	86:5:4148:OHX:N5	2.43	0.51
50:M4:84:LYS:O	50:M4:87:ALA:HB3	2.10	0.51
36:5:1605:A:O2'	36:5:1607:U:OP2	2.28	0.51
20:C8:18:LEU:O	20:C8:19:ASN:HB2	2.40	0.51
1:6:892:A:C6	1:6:893:U:C4	2.99	0.51
35:SM:39:PRO:HB2	35:SM:40:PRO:HD2	2.25	0.51
67:O1:25:PHE:HB3	67:O1:65:LYS:HG2	4.32	0.51
35:SM:88:ARG:HG2	35:SM:91:THR:CG2	2.41	0.51
36:1:2954:U:O5'	36:1:2954:U:H6	1.93	0.51
1:6:1361:U:O2	1:6:1361:U:H2'	2.10	0.51
46:L9:89:LYS:HD3	46:L9:183:HIS:HB3	1.93	0.51
36:1:1194:G:OP1	86:1:3964:OHX:N1	2.43	0.51
70:O4:74:ARG:HG2	70:O4:75:ALA:N	2.68	0.51
44:L7:139:PRO:HA	44:L7:237:ASN:ND2	2.17	0.51
21:C9:68:ARG:NH1	1:6:1521:G:O6	414.02	0.51
42:L5:55:PHE:CZ	42:L5:158:ARG:HG3	2.46	0.51
36:5:856:G:H4'	36:5:1723:A:O2'	2.11	0.51
27:D5:55:PRO:HB2	27:D5:103:ARG:NH1	2.25	0.51
17:C5:22:LEU:HD12	17:C5:26:LEU:HD21	1.93	0.51
67:O1:51:LEU:HD23	67:O1:93:VAL:HB	2.15	0.51
8:S6:179:VAL:HG21	1:6:140:A:H1'	327.29	0.51
36:1:1565:G:N2	36:1:1574:C:C2	2.79	0.51
44:L7:132:PRO:HA	44:L7:229:PHE:CD2	2.57	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:SR:237:GLN:HB2	34:SR:238:ASP:OD1	2.10	0.51
36:1:1097:G:H8	57:N1:128:LEU:HD13	1.75	0.51
36:1:1213:G:OP1	56:N0:137:ARG:HD3	2.10	0.51
20:C8:33:THR:HA	20:C8:38:VAL:HG23	1.90	0.51
42:L5:279:LYS:HG2	42:L5:282:ARG:NH1	2.26	0.51
1:6:138:A:N6	1:6:266:A:H61	2.09	0.51
36:1:440:A:OP2	36:1:440:A:H8	1.93	0.51
42:L5:122:VAL:CG2	42:L5:125:VAL:H	2.23	0.51
55:M9:11:ALA:O	55:M9:15:VAL:HG23	2.10	0.51
1:2:603:U:H2'	1:2:604:A:C8	2.45	0.51
38:8:68:G:OP1	86:8:218:OHX:N3	2.44	0.51
26:D4:60:PHE:HA	26:D4:70:VAL:O	2.10	0.51
46:L9:86:TYR:CG	46:L9:151:VAL:HG13	2.52	0.51
1:6:961:U:H2'	1:6:962:C:C6	2.45	0.51
79:Q3:2:ALA:HB2	36:5:853:G:N7	249.82	0.51
36:1:407:A:C2	38:4:17:A:H1'	2.45	0.51
34:SR:176:LYS:HB3	34:SR:195:HIS:O	2.10	0.51
1:2:1233:G:O2'	33:E1:145:HIS:HB2	2.11	0.51
1:2:1311:U:O4	86:2:2169:OHX:N3	2.43	0.51
36:1:2567:C:C2'	36:1:2568:C:H5'	2.41	0.51
1:6:554:C:H1'	1:6:555:A:N7	2.25	0.51
19:C7:71:PHE:CD1	19:C7:73:LEU:HB3	2.46	0.51
58:N2:50:LEU:HB3	58:N2:54:VAL:HG23	1.99	0.51
79:Q3:13:LYS:HD2	79:Q3:14:TYR:CZ	3.13	0.51
7:S5:112:ARG:HD3	27:D5:95:HIS:CE1	2.45	0.51
70:O4:59:PRO:HD3	36:5:1654:A:O2'	167.32	0.51
3:S1:113:MET:HE3	3:S1:142:PHE:HE2	5.49	0.51
1:2:1316:G:H2'	1:2:1317:C:C6	2.46	0.51
35:SM:76:VAL:HG22	1:6:1460:A:C8	325.41	0.51
40:L3:60:LEU:HD11	40:L3:62:ARG:HG3	1.92	0.51
36:1:1306:G:O2'	36:1:1307:G:H5'	2.11	0.51
19:C7:108:ASP:HA	19:C7:111:LYS:HB2	3.68	0.51
1:2:1564:U:H2'	1:2:1565:C:H6	1.76	0.51
26:D4:43:LYS:O	26:D4:47:VAL:HG23	2.10	0.51
44:L7:134:VAL:O	44:L7:229:PHE:HA	2.56	0.51
36:1:2667:A:N6	36:1:2687:G:H1'	2.25	0.51
1:2:986:G:H2'	1:2:987:G:O4'	2.11	0.51
15:C3:85:PRO:HG2	15:C3:129:TYR:CE2	2.60	0.51
1:2:1085:G:O2'	1:2:1087:A:N7	2.42	0.51
46:L9:88:TYR:CD2	46:L9:184:LYS:HG2	2.45	0.51
36:1:3384:U:H2'	36:1:3385:U:C6	2.44	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:330:G:C6	1:6:331:A:C5	2.99	0.51
40:L3:92:TYR:CE1	40:L3:159:ARG:HD2	2.45	0.51
79:Q3:75:ALA:O	79:Q3:79:VAL:HG23	2.11	0.51
26:D4:94:TYR:HD2	26:D4:96:LEU:HD11	1.75	0.51
45:L8:143:ILE:HG23	45:L8:175:VAL:HG21	2.48	0.51
36:1:1585:C:C2'	36:1:1586:G:H5'	2.41	0.51
36:1:3358:U:H2'	36:1:3359:A:O4'	2.10	0.51
9:S7:103:SER:OG	9:S7:104:ARG:N	2.82	0.51
15:C3:70:LYS:HB2	15:C3:73:ARG:HG3	1.93	0.51
1:6:1427:A:O2'	1:6:1428:G:OP1	2.27	0.51
35:SM:46:LYS:HA	36:5:1018:G:H4'	324.35	0.51
36:1:3393:U:H2'	36:1:3394:U:H6	1.76	0.51
36:1:422:A:C2	36:1:2363:A:H4'	2.46	0.51
36:5:281:G:C2	36:5:282:G:C4	2.99	0.51
34:SR:242:SER:H	34:SR:255:ALA:HB3	1.75	0.51
36:1:1536:G:H2'	36:1:1537:A:O4'	2.10	0.51
1:2:246:G:C4	13:C1:40:LEU:HD13	2.45	0.51
42:L5:188:GLU:HG3	42:L5:188:GLU:O	2.11	0.51
47:M0:77:THR:HG23	47:M0:85:PHE:CZ	2.87	0.51
36:1:3165:A:H2'	36:1:3166:C:C6	2.46	0.51
11:S9:83:VAL:HG23	11:S9:85:VAL:H	2.71	0.51
14:C2:43:ARG:HA	14:C2:121:VAL:HG12	2.87	0.51
67:O1:42:LEU:HD23	67:O1:43:HIS:CD2	2.45	0.51
44:L7:150:LYS:HD3	44:L7:244:ASN:HD21	1.75	0.51
1:6:189:C:C2'	1:6:190:C:H5'	2.41	0.51
3:S1:184:LEU:HA	3:S1:187:LYS:HB2	1.93	0.51
67:O1:80:ASN:OD1	67:O1:81:GLU:N	2.43	0.51
12:C0:54:TYR:H	12:C0:71:GLU:HG3	1.76	0.51
50:M4:20:VAL:O	50:M4:66:THR:HG23	2.34	0.51
1:6:282:C:H2'	1:6:283:U:O4'	2.10	0.51
20:C8:6:GLN:HE22	27:D5:47:TYR:HB2	1.75	0.51
20:C8:26:ILE:HD11	20:C8:31:ALA:HA	4.99	0.51
43:L6:55:LEU:HD21	43:L6:145:LEU:HD11	2.77	0.51
86:2:2044:OHX:N4	86:2:2099:OHX:N6	2.58	0.51
49:M3:124:ILE:HD11	49:M3:126:PHE:CE1	2.46	0.51
36:1:1246:G:H8	36:1:1246:G:OP1	1.93	0.51
1:6:1648:A:H2'	1:6:1649:G:C8	2.45	0.51
15:C3:20:ARG:HG3	24:D2:56:HIS:NE2	4.02	0.51
18:C6:31:VAL:O	18:C6:33:GLY:N	2.68	0.51
8:S6:30:LYS:HG3	8:S6:34:GLN:OE1	2.11	0.51
46:L9:126:VAL:HG21	46:L9:161:LEU:HA	1.93	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2971:A:H3'	36:5:2971:A:N3	2.25	0.51
14:C2:69:ALA:HA	14:C2:71:ILE:HG23	2.94	0.51
36:5:381:U:C2	36:5:382:U:C5	2.99	0.51
26:D4:70:VAL:HG12	26:D4:71:GLY:H	2.84	0.51
1:6:1314:U:OP2	86:6:2184:OHX:N4	2.43	0.51
36:1:217:U:O2'	62:N6:103:LYS:HE2	2.11	0.51
69:O3:76:GLY:HA2	36:5:1327:C:O2'	257.51	0.51
13:C1:124:THR:HB	13:C1:141:LYS:HB3	2.40	0.51
44:L7:96:PRO:HB2	44:L7:99:PRO:HD2	2.25	0.51
10:S8:64:ASN:HD21	10:S8:73:SER:HB3	2.49	0.51
36:1:1509:A:O2'	36:1:1510:G:H5'	2.11	0.51
36:5:286:U:H2'	36:5:287:G:C8	2.45	0.51
1:2:479:C:O2	1:2:510:G:N2	2.43	0.51
13:C1:102:LYS:HE2	1:6:632:U:OP1	327.86	0.51
36:5:2274:U:O2'	36:5:2275:A:H5'	2.11	0.51
35:SM:116:GLU:O	35:SM:119:ALA:N	2.40	0.51
61:N5:31:THR:HB	61:N5:33:ARG:NH1	3.18	0.51
4:S2:187:LEU:HG	4:S2:187:LEU:O	2.10	0.51
36:1:3243:A:H4'	40:L3:95:THR:HG22	1.93	0.51
36:5:1135:A:C2	36:5:1136:A:C8	2.99	0.51
36:5:2310:U:OP1	86:5:4193:OHX:N2	2.43	0.51
1:2:933:A:P	3:S1:116:LYS:HZ3	2.33	0.51
16:C4:127:ARG:HG2	16:C4:128:LYS:O	2.09	0.51
36:1:563:U:OP1	56:N0:71:LYS:NZ	2.33	0.51
18:C6:49:TYR:HB3	18:C6:53:LEU:HD21	1.92	0.51
36:1:835:G:O2'	36:1:857:G:N2	2.32	0.51
3:S1:121:ILE:HG12	3:S1:161:ILE:HG23	1.91	0.51
1:2:739:G:C6	1:2:740:A:C6	2.99	0.51
21:C9:30:VAL:O	21:C9:32:GLY:N	2.44	0.51
2:S0:54:TRP:O	2:S0:58:VAL:HG23	2.73	0.51
77:Q1:2:ARG:HG3	77:Q1:3:ALA:N	2.25	0.51
36:1:2314:U:HO2'	36:1:2315:G:P	2.34	0.51
1:6:1202:A:H2'	1:6:1203:A:H5''	1.91	0.51
52:M6:10:ASP:HB2	52:M6:117:ARG:HG3	1.92	0.51
30:D8:58:GLU:HB3	30:D8:61:ARG:HG3	7.57	0.51
4:S2:53:ILE:HB	4:S2:57:PHE:CE2	2.45	0.51
46:L9:4:ILE:HD11	56:N0:150:PHE:CD2	2.46	0.51
36:1:239:G:O6	86:1:4034:OHX:N3	2.43	0.51
1:2:851:U:H2'	1:2:852:C:H6	1.76	0.51
20:C8:123:ARG:NH2	1:6:1547:A:OP2	362.08	0.51
36:1:2510:U:O2'	36:1:2511:A:H8	1.93	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:67:ALA:HA	46:L9:70:THR:CG2	2.40	0.51
67:O1:8:VAL:HG12	67:O1:9:THR:N	4.24	0.51
24:D2:37:PHE:CD2	24:D2:103:ILE:HD11	3.37	0.51
4:S2:139:ILE:HD11	4:S2:218:ILE:HD13	1.92	0.51
1:6:1533:C:H4'	1:6:1539:G:N1	2.25	0.51
1:2:912:U:H4'	1:2:913:G:H2'	1.91	0.51
1:6:624:G:H2'	1:6:625:C:H6	1.73	0.51
86:8:218:OHX:N5	86:8:226:OHX:N1	2.59	0.51
62:N6:37:LYS:HA	62:N6:40:ARG:HB3	2.90	0.51
36:1:2623:G:H2'	36:1:2624:G:H8	1.74	0.51
36:1:2590:A:C4	36:1:2591:A:C8	2.99	0.51
36:1:308:A:H5'	36:1:2223:A:O2'	2.11	0.51
2:S0:60:ALA:O	2:S0:64:ILE:HG13	2.47	0.51
36:5:1800:A:H2'	36:5:1801:U:O4'	2.10	0.51
74:O8:11:PHE:HD1	74:O8:12:LEU:HD22	3.60	0.51
86:5:3966:OHX:N1	86:5:4236:OHX:N5	2.59	0.51
1:6:1079:U:H2'	1:6:1080:U:O4'	2.10	0.51
43:L6:40:LEU:HD13	43:L6:84:VAL:HG11	1.96	0.51
36:5:193:C:H2'	36:5:194:U:C6	2.46	0.51
36:5:48:A:O4'	36:5:50:U:C6	2.63	0.51
73:O7:25:ARG:HE	75:O9:51:ILE:HG13	1.74	0.51
51:M5:58:GLY:HA3	51:M5:142:ILE:HD13	1.91	0.51
50:M4:40:ASP:HA	56:N0:143:PHE:CE1	3.32	0.51
10:S8:8:ARG:NH2	10:S8:28:GLU:OE1	9.58	0.51
28:D6:87:ARG:HD2	1:6:1797:A:C6	344.53	0.51
11:S9:134:ILE:HD13	11:S9:141:VAL:O	4.87	0.51
5:S3:69:LEU:O	5:S3:72:LEU:HB2	2.11	0.51
39:L2:118:GLU:HG2	39:L2:156:LYS:HZ3	1.75	0.51
22:D0:88:LYS:HG2	22:D0:89:ARG:H	1.75	0.51
42:L5:152:ARG:O	42:L5:154:THR:HG23	2.11	0.51
51:M5:30:TYR:OH	51:M5:43:THR:HG21	2.11	0.51
36:1:2655:U:H4'	36:1:2656:A:O4'	2.10	0.51
22:D0:105:GLN:HG3	22:D0:106:ILE:N	2.25	0.51
18:C6:50:GLU:OE1	18:C6:112:TYR:OH	2.17	0.51
36:1:2294:U:O2	36:1:2296:A:H8	1.94	0.51
8:S6:162:VAL:O	8:S6:169:TYR:N	2.25	0.51
33:E1:135:HIS:ND1	33:E1:138:ARG:HD2	2.25	0.51
1:6:1172:G:C5	1:6:1173:C:C4	2.98	0.51
20:C8:120:ARG:O	35:SM:57:ASN:ND2	2.80	0.51
58:N2:89:LEU:HD13	58:N2:93:ILE:HD13	3.82	0.51
36:5:1560:G:HO2'	36:5:1561:G:P	2.34	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:89:TYR:O	49:M3:92:THR:N	2.44	0.51
36:5:86:G:O2'	36:5:98:G:O6	2.22	0.51
1:2:159:U:H1'	8:S6:87:ARG:HH12	1.75	0.51
65:N9:21:ILE:HG22	65:N9:22:LYS:O	4.21	0.51
55:M9:175:GLN:O	55:M9:179:GLU:N	2.39	0.51
5:S3:32:GLU:HG2	5:S3:57:ASP:HB2	2.78	0.51
46:L9:161:LEU:O	46:L9:164:ILE:HG22	2.09	0.51
49:M3:64:LYS:HE3	64:N8:69:TRP:CD1	2.46	0.51
47:M0:207:GLU:O	47:M0:209:ASN:N	2.43	0.51
46:L9:94:TYR:CD2	46:L9:98:PRO:HA	2.79	0.51
4:S2:157:LYS:HA	4:S2:169:LEU:O	2.10	0.51
5:S3:142:LEU:HD22	5:S3:142:LEU:H	5.15	0.51
36:1:1118:C:O2	36:1:1154:A:H2	1.94	0.51
1:6:1050:G:N2	1:6:1068:C:O2	2.40	0.51
42:L5:155:THR:HA	42:L5:179:ARG:HD3	1.93	0.51
1:2:948:G:H2'	1:2:949:C:O4'	2.11	0.51
37:3:8:G:O6	42:L5:21:ARG:NH2	2.27	0.51
36:5:3225:C:H2'	36:5:3226:A:O4'	2.10	0.51
45:L8:134:TYR:CG	45:L8:190:VAL:HG11	3.79	0.51
1:2:495:C:H3'	1:2:496:G:O4'	2.11	0.51
1:2:542:A:HO2'	1:2:542:A:H8	1.57	0.51
36:1:1447:G:H3'	53:M7:67:ILE:HD11	1.93	0.51
63:N7:46:ILE:HD11	63:N7:49:TYR:HA	1.93	0.51
3:S1:178:GLY:HA3	3:S1:187:LYS:HZ1	1.76	0.51
17:C5:68:PRO:O	86:C5:201:OHX:N5	7.71	0.51
51:M5:137:PRO:HD2	51:M5:138:GLN:NE2	2.25	0.51
1:6:1081:A:H1'	1:6:1082:C:H5	1.76	0.51
33:E1:108:VAL:HG12	33:E1:114:VAL:HG13	1.91	0.51
44:L7:158:LYS:CD	44:L7:159:GLN:H	3.13	0.51
40:L3:188:ILE:HD12	40:L3:189:SER:H	1.76	0.51
7:S5:222:LYS:HG3	7:S5:225:ARG:CZ	2.41	0.51
7:S5:200:ASN:O	7:S5:205:SER:HB3	3.59	0.51
40:L3:147:GLU:OE2	40:L3:150:ARG:NH1	2.92	0.51
44:L7:214:TRP:CE2	44:L7:219:LYS:HD2	2.46	0.51
2:S0:179:ARG:HH11	2:S0:183:ARG:NH1	2.09	0.51
32:E0:2:ALA:HA	1:6:1647:U:O2	330.93	0.51
36:5:1192:C:N4	36:5:1301:A:O3'	2.44	0.51
36:1:1765:U:H5''	55:M9:43:LYS:HE2	1.91	0.51
9:S7:42:GLN:HG2	9:S7:43:PHE:N	2.26	0.51
36:1:3095:U:H2'	36:1:3096:C:C6	2.46	0.51
11:S9:28:LEU:HB3	32:E0:44:PHE:HZ	4.04	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:O4:44:CYS:N	70:O4:49:SER:O	2.64	0.51
1:6:1218:G:H22	1:6:1443:U:H2'	1.76	0.51
5:S3:137:VAL:HG22	5:S3:151:LYS:HG3	3.84	0.51
59:N3:104:ASN:ND2	59:N3:108:GLU:HB2	4.75	0.51
1:6:454:U:H5''	1:6:455:C:H5	1.76	0.51
20:C8:65:GLU:HG2	20:C8:68:ARG:NH2	2.78	0.51
1:6:1594:G:OP2	1:6:1596:C:N4	2.44	0.51
38:4:23:U:C4'	62:N6:17:LYS:HG2	2.41	0.51
36:1:3082:C:H2'	36:1:3083:G:C8	2.46	0.51
23:D1:71:ARG:O	23:D1:75:ASN:ND2	2.43	0.51
40:L3:35:ASP:OD2	40:L3:191:LYS:NZ	2.79	0.51
36:5:739:G:O6	86:5:3959:OHX:N6	2.44	0.51
44:L7:170:GLU:HG3	44:L7:179:LEU:HB3	1.93	0.51
55:M9:143:ILE:O	55:M9:146:LYS:N	3.58	0.51
6:S4:96:ASN:N	6:S4:96:ASN:OD1	2.43	0.51
36:1:2514:U:OP1	36:1:2514:U:H6	1.94	0.51
1:2:23:G:C6	1:2:24:U:N3	2.79	0.51
43:L6:69:PHE:N	43:L6:142:ASP:OD2	2.43	0.51
56:N0:82:ASP:HA	56:N0:87:THR:HA	1.93	0.51
1:2:121:U:H1'	6:S4:33:ALA:HB3	1.93	0.51
86:5:3971:OHX:N2	86:5:4193:OHX:N1	2.58	0.51
42:L5:268:GLU:O	42:L5:270:LYS:N	3.55	0.51
49:M3:157:ARG:HG2	49:M3:158:ALA:N	2.25	0.51
53:M7:67:ILE:HD11	36:5:1447:G:H3'	164.96	0.51
44:L7:207:LEU:O	36:5:1334:U:H5'	240.39	0.51
27:D5:83:LEU:HB3	27:D5:89:ILE:HD13	2.80	0.51
1:2:76:A:H5'	1:2:77:U:OP2	2.11	0.51
12:C0:55:VAL:HA	12:C0:69:THR:HG23	1.92	0.51
41:L4:104:LYS:HD2	41:L4:106:TRP:CZ2	2.46	0.51
63:N7:9:LYS:HD2	63:N7:83:THR:O	2.10	0.51
56:N0:84:ARG:HG3	36:5:1295:G:OP1	294.24	0.51
38:4:85:G:H3'	38:4:85:G:C8	2.46	0.51
1:2:332:U:OP2	10:S8:54:LYS:NZ	2.43	0.51
72:O6:50:LEU:HB3	72:O6:55:ARG:HG2	2.93	0.51
36:1:785:G:N1	54:M8:89:ASP:O	2.39	0.51
56:N0:98:SER:CB	56:N0:100:VAL:HG12	2.41	0.51
40:L3:146:ARG:HE	40:L3:146:ARG:HA	1.76	0.51
74:O8:59:ALA:O	74:O8:62:ALA:HB3	2.10	0.51
1:2:124:A:O2'	6:S4:148:ARG:HD3	2.11	0.51
38:4:155:A:H5'	45:L8:185:ARG:NH2	2.25	0.51
1:6:715:U:H2'	1:6:716:C:C6	2.46	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2366:C:H2'	36:5:2367:A:C8	2.46	0.51
36:1:2395:G:H5''	40:L3:255:TRP:CD1	2.45	0.51
1:6:1535:U:HO2'	1:6:1536:G:P	2.34	0.51
49:M3:104:ARG:O	72:O6:20:MET:HB2	2.11	0.51
36:1:2989:U:H2'	36:1:2990:G:O4'	2.10	0.51
1:2:1653:C:N4	1:2:1654:G:C6	2.79	0.51
36:1:2148:U:H2'	36:1:2149:A:C4	2.46	0.51
16:C4:107:ARG:NH1	28:D6:52:ASP:OD2	4.91	0.51
78:Q2:89:LYS:HB2	36:5:2653:C:OP1	237.02	0.51
36:1:1355:A:H4'	36:1:1356:U:O5'	2.11	0.51
1:6:919:A:H2'	1:6:920:U:C6	2.46	0.50
1:2:400:A:H5''	10:S8:25:ARG:HA	1.94	0.50
1:2:788:A:H3'	6:S4:108:ARG:NH2	2.26	0.50
50:M4:45:LEU:HD12	50:M4:56:GLN:O	2.10	0.50
42:L5:146:LEU:HG	42:L5:163:LEU:HG	1.91	0.50
1:2:1202:A:N6	1:2:1457:C:H5'	2.27	0.50
2:S0:69:ASN:HB3	2:S0:71:GLU:CD	2.31	0.50
1:2:74:U:H1'	1:2:75:U:C5'	2.39	0.50
1:2:1291:G:H22	1:2:1324:G:H22	1.56	0.50
12:C0:8:ARG:HD2	12:C0:12:HIS:CE1	2.46	0.50
47:M0:75:TYR:CE1	47:M0:150:GLU:HB3	3.42	0.50
36:1:1834:U:H3'	36:1:1835:A:H5'	1.92	0.50
46:L9:8:GLN:NE2	46:L9:69:ARG:HG2	3.43	0.50
34:SR:238:ASP:OD2	34:SR:258:THR:OG1	2.25	0.50
44:L7:29:GLU:O	44:L7:32:ALA:HB3	2.86	0.50
86:1:3972:OHX:N3	86:1:4156:OHX:N4	2.59	0.50
4:S2:152:HIS:H	4:S2:152:HIS:CD2	2.28	0.50
51:M5:8:GLU:HG3	51:M5:50:ARG:NH1	3.58	0.50
48:M1:106:ILE:HD13	48:M1:125:MET:HG2	5.10	0.50
9:S7:173:TYR:CE1	9:S7:181:ILE:HD13	2.46	0.50
36:1:129:U:O4	86:1:3892:OHX:N5	2.45	0.50
46:L9:93:VAL:O	46:L9:177:ASP:HA	2.11	0.50
36:1:1577:G:H2'	36:1:1578:C:O4'	2.11	0.50
1:6:454:U:H5''	1:6:455:C:C5	2.47	0.50
6:S4:195:ILE:HG22	6:S4:196:VAL:H	3.65	0.50
1:2:28:A:H61	1:2:598:U:H3	1.59	0.50
36:5:1756:C:H42	36:5:1769:G:H1	1.58	0.50
45:L8:90:THR:HA	45:L8:214:LEU:HD21	1.91	0.50
1:6:1697:G:H8	1:6:1705:C:N3	2.09	0.50
53:M7:3:ARG:NH2	36:5:398:A:N7	128.53	0.50
1:6:1690:G:H1	1:6:1711:C:H42	1.58	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:129:ALA:O	36:5:3149:G:O2'	213.78	0.50
68:O2:16:LYS:O	68:O2:17:PHE:HB2	4.69	0.50
1:6:1324:G:N7	86:6:2102:OHX:N2	2.59	0.50
6:S4:32:SER:HB2	6:S4:83:PRO:HD3	1.93	0.50
36:1:2373:A:N7	36:1:2867:C:H1'	2.27	0.50
52:M6:16:VAL:CG2	52:M6:43:ILE:HG12	3.07	0.50
56:N0:119:ARG:NH2	37:7:87:G:O2'	278.20	0.50
3:S1:219:LYS:NZ	79:Q3:92:ALA:O	8.83	0.50
36:1:3134:A:OP1	86:1:3903:OHX:N4	2.43	0.50
36:1:2756:C:O4'	57:N1:49:GLN:HG2	2.11	0.50
34:SR:272:ASP:OD1	34:SR:273:ASP:N	2.70	0.50
36:1:3251:U:H2'	36:1:3252:G:C8	2.45	0.50
60:N4:62:GLY:O	60:N4:64:THR:OG1	2.29	0.50
4:S2:49:LYS:HG3	4:S2:246:GLU:OE1	3.68	0.50
36:5:2211:U:H5	36:5:2234:G:O6	1.95	0.50
1:6:1230:A:C8	1:6:1258:U:C4	2.99	0.50
27:D5:43:ASP:O	27:D5:46:LYS:N	2.33	0.50
1:2:1619:C:H2'	1:2:1620:C:C6	2.47	0.50
7:S5:188:LYS:HG2	27:D5:63:SER:HB2	3.28	0.50
3:S1:180:THR:HG22	3:S1:181:LEU:N	2.26	0.50
53:M7:50:GLN:OE1	53:M7:56:ARG:HD3	2.11	0.50
14:C2:50:LYS:HG3	33:E1:129:GLY:HA2	2.97	0.50
23:D1:73:ALA:HB1	23:D1:78:LEU:HD11	1.92	0.50
36:1:1949:G:H2'	36:1:1950:U:C6	2.46	0.50
1:6:446:A:N6	1:6:461:G:H21	2.10	0.50
46:L9:91:ARG:HD2	46:L9:143:GLU:HB2	1.93	0.50
10:S8:56:ARG:HH22	1:6:332:U:P	287.51	0.50
8:S6:64:LYS:NZ	8:S6:81:VAL:HG22	2.26	0.50
53:M7:122:ALA:HB1	53:M7:123:PRO:HD2	2.31	0.50
86:1:3972:OHX:N3	86:1:4156:OHX:N1	2.59	0.50
51:M5:24:ARG:O	51:M5:27:VAL:HG12	2.10	0.50
10:S8:104:ILE:O	10:S8:164:ARG:HA	2.53	0.50
18:C6:31:VAL:N	18:C6:34:SER:O	2.43	0.50
1:6:1756:A:H8	1:6:1756:A:O5'	1.92	0.50
15:C3:55:ARG:HD2	15:C3:56:ASP:OD1	4.25	0.50
36:1:619:A:H4'	36:1:620:U:O4'	2.11	0.50
41:L4:99:MET:SD	41:L4:102:PRO:HA	2.50	0.50
25:D3:137:LYS:O	25:D3:138:GLU:HB2	2.11	0.50
39:L2:79:ASN:ND2	39:L2:166:ILE:O	2.56	0.50
36:1:1621:A:H2'	36:1:1622:U:C6	2.45	0.50
34:SR:264:SER:O	34:SR:268:GLN:HA	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
69:O3:6:ARG:HD2	69:O3:8:TYR:O	3.24	0.50
52:M6:130:LYS:HG3	52:M6:131:PRO:HD2	3.27	0.50
36:5:1528:G:O2'	36:5:1588:A:N3	2.41	0.50
63:N7:4:PHE:CZ	66:O0:35:ARG:HA	2.46	0.50
36:1:209:A:N3	41:L4:221:ASN:ND2	2.53	0.50
36:1:1938:U:O4	86:1:3915:OHX:N2	2.44	0.50
69:O3:73:ARG:HH22	36:5:1167:U:P	247.54	0.50
36:5:532:A:C8	36:5:555:U:C4	2.99	0.50
72:O6:2:THR:OG1	72:O6:3:VAL:HG22	5.89	0.50
1:6:255:U:H2'	1:6:256:A:H8	1.76	0.50
36:1:2727:A:H4'	36:1:2728:G:OP2	2.11	0.50
36:5:2590:A:C5	36:5:2591:A:C8	2.99	0.50
36:5:3098:G:N7	86:5:3914:OHX:N6	2.58	0.50
36:1:2252:A:H5"	36:1:2252:A:H8	1.77	0.50
59:N3:101:VAL:HG11	59:N3:114:ILE:HG13	1.93	0.50
10:S8:6:ASP:OD2	10:S8:9:HIS:ND1	4.89	0.50
36:1:2762:A:OP2	86:1:3935:OHX:N4	2.44	0.50
62:N6:39:LEU:HD22	62:N6:43:TYR:HE2	1.75	0.50
28:D6:84:VAL:HG13	28:D6:85:ARG:N	2.26	0.50
42:L5:270:LYS:C	42:L5:272:TYR:H	2.86	0.50
67:O1:40:ALA:O	67:O1:43:HIS:N	3.49	0.50
36:1:1319:G:C4	36:1:1320:C:C5	2.99	0.50
18:C6:29:ILE:HA	18:C6:65:ILE:O	2.11	0.50
5:S3:164:VAL:O	5:S3:168:ILE:HG13	2.12	0.50
35:SM:48:ARG:NH1	36:5:1017:C:H5"	336.84	0.50
44:L7:33:ARG:O	44:L7:37:ASN:N	2.77	0.50
49:M3:180:ARG:HH12	36:5:2780:A:H4'	130.42	0.50
36:1:1244:A:N6	36:1:1271:A:OP2	2.44	0.50
47:M0:74:LYS:O	47:M0:78:THR:HG23	2.36	0.50
36:5:2180:G:H2'	36:5:2181:C:C6	2.46	0.50
55:M9:104:ARG:HE	55:M9:105:LEU:N	2.08	0.50
1:6:488:G:N2	1:6:499:U:H3	2.09	0.50
39:L2:109:GLU:OE1	39:L2:109:GLU:N	4.50	0.50
36:1:1675:G:H2'	36:1:1676:A:C8	2.46	0.50
27:D5:39:ALA:HB1	27:D5:72:GLY:N	2.26	0.50
86:6:2058:OHX:N1	86:6:2145:OHX:N4	2.60	0.50
18:C6:67:VAL:HG21	18:C6:85:ILE:CD1	3.99	0.50
1:6:680:U:C2	1:6:682:C:N4	2.79	0.50
12:C0:29:GLN:HB3	12:C0:39:ASN:HB2	1.92	0.50
25:D3:92:CYS:HA	25:D3:95:PHE:HD2	1.73	0.50
29:D7:47:PHE:CE1	29:D7:49:HIS:HB2	2.45	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:1:4132:OHX:N5	86:1:4164:OHX:N6	2.60	0.50
43:L6:2:SER:N	36:5:1385:C:HO2'	136.73	0.50
79:Q3:27:LYS:O	79:Q3:31:ILE:HG13	2.10	0.50
1:2:1060:U:H2'	1:2:1061:A:O4'	2.11	0.50
78:Q2:59:HIS:O	78:Q2:61:LYS:HD3	6.41	0.50
1:6:577:G:H3'	1:6:577:G:C8	2.47	0.50
1:2:1492:A:O2'	1:2:1493:A:H8	1.95	0.50
36:5:2592:G:H4'	36:5:2594:C:C2	2.47	0.50
49:M3:86:THR:HG21	36:5:257:U:H5''	53.21	0.50
37:7:64:A:H5'	37:7:65:G:H5''	1.94	0.50
44:L7:111:ILE:O	44:L7:112:ASN:HB2	2.10	0.50
38:4:12:A:H2	53:M7:120:ASN:ND2	2.09	0.50
40:L3:262:TRP:HE1	52:M6:66:LYS:HZ3	1.59	0.50
36:1:2331:C:H2'	36:1:2332:A:O4'	2.10	0.50
48:M1:34:SER:HA	48:M1:67:VAL:HG21	1.94	0.50
72:O6:57:LEU:O	72:O6:61:ILE:HG12	4.54	0.50
55:M9:106:LEU:HB3	55:M9:120:TYR:CE1	2.46	0.50
36:1:94:G:H5'	64:N8:53:PHE:CD2	2.47	0.50
37:7:13:A:OP1	37:7:111:U:O2'	2.27	0.50
36:1:2427:U:H2'	36:1:2428:U:C6	2.47	0.50
23:D1:85:TYR:CD1	29:D7:6:ASP:HB2	2.57	0.50
37:7:25:G:H2'	37:7:26:C:O4'	2.11	0.50
36:1:812:G:N7	86:1:3984:OHX:N1	2.59	0.50
36:1:1849:C:H6	36:1:1849:C:H5'	1.76	0.50
36:1:2230:C:H6	36:1:2230:C:O5'	1.94	0.50
36:1:2562:A:H2	45:L8:31:PRO:HD3	1.75	0.50
68:O2:5:PRO:HD2	68:O2:6:HIS:H	5.19	0.50
36:5:1151:U:OP1	86:5:4205:OHX:N1	2.44	0.50
36:5:696:C:HO2'	36:5:697:A:H8	1.57	0.50
1:6:1579:U:OP2	86:6:2182:OHX:N6	2.44	0.50
36:5:3047:U:O2'	36:5:3048:A:H5'	2.11	0.50
40:L3:53:MET:HE3	36:5:3048:A:C5'	232.93	0.50
57:N1:143:THR:O	57:N1:145:GLY:N	2.44	0.50
9:S7:96:ARG:CZ	9:S7:124:LYS:HB3	2.40	0.50
34:SR:126:SER:OG	34:SR:127:ARG:N	2.45	0.50
27:D5:54:VAL:HG13	27:D5:57:TYR:HD1	1.75	0.50
1:6:1459:C:OP2	1:6:1459:C:H6	1.94	0.50
52:M6:62:THR:H	52:M6:69:GLY:HA3	1.76	0.50
23:D1:36:VAL:N	23:D1:51:VAL:O	2.95	0.50
1:2:795:U:C5	1:2:796:A:C8	3.00	0.50
1:2:1000:C:O2'	1:2:1002:G:N7	2.28	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:98:VAL:HA	43:L6:101:PHE:CD2	2.47	0.50
66:O0:24:THR:HG23	66:O0:91:SER:HB3	1.94	0.50
54:M8:141:ARG:NH1	36:5:743:C:N3	178.79	0.50
45:L8:57:ARG:O	45:L8:61:GLN:HG2	4.87	0.50
13:C1:4:GLU:HG3	13:C1:5:LEU:HD22	6.03	0.50
1:2:1156:C:C2'	1:2:1157:A:H5'	2.41	0.50
54:M8:63:SER:OG	54:M8:64:VAL:N	2.95	0.50
15:C3:30:SER:O	15:C3:34:ILE:HG13	2.62	0.50
1:6:151:G:H22	1:6:163:G:N2	2.09	0.50
61:N5:105:VAL:HG11	61:N5:126:LEU:HD22	1.93	0.50
51:M5:154:PRO:HB3	51:M5:157:LYS:HZ2	1.77	0.50
47:M0:88:ARG:HG2	47:M0:90:ARG:HG2	2.35	0.50
36:1:353:G:O2'	36:1:354:U:OP2	2.28	0.50
1:2:522:U:OP1	26:D4:37:LYS:HB2	2.12	0.50
36:1:3078:U:H4'	36:1:3079:U:O5'	2.06	0.50
24:D2:93:LEU:O	24:D2:94:LEU:HD23	2.88	0.50
36:1:215:G:OP1	62:N6:12:ARG:HD2	2.12	0.50
36:5:1155:C:H2'	36:5:1156:C:C6	2.47	0.50
13:C1:40:LEU:HB2	13:C1:42:PHE:CD2	3.64	0.50
56:N0:16:THR:OG1	56:N0:19:VAL:N	3.25	0.50
70:O4:98:GLN:NE2	70:O4:98:GLN:O	4.76	0.50
50:M4:99:TRP:O	50:M4:103:ILE:HG13	2.12	0.50
14:C2:129:GLU:OE2	14:C2:130:THR:N	3.05	0.50
11:S9:47:PHE:CZ	11:S9:51:LYS:HD3	2.75	0.50
36:5:1161:G:OP2	36:5:1365:G:O2'	2.17	0.50
38:4:52:A:H4'	75:O9:19:GLN:HA	1.93	0.50
41:L4:211:GLU:OE2	41:L4:213:ASN:ND2	2.34	0.50
46:L9:138:THR:O	46:L9:139:ASN:ND2	2.43	0.50
36:1:613:G:H2'	36:1:614:C:C6	2.47	0.50
7:S5:197:GLU:OE1	7:S5:209:TYR:N	2.45	0.50
36:1:1365:G:OP2	86:1:3968:OHX:N6	2.44	0.50
8:S6:195:VAL:HG13	1:6:127:G:C2	330.53	0.50
1:6:1150:G:O6	86:6:2113:OHX:N5	2.44	0.50
7:S5:48:PHE:O	7:S5:65:ARG:NH1	5.37	0.50
11:S9:134:ILE:HD12	11:S9:134:ILE:N	4.93	0.50
48:M1:15:GLU:OE1	48:M1:140:ARG:NH1	2.45	0.50
35:SM:24:GLU:OE2	48:M1:64:LYS:NZ	2.44	0.50
1:2:1202:A:OP2	86:2:2111:OHX:N2	2.45	0.50
38:8:82:U:O2	38:8:87:G:H4'	2.12	0.50
5:S3:133:GLY:HA3	5:S3:156:PHE:O	2.11	0.50
36:1:1230:G:N2	36:1:1279:C:N3	2.56	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D6:60:PRO:O	28:D6:62:TYR:N	2.43	0.50
32:E0:17:GLN:HE21	1:6:563:U:H4'	383.60	0.50
62:N6:119:ILE:HG22	62:N6:124:GLY:HA3	2.66	0.50
36:1:1729:A:N6	66:O0:48:THR:HA	2.27	0.50
36:1:945:C:H1'	36:1:1407:A:H1'	1.94	0.50
13:C1:131:ILE:HG22	13:C1:135:VAL:HB	1.94	0.50
1:2:358:U:O2'	1:2:360:A:OP1	2.29	0.50
86:6:2058:OHX:N2	86:6:2145:OHX:N6	2.59	0.50
10:S8:161:SER:OG	36:5:3353:G:OP1	232.14	0.50
2:S0:41:ARG:HE	2:S0:45:VAL:HB	1.77	0.50
2:S0:169:SER:O	2:S0:173:ILE:HG12	2.12	0.50
44:L7:92:ILE:HD11	54:M8:4:ASP:HB2	1.93	0.50
36:5:3078:U:H4'	36:5:3079:U:O5'	2.11	0.50
8:S6:4:ASN:OD1	1:6:152:U:O2'	307.65	0.50
36:1:3095:U:H2'	36:1:3096:C:H6	1.77	0.50
36:1:1767:C:H2'	36:1:1768:U:C6	2.47	0.50
64:N8:93:SER:OG	64:N8:93:SER:O	2.26	0.50
17:C5:83:MET:HB3	17:C5:116:LEU:HD12	3.22	0.50
19:C7:67:ARG:NH2	1:6:1398:U:O2'	405.79	0.50
1:6:427:C:C4	1:6:428:A:N7	2.80	0.50
26:D4:121:THR:OG1	1:6:149:C:OP1	335.38	0.50
59:N3:106:LYS:HD2	59:N3:108:GLU:OE2	2.12	0.50
1:2:434:G:H5'	25:D3:78:LYS:HB3	1.92	0.50
34:SR:201:THR:CB	34:SR:242:SER:HA	2.41	0.50
58:N2:92:TRP:O	58:N2:108:TYR:N	4.19	0.50
65:N9:12:GLN:NE2	36:5:954:U:H1'	211.64	0.50
36:1:36:C:H2'	36:1:37:U:H5'	1.93	0.50
7:S5:156:ARG:HA	7:S5:157:ARG:HH21	5.13	0.50
1:2:609:U:H4'	1:2:610:G:O5'	2.10	0.50
36:5:1716:U:C6	36:5:1716:U:H5'	2.46	0.50
1:6:365:G:O6	86:6:2132:OHX:N4	2.45	0.50
36:1:3112:G:O6	36:1:3120:C:H5''	2.11	0.50
36:1:3113:A:OP1	46:L9:73:SER:OG	2.29	0.50
36:5:2442:G:H22	36:5:2506:U:H3	1.58	0.50
43:L6:41:ILE:HB	43:L6:85:ILE:HB	1.92	0.50
36:5:1239:C:N4	36:5:1249:G:H1	1.91	0.50
59:N3:87:ARG:NH2	59:N3:137:VAL:HG21	2.14	0.50
1:2:590:C:H2'	1:2:591:A:H8	1.77	0.50
11:S9:78:ARG:O	11:S9:82:ARG:HB2	2.12	0.50
47:M0:210:ILE:HD13	47:M0:217:PHE:CE2	4.53	0.50
6:S4:104:ASP:HB2	6:S4:108:ARG:N	2.72	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:22:VAL:HG21	52:M6:120:VAL:HG11	1.94	0.50
21:C9:16:ASN:HA	21:C9:56:LYS:HZ2	1.75	0.50
13:C1:99:ARG:HD3	25:D3:8:GLY:O	2.11	0.50
34:SR:37:SER:HG	34:SR:38:ARG:H	2.06	0.50
1:2:1316:G:H2'	1:2:1317:C:H6	1.75	0.50
39:L2:54:ARG:HG2	39:L2:56:ALA:H	1.76	0.50
1:2:704:C:H4'	1:2:705:U:OP1	2.10	0.50
1:6:629:U:H1'	1:6:971:A:N1	2.27	0.50
6:S4:57:ASN:HB3	6:S4:59:ARG:H	2.14	0.50
56:N0:12:ARG:HG3	56:N0:13:ARG:O	3.23	0.50
54:M8:23:ASN:HB3	54:M8:26:LEU:HB2	2.31	0.50
63:N7:88:ASP:HB3	63:N7:121:ARG:HH22	2.33	0.50
47:M0:51:HIS:ND1	47:M0:134:ILE:HD13	2.26	0.50
36:1:1478:C:H2'	36:1:1479:U:H6	1.77	0.50
1:6:491:C:N4	1:6:497:G:H21	2.08	0.50
42:L5:52:VAL:HG21	42:L5:65:ILE:HG13	3.58	0.50
9:S7:14:THR:HG22	9:S7:17:GLU:HB2	2.00	0.50
24:D2:77:PRO:O	24:D2:79:PHE:N	2.44	0.50
34:SR:305:TYR:HH	34:SR:313:TRP:HH2	3.39	0.50
36:1:2677:G:OP2	86:1:4049:OHX:N4	2.45	0.50
46:L9:31:ARG:HD3	46:L9:149:ASN:OD1	3.28	0.50
42:L5:120:LYS:HD2	42:L5:121:GLY:O	6.47	0.50
15:C3:13:SER:OG	15:C3:14:SER:N	2.45	0.50
9:S7:143:LEU:C	9:S7:145:GLY:H	2.59	0.50
1:6:624:G:H2'	1:6:625:C:C6	2.47	0.50
86:8:218:OHX:N5	86:8:226:OHX:N3	2.60	0.50
1:2:839:U:C2'	1:2:840:U:H5'	2.41	0.50
36:5:3218:A:H5''	36:5:3219:G:C5	2.47	0.50
5:S3:124:ARG:O	5:S3:128:GLU:N	3.39	0.50
46:L9:94:TYR:OH	46:L9:142:ASP:OD1	2.22	0.50
8:S6:10:ASN:HB3	8:S6:128:THR:HA	1.93	0.50
55:M9:84:THR:O	55:M9:88:ARG:HG2	3.86	0.50
36:5:2866:U:O4	86:5:3966:OHX:N6	2.45	0.50
36:1:398:A:C5	53:M7:3:ARG:NH2	2.75	0.50
1:6:1054:U:H2'	1:6:1055:U:O4'	2.12	0.50
61:N5:80:ASN:O	61:N5:125:ARG:HG2	3.12	0.50
36:5:1268:G:O2'	36:5:1273:A:N6	2.43	0.50
36:1:2857:C:C2'	36:1:2858:U:H5'	2.41	0.50
41:L4:303:GLY:H	36:5:1347:U:H5''	198.42	0.50
36:5:2239:G:N7	86:5:4187:OHX:N5	2.59	0.50
1:2:1327:C:O2'	5:S3:159:HIS:ND1	2.40	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
69:O3:16:TYR:CD2	69:O3:25:PRO:HA	2.85	0.50
41:L4:201:GLN:HG3	41:L4:202:ARG:O	2.11	0.50
31:D9:9:SER:HA	1:6:1451:C:OP1	410.09	0.50
36:5:2611:U:H2'	36:5:2612:U:C6	2.47	0.50
7:S5:91:GLU:HA	7:S5:94:THR:HG23	1.93	0.50
36:1:1723:A:N1	36:1:1788:C:O2'	2.34	0.50
7:S5:121:ILE:HG13	7:S5:195:ALA:HB1	2.45	0.50
1:2:1291:G:O5'	1:2:1291:G:H8	1.95	0.50
1:2:1459:C:H42	20:C8:139:LYS:HE2	1.75	0.50
33:E1:130:VAL:HG22	33:E1:143:LYS:HG2	3.95	0.50
2:S0:66:ALA:O	2:S0:67:ILE:HD13	2.12	0.50
1:2:736:C:H2'	1:2:737:A:H5'	1.93	0.50
36:1:437:G:H2'	36:1:438:A:O4'	2.11	0.50
44:L7:102:VAL:HG12	44:L7:130:ILE:HD12	4.10	0.50
2:S0:28:ASN:O	2:S0:150:ASP:HB3	6.53	0.50
36:1:1673:G:C5	36:1:1775:G:C2	3.00	0.50
1:2:448:C:H5'	6:S4:29:PRO:HG3	1.93	0.50
53:M7:125:GLN:HA	53:M7:125:GLN:HE21	1.77	0.50
56:N0:91:TYR:O	56:N0:137:ARG:NH1	2.47	0.50
1:2:1370:U:H4'	1:2:1371:A:C5'	2.42	0.50
42:L5:164:LYS:O	42:L5:164:LYS:HD3	2.12	0.50
6:S4:146:THR:HG21	1:6:123:G:N2	341.57	0.50
1:2:1087:A:H2'	1:2:1088:A:C8	2.47	0.50
49:M3:16:LYS:O	49:M3:17:HIS:HB2	4.64	0.50
44:L7:197:GLN:OE1	44:L7:197:GLN:N	2.36	0.50
34:SR:260:ILE:HB	34:SR:274:LEU:HD12	2.80	0.50
61:N5:92:LYS:HD3	61:N5:110:VAL:O	4.21	0.50
37:7:57:G:H3'	37:7:58:C:C6	2.47	0.50
36:1:705:A:C4	36:1:715:A:N6	2.79	0.50
68:O2:21:HIS:ND1	68:O2:24:ARG:HD2	2.26	0.50
44:L7:96:PRO:O	44:L7:99:PRO:HD2	2.24	0.50
36:5:879:U:O2	36:5:2357:A:H1'	2.11	0.50
18:C6:5:PRO:HG2	18:C6:24:ALA:HB2	1.94	0.50
24:D2:108:ALA:HB2	24:D2:121:VAL:HG11	2.43	0.50
1:6:784:C:H2'	1:6:785:U:H6	1.77	0.50
53:M7:109:ALA:O	53:M7:112:LEU:HB2	3.56	0.50
29:D7:14:SER:HA	29:D7:17:ARG:HG2	1.93	0.50
36:5:3324:C:H2'	36:5:3325:G:H8	1.76	0.50
45:L8:244:ALA:HA	45:L8:247:ASP:HB2	2.30	0.50
44:L7:47:ARG:O	44:L7:50:ALA:N	3.09	0.50
56:N0:78:TRP:CE3	56:N0:125:LYS:HG2	3.55	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:235:LEU:HD13	23:D1:33:GLN:HE21	1.77	0.50
36:5:128:G:O6	86:5:3926:OHX:N4	2.44	0.50
15:C3:3:ARG:NH1	1:6:955:A:OP1	326.92	0.50
1:6:542:A:H2	1:6:544:A:O4'	1.95	0.50
41:L4:181:VAL:O	41:L4:182:LEU:HB2	2.12	0.50
14:C2:32:LEU:O	14:C2:36:LEU:N	2.45	0.50
5:S3:55:THR:HG21	5:S3:90:ARG:HG2	3.67	0.50
1:2:1485:C:H1'	1:2:1606:C:H4'	1.92	0.50
36:5:293:C:H2'	36:5:294:U:O4'	2.12	0.50
36:1:3376:A:N3	67:O1:18:LYS:HA	2.26	0.50
51:M5:69:GLY:O	36:5:290:G:H4'	145.37	0.50
51:M5:67:ARG:O	51:M5:98:LEU:HD11	2.12	0.50
36:1:2735:U:H2'	36:1:2736:A:C8	2.47	0.50
61:N5:67:ILE:HD13	61:N5:115:ARG:NH2	2.26	0.50
46:L9:163:GLN:O	46:L9:166:ARG:HD3	2.12	0.50
50:M4:20:VAL:HG23	50:M4:66:THR:OG1	3.29	0.50
16:C4:54:GLU:CD	1:6:901:G:H22	281.88	0.50
36:5:571:U:H2'	36:5:572:A:C8	2.45	0.50
8:S6:28:PHE:CE1	8:S6:104:PRO:HG3	2.46	0.50
52:M6:8:VAL:HA	52:M6:34:VAL:HG13	1.93	0.50
1:2:461:G:OP1	11:S9:2:PRO:HG2	2.12	0.50
1:2:95:G:O2'	1:2:460:A:O2'	2.25	0.50
1:2:333:A:OP1	10:S8:31:ARG:NH2	2.45	0.50
34:SR:159:ASN:HD22	34:SR:163:ASP:HA	1.76	0.50
25:D3:69:ARG:HD2	25:D3:116:ASP:OD2	2.12	0.50
86:1:4004:OHX:N6	86:1:4172:OHX:N5	2.60	0.50
1:6:826:U:H2'	1:6:827:C:C6	2.46	0.50
2:S0:22:THR:HG21	2:S0:173:ILE:HD11	1.93	0.50
9:S7:60:ILE:HD12	9:S7:92:PHE:CZ	2.47	0.50
68:O2:44:ARG:NH1	36:5:1145:G:OP1	206.95	0.50
9:S7:49:ILE:HD12	9:S7:172:VAL:HA	2.29	0.50
1:2:1445:G:C6	33:E1:91:ILE:HB	2.47	0.50
70:O4:71:THR:HG22	70:O4:78:GLY:H	1.77	0.50
54:M8:70:ALA:O	54:M8:73:GLN:HB2	2.11	0.50
1:2:755:A:H2'	1:2:756:A:H8	1.75	0.50
36:1:7:C:H2'	36:1:8:C:H6	1.76	0.50
38:8:92:A:H2'	38:8:93:U:O4'	2.12	0.50
49:M3:31:LYS:O	49:M3:35:ARG:HB2	2.12	0.50
1:2:799:A:H5''	6:S4:201:HIS:CD2	2.47	0.50
86:5:3966:OHX:N3	86:5:4236:OHX:N6	2.60	0.50
1:6:255:U:H2'	1:6:256:A:C8	2.47	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:28:GLU:O	55:M9:32:ILE:HG13	2.62	0.50
36:5:2904:U:H2'	36:5:2905:U:C6	2.47	0.50
1:2:269:G:C6	1:2:287:G:C6	3.00	0.50
40:L3:37:ARG:CA	40:L3:186:GLY:HA2	2.57	0.50
40:L3:106:TRP:HB2	40:L3:133:TYR:CE2	2.47	0.50
36:5:54:C:O2'	36:5:1547:G:H1'	2.12	0.50
5:S3:222:VAL:HG11	34:SR:229:LYS:HA	2.76	0.50
21:C9:108:LEU:HA	21:C9:111:ILE:HG22	1.94	0.50
45:L8:246:MET:HE3	45:L8:249:ARG:HH21	1.77	0.50
66:O0:70:PHE:CD2	66:O0:77:LEU:HD13	2.88	0.50
36:1:3319:U:P	36:1:3319:U:H3'	2.52	0.50
4:S2:148:LEU:O	23:D1:4:ASP:HB2	2.11	0.50
41:L4:233:LEU:HD22	41:L4:238:LEU:HD11	3.22	0.50
36:5:2314:U:O4	86:5:3971:OHX:N5	2.44	0.50
7:S5:52:GLU:H	7:S5:131:GLN:HE22	1.60	0.50
16:C4:129:LYS:HB2	1:6:990:C:H5''	282.42	0.50
13:C1:29:LYS:O	13:C1:31:THR:N	2.45	0.50
63:N7:46:ILE:HD13	63:N7:68:ILE:CG2	2.38	0.50
1:2:1460:A:C4	17:C5:128:HIS:CD2	3.00	0.50
12:C0:21:VAL:HG21	12:C0:46:LEU:HD11	3.74	0.50
1:2:1241:G:H1'	17:C5:79:HIS:CG	2.47	0.50
6:S4:18:TRP:HE3	6:S4:20:LEU:HD11	1.76	0.50
46:L9:7:GLU:OE1	46:L9:54:LYS:HD2	2.12	0.50
36:1:744:A:H4'	54:M8:142:GLY:O	2.12	0.50
36:1:1919:G:H1'	36:1:1934:G:N2	2.27	0.50
36:1:954:U:O2'	36:1:955:U:H5'	2.12	0.50
2:S0:30:GLN:HE21	2:S0:33:GLN:HG2	10.81	0.50
1:2:330:G:H2'	1:2:331:A:C8	2.47	0.50
66:O0:13:LYS:O	66:O0:17:VAL:HG23	2.46	0.50
44:L7:228:SER:HA	44:L7:232:ARG:HH21	2.27	0.50
19:C7:15:ALA:HA	19:C7:18:GLU:HB2	1.94	0.50
1:2:1548:G:OP1	17:C5:18:ARG:NH1	2.42	0.50
69:O3:49:ILE:HG22	69:O3:100:ILE:HA	4.31	0.50
74:O8:64:LYS:HG3	74:O8:65:LEU:N	4.77	0.50
71:O5:68:GLN:O	71:O5:71:LYS:N	2.43	0.50
15:C3:24:ALA:O	15:C3:27:LYS:HE2	8.06	0.50
26:D4:11:LYS:HB2	26:D4:24:VAL:HG23	2.49	0.50
36:5:2111:G:H4'	36:5:2112:U:OP2	2.12	0.50
1:2:682:C:H2'	1:2:683:C:O4'	2.11	0.50
1:2:523:G:H5''	26:D4:59:GLY:O	2.12	0.50
55:M9:156:ASN:OD1	55:M9:156:ASN:N	2.45	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:13:PRO:O	46:L9:16:VAL:HG13	4.32	0.50
24:D2:53:ILE:HB	24:D2:60:LYS:HB2	4.35	0.50
36:5:2283:G:N3	36:5:2285:C:N4	2.58	0.50
61:N5:76:VAL:HG12	61:N5:133:LEU:HA	1.94	0.50
35:SM:37:VAL:HG12	35:SM:38:PRO:O	2.47	0.50
36:1:139:G:H2'	36:1:140:C:C6	2.47	0.50
44:L7:116:PHE:HB2	44:L7:199:ASN:OD1	2.12	0.50
38:4:120:C:H2'	38:4:121:U:O4'	2.12	0.50
13:C1:35:TYR:CG	13:C1:49:ILE:HG12	3.09	0.50
48:M1:83:GLY:HA2	48:M1:86:VAL:HG23	1.94	0.50
1:6:116:U:H2'	1:6:117:U:C6	2.46	0.50
36:1:2657:A:C2	36:1:2694:A:C8	3.00	0.50
47:M0:81:GLY:C	47:M0:83:ASP:N	2.99	0.49
28:D6:10:ARG:HH11	28:D6:36:ILE:HG13	6.38	0.49
36:5:1238:C:H2'	36:5:1239:C:H5''	1.94	0.49
36:1:3049:A:OP2	86:1:4180:OHX:N3	2.45	0.49
48:M1:93:ASP:OD2	48:M1:156:LYS:HE2	4.35	0.49
50:M4:14:LEU:H	50:M4:19:ARG:HH11	2.30	0.49
18:C6:25:GLY:H	18:C6:63:ILE:HA	1.77	0.49
67:O1:27:LYS:C	67:O1:30:PRO:HD2	2.32	0.49
51:M5:98:LEU:HD22	51:M5:128:LYS:HZ2	4.66	0.49
38:8:81:U:H1'	38:8:82:U:H5''	1.94	0.49
1:2:189:C:H2'	1:2:190:C:H5'	1.93	0.49
1:6:1458:G:H5''	1:6:1459:C:OP2	2.12	0.49
1:2:1459:C:H5'	17:C5:126:VAL:HG11	1.93	0.49
1:2:583:C:H2'	1:2:584:C:H6	1.77	0.49
41:L4:237:GLN:O	41:L4:246:ARG:HG3	2.12	0.49
1:6:1563:C:H2'	1:6:1564:U:C6	2.46	0.49
36:5:2255:A:H5'	36:5:2261:G:N2	2.24	0.49
48:M1:166:LYS:C	48:M1:168:ASP:H	3.25	0.49
63:N7:5:LEU:HB3	63:N7:77:TYR:OH	3.90	0.49
36:1:1950:U:H3	36:1:2096:A:H2	1.59	0.49
18:C6:82:ARG:HH22	18:C6:114:ARG:HB2	2.34	0.49
1:2:461:G:H2'	1:2:462:G:H8	1.76	0.49
49:M3:58:VAL:CG1	36:5:75:G:H5''	87.08	0.49
8:S6:57:ASP:HA	8:S6:107:ALA:H	1.75	0.49
1:2:1051:G:O2'	1:2:1052:U:O5'	2.27	0.49
28:D6:46:GLU:HG3	28:D6:47:ALA:HB3	3.46	0.49
38:4:49:G:OP1	71:O5:45:LYS:HB2	2.11	0.49
58:N2:47:VAL:C	58:N2:49:ASN:H	2.60	0.49
56:N0:89:ASN:OD1	57:N1:155:PRO:HB3	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
69:O3:6:ARG:HG3	69:O3:8:TYR:H	2.58	0.49
5:S3:107:PHE:HA	5:S3:110:LEU:HB2	3.09	0.49
36:1:2847:A:OP2	76:Q0:97:ARG:NH2	2.29	0.49
36:1:246:U:H2'	36:1:247:C:H6	1.76	0.49
34:SR:79:TYR:HE1	34:SR:100:TYR:CE1	3.26	0.49
60:N4:63:ILE:O	60:N4:65:GLU:N	2.78	0.49
8:S6:61:PHE:CE1	8:S6:96:SER:HB2	2.89	0.49
36:1:1108:U:H2'	36:1:1109:U:C6	2.46	0.49
36:1:2383:C:H5'	52:M6:71:PHE:CE2	2.46	0.49
2:S0:4:PRO:HB2	2:S0:7:PHE:HB2	1.94	0.49
40:L3:316:GLU:HB2	40:L3:318:LYS:HE3	3.00	0.49
62:N6:74:TYR:CZ	62:N6:77:LYS:HD2	5.14	0.49
1:2:1130:G:OP2	86:2:2074:OHX:N2	2.45	0.49
9:S7:157:LYS:O	9:S7:159:VAL:HG13	2.12	0.49
36:1:533:A:O2'	36:1:535:G:OP2	2.30	0.49
34:SR:282:SER:H	34:SR:285:ALA:HB3	1.76	0.49
36:1:824:C:O2'	36:1:1534:A:N3	2.40	0.49
41:L4:294:GLU:N	41:L4:294:GLU:OE1	2.38	0.49
1:2:538:A:H2	1:2:540:G:H22	1.56	0.49
47:M0:210:ILE:HG12	47:M0:217:PHE:CZ	2.47	0.49
38:4:70:G:H8	38:4:70:G:OP2	1.95	0.49
72:O6:74:LYS:HD2	72:O6:80:PHE:CD2	2.33	0.49
34:SR:38:ARG:HB3	34:SR:67:ILE:HG12	1.93	0.49
34:SR:37:SER:HB3	34:SR:39:ASP:OD1	2.63	0.49
46:L9:49:ASN:HD22	46:L9:51:GLN:H	1.57	0.49
16:C4:112:ILE:HB	28:D6:57:SER:OG	2.11	0.49
36:1:13:A:H5''	36:1:13:A:H8	1.77	0.49
1:2:1379:C:H1'	18:C6:19:VAL:HG11	1.93	0.49
41:L4:5:GLN:HA	41:L4:20:LEU:O	2.13	0.49
36:5:2820:A:C4	88:5:4246:3J6:H1	2.48	0.49
41:L4:35:VAL:HG21	41:L4:244:LEU:HD21	1.93	0.49
13:C1:74:THR:HG22	13:C1:122:ILE:HG23	5.39	0.49
39:L2:181:LYS:HZ3	36:5:860:G:P	213.46	0.49
20:C8:45:LEU:HD11	21:C9:36:ILE:HG22	1.95	0.49
36:1:2899:C:C5	46:L9:171:ASP:HA	2.46	0.49
1:2:1544:U:H4'	20:C8:132:ARG:NH2	2.27	0.49
51:M5:84:PRO:HD2	36:5:44:U:OP1	166.23	0.49
47:M0:33:ILE:HD11	47:M0:36:LEU:HG	1.92	0.49
1:6:138:A:H2'	1:6:139:C:H5'	1.94	0.49
28:D6:44:ILE:HD11	28:D6:65:PRO:C	2.32	0.49
62:N6:126:LEU:HB2	71:O5:71:LYS:NZ	46.31	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:N0:26:ARG:NH1	57:N1:150:THR:HG21	2.68	0.49
14:C2:132:GLU:HA	14:C2:135:MET:HB2	1.93	0.49
70:O4:51:LEU:HD23	70:O4:51:LEU:H	1.77	0.49
48:M1:9:MET:O	48:M1:11:ASP:N	3.30	0.49
36:1:1473:G:OP2	55:M9:8:LYS:NZ	2.46	0.49
27:D5:75:LEU:HA	27:D5:78:ILE:HD13	1.93	0.49
36:5:2651:G:H4'	36:5:2652:U:OP2	2.11	0.49
36:1:1162:U:OP1	68:O2:54:LYS:HE3	2.11	0.49
1:2:28:A:H2'	1:2:29:U:C6	2.47	0.49
25:D3:19:ARG:HD3	1:6:609:U:H1'	343.51	0.49
36:5:3324:C:H2'	36:5:3325:G:C8	2.47	0.49
1:6:872:G:H2'	1:6:873:U:O4'	2.12	0.49
1:6:412:A:H2'	1:6:413:U:H6	1.77	0.49
36:5:3299:A:H61	36:5:3315:G:H1	1.59	0.49
36:5:2403:G:H5'	36:5:2872:A:C2	2.47	0.49
60:N4:23:ARG:NH2	60:N4:25:ASP:OD1	4.59	0.49
36:1:1769:G:N7	86:1:4169:OHX:N2	2.61	0.49
36:1:1839:A:N6	36:1:1843:C:C2	2.80	0.49
5:S3:94:ARG:NH1	35:SM:137:GLU:O	10.89	0.49
51:M5:35:VAL:O	51:M5:64:VAL:HA	2.12	0.49
9:S7:96:ARG:NH2	9:S7:128:ASP:OD2	2.58	0.49
36:5:856:G:OP1	36:5:1722:U:O2'	2.25	0.49
1:2:563:U:H4'	32:E0:17:GLN:OE1	2.12	0.49
63:N7:10:VAL:HG22	63:N7:24:VAL:HG13	1.93	0.49
24:D2:22:LYS:HA	29:D7:3:LEU:HD22	1.93	0.49
16:C4:25:ASP:OD1	16:C4:26:THR:N	2.78	0.49
86:1:4032:OHX:N2	86:1:4045:OHX:N1	2.61	0.49
36:5:410:U:O4	86:5:4096:OHX:N3	2.45	0.49
63:N7:53:VAL:HA	63:N7:57:HIS:CD2	2.52	0.49
66:O0:100:ILE:HG13	66:O0:101:LEU:HD22	4.58	0.49
52:M6:138:LEU:O	52:M6:141:LEU:N	2.95	0.49
12:C0:32:HIS:CD2	12:C0:33:GLU:H	3.17	0.49
36:1:3199:G:C2	36:1:3200:G:C8	3.00	0.49
1:6:25:C:H4'	1:6:25:C:OP2	2.12	0.49
37:7:106:U:H2'	37:7:107:C:C6	2.47	0.49
12:C0:59:PHE:CE2	12:C0:62:GLN:HA	3.59	0.49
51:M5:15:GLN:HB3	72:O6:52:PRO:HD2	2.66	0.49
54:M8:181:SER:HB3	36:5:2790:A:OP2	183.01	0.49
36:1:715:A:H8	64:N8:115:LYS:HG2	1.77	0.49
63:N7:2:ALA:O	63:N7:4:PHE:N	2.46	0.49
1:2:434:G:N2	1:2:436:A:H3'	2.27	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:N4:63:ILE:HD12	60:N4:64:THR:H	6.04	0.49
25:D3:22:ASN:HB3	1:6:609:U:H5	336.22	0.49
9:S7:46:ILE:HA	9:S7:59:ALA:O	2.26	0.49
10:S8:53:LYS:HD2	10:S8:55:TYR:CZ	3.10	0.49
36:1:3004:C:O2'	36:1:3005:A:H5'	2.12	0.49
26:D4:66:GLY:HA2	1:6:532:U:H4'	431.70	0.49
13:C1:39:GLY:C	13:C1:41:GLY:H	2.15	0.49
18:C6:91:ALA:O	18:C6:94:GLN:HB3	2.12	0.49
6:S4:240:LYS:H	6:S4:240:LYS:HE2	1.77	0.49
6:S4:71:LYS:HA	6:S4:76:VAL:O	2.11	0.49
53:M7:169:THR:HG23	69:O3:60:ARG:HH11	1.77	0.49
36:1:1596:C:O2'	36:1:1696:A:N3	2.39	0.49
1:2:538:A:C8	1:2:543:C:N4	2.81	0.49
1:2:1232:U:H4'	12:C0:2:LEU:HD21	1.95	0.49
40:L3:76:VAL:HG21	40:L3:323:MET:CE	3.21	0.49
7:S5:84:LYS:HD3	7:S5:92:ARG:NH2	5.60	0.49
34:SR:110:VAL:HA	34:SR:126:SER:HB2	1.94	0.49
36:1:1789:G:O6	86:1:4168:OHX:N4	2.46	0.49
27:D5:87:GLY:O	27:D5:89:ILE:N	2.42	0.49
7:S5:119:ASP:O	7:S5:123:VAL:HG23	2.85	0.49
36:1:3155:U:O2	86:1:4144:OHX:N3	2.46	0.49
36:5:2254:U:H2'	36:5:2261:G:N2	2.27	0.49
1:6:1081:A:H8	1:6:1081:A:OP2	1.95	0.49
39:L2:114:SER:OG	39:L2:115:ASN:N	2.98	0.49
44:L7:160:ARG:HB2	44:L7:203:TRP:CE2	2.71	0.49
18:C6:115:THR:HB	18:C6:118:ILE:O	2.12	0.49
2:S0:30:GLN:HE22	2:S0:32:HIS:HB2	8.76	0.49
52:M6:116:LYS:HE2	56:N0:165:TYR:HB3	1.94	0.49
6:S4:29:PRO:HA	1:6:448:C:H5'	367.62	0.49
13:C1:5:LEU:HD22	13:C1:5:LEU:H	4.56	0.49
10:S8:44:HIS:O	10:S8:56:ARG:N	2.91	0.49
6:S4:125:LYS:O	6:S4:141:THR:HA	2.46	0.49
55:M9:20:ARG:HG2	36:5:1875:G:OP2	137.51	0.49
43:L6:7:PRO:HD3	68:O2:74:PHE:CE1	3.90	0.49
75:O9:5:LYS:HD3	75:O9:13:MET:HE1	2.61	0.49
36:1:2153:U:OP1	39:L2:246:LEU:HB2	2.12	0.49
36:1:2843:U:H5''	36:1:2844:C:OP2	2.13	0.49
57:N1:17:ARG:HH11	57:N1:17:ARG:HB3	3.90	0.49
1:6:1371:A:H5'	1:6:1372:U:OP2	2.12	0.49
2:S0:90:ALA:HB1	2:S0:95:ALA:O	2.41	0.49
39:L2:104:LEU:HD11	39:L2:113:VAL:HG21	1.95	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D3:103:LEU:HB3	25:D3:126:LYS:HB2	1.93	0.49
48:M1:44:THR:O	37:7:39:C:O2'	299.67	0.49
36:5:776:U:H5	36:5:2719:U:O2	1.95	0.49
39:L2:64:ARG:HH22	45:L8:39:ALA:H	1.59	0.49
36:5:591:G:N2	36:5:612:U:OP1	2.34	0.49
25:D3:23:ARG:HD2	25:D3:26:GLU:OE1	2.31	0.49
36:5:238:A:H2'	36:5:239:G:C8	2.47	0.49
22:D0:68:ARG:HG2	22:D0:79:TRP:CD2	2.47	0.49
69:O3:19:SER:OG	36:5:1330:A:OP2	231.15	0.49
79:Q3:53:GLY:HA2	79:Q3:67:GLY:O	2.33	0.49
1:2:958:U:OP2	29:D7:20:LYS:HE3	2.12	0.49
38:4:47:C:H1'	38:4:61:A:H2'	1.94	0.49
36:1:1791:C:H2'	36:1:1792:C:C6	2.48	0.49
44:L7:143:THR:HG22	44:L7:241:LYS:HG3	1.95	0.49
54:M8:88:THR:HA	54:M8:107:THR:HG23	1.94	0.49
1:6:557:G:O2'	1:6:558:U:H4'	2.13	0.49
38:4:144:G:O2'	38:4:145:U:H5'	2.13	0.49
1:6:1015:U:OP1	86:6:2054:OHX:N3	2.45	0.49
42:L5:126:GLU:HA	42:L5:196:ARG:HD2	1.94	0.49
36:1:1634:G:OP1	63:N7:107:ARG:NH1	2.45	0.49
10:S8:6:ASP:OD1	10:S8:8:ARG:N	2.34	0.49
28:D6:95:ARG:NH1	1:6:1796:C:O2'	340.85	0.49
48:M1:156:LYS:O	48:M1:160:VAL:HG23	2.78	0.49
71:O5:89:ARG:HD2	38:8:38:U:C4	68.01	0.49
36:1:1560:G:O6	61:N5:36:LYS:NZ	2.46	0.49
44:L7:192:GLY:O	44:L7:194:HIS:N	2.90	0.49
67:O1:29:ALA:HB3	67:O1:30:PRO:HD3	2.11	0.49
38:8:26:U:H2'	38:8:27:U:C6	2.48	0.49
1:6:187:G:C6	1:6:197:A:N6	2.80	0.49
10:S8:76:THR:HG21	10:S8:109:PHE:HE1	1.77	0.49
1:6:1227:A:H4'	1:6:1228:G:C5'	2.40	0.49
1:6:219:A:O2'	1:6:220:A:O5'	2.29	0.49
36:1:1919:G:N7	86:1:4014:OHX:N5	2.61	0.49
8:S6:67:VAL:O	8:S6:68:LEU:HB2	2.31	0.49
8:S6:69:LEU:O	8:S6:101:ILE:HG13	2.13	0.49
10:S8:57:ALA:HB1	10:S8:60:ILE:HD11	1.94	0.49
49:M3:186:ARG:O	49:M3:190:LYS:HB3	2.12	0.49
75:O9:10:LYS:NZ	36:5:1833:G:OP1	105.14	0.49
34:SR:26:SER:OG	34:SR:75:ALA:O	2.27	0.49
57:N1:18:ASP:O	57:N1:21:LYS:N	3.22	0.49
1:2:900:A:OP1	16:C4:43:THR:OG1	2.24	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:48:ILE:HD12	39:L2:49:VAL:N	2.27	0.49
59:N3:62:VAL:CG2	59:N3:74:MET:HE1	2.43	0.49
36:1:728:G:H5'	54:M8:43:PRO:HB2	1.92	0.49
1:2:1226:A:C2	14:C2:116:VAL:HG11	2.46	0.49
66:O0:55:GLU:O	66:O0:59:TYR:HD1	1.95	0.49
52:M6:130:LYS:HA	36:5:1316:C:C4	297.30	0.49
36:5:209:A:H4'	36:5:211:A:N7	2.27	0.49
36:5:612:U:H2'	36:5:613:G:H8	1.78	0.49
1:2:526:A:H2'	1:2:527:A:O4'	2.13	0.49
36:1:853:G:N7	79:Q3:2:ALA:HB2	2.27	0.49
9:S7:157:LYS:O	9:S7:159:VAL:N	2.42	0.49
1:6:1321:A:H4'	1:6:1322:A:O5'	2.11	0.49
39:L2:105:GLY:HA2	39:L2:139:HIS:CD2	5.25	0.49
36:1:542:G:H1	36:1:549:U:H3	1.60	0.49
36:1:3100:U:O2'	36:1:3101:G:OP2	2.28	0.49
36:1:2631:U:OP1	36:1:2757:U:O2'	2.26	0.49
1:2:1147:A:H2'	1:2:1148:C:C6	2.48	0.49
36:1:3242:G:C2	36:1:3245:A:C8	3.00	0.49
68:O2:104:ASN:O	68:O2:108:ILE:HD12	3.88	0.49
36:5:1691:U:H2'	36:5:1692:U:C6	2.47	0.49
36:5:415:G:OP2	86:5:4215:OHX:N4	2.45	0.49
42:L5:85:ARG:HD3	42:L5:86:TYR:CE2	2.47	0.49
36:5:270:U:O2'	36:5:318:A:N3	2.34	0.49
40:L3:53:MET:HG3	40:L3:77:THR:HG22	2.17	0.49
24:D2:10:ALA:HB1	24:D2:27:ILE:HD12	1.95	0.49
7:S5:192:GLU:OE2	27:D5:61:SER:OG	3.62	0.49
3:S1:120:LEU:HD23	3:S1:121:ILE:N	2.28	0.49
1:6:1209:C:H42	1:6:1454:G:H1	1.61	0.49
22:D0:20:ILE:HG13	22:D0:95:ALA:O	2.13	0.49
45:L8:129:PRO:HB3	36:5:121:A:C2	101.57	0.49
44:L7:160:ARG:HB2	44:L7:203:TRP:CD2	2.53	0.49
18:C6:114:ARG:O	18:C6:115:THR:HB	3.78	0.49
36:5:981:U:H2'	36:5:982:C:O4'	2.13	0.49
1:6:1202:A:O2'	1:6:1205:C:N4	2.45	0.49
45:L8:156:ASP:HB2	45:L8:183:LYS:HD3	1.94	0.49
24:D2:5:SER:HB3	24:D2:8:ALA:HB3	2.57	0.49
63:N7:89:VAL:HG13	63:N7:90:GLU:OE2	4.17	0.49
21:C9:15:ILE:HD11	21:C9:63:ARG:HD2	4.88	0.49
34:SR:52:GLN:HG2	34:SR:53:LYS:N	2.40	0.49
53:M7:4:TYR:OH	53:M7:16:SER:OG	3.97	0.49
36:1:1815:U:O2'	36:1:1816:A:P	2.71	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1102:G:P	24:D2:76:SER:HB2	2.53	0.49
40:L3:259:HIS:NE2	36:5:2366:C:H5'	216.97	0.49
40:L3:256:HIS:HA	40:L3:257:PRO:C	2.32	0.49
36:1:1470:U:H2'	36:1:1471:U:C6	2.47	0.49
39:L2:159:SER:O	39:L2:161:ASP:N	3.31	0.49
36:5:172:G:C6	36:5:247:C:N4	2.81	0.49
36:5:381:U:H2'	36:5:382:U:C6	2.46	0.49
65:N9:23:LYS:HE3	65:N9:24:PRO:HD3	1.94	0.49
1:2:288:A:H2'	1:2:289:U:C6	2.47	0.49
64:N8:111:LYS:HD2	64:N8:129:PHE:HB3	2.39	0.49
36:1:2991:A:OP1	40:L3:20:LYS:HB2	2.11	0.49
2:S0:88:LYS:HE2	2:S0:88:LYS:HA	1.94	0.49
9:S7:38:LEU:HD23	9:S7:41:LEU:HD12	1.94	0.49
1:2:246:G:N3	13:C1:40:LEU:HD13	2.27	0.49
36:1:714:G:O2'	36:1:753:C:O2'	2.30	0.49
9:S7:51:VAL:HG23	9:S7:53:GLY:H	1.77	0.49
1:6:982:U:OP1	86:6:2074:OHX:N2	2.45	0.49
8:S6:12:SER:HB3	8:S6:124:LEU:HD12	1.93	0.49
36:5:996:A:H2'	36:5:997:A:O4'	2.12	0.49
6:S4:155:LYS:NZ	1:6:244:A:OP1	344.70	0.49
55:M9:6:THR:HG23	55:M9:9:ARG:HH21	1.78	0.49
36:1:334:A:C2	36:1:335:G:C5	3.01	0.49
36:5:2426:U:H2'	36:5:2427:U:C6	2.47	0.49
36:5:279:U:H2'	36:5:280:U:C6	2.48	0.49
42:L5:136:GLU:N	42:L5:136:GLU:OE2	5.11	0.49
1:6:1027:A:OP1	1:6:1789:G:O2'	2.24	0.49
11:S9:110:GLN:NE2	11:S9:122:VAL:O	2.45	0.49
1:2:1521:G:O6	21:C9:68:ARG:NH1	2.45	0.49
37:3:45:A:H2'	37:3:46:A:C8	2.48	0.49
55:M9:100:ARG:NE	36:5:1722:U:OP1	214.52	0.49
57:N1:104:GLU:HG3	57:N1:105:PHE:N	2.27	0.49
49:M3:91:ARG:HH12	49:M3:97:VAL:HB	1.76	0.49
35:SM:48:ARG:HA	36:5:1019:G:OP1	333.96	0.49
6:S4:121:TYR:CE2	6:S4:161:LYS:HE3	2.47	0.49
22:D0:74:GLU:HG2	1:6:1429:G:H1'	378.09	0.49
45:L8:133:LYS:HB3	45:L8:138:HIS:CE1	2.47	0.49
86:1:4032:OHX:N6	86:1:4045:OHX:N3	2.61	0.49
38:8:15:G:C6	38:8:16:G:N1	2.80	0.49
36:1:3070:A:C5	36:1:3071:U:C5	3.01	0.49
1:6:628:G:N2	1:6:970:A:OP2	2.40	0.49
1:2:109:G:C6	1:2:110:U:N3	2.81	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:461:G:H2'	1:2:462:G:C8	2.47	0.49
1:2:1236:A:H2'	1:2:1237:G:H8	1.78	0.49
20:C8:42:TYR:OH	20:C8:76:PRO:HG3	3.54	0.49
52:M6:14:HIS:CD2	52:M6:124:LEU:HD13	3.01	0.49
44:L7:125:GLU:O	44:L7:128:LYS:HB2	2.13	0.49
51:M5:194:GLN:NE2	36:5:99:A:OP1	123.69	0.49
51:M5:190:THR:O	51:M5:194:GLN:HG2	2.21	0.49
1:6:1491:U:H4'	1:6:1492:A:C5'	2.43	0.49
58:N2:58:GLU:HB2	58:N2:63:VAL:HA	3.59	0.49
42:L5:132:THR:OG1	42:L5:171:LEU:O	2.29	0.49
61:N5:103:TYR:O	61:N5:105:VAL:HG23	2.12	0.49
1:2:472:U:H5''	11:S9:11:THR:HG23	1.95	0.49
53:M7:27:LYS:HA	53:M7:63:PHE:CD2	2.69	0.49
25:D3:130:VAL:HG11	25:D3:143:PRO:HD3	1.95	0.49
5:S3:34:TYR:CE2	5:S3:37:VAL:HG22	4.46	0.49
36:5:2441:A:H61	36:5:2507:C:N4	2.11	0.49
45:L8:74:THR:HA	45:L8:77:GLN:HE21	2.47	0.49
36:5:1045:C:OP2	86:5:4171:OHX:N1	2.45	0.49
59:N3:80:ARG:HD3	59:N3:117:PRO:O	2.57	0.49
26:D4:62:THR:HA	26:D4:69:SER:HA	1.95	0.49
36:1:608:A:N6	43:L6:22:ARG:HD3	2.28	0.49
36:5:1205:A:H4'	36:5:2835:U:O2'	2.12	0.49
73:O7:18:LEU:HA	73:O7:25:ARG:H	1.77	0.49
36:1:2383:C:H5'	52:M6:71:PHE:HE2	1.77	0.49
36:5:1245:A:H5'	36:5:1247:U:OP2	2.13	0.49
40:L3:58:ARG:HD2	40:L3:354:VAL:HG12	1.94	0.49
1:2:1219:A:H3'	1:2:1220:C:C6	2.48	0.49
47:M0:200:LEU:HD13	47:M0:213:PHE:CD1	2.48	0.49
55:M9:130:ASN:C	55:M9:132:PHE:H	2.16	0.49
5:S3:217:ILE:HG22	5:S3:218:LEU:H	1.78	0.49
31:D9:53:ASN:HB2	31:D9:55:PHE:CE2	3.68	0.49
36:1:2862:U:H2'	36:1:2863:G:O4'	2.12	0.49
64:N8:21:ARG:HD2	36:5:1369:A:H5'	185.70	0.49
36:1:156:G:OP2	72:O6:25:LYS:HB3	2.12	0.49
51:M5:109:ARG:NH1	38:8:141:C:OP1	120.82	0.49
51:M5:38:ARG:NH1	38:8:142:C:OP1	112.68	0.49
22:D0:70:THR:O	31:D9:40:ARG:NH1	2.46	0.49
48:M1:59:ILE:HG22	48:M1:65:ILE:HD11	1.95	0.49
34:SR:246:SER:HB3	34:SR:251:TRP:HB2	2.10	0.49
23:D1:36:VAL:HG12	23:D1:51:VAL:HB	2.11	0.49
13:C1:46:LYS:HE2	1:6:846:G:N2	312.01	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:51:GLY:N	1:6:397:A:H5''	313.05	0.49
42:L5:260:PHE:CE2	37:7:121:U:H5'	320.08	0.49
1:2:801:G:N2	1:2:802:G:H1'	2.28	0.49
10:S8:12:SER:OG	10:S8:16:ALA:HB3	2.12	0.49
36:5:945:C:H2'	36:5:946:U:C6	2.47	0.49
20:C8:86:LEU:HD12	20:C8:99:HIS:CD2	2.48	0.49
25:D3:110:LYS:O	25:D3:112:LYS:HG2	2.12	0.49
6:S4:179:LYS:N	6:S4:194:THR:O	2.46	0.49
2:S0:17:LEU:HD23	2:S0:22:THR:HG21	2.54	0.49
18:C6:34:SER:HB3	18:C6:38:LEU:HD12	1.95	0.49
36:1:665:A:H1'	49:M3:14:PHE:CE1	2.47	0.49
46:L9:88:TYR:CE2	46:L9:184:LYS:HG2	2.48	0.49
14:C2:131:ASP:OD1	14:C2:132:GLU:N	2.40	0.49
70:O4:88:ARG:NH1	36:5:2556:C:OP1	200.18	0.49
39:L2:189:TYR:HA	39:L2:192:LYS:HB2	2.29	0.49
57:N1:82:ASN:OD1	57:N1:82:ASN:N	2.39	0.49
1:2:497:G:O2'	1:2:498:G:C8	2.63	0.49
29:D7:29:ARG:HH11	29:D7:29:ARG:HG3	1.77	0.49
36:5:715:A:H4'	36:5:716:A:OP1	2.13	0.49
36:1:2220:A:N6	36:1:2221:G:C6	2.81	0.49
47:M0:89:VAL:HG13	47:M0:136:PHE:CE1	2.48	0.49
1:2:1657:U:H5	36:1:2125:A:O3'	1.94	0.49
1:2:1111:G:C2	1:2:1112:G:H1'	2.48	0.49
36:1:637:C:H4'	36:1:638:C:OP1	2.12	0.49
52:M6:72:HIS:O	52:M6:74:ARG:NH1	2.45	0.49
17:C5:67:ALA:O	17:C5:69:GLU:N	2.46	0.49
1:6:1182:U:O2'	1:6:1184:A:N7	2.31	0.49
36:1:2635:A:H4'	36:1:2636:A:O5'	2.12	0.49
25:D3:134:ALA:HB1	25:D3:140:LYS:HG3	4.98	0.49
36:1:2093:A:H3'	36:1:2093:A:N3	2.28	0.49
36:5:1782:U:C4	36:5:1783:U:C4	3.01	0.49
21:C9:122:ARG:NH2	1:6:1500:C:OP1	419.15	0.49
42:L5:41:LYS:NZ	57:N1:32:LYS:O	2.43	0.49
57:N1:68:THR:OG1	57:N1:71:SER:HB2	2.13	0.49
36:5:3288:G:O2'	36:5:3289:G:OP2	2.28	0.49
52:M6:68:ARG:NH1	36:5:2988:C:P	216.26	0.49
1:2:1796:C:C5	28:D6:5:ARG:HA	2.48	0.49
1:6:538:A:C8	1:6:543:C:N4	2.75	0.49
86:6:2118:OHX:N2	86:6:2170:OHX:N5	2.61	0.49
22:D0:70:THR:HG23	1:6:1280:C:O2'	388.55	0.49
42:L5:158:ARG:HD2	37:7:47:C:OP2	283.65	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:979:U:H1'	36:1:980:A:N9	2.26	0.49
73:O7:21:ARG:HH11	73:O7:44:THR:HG23	1.78	0.49
46:L9:163:GLN:HB3	46:L9:166:ARG:HH11	1.78	0.49
1:2:734:A:H4'	1:2:735:C:H5'	1.95	0.49
50:M4:23:ILE:HG13	50:M4:31:LYS:O	3.52	0.49
36:1:1636:U:H5''	63:N7:73:LYS:HZ2	1.78	0.49
72:O6:4:LYS:HD2	72:O6:13:LYS:O	2.13	0.49
36:1:1237:G:H2'	36:1:1237:G:N3	2.28	0.49
36:1:860:G:H5'	36:1:861:C:H5'	1.95	0.49
36:5:2373:A:N7	36:5:2867:C:H1'	2.28	0.49
1:6:445:A:C2	1:6:446:A:C8	3.01	0.49
1:2:331:A:H4'	10:S8:31:ARG:O	2.12	0.49
36:1:2206:G:C8	36:1:2206:G:OP2	2.66	0.49
57:N1:76:ILE:HG13	57:N1:89:LEU:HD22	3.01	0.49
10:S8:164:ARG:O	10:S8:165:LEU:HD23	3.10	0.49
19:C7:51:ALA:HA	19:C7:54:THR:HG23	1.94	0.49
9:S7:60:ILE:HD11	9:S7:90:VAL:HG13	2.21	0.49
64:N8:90:TYR:CG	64:N8:100:PRO:HG3	2.47	0.49
3:S1:33:LYS:HD2	3:S1:232:HIS:ND1	9.52	0.49
1:2:489:C:H42	1:2:497:G:H22	1.59	0.49
36:1:781:G:O6	86:1:3941:OHX:N5	2.45	0.49
1:6:1213:G:O2'	1:6:1244:A:N6	2.45	0.49
38:8:96:A:H2'	38:8:96:A:N3	2.27	0.49
39:L2:112:ILE:HG22	39:L2:135:ILE:HG12	5.62	0.49
39:L2:233:GLN:HG2	36:5:2607:G:H5'	192.84	0.49
47:M0:179:PRO:HA	47:M0:182:LEU:HD12	1.94	0.49
36:1:1029:G:H2'	36:1:1030:A:C8	2.48	0.49
36:5:589:A:H1'	36:5:1337:A:H5''	1.94	0.49
25:D3:51:GLY:HA2	25:D3:77:ILE:HG13	1.94	0.49
38:8:124:G:OP2	86:8:225:OHX:N2	2.46	0.49
40:L3:97:ARG:NH1	36:5:3244:A:N1	245.03	0.49
38:4:113:U:H5''	75:O9:7:PHE:HB3	1.95	0.49
19:C7:99:VAL:CB	19:C7:118:PRO:HB2	2.43	0.49
36:1:656:A:H2'	36:1:657:A:C8	2.47	0.49
21:C9:86:ARG:HB2	21:C9:89:ARG:HB2	3.14	0.49
86:5:3971:OHX:N6	86:5:4193:OHX:N5	2.61	0.49
47:M0:61:SER:HB2	47:M0:63:GLU:HG2	2.01	0.49
1:2:1795:U:O4	28:D6:9:GLY:HA2	2.13	0.49
36:1:3087:A:P	86:1:4180:OHX:N5	2.85	0.49
72:O6:62:ARG:O	72:O6:63:ASN:ND2	5.47	0.49
36:1:1559:A:H4'	36:1:1560:G:OP2	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1586:A:H2'	1:2:1587:A:O4'	2.13	0.49
51:M5:94:TYR:CE2	51:M5:96:ARG:HB2	2.48	0.49
3:S1:110:LEU:HD21	3:S1:213:ARG:HD2	1.95	0.49
6:S4:118:GLU:HA	6:S4:121:TYR:CE1	2.87	0.49
6:S4:120:SER:O	6:S4:164:LEU:HB2	2.13	0.49
14:C2:50:LYS:NZ	33:E1:106:TYR:OH	2.46	0.49
59:N3:11:PHE:CZ	59:N3:88:ARG:HD2	2.48	0.49
1:2:1253:U:H2'	1:2:1254:U:C6	2.48	0.49
45:L8:161:GLU:OE2	51:M5:26:ARG:NH2	2.91	0.49
30:D8:26:THR:O	30:D8:44:VAL:HG22	2.43	0.49
9:S7:82:GLU:OE2	9:S7:165:LYS:NZ	2.41	0.49
53:M7:41:LEU:O	53:M7:41:LEU:HD22	2.21	0.49
44:L7:130:ILE:O	44:L7:134:VAL:HG22	2.13	0.49
64:N8:131:SER:HB3	64:N8:134:ALA:CB	2.65	0.49
44:L7:219:LYS:O	44:L7:228:SER:HB2	2.58	0.49
54:M8:26:LEU:O	54:M8:30:VAL:HG23	2.18	0.49
1:2:1539:G:O4'	20:C8:40:ARG:NH1	2.46	0.49
71:O5:47:VAL:HA	71:O5:50:SER:HB2	2.81	0.49
36:5:1348:U:C6	36:5:1355:A:C5	3.00	0.49
36:5:3258:U:O2'	36:5:3260:G:OP1	2.27	0.49
1:2:487:G:H3'	1:2:488:G:H5''	1.95	0.49
1:2:1162:C:H1'	1:2:1616:G:N2	2.28	0.49
49:M3:106:GLN:HA	72:O6:20:MET:SD	2.91	0.49
51:M5:37:HIS:CD2	51:M5:63:ARG:HB3	2.48	0.49
38:4:125:U:O2'	38:4:126:A:P	2.71	0.49
36:1:2373:A:H3'	36:1:2373:A:OP2	2.13	0.49
60:N4:25:ASP:OD2	60:N4:26:SER:N	4.73	0.49
44:L7:59:GLU:O	44:L7:63:ILE:HG13	2.13	0.49
58:N2:90:ARG:O	58:N2:91:ASP:HB2	2.54	0.49
33:E1:102:VAL:O	33:E1:104:SER:N	2.41	0.49
20:C8:8:GLN:C	20:C8:10:SER:H	2.39	0.49
36:5:201:A:OP2	86:5:3980:OHX:N1	2.45	0.49
36:1:3280:U:O2'	36:1:3281:U:H5''	2.13	0.49
36:5:1443:G:O6	86:5:4003:OHX:N5	2.46	0.49
36:1:1155:C:P	44:L7:94:LYS:HZ1	2.35	0.49
36:1:2948:C:H2'	36:1:2949:U:O4'	2.13	0.49
43:L6:165:LEU:HD11	69:O3:102:LEU:HD11	1.95	0.49
75:O9:34:THR:O	75:O9:36:ARG:HG2	6.07	0.49
39:L2:205:ASN:HB3	39:L2:206:PRO:HD2	2.68	0.49
36:1:1587:A:OP1	86:1:3943:OHX:N6	2.46	0.49
79:Q3:86:LEU:O	79:Q3:89:MET:HB2	2.12	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:11:ILE:HD12	12:C0:42:VAL:HA	1.94	0.49
26:D4:98:GLU:OE1	26:D4:99:LYS:N	5.44	0.49
44:L7:169:ILE:HD13	44:L7:181:ILE:HA	1.93	0.49
36:1:2585:G:C6	61:N5:24:LEU:HD13	2.48	0.49
36:5:3163:A:C6	36:5:3164:C:N4	2.81	0.48
28:D6:4:LYS:HG2	28:D6:5:ARG:HG3	5.93	0.48
39:L2:30:ARG:HB2	39:L2:36:GLU:OE2	2.13	0.48
5:S3:77:PHE:HB2	5:S3:79:TYR:CE2	2.88	0.48
36:1:1580:A:H1'	36:1:1581:C:H5	1.77	0.48
6:S4:19:LEU:HD13	1:6:788:A:C4	393.41	0.48
47:M0:181:TYR:O	47:M0:184:LYS:N	2.90	0.48
36:5:437:G:H1	36:5:622:A:H61	1.60	0.48
9:S7:96:ARG:HH22	9:S7:128:ASP:CG	2.74	0.48
35:SM:36:ASP:OD1	48:M1:53:THR:OG1	2.31	0.48
1:6:230:C:N4	1:6:235:G:H1	2.05	0.48
27:D5:55:PRO:HB2	27:D5:103:ARG:HH11	1.77	0.48
17:C5:130:ARG:HH12	35:SM:71:ASN:HA	1.78	0.48
63:N7:9:LYS:HG3	63:N7:10:VAL:O	2.12	0.48
47:M0:75:TYR:CZ	47:M0:79:VAL:HG21	3.35	0.48
3:S1:212:VAL:O	3:S1:214:LYS:N	2.38	0.48
36:1:1573:G:C2	36:1:1574:C:H1'	2.48	0.48
4:S2:53:ILE:HG23	4:S2:72:LEU:HD23	1.95	0.48
36:1:2339:C:P	59:N3:48:ARG:HG3	2.53	0.48
13:C1:129:ARG:HG3	13:C1:129:ARG:O	2.46	0.48
1:2:144:U:H5	8:S6:137:ARG:NH1	2.11	0.48
1:2:463:U:C2	1:2:464:A:C8	3.01	0.48
1:6:1488:G:O2'	1:6:1494:C:O2	2.16	0.48
46:L9:174:LYS:O	46:L9:174:LYS:HG3	2.12	0.48
61:N5:65:GLN:O	61:N5:85:GLN:N	2.67	0.48
71:O5:21:LEU:HD22	71:O5:25:LYS:HE2	1.95	0.48
68:O2:124:GLY:C	68:O2:126:LEU:H	2.51	0.48
70:O4:54:ILE:HD11	70:O4:78:GLY:HA2	2.08	0.48
10:S8:146:ARG:NH2	1:6:186:C:OP1	275.14	0.48
51:M5:44:ARG:HH12	36:5:269:G:P	126.20	0.48
66:O0:73:GLY:O	66:O0:76:GLU:HG2	2.13	0.48
1:6:1237:G:H2'	1:6:1238:A:C8	2.48	0.48
36:1:2790:A:OP2	54:M8:181:SER:HB3	2.13	0.48
36:5:247:C:C2	36:5:248:U:H1'	2.48	0.48
68:O2:12:LYS:HE2	68:O2:56:GLY:O	2.13	0.48
40:L3:250:ALA:HB1	36:5:2947:G:C2	219.52	0.48
76:Q0:97:ARG:HG3	76:Q0:120:GLN:O	2.15	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:22:ARG:NH1	36:5:608:A:C4	241.73	0.48
36:1:1757:A:OP1	58:N2:94:ARG:NH2	2.41	0.48
36:5:2239:G:OP2	86:5:4187:OHX:N6	2.46	0.48
40:L3:97:ARG:NH1	36:5:3244:A:C2	244.12	0.48
36:1:2505:U:H2'	36:1:2506:U:C6	2.48	0.48
36:1:1204:A:H2	36:1:2834:G:N3	2.11	0.48
50:M4:92:GLU:HA	50:M4:95:ALA:HB3	1.93	0.48
69:O3:90:PRO:O	69:O3:92:LYS:N	2.44	0.48
36:1:2440:G:H1	36:1:2507:C:H42	1.60	0.48
36:5:1152:G:H8	36:5:1152:G:O5'	1.96	0.48
43:L6:170:LYS:NZ	69:O3:34:GLY:O	3.82	0.48
36:5:3160:U:H2'	36:5:3161:C:C6	2.48	0.48
36:1:1901:A:H5''	36:1:2919:A:OP1	2.13	0.48
1:2:708:C:C2	1:2:709:C:H5	2.31	0.48
47:M0:32:ARG:NH1	47:M0:32:ARG:HG2	2.27	0.48
10:S8:8:ARG:NH2	10:S8:21:PHE:HB3	2.28	0.48
64:N8:126:LYS:HB3	64:N8:148:ILE:HD13	1.94	0.48
51:M5:38:ARG:HH22	38:8:143:U:P	107.73	0.48
38:8:36:G:N2	38:8:37:A:N1	2.60	0.48
36:5:2107:A:C2	36:5:2108:C:C2	3.00	0.48
27:D5:43:ASP:HB2	27:D5:46:LYS:HE3	2.78	0.48
6:S4:43:PRO:HA	6:S4:82:TYR:O	2.14	0.48
51:M5:93:LYS:HG3	36:5:289:A:N3	144.56	0.48
52:M6:102:LEU:HD12	52:M6:103:LYS:N	2.28	0.48
36:5:1096:U:H4'	36:5:1097:G:O5'	2.13	0.48
36:1:3040:A:OP1	59:N3:12:ARG:N	2.36	0.48
1:6:1458:G:N2	1:6:1459:C:C2	2.81	0.48
1:2:1350:U:H5'	18:C6:68:ARG:NH2	2.28	0.48
2:S0:52:LYS:NZ	23:D1:82:VAL:O	2.37	0.48
36:1:2571:U:O2'	36:1:2572:C:O2	2.30	0.48
36:1:1158:A:H8	36:1:1158:A:O5'	1.95	0.48
41:L4:209:TYR:O	41:L4:230:VAL:HG22	2.62	0.48
1:2:1547:A:H5'	20:C8:112:ASP:OD2	2.13	0.48
2:S0:185:ARG:HB3	2:S0:186:GLY:H	4.30	0.48
9:S7:98:ILE:HD11	9:S7:121:VAL:HG11	1.95	0.48
18:C6:31:VAL:C	18:C6:33:GLY:H	2.33	0.48
51:M5:50:ARG:NH1	36:5:267:G:H4'	112.19	0.48
1:6:107:C:N4	1:6:307:G:H1	2.11	0.48
4:S2:40:LYS:HA	4:S2:43:ARG:HH12	1.78	0.48
63:N7:41:ALA:O	63:N7:43:VAL:HG13	2.96	0.48
40:L3:128:LYS:HG3	36:5:3294:A:H5'	197.83	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:54:GLU:N	4:S2:54:GLU:OE2	3.20	0.48
13:C1:101:GLU:OE2	25:D3:16:ARG:NH2	3.16	0.48
67:O1:11:GLU:OE2	67:O1:74:ARG:NH2	2.46	0.48
36:1:2320:A:C2	79:Q3:16:VAL:HG12	2.48	0.48
46:L9:3:TYR:H	46:L9:60:GLY:H	1.59	0.48
58:N2:94:ARG:HD3	58:N2:108:TYR:HE1	3.95	0.48
6:S4:21:ASP:HB2	1:6:773:C:OP1	388.35	0.48
1:2:830:U:O2'	1:2:831:U:H6	1.97	0.48
36:5:2910:A:N1	86:5:3896:OHX:N4	2.62	0.48
45:L8:121:SER:O	45:L8:123:GLN:N	2.45	0.48
36:1:1782:U:H2'	36:1:1783:U:O4'	2.13	0.48
1:6:988:A:C6	1:6:989:U:C2	3.01	0.48
36:5:3316:A:OP1	36:5:3318:G:N2	2.32	0.48
36:1:1916:U:H2'	36:1:1917:C:C6	2.48	0.48
36:5:2429:G:OP2	86:5:4040:OHX:N5	2.45	0.48
36:1:612:U:OP1	43:L6:21:THR:HB	2.13	0.48
36:5:2861:U:H2'	36:5:2862:U:O4'	2.13	0.48
34:SR:244:ALA:O	34:SR:294:TRP:NE1	2.43	0.48
52:M6:17:GLY:HA3	36:5:1313:G:O3'	266.63	0.48
40:L3:114:VAL:HG22	40:L3:163:HIS:CE1	2.86	0.48
17:C5:40:ARG:NH1	1:6:1556:A:O2'	384.56	0.48
51:M5:204:LYS:HE3	36:5:683:U:OP1	107.23	0.48
50:M4:108:ARG:NH1	50:M4:112:LEU:HD23	4.01	0.48
34:SR:184:ASN:O	34:SR:185:GLN:NE2	6.48	0.48
36:5:90:C:C2'	36:5:91:G:H5'	2.43	0.48
57:N1:95:HIS:O	57:N1:96:ILE:HD13	2.23	0.48
41:L4:328:ASN:OD1	41:L4:330:TYR:HB3	2.14	0.48
62:N6:72:SER:O	62:N6:80:VAL:HG23	3.92	0.48
59:N3:118:VAL:O	59:N3:137:VAL:N	2.38	0.48
36:1:155:G:H1'	72:O6:26:ILE:HD13	1.95	0.48
1:6:1160:A:H2'	1:6:1161:C:H6	1.77	0.48
1:6:1579:U:P	86:6:2182:OHX:N3	2.86	0.48
11:S9:30:LEU:HD23	11:S9:34:PHE:HE2	3.04	0.48
71:O5:78:LYS:HA	71:O5:81:ARG:HD2	1.95	0.48
36:1:1560:G:C6	36:1:1561:G:N7	2.81	0.48
31:D9:47:ALA:HA	31:D9:50:ILE:HD12	2.40	0.48
36:1:1940:G:N2	36:1:3362:A:C8	2.80	0.48
4:S2:140:ARG:HH22	4:S2:228:ASN:ND2	2.08	0.48
39:L2:3:ARG:HD3	36:5:911:C:H42	178.70	0.48
1:2:196:G:O2'	1:2:197:A:P	2.71	0.48
17:C5:121:ILE:HG12	17:C5:123:TYR:H	5.11	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:C2:45:LEU:HB2	1:6:1228:G:OP1	462.48	0.48
1:2:582:U:H5'	1:2:583:C:H5	1.78	0.48
19:C7:105:GLN:HA	19:C7:108:ASP:HB2	1.95	0.48
1:2:142:G:C5	1:2:266:A:C6	3.00	0.48
40:L3:298:PHE:HD2	40:L3:357:LYS:O	1.95	0.48
86:1:4032:OHX:N2	86:1:4045:OHX:N5	2.61	0.48
36:1:1018:G:H2'	36:1:1019:G:O4'	2.13	0.48
36:1:1564:U:H2'	36:1:1565:G:C8	2.47	0.48
46:L9:48:VAL:HG21	46:L9:52:LEU:HD13	3.16	0.48
1:2:823:G:O2'	1:2:824:G:O5'	2.31	0.48
55:M9:172:ARG:O	55:M9:176:ARG:HG2	2.26	0.48
38:4:14:C:OP1	53:M7:123:PRO:HD3	2.13	0.48
20:C8:17:LEU:O	20:C8:20:THR:N	3.32	0.48
58:N2:89:LEU:HB3	58:N2:93:ILE:HD13	3.63	0.48
54:M8:63:SER:O	54:M8:67:ILE:HG13	3.36	0.48
36:1:2273:G:N7	86:1:4139:OHX:N5	2.62	0.48
43:L6:10:TYR:HB2	36:5:1353:U:O2	171.84	0.48
36:1:2616:C:H3'	36:1:2617:U:O2	2.13	0.48
26:D4:124:ARG:NH2	1:6:151:G:N7	321.26	0.48
36:1:440:A:OP1	36:1:494:G:H1'	2.13	0.48
36:5:3103:A:OP2	86:5:4153:OHX:N4	2.46	0.48
36:5:2102:U:H2'	36:5:2103:U:H6	1.78	0.48
1:2:1151:A:H2'	1:2:1152:A:C8	2.48	0.48
30:D8:65:ARG:HG3	30:D8:66:LEU:N	2.28	0.48
36:1:2984:C:C2	36:1:2985:C:C5	3.01	0.48
56:N0:1:MET:HB3	56:N0:118:PHE:CE2	4.58	0.48
41:L4:191:LYS:HG2	41:L4:194:TYR:CE2	2.48	0.48
7:S5:146:THR:HG23	7:S5:221:ALA:HA	1.94	0.48
36:1:304:G:H5'	36:1:304:G:N3	2.28	0.48
10:S8:35:ASN:HB3	10:S8:37:LYS:NZ	4.25	0.48
36:1:1947:G:H1	36:1:2101:C:H42	1.61	0.48
36:1:3279:A:C2'	36:1:3280:U:H5'	2.43	0.48
12:C0:7:ASP:O	12:C0:11:ILE:HG12	2.12	0.48
52:M6:89:SER:O	52:M6:91:LYS:N	2.46	0.48
36:1:2257:C:H2'	36:1:2258:U:O4'	2.12	0.48
10:S8:197:THR:HA	10:S8:200:LYS:HB2	1.95	0.48
45:L8:81:THR:OG1	45:L8:181:LYS:HB2	3.18	0.48
39:L2:111:THR:HB	39:L2:136:ILE:HD13	1.95	0.48
36:5:920:A:OP1	36:5:922:U:H5	1.97	0.48
2:S0:135:GLU:O	2:S0:138:TYR:HB2	2.36	0.48
38:4:67:U:H5''	73:O7:84:SER:O	2.12	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:O7:84:SER:O	73:O7:85:LYS:HB3	3.78	0.48
20:C8:97:ASP:N	20:C8:97:ASP:OD2	2.46	0.48
36:1:2775:U:H2'	36:1:2776:C:C6	2.48	0.48
47:M0:53:VAL:N	47:M0:164:LYS:O	3.23	0.48
25:D3:24:TRP:HE3	25:D3:30:LYS:HE2	4.62	0.48
5:S3:84:ILE:HD13	5:S3:85:VAL:N	2.28	0.48
78:Q2:46:LYS:O	86:Q2:502:OHX:N6	2.46	0.48
1:2:1515:A:OP2	5:S3:7:LYS:HB2	2.13	0.48
7:S5:69:PHE:CE2	18:C6:53:LEU:HD12	2.49	0.48
51:M5:98:LEU:HD22	51:M5:128:LYS:NZ	5.32	0.48
7:S5:77:TYR:HB3	7:S5:84:LYS:HA	1.94	0.48
36:1:1345:G:H21	41:L4:307:GLN:NE2	2.04	0.48
5:S3:132:LYS:HB3	5:S3:189:MET:HG3	2.40	0.48
5:S3:170:THR:HG22	5:S3:171:ALA:H	1.78	0.48
40:L3:81:THR:HG21	40:L3:205:VAL:HG11	2.24	0.48
1:2:73:U:O2'	1:2:74:U:C2	2.65	0.48
36:1:13:A:H5'	36:1:14:U:OP2	2.12	0.48
1:6:1557:U:O2'	1:6:1558:U:H2'	2.12	0.48
1:6:1553:G:N2	1:6:1555:A:H3'	2.29	0.48
70:O4:103:LYS:HA	70:O4:103:LYS:HD3	1.68	0.48
53:M7:30:ARG:HA	53:M7:119:VAL:CG1	2.76	0.48
1:2:328:A:H2'	1:2:329:G:O4'	2.13	0.48
40:L3:19:ARG:HG3	40:L3:273:HIS:CE1	2.49	0.48
36:1:1573:G:N2	36:1:1574:C:O2'	2.47	0.48
44:L7:132:PRO:HA	44:L7:229:PHE:CE2	2.71	0.48
45:L8:26:LEU:HD13	63:N7:53:VAL:HG11	1.95	0.48
40:L3:147:GLU:O	40:L3:150:ARG:HB3	2.48	0.48
1:6:398:G:O5'	1:6:398:G:H8	1.97	0.48
86:6:2058:OHX:N5	86:6:2145:OHX:N3	2.62	0.48
24:D2:103:ILE:HG22	24:D2:112:ASP:HA	5.19	0.48
49:M3:17:HIS:O	49:M3:20:GLU:HB2	2.13	0.48
1:6:1756:A:H2'	1:6:1757:G:C8	2.47	0.48
36:1:3199:G:H5''	50:M4:6:ILE:HG21	1.94	0.48
68:O2:19:ARG:HG3	68:O2:31:ASN:O	2.12	0.48
40:L3:33:PRO:HG2	40:L3:340:LYS:HB2	1.94	0.48
42:L5:95:TRP:HZ3	42:L5:156:GLY:O	8.59	0.48
4:S2:38:VAL:HG22	4:S2:39:THR:H	1.79	0.48
36:5:1806:A:H2'	36:5:1807:G:O4'	2.14	0.48
15:C3:61:THR:OG1	15:C3:62:GLN:N	2.67	0.48
1:6:1237:G:H2'	1:6:1238:A:H8	1.77	0.48
40:L3:261:MET:O	40:L3:264:VAL:HG13	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:623:A:OP1	86:2:2157:OHX:N2	2.46	0.48
1:2:623:A:OP2	86:2:2157:OHX:N4	2.46	0.48
68:O2:22:SER:OG	68:O2:23:ASP:N	2.45	0.48
68:O2:24:ARG:HG2	68:O2:25:TYR:CE1	2.65	0.48
46:L9:75:VAL:HA	46:L9:78:MET:CE	2.75	0.48
50:M4:103:ILE:O	50:M4:107:GLU:HG3	2.13	0.48
36:5:2610:G:H2'	36:5:2611:U:O4'	2.14	0.48
36:5:1240:A:H2'	36:5:1241:U:H5'	1.94	0.48
36:1:83:U:H2'	36:1:84:U:O4'	2.13	0.48
48:M1:38:GLU:HB2	48:M1:45:PRO:HD3	2.50	0.48
10:S8:122:GLY:O	86:S8:302:OHX:N5	2.46	0.48
36:5:2318:U:O4	86:5:3989:OHX:N6	2.45	0.48
52:M6:15:LEU:HD11	52:M6:129:LEU:HD13	2.53	0.48
19:C7:115:LEU:HD13	19:C7:116:LYS:H	1.78	0.48
31:D9:49:ASP:OD1	31:D9:49:ASP:N	2.47	0.48
57:N1:137:GLU:HA	57:N1:137:GLU:OE1	4.00	0.48
2:S0:133:ILE:H	2:S0:133:ILE:HD12	1.78	0.48
19:C7:72:LYS:HA	19:C7:72:LYS:HE3	4.56	0.48
1:6:1110:G:N2	1:6:1136:U:H1'	2.28	0.48
8:S6:175:ILE:HG12	1:6:78:A:H1'	337.91	0.48
78:Q2:16:THR:OG1	78:Q2:17:CYS:N	3.39	0.48
1:2:478:A:OP1	32:E0:37:ARG:NH1	2.46	0.48
36:1:3087:A:H2'	36:1:3088:G:O4'	2.12	0.48
71:O5:85:THR:CG2	71:O5:87:ALA:H	2.26	0.48
5:S3:10:LYS:O	5:S3:14:ASP:N	2.37	0.48
60:N4:6:ASP:OD1	60:N4:32:GLN:N	2.76	0.48
3:S1:137:ILE:HD13	3:S1:172:LEU:HD13	3.80	0.48
3:S1:201:THR:HG21	3:S1:207:LEU:HD22	1.96	0.48
34:SR:249:ARG:NH2	34:SR:315:VAL:HG11	2.28	0.48
2:S0:52:LYS:HB3	23:D1:82:VAL:HG22	1.95	0.48
41:L4:6:VAL:HG21	41:L4:255:PHE:CZ	2.48	0.48
45:L8:108:ARG:NE	45:L8:112:GLU:OE2	2.46	0.48
40:L3:296:THR:CG2	40:L3:299:ASP:H	2.26	0.48
30:D8:21:SER:H	30:D8:67:ARG:HA	3.58	0.48
55:M9:105:LEU:HD11	55:M9:139:VAL:HG23	1.96	0.48
50:M4:24:LYS:HG2	50:M4:62:GLN:O	2.12	0.48
1:2:68:A:O2'	1:2:69:G:OP2	2.32	0.48
36:1:44:U:OP1	51:M5:84:PRO:HG2	2.13	0.48
6:S4:124:GLY:HA2	6:S4:142:HIS:HE1	1.78	0.48
6:S4:248:ILE:HA	6:S4:251:GLU:HG3	3.92	0.48
71:O5:28:LEU:O	71:O5:32:LYS:HG3	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:124:THR:HB	2:S0:174:TRP:HE1	3.49	0.48
48:M1:82:ARG:HG3	48:M1:112:LEU:HB2	1.94	0.48
86:1:4193:OHX:N4	43:L6:129:GLU:HB3	2.28	0.48
1:2:1449:U:H2'	1:2:1450:U:C6	2.48	0.48
58:N2:18:ASP:OD2	58:N2:20:SER:OG	2.19	0.48
42:L5:244:HIS:O	42:L5:248:ARG:HG3	2.14	0.48
36:5:776:U:C5	36:5:2719:U:O2	2.67	0.48
70:O4:22:VAL:CG1	70:O4:30:LEU:HD22	2.42	0.48
79:Q3:79:VAL:O	79:Q3:82:THR:N	3.10	0.48
1:6:1665:U:O4	86:6:2121:OHX:N6	2.46	0.48
36:5:1839:A:N6	36:5:1843:C:C2	2.81	0.48
50:M4:39:ILE:HB	50:M4:43:LYS:HB3	3.40	0.48
36:1:3393:U:H2'	36:1:3394:U:C6	2.49	0.48
1:6:1013:A:H2'	1:6:1014:G:O4'	2.12	0.48
44:L7:94:LYS:HA	36:5:1139:G:O3'	231.67	0.48
36:5:3317:U:H4'	36:5:3318:G:O5'	2.14	0.48
50:M4:50:LYS:HE3	50:M4:86:ALA:HB2	1.95	0.48
9:S7:61:PHE:HA	9:S7:93:LEU:O	2.12	0.48
44:L7:86:VAL:HG21	44:L7:127:LEU:HD21	2.53	0.48
5:S3:6:SER:N	1:6:1514:U:H1'	440.54	0.48
41:L4:286:VAL:HG11	54:M8:31:LYS:HD2	4.47	0.48
42:L5:33:ARG:NH2	37:7:7:G:O3'	270.28	0.48
36:1:181:U:O3'	73:O7:75:LYS:HD3	2.14	0.48
67:O1:41:LYS:O	67:O1:45:GLY:HA2	2.75	0.48
52:M6:39:GLU:OE1	52:M6:39:GLU:N	2.35	0.48
42:L5:3:PHE:CD2	42:L5:3:PHE:N	2.81	0.48
42:L5:3:PHE:HD2	42:L5:3:PHE:N	2.11	0.48
36:5:1226:G:H2'	36:5:1227:C:C6	2.48	0.48
22:D0:31:VAL:HB	22:D0:32:LYS:HD2	5.57	0.48
47:M0:171:TRP:O	47:M0:174:THR:HG22	2.14	0.48
51:M5:65:ARG:HG2	51:M5:127:TYR:CD1	3.89	0.48
47:M0:12:GLN:OE1	47:M0:128:ARG:HB3	2.13	0.48
19:C7:24:LEU:HD21	19:C7:34:LEU:HD22	1.96	0.48
19:C7:34:LEU:HD23	19:C7:38:ILE:HG21	1.96	0.48
3:S1:185:THR:O	3:S1:189:ILE:HG13	2.13	0.48
7:S5:82:PHE:CE2	30:D8:49:ARG:HB3	2.48	0.48
2:S0:66:ALA:HB2	23:D1:37:ALA:HB2	2.01	0.48
36:5:2261:G:O2'	36:5:2263:C:N4	2.47	0.48
36:5:2525:G:O3'	36:5:2526:C:H6	1.97	0.48
10:S8:100:ALA:O	10:S8:101:ILE:HG12	4.11	0.48
8:S6:63:MET:HA	8:S6:98:ARG:O	2.25	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D3:17:VAL:HG23	25:D3:20:ARG:NH1	4.76	0.48
20:C8:117:LYS:HE3	20:C8:128:PHE:HB2	3.40	0.48
54:M8:67:ILE:HG23	54:M8:81:VAL:HG11	3.64	0.48
54:M8:57:ILE:HD11	54:M8:147:ARG:NH2	2.28	0.48
31:D9:5:ASN:CG	31:D9:7:TRP:NE1	2.67	0.48
9:S7:35:LYS:C	9:S7:37:GLU:H	2.16	0.48
36:5:1819:U:O2'	36:5:1820:U:H5'	2.14	0.48
11:S9:11:THR:HG23	1:6:472:U:H5''	397.71	0.48
34:SR:309:VAL:HG23	34:SR:311:ARG:NH1	4.17	0.48
41:L4:361:HIS:CG	41:L4:362:ASP:H	2.36	0.48
56:N0:89:ASN:OD1	57:N1:156:TYR:N	2.71	0.48
1:2:1190:C:H1'	18:C6:143:ARG:NH1	2.29	0.48
36:5:1806:A:OP2	86:5:4019:OHX:N5	2.46	0.48
62:N6:4:GLN:N	36:5:229:G:OP1	68.87	0.48
1:2:1:U:C4	1:2:369:A:C6	3.02	0.48
41:L4:141:ARG:O	41:L4:144:LYS:NZ	9.93	0.48
14:C2:62:LEU:O	14:C2:91:VAL:HG12	4.69	0.48
43:L6:175:LYS:O	50:M4:117:ARG:NH2	2.46	0.48
52:M6:130:LYS:HG3	52:M6:131:PRO:CD	3.91	0.48
36:5:2948:C:H6	36:5:2948:C:O5'	1.96	0.48
11:S9:97:LEU:HA	11:S9:97:LEU:HD23	1.71	0.48
36:1:1397:C:O2'	36:1:1398:U:H5'	2.13	0.48
36:5:2794:G:H1'	36:5:2795:U:C6	2.48	0.48
62:N6:57:LEU:HD13	62:N6:59:VAL:HG12	5.29	0.48
36:5:1817:G:OP1	86:5:4175:OHX:N1	2.47	0.48
1:6:1263:G:H2'	1:6:1264:G:O4'	2.13	0.48
40:L3:84:VAL:HG22	40:L3:162:VAL:HB	2.65	0.48
36:5:421:G:OP1	86:5:4013:OHX:N2	2.47	0.48
36:1:2699:G:OP2	86:1:3908:OHX:N1	2.46	0.48
36:1:118:U:O2	36:1:121:A:H5'	2.13	0.48
36:1:2160:G:H2'	36:1:2161:G:C8	2.47	0.48
1:2:534:A:H3'	1:2:535:A:H8	1.79	0.48
6:S4:44:LEU:HD13	6:S4:65:LEU:HD21	1.95	0.48
36:1:1719:G:OP2	55:M9:121:HIS:ND1	2.39	0.48
38:4:149:A:N3	45:L8:55:TYR:OH	2.38	0.48
1:2:634:G:HO2'	1:2:635:A:P	2.37	0.48
36:5:2434:U:H4'	36:5:2435:G:O5'	2.13	0.48
39:L2:14:SER:OG	39:L2:15:ILE:N	2.42	0.48
40:L3:243:HIS:NE2	36:5:878:G:O6	193.61	0.48
1:2:346:G:H5'	13:C1:79:LYS:HE2	1.95	0.48
78:Q2:12:CYS:SG	78:Q2:17:CYS:CB	3.06	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:23:PRO:O	3:S1:27:LYS:HG2	2.60	0.48
51:M5:110:ALA:HB2	38:8:141:C:H4'	110.99	0.48
11:S9:122:VAL:O	11:S9:125:ALA:HB3	2.14	0.48
36:1:2177:G:N2	39:L2:118:GLU:OE2	2.46	0.48
7:S5:37:GLN:OE1	18:C6:53:LEU:HD22	2.76	0.48
6:S4:163:ASP:O	6:S4:164:LEU:HB2	2.22	0.48
59:N3:13:ILE:HD13	59:N3:54:LEU:HB2	1.95	0.48
17:C5:98:ASN:HB2	17:C5:122:THR:HG22	1.95	0.48
17:C5:123:TYR:OH	20:C8:122:HIS:NE2	2.40	0.48
36:1:1307:G:C5	52:M6:60:LYS:HD3	2.49	0.48
45:L8:161:GLU:OE1	51:M5:26:ARG:NH1	2.85	0.48
46:L9:22:SER:HB2	36:5:3188:G:OP1	313.14	0.48
1:6:647:G:H22	1:6:687:G:N2	2.11	0.48
63:N7:73:LYS:NZ	36:5:1637:A:OP2	211.24	0.48
45:L8:133:LYS:NZ	36:5:119:U:O3'	103.60	0.48
36:1:2294:U:O2	36:1:2296:A:C8	2.66	0.48
1:6:1549:C:H42	1:6:1562:G:H1	1.60	0.48
36:1:1246:G:H2'	36:1:1247:U:O4'	2.14	0.48
8:S6:176:GLN:HG2	1:6:169:A:H5'	328.32	0.48
36:5:3119:U:H5''	36:5:3120:C:OP2	2.13	0.48
65:N9:14:ARG:HH12	65:N9:18:ARG:HH11	3.17	0.48
63:N7:136:PHE:N	63:N7:136:PHE:CD1	2.82	0.48
1:2:1450:U:H2'	1:2:1451:C:C6	2.48	0.48
1:2:711:U:H1'	1:2:712:G:H5'	1.95	0.48
46:L9:124:ARG:HB3	46:L9:164:ILE:HD13	5.34	0.48
59:N3:29:SER:O	59:N3:69:LEU:HD21	2.13	0.48
36:1:2400:G:OP1	86:1:4088:OHX:N2	2.46	0.48
18:C6:8:GLN:O	1:6:1340:U:H5	438.45	0.48
9:S7:41:LEU:HB3	9:S7:70:PHE:CE1	2.49	0.48
36:5:3017:A:H2'	36:5:3018:C:H6	1.79	0.48
34:SR:255:ALA:HB1	34:SR:289:ALA:O	2.13	0.48
1:6:1220:C:H2'	1:6:1221:A:C8	2.48	0.48
36:1:761:A:H2'	36:1:762:U:H6	1.78	0.48
36:5:1519:G:H2'	36:5:1520:G:H8	1.78	0.48
50:M4:127:LYS:O	50:M4:131:VAL:HG23	3.40	0.48
36:5:614:C:H2'	36:5:615:U:H6	1.78	0.48
34:SR:122:ILE:O	34:SR:134:TRP:HD1	2.97	0.48
24:D2:84:GLY:O	24:D2:87:GLU:HG3	2.14	0.48
66:O0:42:ILE:HG12	66:O0:67:VAL:HG22	2.88	0.48
36:5:1013:G:C2	36:5:1014:U:H1'	2.48	0.48
36:1:2933:A:OP1	36:1:3015:G:H4'	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:21:U:H2'	1:2:22:A:H8	1.77	0.48
42:L5:177:GLU:H	42:L5:177:GLU:HG3	1.45	0.48
1:2:1182:U:O2	1:2:1182:U:H2'	2.13	0.48
13:C1:133:LYS:HB2	1:6:337:G:H3'	290.32	0.48
86:6:2118:OHX:N6	86:6:2170:OHX:N3	2.61	0.48
55:M9:92:GLN:O	55:M9:96:ILE:HG13	3.05	0.48
3:S1:137:ILE:HD11	3:S1:172:LEU:HB3	1.96	0.48
3:S1:84:ILE:HG22	3:S1:86:LEU:HD22	1.96	0.48
20:C8:122:HIS:CD2	1:6:1558:U:C5	361.32	0.48
21:C9:38:LYS:NZ	21:C9:43:ASN:O	2.37	0.48
1:2:142:G:N2	1:2:173:A:H2	2.07	0.48
36:1:1296:C:P	56:N0:84:ARG:HH22	2.36	0.48
4:S2:156:THR:HG21	4:S2:224:PHE:CD1	2.49	0.48
6:S4:31:PRO:HG2	6:S4:38:LEU:HD13	1.96	0.48
1:2:730:G:O6	86:2:2156:OHX:N4	2.47	0.48
18:C6:109:PHE:HB3	18:C6:117:LEU:HD21	1.96	0.48
36:5:2603:G:H2'	36:5:2604:U:O4'	2.13	0.48
8:S6:64:LYS:NZ	8:S6:82:SER:OG	2.46	0.48
52:M6:124:LEU:HD21	56:N0:168:PRO:HD3	1.94	0.48
45:L8:141:ALA:HA	45:L8:144:GLU:HB2	2.11	0.48
6:S4:246:LEU:HD13	6:S4:251:GLU:HG2	1.95	0.48
53:M7:126:ARG:HA	53:M7:140:GLU:HG3	2.52	0.48
44:L7:92:ILE:HD11	54:M8:4:ASP:N	2.29	0.48
59:N3:129:VAL:O	59:N3:133:SER:OG	2.18	0.48
36:1:2209:U:H2'	36:1:2209:U:OP2	2.14	0.48
71:O5:21:LEU:HD21	71:O5:25:LYS:HZ2	5.43	0.48
9:S7:31:SER:HA	9:S7:35:LYS:HB3	2.58	0.48
21:C9:74:GLY:O	21:C9:77:ASN:HB2	2.13	0.48
8:S6:27:PHE:O	8:S6:30:LYS:HG3	5.14	0.48
1:2:359:A:C2	25:D3:38:PHE:HB3	2.48	0.48
33:E1:97:LYS:HD3	1:6:1232:U:H5	434.40	0.48
11:S9:114:TYR:HE1	11:S9:121:SER:H	1.61	0.48
68:O2:24:ARG:HG2	68:O2:25:TYR:CZ	2.94	0.48
36:5:1471:U:H2'	36:5:1472:U:H6	1.79	0.48
46:L9:74:LEU:HD23	46:L9:74:LEU:HA	1.66	0.48
36:1:2726:C:O2'	36:1:2727:A:H2'	2.14	0.48
1:2:61:A:H8	1:2:269:G:HO2'	1.57	0.48
36:1:656:A:H2'	36:1:657:A:H8	1.78	0.48
13:C1:77:SER:HB3	13:C1:85:VAL:HB	2.00	0.48
17:C5:89:MET:O	17:C5:107:ILE:HG13	4.08	0.48
9:S7:135:ILE:HG23	9:S7:152:VAL:HG13	2.42	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:98:GLY:HA3	36:5:3005:A:H5'	249.15	0.48
16:C4:85:ALA:H	16:C4:119:THR:CG2	2.17	0.48
64:N8:21:ARG:NH1	36:5:1369:A:OP1	183.21	0.48
11:S9:102:GLU:CD	11:S9:102:GLU:H	2.74	0.48
1:2:868:G:H1	1:2:960:U:H3	1.60	0.48
79:Q3:87:ARG:O	79:Q3:90:VAL:HG22	3.98	0.48
52:M6:98:ALA:HA	52:M6:101:ARG:HH11	1.79	0.48
5:S3:127:MET:HE1	5:S3:133:GLY:HA2	1.96	0.48
40:L3:305:ILE:HD13	40:L3:317:ILE:HD12	1.95	0.48
51:M5:155:VAL:HG23	51:M5:156:HIS:CD2	2.48	0.48
3:S1:142:PHE:HD2	3:S1:209:ASN:HB2	2.77	0.48
12:C0:50:THR:HG21	12:C0:57:THR:OG1	2.14	0.48
12:C0:8:ARG:HD2	12:C0:12:HIS:HE1	1.77	0.48
45:L8:159:PRO:HB2	45:L8:161:GLU:OE2	3.82	0.48
41:L4:106:TRP:CZ2	49:M3:19:GLN:HG2	5.48	0.48
38:4:85:G:O6	62:N6:112:ASP:HB3	2.14	0.48
40:L3:17:LEU:HD12	40:L3:17:LEU:HA	1.94	0.48
1:2:1676:U:H1'	1:2:1726:G:N2	2.29	0.48
18:C6:110:THR:HA	18:C6:113:ASP:HB2	2.37	0.48
8:S6:25:ARG:HG3	8:S6:28:PHE:HD1	1.79	0.48
1:2:1228:G:H3'	1:2:1229:G:H8	1.78	0.48
1:6:1592:A:C2	1:6:1605:G:C2	3.02	0.48
1:6:755:A:O2'	1:6:756:A:H5''	2.14	0.48
49:M3:28:GLN:HB3	51:M5:201:ARG:HD2	2.20	0.48
17:C5:110:GLU:HG3	20:C8:119:ILE:HD11	1.96	0.48
20:C8:116:LEU:HD23	20:C8:123:ARG:HG2	1.96	0.48
25:D3:69:ARG:HH11	25:D3:116:ASP:CG	2.17	0.48
1:6:193:U:C4	1:6:195:G:C8	3.02	0.48
11:S9:178:ALA:HA	11:S9:181:ALA:CB	4.71	0.48
17:C5:18:ARG:HD3	20:C8:90:ASN:HD21	2.53	0.48
36:1:770:G:N7	86:1:4095:OHX:N6	2.62	0.48
39:L2:227:ARG:HG2	39:L2:239:ALA:HB2	1.95	0.48
18:C6:45:ARG:O	18:C6:48:VAL:HG12	2.39	0.48
12:C0:29:GLN:HB3	12:C0:39:ASN:CB	2.44	0.48
3:S1:91:VAL:HG23	3:S1:96:LEU:HB3	1.95	0.48
36:1:1682:U:O2	58:N2:82:LYS:NZ	2.35	0.48
36:1:3189:G:C2	36:1:3190:C:C2	3.02	0.48
52:M6:3:VAL:HG13	52:M6:4:GLU:CG	2.43	0.48
44:L7:180:SER:HG	44:L7:183:ASP:H	1.76	0.48
36:5:1661:G:H2'	36:5:1662:G:C8	2.49	0.48
36:5:3065:G:O6	86:5:4099:OHX:N6	2.47	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:361:HIS:CD2	41:L4:362:ASP:HB2	4.78	0.48
36:5:2947:G:OP2	36:5:2947:G:H4'	2.13	0.48
37:3:92:A:C5	37:3:93:C:H1'	2.49	0.48
1:6:1390:U:HO2'	1:6:1391:A:H8	1.62	0.48
36:1:2217:U:H2'	36:1:2218:G:H8	1.78	0.48
17:C5:77:ARG:HB3	17:C5:102:PHE:CE1	3.13	0.48
19:C7:71:PHE:CZ	19:C7:74:GLN:HB2	5.59	0.48
74:O8:9:LYS:O	74:O8:12:LEU:N	3.00	0.48
36:1:3082:C:H2'	36:1:3083:G:H8	1.79	0.48
36:1:2527:G:N2	36:1:2584:G:C4	2.81	0.48
25:D3:30:LYS:HE3	25:D3:34:LEU:HD11	1.96	0.48
40:L3:86:VAL:HG22	40:L3:162:VAL:HG12	1.99	0.48
53:M7:53:ASP:O	86:M7:206:OHX:N3	2.47	0.48
36:5:985:U:H2'	36:5:986:U:H6	1.79	0.48
53:M7:105:LYS:HB3	53:M7:107:LEU:HD13	1.95	0.48
70:O4:57:LEU:HD12	70:O4:62:TYR:CD1	2.49	0.48
7:S5:41:LYS:O	7:S5:67:PRO:HB2	2.14	0.48
1:6:1655:A:N1	36:5:2291:A:O2'	2.42	0.48
1:6:1071:U:H2'	1:6:1072:C:C6	2.48	0.48
6:S4:25:GLY:HA3	1:6:447:U:O2'	374.65	0.48
45:L8:248:LYS:C	45:L8:250:ALA:H	3.24	0.48
1:6:1573:A:H4'	1:6:1574:G:O5'	2.14	0.48
36:5:1856:C:H2'	36:5:1857:C:C6	2.49	0.48
36:5:770:G:N7	86:5:4090:OHX:N6	2.62	0.48
36:1:2794:G:H1'	36:1:2795:U:C6	2.49	0.48
62:N6:71:SER:OG	62:N6:72:SER:N	2.45	0.48
7:S5:58:LEU:O	7:S5:62:VAL:N	2.47	0.48
11:S9:129:ILE:HG22	11:S9:142:ASN:O	3.96	0.48
67:O1:72:ARG:NE	67:O1:104:LEU:HD12	2.28	0.48
56:N0:115:ARG:NH2	36:5:1320:C:O2	288.78	0.48
19:C7:23:LYS:HB3	19:C7:34:LEU:HD11	2.77	0.48
1:2:954:G:H2'	1:2:955:A:C8	2.49	0.48
3:S1:117:TRP:HE1	3:S1:152:ARG:NH1	2.10	0.48
3:S1:97:LEU:HD13	3:S1:98:THR:H	1.79	0.48
19:C7:105:GLN:O	19:C7:109:LEU:N	2.38	0.48
36:5:2264:U:OP2	86:5:3949:OHX:N4	2.46	0.48
63:N7:85:TYR:HE2	63:N7:129:TRP:CD2	4.19	0.48
22:D0:99:ILE:O	22:D0:103:ILE:HB	2.14	0.48
36:1:1793:C:OP1	39:L2:177:LYS:HE2	2.13	0.48
1:2:1679:G:N7	86:2:2110:OHX:N6	2.62	0.48
42:L5:265:TYR:CE1	37:7:121:U:H5"	315.41	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:114:LYS:HG2	36:5:3180:A:C6	273.65	0.48
1:2:461:G:N7	86:2:2143:OHX:N1	2.62	0.48
53:M7:78:VAL:HG13	53:M7:79:THR:N	2.53	0.48
86:1:4004:OHX:N3	86:1:4172:OHX:N3	2.62	0.48
86:1:3972:OHX:N5	86:1:4156:OHX:N1	2.62	0.48
1:6:463:U:H2'	1:6:464:A:H8	1.78	0.48
24:D2:37:PHE:CZ	24:D2:103:ILE:HD11	5.13	0.48
75:O9:9:ILE:HG23	75:O9:13:MET:HE2	3.37	0.48
36:1:2617:U:H3'	65:N9:3:LYS:HD3	1.96	0.48
42:L5:166:ALA:HB1	42:L5:171:LEU:HD12	1.96	0.48
26:D4:50:ALA:O	26:D4:51:GLU:HB3	2.13	0.48
2:S0:70:PRO:O	2:S0:95:ALA:N	2.83	0.48
15:C3:56:ASP:O	29:D7:46:VAL:HA	2.40	0.48
51:M5:154:PRO:HB3	51:M5:157:LYS:NZ	2.29	0.48
68:O2:123:LYS:HA	68:O2:126:LEU:CG	3.13	0.48
40:L3:334:ARG:NH2	36:5:3304:U:O2'	212.56	0.48
46:L9:117:PHE:CD2	46:L9:118:LEU:HB2	2.49	0.48
34:SR:256:THR:N	34:SR:259:GLY:O	2.94	0.48
36:1:2990:G:C6	36:1:2991:A:N7	2.82	0.48
6:S4:66:MET:HG3	1:6:454:U:C6	372.68	0.48
40:L3:199:PHE:C	40:L3:201:LYS:H	2.17	0.48
46:L9:36:LYS:HE3	46:L9:74:LEU:HB3	2.95	0.48
52:M6:106:GLU:H	52:M6:106:GLU:HG2	1.95	0.48
43:L6:3:ALA:HB2	68:O2:77:ALA:HB2	2.13	0.48
52:M6:61:ALA:HA	52:M6:70:PRO:HD2	1.95	0.48
6:S4:126:VAL:HG22	6:S4:156:VAL:HA	2.13	0.48
1:6:604:A:OP2	86:6:2149:OHX:N4	2.47	0.48
56:N0:34:GLU:HB3	56:N0:61:ILE:HD13	2.17	0.48
3:S1:195:LYS:HD3	3:S1:195:LYS:HA	2.56	0.48
36:5:3041:U:H2'	36:5:3042:U:C6	2.49	0.48
44:L7:144:ILE:O	44:L7:148:VAL:HG23	2.58	0.48
1:6:717:C:H42	1:6:720:G:H1	1.62	0.48
21:C9:9:VAL:HG22	21:C9:140:LEU:HD21	1.96	0.48
36:5:2320:A:OP2	86:5:4069:OHX:N5	2.47	0.48
53:M7:38:GLY:H	53:M7:114:VAL:HG13	1.78	0.48
47:M0:38:LYS:HD3	47:M0:83:ASP:OD1	5.35	0.47
16:C4:30:VAL:HG13	16:C4:39:ILE:O	2.13	0.47
3:S1:59:ASP:HA	3:S1:62:LYS:NZ	2.29	0.47
10:S8:8:ARG:HH21	10:S8:22:ARG:HH11	7.46	0.47
28:D6:94:ASN:OD1	28:D6:96:ALA:HB3	2.53	0.47
11:S9:82:ARG:HH11	11:S9:149:ARG:HD2	6.45	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1554:U:O2'	36:1:1582:C:H5	1.97	0.47
21:C9:16:ASN:HA	21:C9:56:LYS:NZ	2.37	0.47
9:S7:96:ARG:NH1	9:S7:128:ASP:OD2	2.42	0.47
36:5:1019:G:H22	36:5:1033:U:H3	1.60	0.47
36:1:1294:A:C2	36:1:1295:G:C8	3.02	0.47
1:6:119:A:H1'	1:6:397:A:C5	2.49	0.47
13:C1:122:ILE:N	13:C1:144:ALA:HB2	2.28	0.47
36:5:1565:G:N2	36:5:1566:A:H1'	2.28	0.47
1:6:485:A:N6	1:6:486:G:N3	2.62	0.47
40:L3:187:SER:O	40:L3:189:SER:N	2.47	0.47
26:D4:20:ARG:HB3	26:D4:76:TYR:CD2	2.89	0.47
1:2:1235:C:H42	33:E1:135:HIS:CE1	2.30	0.47
1:2:1594:G:H5''	31:D9:33:LYS:HD2	1.95	0.47
36:1:2983:C:OP1	86:1:4188:OHX:N3	2.47	0.47
34:SR:50:ASP:H	34:SR:54:PHE:HA	3.04	0.47
36:1:1833:G:OP1	75:O9:10:LYS:HD2	2.13	0.47
36:5:975:C:H2'	36:5:976:U:C6	2.48	0.47
42:L5:68:THR:HB	42:L5:71:GLY:O	2.13	0.47
56:N0:8:GLN:HB3	56:N0:64:ILE:HD11	1.96	0.47
36:5:1696:A:OP2	86:5:4180:OHX:N6	2.47	0.47
46:L9:26:LYS:HA	46:L9:35:THR:HG22	1.95	0.47
36:5:186:U:H5''	36:5:187:A:OP2	2.14	0.47
39:L2:104:LEU:HD23	39:L2:158:ILE:HD11	1.95	0.47
49:M3:94:GLY:HA3	71:O5:116:TYR:CZ	2.50	0.47
57:N1:56:PHE:CE1	57:N1:78:LYS:HD3	3.38	0.47
36:1:1080:A:OP1	42:L5:140:ARG:HB2	2.14	0.47
67:O1:74:ARG:HD2	67:O1:94:GLU:OE1	2.13	0.47
49:M3:104:ARG:HA	72:O6:20:MET:O	4.44	0.47
25:D3:126:LYS:HA	25:D3:131:SER:HA	3.00	0.47
36:5:2582:C:H2'	36:5:2583:C:C6	2.49	0.47
36:1:2947:G:C2	40:L3:250:ALA:HB1	2.49	0.47
1:2:720:G:H1'	1:2:721:U:H5''	1.96	0.47
12:C0:23:ALA:CB	12:C0:64:TYR:HB2	3.53	0.47
55:M9:13:SER:OG	55:M9:38:ARG:NH2	2.47	0.47
68:O2:21:HIS:CE1	68:O2:24:ARG:HD2	2.49	0.47
36:1:1947:G:N2	36:1:2102:U:C2	2.82	0.47
72:O6:34:SER:O	72:O6:38:LYS:HG3	2.14	0.47
1:2:1252:C:O4'	33:E1:133:ALA:HB2	2.13	0.47
36:5:3298:C:H2'	36:5:3299:A:O4'	2.14	0.47
6:S4:240:LYS:CD	6:S4:240:LYS:H	2.25	0.47
36:5:2317:A:H2'	36:5:2318:U:O4'	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1610:G:OP1	7:S5:72:HIS:NE2	2.38	0.47
36:1:1488:G:H5''	36:1:1838:G:O6	2.13	0.47
12:C0:61:TRP:CE2	31:D9:23:VAL:HG22	2.49	0.47
36:1:3325:G:H5''	67:O1:103:GLY:HA2	1.96	0.47
53:M7:70:THR:HG21	53:M7:81:ALA:HB3	2.20	0.47
36:5:1811:G:H2'	36:5:1812:G:O4'	2.14	0.47
36:1:1117:G:OP1	65:N9:4:SER:HB2	2.14	0.47
58:N2:35:LYS:O	58:N2:38:ILE:HG22	2.13	0.47
36:1:431:U:OP1	69:O3:65:ARG:NH1	2.44	0.47
1:2:600:U:OP2	25:D3:108:GLY:HA2	2.13	0.47
49:M3:131:LYS:NZ	49:M3:131:LYS:HB3	2.29	0.47
36:5:783:A:OP2	86:5:4188:OHX:N6	2.46	0.47
37:3:28:C:O3'	48:M1:135:GLY:HA2	2.14	0.47
86:5:3971:OHX:N4	86:5:4193:OHX:N1	2.62	0.47
57:N1:96:ILE:HA	57:N1:96:ILE:HD13	1.97	0.47
42:L5:269:SER:HB2	37:7:1:G:H21	316.50	0.47
37:3:22:A:H1'	42:L5:272:TYR:CZ	2.49	0.47
7:S5:45:LYS:HD3	7:S5:45:LYS:HA	1.42	0.47
48:M1:16:LYS:NZ	36:5:2684:C:OP1	308.61	0.47
36:1:18:G:N2	38:4:142:C:C2	2.82	0.47
47:M0:97:LEU:O	47:M0:123:HIS:N	2.77	0.47
72:O6:98:ARG:HD2	72:O6:98:ARG:H	1.79	0.47
1:6:1529:C:H2'	1:6:1530:C:C6	2.49	0.47
37:3:26:C:H5'	42:L5:56:THR:HB	1.96	0.47
36:1:63:A:P	51:M5:172:ARG:HH22	2.37	0.47
18:C6:99:GLU:OE2	34:SR:60:SER:HB2	2.29	0.47
1:2:73:U:H4'	1:2:74:U:OP1	2.12	0.47
54:M8:44:PHE:CD2	54:M8:134:GLY:HA3	2.49	0.47
1:2:1553:G:O2'	31:D9:14:TYR:OH	2.32	0.47
33:E1:121:CYS:HB2	33:E1:132:LEU:HD21	3.59	0.47
2:S0:63:ILE:HG12	23:D1:36:VAL:HG23	2.60	0.47
2:S0:110:TYR:O	2:S0:112:THR:N	2.47	0.47
3:S1:111:ARG:HA	3:S1:111:ARG:HD3	1.66	0.47
1:2:1236:A:H2'	1:2:1237:G:C8	2.48	0.47
66:O0:95:ALA:HB2	66:O0:101:LEU:HD23	2.39	0.47
36:1:1675:G:H2'	36:1:1676:A:H8	1.79	0.47
1:6:139:C:O2'	1:6:176:C:O2	2.21	0.47
74:O8:69:LEU:HA	74:O8:69:LEU:HD13	1.71	0.47
9:S7:9:LEU:HB3	9:S7:10:SER:H	2.97	0.47
2:S0:90:ALA:HA	2:S0:95:ALA:HB3	2.88	0.47
36:5:2921:U:H2'	36:5:2923:U:H5''	1.95	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:647:G:N2	1:2:687:G:H22	2.12	0.47
1:2:422:G:OP1	86:2:2042:OHX:N6	2.48	0.47
10:S8:114:GLU:HG2	10:S8:120:THR:HA	1.95	0.47
57:N1:83:ARG:NH1	57:N1:85:LEU:HD21	2.28	0.47
43:L6:90:LYS:HE3	43:L6:90:LYS:HB2	3.53	0.47
78:Q2:47:GLN:NE2	78:Q2:53:GLN:OE1	2.72	0.47
1:2:505:A:N3	1:2:505:A:H2'	2.29	0.47
64:N8:117:ARG:HG2	36:5:716:A:N7	150.33	0.47
57:N1:44:ALA:HB2	57:N1:53:PRO:HG2	1.95	0.47
21:C9:117:SER:HB3	21:C9:123:ARG:HB3	3.98	0.47
65:N9:23:LYS:HB3	65:N9:24:PRO:HD3	2.46	0.47
39:L2:112:ILE:HD11	79:Q3:79:VAL:CG1	5.48	0.47
36:1:1273:A:HO2'	36:1:1274:A:P	2.36	0.47
24:D2:95:PRO:HD3	24:D2:130:TYR:CD1	3.07	0.47
17:C5:64:LYS:HA	17:C5:73:PRO:HB3	1.95	0.47
37:7:110:G:C6	37:7:111:U:C4	3.02	0.47
36:1:2636:A:H5''	36:1:2637:A:H5'	1.96	0.47
36:5:2364:G:H22	36:5:2396:G:H1'	1.79	0.47
1:6:882:U:H2'	1:6:883:C:C6	2.48	0.47
73:O7:27:PHE:HA	73:O7:34:CYS:HA	1.96	0.47
61:N5:74:LYS:O	61:N5:78:ASP:HB2	2.95	0.47
1:2:939:A:H2'	1:2:940:A:C8	2.49	0.47
41:L4:261:VAL:HG12	41:L4:262:TRP:CD1	3.46	0.47
72:O6:95:ALA:O	72:O6:99:ARG:HB3	2.15	0.47
36:5:3132:C:H2'	36:5:3133:C:C6	2.49	0.47
7:S5:150:GLY:O	7:S5:152:GLY:N	2.99	0.47
36:5:1908:A:H2'	36:5:1909:A:O4'	2.14	0.47
1:2:1685:G:C2	1:2:1717:G:C6	3.02	0.47
36:5:547:G:H2'	36:5:548:G:O4'	2.14	0.47
38:4:3:A:H2'	38:4:4:C:O4'	2.14	0.47
36:5:2304:C:C5	36:5:2305:G:C6	3.02	0.47
36:1:1256:G:O6	36:1:1261:G:N2	2.48	0.47
59:N3:128:ARG:HH11	59:N3:128:ARG:HG3	1.79	0.47
44:L7:124:LEU:HA	44:L7:124:LEU:HD22	2.07	0.47
42:L5:259:LYS:HB3	42:L5:259:LYS:HE3	1.76	0.47
36:1:2869:U:H5''	36:1:2870:C:OP2	2.13	0.47
38:4:152:G:H2'	38:4:153:U:O4'	2.14	0.47
1:2:1556:A:C5	1:2:1560:U:C2	3.02	0.47
43:L6:43:LEU:HD11	43:L6:85:ILE:HG13	1.98	0.47
36:1:2988:C:O2'	40:L3:266:ARG:HD2	2.14	0.47
36:5:21:G:OP2	38:8:36:G:N1	2.45	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:53:THR:O	5:S3:90:ARG:HG2	2.13	0.47
1:2:1523:G:N7	21:C9:64:HIS:NE2	2.58	0.47
6:S4:106:LYS:HB2	6:S4:108:ARG:HE	1.79	0.47
4:S2:88:LYS:HB3	4:S2:95:ARG:HD2	5.51	0.47
51:M5:184:LYS:HD3	51:M5:185:ALA:N	3.53	0.47
1:6:189:C:O2'	1:6:190:C:H5'	2.14	0.47
3:S1:129:THR:OG1	3:S1:131:ASP:O	3.12	0.47
17:C5:127:ARG:NH2	35:SM:66:ALA:HB2	3.58	0.47
23:D1:81:ASN:O	23:D1:82:VAL:HB	2.14	0.47
36:1:1211:U:H2'	36:1:1212:A:C8	2.49	0.47
55:M9:101:VAL:HG22	55:M9:104:ARG:HH11	1.79	0.47
15:C3:89:TYR:CE2	15:C3:150:VAL:HG13	2.49	0.47
39:L2:181:LYS:NZ	36:5:860:G:O5'	212.00	0.47
36:1:1245:A:H3'	36:1:1246:G:H5''	1.96	0.47
36:1:1063:G:C5	36:1:1097:G:C2	3.02	0.47
57:N1:116:ARG:O	57:N1:120:LYS:N	2.35	0.47
13:C1:3:THR:HG22	13:C1:4:GLU:H	2.40	0.47
36:1:75:G:H5''	49:M3:58:VAL:CG1	2.44	0.47
66:O0:99:ASP:HB2	66:O0:103:THR:CG2	2.44	0.47
53:M7:69:ARG:NH1	36:5:3308:C:N3	189.77	0.47
1:6:75:U:O2'	1:6:76:A:O4'	2.32	0.47
26:D4:104:SER:HB3	26:D4:107:GLN:CG	2.44	0.47
46:L9:20:ILE:HG23	46:L9:25:VAL:HA	1.97	0.47
1:2:1160:A:H2'	1:2:1161:C:H6	1.77	0.47
22:D0:63:LEU:HB3	31:D9:34:TYR:CZ	2.70	0.47
1:2:641:G:N2	1:2:693:U:O2	2.36	0.47
40:L3:146:ARG:O	40:L3:149:ALA:HB3	2.33	0.47
36:5:2110:G:O2'	36:5:2111:G:H5''	2.15	0.47
9:S7:168:SER:O	9:S7:172:VAL:HG23	2.22	0.47
28:D6:23:CYS:HB2	28:D6:74:CYS:HB3	1.96	0.47
24:D2:77:PRO:HG2	24:D2:79:PHE:CE2	2.64	0.47
1:2:82:U:H2'	1:2:83:G:O4'	2.13	0.47
30:D8:11:LYS:O	30:D8:13:ILE:HG23	2.13	0.47
54:M8:21:SER:OG	54:M8:22:ASP:N	2.48	0.47
36:1:937:G:OP2	64:N8:26:ARG:HB3	2.14	0.47
62:N6:37:LYS:HD3	62:N6:37:LYS:H	1.78	0.47
65:N9:41:ARG:O	65:N9:44:LYS:HB2	3.63	0.47
36:1:2199:G:C4	36:1:2200:U:C5	3.03	0.47
45:L8:86:THR:O	45:L8:90:THR:HG23	5.47	0.47
36:5:2518:C:C2	36:5:2590:A:C2	3.02	0.47
1:6:1452:U:H2'	1:6:1453:G:C8	2.49	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:412:A:H2'	1:6:413:U:C6	2.49	0.47
1:2:1562:G:OP1	21:C9:89:ARG:NH2	2.47	0.47
36:5:2435:G:H1	36:5:2512:C:H42	1.61	0.47
36:5:1013:G:H2'	36:5:1014:U:O4'	2.14	0.47
36:1:663:C:H2'	36:1:664:U:H6	1.77	0.47
36:5:1602:A:C6	36:5:1603:A:N1	2.81	0.47
1:6:432:G:H2'	1:6:433:C:O4'	2.14	0.47
36:1:887:G:H2'	36:1:888:A:C8	2.48	0.47
36:1:3019:U:C4	36:1:3020:U:C4	3.02	0.47
36:1:2564:G:C6	36:1:2565:U:C4	3.02	0.47
48:M1:87:LYS:HD3	48:M1:87:LYS:HA	3.58	0.47
19:C7:96:SER:HA	19:C7:97:ASN:HA	1.60	0.47
1:2:458:G:OP2	26:D4:105:ARG:NH2	2.47	0.47
1:6:492:A:H2'	1:6:493:U:H5''	1.96	0.47
36:5:1887:A:OP2	86:5:3924:OHX:N5	2.48	0.47
1:2:540:G:O3'	1:2:541:A:H3'	2.14	0.47
1:2:590:C:H2'	1:2:591:A:C8	2.49	0.47
6:S4:75:LYS:HD3	6:S4:77:ARG:NH2	2.89	0.47
56:N0:115:ARG:N	56:N0:115:ARG:HD2	2.28	0.47
53:M7:32:THR:O	53:M7:35:ALA:HB3	2.80	0.47
16:C4:15:GLY:O	16:C4:79:VAL:HG23	2.15	0.47
51:M5:68:ARG:HA	51:M5:98:LEU:HD21	2.34	0.47
52:M6:102:LEU:HD12	52:M6:103:LYS:H	1.78	0.47
13:C1:93:TYR:HD1	13:C1:100:TYR:CZ	2.32	0.47
36:5:438:A:H3'	36:5:439:C:C6	2.49	0.47
7:S5:192:GLU:OE2	27:D5:63:SER:OG	3.94	0.47
1:2:190:C:N4	1:2:196:G:C6	2.81	0.47
17:C5:22:LEU:HA	17:C5:25:LEU:HB2	3.24	0.47
59:N3:13:ILE:CD1	59:N3:53:SER:HB2	2.84	0.47
41:L4:25:VAL:O	41:L4:27:SER:N	2.57	0.47
1:2:735:C:OP2	1:2:735:C:H2'	2.15	0.47
86:2:2044:OHX:N4	86:2:2099:OHX:N3	2.63	0.47
36:1:1103:A:N6	36:1:1363:A:H1'	2.29	0.47
36:1:1233:G:H22	36:1:1255:C:N4	2.12	0.47
26:D4:20:ARG:C	26:D4:21:LYS:HD2	2.34	0.47
1:6:825:U:O2'	1:6:826:U:H6	1.98	0.47
36:5:2804:A:H2'	36:5:2805:G:O5'	2.14	0.47
1:2:1275:A:C6	1:2:1438:G:C5	3.02	0.47
44:L7:121:LYS:HE2	44:L7:125:GLU:OE2	2.15	0.47
49:M3:3:ILE:HD13	64:N8:45:MET:HE3	4.73	0.47
12:C0:32:HIS:HB3	12:C0:34:GLU:O	6.65	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:550:A:H2'	36:5:551:A:C8	2.50	0.47
3:S1:34:ALA:HB3	3:S1:41:ARG:HA	1.97	0.47
11:S9:143:ILE:HG22	11:S9:145:SER:H	1.91	0.47
36:5:1464:G:O2'	86:5:3906:OHX:N5	2.47	0.47
23:D1:5:LYS:C	23:D1:7:GLN:H	3.99	0.47
58:N2:104:ARG:NH1	58:N2:106:ALA:HB2	3.81	0.47
36:5:1789:G:N7	86:5:4192:OHX:N2	2.63	0.47
36:5:937:G:N3	36:5:963:G:H1'	2.28	0.47
70:O4:81:CYS:O	70:O4:81:CYS:SG	2.81	0.47
22:D0:47:GLN:HG2	22:D0:47:GLN:O	2.14	0.47
57:N1:78:LYS:HG2	57:N1:87:LYS:HD2	1.97	0.47
14:C2:103:LEU:HG	14:C2:116:VAL:HG13	4.41	0.47
36:5:1000:C:C2	36:5:1045:C:N4	2.83	0.47
49:M3:69:VAL:N	49:M3:149:GLN:OE1	2.75	0.47
36:1:695:C:OP1	41:L4:119:ARG:NE	2.42	0.47
1:6:1402:G:H2'	1:6:1403:C:C6	2.50	0.47
6:S4:62:LYS:HD3	6:S4:66:MET:HG2	4.73	0.47
36:5:501:A:H2'	36:5:502:U:H6	1.79	0.47
36:1:535:G:C6	36:1:555:U:N3	2.82	0.47
1:2:1194:A:H2'	1:2:1195:C:H5'	1.95	0.47
38:8:66:A:H2'	38:8:67:U:H6	1.80	0.47
36:5:2144:A:C4	36:5:2281:A:C6	3.02	0.47
7:S5:144:GLU:HA	7:S5:162:VAL:HG12	1.95	0.47
36:1:1694:U:N3	36:1:1695:U:C4	2.83	0.47
1:2:1597:A:OP2	31:D9:32:ARG:NH2	2.38	0.47
36:5:1119:C:OP2	86:5:3979:OHX:N2	2.47	0.47
79:Q3:32:GLN:OE1	79:Q3:70:THR:HB	2.14	0.47
1:2:1798:U:C6	28:D6:97:PRO:HB3	2.50	0.47
44:L7:39:GLU:HG3	44:L7:43:ILE:HD12	6.65	0.47
44:L7:93:ASN:OD1	44:L7:93:ASN:N	2.47	0.47
34:SR:44:SER:O	34:SR:58:VAL:HG22	2.14	0.47
36:1:1696:A:OP2	86:1:4158:OHX:N3	2.48	0.47
7:S5:90:ILE:HD13	7:S5:90:ILE:HA	2.01	0.47
1:2:868:G:OP1	15:C3:121:ARG:NH1	2.47	0.47
36:1:1170:A:H2'	36:1:1171:G:O4'	2.15	0.47
34:SR:16:HIS:CE1	34:SR:37:SER:HB3	2.50	0.47
3:S1:131:ASP:O	3:S1:133:TYR:N	2.43	0.47
19:C7:106:THR:O	19:C7:109:LEU:HB3	2.15	0.47
63:N7:24:VAL:HG23	63:N7:44:ALA:O	2.44	0.47
24:D2:118:ARG:HH11	24:D2:118:ARG:HB2	2.23	0.47
1:2:800:U:H2'	1:2:801:G:C8	2.43	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:10:LYS:NZ	11:S9:2:PRO:HB3	4.70	0.47
1:2:116:U:H2'	1:2:117:U:H6	1.76	0.47
86:1:4004:OHX:N3	86:1:4172:OHX:N1	2.62	0.47
6:S4:246:LEU:HD21	6:S4:254:ARG:NE	2.28	0.47
36:5:1633:C:H2'	36:5:1634:G:C8	2.49	0.47
36:1:1227:C:H5'	36:1:1228:C:OP2	2.14	0.47
1:2:1339:C:O2'	1:2:1341:A:C8	2.61	0.47
26:D4:8:ARG:CZ	26:D4:28:LEU:HD11	4.27	0.47
1:2:487:G:C6	1:2:488:G:C8	3.02	0.47
36:1:8:C:H2'	36:1:9:U:O4'	2.14	0.47
1:6:913:G:C8	36:5:2205:U:C4	3.03	0.47
12:C0:77:ARG:NH1	12:C0:85:HIS:H	2.13	0.47
15:C3:38:VAL:HG13	15:C3:80:LEU:HD23	3.24	0.47
21:C9:25:GLN:O	21:C9:27:LYS:HG3	4.31	0.47
1:2:1637:C:HO2'	35:SM:94:HIS:CE1	2.32	0.47
36:1:972:A:OP1	54:M8:12:ARG:NH2	2.47	0.47
45:L8:214:LEU:HD12	45:L8:214:LEU:HA	1.73	0.47
41:L4:232:SER:O	41:L4:233:LEU:HB2	2.14	0.47
39:L2:103:PRO:HG2	39:L2:106:SER:OG	2.79	0.47
36:1:3169:U:H2'	36:1:3170:A:O4'	2.15	0.47
36:1:1854:C:OP2	86:1:4033:OHX:N5	2.47	0.47
1:2:1477:G:N2	1:2:1530:C:O2	2.40	0.47
44:L7:147:LEU:HD22	44:L7:205:PHE:CD1	3.21	0.47
38:4:43:A:OP1	86:4:234:OHX:N5	2.47	0.47
1:2:625:C:H2'	1:2:626:U:C6	2.49	0.47
55:M9:128:LYS:NZ	36:5:1721:U:O4	232.70	0.47
36:5:1631:C:H5''	36:5:1632:A:H5'	1.95	0.47
4:S2:206:THR:HG21	1:6:14:C:OP2	375.75	0.47
57:N1:41:ASP:HB2	57:N1:97:LYS:HG2	2.60	0.47
51:M5:48:ALA:C	51:M5:53:TYR:HB3	2.64	0.47
51:M5:53:TYR:O	51:M5:54:LYS:HD2	2.13	0.47
41:L4:292:SER:OG	41:L4:294:GLU:N	2.48	0.47
36:1:315:C:OP2	72:O6:28:TYR:OH	2.32	0.47
39:L2:70:ARG:NH1	39:L2:72:ARG:HH21	7.54	0.47
22:D0:32:LYS:HA	22:D0:35:GLU:HB2	3.54	0.47
50:M4:77:ARG:O	50:M4:81:VAL:HG23	2.48	0.47
67:O1:19:ARG:CD	67:O1:35:GLU:HG2	2.41	0.47
36:5:438:A:C8	36:5:439:C:C5	3.02	0.47
9:S7:94:ALA:HB3	9:S7:96:ARG:NH1	2.29	0.47
38:8:78:G:H2'	38:8:79:A:O4'	2.14	0.47
1:2:74:U:O2'	1:2:75:U:OP2	2.28	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:166:ARG:HD2	46:L9:168:ARG:NH1	12.03	0.47
1:2:1281:G:H2'	1:2:1282:U:H6	1.79	0.47
70:O4:93:PHE:HD2	70:O4:94:LEU:HD23	1.79	0.47
18:C6:13:LYS:HD3	18:C6:14:LYS:N	2.29	0.47
36:1:3365:U:H2'	36:1:3366:G:H8	1.78	0.47
44:L7:214:TRP:CD2	44:L7:219:LYS:HD2	2.49	0.47
22:D0:63:LEU:HB3	31:D9:34:TYR:CE2	2.49	0.47
4:S2:102:VAL:HG11	4:S2:129:ILE:HA	2.94	0.47
39:L2:211:HIS:C	39:L2:213:GLY:N	4.23	0.47
36:1:1286:A:O2'	36:1:1287:A:OP2	2.24	0.47
18:C6:98:ASP:OD2	18:C6:100:GLN:N	2.46	0.47
5:S3:141:LYS:HE3	5:S3:179:GLN:HG3	1.95	0.47
1:2:755:A:HO2'	1:2:756:A:P	2.38	0.47
36:5:3167:A:H2'	36:5:3168:A:O4'	2.14	0.47
1:2:25:C:HO2'	1:2:366:A:HO2'	1.61	0.47
26:D4:113:ASN:O	26:D4:116:LYS:HB2	2.15	0.47
39:L2:112:ILE:HG13	39:L2:135:ILE:HG12	1.95	0.47
36:5:2733:A:H2'	36:5:2734:A:O4'	2.14	0.47
35:SM:99:LYS:O	35:SM:100:THR:HG22	2.15	0.47
36:1:2349:U:H5'	36:1:2391:G:OP1	2.15	0.47
69:O3:73:ARG:HD3	69:O3:82:ARG:HD2	1.97	0.47
36:1:3113:A:H2'	36:1:3114:A:O4'	2.14	0.47
36:5:2505:U:H2'	36:5:2506:U:C4	2.49	0.47
34:SR:228:LYS:O	34:SR:229:LYS:HG3	2.14	0.47
62:N6:74:TYR:CE1	62:N6:77:LYS:HG3	2.49	0.47
36:1:1839:A:C6	36:1:1843:C:C2	3.02	0.47
36:1:655:C:H2'	36:1:656:A:H8	1.79	0.47
36:5:3102:G:N2	36:5:3133:C:C2	2.83	0.47
1:2:1170:G:C6	1:2:1574:G:C5	3.03	0.47
54:M8:86:THR:CG2	54:M8:105:ARG:HB2	2.96	0.47
36:1:93:C:O2'	64:N8:55:LYS:HE3	2.14	0.47
20:C8:36:LYS:O	20:C8:102:ALA:N	2.51	0.47
1:2:1050:G:OP1	29:D7:70:LYS:NZ	2.37	0.47
36:1:1340:G:H2'	36:1:1341:U:H6	1.79	0.47
36:5:747:A:H2'	36:5:748:U:O4'	2.15	0.47
9:S7:136:VAL:N	9:S7:153:LEU:O	2.72	0.47
42:L5:191:ASP:OD2	42:L5:193:GLU:HB2	2.14	0.47
36:1:3254:G:O6	86:1:4056:OHX:N5	2.47	0.47
57:N1:106:LEU:O	57:N1:110:LYS:HG3	3.14	0.47
43:L6:46:ARG:HG3	43:L6:47:PHE:CD1	2.60	0.47
1:6:650:U:H2'	1:6:651:G:H5'	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:772:U:OP1	86:5:4115:OHX:N3	2.47	0.47
36:5:2259:A:H2'	36:5:2260:U:O4'	2.14	0.47
36:5:92:G:OP2	36:5:93:C:H5''	2.14	0.47
1:6:1636:C:C2	1:6:1638:G:C5	3.03	0.47
36:1:1480:G:H4'	36:1:1481:A:OP1	2.15	0.47
36:5:1249:G:H2'	36:5:1250:G:H8	1.79	0.47
1:2:591:A:H2'	1:2:592:A:C8	2.49	0.47
1:6:1011:G:OP2	86:6:2118:OHX:N4	2.47	0.47
71:O5:85:THR:HG22	71:O5:87:ALA:N	2.33	0.47
12:C0:43:ILE:HG22	12:C0:44:LYS:NZ	5.20	0.47
1:6:1382:A:HO2'	1:6:1383:G:H8	1.63	0.47
6:S4:19:LEU:HD11	6:S4:108:ARG:HD2	2.32	0.47
52:M6:120:VAL:HG22	56:N0:163:PHE:HD1	2.19	0.47
21:C9:57:ARG:HG3	21:C9:57:ARG:NH1	2.30	0.47
66:O0:86:ARG:NH1	79:Q3:44:LYS:HG2	2.96	0.47
5:S3:209:ILE:HG22	19:C7:38:ILE:O	2.65	0.47
51:M5:172:ARG:HB3	51:M5:174:ILE:CD1	2.43	0.47
36:1:1523:U:O4	61:N5:75:LYS:NZ	2.48	0.47
16:C4:114:ARG:HE	28:D6:62:TYR:HE1	1.62	0.47
3:S1:171:ILE:O	3:S1:175:GLU:N	3.19	0.47
40:L3:66:LYS:HE2	40:L3:70:ARG:HH21	3.03	0.47
31:D9:14:TYR:OH	1:6:1553:G:O2'	401.89	0.47
78:Q2:98:LYS:HD2	36:5:2656:A:H4'	250.91	0.47
52:M6:42:ASN:HA	52:M6:136:THR:O	2.22	0.47
2:S0:65:ALA:O	2:S0:67:ILE:N	4.78	0.47
47:M0:74:LYS:HB2	47:M0:74:LYS:HE3	1.66	0.47
56:N0:155:ARG:HB3	56:N0:172:TYR:HB2	1.98	0.47
38:4:85:G:H3'	38:4:85:G:H8	1.79	0.47
36:1:1427:U:OP1	41:L4:44:LYS:NZ	2.48	0.47
22:D0:96:PRO:HB2	22:D0:97:VAL:H	2.25	0.47
40:L3:221:THR:HB	40:L3:273:HIS:H	1.80	0.47
86:1:4032:OHX:N4	86:1:4045:OHX:N1	2.63	0.47
51:M5:9:GLU:CD	72:O6:41:ARG:HE	3.29	0.47
15:C3:33:VAL:O	15:C3:37:ILE:HG12	3.95	0.47
1:2:448:C:OP1	6:S4:29:PRO:HD3	2.13	0.47
36:5:1235:U:C4'	36:5:1236:G:H5'	2.45	0.47
8:S6:72:ARG:HG2	8:S6:98:ARG:HG2	1.96	0.47
10:S8:60:ILE:HG21	10:S8:179:CYS:HB3	1.96	0.47
54:M8:93:ILE:HG23	36:5:784:A:C6	150.55	0.47
6:S4:124:GLY:HA2	6:S4:142:HIS:CE1	2.50	0.47
42:L5:278:SER:C	42:L5:280:GLU:N	3.33	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:166:ALA:O	64:N8:147:LEU:HD11	2.15	0.47
2:S0:172:LEU:O	2:S0:176:LEU:HG	2.14	0.47
86:5:4060:OHX:N1	86:5:4137:OHX:N2	2.63	0.47
36:1:3131:U:O2'	36:1:3132:C:H5'	2.15	0.47
53:M7:116:HIS:HB3	53:M7:149:VAL:HB	1.97	0.47
54:M8:58:ASN:C	54:M8:60:PRO:HD3	2.59	0.47
36:1:672:A:OP2	54:M8:55:SER:HB2	2.15	0.47
74:O8:8:ILE:CD1	74:O8:8:ILE:H	2.28	0.47
1:2:1537:C:O2'	1:2:1540:G:O6	2.31	0.47
46:L9:105:GLU:HB3	46:L9:110:LYS:H	4.28	0.47
2:S0:82:GLY:O	2:S0:86:VAL:HG22	2.15	0.47
54:M8:74:GLU:HB3	36:5:741:U:H4'	183.60	0.47
36:5:244:G:C6	36:5:245:U:C4	3.03	0.47
36:5:900:G:H1'	36:5:1589:A:H61	1.80	0.47
36:1:1589:A:OP2	70:O4:11:ASN:HB2	2.15	0.47
36:1:900:G:H2'	36:1:901:G:C8	2.50	0.47
70:O4:11:ASN:HB2	36:5:1589:A:OP2	142.60	0.47
5:S3:179:GLN:HB3	5:S3:180:GLY:H	3.30	0.47
1:2:486:G:H3'	1:2:487:G:C8	2.50	0.47
1:6:800:U:H2'	1:6:801:G:C8	2.48	0.47
42:L5:119:TYR:OH	42:L5:135:VAL:HG12	2.15	0.47
1:2:1465:C:C4	1:2:1466:G:C8	3.03	0.47
64:N8:66:ALA:HA	64:N8:69:TRP:N	4.19	0.47
36:5:2971:A:H5''	36:5:2972:G:O5'	2.14	0.47
39:L2:35:ALA:HA	45:L8:36:ILE:HD13	1.96	0.47
59:N3:80:ARG:NH1	59:N3:116:GLY:HA3	2.42	0.47
26:D4:83:LYS:HA	26:D4:91:LEU:HD11	1.96	0.47
36:1:247:C:H2'	36:1:248:U:C6	2.50	0.47
64:N8:70:LYS:HE2	64:N8:129:PHE:CD2	2.49	0.47
36:1:699:A:H2'	36:1:700:C:O4'	2.14	0.47
46:L9:13:PRO:HD2	46:L9:16:VAL:HG22	1.97	0.47
1:2:45:U:O2	1:2:434:G:H1'	2.15	0.47
57:N1:39:ILE:HD12	57:N1:102:ARG:HD2	1.96	0.47
1:6:1273:G:H4'	1:6:1274:C:C5'	2.45	0.47
1:2:598:U:H2'	1:2:599:A:C8	2.49	0.47
1:2:442:C:O2'	1:2:525:A:N1	2.47	0.47
36:5:1495:U:H2'	36:5:1842:A:C2	2.49	0.47
75:O9:45:ARG:NH2	36:5:1841:A:N3	127.86	0.47
1:6:1111:G:N7	86:6:2068:OHX:N3	2.62	0.47
36:1:1298:C:OP2	86:1:3964:OHX:N2	2.48	0.47
45:L8:134:TYR:CD1	45:L8:190:VAL:HG11	3.58	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3133:C:H2'	36:1:3134:A:O4'	2.14	0.47
6:S4:71:LYS:HB3	6:S4:76:VAL:HA	1.95	0.47
68:O2:78:ASN:HA	68:O2:108:ILE:HD11	1.96	0.47
1:2:829:A:O2'	1:2:830:U:OP2	2.24	0.47
7:S5:152:GLY:O	7:S5:154:ALA:N	2.47	0.47
36:1:627:U:H2'	36:1:628:A:C8	2.50	0.47
45:L8:130:TYR:HD1	45:L8:202:GLU:HB3	1.79	0.47
1:6:1030:A:N7	1:6:1792:G:C2	2.82	0.47
66:O0:16:LEU:HB3	66:O0:98:SER:HB2	1.96	0.47
36:1:237:G:H2'	36:1:238:A:O4'	2.13	0.47
36:1:511:G:H2'	36:1:512:U:O4'	2.15	0.47
36:5:1861:G:OP2	86:5:3988:OHX:N2	2.48	0.47
47:M0:34:TYR:CD1	47:M0:34:TYR:N	2.83	0.47
36:1:1507:G:H5'	36:1:1507:G:N3	2.30	0.47
55:M9:138:LEU:O	55:M9:138:LEU:HD22	3.37	0.47
1:6:60:U:H5'	1:6:61:A:OP2	2.14	0.47
78:Q2:20:HIS:ND1	36:5:2741:C:O2'	214.21	0.47
36:5:961:C:N3	86:5:4173:OHX:N4	2.63	0.47
78:Q2:40:LYS:HE3	78:Q2:44:ASP:OD2	2.40	0.47
36:1:1680:G:C5	36:1:1681:U:C5	3.03	0.47
41:L4:10:SER:OG	41:L4:14:GLU:HG2	5.70	0.47
1:2:876:G:H1'	1:2:944:A:O4'	2.14	0.47
36:1:3286:G:H3'	36:1:3287:U:H5''	1.96	0.47
36:5:1246:G:O2'	36:5:1264:G:OP2	2.29	0.47
36:1:2768:U:H2'	36:1:2769:A:C8	2.49	0.47
5:S3:46:THR:N	5:S3:83:THR:O	3.02	0.47
47:M0:144:ASN:O	47:M0:147:VAL:N	2.47	0.47
47:M0:48:LEU:HD22	47:M0:49:CYS:N	2.30	0.47
21:C9:122:ARG:NH1	1:6:1499:G:OP1	420.94	0.47
42:L5:85:ARG:NH2	42:L5:252:ALA:O	4.23	0.47
1:6:921:U:O4	86:6:2179:OHX:N3	2.48	0.47
32:E0:33:ARG:NH2	1:6:478:A:H5'	436.88	0.47
11:S9:124:HIS:HD2	1:6:478:A:O2'	449.12	0.47
67:O1:13:THR:HG22	67:O1:72:ARG:HH11	1.80	0.47
36:1:1650:G:H5''	39:L2:70:ARG:HB3	1.97	0.47
53:M7:67:ILE:CG2	53:M7:80:LYS:HB3	2.44	0.47
51:M5:65:ARG:HG3	51:M5:129:TYR:CE1	3.22	0.47
48:M1:52:TYR:HB2	48:M1:53:THR:H	1.40	0.47
4:S2:140:ARG:HH12	23:D1:1:MET:HB3	1.79	0.47
44:L7:150:LYS:HD3	44:L7:244:ASN:ND2	2.29	0.47
36:1:1231:A:OP2	86:1:4085:OHX:N5	2.48	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:189:ILE:HB	3:S1:190:PRO:HD3	2.04	0.47
3:S1:223:PHE:CE1	3:S1:225:VAL:HG12	3.95	0.47
3:S1:36:SER:O	3:S1:38:PHE:N	2.48	0.47
33:E1:106:TYR:CZ	33:E1:131:PHE:HZ	3.23	0.47
41:L4:3:ARG:O	41:L4:5:GLN:NE2	2.47	0.47
3:S1:124:ASN:HD22	3:S1:138:PHE:HE1	1.63	0.47
36:1:2180:G:C6	36:1:2181:C:N4	2.82	0.47
63:N7:35:SER:O	63:N7:36:HIS:ND1	5.58	0.47
64:N8:91:LEU:HA	64:N8:121:VAL:HG21	1.97	0.47
7:S5:109:LYS:HE3	7:S5:109:LYS:HB2	4.72	0.47
66:O0:23:TYR:HA	66:O0:93:LEU:HG	1.95	0.47
38:8:15:G:C6	38:8:16:G:C6	3.02	0.47
18:C6:83:GLN:HE22	18:C6:119:ALA:HB2	1.80	0.47
1:2:905:A:H5''	16:C4:52:ARG:HD3	1.97	0.47
1:2:866:G:OP1	15:C3:2:GLY:HA3	2.15	0.47
44:L7:102:VAL:HG13	44:L7:126:LEU:HD22	1.96	0.47
4:S2:63:VAL:HG12	4:S2:134:LEU:HD12	1.96	0.47
36:1:945:C:H2'	36:1:946:U:C6	2.50	0.47
1:2:852:C:OP1	55:M9:172:ARG:HD3	2.14	0.47
1:6:72:A:H2'	1:6:73:U:C1'	2.45	0.47
8:S6:141:ILE:HG21	8:S6:153:VAL:HG13	1.97	0.47
56:N0:10:ILE:O	56:N0:59:VAL:N	2.47	0.47
2:S0:185:ARG:HG2	23:D1:45:ALA:O	4.01	0.47
39:L2:211:HIS:C	39:L2:213:GLY:H	4.59	0.47
74:O8:62:ALA:O	74:O8:65:LEU:N	3.00	0.47
56:N0:26:ARG:HH11	57:N1:150:THR:CG2	2.78	0.47
43:L6:155:LEU:HA	43:L6:155:LEU:HD23	1.70	0.47
48:M1:100:GLY:HA2	48:M1:155:THR:O	2.15	0.47
36:5:2689:A:N3	36:5:2689:A:H2'	2.28	0.47
25:D3:137:LYS:C	25:D3:139:LYS:H	3.03	0.47
40:L3:126:LYS:HB2	40:L3:128:LYS:HG2	1.96	0.47
48:M1:133:ARG:HB3	48:M1:134:PRO:CD	2.88	0.47
9:S7:143:LEU:O	24:D2:42:GLN:NE2	2.48	0.47
1:2:367:A:C6	1:2:368:U:C4	3.03	0.47
42:L5:184:ASP:HB3	42:L5:187:THR:OG1	5.05	0.47
12:C0:77:ARG:NH2	12:C0:84:GLU:O	5.57	0.47
36:5:2513:U:C2'	36:5:2592:G:H1	2.28	0.47
71:O5:63:ARG:HH21	38:8:97:A:P	54.98	0.47
19:C7:81:LYS:O	19:C7:83:GLN:N	3.37	0.47
36:5:3174:A:H2'	36:5:3175:U:H5'	1.97	0.47
36:1:1841:A:H2	75:O9:45:ARG:HH22	1.62	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2938:G:C2'	36:5:2939:G:H5'	2.44	0.47
53:M7:109:ALA:HA	53:M7:112:LEU:HD22	1.99	0.47
36:5:2144:A:H1'	36:5:2281:A:N6	2.30	0.47
6:S4:92:LEU:HB3	6:S4:94:ALA:O	2.14	0.47
27:D5:90:LYS:O	27:D5:92:ILE:HG22	2.15	0.47
1:2:1107:G:C6	1:2:1108:G:C6	3.02	0.47
1:2:1757:G:H4'	36:1:2256:A:N7	2.30	0.47
8:S6:214:LYS:HB3	8:S6:218:GLU:OE1	6.05	0.47
1:2:301:A:OP2	86:2:2064:OHX:N2	2.48	0.47
75:O9:21:ARG:HD3	75:O9:22:PRO:O	2.31	0.47
34:SR:222:LEU:O	34:SR:231:MET:HB2	2.14	0.47
64:N8:61:PHE:O	64:N8:62:HIS:HB3	2.63	0.47
36:5:1008:U:C2	36:5:1043:C:C2	3.02	0.47
41:L4:219:LEU:HD23	41:L4:219:LEU:HA	1.78	0.47
36:1:372:A:H2'	36:1:373:A:C8	2.50	0.47
41:L4:207:VAL:HB	41:L4:227:THR:HG22	3.12	0.47
36:1:824:C:H2'	36:1:825:U:C6	2.49	0.47
1:2:386:G:C6	1:2:387:A:N6	2.82	0.47
1:2:140:A:OP2	8:S6:187:LYS:NZ	2.31	0.47
34:SR:69:GLN:OE1	34:SR:85:TRP:NE1	2.48	0.47
39:L2:31:THR:O	39:L2:33:ASP:N	2.46	0.47
1:6:1483:A:OP2	1:6:1521:G:N2	2.32	0.47
79:Q3:49:ARG:HD3	79:Q3:51:ALA:O	2.15	0.47
51:M5:94:TYR:CZ	51:M5:96:ARG:HD3	2.83	0.47
10:S8:168:CYS:HG	10:S8:182:TYR:HE1	1.62	0.47
37:3:30:G:C6	37:3:31:U:C4	3.03	0.47
50:M4:113:THR:HB	50:M4:116:GLU:HG3	1.97	0.47
36:1:914:A:C2	39:L2:204:MET:HB3	2.50	0.47
3:S1:120:LEU:HD23	3:S1:142:PHE:CE1	5.13	0.47
17:C5:16:SER:HB2	17:C5:20:VAL:O	3.37	0.47
1:2:1291:G:H22	1:2:1324:G:N2	2.13	0.47
20:C8:134:ARG:O	20:C8:136:GLN:HG2	4.10	0.47
1:2:1552:U:H2'	1:2:1553:G:O4'	2.15	0.47
30:D8:49:ARG:HG2	30:D8:52:ASP:OD1	2.98	0.47
26:D4:12:VAL:HG12	1:6:783:G:C8	423.22	0.47
1:2:706:A:N1	1:2:734:A:N6	2.63	0.47
49:M3:46:ILE:HG13	49:M3:49:ARG:CZ	5.29	0.47
36:1:1209:G:C6	36:1:1210:U:N3	2.83	0.47
4:S2:137:ILE:HD11	4:S2:219:GLY:HA3	3.62	0.47
36:1:1556:C:H5''	36:1:2169:G:H22	1.79	0.47
40:L3:187:SER:HB3	40:L3:190:GLU:OE1	2.25	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:107:SER:O	1:6:802:G:O2'	371.38	0.47
41:L4:82:THR:HG23	41:L4:84:ARG:N	2.67	0.47
1:6:1173:C:H2'	1:6:1174:C:H6	1.80	0.47
54:M8:49:LEU:HD22	54:M8:53:PHE:CZ	2.50	0.47
36:1:1674:G:C6	36:1:1675:G:C5	3.03	0.47
1:2:1535:U:H6	1:2:1535:U:H2'	1.52	0.47
54:M8:65:SER:HA	54:M8:93:ILE:HD13	1.96	0.47
8:S6:131:LYS:HD3	60:N4:81:PRO:O	2.15	0.47
75:O9:5:LYS:O	36:5:1833:G:H4'	115.03	0.47
12:C0:38:LYS:O	12:C0:41:TYR:HB2	2.40	0.47
71:O5:29:ALA:HA	71:O5:32:LYS:HE2	2.18	0.47
68:O2:31:ASN:ND2	36:5:1408:G:OP1	159.72	0.47
36:1:1577:G:H2'	36:1:1578:C:C1'	2.45	0.47
1:6:1716:C:O2'	1:6:1717:G:OP2	2.30	0.47
41:L4:59:GLN:OE1	73:O7:55:ARG:NH2	2.83	0.47
41:L4:309:ARG:NH2	41:L4:312:VAL:HB	2.30	0.47
18:C6:32:ASN:OD1	18:C6:69:VAL:HG23	2.90	0.47
75:O9:49:MET:O	75:O9:51:ILE:N	2.47	0.47
68:O2:7:PRO:HG2	68:O2:63:THR:CG2	4.54	0.47
29:D7:19:HIS:CE1	29:D7:20:LYS:HB3	4.30	0.47
36:5:2601:A:H2'	36:5:2602:G:H8	1.80	0.47
20:C8:36:LYS:HD3	20:C8:36:LYS:HA	1.63	0.47
1:6:82:U:H2'	1:6:83:G:O4'	2.15	0.47
36:5:2906:C:H2'	36:5:2907:G:O4'	2.15	0.47
67:O1:96:VAL:O	67:O1:98:VAL:N	2.86	0.47
1:6:523:G:O2'	1:6:529:A:N6	2.48	0.47
36:5:1706:C:H2'	36:5:1707:A:O4'	2.15	0.47
55:M9:44:LEU:HD12	55:M9:49:THR:HB	1.96	0.47
36:1:90:C:H2'	36:1:91:G:H5'	1.96	0.47
45:L8:225:LYS:O	45:L8:229:VAL:HG23	2.14	0.47
26:D4:114:ARG:HA	26:D4:117:LYS:HD2	1.97	0.47
16:C4:91:THR:O	16:C4:93:THR:N	2.65	0.47
1:2:976:G:C6	1:2:1023:A:C4	3.03	0.47
36:1:1802:C:H2'	36:1:1803:C:O4'	2.15	0.47
1:2:1178:G:H2'	1:2:1179:G:O4'	2.14	0.47
36:1:1831:U:H2'	36:1:1832:C:H6	1.79	0.47
10:S8:65:PHE:HA	10:S8:181:GLY:O	2.37	0.47
41:L4:234:ASN:OD1	41:L4:236:LEU:N	2.43	0.47
52:M6:157:GLU:OE2	36:5:3243:A:N6	271.85	0.47
47:M0:80:SER:O	47:M0:84:ALA:HB2	2.15	0.47
28:D6:78:ALA:HA	28:D6:83:ILE:HG13	8.41	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:8:141:C:H2'	38:8:142:C:C6	2.50	0.47
41:L4:181:VAL:HG12	41:L4:182:LEU:H	1.80	0.47
11:S9:117:GLY:C	11:S9:119:ALA:H	2.17	0.47
1:2:470:A:OP2	86:2:2076:OHX:N6	2.48	0.47
1:2:1525:A:N1	1:2:1608:U:O2'	2.48	0.47
21:C9:92:LYS:HG3	21:C9:93:HIS:O	2.15	0.47
36:1:2107:A:H2	36:1:3344:A:C8	2.33	0.47
36:5:3362:A:C2	36:5:3363:U:C2	3.03	0.47
2:S0:139:VAL:O	2:S0:141:ILE:HG13	2.19	0.47
3:S1:117:TRP:CZ2	1:6:1799:U:H5''	335.44	0.47
3:S1:131:ASP:N	3:S1:131:ASP:OD1	4.24	0.47
32:E0:13:LYS:HB2	1:6:567:A:H4'	370.47	0.47
1:2:819:G:O6	1:2:853:G:C6	2.68	0.47
24:D2:83:ILE:HG12	24:D2:117:ARG:NH1	2.27	0.47
33:E1:82:LYS:HE2	1:6:1447:C:C5	379.51	0.47
39:L2:132:ASN:O	39:L2:133:TYR:HB3	2.14	0.47
16:C4:24:ASN:HA	16:C4:55:SER:HB3	2.88	0.47
86:5:3995:OHX:N4	86:5:4084:OHX:N2	2.63	0.47
36:1:1793:C:C4	39:L2:179:LEU:HD22	2.50	0.47
3:S1:111:ARG:HG3	3:S1:111:ARG:HH11	3.10	0.47
18:C6:47:LYS:NZ	18:C6:114:ARG:HH21	2.09	0.47
36:1:975:C:H2'	36:1:976:U:C6	2.50	0.47
26:D4:29:HIS:CD2	26:D4:29:HIS:N	4.17	0.47
7:S5:203:LYS:O	7:S5:205:SER:N	3.25	0.47
6:S4:42:LEU:N	6:S4:84:ALA:O	2.48	0.47
1:6:76:A:N3	1:6:76:A:H2'	2.30	0.47
25:D3:17:VAL:HG23	25:D3:20:ARG:HH12	4.54	0.47
1:2:1546:G:H2'	1:2:1547:A:C8	2.50	0.47
2:S0:185:ARG:HB2	23:D1:45:ALA:H	1.80	0.47
20:C8:70:VAL:HA	20:C8:73:MET:HE2	1.97	0.47
1:2:886:U:H2'	1:2:887:A:O4'	2.14	0.47
21:C9:63:ARG:O	21:C9:67:MET:HG3	5.02	0.47
38:4:106:C:O2'	86:4:232:OHX:N4	2.48	0.47
18:C6:38:LEU:HA	18:C6:38:LEU:HD23	2.05	0.47
18:C6:40:GLU:HA	18:C6:41:PRO:C	2.35	0.47
12:C0:29:GLN:HB3	12:C0:39:ASN:HB3	2.13	0.47
26:D4:120:GLY:HA2	1:6:85:A:O3'	335.07	0.47
8:S6:4:ASN:HB3	8:S6:110:ALA:HA	2.44	0.47
62:N6:126:LEU:HB2	71:O5:71:LYS:HZ3	46.35	0.47
36:5:3245:A:H2	36:5:3246:G:C2	2.32	0.47
61:N5:106:ASP:HB2	61:N5:130:TYR:HE1	2.63	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:O2:41:VAL:HB	68:O2:46:PHE:HD2	2.33	0.47
79:Q3:8:VAL:HB	79:Q3:11:THR:HG22	1.96	0.47
67:O1:74:ARG:HH12	67:O1:109:VAL:HG21	1.80	0.47
61:N5:86:VAL:HG21	61:N5:95:ILE:HG12	3.15	0.47
1:6:913:G:H3'	1:6:914:G:C5'	2.43	0.47
66:O0:53:LYS:HZ1	36:5:2552:C:H5	242.09	0.47
36:1:423:A:C6	36:1:424:G:C6	3.03	0.47
26:D4:96:LEU:H	26:D4:96:LEU:HG	1.42	0.47
46:L9:77:ASN:HB3	46:L9:151:VAL:HG21	1.96	0.47
46:L9:86:TYR:CE2	46:L9:151:VAL:HG22	2.51	0.47
36:5:1690:C:C4	36:5:1691:U:C4	3.03	0.47
50:M4:133:LYS:O	50:M4:136:ALA:HB3	2.15	0.47
36:5:1202:A:O2'	36:5:1203:A:H5'	2.15	0.47
36:1:2796:G:N7	78:Q2:63:LYS:NZ	2.63	0.47
9:S7:21:ALA:O	9:S7:24:PHE:HB2	2.27	0.47
4:S2:37:PRO:HA	4:S2:65:GLU:OE1	2.49	0.47
25:D3:102:VAL:HB	25:D3:124:VAL:HG13	2.25	0.47
37:3:71:G:O2'	37:3:72:A:H5'	2.15	0.47
36:5:2788:C:H2'	36:5:2789:U:H6	1.80	0.47
1:6:1194:A:H2'	1:6:1195:C:H5'	1.97	0.47
37:3:33:U:C6	42:L5:207:TYR:CE2	3.02	0.47
36:5:969:C:H6	36:5:969:C:O5'	1.98	0.47
43:L6:172:HIS:HB3	69:O3:44:TYR:CE2	2.50	0.47
36:1:3335:A:H2'	36:1:3336:A:C8	2.50	0.47
36:1:1924:U:H2'	36:1:1926:C:C5	2.49	0.47
48:M1:150:ASN:HA	48:M1:153:LYS:HD2	1.97	0.47
9:S7:39:ARG:N	9:S7:40:PRO:HD2	2.48	0.47
41:L4:292:SER:HG	41:L4:295:ILE:H	1.57	0.46
5:S3:67:ASN:O	5:S3:71:LEU:HG	2.15	0.46
22:D0:26:LEU:HD21	22:D0:114:VAL:HG13	2.51	0.46
1:2:1199:G:O6	22:D0:67:THR:OG1	2.26	0.46
53:M7:67:ILE:HG22	53:M7:80:LYS:HB3	1.96	0.46
16:C4:17:ALA:HB2	16:C4:79:VAL:HG11	3.51	0.46
21:C9:52:GLY:HA2	21:C9:55:TYR:CD2	2.50	0.46
36:5:989:A:H2'	36:5:990:U:O4'	2.14	0.46
36:5:1015:U:O3'	36:5:1016:C:H2'	2.16	0.46
51:M5:169:LYS:HE3	36:5:63:A:OP1	100.64	0.46
28:D6:58:VAL:HG22	28:D6:59:TYR:N	3.11	0.46
6:S4:122:LYS:HB3	6:S4:164:LEU:HD21	1.97	0.46
17:C5:122:THR:HG22	17:C5:123:TYR:HD1	5.63	0.46
71:O5:54:VAL:O	71:O5:58:ILE:HG13	2.54	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:24:VAL:HG22	63:N7:130:PHE:CE2	3.23	0.46
36:5:2584:G:H5'	36:5:2585:G:OP2	2.14	0.46
66:O0:45:ALA:O	66:O0:48:THR:HG22	2.15	0.46
40:L3:296:THR:CG2	40:L3:297:SER:N	3.14	0.46
6:S4:15:PRO:HG2	6:S4:18:TRP:CD2	2.50	0.46
36:5:1784:G:H2'	36:5:1785:U:O4'	2.14	0.46
50:M4:25:LYS:HE3	50:M4:62:GLN:HG2	1.98	0.46
18:C6:47:LYS:HA	18:C6:47:LYS:HD2	1.80	0.46
63:N7:54:THR:H	63:N7:57:HIS:CD2	2.82	0.46
12:C0:25:LYS:NZ	1:6:1435:G:N7	418.76	0.46
39:L2:109:GLU:OE1	39:L2:138:GLY:HA2	2.14	0.46
8:S6:70:PRO:O	8:S6:98:ARG:NH1	2.50	0.46
1:2:657:U:O2	1:2:677:G:N2	2.48	0.46
25:D3:13:ARG:O	25:D3:17:VAL:HG12	4.77	0.46
20:C8:30:TYR:HE2	20:C8:40:ARG:NH1	2.13	0.46
20:C8:70:VAL:O	20:C8:74:GLN:HG3	4.01	0.46
54:M8:96:PHE:CG	54:M8:97:PRO:HD2	2.50	0.46
1:2:694:U:N3	9:S7:98:ILE:HD12	2.31	0.46
37:7:61:G:C6	37:7:62:U:C4	3.02	0.46
43:L6:7:PRO:HG2	43:L6:10:TYR:CZ	2.50	0.46
26:D4:122:GLY:O	26:D4:125:LEU:N	2.74	0.46
9:S7:78:THR:HG22	9:S7:90:VAL:HG12	3.08	0.46
36:5:1748:G:O6	86:5:4180:OHX:N4	2.48	0.46
15:C3:54:LEU:HB3	15:C3:60:VAL:HG13	3.94	0.46
50:M4:123:LEU:HA	50:M4:123:LEU:HD23	1.70	0.46
38:4:62:C:H4'	38:4:63:G:O5'	2.15	0.46
1:2:827:C:H2'	1:2:828:U:C6	2.50	0.46
1:6:723:G:H5'	1:6:724:C:OP2	2.15	0.46
40:L3:258:ALA:O	40:L3:259:HIS:CD2	2.73	0.46
70:O4:44:CYS:HB3	70:O4:49:SER:H	2.54	0.46
36:1:1887:A:OP1	86:1:4087:OHX:N3	2.48	0.46
62:N6:37:LYS:CE	62:N6:37:LYS:H	3.45	0.46
39:L2:88:ILE:HG23	39:L2:99:GLY:O	3.31	0.46
26:D4:59:GLY:O	26:D4:60:PHE:HB2	2.14	0.46
65:N9:23:LYS:HA	65:N9:23:LYS:HD3	3.36	0.46
65:N9:43:HIS:NE2	65:N9:47:LEU:HD11	2.30	0.46
58:N2:54:VAL:HG13	58:N2:67:SER:HB2	3.18	0.46
60:N4:23:ARG:HG2	60:N4:24:GLY:H	2.67	0.46
36:1:655:C:H2'	36:1:656:A:C8	2.50	0.46
36:5:2433:U:OP2	36:5:2434:U:O2'	2.32	0.46
36:1:1100:U:O2'	44:L7:105:LEU:O	2.28	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2533:G:N2	36:5:2546:C:O2	2.41	0.46
36:1:1116:G:C4	36:1:2817:A:C2	3.03	0.46
38:8:59:A:H4'	38:8:60:U:H5''	1.97	0.46
36:5:2118:C:O5'	36:5:2118:C:H6	1.97	0.46
55:M9:68:GLN:NE2	55:M9:72:GLU:OE2	5.51	0.46
11:S9:80:LEU:HB3	11:S9:86:LEU:HB2	2.21	0.46
6:S4:51:ARG:HE	6:S4:51:ARG:HA	2.25	0.46
36:1:3276:G:H1	69:O3:60:ARG:NH1	2.12	0.46
1:6:1637:C:OP2	86:6:2113:OHX:N4	2.48	0.46
11:S9:107:ARG:NH2	11:S9:148:VAL:O	2.48	0.46
36:5:2836:C:H41	36:5:2852:C:N4	2.13	0.46
14:C2:43:ARG:NH2	1:6:1256:A:OP2	461.88	0.46
39:L2:70:ARG:NH1	39:L2:72:ARG:HE	5.46	0.46
1:2:1480:G:H3'	1:2:1481:C:H6	1.79	0.46
63:N7:22:LYS:HG3	63:N7:49:TYR:OH	2.68	0.46
19:C7:27:ASP:OD2	19:C7:30:THR:HG22	2.15	0.46
1:2:1619:C:H2'	1:2:1620:C:H6	1.80	0.46
1:2:77:U:H4'	1:2:78:A:O5'	2.16	0.46
52:M6:62:THR:HA	36:5:1306:G:C6	233.32	0.46
41:L4:23:PRO:HD2	41:L4:26:PHE:CD2	2.96	0.46
41:L4:23:PRO:O	41:L4:24:ALA:HB3	2.14	0.46
10:S8:89:GLU:CD	10:S8:92:ARG:HH21	2.18	0.46
22:D0:20:ILE:HD12	22:D0:100:VAL:HG21	4.41	0.46
45:L8:100:GLU:OE1	45:L8:108:ARG:HD3	2.60	0.46
49:M3:47:ALA:CB	49:M3:48:PRO:HD2	2.58	0.46
36:1:743:C:O2	54:M8:141:ARG:HG3	2.15	0.46
44:L7:88:ARG:CZ	44:L7:103:LEU:HD13	2.45	0.46
45:L8:156:ASP:HB2	45:L8:157:VAL:H	1.54	0.46
1:2:1542:G:H22	1:2:1568:C:H1'	1.79	0.46
8:S6:64:LYS:HD2	8:S6:97:VAL:HG11	3.13	0.46
55:M9:168:ALA:HB1	55:M9:172:ARG:CZ	2.45	0.46
1:6:74:U:C4	1:6:76:A:H5'	2.50	0.46
54:M8:34:THR:HG22	54:M8:49:LEU:CD2	2.68	0.46
65:N9:58:LYS:HA	65:N9:58:LYS:HZ3	2.84	0.46
36:1:665:A:OP1	51:M5:203:ARG:HD2	2.15	0.46
1:2:17:C:H4'	1:2:1109:G:C8	2.50	0.46
9:S7:60:ILE:HD12	9:S7:92:PHE:CE2	2.94	0.46
34:SR:13:LEU:HB3	34:SR:45:TRP:CZ3	2.70	0.46
58:N2:36:TYR:CD1	58:N2:40:HIS:CE1	3.78	0.46
63:N7:136:PHE:HD1	63:N7:136:PHE:N	2.13	0.46
73:O7:69:HIS:O	73:O7:73:ARG:HG3	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:102:PHE:O	2:S0:103:THR:HB	2.15	0.46
39:L2:79:ASN:H	39:L2:82:VAL:HG11	2.68	0.46
53:M7:19:GLY:HA3	53:M7:22:LEU:HD11	1.97	0.46
48:M1:11:ASP:O	48:M1:12:LEU:HB3	3.74	0.46
38:4:125:U:HO2'	38:4:126:A:P	2.38	0.46
39:L2:39:GLY:HA3	45:L8:36:ILE:HD12	2.97	0.46
36:5:1514:G:H2'	36:5:1514:G:N3	2.29	0.46
43:L6:170:LYS:O	43:L6:173:MET:HB2	3.01	0.46
1:2:1469:A:H2'	1:2:1470:C:C6	2.50	0.46
36:1:2163:C:O2'	39:L2:11:GLY:HA3	2.15	0.46
36:5:1323:G:C2'	36:5:1324:U:H5'	2.46	0.46
48:M1:91:LEU:HD12	48:M1:163:PHE:CE2	2.50	0.46
71:O5:49:LYS:NZ	38:8:63:G:O2'	49.90	0.46
1:2:759:U:OP1	86:2:2160:OHX:N1	2.48	0.46
36:1:833:G:C2	36:1:862:U:O2	2.68	0.46
1:6:706:A:H2'	1:6:707:A:O4'	2.15	0.46
36:1:2168:A:C6	36:1:2170:U:H1'	2.50	0.46
36:5:815:G:C2	36:5:906:A:C2	3.04	0.46
17:C5:75:PRO:HA	17:C5:93:VAL:HB	2.75	0.46
1:6:1752:U:H2'	1:6:1753:A:C8	2.50	0.46
10:S8:32:GLN:HE21	1:6:1728:A:H1'	276.98	0.46
36:1:281:G:C6	36:1:282:G:C6	3.04	0.46
2:S0:79:ARG:NH1	2:S0:164:ASN:O	2.59	0.46
37:7:77:G:N2	37:7:102:A:OP2	2.42	0.46
1:2:552:G:C6	1:2:553:G:C6	3.03	0.46
36:1:2854:U:P	47:M0:3:ARG:HH22	2.38	0.46
59:N3:87:ARG:HH22	59:N3:137:VAL:HG22	2.53	0.46
72:O6:25:LYS:HB3	36:5:156:G:OP2	87.94	0.46
48:M1:137:ARG:NH1	37:7:28:C:OP1	301.07	0.46
40:L3:358:TRP:CZ2	40:L3:360:ASP:HA	2.81	0.46
1:2:1587:A:H2'	1:2:1588:G:H8	1.80	0.46
36:5:494:G:H3'	36:5:495:G:H8	1.80	0.46
36:5:621:A:H2'	36:5:622:A:C8	2.50	0.46
1:2:1202:A:H2'	1:2:1203:A:H5''	1.96	0.46
36:1:981:U:O2'	36:1:982:C:OP1	2.32	0.46
50:M4:113:THR:HG22	50:M4:116:GLU:H	2.03	0.46
46:L9:49:ASN:OD1	46:L9:51:GLN:N	4.56	0.46
3:S1:129:THR:OG1	3:S1:130:SER:N	3.95	0.46
1:2:1291:G:N2	1:2:1324:G:N2	2.58	0.46
1:2:1323:C:H2'	1:2:1324:G:O4'	2.15	0.46
65:N9:2:ALA:HB2	36:5:2818:U:C5'	211.63	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:E1:127:GLY:O	33:E1:129:GLY:N	2.48	0.46
1:6:1227:A:OP1	1:6:1228:G:H3'	2.15	0.46
41:L4:40:THR:O	41:L4:44:LYS:HE3	4.43	0.46
40:L3:296:THR:HG23	40:L3:298:PHE:H	1.80	0.46
20:C8:31:ALA:O	20:C8:34:THR:HG22	4.64	0.46
6:S4:151:ASP:CG	8:S6:215:ARG:HH12	3.71	0.46
36:1:2884:C:H2'	36:1:2885:C:H6	1.79	0.46
52:M6:10:ASP:HA	52:M6:36:VAL:HG23	1.97	0.46
50:M4:15:VAL:HG13	56:N0:150:PHE:O	2.15	0.46
46:L9:103:ILE:HD12	46:L9:136:PHE:HE2	2.33	0.46
20:C8:38:VAL:HG12	20:C8:42:TYR:CD2	2.49	0.46
10:S8:38:ILE:HA	10:S8:60:ILE:O	2.35	0.46
42:L5:276:LYS:HB2	37:7:62:U:OP1	327.38	0.46
86:5:4060:OHX:N3	86:5:4137:OHX:N6	2.64	0.46
12:C0:35:ILE:HG22	12:C0:37:THR:HG23	1.97	0.46
36:1:2616:C:C2'	36:1:2617:U:H5'	2.44	0.46
36:1:99:A:OP1	51:M5:194:GLN:NE2	2.47	0.46
51:M5:203:ARG:HD2	36:5:665:A:OP1	121.75	0.46
51:M5:12:ARG:HG2	36:5:268:A:C5	127.61	0.46
34:SR:32:LEU:HA	34:SR:45:TRP:O	2.52	0.46
15:C3:114:ARG:HG3	1:6:952:A:O2'	298.51	0.46
42:L5:34:LYS:HB2	57:N1:27:LEU:HD21	1.98	0.46
58:N2:47:VAL:O	58:N2:49:ASN:N	2.90	0.46
45:L8:153:ILE:HD13	45:L8:166:LEU:HB3	2.63	0.46
36:5:59:G:H2'	38:8:33:A:O2'	2.15	0.46
36:5:132:C:C2'	36:5:133:U:H5''	2.45	0.46
63:N7:136:PHE:CZ	70:O4:89:ILE:HG12	3.94	0.46
1:6:489:C:O2'	1:6:490:C:O5'	2.33	0.46
34:SR:211:ILE:HG22	34:SR:223:TRP:HD1	1.80	0.46
53:M7:22:LEU:HB3	53:M7:90:PHE:CE2	2.50	0.46
64:N8:14:HIS:O	64:N8:16:SER:N	2.48	0.46
54:M8:165:ILE:HG23	54:M8:167:SER:H	5.23	0.46
1:6:1122:G:N2	1:6:1125:A:OP2	2.39	0.46
36:5:1599:G:OP1	86:5:4131:OHX:N4	2.48	0.46
39:L2:43:GLY:N	39:L2:88:ILE:O	2.49	0.46
47:M0:54:SER:HB3	47:M0:130:ASP:O	2.14	0.46
68:O2:22:SER:HB2	68:O2:30:GLU:HA	2.01	0.46
26:D4:79:VAL:O	26:D4:83:LYS:HB2	2.15	0.46
1:6:660:G:H2'	1:6:661:A:H4'	1.96	0.46
34:SR:89:LEU:HB2	34:SR:103:PHE:CD2	2.51	0.46
54:M8:151:ARG:HD2	36:5:781:G:OP1	161.03	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1537:A:C2'	36:1:1538:G:H5'	2.45	0.46
36:5:1716:U:H5'	36:5:1716:U:H6	1.80	0.46
45:L8:246:MET:HA	45:L8:249:ARG:HB3	1.96	0.46
1:2:1573:A:H4'	1:2:1574:G:H5'	1.97	0.46
36:1:282:G:C8	36:1:282:G:H3'	2.49	0.46
24:D2:6:VAL:HG13	24:D2:29:PRO:HD2	1.96	0.46
68:O2:87:MET:O	68:O2:88:HIS:ND1	2.48	0.46
1:6:417:A:H4'	1:6:418:G:O5'	2.14	0.46
36:5:1338:C:H2'	36:5:1339:C:H6	1.80	0.46
1:6:1332:C:H42	1:6:1419:G:H1	1.61	0.46
36:5:1656:A:O2'	86:5:4172:OHX:N2	2.48	0.46
36:5:46:U:H6	36:5:46:U:O5'	1.99	0.46
36:1:2853:A:H4'	47:M0:63:GLU:O	2.16	0.46
1:6:1794:A:OP1	86:6:2124:OHX:N5	2.48	0.46
7:S5:43:PHE:CG	7:S5:44:ASN:N	2.87	0.46
86:6:2118:OHX:N6	86:6:2170:OHX:N5	2.63	0.46
47:M0:99:ILE:HD13	47:M0:101:LYS:HG2	4.50	0.46
24:D2:30:SER:HB2	24:D2:61:ILE:HG13	1.98	0.46
1:2:75:U:N3	1:2:76:A:N3	2.63	0.46
10:S8:138:ASN:O	10:S8:141:ARG:HB2	2.15	0.46
19:C7:106:THR:O	19:C7:110:VAL:HG13	5.69	0.46
36:5:2263:C:OP1	86:5:3949:OHX:N2	2.49	0.46
63:N7:10:VAL:HB	63:N7:83:THR:CG2	2.44	0.46
36:1:3185:U:O2'	56:N0:170:THR:OG1	2.27	0.46
43:L6:98:VAL:HA	43:L6:101:PHE:HD2	1.80	0.46
26:D4:49:LYS:N	26:D4:49:LYS:HD3	2.46	0.46
44:L7:135:ALA:HB2	44:L7:229:PHE:H	4.91	0.46
36:1:1672:U:O2'	36:1:1673:G:H5'	2.15	0.46
74:O8:32:ASN:ND2	74:O8:34:ALA:HB3	6.30	0.46
41:L4:209:TYR:OH	41:L4:229:ASN:HB2	2.15	0.46
8:S6:69:LEU:N	8:S6:101:ILE:HD12	3.37	0.46
8:S6:98:ARG:HD3	8:S6:99:GLY:N	2.46	0.46
1:2:144:U:O2'	1:2:145:A:H5'	2.14	0.46
29:D7:58:SER:OG	29:D7:59:CYS:N	2.83	0.46
10:S8:36:THR:HA	10:S8:58:LEU:HA	1.96	0.46
36:1:3007:U:OP1	52:M6:73:PHE:HA	2.16	0.46
9:S7:122:HIS:HA	9:S7:125:ILE:HD12	1.97	0.46
15:C3:30:SER:HB2	15:C3:67:THR:HA	5.70	0.46
1:2:1439:C:H2'	1:2:1440:C:H6	1.81	0.46
40:L3:383:LEU:HD23	40:L3:383:LEU:HA	2.99	0.46
36:5:1765:U:H2'	36:5:1766:G:O4'	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:52:VAL:HA	42:L5:147:ASP:HB3	1.98	0.46
4:S2:162:CYS:SG	4:S2:212:LYS:HE2	2.55	0.46
15:C3:136:PRO:O	15:C3:139:TRP:N	2.49	0.46
57:N1:17:ARG:HB2	57:N1:22:HIS:CE1	3.07	0.46
86:5:4208:OHX:N4	86:5:4218:OHX:N3	2.63	0.46
36:5:173:G:N1	36:5:246:U:C2	2.83	0.46
2:S0:101:ARG:HH11	2:S0:101:ARG:HG2	3.76	0.46
71:O5:118:ILE:O	71:O5:119:LYS:HB2	3.02	0.46
24:D2:67:GLY:C	24:D2:69:LEU:H	2.71	0.46
36:1:781:G:N7	86:1:3941:OHX:N5	2.64	0.46
36:1:1471:U:H2'	36:1:1472:U:H6	1.81	0.46
36:1:2718:U:H2'	36:1:2719:U:C6	2.51	0.46
41:L4:165:ALA:O	41:L4:168:ALA:HB3	2.45	0.46
36:1:685:G:P	49:M3:35:ARG:NH1	2.88	0.46
1:2:482:U:H2'	1:2:483:A:H8	1.81	0.46
42:L5:211:LEU:HB3	42:L5:219:PHE:HB2	2.73	0.46
65:N9:38:LYS:O	65:N9:39:PHE:CB	4.21	0.46
40:L3:4:ARG:HD3	40:L3:7:GLU:HA	1.97	0.46
45:L8:143:ILE:HD13	45:L8:170:CYS:SG	3.40	0.46
56:N0:82:ASP:OD1	56:N0:87:THR:HB	2.16	0.46
36:1:1355:A:H5''	36:1:1356:U:H5	1.80	0.46
6:S4:35:PRO:HD2	6:S4:83:PRO:HG2	2.58	0.46
36:1:644:G:H2'	36:1:2372:A:N7	2.31	0.46
36:5:1715:A:H4'	36:5:1716:U:OP1	2.16	0.46
41:L4:304:GLN:HB3	41:L4:306:THR:O	2.15	0.46
36:1:2861:U:H2'	36:1:2862:U:O4'	2.15	0.46
36:1:1313:G:P	52:M6:82:LYS:HE3	2.56	0.46
40:L3:85:VAL:O	40:L3:162:VAL:HA	2.46	0.46
6:S4:204:GLY:HA2	86:6:2166:OHX:N6	342.18	0.46
38:4:24:G:OP2	62:N6:13:ARG:HD3	2.15	0.46
36:5:1621:A:H2'	36:5:1622:U:C6	2.51	0.46
1:2:1308:G:C2	1:2:1309:C:C2	3.03	0.46
36:5:1270:A:H2'	36:5:1271:A:C8	2.50	0.46
36:5:2957:G:H8	36:5:2957:G:H5'	1.80	0.46
36:1:559:A:N7	36:1:560:G:C8	2.83	0.46
36:1:1597:C:H2'	36:1:1598:G:H8	1.80	0.46
7:S5:42:LEU:HD21	7:S5:45:LYS:HE2	1.97	0.46
11:S9:38:ASN:ND2	1:6:594:A:OP2	409.59	0.46
11:S9:110:GLN:HE22	11:S9:126:ARG:CG	2.43	0.46
7:S5:166:ARG:HD2	30:D8:46:GLY:CA	2.45	0.46
14:C2:61:VAL:HA	14:C2:89:ILE:HG22	1.98	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:C9:93:HIS:NE2	21:C9:95:ASP:OD1	3.34	0.46
56:N0:73:LYS:NZ	56:N0:97:VAL:O	3.21	0.46
1:2:1073:G:C2'	1:2:1074:G:H5''	2.41	0.46
37:3:48:U:O4	42:L5:58:LYS:HE2	2.15	0.46
50:M4:116:GLU:HG2	52:M6:197:LEU:HD23	4.34	0.46
3:S1:81:PHE:CE1	3:S1:109:LYS:HE2	2.67	0.46
19:C7:107:SER:O	19:C7:110:VAL:HG22	4.67	0.46
24:D2:114:GLU:O	24:D2:117:ARG:HB3	2.66	0.46
36:1:1210:U:H2'	36:1:1211:U:H6	1.80	0.46
40:L3:137:TYR:O	40:L3:141:GLY:N	2.48	0.46
36:1:119:U:C2	45:L8:138:HIS:CE1	3.04	0.46
59:N3:17:LEU:HD21	59:N3:98:ASN:CG	2.58	0.46
48:M1:90:GLN:OE1	48:M1:172:LEU:HD11	2.15	0.46
36:5:2604:U:OP2	86:5:4010:OHX:N3	2.48	0.46
46:L9:136:PHE:CE1	46:L9:144:ILE:HG12	4.57	0.46
1:2:116:U:O2	1:2:333:A:H2	1.99	0.46
36:1:3366:G:H2'	36:1:3367:C:C6	2.50	0.46
36:5:1824:U:H2'	36:5:1825:G:H8	1.80	0.46
1:6:1542:G:H22	1:6:1568:C:H1'	1.79	0.46
18:C6:21:HIS:N	18:C6:66:ARG:O	3.05	0.46
66:O0:22:LYS:H	66:O0:94:GLU:HB2	1.81	0.46
4:S2:152:HIS:HD1	4:S2:174:ARG:HG2	3.48	0.46
5:S3:50:ILE:O	5:S3:52:ALA:N	2.49	0.46
55:M9:8:LYS:O	55:M9:11:ALA:HB3	2.14	0.46
17:C5:115:TYR:N	17:C5:118:GLU:OE1	3.73	0.46
34:SR:112:SER:CB	34:SR:153:GLN:HA	2.45	0.46
66:O0:27:TYR:OH	66:O0:55:GLU:OE1	2.32	0.46
49:M3:168:ARG:NH1	49:M3:172:LEU:HD11	3.24	0.46
36:1:2519:A:C4	36:1:2589:G:N2	2.84	0.46
36:5:527:A:H2'	36:5:528:U:C6	2.49	0.46
1:2:28:A:H2'	1:2:29:U:H6	1.81	0.46
36:5:2275:A:C2	36:5:2312:A:C4	3.04	0.46
23:D1:71:ARG:HG3	23:D1:83:TRP:CH2	2.50	0.46
24:D2:53:ILE:HG12	24:D2:60:LYS:HB2	1.98	0.46
1:6:882:U:H2'	1:6:883:C:H6	1.81	0.46
1:6:691:C:OP1	1:6:696:C:N4	2.43	0.46
36:5:428:A:H2'	36:5:429:U:C6	2.51	0.46
36:1:3321:C:H2'	36:1:3322:A:O4'	2.16	0.46
38:4:19:C:H2'	38:4:20:U:O4'	2.15	0.46
22:D0:25:THR:HG23	22:D0:90:TYR:HB3	3.41	0.46
36:1:2341:A:OP2	40:L3:247:ARG:NH2	2.48	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2562:A:N6	36:5:2579:G:O2'	2.44	0.46
36:1:242:C:HO2'	36:1:243:G:C5'	2.27	0.46
9:S7:111:LYS:H	1:6:810:G:N2	340.87	0.46
36:1:526:C:H2'	36:1:527:A:O4'	2.14	0.46
86:5:4005:OHX:N3	86:5:4195:OHX:N1	2.64	0.46
4:S2:58:LEU:HA	4:S2:58:LEU:HD23	1.64	0.46
2:S0:11:PRO:O	2:S0:15:GLN:HG3	2.23	0.46
1:6:1022:C:H4'	1:6:1124:A:N6	2.31	0.46
56:N0:151:PRO:C	56:N0:153:PRO:HD3	2.66	0.46
1:2:1497:U:C4	1:2:1511:U:O2	2.69	0.46
36:1:1073:U:H2'	36:1:1074:U:C6	2.50	0.46
36:1:3166:C:H42	36:1:3284:G:H1	1.62	0.46
40:L3:360:ASP:OD1	40:L3:361:THR:N	3.58	0.46
22:D0:57:ARG:HD2	22:D0:89:ARG:HD3	1.96	0.46
1:6:1609:U:H2'	1:6:1610:G:O4'	2.16	0.46
27:D5:45:GLU:O	27:D5:49:ARG:N	2.48	0.46
36:1:979:U:H1'	36:1:980:A:C4	2.50	0.46
70:O4:58:ARG:CG	70:O4:59:PRO:HD2	3.80	0.46
42:L5:22:ARG:NH1	42:L5:28:THR:HG1	4.48	0.46
63:N7:84:ARG:HG3	63:N7:85:TYR:CD1	3.62	0.46
60:N4:9:SER:HB2	60:N4:51:TRP:CZ3	2.92	0.46
70:O4:91:ARG:O	70:O4:95:ILE:HG13	4.41	0.46
36:1:1710:C:H2'	36:1:1711:C:H6	1.81	0.46
20:C8:24:GLY:O	20:C8:26:ILE:N	2.40	0.46
20:C8:26:ILE:HG23	20:C8:31:ALA:HB2	1.96	0.46
7:S5:73:THR:HG23	18:C6:114:ARG:HE	2.66	0.46
1:2:1719:A:H3'	1:2:1720:G:C8	2.51	0.46
2:S0:29:VAL:HB	2:S0:30:GLN:H	4.12	0.46
46:L9:134:ILE:HG23	46:L9:144:ILE:HD11	2.92	0.46
44:L7:89:ILE:HD12	44:L7:214:TRP:CZ3	2.50	0.46
86:5:4060:OHX:N5	86:5:4137:OHX:N2	2.63	0.46
1:6:1309:C:H2'	1:6:1310:U:O4'	2.15	0.46
1:2:1140:G:H2'	1:2:1141:G:H8	1.79	0.46
36:5:975:C:O2'	36:5:976:U:H5'	2.16	0.46
15:C3:28:LEU:HB3	15:C3:29:SER:H	1.51	0.46
43:L6:149:ILE:HG23	43:L6:155:LEU:HB3	1.97	0.46
49:M3:167:PHE:CD1	64:N8:132:LYS:HG3	3.71	0.46
36:1:2157:G:O6	39:L2:152:SER:HB3	2.16	0.46
5:S3:68:GLU:OE2	12:C0:67:THR:HG23	2.16	0.46
46:L9:118:LEU:HD23	46:L9:177:ASP:CG	2.36	0.46
36:5:240:U:O2'	36:5:241:G:H8	1.98	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:736:A:H2'	36:1:737:G:O4'	2.16	0.46
52:M6:5:PRO:CD	36:5:3178:A:H5'	257.64	0.46
46:L9:92:TYR:N	46:L9:92:TYR:CD1	2.80	0.46
39:L2:112:ILE:O	39:L2:167:GLY:N	2.32	0.46
36:1:1196:C:O2	86:3:218:OHX:N2	2.49	0.46
5:S3:142:LEU:HD13	5:S3:182:LEU:HD21	1.97	0.46
55:M9:106:LEU:HB3	55:M9:120:TYR:HE1	1.81	0.46
36:5:1241:U:O2'	36:5:1242:G:O5'	2.22	0.46
39:L2:14:SER:H	39:L2:16:PHE:H	1.64	0.46
48:M1:143:ARG:NH2	37:7:5:G:OP1	291.37	0.46
51:M5:73:ARG:HB3	51:M5:89:VAL:HG13	2.13	0.46
47:M0:187:ALA:O	47:M0:216:TYR:HD2	9.11	0.46
28:D6:24:VAL:HG21	28:D6:71:LEU:HD12	1.97	0.46
36:5:2925:C:H2'	36:5:2926:A:O4'	2.15	0.46
1:6:626:U:H2'	1:6:627:C:H6	1.81	0.46
45:L8:68:ARG:NE	45:L8:237:ILE:O	2.65	0.46
75:O9:43:ASN:HB3	75:O9:46:ARG:HB2	1.98	0.46
23:D1:14:PRO:HB2	23:D1:23:ILE:HG23	2.09	0.46
1:6:182:A:H2'	1:6:183:U:O4'	2.15	0.46
36:1:356:C:OP2	86:O9:101:OHX:N1	2.49	0.46
10:S8:154:SER:OG	10:S8:155:SER:N	4.27	0.46
36:5:65:A:C4	36:5:110:G:N7	2.84	0.46
1:2:341:A:C5	1:2:342:C:C5	3.04	0.46
36:5:2623:G:H2'	36:5:2624:G:O4'	2.16	0.46
36:1:103:G:OP1	49:M3:70:ARG:NH2	2.32	0.46
75:O9:15:LYS:HD3	38:8:46:G:OP2	90.85	0.46
1:2:538:A:H8	1:2:543:C:N4	2.13	0.46
1:2:1473:U:O2'	7:S5:103:ASN:ND2	2.49	0.46
36:1:1804:A:H2'	36:1:1805:C:H6	1.80	0.46
36:1:3047:U:O2'	40:L3:53:MET:HE1	2.15	0.46
22:D0:26:LEU:N	22:D0:89:ARG:O	2.45	0.46
18:C6:58:ASP:OD2	18:C6:59:LYS:N	2.47	0.46
37:7:45:A:H2'	37:7:46:A:O4'	2.16	0.46
36:5:1940:G:N2	36:5:3362:A:H8	2.06	0.46
55:M9:80:LYS:HE2	36:5:1940:G:OP1	206.16	0.46
5:S3:127:MET:HE1	5:S3:155:GLY:HA3	1.97	0.46
49:M3:101:ARG:HB2	36:5:76:G:N7	84.30	0.46
36:1:595:G:C8	36:1:609:G:C6	3.04	0.46
61:N5:75:LYS:HB3	61:N5:81:ILE:HB	2.90	0.46
7:S5:129:PRO:O	7:S5:133:VAL:HG23	2.16	0.46
1:6:1552:U:H2'	1:6:1553:G:O4'	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:N6:60:ARG:NH2	36:5:190:U:H2'	83.43	0.46
71:O5:92:LEU:HB3	71:O5:96:GLU:O	2.16	0.46
2:S0:63:ILE:HG12	23:D1:36:VAL:CG2	3.45	0.46
25:D3:76:LEU:O	25:D3:80:GLY:N	2.79	0.46
47:M0:75:TYR:HE1	47:M0:150:GLU:HB3	2.81	0.46
43:L6:58:LEU:HD22	43:L6:102:ASN:HA	3.06	0.46
86:1:4032:OHX:N4	86:1:4045:OHX:N3	2.63	0.46
18:C6:106:LYS:O	18:C6:110:THR:HB	3.05	0.46
37:3:113:C:H2'	37:3:114:U:O4'	2.15	0.46
39:L2:137:ILE:HG12	39:L2:147:ARG:HB2	4.67	0.46
49:M3:28:GLN:HB3	51:M5:201:ARG:CD	2.46	0.46
47:M0:36:LEU:HD21	47:M0:69:ARG:HD3	2.16	0.46
2:S0:185:ARG:N	23:D1:45:ALA:H	2.29	0.46
58:N2:22:PRO:HB3	58:N2:93:ILE:HG12	4.83	0.46
24:D2:57:ARG:N	24:D2:57:ARG:HD2	2.31	0.46
9:S7:102:PRO:HD3	9:S7:112:ARG:CZ	4.10	0.46
36:5:2966:G:C6	36:5:2967:A:N6	2.84	0.46
1:2:1371:A:H2'	1:2:1371:A:OP1	2.16	0.46
1:6:1066:C:O2'	1:6:1067:C:H5'	2.16	0.46
15:C3:85:PRO:HG2	15:C3:129:TYR:CD2	2.88	0.46
36:5:1455:U:C4	36:5:3078:U:O2	2.69	0.46
29:D7:51:GLN:NE2	1:6:870:C:O2	327.45	0.46
36:5:3192:U:O4	86:5:4138:OHX:N2	2.49	0.46
53:M7:127:ARG:HB3	53:M7:139:TYR:O	2.48	0.46
15:C3:22:ALA:HB1	15:C3:23:PRO:C	2.35	0.46
37:3:60:G:OP2	86:3:226:OHX:N3	2.48	0.46
45:L8:50:VAL:HG23	45:L8:52:TRP:NE1	4.49	0.46
49:M3:140:SER:OG	49:M3:141:ALA:N	2.45	0.46
1:2:912:U:H4'	1:2:913:G:O5'	2.16	0.46
54:M8:41:ASP:OD1	54:M8:42:ALA:N	2.49	0.46
70:O4:106:LYS:O	70:O4:110:GLU:HG3	2.41	0.46
49:M3:64:LYS:HG3	64:N8:69:TRP:CD1	2.51	0.46
38:8:91:C:H2'	38:8:92:A:C8	2.51	0.46
51:M5:37:HIS:NE2	51:M5:63:ARG:HD2	2.31	0.46
56:N0:138:GLN:O	56:N0:140:VAL:N	2.49	0.46
1:6:1267:G:H2'	1:6:1268:G:H8	1.79	0.46
36:5:3155:U:HO2'	36:5:3156:U:H6	1.63	0.46
46:L9:13:PRO:HG2	46:L9:16:VAL:HG13	1.98	0.46
62:N6:12:ARG:HD3	36:5:215:G:H5''	87.75	0.46
51:M5:179:LYS:HD3	36:5:287:G:OP1	126.27	0.46
86:5:3966:OHX:N4	86:5:4236:OHX:N2	2.63	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:O7:14:LYS:HD2	75:O9:51:ILE:HD11	1.98	0.46
36:1:2856:G:H2'	36:1:2857:C:H6	1.81	0.46
69:O3:47:LYS:HA	69:O3:104:PRO:HD2	2.87	0.46
37:7:119:U:H2'	37:7:120:C:C6	2.51	0.46
36:1:1528:G:O2'	36:1:1588:A:N3	2.43	0.46
22:D0:82:TYR:HB3	31:D9:52:PHE:HB3	2.26	0.46
1:6:322:G:O4'	1:6:323:A:H8	1.99	0.46
36:5:1160:C:H5''	36:5:1332:A:OP1	2.15	0.46
1:2:473:A:H4'	1:2:768:C:O2	2.16	0.46
48:M1:41:SER:OG	48:M1:43:GLN:O	2.34	0.46
36:1:827:A:H2'	36:1:828:A:C8	2.50	0.46
40:L3:120:LYS:HD3	36:5:3000:A:H5''	199.54	0.46
36:1:1191:U:H4'	36:1:1192:C:H5''	1.98	0.46
23:D1:42:GLU:O	23:D1:44:ARG:N	2.40	0.46
52:M6:46:GLU:O	52:M6:49:ARG:HB2	2.56	0.46
36:5:3189:G:H2'	36:5:3190:C:O4'	2.16	0.46
36:1:2688:U:OP1	42:L5:12:TYR:OH	2.31	0.46
1:6:675:U:H2'	1:6:676:G:C8	2.51	0.46
36:1:1593:A:O4'	70:O4:60:ARG:NH1	2.49	0.46
8:S6:48:TYR:OH	8:S6:119:GLN:O	2.48	0.46
42:L5:270:LYS:CG	42:L5:273:ARG:HD2	2.46	0.46
11:S9:124:HIS:CE1	11:S9:128:LEU:HD11	4.09	0.46
7:S5:26:ALA:N	18:C6:27:GLY:O	2.95	0.46
7:S5:120:ILE:HG23	27:D5:59:TYR:CE1	2.51	0.46
3:S1:70:LEU:HD13	3:S1:79:HIS:CG	3.66	0.46
36:1:2261:G:O6	86:1:3934:OHX:N4	2.49	0.46
1:2:1559:A:C6	20:C8:134:ARG:HD2	2.51	0.46
49:M3:177:LYS:HA	72:O6:11:LEU:HD13	2.76	0.46
1:2:819:G:C6	1:2:853:G:C2	3.04	0.46
26:D4:23:PHE:HZ	26:D4:44:LEU:HD13	1.80	0.46
23:D1:35:ASN:HA	23:D1:52:THR:HB	2.74	0.46
46:L9:168:ARG:HD2	36:5:2894:C:OP1	306.22	0.46
23:D1:56:SER:OG	23:D1:59:VAL:HG23	2.26	0.46
44:L7:157:ASN:O	44:L7:159:GLN:HG2	2.16	0.46
36:1:1017:C:O2'	36:1:1018:G:OP2	2.34	0.46
45:L8:61:GLN:HG3	51:M5:28:TRP:CH2	5.45	0.46
18:C6:127:LYS:HE3	18:C6:131:GLY:O	4.61	0.46
52:M6:111:PRO:O	52:M6:113:ASP:N	2.49	0.46
36:5:2369:G:H2'	36:5:2370:G:O4'	2.15	0.46
1:2:924:A:O2'	1:2:987:G:OP1	2.32	0.46
1:2:393:C:H2'	1:2:394:C:C6	2.51	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:975:C:H2'	36:5:976:U:H6	1.81	0.46
36:5:2702:A:H5'	36:5:2704:A:O4'	2.15	0.46
71:O5:118:ILE:CG2	71:O5:119:LYS:H	2.24	0.46
51:M5:14:LYS:NZ	36:5:269:G:H5''	131.97	0.46
1:2:1731:A:H5''	1:2:1732:A:OP2	2.16	0.46
33:E1:97:LYS:HD2	33:E1:97:LYS:HA	1.68	0.46
56:N0:138:GLN:C	56:N0:140:VAL:H	2.19	0.46
27:D5:71:ILE:HG21	27:D5:76:ALA:HB2	3.64	0.46
36:1:3:U:H2'	36:1:4:U:C6	2.51	0.46
1:2:1765:A:OP1	86:2:2092:OHX:N3	2.48	0.46
1:2:286:C:H2'	1:2:287:G:H5'	1.98	0.46
36:5:1486:G:N2	36:5:1857:C:C2	2.84	0.46
50:M4:134:ALA:O	50:M4:136:ALA:N	2.48	0.46
1:6:1419:G:H2'	1:6:1420:C:O4'	2.16	0.46
86:5:4005:OHX:N6	86:5:4195:OHX:N2	2.64	0.46
21:C9:141:GLU:C	21:C9:143:ASP:H	2.97	0.46
43:L6:136:GLU:O	43:L6:140:VAL:HG23	2.15	0.46
1:2:122:U:O4	86:2:2049:OHX:N3	2.49	0.46
36:1:1504:A:C5	36:1:1505:C:C5	3.04	0.46
36:1:1795:U:H4'	36:1:1796:G:C4	2.50	0.46
17:C5:56:PHE:HE2	17:C5:78:THR:HB	1.80	0.46
36:5:2516:U:H2'	36:5:2517:U:C6	2.51	0.46
75:O9:37:TYR:CE1	75:O9:39:ALA:HA	2.51	0.46
35:SM:52:PRO:O	35:SM:54:PRO:HD3	3.78	0.46
36:1:994:G:N2	36:1:1053:A:H2'	2.30	0.46
11:S9:136:VAL:HG22	11:S9:156:ILE:HG23	4.13	0.46
1:6:1576:A:H2'	1:6:1577:A:O4'	2.15	0.46
79:Q3:45:LYS:HB2	79:Q3:45:LYS:NZ	2.30	0.46
44:L7:186:HIS:O	44:L7:190:THR:HG23	2.15	0.46
1:2:1796:C:C6	28:D6:5:ARG:HG2	2.51	0.46
28:D6:12:LYS:HB2	28:D6:33:ASP:OD2	2.16	0.46
7:S5:62:VAL:HG13	7:S5:89:ILE:HG21	1.98	0.46
48:M1:15:GLU:HB2	48:M1:132:ASN:ND2	2.50	0.46
1:2:559:C:N3	1:2:586:G:N1	2.61	0.46
5:S3:58:VAL:O	5:S3:66:ILE:HG12	2.16	0.46
22:D0:65:ILE:HG21	31:D9:43:PHE:CE1	2.51	0.46
36:1:1941:C:H2'	36:1:1942:U:H6	1.81	0.46
40:L3:10:ARG:NH1	40:L3:11:HIS:O	2.48	0.46
36:5:304:G:H5'	36:5:304:G:N3	2.31	0.46
39:L2:24:GLN:N	39:L2:51:ASP:OD1	2.76	0.46
17:C5:126:VAL:O	17:C5:127:ARG:HB2	2.26	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:52:LYS:HE2	12:C0:54:TYR:CE2	2.51	0.46
36:5:80:G:H1	36:5:105:C:H42	1.64	0.46
14:C2:46:ARG:HB2	14:C2:46:ARG:HE	1.32	0.46
45:L8:159:PRO:HG3	51:M5:43:THR:O	4.36	0.46
13:C1:17:PRO:HB2	13:C1:18:HIS:CE1	4.87	0.46
63:N7:127:ASN:O	63:N7:129:TRP:N	2.49	0.46
36:1:2300:G:H2'	36:1:2301:U:O4'	2.15	0.46
20:C8:6:GLN:O	27:D5:42:LEU:HD13	2.16	0.46
86:2:2044:OHX:N2	86:2:2099:OHX:N5	2.64	0.46
36:1:1493:G:O6	75:O9:2:ALA:HA	2.15	0.46
36:1:2667:A:H2'	36:1:2668:U:O4'	2.15	0.46
6:S4:241:GLY:O	6:S4:243:GLY:N	2.84	0.46
2:S0:185:ARG:H	23:D1:45:ALA:H	1.74	0.46
2:S0:189:VAL:HG22	2:S0:190:ASP:H	1.80	0.46
1:2:639:U:H5''	9:S7:101:LYS:HB2	1.98	0.46
15:C3:20:ARG:O	15:C3:65:VAL:HG13	2.16	0.46
57:N1:7:TYR:OH	57:N1:54:HIS:HB2	2.16	0.46
36:1:2722:U:H4'	57:N1:88:ARG:HB2	1.96	0.46
1:2:1370:U:H4'	1:2:1371:A:H5''	1.96	0.46
28:D6:44:ILE:HG22	28:D6:45:VAL:HG13	5.04	0.46
15:C3:83:GLU:HG3	15:C3:84:ILE:HG23	2.87	0.46
1:2:1244:A:O2'	1:2:1245:G:OP1	2.33	0.46
74:O8:77:ARG:O	74:O8:78:LEU:HB2	2.15	0.46
1:6:152:U:C2	1:6:163:G:N2	2.84	0.46
36:5:731:U:H2'	36:5:732:C:C6	2.49	0.46
64:N8:132:LYS:O	64:N8:136:GLU:HG3	2.16	0.46
36:5:2111:G:O6	36:5:3333:G:H5''	2.16	0.46
1:2:81:G:C6	1:2:82:U:N3	2.84	0.46
6:S4:52:LEU:HB3	6:S4:54:TYR:CD2	2.51	0.46
5:S3:57:ASP:N	5:S3:57:ASP:OD1	2.47	0.46
36:5:72:C:C2	36:5:74:G:H1'	2.51	0.46
48:M1:9:MET:O	48:M1:9:MET:HG3	2.16	0.46
36:5:1221:A:H4'	36:5:1222:G:OP2	2.16	0.46
36:5:2510:U:O2'	36:5:2511:A:H5''	2.16	0.46
27:D5:40:VAL:C	27:D5:75:LEU:HD11	2.36	0.46
36:1:3316:A:H2	36:1:3389:U:H5'	1.80	0.46
86:5:4101:OHX:N5	38:8:140:G:O6	2.49	0.46
70:O4:22:VAL:HG12	70:O4:30:LEU:HD22	1.97	0.46
1:6:1078:C:H2'	1:6:1079:U:C6	2.50	0.46
1:6:1451:C:H2'	1:6:1452:U:H6	1.81	0.46
8:S6:200:ALA:O	8:S6:203:GLU:N	2.48	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:47:PHE:CE2	6:S4:90:ILE:HG21	3.15	0.46
45:L8:106:LYS:O	45:L8:110:THR:HG23	2.71	0.46
25:D3:52:ILE:HG22	25:D3:99:ASN:HA	3.48	0.46
54:M8:3:ILE:HB	54:M8:5:HIS:CD2	4.35	0.46
36:1:401:U:H4'	36:1:403:C:C2	2.50	0.46
17:C5:85:ILE:HD12	17:C5:111:MET:HB3	2.57	0.46
1:6:808:U:H2'	1:6:809:A:C8	2.51	0.46
86:1:3961:OHX:N1	86:1:4140:OHX:N4	2.64	0.46
36:1:1165:A:H2'	36:1:1166:G:O4'	2.15	0.46
1:6:276:C:H1'	1:6:277:U:C5	2.51	0.46
36:5:2134:G:C2	36:5:2135:U:C6	3.04	0.46
5:S3:212:LYS:HB2	5:S3:212:LYS:NZ	3.66	0.46
36:1:2689:A:H2'	36:1:2689:A:N3	2.31	0.46
72:O6:21:THR:OG1	72:O6:21:THR:O	2.24	0.46
18:C6:43:ILE:HG12	18:C6:43:ILE:H	1.45	0.46
46:L9:130:ASP:N	46:L9:130:ASP:OD1	2.47	0.46
1:2:715:U:H3	1:2:723:G:H1	1.63	0.46
69:O3:51:TYR:CE2	69:O3:53:TYR:HB3	2.73	0.46
36:1:2405:C:O2	36:1:2819:A:N1	2.49	0.46
74:O8:46:ARG:HH21	74:O8:51:LEU:HB2	1.80	0.46
42:L5:114:GLY:O	42:L5:116:ASP:N	2.44	0.46
16:C4:30:VAL:O	16:C4:39:ILE:HG12	3.26	0.46
21:C9:69:LYS:HB3	21:C9:70:GLN:NE2	2.31	0.46
62:N6:50:ILE:HD12	62:N6:70:ILE:HG12	3.89	0.46
7:S5:44:ASN:O	7:S5:45:LYS:HE3	2.31	0.46
39:L2:30:ARG:HE	39:L2:36:GLU:HG3	1.80	0.46
36:1:317:A:C2	36:1:318:A:C4	3.04	0.46
72:O6:30:LYS:HA	36:5:266:A:N6	99.99	0.46
22:D0:57:ARG:HG3	22:D0:89:ARG:CZ	2.46	0.46
31:D9:40:ARG:O	31:D9:43:PHE:HB3	2.61	0.46
36:1:409:A:H2	36:1:1441:G:N3	2.14	0.46
51:M5:172:ARG:HD2	36:5:30:G:O5'	110.39	0.46
49:M3:50:PRO:O	49:M3:51:LEU:HB2	4.66	0.46
29:D7:2:VAL:O	29:D7:3:LEU:HB2	2.72	0.46
62:N6:112:ASP:HB2	62:N6:115:ARG:HB2	2.63	0.46
22:D0:18:GLN:O	22:D0:19:ILE:HG13	4.59	0.46
36:1:2534:G:C2	36:1:2535:A:N7	2.83	0.46
1:2:1677:C:H2'	1:2:1678:A:O4'	2.15	0.46
44:L7:160:ARG:HB2	44:L7:203:TRP:CE3	2.51	0.46
1:6:219:A:N6	1:6:843:U:C2	2.84	0.46
53:M7:88:VAL:HG12	53:M7:92:GLN:HG3	4.29	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:171:ASP:HA	36:5:2899:C:C5	322.51	0.46
17:C5:86:VAL:HB	17:C5:87:PRO:HD2	3.03	0.46
1:6:93:A:C6	1:6:398:G:C6	3.04	0.46
17:C5:18:ARG:NH2	17:C5:38:PRO:HD3	2.49	0.46
1:6:881:A:C2	1:6:948:G:C2	3.03	0.46
1:2:1067:C:H5''	3:S1:150:VAL:H	1.81	0.46
15:C3:119:GLU:O	15:C3:122:ILE:HB	2.15	0.46
40:L3:56:ILE:HD12	40:L3:56:ILE:HA	1.74	0.46
56:N0:26:ARG:NH2	56:N0:28:ARG:HD2	2.31	0.46
46:L9:44:THR:HG22	36:5:3186:A:C2	326.20	0.46
56:N0:1:MET:HB3	56:N0:1:MET:HE2	1.76	0.46
61:N5:57:LEU:H	61:N5:61:LYS:HD3	5.76	0.46
71:O5:15:GLU:OE2	71:O5:15:GLU:N	4.52	0.46
37:3:39:C:O2'	48:M1:44:THR:O	2.23	0.46
78:Q2:58:PHE:CD1	78:Q2:59:HIS:N	2.84	0.46
36:1:2880:U:H1'	40:L3:250:ALA:HB3	1.98	0.46
59:N3:104:ASN:HD21	59:N3:106:LYS:HB2	1.81	0.46
47:M0:57:LEU:N	47:M0:131:ILE:HG13	2.31	0.46
63:N7:4:PHE:CE2	66:O0:63:SER:HB3	3.27	0.46
36:5:281:G:N2	36:5:282:G:N3	2.64	0.46
36:1:3252:G:H2'	36:1:3253:G:C8	2.51	0.46
68:O2:4:LEU:HD12	68:O2:5:PRO:HD3	2.93	0.46
1:2:609:U:N3	25:D3:22:ASN:O	2.49	0.46
36:5:2903:A:H2'	36:5:2904:U:O4'	2.16	0.46
1:2:61:A:C8	1:2:269:G:O2'	2.66	0.46
9:S7:51:VAL:HG22	9:S7:55:LYS:O	3.05	0.46
9:S7:184:GLU:HB3	9:S7:185:ILE:H	1.58	0.46
86:5:4005:OHX:N3	86:5:4195:OHX:N5	2.64	0.46
36:1:847:A:H2'	36:1:848:A:C8	2.51	0.46
72:O6:42:SER:OG	72:O6:43:LEU:N	3.55	0.46
34:SR:205:SER:O	34:SR:207:ASP:N	2.49	0.46
36:5:2833:A:C2	36:5:2834:G:C8	3.04	0.46
36:5:2931:C:H2'	36:5:2932:U:O4'	2.16	0.46
36:5:1901:A:H5''	36:5:1902:G:OP2	2.15	0.46
11:S9:140:ILE:HG13	26:D4:65:GLY:HA3	1.97	0.46
36:1:792:G:H2'	36:1:793:C:C6	2.50	0.46
1:2:1039:A:N6	1:2:1091:A:C2	2.84	0.46
71:O5:114:ARG:HE	71:O5:114:ARG:HB3	1.37	0.46
33:E1:90:LYS:HB3	33:E1:90:LYS:HE3	1.68	0.46
36:1:40:A:C2	64:N8:40:HIS:CE1	3.04	0.46
1:2:1092:A:C8	1:2:1094:G:C8	3.04	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:97:SER:HB3	63:N7:99:GLU:HG2	1.98	0.45
16:C4:32:ASP:O	16:C4:35:GLY:N	2.46	0.45
3:S1:24:PHE:HA	3:S1:27:LYS:HG3	3.22	0.45
28:D6:36:ILE:HD12	28:D6:78:ALA:CB	2.45	0.45
11:S9:142:ASN:O	11:S9:144:PRO:HD3	2.55	0.45
12:C0:44:LYS:HA	12:C0:44:LYS:HD3	1.80	0.45
40:L3:284:ARG:HG3	40:L3:285:VAL:N	3.06	0.45
1:2:1606:C:H2'	1:2:1607:G:C8	2.51	0.45
7:S5:112:ARG:HD3	1:6:1529:C:OP1	373.12	0.45
18:C6:52:LEU:HD23	18:C6:60:PHE:CE1	4.16	0.45
49:M3:108:ILE:O	49:M3:112:ASN:N	3.10	0.45
36:1:2259:A:OP2	86:1:3934:OHX:N2	2.48	0.45
36:1:2261:G:H21	36:1:2262:A:H61	1.64	0.45
36:1:1806:A:H2'	36:1:1807:G:O4'	2.16	0.45
30:D8:48:VAL:HG12	30:D8:49:ARG:O	3.55	0.45
36:1:1270:A:N6	36:1:1271:A:N3	2.64	0.45
41:L4:138:ARG:HH21	41:L4:240:PRO:HB2	1.82	0.45
56:N0:155:ARG:HG2	56:N0:171:PHE:O	2.15	0.45
41:L4:38:VAL:HG11	41:L4:118:LYS:HA	2.52	0.45
22:D0:22:ILE:N	22:D0:93:LEU:O	2.47	0.45
36:1:1729:A:H4'	36:1:1730:G:OP2	2.17	0.45
36:5:1566:A:H2'	36:5:1567:U:H5'	1.97	0.45
20:C8:42:TYR:HA	20:C8:85:PHE:HE1	1.96	0.45
36:5:1899:G:N7	86:5:3939:OHX:N6	2.63	0.45
36:5:1647:A:C2	36:5:1809:A:H1'	2.51	0.45
74:O8:17:ARG:O	74:O8:19:ASP:N	2.47	0.45
36:5:1192:C:H5	86:5:4085:OHX:N4	2.14	0.45
53:M7:4:TYR:OH	53:M7:18:ARG:HG3	2.16	0.45
39:L2:242:ARG:NH1	39:L2:246:LEU:HD12	4.83	0.45
1:2:151:G:C2	1:2:164:A:C6	3.03	0.45
54:M8:57:ILE:HD11	54:M8:147:ARG:CZ	2.46	0.45
1:2:1365:C:H5''	18:C6:28:LEU:HD22	1.97	0.45
6:S4:212:ASP:C	6:S4:214:LEU:H	2.53	0.45
36:1:623:U:OP2	86:1:4132:OHX:N1	2.48	0.45
26:D4:8:ARG:HB2	26:D4:26:ASP:HB3	1.97	0.45
63:N7:7:ALA:HA	63:N7:25:ILE:HG22	1.98	0.45
1:2:959:U:OP1	29:D7:30:SER:OG	2.29	0.45
36:1:1470:U:H2'	36:1:1471:U:H6	1.81	0.45
36:5:142:C:H2'	36:5:143:G:O4'	2.16	0.45
1:2:1453:G:H21	17:C5:99:GLY:HA2	1.81	0.45
1:6:1236:A:H2'	1:6:1237:G:C8	2.52	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:891:A:O2'	1:2:892:A:H5'	2.17	0.45
38:4:124:G:H1	38:4:129:C:H42	1.64	0.45
36:5:2947:G:N2	36:5:2948:C:C2	2.84	0.45
2:S0:88:LYS:HB3	2:S0:202:TYR:CZ	2.96	0.45
36:5:286:U:H2'	36:5:287:G:H8	1.80	0.45
1:6:1068:C:H2'	1:6:1069:A:C8	2.51	0.45
36:5:2213:A:N1	36:5:2429:G:H1'	2.31	0.45
36:1:645:A:N6	36:1:2869:U:OP1	2.42	0.45
4:S2:164:SER:HB3	1:6:14:C:OP1	373.72	0.45
36:1:1203:A:N3	36:1:2855:U:O2'	2.39	0.45
78:Q2:4:VAL:HA	78:Q2:5:PRO:HD2	1.87	0.45
42:L5:153:THR:HG23	42:L5:160:PHE:CZ	2.51	0.45
1:6:1613:U:C4	1:6:1614:A:C2	3.04	0.45
1:2:1629:G:H2'	1:2:1630:U:C6	2.51	0.45
31:D9:29:GLY:HA3	1:6:1199:G:H5''	395.89	0.45
49:M3:67:ARG:H	49:M3:67:ARG:HG3	1.49	0.45
36:1:2922:G:H1'	36:1:2951:G:N3	2.31	0.45
36:1:1513:G:O2'	36:1:1514:G:H5'	2.16	0.45
36:1:2853:A:H8	36:1:2853:A:H5''	1.81	0.45
3:S1:27:LYS:NZ	3:S1:48:VAL:O	2.40	0.45
36:1:2763:U:OP1	54:M8:183:GLY:N	2.49	0.45
42:L5:270:LYS:HB3	37:7:1:G:O2'	321.70	0.45
1:2:542:A:N6	32:E0:28:LYS:HZ3	2.14	0.45
32:E0:39:LEU:O	32:E0:43:ARG:HB2	2.52	0.45
36:5:68:C:N4	36:5:315:C:O5'	2.50	0.45
7:S5:43:PHE:N	7:S5:46:TRP:H	2.71	0.45
32:E0:37:ARG:NH1	1:6:478:A:OP1	439.78	0.45
71:O5:85:THR:HG23	38:8:36:G:OP2	73.27	0.45
12:C0:2:LEU:HB3	12:C0:3:MET:H	4.32	0.45
5:S3:65:ARG:O	5:S3:69:LEU:HG	2.15	0.45
19:C7:37:GLU:HG3	34:SR:150:TRP:HE1	1.80	0.45
57:N1:105:PHE:O	57:N1:109:VAL:HG23	2.26	0.45
1:6:752:A:C2'	1:6:753:A:H5'	2.46	0.45
1:2:1253:U:H4'	33:E1:143:LYS:CA	2.46	0.45
40:L3:25:ILE:H	40:L3:25:ILE:CD1	2.22	0.45
23:D1:69:LEU:O	23:D1:73:ALA:N	2.90	0.45
49:M3:42:ARG:NH1	49:M3:51:LEU:O	2.49	0.45
18:C6:82:ARG:NH2	18:C6:114:ARG:HB2	3.13	0.45
59:N3:6:ALA:HB2	59:N3:126:TRP:CZ2	2.51	0.45
8:S6:21:GLU:O	8:S6:25:ARG:HB2	2.46	0.45
74:O8:32:ASN:ND2	74:O8:36:LYS:H	2.11	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:M4:135:LEU:CD1	52:M6:178:VAL:HG22	2.45	0.45
36:5:2444:C:N4	36:5:2503:G:H1	2.10	0.45
26:D4:74:LEU:HD13	26:D4:76:TYR:OH	2.62	0.45
52:M6:73:PHE:HE1	36:5:3006:A:HO2'	242.07	0.45
46:L9:70:THR:HB	36:5:3112:G:O2'	328.98	0.45
46:L9:84:LYS:HZ3	46:L9:191:LEU:HD22	1.80	0.45
12:C0:30:ALA:O	12:C0:31:LYS:HB2	3.07	0.45
3:S1:232:HIS:HB3	3:S1:233:GLY:H	2.52	0.45
1:2:980:G:H4'	1:2:1776:A:H4'	1.98	0.45
8:S6:147:LEU:O	8:S6:148:SER:OG	2.25	0.45
1:2:531:C:OP2	86:2:2070:OHX:N4	2.48	0.45
1:2:364:G:O2'	1:2:756:A:N6	2.48	0.45
36:5:3294:A:H2'	36:5:3295:A:O4'	2.17	0.45
44:L7:68:ASP:O	44:L7:71:ALA:HB3	2.15	0.45
36:5:2205:U:HO2'	36:5:2205:U:H6	1.63	0.45
14:C2:62:LEU:HD22	14:C2:75:VAL:HG11	1.98	0.45
38:8:65:A:C2	38:8:96:A:C5	3.04	0.45
26:D4:121:THR:HG22	26:D4:123:LYS:HB2	4.52	0.45
73:O7:28:HIS:CD2	73:O7:31:LYS:HG3	3.51	0.45
6:S4:95:THR:HG22	26:D4:16:PRO:HG2	1.98	0.45
6:S4:62:LYS:HB2	6:S4:62:LYS:HE2	2.75	0.45
38:4:22:U:OP1	62:N6:12:ARG:NH2	2.49	0.45
19:C7:71:PHE:CE1	19:C7:74:GLN:HB2	5.28	0.45
42:L5:21:ARG:O	42:L5:24:ARG:N	2.58	0.45
44:L7:110:ARG:HG2	44:L7:111:ILE:N	2.31	0.45
44:L7:110:ARG:HG2	44:L7:113:SER:HB3	4.18	0.45
35:SM:37:VAL:HA	35:SM:38:PRO:HD2	1.67	0.45
36:1:542:G:H2'	36:1:543:C:C6	2.52	0.45
36:5:3318:G:OP2	86:5:4134:OHX:N5	2.50	0.45
36:5:973:A:H2'	36:5:974:G:O4'	2.15	0.45
1:2:252:U:H5'	6:S4:131:LEU:O	2.15	0.45
69:O3:58:GLU:HA	69:O3:63:LYS:HG2	1.98	0.45
76:Q0:113:ARG:NH1	36:5:1298:C:O3'	290.48	0.45
1:2:380:U:H5	11:S9:5:PRO:HA	1.80	0.45
86:4:225:OHX:N6	73:O7:60:GLY:O	2.50	0.45
78:Q2:68:VAL:O	78:Q2:85:LEU:HB2	2.78	0.45
36:1:2112:U:O5'	36:1:2112:U:H6	1.99	0.45
32:E0:38:LEU:O	32:E0:42:ARG:HB2	2.17	0.45
47:M0:71:CYS:SG	47:M0:72:ALA:N	4.00	0.45
36:5:2876:C:H2'	36:5:2877:G:O4'	2.16	0.45
36:1:352:A:N6	36:1:365:A:H5"	2.31	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:3:97:A:H2'	37:3:98:C:C6	2.51	0.45
36:5:249:U:H2'	36:5:249:U:OP2	2.17	0.45
36:1:3278:C:H2'	36:1:3278:C:O2	2.16	0.45
25:D3:132:LEU:HD23	25:D3:132:LEU:HA	4.43	0.45
45:L8:150:LEU:HA	45:L8:176:PRO:O	2.47	0.45
36:5:1614:C:H2'	36:5:1615:C:C6	2.51	0.45
63:N7:102:GLU:H	63:N7:107:ARG:NH2	4.39	0.45
1:2:1794:A:H1'	28:D6:79:ILE:HD12	1.99	0.45
5:S3:48:VAL:HG23	5:S3:84:ILE:HD11	2.06	0.45
52:M6:120:VAL:O	52:M6:122:GLN:N	2.49	0.45
37:3:45:A:H5'	42:L5:154:THR:HG21	1.98	0.45
51:M5:98:LEU:O	51:M5:102:ALA:N	3.02	0.45
57:N1:103:GLN:HG3	57:N1:104:GLU:N	2.31	0.45
4:S2:140:ARG:HB3	4:S2:221:THR:HB	2.21	0.45
3:S1:71:ALA:HB3	16:C4:114:ARG:NH1	2.46	0.45
17:C5:16:SER:HB3	17:C5:21:ASP:OD1	2.16	0.45
19:C7:5:ARG:HB3	19:C7:9:VAL:CG1	3.45	0.45
4:S2:170:ILE:O	4:S2:197:TYR:N	2.42	0.45
51:M5:143:ARG:HH21	71:O5:92:LEU:HD23	1.80	0.45
24:D2:22:LYS:NZ	29:D7:3:LEU:H	2.14	0.45
1:2:1762:A:C1'	1:2:1783:C:H5'	2.47	0.45
27:D5:47:TYR:CE2	27:D5:51:LEU:HD11	3.15	0.45
43:L6:58:LEU:O	43:L6:61:ASN:N	2.48	0.45
36:1:2943:G:C8	40:L3:2:SER:HB2	2.51	0.45
52:M6:8:VAL:O	52:M6:117:ARG:HA	2.59	0.45
1:2:1541:G:C5	1:2:1542:G:C6	3.04	0.45
1:2:1542:G:H5''	21:C9:88:VAL:N	2.30	0.45
1:2:851:U:H2'	1:2:852:C:C5	2.51	0.45
2:S0:184:LEU:O	2:S0:185:ARG:C	2.55	0.45
36:1:2970:C:O2'	36:1:2971:A:H2	1.98	0.45
86:1:3972:OHX:N6	86:1:4156:OHX:N2	2.65	0.45
17:C5:18:ARG:NH1	20:C8:90:ASN:HD21	4.24	0.45
1:2:694:U:O2	1:2:694:U:H2'	2.16	0.45
3:S1:160:HIS:O	3:S1:164:ILE:HG13	2.23	0.45
36:1:2723:U:H2'	36:1:2724:U:C6	2.51	0.45
15:C3:100:LYS:O	15:C3:103:GLU:N	3.33	0.45
46:L9:87:LYS:NZ	46:L9:191:LEU:HD11	15.10	0.45
61:N5:108:LEU:HA	61:N5:108:LEU:HD22	2.60	0.45
36:1:1631:C:OP2	63:N7:48:ARG:NH2	2.49	0.45
76:Q0:127:LEU:HA	76:Q0:127:LEU:HD23	2.19	0.45
29:D7:62:ILE:HA	29:D7:62:ILE:HD12	1.87	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:77:SER:HB2	2:S0:86:VAL:HG11	3.01	0.45
2:S0:101:ARG:HG3	2:S0:102:PHE:N	2.45	0.45
36:1:941:G:O2'	36:1:942:U:H5'	2.16	0.45
57:N1:78:LYS:HE3	57:N1:87:LYS:HD2	1.98	0.45
36:5:3358:U:H2'	36:5:3359:A:H8	1.81	0.45
7:S5:219:ARG:HB3	7:S5:219:ARG:NH2	5.06	0.45
42:L5:46:THR:HA	42:L5:47:PRO:HD3	2.53	0.45
61:N5:91:ASN:O	61:N5:95:ILE:HG13	2.17	0.45
38:4:65:A:O3'	71:O5:10:ARG:NH2	2.50	0.45
36:5:113:C:H3'	36:5:154:U:O4	2.16	0.45
42:L5:219:PHE:C	42:L5:221:GLU:H	3.02	0.45
46:L9:75:VAL:HA	46:L9:78:MET:HE2	2.13	0.45
36:1:1054:A:H5''	36:1:2637:A:H61	1.81	0.45
34:SR:222:LEU:HD23	34:SR:234:LEU:HD13	1.99	0.45
1:6:483:A:H2'	1:6:484:C:O4'	2.16	0.45
1:6:483:A:H61	1:6:504:U:H3	1.64	0.45
76:Q0:113:ARG:HG3	76:Q0:113:ARG:O	2.28	0.45
36:1:2111:G:C8	60:N4:49:ILE:HD13	2.52	0.45
13:C1:75:VAL:HG23	13:C1:121:ASP:O	3.31	0.45
36:1:2995:A:H2'	36:1:2996:U:H5''	1.98	0.45
47:M0:30:LYS:H	47:M0:62:SER:HB2	2.58	0.45
1:6:1357:A:H2'	1:6:1358:G:H8	1.81	0.45
42:L5:267:ALA:O	42:L5:271:LYS:HG2	3.56	0.45
50:M4:37:GLU:OE1	56:N0:72:VAL:HB	3.02	0.45
22:D0:28:SER:OG	22:D0:29:THR:N	2.46	0.45
36:1:3109:G:C2	36:1:3110:C:C6	3.04	0.45
11:S9:92:LYS:HB2	11:S9:95:TYR:HD2	8.36	0.45
36:5:207:U:O5'	36:5:207:U:H6	1.99	0.45
1:6:1436:A:OP2	1:6:1436:A:H4'	2.15	0.45
39:L2:180:LEU:HD13	79:Q3:18:TYR:CD1	2.51	0.45
36:5:1556:C:O5'	36:5:2169:G:N2	2.50	0.45
21:C9:132:LEU:O	21:C9:136:ALA:N	2.81	0.45
3:S1:48:VAL:CG1	3:S1:61:LEU:HD21	2.47	0.45
3:S1:61:LEU:CD2	3:S1:62:LYS:H	2.30	0.45
36:1:2800:G:H5''	36:1:2801:A:OP1	2.16	0.45
37:3:1:G:N2	42:L5:269:SER:OG	2.41	0.45
1:2:542:A:O2'	1:2:543:C:P	2.75	0.45
14:C2:43:ARG:N	14:C2:47:GLU:OE2	3.51	0.45
35:SM:134:ASP:OD1	35:SM:134:ASP:C	2.54	0.45
72:O6:62:ARG:HH11	72:O6:94:ILE:HD11	4.16	0.45
5:S3:7:LYS:HG2	22:D0:88:LYS:HE3	1.98	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:99:ARG:HG2	25:D3:9:LEU:HA	2.29	0.45
48:M1:26:SER:HB3	48:M1:64:LYS:O	2.17	0.45
23:D1:28:ASP:O	23:D1:31:SER:OG	2.34	0.45
62:N6:60:ARG:HD3	62:N6:60:ARG:HA	1.76	0.45
34:SR:249:ARG:HD3	34:SR:251:TRP:CD2	2.51	0.45
21:C9:26:GLY:O	21:C9:28:LEU:HG	2.17	0.45
88:1:4213:3J6:C12	88:1:4213:3J6:H4	2.45	0.45
39:L2:169:ILE:HG22	39:L2:170:ALA:O	2.26	0.45
53:M7:36:ILE:HD13	53:M7:48:LEU:HD11	3.20	0.45
36:1:2572:C:OP2	36:1:2572:C:H3'	2.17	0.45
36:5:2257:C:H2'	36:5:2258:U:C6	2.50	0.45
1:6:74:U:H3'	1:6:75:U:H3'	1.98	0.45
55:M9:4:LEU:O	55:M9:7:GLN:HG2	5.26	0.45
6:S4:251:GLU:O	6:S4:255:ARG:HG3	2.16	0.45
47:M0:116:ARG:HG3	47:M0:116:ARG:O	2.16	0.45
49:M3:14:PHE:CE1	36:5:665:A:H1'	133.26	0.45
53:M7:127:ARG:O	53:M7:139:TYR:N	3.17	0.45
36:5:1946:A:H61	36:5:2102:U:H3	1.65	0.45
1:2:1571:C:OP2	86:2:2154:OHX:N1	2.49	0.45
16:C4:131:GLY:O	16:C4:133:ARG:N	2.98	0.45
11:S9:59:LEU:HD13	11:S9:69:ARG:HA	1.99	0.45
1:6:107:C:H1'	1:6:362:G:O2'	2.16	0.45
25:D3:53:VAL:HG21	25:D3:96:VAL:CG2	5.46	0.45
36:1:1288:U:H2'	36:1:1289:G:C8	2.49	0.45
38:8:145:U:H2'	38:8:146:U:O4'	2.15	0.45
48:M1:133:ARG:HD2	48:M1:152:HIS:CD2	3.35	0.45
42:L5:140:ARG:NH2	36:5:1080:A:OP2	228.68	0.45
36:1:2681:U:H2'	36:1:2682:C:H6	1.82	0.45
13:C1:90:TYR:CE1	13:C1:103:ARG:HB2	2.52	0.45
1:6:15:U:C4	1:6:16:G:C5	3.05	0.45
78:Q2:28:TYR:CE1	78:Q2:30:ALA:HA	4.72	0.45
36:5:701:G:H2'	36:5:702:C:H6	1.81	0.45
67:O1:36:ILE:O	67:O1:39:PHE:N	2.49	0.45
36:1:1375:G:O6	64:N8:10:LYS:HE3	2.17	0.45
39:L2:139:HIS:CG	39:L2:146:THR:HG23	3.30	0.45
17:C5:124:THR:OG1	17:C5:124:THR:O	3.33	0.45
50:M4:92:GLU:OE2	50:M4:92:GLU:N	2.29	0.45
36:5:920:A:OP1	36:5:922:U:C5	2.70	0.45
17:C5:89:MET:O	17:C5:92:SER:HB2	2.15	0.45
8:S6:214:LYS:HA	8:S6:217:SER:HB2	2.21	0.45
36:1:3336:A:O5'	36:1:3336:A:H8	2.00	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:3:ARG:HH21	24:D2:28:ARG:HH21	4.92	0.45
36:5:2561:A:O2'	36:5:2562:A:H5''	2.16	0.45
32:E0:42:ARG:HB3	32:E0:42:ARG:HH11	1.81	0.45
15:C3:8:GLY:O	15:C3:9:LYS:NZ	3.90	0.45
36:1:1393:A:N3	36:1:1419:A:O2'	2.42	0.45
53:M7:65:SER:O	53:M7:66:SER:HB2	2.31	0.45
36:1:591:G:C1'	43:L6:19:LYS:HG3	2.46	0.45
76:Q0:92:ASP:C	76:Q0:93:LYS:HG2	3.00	0.45
1:6:1074:G:O6	86:6:2138:OHX:N3	2.49	0.45
3:S1:55:LYS:HD3	3:S1:55:LYS:HA	2.06	0.45
59:N3:34:LEU:HA	59:N3:34:LEU:HD23	2.02	0.45
36:5:2580:A:O2'	86:5:4124:OHX:N1	2.50	0.45
56:N0:25:PHE:HA	57:N1:149:GLN:O	2.17	0.45
36:1:109:A:H4'	36:1:110:G:OP1	2.15	0.45
47:M0:144:ASN:O	47:M0:145:LYS:C	2.54	0.45
1:2:1507:G:H2'	1:2:1508:U:O4'	2.16	0.45
41:L4:330:TYR:O	41:L4:333:VAL:HG13	2.36	0.45
28:D6:85:ARG:HA	28:D6:85:ARG:HD3	1.49	0.45
41:L4:271:LYS:HB2	41:L4:274:TYR:CB	3.15	0.45
36:5:314:U:H2'	36:5:315:C:H6	1.80	0.45
7:S5:101:GLY:HA3	1:6:1167:G:OP1	356.27	0.45
47:M0:210:ILE:HG23	47:M0:217:PHE:CD2	2.51	0.45
47:M0:210:ILE:HG23	47:M0:217:PHE:CE2	2.52	0.45
36:1:316:U:O2'	72:O6:30:LYS:HD2	2.17	0.45
5:S3:72:LEU:HD22	12:C0:65:TYR:HD1	2.27	0.45
47:M0:175:ASN:CG	47:M0:176:LEU:N	4.61	0.45
50:M4:17:VAL:HG22	50:M4:36:VAL:O	2.16	0.45
42:L5:55:PHE:CE1	42:L5:158:ARG:HG2	4.37	0.45
36:1:1334:U:C1'	44:L7:208:SER:HB2	2.46	0.45
7:S5:115:LYS:HA	7:S5:118:LEU:HD12	3.08	0.45
3:S1:180:THR:HG22	3:S1:181:LEU:HD13	1.99	0.45
3:S1:70:LEU:HD21	3:S1:79:HIS:CG	2.51	0.45
1:2:1458:G:O5'	1:2:1459:C:H5	2.00	0.45
36:1:1307:G:C2	36:1:1308:A:C2	3.04	0.45
33:E1:130:VAL:HG13	33:E1:143:LYS:HB3	4.22	0.45
49:M3:42:ARG:NH2	49:M3:51:LEU:HD22	5.79	0.45
48:M1:166:LYS:HB2	48:M1:166:LYS:HE2	1.71	0.45
43:L6:56:LYS:HG2	43:L6:58:LEU:HD23	1.98	0.45
7:S5:109:LYS:O	7:S5:113:ILE:HG13	2.24	0.45
36:1:1556:C:H5''	36:1:2169:G:N2	2.30	0.45
51:M5:70:ASN:HB3	51:M5:92:LEU:O	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1700:C:O2	1:6:1700:C:H2'	2.16	0.45
1:2:332:U:OP1	10:S8:56:ARG:NH1	2.46	0.45
10:S8:34:ALA:HB2	10:S8:56:ARG:HG3	1.99	0.45
1:6:1467:C:H2'	1:6:1468:U:H6	1.81	0.45
24:D2:15:ASN:OD1	24:D2:71:LYS:HA	2.66	0.45
1:6:37:U:O2'	1:6:770:A:N1	2.40	0.45
19:C7:12:ALA:O	19:C7:15:ALA:HB3	2.91	0.45
20:C8:30:TYR:OH	20:C8:40:ARG:NH1	3.37	0.45
20:C8:35:ILE:O	20:C8:38:VAL:HG22	2.17	0.45
52:M6:73:PHE:CD1	52:M6:78:ARG:HG2	2.64	0.45
1:6:1541:G:C5	1:6:1542:G:C6	3.04	0.45
36:1:1764:U:H3'	36:1:1765:U:C4'	2.46	0.45
36:1:2278:C:C2'	36:1:2279:A:H5''	2.46	0.45
1:2:187:G:H1'	1:2:199:G:H22	1.82	0.45
42:L5:171:LEU:HD23	42:L5:171:LEU:HA	2.20	0.45
14:C2:68:GLU:C	14:C2:70:ASN:H	2.19	0.45
38:4:40:A:OP2	38:4:103:G:N1	2.28	0.45
8:S6:31:ARG:O	8:S6:34:GLN:HB2	3.11	0.45
36:1:941:G:O4'	36:1:1435:A:H1'	2.16	0.45
1:2:381:C:O2'	1:2:755:A:N1	2.37	0.45
13:C1:94:ILE:HG21	13:C1:97:TYR:HD2	2.38	0.45
41:L4:74:ILE:HG22	41:L4:75:PRO:HD2	1.98	0.45
36:5:1107:C:H2'	36:5:1108:U:C6	2.51	0.45
12:C0:23:ALA:O	12:C0:24:LYS:HB3	4.46	0.45
36:5:2766:U:H2'	36:5:2767:U:C6	2.51	0.45
62:N6:56:VAL:HG22	62:N6:105:VAL:O	2.16	0.45
36:5:996:A:C2	36:5:1054:A:C4	3.05	0.45
44:L7:63:ILE:O	44:L7:67:ARG:HG3	2.37	0.45
1:6:48:G:C6	1:6:432:G:C2	3.05	0.45
36:5:1887:A:OP1	86:5:4108:OHX:N6	2.49	0.45
1:6:690:G:C6	1:6:691:C:C4	3.05	0.45
36:1:3110:C:O3'	46:L9:155:SER:HB2	2.16	0.45
55:M9:29:THR:O	55:M9:33:ALA:N	3.45	0.45
46:L9:45:PHE:CD1	46:L9:55:VAL:HG13	3.63	0.45
36:1:1411:C:P	68:O2:98:HIS:HB3	2.57	0.45
44:L7:136:TYR:CZ	44:L7:231:ASN:HB2	2.52	0.45
9:S7:73:VAL:O	9:S7:75:THR:N	2.57	0.45
56:N0:31:ALA:HB1	56:N0:36:ILE:HG22	1.97	0.45
1:2:1490:C:H4'	1:2:1491:U:OP1	2.17	0.45
10:S8:110:ARG:NH2	36:5:3354:U:O4	239.68	0.45
74:O8:31:LEU:HD12	74:O8:35:GLY:HA2	4.30	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:N1:127:GLN:HA	36:5:1095:U:O2	258.08	0.45
36:1:2367:A:H2'	36:1:2368:A:O4'	2.17	0.45
1:6:1287:A:H4'	1:6:1288:G:OP1	2.16	0.45
36:1:2840:C:N4	36:1:2845:A:O2'	2.44	0.45
60:N4:39:LEU:HA	60:N4:39:LEU:HD12	1.69	0.45
41:L4:325:LEU:HD23	41:L4:325:LEU:HA	1.63	0.45
32:E0:46:ASN:O	32:E0:47:VAL:HG12	2.16	0.45
36:5:2158:A:H5'	36:5:2160:G:O4'	2.16	0.45
36:5:873:C:H2'	36:5:875:G:O4'	2.16	0.45
36:1:1936:A:H2'	36:1:1937:U:O4'	2.16	0.45
1:6:1637:C:H5''	1:6:1637:C:C6	2.48	0.45
86:5:3971:OHX:N6	86:5:4193:OHX:N3	2.64	0.45
28:D6:38:ARG:HD3	28:D6:38:ARG:HA	3.90	0.45
28:D6:38:ARG:HE	28:D6:83:ILE:HB	1.81	0.45
1:2:540:G:H2'	1:2:540:G:OP2	2.17	0.45
1:2:592:A:O2'	1:2:596:C:OP1	2.34	0.45
9:S7:96:ARG:NH2	9:S7:124:LYS:HD2	2.32	0.45
39:L2:209:HIS:ND1	39:L2:210:PRO:HD2	2.51	0.45
3:S1:133:TYR:CD1	3:S1:220:GLN:HA	2.52	0.45
17:C5:16:SER:HB2	17:C5:20:VAL:N	2.32	0.45
36:1:1464:G:OP2	86:1:4197:OHX:N5	2.50	0.45
36:1:1306:G:C6	52:M6:62:THR:HA	2.52	0.45
36:5:419:G:O3'	36:5:420:G:C5'	2.65	0.45
22:D0:103:ILE:HA	22:D0:106:ILE:HG22	3.10	0.45
4:S2:168:ARG:NH1	4:S2:199:GLN:OE1	4.30	0.45
44:L7:155:LYS:HB2	44:L7:203:TRP:CE3	2.52	0.45
1:6:830:U:H2'	1:6:831:U:H5'	1.99	0.45
53:M7:92:GLN:HA	53:M7:95:LEU:HD12	1.99	0.45
20:C8:92:ILE:HG12	20:C8:92:ILE:O	2.16	0.45
36:1:530:G:H2'	36:1:531:G:O4'	2.16	0.45
46:L9:90:MET:HE3	46:L9:158:ALA:HB1	4.38	0.45
24:D2:5:SER:O	24:D2:7:LEU:N	3.27	0.45
57:N1:88:ARG:NH2	65:N9:33:LYS:HB3	3.03	0.45
4:S2:102:VAL:O	4:S2:114:GLY:N	2.77	0.45
69:O3:85:PHE:CZ	69:O3:89:LEU:HD11	2.51	0.45
2:S0:22:THR:HG22	2:S0:162:CYS:SG	2.56	0.45
36:5:2514:U:OP1	36:5:2514:U:C6	2.65	0.45
5:S3:116:ARG:HG2	5:S3:152:PHE:CE1	3.75	0.45
1:2:66:U:C5	8:S6:173:PRO:HG3	2.51	0.45
27:D5:77:ARG:NH2	1:6:1534:G:N7	349.29	0.45
63:N7:25:ILE:HG13	63:N7:25:ILE:H	2.97	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:699:U:H2'	1:2:700:C:C6	2.51	0.45
36:1:3294:A:H5'	40:L3:126:LYS:HG3	1.99	0.45
53:M7:90:PHE:O	53:M7:94:LEU:HD13	2.17	0.45
1:6:515:A:H2'	1:6:516:G:O4'	2.17	0.45
36:1:1317:A:O2'	36:1:1318:A:H3'	2.17	0.45
5:S3:143:ARG:HB2	5:S3:148:LYS:NZ	10.73	0.45
42:L5:261:THR:OG1	42:L5:264:GLN:HG3	2.26	0.45
56:N0:161:LYS:NZ	36:5:3209:A:OP 2	277.26	0.45
14:C2:63:VAL:HA	14:C2:91:VAL:O	2.17	0.45
8:S6:61:PHE:HE1	8:S6:96:SER:HB2	2.61	0.45
36:1:2948:C:H2'	36:1:2949:U:H6	1.81	0.45
71:O5:49:LYS:HD3	71:O5:49:LYS:HA	2.65	0.45
51:M5:197:LEU:HG	51:M5:199:LEU:HD21	1.98	0.45
1:2:569:C:OP1	25:D3:89:ASN:N	2.43	0.45
1:2:388:G:O2'	1:2:389:G:H5'	2.17	0.45
36:5:2308:C:O2	86:5:4233:OHX:N1	2.49	0.45
51:M5:6:TYR:CD2	72:O6:40:VAL:HG13	2.69	0.45
4:S2:144:TRP:HB2	4:S2:172:ALA:O	2.33	0.45
1:2:1437:U:H5'	5:S3:176:LEU:HD23	1.98	0.45
34:SR:130:THR:HG22	34:SR:145:LEU:HD22	1.98	0.45
42:L5:129:TYR:OH	42:L5:175:HIS:O	2.28	0.45
31:D9:10:HIS:CG	31:D9:11:PRO:HD2	2.51	0.45
51:M5:160:GLU:HA	51:M5:165:THR:HG23	1.99	0.45
1:6:1271:G:H2'	1:6:1272:U:O4'	2.17	0.45
36:1:163:C:H42	36:1:258:G:H1	1.65	0.45
36:5:750:G:H2'	36:5:751:A:H8	1.81	0.45
44:L7:40:LYS:HE3	44:L7:40:LYS:HB2	1.77	0.45
45:L8:231:LYS:HB2	45:L8:231:LYS:HE3	4.25	0.45
58:N2:42:LYS:HB2	36:5:1687:U:C5	174.42	0.45
4:S2:59:HIS:CE1	4:S2:238:SER:HA	4.26	0.45
36:5:3182:G:H2'	36:5:3183:A:O4'	2.16	0.45
47:M0:76:MET:HE1	47:M0:148:VAL:HG22	2.79	0.45
63:N7:101:PHE:HA	63:N7:107:ARG:HE	2.42	0.45
36:1:3284:G:C6	36:1:3285:C:N4	2.85	0.45
1:2:319:U:H1'	1:2:323:A:C4	2.52	0.45
62:N6:55:GLU:HB2	62:N6:108:LYS:HB2	2.21	0.45
1:2:476:U:H2'	32:E0:31:LYS:CG	2.46	0.45
48:M1:97:SER:O	48:M1:156:LYS:HB2	2.53	0.45
40:L3:345:ASN:OD1	40:L3:346:THR:N	3.11	0.45
5:S3:101:GLN:HA	5:S3:104:SER:HB3	1.99	0.45
67:O1:27:LYS:O	67:O1:31:ARG:HB2	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:96:ARG:HB3	1:6:856:A:N6	365.33	0.45
48:M1:49:LYS:HA	48:M1:64:LYS:H	1.82	0.45
19:C7:34:LEU:HD22	19:C7:38:ILE:HD13	5.73	0.45
36:1:1662:G:N2	36:1:1788:C:O2	2.49	0.45
5:S3:123:VAL:O	5:S3:127:MET:HB2	2.17	0.45
36:1:1225:A:H1'	36:1:3116:G:N2	2.31	0.45
1:2:195:G:H2'	1:2:196:G:H5''	1.98	0.45
1:2:929:A:N6	1:2:930:A:C6	2.84	0.45
71:O5:9:LEU:HD13	71:O5:54:VAL:HA	1.98	0.45
1:2:1565:C:OP1	20:C8:41:ARG:HD3	2.17	0.45
24:D2:82:LYS:O	24:D2:83:ILE:HG22	2.16	0.45
22:D0:42:VAL:HG21	22:D0:55:PRO:HD3	2.08	0.45
55:M9:139:VAL:O	55:M9:142:ILE:N	3.21	0.45
36:5:2372:A:H4'	36:5:2373:A:OP2	2.15	0.45
38:8:103:G:O6	86:8:219:OHX:N5	2.50	0.45
36:5:1822:C:H2'	36:5:1823:A:C8	2.52	0.45
1:6:1647:U:H2'	1:6:1648:A:C8	2.52	0.45
48:M1:80:LEU:HD22	48:M1:84:LEU:HG	1.98	0.45
1:6:1541:G:C6	1:6:1542:G:N1	2.84	0.45
1:2:363:G:OP1	86:2:2078:OHX:N2	2.50	0.45
39:L2:242:ARG:O	36:5:2154:U:H5''	224.90	0.45
63:N7:69:LYS:NZ	36:5:1633:C:OP2	194.66	0.45
64:N8:82:ILE:HD11	64:N8:100:PRO:HB2	2.92	0.45
4:S2:153:SER:HB3	4:S2:154:LEU:H	1.86	0.45
15:C3:21:ASN:HB2	15:C3:22:ALA:H	1.89	0.45
5:S3:162:GLN:NE2	5:S3:165:ASN:HB2	2.31	0.45
1:2:1347:U:C2	1:2:1517:U:C5	3.04	0.45
70:O4:71:THR:HG22	70:O4:78:GLY:N	2.31	0.45
58:N2:18:ASP:HB3	58:N2:104:ARG:CB	2.46	0.45
25:D3:100:ASP:O	25:D3:101:GLU:HB3	4.74	0.45
1:6:1406:A:H2'	1:6:1407:U:C6	2.51	0.45
57:N1:80:VAL:HG22	57:N1:83:ARG:HH21	1.82	0.45
1:6:1039:A:N7	1:6:1091:A:C5	2.85	0.45
42:L5:9:SER:OG	42:L5:11:ALA:N	2.49	0.45
36:5:1746:U:H2'	36:5:1747:G:H8	1.82	0.45
79:Q3:9:GLY:O	79:Q3:11:THR:N	3.29	0.45
35:SM:25:ILE:HG22	48:M1:46:VAL:HB	1.98	0.45
15:C3:109:LYS:NZ	15:C3:109:LYS:HB3	2.31	0.45
36:1:2174:G:OP1	36:1:2174:G:H8	1.99	0.45
48:M1:23:VAL:C	48:M1:25:GLU:H	2.20	0.45
11:S9:175:ARG:HD3	11:S9:179:ARG:NH1	2.31	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D4:121:THR:HG1	1:6:149:C:P	333.89	0.45
38:8:139:U:H2'	38:8:140:G:C8	2.51	0.45
71:O5:101:THR:HG22	71:O5:104:GLN:HG2	1.99	0.45
2:S0:201:LEU:O	2:S0:203:PHE:N	2.50	0.45
2:S0:64:ILE:HD12	2:S0:181:VAL:HG11	3.45	0.45
15:C3:70:LYS:HE2	15:C3:70:LYS:HB3	4.56	0.45
1:2:246:G:C2	13:C1:40:LEU:HD22	2.52	0.45
15:C3:3:ARG:HH11	1:6:955:A:P	325.29	0.45
36:1:669:U:H1'	36:1:1110:U:H4'	1.99	0.45
36:1:126:U:H2'	36:1:127:G:O4'	2.16	0.45
1:6:61:A:C6	1:6:62:A:C6	3.05	0.45
36:1:1680:G:C4	36:1:1681:U:C5	3.05	0.45
1:6:385:A:H2'	1:6:386:G:C8	2.51	0.45
36:5:2632:G:C6	36:5:2647:A:C6	3.04	0.45
11:S9:29:LYS:O	11:S9:33:GLU:HG2	4.01	0.45
36:5:3200:G:H2'	36:5:3201:C:C6	2.52	0.45
1:2:1029:U:O4	86:2:2168:OHX:N3	2.49	0.45
36:5:1815:U:O2'	36:5:1816:A:P	2.74	0.45
1:6:158:U:O2'	1:6:160:C:OP2	2.24	0.45
45:L8:72:PRO:HA	45:L8:73:PRO:HD3	1.67	0.45
3:S1:119:THR:HB	3:S1:143:THR:CG2	2.47	0.45
1:2:607:G:H5'	1:2:613:G:N2	2.32	0.45
1:2:1163:A:N6	1:2:1164:G:C5	2.85	0.45
42:L5:222:LEU:HG	42:L5:222:LEU:H	1.52	0.45
49:M3:25:HIS:CD2	49:M3:25:HIS:H	2.34	0.45
31:D9:6:VAL:O	31:D9:8:PHE:N	4.17	0.45
23:D1:40:ASP:HB3	23:D1:46:ILE:HD11	2.25	0.45
36:5:1366:A:C2	36:5:1367:G:C4	3.05	0.45
36:5:2309:A:H4'	86:5:4193:OHX:N4	2.31	0.45
1:2:544:A:H5''	1:2:545:A:OP2	2.16	0.45
1:6:542:A:OP1	1:6:542:A:H2'	2.17	0.45
48:M1:92:ARG:HA	48:M1:171:VAL:O	2.17	0.45
40:L3:53:MET:CE	40:L3:77:THR:HG22	2.78	0.45
39:L2:68:LYS:HD3	39:L2:70:ARG:CZ	2.46	0.45
1:2:79:C:P	8:S6:159:ARG:HH22	2.40	0.45
51:M5:98:LEU:O	51:M5:101:THR:N	2.95	0.45
13:C1:95:PRO:O	13:C1:98:ASN:N	2.49	0.45
25:D3:9:LEU:O	25:D3:9:LEU:HD22	2.17	0.45
2:S0:141:ILE:HG22	2:S0:142:PRO:O	2.17	0.45
36:5:1015:U:O2'	36:5:1016:C:H3'	2.17	0.45
40:L3:369:ARG:HG2	60:N4:32:GLN:NE2	2.32	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1591:G:OP1	70:O4:37:LYS:NZ	2.48	0.45
44:L7:27:ALA:HA	44:L7:30:ARG:HB3	1.99	0.45
44:L7:37:ASN:HB3	36:5:597:G:OP1	249.43	0.45
17:C5:68:PRO:HG2	17:C5:71:GLU:CD	3.60	0.45
20:C8:41:ARG:HH11	21:C9:38:LYS:HE2	1.82	0.45
50:M4:67:PRO:HG2	50:M4:68:LEU:HD23	3.43	0.45
1:2:138:A:N6	1:2:266:A:H61	2.15	0.45
41:L4:122:THR:HG22	41:L4:235:LEU:HB2	1.98	0.45
22:D0:48:HIS:HE1	22:D0:50:LEU:HD11	2.61	0.45
37:3:27:A:OP2	42:L5:57:ASN:HB2	2.17	0.45
36:1:2881:C:H2'	36:1:2882:U:H6	1.82	0.45
44:L7:131:GLU:O	44:L7:229:PHE:HB2	2.17	0.45
36:5:3053:G:H2'	36:5:3054:U:C6	2.52	0.45
1:6:105:A:H2'	1:6:106:U:O4'	2.17	0.45
36:1:3055:U:C2	36:1:3085:G:C6	3.05	0.45
39:L2:147:ARG:NH1	39:L2:155:LYS:HD3	5.72	0.45
20:C8:118:LYS:O	20:C8:120:ARG:HD2	5.02	0.45
20:C8:46:VAL:HG11	20:C8:73:MET:HG3	1.99	0.45
1:2:393:C:OP2	10:S8:2:GLY:N	2.49	0.45
58:N2:95:PHE:HA	58:N2:105:LEU:HD12	4.36	0.45
86:1:3972:OHX:N6	86:1:4156:OHX:N4	2.65	0.45
15:C3:65:VAL:HG23	15:C3:66:ILE:N	4.44	0.45
36:5:2804:A:C2'	36:5:2805:G:O5'	2.64	0.45
51:M5:27:VAL:HB	51:M5:122:ASN:HD21	1.82	0.45
44:L7:92:ILE:HD12	44:L7:92:ILE:HA	1.71	0.45
15:C3:84:ILE:HG22	15:C3:135:LEU:HD21	1.99	0.45
36:1:729:C:H2'	36:1:730:C:C6	2.46	0.45
74:O8:62:ALA:O	74:O8:66:ILE:HG13	2.28	0.45
86:5:4208:OHX:N2	86:5:4218:OHX:N5	2.65	0.45
6:S4:211:LYS:HA	6:S4:216:ASN:O	2.16	0.45
9:S7:142:TYR:O	24:D2:49:GLU:HB2	2.48	0.45
36:1:1758:G:H5''	58:N2:104:ARG:NH2	2.32	0.45
1:2:969:C:H4'	1:2:1104:U:O2'	2.17	0.45
1:2:499:U:O2'	1:2:500:C:H5''	2.17	0.45
36:5:937:G:C6	36:5:2410:U:H5''	2.52	0.45
13:C1:105:LYS:HD2	1:6:306:U:P	322.72	0.45
34:SR:177:MET:HE1	34:SR:193:ILE:HA	6.32	0.45
36:1:2680:A:C2	48:M1:57:PHE:HB3	2.52	0.45
4:S2:143:TYR:O	24:D2:98:GLN:NE2	2.92	0.45
38:4:124:G:OP2	86:4:230:OHX:N4	2.49	0.45
42:L5:60:ILE:HB	42:L5:80:SER:HB2	1.99	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1350:U:H2'	1:6:1351:G:H8	1.82	0.45
36:5:3377:G:O6	86:5:4082:OHX:N2	2.50	0.45
68:O2:20:HIS:ND1	68:O2:42:VAL:HG21	2.69	0.45
65:N9:43:HIS:O	65:N9:47:LEU:HG	2.17	0.45
36:1:111:C:O2'	36:1:112:U:H5'	2.17	0.45
36:5:997:A:H4'	37:7:80:G:H5'	1.99	0.45
54:M8:86:THR:HG22	54:M8:105:ARG:HB2	2.06	0.45
11:S9:92:LYS:HB2	11:S9:95:TYR:CD2	8.59	0.45
1:2:127:G:N7	8:S6:202:ARG:NH2	2.65	0.45
45:L8:105:LYS:O	45:L8:109:LEU:HB2	2.32	0.45
59:N3:93:LEU:HB2	60:N4:20:LEU:HD22	2.31	0.45
41:L4:341:SER:O	41:L4:342:LYS:CB	4.31	0.45
36:1:960:U:H4'	36:1:963:G:N1	2.32	0.45
1:2:1509:C:H2'	1:2:1510:U:O4'	2.17	0.45
36:1:167:U:H2'	36:1:168:U:H6	1.81	0.45
1:6:1570:A:C6	1:6:1571:C:C2	3.05	0.45
28:D6:90:GLU:H	28:D6:90:GLU:CD	3.57	0.45
34:SR:250:TYR:N	34:SR:250:TYR:CD1	3.13	0.45
36:1:2213:A:H2'	36:1:2214:A:C8	2.52	0.45
36:1:71:A:C2	36:1:2778:G:H1'	2.52	0.45
41:L4:299:ILE:HG22	41:L4:300:ARG:O	2.17	0.45
51:M5:38:ARG:CZ	51:M5:60:VAL:HG13	2.47	0.45
86:6:2118:OHX:N4	86:6:2170:OHX:N3	2.65	0.45
5:S3:69:LEU:HD23	5:S3:72:LEU:HD12	1.99	0.45
22:D0:27:THR:O	22:D0:113:ASP:HB3	2.59	0.45
1:2:1198:G:O3'	31:D9:40:ARG:NH2	2.50	0.45
7:S5:25:LEU:HD21	7:S5:29:ILE:HD12	3.07	0.45
7:S5:33:VAL:HG12	7:S5:34:GLN:N	2.88	0.45
49:M3:91:ARG:NH2	49:M3:97:VAL:O	3.00	0.45
51:M5:153:ASP:HB3	51:M5:155:VAL:HG23	2.93	0.45
51:M5:159:ARG:HB2	51:M5:164:LEU:HB2	2.77	0.45
51:M5:164:LEU:HD23	51:M5:172:ARG:HH12	1.82	0.45
12:C0:46:LEU:O	12:C0:50:THR:HG23	2.17	0.45
64:N8:6:THR:OG1	64:N8:8:THR:HG23	3.28	0.45
36:5:1502:C:N3	36:5:1513:G:O6	2.50	0.45
62:N6:115:ARG:O	62:N6:118:LEU:HB3	2.17	0.45
1:6:315:A:C2	1:6:353:A:C5	3.04	0.45
59:N3:17:LEU:HD23	59:N3:17:LEU:HA	1.76	0.45
43:L6:58:LEU:O	43:L6:60:ASP:N	2.50	0.45
40:L3:221:THR:HG22	40:L3:222:LYS:O	2.17	0.45
36:1:437:G:H2'	36:1:438:A:C8	2.52	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:C6:115:THR:OG1	18:C6:116:LEU:N	2.50	0.45
1:2:1066:C:H4'	3:S1:149:GLN:NE2	2.32	0.45
36:1:1245:A:C3'	36:1:1246:G:H5''	2.46	0.45
36:5:2369:G:C6	36:5:2370:G:C6	3.05	0.45
36:5:1195:A:H1'	36:5:1319:G:H4'	1.99	0.45
33:E1:149:LYS:NZ	1:6:1235:C:O2'	432.41	0.45
74:O8:21:LYS:O	74:O8:73:LEU:HD12	2.17	0.45
1:2:1405:G:P	7:S5:80:LYS:HE3	2.57	0.45
49:M3:89:TYR:CZ	49:M3:93:ILE:HD11	2.74	0.45
36:1:807:A:C2	36:1:808:A:C8	3.04	0.45
54:M8:58:ASN:N	54:M8:58:ASN:OD1	3.34	0.45
36:5:2101:C:HO2'	36:5:2102:U:P	2.36	0.45
1:6:708:C:H2'	1:6:709:C:O4'	2.17	0.45
36:1:2376:G:C6	36:1:2377:G:O6	2.70	0.45
61:N5:103:TYR:HE1	61:N5:139:ILE:HG12	4.69	0.45
79:Q3:76:ALA:O	79:Q3:80:ARG:HB3	3.82	0.45
36:1:2138:A:HO2'	73:O7:2:GLY:N	2.15	0.45
40:L3:332:ARG:HH22	36:5:3304:U:P	206.78	0.45
34:SR:305:TYR:CE2	34:SR:311:ARG:HB2	2.52	0.45
10:S8:116:HIS:CD2	10:S8:146:ARG:HD3	3.86	0.45
61:N5:40:LEU:HA	61:N5:40:LEU:HD12	1.83	0.45
36:5:1796:G:H5''	36:5:1797:A:OP1	2.17	0.45
40:L3:259:HIS:HE2	36:5:2366:C:H5'	216.45	0.45
43:L6:38:THR:HG23	43:L6:90:LYS:HE2	1.99	0.45
1:6:886:U:H2'	1:6:887:A:H8	1.82	0.45
36:5:811:U:H2'	36:5:812:G:H8	1.81	0.45
36:5:2551:U:H4'	36:5:2552:C:OP1	2.17	0.45
29:D7:36:LYS:HD3	29:D7:43:ILE:HG22	3.32	0.45
46:L9:77:ASN:HB3	46:L9:86:TYR:OH	3.15	0.45
42:L5:238:ASP:HA	42:L5:241:THR:HB	1.98	0.45
36:1:2223:A:C8	36:1:2223:A:H5''	2.52	0.45
65:N9:7:HIS:O	36:5:1135:A:H5'	226.70	0.45
40:L3:34:LYS:HG2	40:L3:35:ASP:H	1.82	0.45
25:D3:22:ASN:HB3	1:6:609:U:C5	337.07	0.45
41:L4:303:GLY:O	41:L4:305:ALA:N	2.50	0.45
1:2:1220:C:OP1	12:C0:48:SER:OG	2.20	0.45
3:S1:195:LYS:HA	3:S1:198:GLU:HB3	1.98	0.45
1:2:1573:A:H8	1:2:1573:A:O5'	2.00	0.45
36:5:1203:A:H5''	37:7:90:U:C2	2.52	0.45
36:1:1796:G:H5''	36:1:1797:A:OP1	2.17	0.45
1:6:276:C:O2'	1:6:277:U:H5''	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:D0:73:GLY:HA3	1:6:1198:G:O4'	380.14	0.45
36:5:223:U:O4	86:5:4237:OHX:N4	2.50	0.45
13:C1:57:LYS:NZ	1:6:326:G:OP1	290.14	0.45
2:S0:56:LYS:HZ1	2:S0:159:ALA:H	1.64	0.45
25:D3:73:ARG:HH21	25:D3:84:THR:HG22	2.32	0.45
53:M7:85:ALA:O	53:M7:89:LYS:HB2	3.07	0.45
4:S2:101:VAL:HG13	4:S2:115:ILE:HG12	1.98	0.45
36:5:2682:C:O2'	36:5:2683:U:OP1	2.24	0.45
36:5:2950:G:C5	36:5:2979:U:C4	3.04	0.45
69:O3:26:ASN:HA	69:O3:88:ASN:OD1	2.17	0.45
43:L6:159:LEU:HD23	43:L6:159:LEU:HA	1.67	0.45
1:2:1270:G:N2	1:2:1271:G:C4	2.85	0.45
37:7:36:C:H2'	37:7:37:G:C8	2.52	0.45
36:1:3238:G:N2	36:1:3250:U:H1'	2.32	0.45
52:M6:54:TYR:CD2	52:M6:58:LEU:HD22	3.50	0.45
63:N7:95:VAL:HG21	63:N7:113:VAL:HG11	1.98	0.45
36:1:3354:U:OP1	36:1:3356:G:H5'	2.17	0.45
1:2:590:C:H5''	32:E0:43:ARG:HH12	1.81	0.45
7:S5:99:MET:O	7:S5:103:ASN:ND2	5.05	0.45
67:O1:44:MET:HB3	67:O1:77:ARG:NH1	4.27	0.45
36:1:1128:U:H5'	47:M0:4:ARG:NH2	2.32	0.45
1:2:1489:U:H5'	1:2:1494:C:H1'	1.98	0.45
21:C9:49:ASP:OD1	21:C9:53:TRP:N	2.45	0.45
7:S5:87:CYS:HB3	7:S5:92:ARG:HD2	3.28	0.45
36:1:359:U:H2'	36:1:360:G:O4'	2.17	0.45
10:S8:188:GLU:HG2	10:S8:192:TYR:HE2	1.80	0.45
44:L7:206:LYS:HE3	44:L7:206:LYS:HB3	1.79	0.45
61:N5:115:ARG:N	61:N5:119:THR:O	2.99	0.45
3:S1:69:CYS:HB3	3:S1:72:ASP:OD1	2.16	0.45
17:C5:130:ARG:HD3	35:SM:74:LYS:HG2	1.99	0.45
36:1:1240:A:H61	36:1:1244:A:H5''	1.82	0.45
36:1:2712:U:H2'	36:1:2713:U:C6	2.52	0.45
50:M4:13:ARG:NH2	36:5:3206:C:N3	316.12	0.45
24:D2:20:THR:HB	24:D2:22:LYS:HD3	2.59	0.45
47:M0:68:ALA:HA	47:M0:158:LYS:HG3	2.10	0.45
36:1:998:A:O2'	36:1:999:G:H5'	2.17	0.45
33:E1:82:LYS:O	33:E1:83:LYS:HG3	2.18	0.45
33:E1:82:LYS:O	33:E1:84:VAL:N	4.93	0.45
36:1:1713:G:H1	36:1:1730:G:HO2'	1.62	0.45
63:N7:36:HIS:CD2	63:N7:74:VAL:HG11	2.92	0.45
27:D5:41:ILE:HG23	27:D5:42:LEU:H	1.80	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:S9:170:GLY:O	11:S9:171:ARG:HD2	6.03	0.45
20:C8:45:LEU:HA	20:C8:45:LEU:HD12	1.64	0.45
2:S0:32:HIS:C	2:S0:32:HIS:ND1	2.70	0.45
1:6:1699:G:N2	1:6:1702:A:H5''	2.30	0.45
20:C8:116:LEU:HA	20:C8:119:ILE:HG22	3.83	0.45
20:C8:128:PHE:CE2	35:SM:61:ILE:HG12	6.66	0.45
10:S8:36:THR:HG23	10:S8:96:LEU:O	2.27	0.45
9:S7:99:LEU:HG	9:S7:116:ARG:HG2	4.83	0.45
46:L9:190:ASP:O	46:L9:191:LEU:HG	2.16	0.45
64:N8:42:ARG:HA	64:N8:45:MET:HB2	2.76	0.45
2:S0:82:GLY:O	2:S0:86:VAL:HG13	3.39	0.45
63:N7:136:PHE:HB2	36:5:2555:G:O2'	207.98	0.45
41:L4:60:THR:HG21	41:L4:77:VAL:HG22	1.97	0.45
36:1:1162:U:H4'	68:O2:57:TYR:CD1	2.52	0.45
12:C0:80:LEU:HB2	12:C0:82:LEU:HD11	1.99	0.45
12:C0:24:LYS:HB2	12:C0:63:TYR:CE1	2.55	0.45
46:L9:94:TYR:HE1	46:L9:142:ASP:OD1	2.38	0.45
68:O2:64:LYS:HE3	68:O2:65:PHE:CZ	4.75	0.45
20:C8:140:THR:HA	20:C8:143:ARG:HH12	1.82	0.45
42:L5:91:GLY:O	42:L5:94:ASN:ND2	4.05	0.45
40:L3:18:PRO:HG2	40:L3:20:LYS:HD2	2.13	0.45
36:5:25:U:O4	86:5:3900:OHX:N6	2.50	0.45
46:L9:74:LEU:O	46:L9:78:MET:HG3	2.46	0.45
4:S2:49:LYS:HB3	4:S2:243:TYR:CE1	3.87	0.45
1:2:1334:U:H2'	1:2:1335:U:C6	2.51	0.45
36:1:1054:A:OP1	86:1:4152:OHX:N5	2.50	0.45
36:5:305:U:C5	36:5:2776:C:H1'	2.52	0.45
1:2:1531:G:N2	21:C9:48:GLN:OE1	2.50	0.45
57:N1:126:VAL:HG23	57:N1:127:GLN:H	1.82	0.45
42:L5:131:LEU:O	42:L5:133:GLU:N	2.76	0.45
51:M5:79:ALA:HB1	51:M5:81:TYR:CE1	2.52	0.45
36:5:2916:U:H5	36:5:2935:U:HO2'	1.63	0.45
1:2:843:U:H2'	1:2:844:A:C8	2.52	0.45
36:5:344:A:C5	36:5:345:G:N7	2.85	0.45
36:5:2197:C:C2	36:5:2241:U:C4	3.05	0.45
10:S8:74:LYS:HE2	10:S8:112:TRP:HB2	1.98	0.45
55:M9:66:HIS:O	55:M9:69:SER:HB3	3.86	0.45
59:N3:94:TYR:HE2	60:N4:19:THR:OG1	2.00	0.45
78:Q2:2:VAL:HG23	78:Q2:91:PHE:HA	1.99	0.45
24:D2:26:LEU:HB2	29:D7:7:LEU:HD13	1.99	0.45
41:L4:136:LEU:HD23	41:L4:136:LEU:HA	1.72	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D3:31:LYS:HA	25:D3:31:LYS:HD3	1.59	0.45
42:L5:234:ASP:OD2	42:L5:234:ASP:N	2.50	0.45
51:M5:11:GLN:O	51:M5:11:GLN:HG3	2.17	0.45
29:D7:8:LEU:HA	29:D7:8:LEU:HD23	1.69	0.45
71:O5:38:ARG:HG2	71:O5:39:PRO:HD2	1.98	0.45
36:1:3163:A:C2'	36:1:3164:C:H5'	2.46	0.44
16:C4:34:SER:O	16:C4:36:LYS:N	3.37	0.44
25:D3:83:VAL:HG21	25:D3:122:PHE:CE2	3.87	0.44
7:S5:51:VAL:O	7:S5:65:ARG:NH1	3.29	0.44
70:O4:73:SER:O	36:5:1639:C:N4	195.89	0.44
70:O4:74:ARG:CZ	70:O4:82:ALA:HB2	2.47	0.44
40:L3:77:THR:CG2	40:L3:327:CYS:HA	2.69	0.44
21:C9:64:HIS:CE1	21:C9:68:ARG:NH2	3.32	0.44
36:1:1939:G:C6	36:1:1940:G:C5	3.05	0.44
23:D1:32:VAL:HB	23:D1:60:ARG:HD2	2.87	0.44
4:S2:229:LEU:HD12	4:S2:229:LEU:HA	1.73	0.44
60:N4:5:ILE:HD12	60:N4:6:ASP:O	2.17	0.44
27:D5:55:PRO:O	27:D5:57:TYR:N	2.50	0.44
3:S1:180:THR:HG22	3:S1:181:LEU:H	1.82	0.44
3:S1:86:LEU:HB3	3:S1:98:THR:OG1	2.17	0.44
28:D6:32:LYS:NZ	1:6:932:U:O2	311.08	0.44
33:E1:103:LEU:HD11	1:6:1252:C:H5'	454.96	0.44
20:C8:136:GLN:NE2	1:6:1544:U:OP1	354.11	0.44
54:M8:178:ARG:HA	54:M8:178:ARG:HD3	1.43	0.44
50:M4:94:TRP:CE2	50:M4:100:ALA:HB2	2.51	0.44
41:L4:118:LYS:O	41:L4:121:ALA:HB3	2.35	0.44
10:S8:87:ASN:HB3	10:S8:90:LEU:HD12	2.52	0.44
2:S0:115:PHE:HD2	2:S0:116:LYS:N	4.01	0.44
7:S5:73:THR:O	7:S5:75:GLY:N	2.71	0.44
37:3:111:U:O2'	86:3:221:OHX:N1	2.50	0.44
2:S0:30:GLN:NE2	2:S0:33:GLN:HG2	9.97	0.44
1:2:462:G:N7	86:2:2143:OHX:N1	2.64	0.44
20:C8:20:THR:HG21	20:C8:35:ILE:HA	2.47	0.44
1:6:827:C:C2'	1:6:828:U:H5'	2.47	0.44
1:2:1274:C:H4'	1:2:1275:A:O5'	2.18	0.44
49:M3:89:TYR:CE1	49:M3:93:ILE:HD11	3.46	0.44
65:N9:11:ASN:O	65:N9:11:ASN:CG	2.55	0.44
1:6:1492:A:O2'	1:6:1493:A:H8	2.00	0.44
1:2:1102:G:H2'	1:2:1103:U:H6	1.83	0.44
24:D2:76:SER:OG	24:D2:77:PRO:HD3	2.17	0.44
40:L3:380:MET:O	36:5:3369:G:N1	228.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:SR:81:LEU:HG	34:SR:91:LEU:HD13	1.99	0.44
56:N0:89:ASN:ND2	56:N0:89:ASN:H	2.74	0.44
61:N5:39:LYS:HG3	36:5:13:A:H4'	119.14	0.44
36:1:1461:A:O2'	36:1:1462:A:H5'	2.16	0.44
26:D4:52:LYS:C	26:D4:54:ALA:H	2.21	0.44
57:N1:132:PRO:O	57:N1:134:GLN:HG2	4.06	0.44
39:L2:43:GLY:O	39:L2:87:PHE:HA	2.41	0.44
14:C2:75:VAL:HG21	14:C2:120:VAL:HG21	2.10	0.44
38:4:65:A:H5''	71:O5:6:ALA:HB2	1.99	0.44
11:S9:53:ARG:NH2	11:S9:97:LEU:O	2.46	0.44
1:2:995:A:H2'	1:2:996:U:O4'	2.17	0.44
1:2:3:U:O2'	1:2:4:C:O4'	2.33	0.44
36:5:2799:A:H5''	36:5:2800:G:O5'	2.16	0.44
1:6:876:G:H1'	1:6:944:A:O4'	2.17	0.44
39:L2:103:PRO:O	39:L2:105:GLY:N	2.50	0.44
36:1:431:U:H5''	69:O3:65:ARG:NH1	2.33	0.44
36:1:1680:G:H2'	36:1:1681:U:H6	1.82	0.44
22:D0:25:THR:HA	22:D0:90:TYR:HA	2.18	0.44
86:5:4005:OHX:N4	86:5:4195:OHX:N1	2.65	0.44
60:N4:42:GLN:HB3	60:N4:44:LYS:HG2	1.98	0.44
8:S6:95:LYS:NZ	1:6:160:C:O3'	308.73	0.44
1:6:423:G:H4'	1:6:424:C:OP1	2.17	0.44
1:2:747:C:H4'	24:D2:80:ASN:ND2	2.33	0.44
44:L7:145:ARG:HA	44:L7:185:ILE:HD13	2.78	0.44
14:C2:42:ALA:HB3	14:C2:122:VAL:HB	2.53	0.44
36:5:721:G:C2	36:5:722:G:C8	3.05	0.44
1:2:1351:G:C2	1:2:1375:A:C2	3.05	0.44
33:E1:87:THR:O	1:6:1445:G:N1	377.80	0.44
1:2:889:U:H4'	1:2:989:U:OP1	2.16	0.44
36:5:561:C:H2'	36:5:562:C:C6	2.52	0.44
50:M4:80:THR:HG21	36:5:560:G:H5'	353.66	0.44
42:L5:197:SER:OG	42:L5:202:GLY:HA3	2.80	0.44
6:S4:67:GLN:HB3	6:S4:69:HIS:CD2	2.88	0.44
36:1:171:G:H2'	36:1:172:G:O4'	2.17	0.44
69:O3:96:ALA:HB2	36:5:3173:G:C2	230.28	0.44
36:1:709:A:H8	36:1:709:A:O5'	2.00	0.44
48:M1:138:VAL:HG22	48:M1:141:ARG:CZ	2.47	0.44
1:6:766:U:C4	1:6:769:A:C8	3.05	0.44
1:6:768:C:H2'	1:6:769:A:O4'	2.17	0.44
62:N6:26:GLN:O	62:N6:30:LEU:HD12	2.17	0.44
37:3:20:A:H2'	37:3:21:G:H8	1.82	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Q2:14:GLY:C	78:Q2:16:THR:N	2.70	0.44
47:M0:86:HIS:HB3	47:M0:139:ARG:HG2	2.03	0.44
74:O8:46:ARG:NH2	74:O8:51:LEU:HB2	2.32	0.44
57:N1:68:THR:OG1	36:5:2737:C:H4'	224.35	0.44
41:L4:329:PRO:HB2	41:L4:330:TYR:H	3.91	0.44
52:M6:65:ASN:HB3	52:M6:68:ARG:HG2	1.99	0.44
10:S8:9:HIS:ND1	10:S8:10:LYS:HB2	2.31	0.44
36:1:3353:G:O2'	36:1:3354:U:OP1	2.35	0.44
7:S5:64:VAL:O	7:S5:65:ARG:HB2	2.17	0.44
40:L3:53:MET:HG2	40:L3:76:VAL:O	2.17	0.44
1:2:1100:G:O4'	25:D3:7:ARG:NH2	2.50	0.44
48:M1:52:TYR:HA	48:M1:61:ARG:HG3	3.04	0.44
35:SM:23:LYS:HE3	35:SM:24:GLU:N	6.87	0.44
36:1:595:G:OP2	44:L7:30:ARG:NH2	2.43	0.44
3:S1:81:PHE:HB2	3:S1:82:ARG:H	1.50	0.44
1:6:1209:C:N4	1:6:1454:G:H1	2.15	0.44
42:L5:39:GLN:HG3	42:L5:40:HIS:O	2.47	0.44
54:M8:178:ARG:HA	54:M8:178:ARG:HD2	2.81	0.44
88:5:4246:3J6:O5	88:5:4246:3J6:C6	2.64	0.44
44:L7:155:LYS:HB2	44:L7:203:TRP:HE3	1.82	0.44
18:C6:109:PHE:O	18:C6:113:ASP:N	2.62	0.44
3:S1:165:ARG:O	3:S1:169:SER:OG	2.32	0.44
6:S4:57:ASN:HB3	6:S4:59:ARG:N	2.75	0.44
53:M7:125:GLN:HG2	53:M7:143:PRO:HG3	2.80	0.44
1:2:1052:U:OP1	1:2:1053:G:H5''	2.16	0.44
36:1:528:U:H2'	36:1:529:A:H8	1.81	0.44
21:C9:82:GLY:HA2	1:6:1525:A:OP1	388.02	0.44
47:M0:20:SER:HG	47:M0:22:TYR:HD1	1.64	0.44
36:1:2617:U:H5	36:1:2621:G:OP2	2.00	0.44
1:6:153:G:H2'	1:6:154:G:C8	2.52	0.44
15:C3:26:PHE:CE2	15:C3:28:LEU:HB2	2.86	0.44
37:3:61:G:H2'	37:3:62:U:H6	1.82	0.44
29:D7:63:LEU:HD23	29:D7:63:LEU:HA	2.48	0.44
1:2:1158:C:O2'	1:2:1581:C:OP2	2.34	0.44
54:M8:66:ARG:NH1	36:5:785:G:OP2	157.24	0.44
36:1:2358:A:H2'	36:1:2359:C:O4'	2.16	0.44
1:2:602:U:H2'	1:2:603:U:C6	2.52	0.44
47:M0:24:ARG:O	47:M0:25:ALA:HB3	4.58	0.44
36:5:1049:C:H2'	36:5:1050:U:C6	2.53	0.44
49:M3:57:VAL:HG23	49:M3:115:ARG:HD2	1.99	0.44
43:L6:169:ASP:OD1	43:L6:174:LEU:HD11	2.16	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:O2:23:ASP:OD1	68:O2:23:ASP:N	2.40	0.44
34:SR:197:SER:HB3	34:SR:217:ASP:HB3	1.99	0.44
36:1:644:G:H2'	36:1:2372:A:C5	2.52	0.44
36:5:2612:U:H2'	36:5:2613:U:O4'	2.17	0.44
36:1:2741:C:H4'	78:Q2:19:LYS:HA	1.99	0.44
17:C5:57:MET:HE1	17:C5:89:MET:HG2	1.99	0.44
6:S4:51:ARG:HE	6:S4:51:ARG:CA	3.07	0.44
1:2:1082:C:H2'	1:2:1083:G:H5'	1.99	0.44
36:1:578:A:H5''	36:1:579:G:O5'	2.18	0.44
38:8:8:C:H2'	38:8:9:A:C8	2.53	0.44
6:S4:234:PRO:CB	6:S4:238:LEU:HD21	2.47	0.44
1:6:794:U:H4'	1:6:795:U:OP2	2.16	0.44
36:5:3135:U:C5	36:5:3136:G:C5	3.05	0.44
1:2:757:A:H4'	6:S4:22:LYS:HD3	2.00	0.44
54:M8:98:LYS:HB3	54:M8:99:THR:H	1.67	0.44
2:S0:108:THR:HA	4:S2:64:LYS:HE3	1.99	0.44
73:O7:71:SER:O	73:O7:74:PHE:HB3	2.17	0.44
4:S2:103:VAL:HA	4:S2:112:GLY:O	2.20	0.44
36:1:174:C:H2'	36:1:175:C:C6	2.52	0.44
60:N4:54:LEU:HA	60:N4:54:LEU:HD13	4.12	0.44
34:SR:297:ASP:OD2	34:SR:297:ASP:N	3.85	0.44
62:N6:99:LEU:H	62:N6:99:LEU:HG	2.35	0.44
36:1:2242:A:H5'	39:L2:243:THR:O	2.17	0.44
34:SR:182:ASN:HB2	34:SR:189:GLU:OE1	3.44	0.44
1:2:1636:C:C2	1:2:1638:G:C5	3.05	0.44
36:1:658:G:OP1	86:1:4046:OHX:N4	2.50	0.44
69:O3:59:VAL:HB	69:O3:60:ARG:H	1.57	0.44
36:1:1597:C:H2'	36:1:1598:G:C8	2.52	0.44
28:D6:11:ASN:O	28:D6:33:ASP:HB2	2.18	0.44
37:7:23:A:H2'	37:7:24:A:C8	2.52	0.44
41:L4:271:LYS:HB2	41:L4:274:TYR:HB3	2.47	0.44
7:S5:43:PHE:H	7:S5:46:TRP:H	2.07	0.44
39:L2:70:ARG:HB3	39:L2:70:ARG:HE	4.87	0.44
18:C6:52:LEU:HD22	18:C6:60:PHE:CZ	2.53	0.44
36:5:2404:A:C8	36:5:2404:A:C5'	2.93	0.44
41:L4:48:GLN:OE1	36:5:691:A:N6	92.95	0.44
55:M9:95:TRP:O	55:M9:99:LEU:N	2.38	0.44
36:1:980:A:H2'	36:1:981:U:C1'	2.47	0.44
50:M4:121:MET:O	50:M4:125:LYS:HG3	2.89	0.44
51:M5:172:ARG:HB3	51:M5:174:ILE:HG12	4.07	0.44
27:D5:58:ARG:HA	27:D5:103:ARG:HB2	5.85	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:73:ASP:OD1	6:S4:89:VAL:N	2.50	0.44
33:E1:132:LEU:HD12	33:E1:139:LEU:HD23	3.12	0.44
23:D1:69:LEU:HD23	23:D1:69:LEU:HA	2.16	0.44
63:N7:129:TRP:O	63:N7:132:SER:N	3.31	0.44
36:5:2179:C:H4'	36:5:2180:G:OP2	2.17	0.44
1:2:901:G:C6	1:2:902:G:C6	3.05	0.44
36:5:118:U:C5	36:5:119:U:C4	3.05	0.44
36:1:2883:U:H2'	36:1:2884:C:C6	2.51	0.44
4:S2:56:ILE:O	4:S2:60:SER:N	2.55	0.44
45:L8:94:PHE:CD2	45:L8:189:LEU:HD21	2.52	0.44
36:1:2992:U:H5'	36:1:3310:A:O2'	2.16	0.44
17:C5:119:PHE:HE1	20:C8:119:ILE:HG23	1.81	0.44
44:L7:25:GLN:H	44:L7:28:ALA:HB3	1.82	0.44
25:D3:65:ASN:ND2	25:D3:116:ASP:OD1	3.02	0.44
56:N0:166:LYS:HB3	56:N0:167:ARG:H	1.36	0.44
3:S1:157:GLN:HB2	3:S1:160:HIS:CG	2.51	0.44
6:S4:250:GLU:HA	6:S4:253:ASP:OD2	3.36	0.44
52:M6:138:LEU:HD12	52:M6:138:LEU:HA	1.70	0.44
47:M0:116:ARG:HB2	47:M0:116:ARG:HE	2.22	0.44
1:6:957:G:C6	1:6:958:U:C4	3.06	0.44
58:N2:18:ASP:HB3	58:N2:104:ARG:HB2	1.98	0.44
1:6:359:A:OP1	86:6:2198:OHX:N2	2.50	0.44
4:S2:205:ARG:HD2	1:6:6:G:OP2	378.88	0.44
11:S9:54:ARG:HE	11:S9:54:ARG:HB3	1.93	0.44
54:M8:43:PRO:HB3	36:5:728:G:H5''	191.89	0.44
36:5:2148:U:H2'	36:5:2149:A:C4	2.52	0.44
14:C2:71:ILE:O	14:C2:75:VAL:HG23	2.17	0.44
1:2:616:G:C2	1:2:622:A:C8	3.05	0.44
12:C0:16:PHE:O	12:C0:88:PRO:HA	2.17	0.44
36:5:916:G:C8	36:5:924:G:C5	3.05	0.44
55:M9:160:GLU:HA	55:M9:163:ARG:HB2	1.98	0.44
36:1:2344:U:H1'	36:1:3079:U:O4	2.17	0.44
19:C7:71:PHE:HE1	19:C7:73:LEU:HD22	1.82	0.44
58:N2:48:GLY:O	58:N2:50:LEU:N	3.50	0.44
20:C8:8:GLN:HB3	20:C8:9:GLY:H	3.20	0.44
1:2:21:U:H2'	1:2:22:A:C8	2.51	0.44
36:1:241:G:C6	36:1:242:C:C4	3.05	0.44
22:D0:28:SER:HB3	22:D0:34:LEU:HG	1.99	0.44
68:O2:45:ARG:NH2	36:5:1366:A:O3'	199.82	0.44
71:O5:41:LEU:O	71:O5:44:ILE:HG22	2.27	0.44
1:2:474:A:O2'	11:S9:37:LYS:HE2	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:33:ASN:HA	36:5:2549:G:N2	211.80	0.44
42:L5:51:LEU:HB2	42:L5:144:VAL:HG13	1.98	0.44
1:2:1752:U:OP2	86:2:2058:OHX:N2	2.50	0.44
36:1:1870:C:H6	36:1:1870:C:O5'	2.01	0.44
6:S4:23:LEU:HB3	6:S4:24:SER:H	1.57	0.44
57:N1:46:GLY:HA2	57:N1:52:MET:HE3	2.48	0.44
36:5:2890:A:N1	36:5:2913:C:N3	2.65	0.44
2:S0:87:LEU:HD22	2:S0:99:ALA:HB2	3.80	0.44
36:1:385:A:H2'	36:1:386:A:C8	2.52	0.44
68:O2:112:ALA:O	68:O2:116:GLY:N	2.49	0.44
78:Q2:12:CYS:HB3	78:Q2:21:THR:CG2	2.47	0.44
36:1:1525:G:H2'	36:1:1525:G:N3	2.32	0.44
42:L5:41:LYS:HB2	57:N1:68:THR:O	2.17	0.44
51:M5:38:ARG:NH1	38:8:142:C:H5''	110.11	0.44
11:S9:119:ALA:O	11:S9:124:HIS:ND1	4.32	0.44
71:O5:85:THR:O	71:O5:89:ARG:HB2	2.35	0.44
5:S3:108:LYS:O	5:S3:113:LEU:HB2	3.11	0.44
22:D0:69:LYS:HB2	22:D0:78:THR:OG1	3.40	0.44
19:C7:19:ARG:HG3	19:C7:20:TYR:CE1	2.53	0.44
10:S8:196:LEU:HA	10:S8:196:LEU:HD23	4.20	0.44
2:S0:74:VAL:HA	2:S0:96:THR:O	2.79	0.44
36:1:595:G:H2'	36:1:596:C:C6	2.53	0.44
37:3:79:A:C2	37:3:102:A:C4	3.06	0.44
42:L5:109:THR:OG1	42:L5:110:LEU:N	2.50	0.44
14:C2:50:LYS:HE2	33:E1:103:LEU:HD11	1.98	0.44
20:C8:122:HIS:O	20:C8:126:ARG:HG2	5.00	0.44
32:E0:13:LYS:HE3	32:E0:17:GLN:NE2	5.56	0.44
36:5:662:U:O4	36:5:801:A:H1'	2.17	0.44
36:1:3187:A:OP1	46:L9:23:ARG:NE	2.37	0.44
63:N7:24:VAL:HG11	63:N7:87:LEU:HB3	3.47	0.44
1:2:704:C:H3'	1:2:704:C:OP2	2.17	0.44
62:N6:45:ILE:HG12	62:N6:122:LYS:HE2	3.73	0.44
41:L4:37:THR:OG1	41:L4:38:VAL:N	2.49	0.44
41:L4:49:ALA:HA	41:L4:109:TRP:CZ2	2.53	0.44
33:E1:108:VAL:HA	33:E1:113:LYS:O	2.18	0.44
9:S7:58:LEU:N	9:S7:89:HIS:O	2.34	0.44
36:5:567:G:H2'	36:5:568:G:C8	2.52	0.44
68:O2:33:ARG:HG3	36:5:945:C:OP1	170.09	0.44
44:L7:77:VAL:HG22	57:N1:139:ARG:O	2.21	0.44
36:1:785:G:N2	54:M8:89:ASP:O	2.46	0.44
48:M1:89:TYR:HB3	48:M1:169:ALA:CB	2.48	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:N1:86:GLU:OE1	57:N1:88:ARG:NH1	2.50	0.44
36:1:1875:G:O6	55:M9:20:ARG:NH2	2.47	0.44
75:O9:10:LYS:HD3	36:5:1833:G:OP1	103.71	0.44
36:1:2616:C:H2'	36:1:2617:U:H5'	2.00	0.44
36:1:132:C:H2'	36:1:133:U:H5''	1.99	0.44
36:5:173:G:HO2'	36:5:174:C:C5'	2.30	0.44
37:7:106:U:H2'	37:7:107:C:O4'	2.17	0.44
1:2:412:A:H2	1:2:421:A:N1	2.16	0.44
40:L3:255:TRP:CD1	40:L3:256:HIS:CE1	3.05	0.44
54:M8:47:VAL:HG21	36:5:728:G:H4'	184.63	0.44
1:6:1535:U:H1'	1:6:1536:G:C2	2.52	0.44
17:C5:116:LEU:C	17:C5:118:GLU:H	2.60	0.44
36:5:1222:G:O6	86:5:4123:OHX:N1	2.50	0.44
8:S6:3:LEU:HD22	8:S6:109:LEU:HB3	1.99	0.44
33:E1:97:LYS:HE2	1:6:1231:U:C4	439.54	0.44
1:2:1278:G:OP1	5:S3:185:LYS:HE2	2.17	0.44
36:1:1686:U:O2	36:1:1688:U:H1'	2.17	0.44
41:L4:192:GLY:HA2	41:L4:195:ARG:CG	4.15	0.44
74:O8:27:ILE:HG13	74:O8:39:ARG:NH2	3.25	0.44
36:5:1944:U:H2'	36:5:1945:A:C8	2.51	0.44
51:M5:140:LYS:O	51:M5:144:ARG:HB2	3.03	0.44
52:M6:72:HIS:O	52:M6:74:ARG:HD3	2.98	0.44
36:5:306:A:C2	36:5:2784:G:H1'	2.53	0.44
45:L8:130:TYR:CD1	45:L8:202:GLU:HB3	2.52	0.44
1:2:768:C:H2'	1:2:769:A:O4'	2.18	0.44
21:C9:14:PHE:HZ	21:C9:132:LEU:HG	1.81	0.44
36:1:591:G:H4'	36:1:592:A:OP1	2.16	0.44
1:6:1045:C:C2	1:6:1074:G:C2	3.05	0.44
55:M9:56:THR:HG23	36:5:1873:U:P	152.04	0.44
36:5:1888:U:C4	36:5:1889:G:C8	3.05	0.44
36:1:2197:C:C2	36:1:2241:U:C4	3.05	0.44
71:O5:105:ARG:HA	71:O5:108:GLN:HB2	1.98	0.44
58:N2:56:VAL:HG22	58:N2:65:VAL:HG13	1.99	0.44
13:C1:22:ASN:OD1	13:C1:24:LYS:HB2	2.17	0.44
10:S8:113:PHE:C	10:S8:115:ALA:H	2.20	0.44
1:2:861:U:H5'	1:2:862:A:OP2	2.18	0.44
38:8:43:A:OP1	86:8:227:OHX:N3	2.50	0.44
1:2:97:C:H2'	1:2:98:U:C6	2.53	0.44
36:1:1075:A:C5	65:N9:45:HIS:CD2	3.04	0.44
66:O0:78:GLY:HA2	66:O0:87:VAL:HG13	1.99	0.44
36:1:3228:C:H4'	36:1:3229:G:O5'	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:815:G:C2	36:1:906:A:C2	3.05	0.44
1:6:1003:A:H4'	1:6:1004:U:O5'	2.17	0.44
45:L8:200:LEU:HG	45:L8:200:LEU:H	3.10	0.44
57:N1:71:SER:HB3	57:N1:91:LEU:O	2.60	0.44
3:S1:62:LYS:C	3:S1:64:ARG:H	2.20	0.44
1:6:565:C:N3	86:6:2157:OHX:N4	2.65	0.44
62:N6:69:LYS:O	62:N6:83:ASP:N	2.95	0.44
1:2:542:A:H5''	1:2:544:A:C5	2.52	0.44
7:S5:43:PHE:N	7:S5:46:TRP:O	2.84	0.44
62:N6:6:LEU:HD23	62:N6:6:LEU:HA	1.73	0.44
40:L3:283:TYR:CE1	40:L3:325:LYS:HB3	2.52	0.44
21:C9:53:TRP:HH2	21:C9:100:ILE:HD13	1.83	0.44
51:M5:35:VAL:HA	51:M5:65:ARG:HD3	1.99	0.44
51:M5:173:GLY:O	51:M5:183:THR:HG23	2.16	0.44
1:6:1315:U:H2'	1:6:1316:G:O4'	2.18	0.44
1:2:881:A:H2'	1:2:882:U:O4'	2.16	0.44
42:L5:75:LEU:CD2	42:L5:112:LYS:HE2	4.64	0.44
33:E1:119:ARG:O	33:E1:132:LEU:N	3.12	0.44
64:N8:8:THR:HG21	36:5:662:U:P	149.46	0.44
23:D1:64:GLU:OE1	29:D7:2:VAL:HG13	2.17	0.44
1:2:1762:A:O2'	1:2:1763:A:H5'	2.18	0.44
63:N7:39:GLY:C	63:N7:77:TYR:HD1	3.61	0.44
10:S8:87:ASN:ND2	1:6:341:A:H4'	256.85	0.44
43:L6:56:LYS:NZ	43:L6:101:PHE:O	3.26	0.44
43:L6:56:LYS:H	43:L6:64:LEU:HB3	2.35	0.44
37:3:27:A:P	42:L5:57:ASN:H	2.40	0.44
44:L7:159:GLN:HA	36:5:1362:G:O2'	217.40	0.44
63:N7:54:THR:O	63:N7:57:HIS:HB2	2.17	0.44
26:D4:108:ARG:NH2	1:6:444:C:OP2	372.66	0.44
6:S4:10:LYS:HD3	1:6:381:C:OP1	358.35	0.44
1:2:1237:G:H2'	1:2:1238:A:C8	2.53	0.44
1:2:1542:G:H5''	21:C9:87:GLY:C	2.38	0.44
1:2:169:A:OP1	8:S6:137:ARG:NH2	2.51	0.44
36:5:1128:U:H2'	36:5:1129:A:O4'	2.18	0.44
36:1:805:G:H1'	41:L4:73:ARG:NH1	2.32	0.44
2:S0:186:GLY:O	2:S0:188:LEU:N	2.50	0.44
1:2:886:U:C2	1:2:887:A:C8	3.05	0.44
15:C3:88:LEU:O	15:C3:92:ILE:HG13	2.18	0.44
49:M3:93:ILE:HD12	49:M3:93:ILE:HG23	1.77	0.44
11:S9:143:ILE:HG23	1:6:474:A:OP1	419.81	0.44
36:5:1820:U:O2'	36:5:1821:U:OP1	2.29	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:170:GLN:HA	9:S7:181:ILE:HG22	1.97	0.44
68:O2:126:LEU:HD23	68:O2:126:LEU:HA	2.01	0.44
40:L3:376:LYS:O	40:L3:380:MET:HB2	2.17	0.44
43:L6:134:ARG:HA	43:L6:134:ARG:HD2	3.14	0.44
32:E0:50:VAL:HA	32:E0:53:LYS:O	2.17	0.44
45:L8:147:LYS:O	45:L8:201:THR:HB	2.68	0.44
1:6:715:U:H2'	1:6:716:C:H6	1.82	0.44
5:S3:190:ARG:NH1	5:S3:195:SER:HA	2.53	0.44
57:N1:85:LEU:HD12	36:5:2728:G:C8	208.95	0.44
1:6:1719:A:N6	1:6:1720:G:C2	2.85	0.44
39:L2:159:SER:O	39:L2:162:ALA:N	3.25	0.44
36:5:1713:G:H1	36:5:1730:G:HO2'	1.65	0.44
36:1:1321:G:H2'	36:1:1322:U:O4'	2.18	0.44
8:S6:75:LEU:HD23	8:S6:75:LEU:HA	2.18	0.44
36:5:1335:C:O2'	36:5:1336:U:H5'	2.18	0.44
36:1:733:G:N2	36:1:736:A:OP2	2.51	0.44
69:O3:13:HIS:NE2	69:O3:28:SER:HB3	2.75	0.44
43:L6:154:LEU:HA	43:L6:157:GLN:OE1	2.18	0.44
1:6:1347:U:O2	1:6:1516:A:H5'	2.18	0.44
70:O4:24:LYS:HB2	70:O4:24:LYS:HE3	1.70	0.44
55:M9:88:ARG:H	55:M9:88:ARG:HG2	3.42	0.44
36:5:1768:U:H2'	36:5:1769:G:O4'	2.17	0.44
6:S4:153:ASN:O	6:S4:155:LYS:HG2	2.18	0.44
39:L2:107:VAL:HB	39:L2:111:THR:HG21	2.59	0.44
36:1:591:G:H1'	43:L6:19:LYS:HG3	1.99	0.44
36:5:3354:U:H4'	36:5:3355:U:H5''	1.99	0.44
36:5:2949:U:C5	36:5:2950:G:C6	3.06	0.44
36:5:3056:U:OP2	86:5:3935:OHX:N2	2.51	0.44
1:6:1:U:C5	1:6:369:A:N6	2.86	0.44
37:3:106:U:H2'	37:3:107:C:C6	2.53	0.44
34:SR:317:THR:HG22	34:SR:318:ALA:H	1.83	0.44
73:O7:58:THR:O	73:O7:61:THR:HG23	2.17	0.44
8:S6:14:LYS:HD3	8:S6:16:PHE:CZ	2.56	0.44
36:1:3030:G:C5	36:1:3031:G:C5	3.05	0.44
1:2:240:U:H1'	1:2:241:U:P	2.58	0.44
7:S5:177:ILE:HA	7:S5:180:ARG:NH1	2.32	0.44
36:5:708:G:H8	36:5:708:G:H5''	1.82	0.44
6:S4:180:LEU:HA	6:S4:180:LEU:HD23	1.75	0.44
1:6:853:G:H2'	1:6:854:U:C6	2.52	0.44
78:Q2:9:LYS:O	36:5:2713:U:H3'	223.40	0.44
1:2:1649:G:N7	86:2:2051:OHX:N1	2.66	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:330:TYR:CE2	44:L7:49:ALA:HA	2.53	0.44
62:N6:50:ILE:HD13	62:N6:51:ARG:N	4.66	0.44
28:D6:75:VAL:HA	28:D6:78:ALA:HB3	2.00	0.44
28:D6:87:ARG:HD3	1:6:1796:C:OP1	345.24	0.44
11:S9:109:LEU:HB3	11:S9:129:ILE:HD13	2.65	0.44
36:5:2520:A:H2'	36:5:2521:U:C6	2.53	0.44
47:M0:210:ILE:HD13	47:M0:217:PHE:CZ	4.27	0.44
76:Q0:96:CYS:HB2	76:Q0:103:LEU:HD11	3.39	0.44
1:2:1009:U:H2'	1:2:1010:C:C6	2.53	0.44
36:1:1804:A:H2'	36:1:1805:C:C6	2.53	0.44
12:C0:1:MET:HG2	12:C0:2:LEU:N	2.33	0.44
4:S2:94:GLN:HB3	4:S2:94:GLN:HE21	1.63	0.44
3:S1:90:GLU:HG2	3:S1:223:PHE:HZ	2.46	0.44
36:1:13:A:OP2	86:1:4202:OHX:N5	2.50	0.44
40:L3:67:PHE:CD1	40:L3:72:VAL:HG12	2.38	0.44
30:D8:44:VAL:HG21	30:D8:48:VAL:CG2	4.03	0.44
47:M0:13:LYS:HB3	47:M0:13:LYS:HE2	1.68	0.44
49:M3:9:ILE:HD12	54:M8:173:GLU:OE2	2.18	0.44
40:L3:139:GLN:NE2	40:L3:142:ALA:HB3	2.31	0.44
22:D0:17:GLN:HA	22:D0:97:VAL:HG12	1.99	0.44
36:1:412:G:C6	36:1:413:U:C4	3.06	0.44
44:L7:155:LYS:C	44:L7:156:ILE:HG12	4.11	0.44
1:2:800:U:O4	86:2:2054:OHX:N5	2.50	0.44
13:C1:54:ILE:HD12	13:C1:54:ILE:HG23	4.19	0.44
41:L4:209:TYR:CE2	41:L4:229:ASN:HB2	3.03	0.44
36:1:239:G:HO2'	36:1:240:U:P	2.36	0.44
36:5:1243:G:C6	36:5:1244:A:N7	2.86	0.44
2:S0:179:ARG:HD3	2:S0:183:ARG:NE	3.80	0.44
6:S4:125:LYS:H	6:S4:142:HIS:CE1	2.58	0.44
65:N9:56:ALA:C	65:N9:58:LYS:H	3.42	0.44
13:C1:72:THR:O	13:C1:88:ARG:HD2	2.17	0.44
24:D2:103:ILE:HG22	24:D2:128:PHE:HA	2.00	0.44
45:L8:41:GLN:HG3	45:L8:42:PRO:HD2	2.00	0.44
15:C3:88:LEU:HD22	15:C3:92:ILE:HD11	3.14	0.44
74:O8:70:PRO:HA	74:O8:71:PRO:HD3	1.74	0.44
15:C3:136:PRO:HG2	15:C3:139:TRP:HB2	2.01	0.44
18:C6:30:LYS:HA	18:C6:35:PRO:HA	2.00	0.44
50:M4:6:ILE:HA	50:M4:6:ILE:HD13	2.52	0.44
24:D2:79:PHE:O	24:D2:125:ILE:HG22	2.17	0.44
36:5:1228:C:H2'	36:5:1229:G:H8	1.83	0.44
41:L4:92:ASN:HA	41:L4:98:ARG:O	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:245:LEU:O	39:L2:247:ARG:HG2	2.17	0.44
5:S3:167:PHE:HD1	5:S3:190:ARG:HD3	1.82	0.44
24:D2:98:GLN:CD	24:D2:98:GLN:H	2.21	0.44
26:D4:112:LYS:O	26:D4:116:LYS:HG3	2.18	0.44
9:S7:41:LEU:HD13	9:S7:70:PHE:HD1	1.81	0.44
44:L7:104:GLN:O	44:L7:106:LEU:N	2.51	0.44
43:L6:42:LEU:HD22	43:L6:79:VAL:HG21	2.68	0.44
36:1:36:C:OP2	51:M5:83:LYS:HE2	2.16	0.44
52:M6:82:LYS:NZ	36:5:1313:G:OP1	252.67	0.44
34:SR:122:ILE:O	34:SR:134:TRP:N	2.38	0.44
7:S5:41:LYS:HE2	7:S5:41:LYS:HB3	2.59	0.44
36:1:1077:U:H1'	36:1:1083:G:N2	2.32	0.44
44:L7:51:TYR:CD1	44:L7:186:HIS:CD2	3.05	0.44
36:5:1583:A:H3'	36:5:1584:U:H6	1.83	0.44
41:L4:150:LEU:HD12	41:L4:249:ILE:HG12	1.99	0.44
36:1:1498:A:H2'	36:1:1499:C:C6	2.51	0.44
41:L4:210:ALA:HB2	41:L4:254:ALA:HA	2.00	0.44
44:L7:81:HIS:CD2	44:L7:138:TYR:CG	3.06	0.44
15:C3:48:SER:OG	15:C3:86:GLU:OE1	2.96	0.44
9:S7:139:ARG:HB2	9:S7:151:LYS:HB3	4.01	0.44
1:6:1623:C:H2'	1:6:1624:C:C6	2.53	0.44
36:5:374:A:N3	36:5:376:G:H5''	2.31	0.44
4:S2:222:TYR:CE2	23:D1:12:TYR:HD2	2.36	0.44
59:N3:35:TYR:CE2	59:N3:37:ILE:HG22	2.66	0.44
59:N3:39:VAL:HG22	59:N3:52:ALA:HB2	1.98	0.44
38:8:157:U:O2'	38:8:158:U:H5'	2.16	0.44
38:4:93:U:H2'	38:4:94:C:O4'	2.17	0.44
36:1:3075:G:H5''	67:O1:62:ARG:O	2.17	0.44
3:S1:226:GLY:HA2	36:5:2536:A:H4'	256.89	0.44
29:D7:41:LEU:H	29:D7:41:LEU:HD23	3.87	0.44
36:5:1680:G:C5	36:5:1681:U:C5	3.06	0.44
1:6:1769:U:OP2	86:6:2142:OHX:N2	2.50	0.44
1:6:336:G:OP2	86:6:2153:OHX:N4	2.51	0.44
47:M0:77:THR:HG23	47:M0:85:PHE:HZ	1.99	0.44
36:5:3164:C:C2	36:5:3165:A:C8	3.06	0.44
1:2:542:A:H5''	1:2:544:A:N7	2.31	0.44
7:S5:58:LEU:HD11	7:S5:167:ARG:NH1	2.82	0.44
1:6:477:A:H2'	1:6:478:A:C8	2.49	0.44
36:1:1639:C:O2'	36:1:1640:G:H5'	2.17	0.44
71:O5:83:LYS:HD2	38:8:38:U:H6	68.40	0.44
5:S3:90:ARG:HB3	5:S3:91:VAL:H	2.95	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:98:LEU:HD13	36:5:290:G:OP1	135.96	0.44
42:L5:58:LYS:HA	42:L5:93:THR:HB	1.99	0.44
23:D1:1:MET:HB3	23:D1:10:GLU:HB2	4.71	0.44
60:N4:6:ASP:HA	60:N4:13:ILE:HD11	2.37	0.44
34:SR:18:GLY:H	34:SR:39:ASP:HB3	3.15	0.44
70:O4:37:LYS:NZ	36:5:1591:G:H5''	160.04	0.44
7:S5:121:ILE:CG2	7:S5:132:VAL:HG21	3.36	0.44
1:2:1317:C:H2'	1:2:1318:G:O4'	2.18	0.44
20:C8:145:ARG:HB3	35:SM:68:ARG:NH1	4.54	0.44
35:SM:65:THR:HA	35:SM:70:ASN:HD22	5.11	0.44
21:C9:30:VAL:HA	21:C9:31:PRO:HD2	1.72	0.44
23:D1:72:LEU:HD23	23:D1:72:LEU:HA	1.86	0.44
63:N7:36:HIS:O	63:N7:38:PHE:N	2.77	0.44
16:C4:51:ASP:O	16:C4:54:GLU:HB2	2.17	0.44
53:M7:62:ARG:O	53:M7:64:ASN:N	2.51	0.44
18:C6:82:ARG:HH12	18:C6:114:ARG:HB2	3.36	0.44
51:M5:9:GLU:HG3	51:M5:9:GLU:O	2.63	0.44
4:S2:66:PHE:O	4:S2:68:ILE:N	2.50	0.44
4:S2:68:ILE:O	4:S2:72:LEU:HB2	2.18	0.44
1:2:446:A:C5	1:2:447:U:C5	3.06	0.44
66:O0:99:ASP:O	66:O0:102:THR:N	2.71	0.44
1:6:1648:A:H2'	1:6:1649:G:H8	1.82	0.44
31:D9:34:TYR:OH	1:6:1487:A:OP1	419.22	0.44
1:2:693:U:H5'	1:2:694:U:H5'	1.99	0.44
9:S7:117:THR:O	9:S7:121:VAL:HG23	3.53	0.44
42:L5:282:ARG:O	42:L5:285:ARG:HB2	2.47	0.44
9:S7:113:PRO:HG2	9:S7:116:ARG:HD2	1.99	0.44
36:1:741:U:H2'	36:1:742:G:O4'	2.16	0.44
40:L3:56:ILE:HG23	40:L3:57:VAL:N	2.67	0.44
9:S7:91:ILE:HD12	9:S7:92:PHE:H	3.51	0.44
36:5:2101:C:O2'	36:5:2102:U:P	2.75	0.44
58:N2:58:GLU:HG2	58:N2:60:GLY:H	5.55	0.44
24:D2:104:LEU:HA	24:D2:126:LEU:H	1.80	0.44
43:L6:166:LYS:NZ	36:5:3214:U:H6	274.42	0.44
50:M4:128:ARG:NH2	36:5:3214:U:OP2	280.59	0.44
1:6:301:A:H2'	1:6:302:U:O4'	2.18	0.44
1:2:1614:A:C6	1:2:1615:C:C4	3.06	0.44
36:5:2726:C:C2	36:5:2728:G:N2	2.85	0.44
36:1:872:U:H2'	36:1:873:C:C6	2.53	0.44
66:O0:85:PHE:CZ	36:5:1728:G:C6	252.56	0.44
1:6:1268:G:H1'	1:6:1448:G:H5''	2.00	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:176:PHE:H	50:M4:117:ARG:NH2	5.32	0.44
48:M1:126:ASP:HB3	36:5:2673:A:O2'	325.73	0.44
36:1:246:U:H2'	36:1:247:C:C6	2.52	0.44
24:D2:24:GLN:HA	24:D2:63:VAL:O	2.27	0.44
45:L8:134:TYR:CG	45:L8:190:VAL:HG21	2.53	0.44
16:C4:107:ARG:HH22	28:D6:52:ASP:CG	4.29	0.44
41:L4:126:ILE:HG13	41:L4:238:LEU:HD13	1.99	0.44
38:4:149:A:H8	38:4:149:A:O5'	2.00	0.44
48:M1:153:LYS:O	48:M1:153:LYS:HG2	5.06	0.44
10:S8:32:GLN:OE1	1:6:1675:C:H1'	274.80	0.44
68:O2:87:MET:C	68:O2:88:HIS:CG	2.91	0.44
6:S4:131:LEU:HD12	1:6:251:A:C2	326.55	0.44
6:S4:130:GLN:HB3	6:S4:131:LEU:H	1.54	0.44
36:1:1870:C:H4'	36:1:3076:C:O2	2.17	0.44
16:C4:48:VAL:HG22	16:C4:49:LYS:N	2.69	0.44
1:6:1408:G:H2'	1:6:1409:G:O4'	2.18	0.44
38:8:55:U:C4	38:8:56:G:N7	2.86	0.44
42:L5:242:SER:OG	42:L5:243:ALA:N	3.59	0.44
76:Q0:85:LEU:O	76:Q0:88:LYS:HB2	2.89	0.44
16:C4:72:LYS:O	16:C4:75:GLY:N	4.54	0.44
36:5:175:C:H2'	36:5:176:G:H8	1.82	0.44
36:5:1826:C:H2'	36:5:1827:C:C6	2.52	0.44
36:1:1895:A:O2'	36:1:3053:G:H4'	2.17	0.44
36:1:898:U:H2'	36:1:899:U:O4'	2.18	0.44
36:5:197:G:N2	36:5:372:A:C8	2.86	0.44
36:1:2773:C:H2'	36:1:2774:C:C6	2.53	0.44
49:M3:15:ARG:NH2	36:5:96:G:H5'	152.17	0.44
78:Q2:77:CYS:O	78:Q2:79:THR:N	2.51	0.44
36:5:3153:U:H1'	36:5:3154:C:C6	2.53	0.44
62:N6:50:ILE:HG12	62:N6:106:ILE:HD11	3.85	0.44
28:D6:12:LYS:HZ2	28:D6:12:LYS:HB3	3.35	0.44
36:5:1238:C:HO2'	36:5:1239:C:P	2.36	0.44
51:M5:38:ARG:HD2	51:M5:61:ILE:O	2.18	0.44
27:D5:43:ASP:HB2	27:D5:46:LYS:HG3	1.98	0.44
51:M5:35:VAL:HG23	36:5:1543:G:OP1	141.10	0.44
36:5:835:G:N3	36:5:857:G:C2	2.85	0.44
36:1:2735:U:H2'	36:1:2736:A:H8	1.82	0.44
36:1:3259:U:C6	36:1:3259:U:H5'	2.41	0.44
27:D5:89:ILE:HB	27:D5:101:TYR:CD1	2.53	0.44
27:D5:57:TYR:N	27:D5:57:TYR:CD2	3.18	0.44
7:S5:194:LEU:HD22	7:S5:198:LEU:HD11	4.91	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:196:G:C2	1:6:197:A:H1'	2.52	0.44
3:S1:109:LYS:HG3	3:S1:113:MET:HE3	1.98	0.44
6:S4:88:ASP:HA	6:S4:122:LYS:NZ	2.48	0.44
6:S4:182:TYR:HB2	6:S4:228:ILE:HD13	1.99	0.44
12:C0:52:LYS:HE2	12:C0:54:TYR:HE2	1.83	0.44
36:5:420:G:O5'	36:5:420:G:OP2	2.33	0.44
32:E0:13:LYS:HB3	32:E0:13:LYS:HE2	4.53	0.44
11:S9:10:LYS:HA	1:6:471:A:O3'	392.03	0.44
41:L4:34:ILE:HD12	41:L4:120:TYR:CD1	2.52	0.44
18:C6:82:ARG:HH22	18:C6:114:ARG:HD2	1.83	0.44
36:1:1918:C:OP2	86:1:4014:OHX:N2	2.51	0.44
36:1:2571:U:H4'	36:1:2572:C:OP1	2.15	0.44
36:5:3306:U:O2'	36:5:3308:C:OP2	2.27	0.44
2:S0:180:GLU:O	2:S0:184:LEU:HD23	2.23	0.44
57:N1:54:HIS:NE2	36:5:2724:U:H4'	228.79	0.44
36:1:2356:A:N6	36:1:2983:C:H5	2.13	0.44
1:2:1438:G:H2'	1:2:1439:C:C6	2.53	0.44
44:L7:125:GLU:HA	44:L7:128:LYS:HG3	2.00	0.44
18:C6:39:VAL:HG21	18:C6:48:VAL:HG11	2.60	0.44
49:M3:92:THR:HB	71:O5:112:PRO:O	2.69	0.44
1:2:1537:C:N3	86:2:2154:OHX:N3	2.65	0.44
57:N1:17:ARG:HD2	57:N1:17:ARG:HA	1.75	0.44
2:S0:86:VAL:HG12	2:S0:174:TRP:CZ2	3.08	0.44
28:D6:23:CYS:HB3	28:D6:28:LYS:H	1.83	0.44
36:5:2689:A:C8	36:5:2702:A:N6	2.85	0.44
47:M0:91:VAL:HG12	47:M0:91:VAL:O	2.17	0.44
36:1:1845:G:H8	36:1:1845:G:H5''	1.81	0.44
6:S4:212:ASP:OD1	6:S4:215:ASP:N	4.04	0.44
41:L4:99:MET:HE1	36:5:1429:G:C5	122.77	0.44
4:S2:43:ARG:NH1	4:S2:249:ALA:HB2	5.52	0.44
36:1:3316:A:C2	36:1:3389:U:H5'	2.53	0.44
8:S6:123:GLY:O	8:S6:127:THR:HG23	2.18	0.44
59:N3:109:MET:HG3	59:N3:132:ASN:OD1	2.18	0.44
55:M9:19:LYS:C	55:M9:21:LYS:H	2.21	0.44
21:C9:118:PRO:HD2	21:C9:123:ARG:NH2	2.68	0.44
1:2:813:U:C2	55:M9:163:ARG:NE	2.86	0.44
36:5:2594:C:H5''	36:5:2595:A:OP2	2.17	0.44
68:O2:76:VAL:N	68:O2:95:GLU:O	2.41	0.44
41:L4:322:GLN:HB3	36:5:608:A:H5'	249.69	0.44
46:L9:170:LYS:HD3	46:L9:170:LYS:HA	1.82	0.44
43:L6:18:LEU:HD23	36:5:591:G:C2	215.71	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1584:U:H2'	36:1:1585:C:C6	2.53	0.44
36:1:398:A:C4	53:M7:3:ARG:NH2	2.85	0.44
1:6:1304:G:H5'	1:6:1322:A:OP2	2.18	0.44
36:5:1692:U:C4	36:5:1693:C:N4	2.86	0.44
69:O3:102:LEU:HA	69:O3:102:LEU:HD23	1.97	0.44
25:D3:108:GLY:HA2	1:6:600:U:OP2	357.57	0.44
34:SR:145:LEU:HG	34:SR:145:LEU:H	2.18	0.44
73:O7:47:TYR:OH	36:5:813:G:H5'	129.21	0.44
51:M5:79:ALA:HB1	51:M5:81:TYR:CZ	2.53	0.44
42:L5:197:SER:O	42:L5:202:GLY:N	2.48	0.44
1:2:1648:A:H2'	1:2:1649:G:H8	1.83	0.44
36:5:3013:U:H5''	36:5:3014:U:OP2	2.17	0.44
36:5:1890:U:C2	36:5:1891:A:C8	3.06	0.44
51:M5:147:ARG:HH12	36:5:151:A:P	79.53	0.44
33:E1:123:ASN:HA	33:E1:124:PRO:HD2	2.09	0.44
4:S2:186:LYS:HA	4:S2:186:LYS:HD2	1.79	0.44
36:5:2420:C:N4	36:5:2421:U:O4	2.51	0.44
58:N2:29:ASP:OD1	58:N2:31:ALA:HB3	2.17	0.44
64:N8:63:LYS:HD3	64:N8:65:GLN:NE2	2.32	0.44
36:5:370:U:H5''	36:5:371:G:OP2	2.17	0.44
36:5:1741:A:C6	36:5:1742:U:C2	3.05	0.44
70:O4:19:LYS:HZ3	70:O4:38:LEU:HD12	2.80	0.44
36:1:277:G:OP1	86:1:3878:OHX:N5	2.50	0.44
30:D8:54:LEU:HD13	30:D8:54:LEU:HA	2.84	0.44
40:L3:101:SER:OG	40:L3:101:SER:O	2.36	0.44
1:6:541:A:OP1	1:6:541:A:H8	2.01	0.44
36:5:3378:C:OP1	86:5:3928:OHX:N3	2.50	0.44
28:D6:82:ARG:O	28:D6:84:VAL:HG12	2.18	0.44
7:S5:99:MET:HB2	7:S5:100:ASN:H	1.56	0.44
14:C2:61:VAL:HG13	14:C2:121:VAL:HG23	2.23	0.44
1:2:788:A:C4	6:S4:19:LEU:HD13	2.53	0.44
52:M6:122:GLN:O	52:M6:128:ARG:HD2	4.48	0.44
7:S5:29:ILE:HG22	7:S5:34:GLN:HG3	1.99	0.44
36:5:289:A:H2'	36:5:290:G:H8	1.83	0.44
48:M1:59:ILE:HB	48:M1:65:ILE:HD11	3.19	0.44
55:M9:103:ARG:NH2	36:5:1723:A:OP1	227.26	0.44
5:S3:156:PHE:O	5:S3:157:LEU:HD12	2.17	0.44
36:1:595:G:O2'	36:1:596:C:H5'	2.18	0.44
61:N5:115:ARG:HH11	61:N5:115:ARG:HG3	1.83	0.44
3:S1:145:LYS:NZ	3:S1:152:ARG:O	2.49	0.44
1:2:884:A:H2'	1:2:885:G:C8	2.53	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:SM:72:ARG:NH1	1:6:1460:A:O2'	323.12	0.44
14:C2:45:LEU:HB3	14:C2:46:ARG:H	2.38	0.44
2:S0:59:LEU:HD12	23:D1:79:LEU:HD21	2.25	0.44
41:L4:120:TYR:CD2	41:L4:277:PRO:HG3	2.53	0.44
16:C4:25:ASP:N	16:C4:55:SER:HB3	2.32	0.44
1:6:486:G:H4'	1:6:486:G:OP1	2.18	0.44
49:M3:47:ALA:HB1	49:M3:48:PRO:CD	2.50	0.44
40:L3:187:SER:C	40:L3:188:ILE:HD12	2.37	0.44
38:8:39:G:H1'	38:8:105:A:N1	2.33	0.44
46:L9:90:MET:O	46:L9:143:GLU:O	4.66	0.44
21:C9:85:SER:HB2	21:C9:91:TYR:CZ	3.40	0.44
1:2:987:G:C2	39:L2:249:SER:HB2	2.53	0.44
17:C5:18:ARG:NH1	20:C8:90:ASN:ND2	4.09	0.44
52:M6:148:LYS:HB2	52:M6:149:TYR:CE2	2.56	0.44
75:O9:9:ILE:HG22	75:O9:13:MET:CE	2.48	0.44
12:C0:29:GLN:O	12:C0:30:ALA:HB3	2.18	0.44
54:M8:57:ILE:HG22	54:M8:58:ASN:N	2.33	0.44
49:M3:18:TRP:C	49:M3:20:GLU:N	2.70	0.44
36:1:3060:C:OP1	86:1:4039:OHX:N4	2.51	0.44
21:C9:7:ARG:HD2	1:6:1366:U:O2'	424.75	0.44
36:5:3245:A:C2	36:5:3246:G:C2	3.06	0.44
9:S7:14:THR:OG1	9:S7:15:GLU:N	2.51	0.44
40:L3:332:ARG:HH11	40:L3:332:ARG:HG2	1.82	0.44
40:L3:332:ARG:O	40:L3:333:LYS:HB2	2.19	0.44
8:S6:142:ARG:O	8:S6:146:GLY:N	2.88	0.44
30:D8:14:LYS:HA	30:D8:14:LYS:NZ	5.40	0.44
13:C1:69:LYS:O	13:C1:127:GLN:HB2	2.18	0.44
4:S2:98:PHE:O	4:S2:118:ALA:N	3.01	0.44
1:2:1191:U:H5'	18:C6:143:ARG:CZ	2.48	0.44
1:2:499:U:C2	1:2:500:C:C5	3.06	0.44
30:D8:19:THR:HG21	30:D8:66:LEU:H	1.83	0.44
1:6:1091:A:H4'	1:6:1092:A:O5'	2.18	0.44
61:N5:86:VAL:HG11	61:N5:95:ILE:CD1	2.48	0.44
49:M3:57:VAL:HG22	49:M3:147:ILE:HG23	2.20	0.44
58:N2:21:SER:HB3	58:N2:107:PHE:HB3	4.33	0.44
36:5:1572:U:O2'	36:5:1573:G:H8	2.01	0.44
27:D5:71:ILE:CG2	27:D5:76:ALA:HB2	3.78	0.44
66:O0:60:ALA:HA	66:O0:63:SER:OG	2.93	0.44
1:6:840:U:H2'	1:6:841:U:H6	1.83	0.44
34:SR:100:TYR:HA	34:SR:100:TYR:HD2	1.95	0.44
36:5:1514:G:HO2'	36:5:1841:A:H2	1.65	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:SR:195:HIS:NE2	34:SR:213:SER:O	2.50	0.44
1:2:1334:U:H4'	31:D9:55:PHE:HB3	2.00	0.44
17:C5:67:ALA:C	17:C5:69:GLU:H	2.20	0.44
36:1:2948:C:H2'	36:1:2949:U:C6	2.52	0.44
69:O3:44:TYR:HA	69:O3:47:LYS:HG3	2.36	0.44
44:L7:51:TYR:O	44:L7:54:GLU:HB3	2.18	0.44
72:O6:40:VAL:O	72:O6:44:VAL:HG23	2.18	0.44
1:2:97:C:H2'	1:2:98:U:H6	1.83	0.44
55:M9:42:ARG:NH2	36:5:1601:U:OP2	104.64	0.44
1:6:223:U:H3	1:6:838:G:H1	1.64	0.44
1:6:1336:A:OP1	86:6:2178:OHX:N1	2.51	0.44
43:L6:144:ALA:O	43:L6:147:ALA:HB3	2.36	0.44
3:S1:46:THR:OG1	3:S1:47:LEU:N	4.27	0.44
36:5:1173:U:H1'	36:5:1179:A:H2'	1.99	0.44
1:6:996:U:H2'	1:6:997:G:H8	1.83	0.44
36:1:2541:U:H1'	36:1:2542:U:OP2	2.18	0.44
39:L2:62:VAL:HG12	39:L2:73:GLU:HB2	1.99	0.44
36:5:1260:A:H1'	36:5:1280:C:H1'	1.99	0.44
36:1:1701:C:H2'	36:1:1702:U:O4'	2.18	0.44
36:1:1615:C:H2'	36:1:1616:U:C6	2.53	0.44
36:5:578:A:H5''	36:5:579:G:O5'	2.18	0.44
53:M7:10:ASN:OD1	53:M7:12:ALA:HB3	2.17	0.44
1:2:432:G:C5	1:2:433:C:C4	3.06	0.44
36:1:2397:A:H8	36:1:2941:A:N1	2.15	0.44
1:6:110:U:H4'	1:6:797:G:C2	2.53	0.44
54:M8:177:GLY:HA2	54:M8:184:PHE:CE2	2.93	0.44
79:Q3:19:GLY:HA2	36:5:1925:U:O2	239.46	0.44
36:1:3341:U:O2'	36:1:3342:A:H5'	2.18	0.44
36:5:3379:C:H2'	36:5:3380:U:O4'	2.18	0.44
86:5:3971:OHX:N2	86:5:4193:OHX:N5	2.66	0.43
63:N7:100:THR:O	63:N7:107:ARG:HG2	3.76	0.43
36:5:1878:G:HO2'	36:5:1879:A:P	2.41	0.43
14:C2:33:ARG:HG3	14:C2:100:TRP:O	4.21	0.43
1:2:1486:G:C8	1:2:1487:A:C8	3.05	0.43
1:2:1485:C:H5''	1:2:1486:G:OP2	2.18	0.43
1:2:1487:A:H2'	1:2:1488:G:C8	2.52	0.43
40:L3:167:ARG:O	86:L3:404:OHX:N4	2.50	0.43
18:C6:59:LYS:O	18:C6:63:ILE:HD11	2.79	0.43
1:2:1202:A:H1'	1:2:1207:C:H42	1.82	0.43
50:M4:116:GLU:HA	50:M4:119:GLN:HG3	2.63	0.43
1:2:1617:U:O2'	1:2:1618:C:H5'	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:138:ASN:HB3	10:S8:141:ARG:NH1	2.32	0.43
3:S1:206:PRO:O	3:S1:207:LEU:HB2	2.27	0.43
36:1:1307:G:C4	52:M6:60:LYS:HD3	2.53	0.43
30:D8:41:VAL:H	30:D8:62:GLU:HG3	5.69	0.43
46:L9:162:GLN:NE2	76:Q0:89:TYR:CE1	3.85	0.43
41:L4:25:VAL:C	41:L4:27:SER:H	2.29	0.43
1:2:1279:C:H2'	1:2:1280:C:O4'	2.18	0.43
63:N7:77:TYR:C	63:N7:79:HIS:H	2.20	0.43
36:5:522:A:OP1	86:5:3933:OHX:N1	2.51	0.43
11:S9:171:ARG:NH2	11:S9:174:ARG:HD3	4.56	0.43
36:5:1566:A:C2'	36:5:1567:U:H5'	2.48	0.43
2:S0:119:ARG:NE	4:S2:240:LEU:HD23	3.71	0.43
18:C6:113:ASP:HA	18:C6:116:LEU:HD12	4.48	0.43
52:M6:113:ASP:C	52:M6:117:ARG:HH12	2.22	0.43
10:S8:12:SER:O	10:S8:15:GLY:N	2.57	0.43
6:S4:49:ARG:HG3	6:S4:50:ASN:N	3.82	0.43
46:L9:134:ILE:HD12	46:L9:146:LEU:HG	4.44	0.43
1:6:1175:U:H2'	1:6:1176:G:C8	2.53	0.43
25:D3:107:PHE:CE2	25:D3:114:LYS:HB2	2.52	0.43
54:M8:69:ARG:HG3	36:5:784:A:N7	158.02	0.43
6:S4:246:LEU:HB3	6:S4:250:GLU:HB2	2.00	0.43
36:1:2273:G:N2	36:1:2311:G:H2'	2.33	0.43
3:S1:148:ASN:ND2	1:6:1066:C:O2'	348.44	0.43
36:1:2577:C:H2'	36:1:2578:U:O4'	2.17	0.43
39:L2:227:ARG:HG2	39:L2:239:ALA:CB	2.48	0.43
74:O8:65:LEU:HD23	74:O8:68:SER:HB2	2.56	0.43
26:D4:122:GLY:C	26:D4:124:ARG:N	3.02	0.43
36:5:1448:U:C5	36:5:2355:G:C2	3.06	0.43
55:M9:151:ARG:O	55:M9:155:LEU:HG	4.44	0.43
1:2:1332:C:O2'	5:S3:162:GLN:HB3	2.18	0.43
36:1:3198:U:H4'	36:1:3199:G:OP2	2.17	0.43
34:SR:123:ILE:HA	34:SR:132:LYS:O	2.66	0.43
15:C3:56:ASP:N	15:C3:56:ASP:OD1	3.79	0.43
61:N5:137:ASN:HB3	61:N5:142:ILE:CG1	2.48	0.43
8:S6:88:ARG:HB3	8:S6:91:GLU:HB2	1.99	0.43
25:D3:127:VAL:O	25:D3:130:VAL:HG22	2.18	0.43
36:5:13:A:H5''	36:5:14:U:OP2	2.18	0.43
29:D7:67:THR:HB	29:D7:68:GLY:H	1.70	0.43
1:2:959:U:H5'	29:D7:28:PRO:HB3	2.00	0.43
36:5:2726:C:C2	36:5:2728:G:C2	3.06	0.43
36:5:941:G:O2'	36:5:942:U:H5'	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1132:C:H2'	36:1:1133:A:C8	2.51	0.43
1:6:625:C:O2	1:6:974:A:N1	2.51	0.43
1:2:1278:G:C4'	5:S3:174:HIS:HE1	2.31	0.43
18:C6:89:LEU:HG	18:C6:105:LEU:HD23	2.94	0.43
66:O0:20:SER:O	66:O0:20:SER:OG	2.33	0.43
43:L6:176:PHE:HA	50:M4:114:ASP:HB2	2.99	0.43
42:L5:187:THR:HG23	42:L5:189:GLU:HB2	1.99	0.43
11:S9:53:ARG:HH21	11:S9:97:LEU:HD22	2.43	0.43
36:1:677:A:H4'	36:1:678:G:O5'	2.17	0.43
34:SR:176:LYS:HE2	34:SR:197:SER:C	5.83	0.43
62:N6:102:SER:O	62:N6:103:LYS:HD3	2.18	0.43
44:L7:179:LEU:HD13	44:L7:179:LEU:N	2.66	0.43
54:M8:87:VAL:O	54:M8:107:THR:HG23	2.17	0.43
20:C8:8:GLN:HG3	20:C8:10:SER:HB3	1.99	0.43
36:5:1519:G:H2'	36:5:1520:G:C8	2.52	0.43
1:6:720:G:OP2	1:6:720:G:N2	2.50	0.43
36:1:1506:A:C2	36:1:1513:G:C2	3.06	0.43
2:S0:56:LYS:NZ	2:S0:158:VAL:HA	2.58	0.43
41:L4:150:LEU:HD13	41:L4:249:ILE:HG23	2.05	0.43
36:5:3028:G:H2'	36:5:3029:A:O4'	2.18	0.43
52:M6:31:GLN:HG3	52:M6:33:ILE:HD12	2.00	0.43
38:8:72:A:C5	38:8:73:U:C5	3.06	0.43
24:D2:41:MET:HG2	24:D2:129:VAL:HG21	3.14	0.43
42:L5:257:GLU:C	42:L5:258:LYS:HD3	4.92	0.43
9:S7:77:LEU:HD22	9:S7:81:LEU:HD11	1.99	0.43
39:L2:81:GLY:N	79:Q3:65:ALA:O	2.33	0.43
74:O8:45:VAL:HG23	74:O8:52:TYR:HB2	1.99	0.43
6:S4:55:ALA:HB2	6:S4:64:ILE:HD12	2.00	0.43
36:1:2287:C:H4'	36:1:2288:G:OP2	2.18	0.43
29:D7:79:PHE:N	29:D7:79:PHE:CD2	3.28	0.43
36:1:346:C:C4	36:1:348:A:C8	3.06	0.43
1:6:909:U:C2'	1:6:910:C:H5'	2.47	0.43
36:1:27:C:H1'	36:1:328:U:H1'	1.99	0.43
75:O9:12:LYS:HE2	75:O9:12:LYS:HB3	1.87	0.43
5:S3:21:LEU:HD23	5:S3:21:LEU:HA	1.87	0.43
22:D0:101:LYS:O	22:D0:104:THR:OG1	2.97	0.43
36:1:2952:G:H2'	36:1:2953:U:O4'	2.18	0.43
34:SR:286:GLU:HA	34:SR:287:PRO:HD3	1.75	0.43
36:5:3389:U:O4	86:5:4244:OHX:N4	2.51	0.43
78:Q2:16:THR:O	78:Q2:18:ARG:N	4.62	0.43
21:C9:73:VAL:HG21	21:C9:102:ARG:HG3	2.20	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:N6:51:ARG:O	62:N6:54:ASP:HB2	2.92	0.43
36:1:2907:G:H1'	76:Q0:100:TYR:CD2	2.53	0.43
40:L3:358:TRP:CH2	60:N4:15:PRO:HD2	2.53	0.43
1:2:1607:G:H2'	1:2:1608:U:H6	1.83	0.43
37:3:47:C:H2'	37:3:48:U:H6	1.82	0.43
6:S4:122:LYS:HD3	6:S4:145:ARG:HE	1.82	0.43
59:N3:53:SER:N	59:N3:56:ASP:OD2	2.62	0.43
39:L2:55:GLY:O	39:L2:56:ALA:HB3	4.70	0.43
1:6:1208:A:H5''	1:6:1209:C:OP2	2.18	0.43
1:2:582:U:H4'	1:2:583:C:OP2	2.18	0.43
22:D0:20:ILE:O	22:D0:94:GLU:HA	5.73	0.43
1:6:901:G:N1	1:6:902:G:C6	2.86	0.43
8:S6:25:ARG:HA	8:S6:28:PHE:CD2	3.84	0.43
18:C6:14:LYS:HB3	18:C6:15:SER:H	1.48	0.43
36:1:2667:A:H61	36:1:2687:G:H1'	1.83	0.43
45:L8:94:PHE:HD2	45:L8:189:LEU:HD21	1.83	0.43
1:6:1698:G:N2	1:6:1699:G:C8	2.86	0.43
46:L9:4:ILE:HD11	56:N0:148:LEU:HD11	2.00	0.43
59:N3:48:ARG:HG3	36:5:2339:C:OP2	246.00	0.43
36:1:147:U:O2'	51:M5:41:ARG:NH1	2.51	0.43
13:C1:131:ILE:HA	13:C1:131:ILE:HD12	1.55	0.43
40:L3:290:ASP:HB3	40:L3:293:ASN:ND2	2.33	0.43
36:1:3006:A:H2'	36:1:3007:U:O4'	2.18	0.43
74:O8:10:GLN:HA	74:O8:13:GLU:OE1	3.34	0.43
36:1:1764:U:H3'	36:1:1765:U:H4'	1.99	0.43
25:D3:86:PHE:HB2	25:D3:120:VAL:HG11	2.31	0.43
26:D4:131:ARG:NH1	1:6:153:G:OP2	320.61	0.43
1:2:13:C:H4'	1:2:1298:U:O2	2.18	0.43
4:S2:152:HIS:CD2	4:S2:153:SER:H	2.90	0.43
15:C3:23:PRO:HD2	15:C3:26:PHE:HB3	1.99	0.43
36:1:2743:A:H2'	36:1:2744:U:O4'	2.18	0.43
15:C3:55:ARG:HA	15:C3:60:VAL:O	2.19	0.43
36:5:3263:G:C6	86:5:4114:OHX:N2	2.86	0.43
14:C2:81:ASP:HA	14:C2:82:PRO:HD3	1.50	0.43
39:L2:9:ARG:NH1	36:5:912:G:OP2	179.60	0.43
42:L5:95:TRP:HZ3	42:L5:156:GLY:C	9.37	0.43
11:S9:6:ARG:HA	11:S9:6:ARG:HD3	1.70	0.43
47:M0:205:SER:O	47:M0:209:ASN:HB2	2.27	0.43
37:3:93:C:O2'	37:3:94:C:H5'	2.19	0.43
1:6:165:G:H2'	1:6:166:C:H5''	2.00	0.43
26:D4:116:LYS:HE2	1:6:57:G:P	339.62	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:N6:56:VAL:HG13	62:N6:104:LEU:HD22	2.33	0.43
68:O2:75:LEU:HD23	68:O2:95:GLU:O	2.37	0.43
2:S0:88:LYS:HB3	2:S0:202:TYR:CE1	3.30	0.43
17:C5:124:THR:OG1	1:6:1182:U:H4'	350.69	0.43
36:1:3108:G:C2	36:1:3127:A:C2	3.05	0.43
32:E0:35:TYR:O	32:E0:38:LEU:HB3	3.23	0.43
36:5:2168:A:C6	36:5:2170:U:H1'	2.53	0.43
64:N8:28:HIS:CE1	64:N8:32:ARG:NE	2.86	0.43
22:D0:62:VAL:HG22	22:D0:85:ARG:HG2	2.86	0.43
36:5:1704:A:HO2'	36:5:1705:U:H6	1.65	0.43
44:L7:137:GLY:HA3	44:L7:236:ILE:HB	2.15	0.43
71:O5:70:TYR:CD1	71:O5:77:PRO:HD3	2.96	0.43
46:L9:85:GLY:O	46:L9:186:PHE:HA	2.59	0.43
1:2:224:C:H2'	1:2:225:A:C8	2.53	0.43
47:M0:129:VAL:HA	47:M0:133:GLN:OE1	3.78	0.43
1:6:38:C:H2'	1:6:39:A:H5'	1.99	0.43
36:5:1210:U:H2'	36:5:1211:U:C6	2.53	0.43
1:6:1006:C:H5''	1:6:1007:C:OP2	2.17	0.43
1:6:1329:A:O5'	1:6:1329:A:H8	2.01	0.43
64:N8:59:ARG:HB2	64:N8:59:ARG:HE	1.43	0.43
49:M3:116:LEU:HA	49:M3:116:LEU:HD23	1.84	0.43
1:2:555:A:HO2'	1:2:556:A:P	2.40	0.43
47:M0:86:HIS:O	47:M0:138:VAL:HA	2.17	0.43
1:6:920:U:H2'	1:6:921:U:O4'	2.18	0.43
70:O4:31:ARG:HB2	70:O4:31:ARG:HE	1.33	0.43
1:2:320:U:C2	1:2:321:C:H6	2.37	0.43
10:S8:26:LYS:O	10:S8:28:GLU:N	3.33	0.43
64:N8:46:ASP:OD1	64:N8:46:ASP:N	2.49	0.43
28:D6:5:ARG:HB3	1:6:1796:C:C5	341.93	0.43
59:N3:87:ARG:NH1	59:N3:137:VAL:HG11	3.42	0.43
7:S5:131:GLN:O	7:S5:134:VAL:HB	2.17	0.43
36:1:1554:U:H4'	36:1:1555:U:O5'	2.19	0.43
7:S5:105:GLY:O	1:6:1609:U:O2'	376.11	0.43
51:M5:31:ARG:HG3	51:M5:129:TYR:OH	3.38	0.43
36:5:1940:G:H2'	36:5:1941:C:O4'	2.19	0.43
36:1:359:U:C4	36:1:360:G:C6	3.06	0.43
38:8:80:A:H8	38:8:80:A:OP2	2.01	0.43
36:1:835:G:N3	36:1:857:G:C2	2.86	0.43
6:S4:221:ARG:CG	1:6:753:A:H5''	359.58	0.43
10:S8:138:ASN:HB3	10:S8:141:ARG:HH12	1.83	0.43
17:C5:121:ILE:HG23	17:C5:123:TYR:H	1.83	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:45:ALA:O	12:C0:49:LEU:HD23	2.19	0.43
64:N8:9:ARG:HE	64:N8:9:ARG:HB3	2.17	0.43
46:L9:22:SER:HG	46:L9:23:ARG:N	2.16	0.43
2:S0:59:LEU:O	2:S0:63:ILE:HG13	2.17	0.43
64:N8:49:HIS:N	64:N8:50:PRO:HD3	3.01	0.43
36:1:1834:U:C3'	36:1:1835:A:H5'	2.47	0.43
70:O4:95:ILE:O	70:O4:99:LYS:N	2.89	0.43
18:C6:82:ARG:HH22	18:C6:114:ARG:CB	2.31	0.43
36:5:3334:U:OP2	86:5:4228:OHX:N6	2.51	0.43
36:1:2571:U:OP1	36:1:2571:U:H2'	2.18	0.43
2:S0:26:ALA:HB1	2:S0:29:VAL:CG1	2.49	0.43
23:D1:15:ARG:NH2	23:D1:24:ILE:HG21	3.88	0.43
15:C3:33:VAL:O	15:C3:37:ILE:N	2.54	0.43
1:2:460:A:H5'	1:2:461:G:OP2	2.19	0.43
1:6:833:U:OP2	86:6:2202:OHX:N5	2.51	0.43
63:N7:27:LYS:HA	63:N7:27:LYS:HD3	1.67	0.43
45:L8:101:THR:HG23	45:L8:104:GLU:OE2	3.85	0.43
44:L7:77:VAL:CG2	57:N1:139:ARG:HD3	2.80	0.43
2:S0:13:ASP:O	2:S0:16:LEU:HB2	2.18	0.43
36:5:137:G:H2'	36:5:138:U:C6	2.54	0.43
1:6:992:A:H5'	1:6:992:A:H8	1.84	0.43
36:1:3007:U:H5'	52:M6:73:PHE:CE1	2.52	0.43
74:O8:5:ILE:HG22	74:O8:54:LEU:HD13	3.20	0.43
1:2:1594:G:C5'	31:D9:33:LYS:HD2	2.48	0.43
16:C4:29:HIS:CD2	16:C4:41:ARG:HB2	4.29	0.43
36:1:1414:G:N7	86:1:4122:OHX:N2	2.66	0.43
86:5:4060:OHX:N3	86:5:4137:OHX:N4	2.66	0.43
62:N6:116:LYS:O	62:N6:120:GLN:HG3	2.19	0.43
34:SR:292:LEU:HA	34:SR:302:PHE:O	2.18	0.43
5:S3:116:ARG:O	5:S3:120:TYR:HB2	2.18	0.43
61:N5:103:TYR:CE1	61:N5:139:ILE:HG12	5.52	0.43
34:SR:260:ILE:O	34:SR:274:LEU:N	2.49	0.43
41:L4:98:ARG:HD2	41:L4:99:MET:O	2.17	0.43
36:1:1897:G:H1	36:1:2338:C:H42	1.66	0.43
36:1:1305:U:C6	40:L3:257:PRO:HG3	2.53	0.43
14:C2:87:PRO:HA	14:C2:140:PHE:HE1	2.42	0.43
43:L6:80:ASN:C	43:L6:82:ARG:H	2.20	0.43
36:5:1049:C:H2'	36:5:1050:U:H6	1.82	0.43
26:D4:57:VAL:HG13	26:D4:60:PHE:HE2	1.83	0.43
11:S9:66:ASP:HA	11:S9:67:PRO:HD2	2.01	0.43
36:5:26:A:C4	36:5:330:G:C8	3.06	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:155:THR:HA	42:L5:179:ARG:HA	2.00	0.43
7:S5:156:ARG:HG3	7:S5:156:ARG:H	1.52	0.43
6:S4:240:LYS:H	6:S4:240:LYS:CE	2.31	0.43
37:7:79:A:H2'	37:7:80:G:O4'	2.18	0.43
36:1:3335:A:C2	36:1:3336:A:C4	3.06	0.43
86:1:3961:OHX:N1	86:1:4140:OHX:N3	2.66	0.43
36:5:1556:C:H2'	36:5:2169:G:N1	2.33	0.43
4:S2:186:LYS:O	4:S2:190:LEU:HD12	4.92	0.43
36:1:707:U:H1'	36:1:754:G:O2'	2.19	0.43
69:O3:54:ARG:NH1	69:O3:64:ILE:HD11	2.85	0.43
36:1:430:U:H4'	69:O3:67:MET:HE1	2.01	0.43
1:2:1003:A:H1'	1:2:1005:A:N7	2.33	0.43
36:5:423:A:C6	36:5:424:G:C6	3.06	0.43
63:N7:23:VAL:HG12	63:N7:45:GLY:HA3	2.04	0.43
10:S8:158:SER:O	10:S8:160:PHE:N	2.51	0.43
48:M1:30:LEU:HD11	48:M1:47:GLN:HG2	1.99	0.43
70:O4:25:THR:O	70:O4:27:GLY:N	2.52	0.43
66:O0:29:SER:HA	66:O0:32:LYS:HD2	5.31	0.43
36:1:2269:U:O2	36:1:2271:A:C8	2.71	0.43
36:5:820:A:C5	36:5:821:U:C4	3.06	0.43
36:1:1069:C:H2'	36:1:1070:U:C6	2.53	0.43
36:5:928:C:H2'	36:5:929:A:C8	2.53	0.43
38:4:71:A:H2	38:4:82:U:O2	2.01	0.43
1:2:265:A:C2	1:2:267:U:C4	3.07	0.43
34:SR:117:LYS:HD2	34:SR:117:LYS:N	2.33	0.43
36:5:1085:A:H5''	36:5:1085:A:H8	1.82	0.43
15:C3:19:SER:O	15:C3:19:SER:OG	2.28	0.43
46:L9:38:LEU:HD13	46:L9:71:VAL:HG22	3.50	0.43
10:S8:166:TYR:O	10:S8:183:ILE:HD12	6.21	0.43
78:Q2:14:GLY:O	78:Q2:18:ARG:HG3	4.65	0.43
47:M0:87:LEU:HD23	47:M0:138:VAL:HG22	2.45	0.43
3:S1:59:ASP:HA	3:S1:62:LYS:HZ1	1.82	0.43
1:2:1076:A:O3'	28:D6:13:LYS:HD3	2.18	0.43
28:D6:18:VAL:HG11	28:D6:33:ASP:HB3	2.01	0.43
1:2:476:U:H5''	1:2:477:A:O4'	2.18	0.43
7:S5:166:ARG:HD2	30:D8:46:GLY:N	2.33	0.43
1:2:1482:C:OP2	1:2:1521:G:N2	2.51	0.43
42:L5:146:LEU:HD13	42:L5:148:ILE:HD13	5.15	0.43
57:N1:104:GLU:OE1	57:N1:130:ARG:NH1	2.51	0.43
2:S0:122:ILE:HG12	2:S0:144:ILE:HB	2.22	0.43
1:6:228:G:H1	1:6:236:A:H61	1.66	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1252:C:H2'	1:6:1253:U:O4'	2.18	0.43
17:C5:128:HIS:HD2	35:SM:71:ASN:HD22	4.04	0.43
20:C8:145:ARG:HB2	35:SM:68:ARG:NH2	2.33	0.43
41:L4:95:ARG:HD2	36:5:343:U:O2	130.87	0.43
36:5:3188:G:C2	36:5:3205:G:N1	2.86	0.43
19:C7:112:SER:O	19:C7:113:LEU:HB3	2.18	0.43
2:S0:63:ILE:O	2:S0:67:ILE:HG12	2.76	0.43
1:2:794:U:H1'	1:2:795:U:OP1	2.18	0.43
23:D1:62:ARG:HH21	1:6:1082:C:H1'	380.62	0.43
9:S7:133:THR:O	9:S7:134:GLU:HB2	2.19	0.43
6:S4:16:HIS:C	6:S4:18:TRP:H	2.21	0.43
1:2:327:U:O2'	13:C1:10:GLU:HG2	2.18	0.43
20:C8:27:LYS:HA	20:C8:57:ARG:HA	2.01	0.43
36:1:437:G:O2'	36:1:438:A:H5'	2.18	0.43
18:C6:115:THR:O	18:C6:117:LEU:N	2.42	0.43
1:6:1296:A:N6	1:6:1297:G:C6	2.86	0.43
1:6:1606:C:H2'	1:6:1607:G:C8	2.52	0.43
36:1:2433:U:C4	36:1:2434:U:C4	3.06	0.43
1:6:168:A:C6	1:6:169:A:N6	2.87	0.43
36:1:692:A:OP1	51:M5:201:ARG:NH2	2.41	0.43
65:N9:53:ALA:O	65:N9:56:ALA:HB3	2.18	0.43
57:N1:57:TYR:CG	57:N1:89:LEU:HD21	3.12	0.43
1:2:1244:A:H3'	1:2:1244:A:N3	2.33	0.43
74:O8:66:ILE:HG21	74:O8:77:ARG:HH21	1.83	0.43
18:C6:41:PRO:HG2	18:C6:78:VAL:HG21	1.99	0.43
36:1:98:G:N7	49:M3:13:HIS:NE2	2.64	0.43
1:6:729:G:C2	1:6:730:G:H1'	2.53	0.43
36:1:603:A:C5	36:1:604:G:H1'	2.52	0.43
34:SR:23:LEU:HB3	34:SR:33:LEU:HD11	2.95	0.43
46:L9:106:LYS:HZ2	46:L9:106:LYS:HA	4.78	0.43
46:L9:106:LYS:HE3	46:L9:107:ASP:OD1	3.94	0.43
17:C5:84:ILE:H	17:C5:84:ILE:HG12	1.62	0.43
52:M6:85:ARG:HD3	52:M6:90:HIS:CE1	3.04	0.43
48:M1:110:ILE:HD13	48:M1:122:ILE:HD11	4.06	0.43
45:L8:60:ARG:O	45:L8:64:ILE:HG13	2.36	0.43
36:1:2676:A:H4'	36:1:2677:G:O5'	2.18	0.43
42:L5:122:VAL:C	42:L5:124:GLU:H	3.02	0.43
6:S4:245:LYS:HB2	6:S4:245:LYS:HE3	4.26	0.43
1:6:514:G:O2'	1:6:515:A:H5'	2.18	0.43
36:1:1323:G:O3'	56:N0:2:ALA:HA	2.18	0.43
79:Q3:11:THR:HG21	79:Q3:27:LYS:HB2	4.04	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:499:G:H2'	36:5:500:C:H6	1.84	0.43
68:O2:34:LYS:O	68:O2:36:LYS:NZ	2.33	0.43
4:S2:143:TYR:CD2	4:S2:147:ASN:HA	4.48	0.43
36:5:172:G:H2'	36:5:172:G:N3	2.32	0.43
63:N7:4:PHE:CE2	66:O0:35:ARG:HA	2.53	0.43
54:M8:103:ALA:HB3	54:M8:106:PHE:CE2	2.94	0.43
36:1:2913:C:H2'	36:1:2914:G:C8	2.53	0.43
13:C1:141:LYS:HG3	13:C1:142:VAL:N	2.32	0.43
75:O9:49:MET:O	75:O9:50:ASN:C	2.57	0.43
36:1:3099:C:O2'	36:1:3100:U:H5'	2.18	0.43
42:L5:33:ARG:HH12	42:L5:50:ARG:NH1	2.17	0.43
36:5:1519:G:O2'	36:5:1520:G:H5'	2.18	0.43
50:M4:131:VAL:HG13	52:M6:181:ALA:HB1	2.00	0.43
36:5:2396:G:OP1	36:5:2397:A:H4'	2.18	0.43
36:1:664:U:H3	36:1:798:G:H1	1.66	0.43
41:L4:227:THR:O	36:5:689:U:N3	90.41	0.43
51:M5:6:TYR:O	51:M5:10:LEU:HB2	2.76	0.43
49:M3:90:ALA:O	49:M3:95:ILE:HB	2.19	0.43
59:N3:83:LYS:HE2	59:N3:84:SER:N	2.33	0.43
1:2:751:G:H2'	1:2:752:A:C8	2.54	0.43
36:5:441:U:H2'	36:5:442:G:C8	2.53	0.43
16:C4:78:ALA:HB2	16:C4:111:ARG:HB2	1.99	0.43
36:1:1146:C:H4'	36:1:1331:U:C5	2.54	0.43
73:O7:52:LYS:O	73:O7:56:ARG:HG3	2.18	0.43
36:1:3146:G:O2'	40:L3:100:ARG:HG3	2.18	0.43
36:1:2144:A:C4	36:1:2281:A:N6	2.86	0.43
36:5:1506:A:H1'	36:5:1848:G:O6	2.18	0.43
36:5:1847:A:O2'	36:5:1848:G:H5''	2.19	0.43
5:S3:138:VAL:HA	5:S3:183:GLY:O	2.91	0.43
36:1:2763:U:H5'	54:M8:176:ARG:HG3	2.00	0.43
28:D6:36:ILE:O	28:D6:36:ILE:HD13	2.18	0.43
36:5:1470:U:OP1	86:5:3950:OHX:N6	2.51	0.43
7:S5:91:GLU:HG2	7:S5:95:ASN:HD21	1.82	0.43
11:S9:74:ASN:O	11:S9:78:ARG:HB3	2.76	0.43
6:S4:77:ARG:HA	6:S4:77:ARG:HD3	4.26	0.43
16:C4:81:VAL:HG13	16:C4:115:ILE:HG21	2.00	0.43
19:C7:19:ARG:HG3	19:C7:20:TYR:CD1	2.53	0.43
55:M9:110:ARG:C	55:M9:112:ALA:H	2.21	0.43
40:L3:305:ILE:HG13	40:L3:305:ILE:H	1.48	0.43
3:S1:131:ASP:HB3	3:S1:180:THR:CG2	2.44	0.43
17:C5:127:ARG:N	17:C5:127:ARG:HD2	4.77	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1180:C:O2	17:C5:128:HIS:HE1	2.02	0.43
56:N0:155:ARG:HH21	56:N0:155:ARG:CG	2.86	0.43
1:2:142:G:H1	1:2:173:A:H2	1.62	0.43
33:E1:108:VAL:HA	33:E1:114:VAL:HA	2.01	0.43
20:C8:3:LEU:HD23	20:C8:5:VAL:HG13	2.00	0.43
86:2:2044:OHX:N2	86:2:2099:OHX:N6	2.66	0.43
36:1:975:C:H2'	36:1:976:U:H6	1.83	0.43
36:5:1131:G:C4	36:5:2373:A:C2	3.06	0.43
36:1:1809:A:OP1	63:N7:65:ARG:NH2	2.52	0.43
52:M6:116:LYS:HG3	52:M6:117:ARG:N	2.65	0.43
11:S9:2:PRO:HD2	1:6:461:G:OP1	361.18	0.43
45:L8:101:THR:HG23	45:L8:104:GLU:HG3	3.03	0.43
72:O6:50:LEU:HD23	72:O6:50:LEU:HA	1.83	0.43
2:S0:188:LEU:HB3	2:S0:189:VAL:H	1.69	0.43
25:D3:62:LYS:N	25:D3:116:ASP:O	2.49	0.43
36:1:1389:G:OP2	86:1:3972:OHX:N4	2.51	0.43
52:M6:12:LYS:HG2	52:M6:40:GLU:HB3	3.64	0.43
52:M6:124:LEU:HD11	56:N0:167:ARG:HH21	1.83	0.43
36:5:3112:G:O6	36:5:3120:C:H5''	2.18	0.43
15:C3:27:LYS:HB2	15:C3:28:LEU:H	1.50	0.43
18:C6:30:LYS:HD3	1:6:1366:U:OP1	424.37	0.43
36:5:1736:G:C6	36:5:1737:U:C4	3.07	0.43
61:N5:130:TYR:CD1	61:N5:130:TYR:N	2.86	0.43
36:5:1432:C:O2'	36:5:1433:A:H3'	2.18	0.43
1:6:330:G:C4	1:6:331:A:C8	3.06	0.43
1:2:1294:G:O6	86:2:2077:OHX:N4	2.52	0.43
1:2:711:U:H1'	1:2:712:G:C8	2.53	0.43
46:L9:112:ILE:N	46:L9:126:VAL:O	2.51	0.43
54:M8:42:ALA:HA	54:M8:43:PRO:HD2	1.73	0.43
1:6:1685:G:H1	1:6:1716:C:H42	1.66	0.43
67:O1:64:VAL:HG22	36:5:1456:A:N6	165.08	0.43
26:D4:41:ARG:NH1	26:D4:52:LYS:HD2	2.33	0.43
33:E1:97:LYS:HD3	1:6:1232:U:C5	434.98	0.43
1:2:892:A:H2'	1:2:893:U:H6	1.83	0.43
1:6:534:A:C6	1:6:535:A:C4	3.06	0.43
15:C3:42:ARG:NH2	15:C3:80:LEU:HD21	2.32	0.43
1:2:720:G:N3	1:2:720:G:H2'	2.34	0.43
36:1:80:G:H2'	36:1:81:C:H6	1.84	0.43
36:1:80:G:H2'	36:1:81:C:C6	2.53	0.43
1:6:1241:G:O2'	1:6:1242:A:OP1	2.31	0.43
79:Q3:79:VAL:O	79:Q3:81:SER:N	3.17	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:200:ASP:N	2:S0:200:ASP:OD1	3.17	0.43
19:C7:71:PHE:CE1	19:C7:73:LEU:HB3	2.54	0.43
13:C1:76:VAL:HG12	13:C1:85:VAL:O	2.54	0.43
1:2:625:C:O2	1:2:974:A:N1	2.52	0.43
86:5:4005:OHX:N6	86:5:4195:OHX:N5	2.66	0.43
28:D6:71:LEU:N	28:D6:71:LEU:HD22	2.34	0.43
21:C9:137:ALA:O	21:C9:141:GLU:HG2	2.18	0.43
36:5:2169:G:O6	86:5:3947:OHX:N5	2.51	0.43
36:1:172:G:N7	86:1:3993:OHX:N2	2.66	0.43
36:5:2890:A:H2'	36:5:2891:U:O4'	2.19	0.43
36:1:1391:C:C2	68:O2:103:LYS:HD2	2.54	0.43
18:C6:4:VAL:HG12	18:C6:23:LYS:HB2	6.53	0.43
1:2:1383:G:OP1	22:D0:87:HIS:ND1	2.51	0.43
36:5:3025:C:H2'	36:5:3026:G:O4'	2.18	0.43
36:1:3275:U:O4'	69:O3:66:VAL:HG21	2.18	0.43
42:L5:178:ASN:HA	42:L5:183:TRP:CG	2.68	0.43
36:5:3152:U:O2	86:5:4220:OHX:N5	2.51	0.43
36:1:1522:U:H4'	36:1:1604:G:O2'	2.18	0.43
21:C9:45:MET:HE3	21:C9:46:PRO:HD2	2.00	0.43
36:5:1668:G:H2'	36:5:1669:C:O4'	2.18	0.43
36:5:1397:C:O2'	36:5:1398:U:H5'	2.18	0.43
1:6:1473:U:H2'	1:6:1473:U:O2	2.18	0.43
71:O5:11:THR:O	71:O5:11:THR:OG1	3.14	0.43
36:1:2955:U:H6	36:1:2955:U:O5'	2.01	0.43
19:C7:36:ASP:N	19:C7:36:ASP:OD2	2.53	0.43
36:5:2211:U:H5	36:5:2234:G:C6	2.36	0.43
3:S1:23:PRO:O	3:S1:27:LYS:N	2.48	0.43
62:N6:52:ARG:HA	62:N6:70:ILE:CG2	2.73	0.43
1:2:538:A:H8	1:2:543:C:H41	1.67	0.43
1:6:540:G:O2'	1:6:542:A:H5'	2.19	0.43
16:C4:129:LYS:HE3	16:C4:129:LYS:HB2	1.47	0.43
71:O5:78:LYS:HG2	38:8:38:U:O2	74.75	0.43
35:SM:32:SER:OG	36:1:2666:C:O2'	2.04	0.43
16:C4:17:ALA:HB3	16:C4:81:VAL:HA	1.99	0.43
52:M6:84:LEU:HD22	52:M6:102:LEU:HD22	3.00	0.43
7:S5:92:ARG:NH2	7:S5:169:ASN:HA	2.33	0.43
4:S2:158:THR:HG21	4:S2:221:THR:HG23	2.01	0.43
27:D5:57:TYR:HB3	27:D5:60:VAL:HG12	1.99	0.43
7:S5:116:HIS:O	7:S5:120:ILE:HG13	2.66	0.43
3:S1:69:CYS:O	3:S1:72:ASP:HB2	2.19	0.43
1:6:1558:U:H3'	1:6:1559:A:H4'	2.00	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:C8:134:ARG:HG2	1:6:1559:A:C2	360.14	0.43
20:C8:146:ALA:H	35:SM:68:ARG:NH2	2.16	0.43
17:C5:126:VAL:HG13	35:SM:71:ASN:HD21	1.84	0.43
34:SR:249:ARG:HD2	34:SR:251:TRP:CZ3	3.65	0.43
29:D7:3:LEU:HA	29:D7:3:LEU:HD22	1.78	0.43
3:S1:138:PHE:HD2	3:S1:214:LYS:HB3	1.83	0.43
6:S4:15:PRO:HA	6:S4:39:ARG:NH1	4.37	0.43
20:C8:54:LEU:C	20:C8:56:LYS:H	2.72	0.43
72:O6:14:GLY:HA2	36:5:73:C:OP1	107.41	0.43
44:L7:158:LYS:CG	44:L7:159:GLN:H	2.44	0.43
1:2:1680:G:C2	1:2:1720:G:C2	3.07	0.43
33:E1:95:HIS:CG	33:E1:96:LYS:H	2.74	0.43
1:2:1433:G:C4	31:D9:41:GLN:CB	3.02	0.43
24:D2:11:LEU:HA	24:D2:11:LEU:HD23	1.74	0.43
20:C8:112:ASP:O	20:C8:115:ARG:HB3	2.26	0.43
36:1:3006:A:OP2	52:M6:148:LYS:NZ	2.51	0.43
1:2:360:A:H2'	1:2:361:C:H4'	2.01	0.43
40:L3:196:ARG:C	40:L3:198:HIS:H	2.22	0.43
1:2:649:U:O2'	1:2:650:U:O4'	2.37	0.43
36:1:729:C:H6	36:1:729:C:O5'	2.01	0.43
46:L9:87:LYS:N	46:L9:185:GLY:O	3.03	0.43
1:2:1088:A:H4'	1:2:1143:A:H5'	2.00	0.43
51:M5:194:GLN:NE2	36:5:99:A:H5'	122.52	0.43
1:2:17:C:HO2'	1:2:1137:A:N6	2.17	0.43
36:5:2294:U:C2	36:5:2297:U:C5	3.07	0.43
1:2:1785:U:H2'	1:2:1786:G:H8	1.83	0.43
36:1:58:G:O5'	36:1:58:G:H8	2.02	0.43
36:5:1662:G:O6	86:5:3913:OHX:N1	2.50	0.43
36:1:22:G:H1'	38:4:104:A:N3	2.34	0.43
36:1:2652:U:C5	36:1:2653:C:C5	3.07	0.43
8:S6:157:VAL:HG22	8:S6:173:PRO:HD2	2.01	0.43
73:O7:66:TYR:O	73:O7:68:LYS:N	2.79	0.43
5:S3:54:ARG:HB3	5:S3:57:ASP:OD1	5.06	0.43
30:D8:19:THR:HG22	30:D8:20:GLY:H	1.83	0.43
7:S5:158:GLN:HG2	30:D8:66:LEU:HD21	1.99	0.43
1:2:180:A:H2'	1:2:181:A:O4'	2.17	0.43
14:C2:59:LEU:HA	14:C2:87:PRO:HB2	2.00	0.43
17:C5:99:GLY:O	1:6:1211:A:H1'	375.20	0.43
45:L8:78:PHE:C	45:L8:80:TYR:N	2.72	0.43
36:1:1618:G:H4'	38:4:129:C:H1'	2.00	0.43
36:1:2399:A:N6	36:1:2400:G:C6	2.87	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:309:ARG:HG2	36:5:1360:C:O3'	211.95	0.43
41:L4:164:GLU:O	41:L4:168:ALA:N	2.87	0.43
36:5:2400:G:OP1	86:5:4104:OHX:N1	2.50	0.43
2:S0:202:TYR:O	2:S0:203:PHE:CD2	2.71	0.43
54:M8:153:PHE:O	54:M8:161:LYS:HD2	2.18	0.43
3:S1:219:LYS:HE2	3:S1:219:LYS:HB3	1.89	0.43
56:N0:125:LYS:HG3	56:N0:126:VAL:N	2.87	0.43
26:D4:66:GLY:H	1:6:532:U:H5''	430.44	0.43
36:1:587:U:C2'	36:1:588:G:H5'	2.48	0.43
1:6:1109:G:C2'	1:6:1110:G:H5'	2.49	0.43
36:5:1014:U:H3	36:5:1036:A:H61	1.65	0.43
17:C5:89:MET:H	17:C5:89:MET:HG3	1.71	0.43
51:M5:133:ILE:HG13	51:M5:133:ILE:O	2.19	0.43
1:6:1198:G:OP1	1:6:1199:G:O2'	2.18	0.43
36:1:2111:G:H4'	36:1:2112:U:OP2	2.19	0.43
1:6:325:G:O2'	1:6:326:G:H5'	2.19	0.43
36:1:189:G:C6	36:1:206:G:C5	3.07	0.43
36:1:70:A:N1	36:1:313:A:O2'	2.47	0.43
76:Q0:84:ALA:O	76:Q0:87:SER:N	3.54	0.43
1:6:1511:U:H2'	1:6:1512:G:C8	2.54	0.43
1:2:758:U:OP1	11:S9:7:THR:HG21	2.18	0.43
46:L9:76:ASP:O	46:L9:80:THR:HG23	2.26	0.43
1:6:1344:A:H4'	1:6:1345:A:OP1	2.18	0.43
69:O3:21:ARG:O	36:5:634:C:H5'	223.34	0.43
42:L5:205:SER:OG	42:L5:206:GLN:N	3.80	0.43
67:O1:71:LEU:HA	67:O1:71:LEU:HD23	1.84	0.43
48:M1:85:LYS:HE3	48:M1:85:LYS:HB2	1.83	0.43
17:C5:12:PHE:CG	17:C5:13:LYS:N	2.85	0.43
36:1:830:A:OP1	86:1:4011:OHX:N4	2.51	0.43
1:6:1672:G:H2'	1:6:1673:G:C8	2.54	0.43
1:2:1735:U:H2'	1:2:1736:G:O4'	2.19	0.43
78:Q2:13:LYS:NZ	36:5:2718:U:OP1	195.68	0.43
36:1:101:G:C2'	36:1:102:C:H5'	2.49	0.43
24:D2:2:THR:N	1:6:1034:C:O2'	336.85	0.43
1:6:919:A:H2'	1:6:920:U:H6	1.83	0.43
36:1:1610:G:C6	36:1:1611:G:C6	3.07	0.43
10:S8:25:ARG:HA	1:6:400:A:H5''	308.78	0.43
28:D6:33:ASP:OD1	28:D6:34:LYS:N	2.51	0.43
28:D6:84:VAL:HG13	28:D6:85:ARG:H	1.84	0.43
36:5:1114:U:C4	36:5:1115:G:N7	2.87	0.43
32:E0:31:LYS:H	32:E0:31:LYS:HG2	2.45	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:O6:30:LYS:HA	36:5:266:A:C6	99.78	0.43
44:L7:73:GLY:O	57:N1:143:THR:HG22	4.84	0.43
5:S3:14:ASP:O	5:S3:17:PHE:HB3	2.32	0.43
22:D0:89:ARG:HE	22:D0:89:ARG:HB2	1.59	0.43
21:C9:39:THR:OG1	1:6:1478:G:OP1	381.95	0.43
4:S2:90:THR:HG22	4:S2:94:GLN:O	7.04	0.43
36:1:3155:U:H3'	36:1:3156:U:C4'	2.38	0.43
3:S1:121:ILE:HD11	3:S1:161:ILE:HG12	3.21	0.43
3:S1:205:PHE:CG	3:S1:206:PRO:HD2	2.63	0.43
3:S1:36:SER:HB3	3:S1:37:THR:H	1.63	0.43
42:L5:40:HIS:HD2	42:L5:42:ALA:N	2.10	0.43
19:C7:106:THR:O	19:C7:110:VAL:HG23	2.18	0.43
22:D0:42:VAL:O	22:D0:45:ALA:HB3	3.73	0.43
86:5:3995:OHX:N3	86:5:4084:OHX:N5	2.66	0.43
20:C8:28:ILE:HA	20:C8:58:ALA:HB2	2.01	0.43
18:C6:109:PHE:CB	18:C6:117:LEU:HD21	2.48	0.43
8:S6:22:HIS:CE1	8:S6:25:ARG:HH22	5.55	0.43
36:5:1208:U:H6	36:5:3115:C:N4	2.14	0.43
6:S4:59:ARG:NH2	1:6:446:A:OP2	383.88	0.43
31:D9:42:CYS:O	31:D9:46:LYS:HG2	2.92	0.43
33:E1:147:VAL:HG22	33:E1:148:TYR:H	4.13	0.43
56:N0:30:PHE:CD2	56:N0:103:VAL:HG21	2.53	0.43
20:C8:46:VAL:O	20:C8:49:LYS:HB2	2.18	0.43
1:2:1535:U:O4	7:S5:186:ASN:N	2.52	0.43
17:C5:17:TYR:O	17:C5:19:GLY:N	4.22	0.43
52:M6:124:LEU:HD12	52:M6:124:LEU:HA	1.82	0.43
1:2:1594:G:OP2	1:2:1596:C:N4	2.51	0.43
6:S4:176:ASP:HB2	6:S4:179:LYS:HZ3	1.84	0.43
49:M3:190:LYS:HE2	49:M3:190:LYS:HB2	1.67	0.43
86:5:4060:OHX:N5	86:5:4137:OHX:N6	2.65	0.43
55:M9:46:LYS:HZ1	36:5:1766:G:H8	102.10	0.43
36:1:1310:G:N7	86:1:4028:OHX:N5	2.66	0.43
75:O9:9:ILE:HG22	75:O9:13:MET:HE3	2.01	0.43
75:O9:9:ILE:O	75:O9:13:MET:HG3	2.41	0.43
1:2:124:A:H1'	6:S4:146:THR:HG21	2.00	0.43
34:SR:25:THR:HG22	34:SR:33:LEU:HD13	2.01	0.43
48:M1:106:ILE:HG12	48:M1:107:ASP:O	2.19	0.43
4:S2:99:LYS:HB2	4:S2:117:THR:HB	3.82	0.43
45:L8:163:VAL:O	45:L8:166:LEU:HB2	2.43	0.43
1:2:480:G:H22	1:2:509:G:H1'	1.81	0.43
25:D3:14:LYS:HD2	25:D3:18:HIS:CD2	2.52	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2707:C:H2'	36:1:2708:C:C6	2.53	0.43
36:1:2394:G:C8	40:L3:260:VAL:HG23	2.54	0.43
64:N8:73:LEU:O	64:N8:113:LEU:N	2.92	0.43
39:L2:42:ARG:HD2	39:L2:87:PHE:CD2	2.54	0.43
1:2:717:C:N4	1:2:720:G:H22	2.17	0.43
36:1:1669:C:OP1	70:O4:24:LYS:HE2	2.19	0.43
36:1:849:C:H2'	36:1:850:U:C6	2.53	0.43
16:C4:103:ARG:HH12	28:D6:48:ALA:CB	3.57	0.43
52:M6:57:PHE:HE2	52:M6:72:HIS:HA	1.84	0.43
39:L2:206:PRO:HD3	39:L2:212:GLY:O	3.73	0.43
52:M6:77:SER:OG	52:M6:106:GLU:OE2	2.39	0.43
1:6:83:G:N7	86:6:2096:OHX:N1	2.67	0.43
1:2:1629:G:H2'	1:2:1630:U:H6	1.84	0.43
1:6:484:C:N4	1:6:503:G:H1	2.16	0.43
38:8:156:U:C4	38:8:157:U:C5	3.07	0.43
42:L5:183:TRP:CZ3	42:L5:185:PHE:HA	6.98	0.43
9:S7:140:VAL:HB	24:D2:52:TYR:HB3	2.31	0.43
1:6:310:C:C4	1:6:311:U:C5	3.07	0.43
68:O2:125:ARG:O	68:O2:127:ALA:N	2.52	0.43
1:2:1105:C:H41	25:D3:4:GLY:HA2	1.83	0.43
36:5:2739:A:H2'	36:5:2740:A:H5''	1.99	0.43
1:6:985:G:H5''	1:6:986:G:OP2	2.18	0.43
36:1:3150:A:OP1	40:L3:132:LYS:HB2	2.19	0.43
36:1:1886:A:O4'	36:1:3307:A:H5'	2.19	0.43
72:O6:56:ARG:O	72:O6:60:LEU:HD13	5.76	0.43
37:3:68:C:OP1	42:L5:14:SER:OG	2.25	0.43
33:E1:98:VAL:HG22	33:E1:99:LYS:H	1.82	0.43
62:N6:89:LYS:HD3	62:N6:91:ASN:HD21	1.83	0.43
1:6:468:A:N1	1:6:595:G:C8	2.86	0.43
64:N8:25:HIS:ND1	36:5:661:G:N7	160.97	0.43
13:C1:107:VAL:HA	13:C1:108:PRO:HD2	1.86	0.43
10:S8:3:ILE:HG13	10:S8:3:ILE:H	1.53	0.43
33:E1:94:LYS:HA	33:E1:94:LYS:HD3	1.86	0.43
25:D3:133:LEU:HA	25:D3:133:LEU:HD22	2.41	0.43
34:SR:144:LEU:HD13	34:SR:144:LEU:HA	1.70	0.43
36:5:3283:U:H2'	36:5:3284:G:H8	1.83	0.43
36:1:3182:G:C6	36:1:3183:A:C5	3.07	0.43
1:6:1766:A:OP2	86:6:2124:OHX:N6	2.52	0.43
1:2:1367:G:C2	1:2:1368:G:C8	3.06	0.43
41:L4:291:ASN:O	41:L4:292:SER:C	2.57	0.43
59:N3:136:VAL:HG12	59:N3:137:VAL:N	3.03	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:42:LEU:HB2	7:S5:45:LYS:HD3	4.67	0.43
11:S9:110:GLN:HE22	11:S9:126:ARG:HA	3.17	0.43
86:L1:4180:OHX:N1	40:L3:364:LYS:O	2.51	0.43
48:M1:96:PHE:CG	48:M1:160:VAL:HG22	2.93	0.43
48:M1:13:LYS:HG3	48:M1:132:ASN:O	2.18	0.43
67:O1:16:LEU:HD12	67:O1:16:LEU:HA	1.68	0.43
36:L1:3216:G:C4	36:L1:3259:U:C4	3.07	0.43
3:S1:70:LEU:HB2	3:S1:82:ARG:O	4.98	0.43
41:L4:338:LYS:HA	41:L4:338:LYS:HD3	3.34	0.43
33:E1:103:LEU:HA	33:E1:105:TYR:CD2	3.75	0.43
67:O1:80:ASN:N	67:O1:88:PRO:O	2.37	0.43
45:L8:161:GLU:CD	51:M5:26:ARG:HH22	3.17	0.43
71:O5:62:GLN:O	71:O5:65:ALA:HB3	2.18	0.43
50:M4:20:VAL:HG22	50:M4:68:LEU:O	3.57	0.43
39:L2:114:SER:O	39:L2:116:VAL:N	3.09	0.43
22:D0:50:LEU:CD2	22:D0:95:ALA:HB2	2.45	0.43
1:2:1773:C:OP1	77:Q1:3:ALA:HB3	2.19	0.43
36:L1:1711:C:H2'	36:L1:1712:G:O4'	2.19	0.43
40:L3:232:ARG:HD2	40:L3:269:GLN:O	2.98	0.43
36:5:1557:A:C6	36:5:1559:A:C2	3.06	0.43
41:L4:209:TYR:CZ	41:L4:229:ASN:HB2	2.54	0.43
21:C9:85:SER:C	21:C9:87:GLY:N	2.71	0.43
36:5:1643:A:H4'	36:5:1822:C:H5'	2.01	0.43
24:D2:57:ARG:NH2	29:D7:26:GLN:OE1	2.70	0.43
15:C3:76:LYS:HE3	15:C3:76:LYS:HB3	1.84	0.43
36:L1:1874:A:H5''	55:M9:18:GLY:HA3	2.00	0.43
36:5:3349:C:H2'	36:5:3350:C:O4'	2.18	0.43
36:L1:671:U:OP2	54:M8:57:ILE:HD12	2.19	0.43
49:M3:14:PHE:HB3	49:M3:18:TRP:CD1	2.54	0.43
1:6:729:G:O2'	1:6:730:G:O5'	2.32	0.43
36:5:1609:C:H2'	36:5:1610:G:C8	2.54	0.43
46:L9:110:LYS:HE3	46:L9:110:LYS:HB2	3.26	0.43
57:N1:17:ARG:HG3	36:5:2700:G:H5''	265.97	0.43
68:O2:19:ARG:NH2	36:5:1433:A:OP1	165.78	0.43
61:N5:141:TYR:O	61:N5:142:ILE:HG13	3.83	0.43
52:M6:193:GLN:O	52:M6:196:ALA:HB3	2.19	0.43
1:2:515:A:OP2	86:2:2070:OHX:N3	2.51	0.43
26:D4:10:ARG:HB3	1:6:778:G:O6	427.86	0.43
25:D3:50:LYS:NZ	25:D3:101:GLU:OE1	3.72	0.43
36:5:1717:U:H2'	36:5:1718:G:C8	2.54	0.43
36:5:269:G:N2	36:5:295:A:OP2	2.44	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2440:G:N2	36:5:2508:U:C2	2.87	0.43
46:L9:117:PHE:CE1	46:L9:178:GLY:HA2	2.51	0.43
36:1:2146:C:OP1	39:L2:200:ARG:NH1	2.51	0.43
66:O0:28:LYS:HD3	36:5:1713:G:O6	236.02	0.43
47:M0:26:VAL:HG23	47:M0:27:PRO:O	2.18	0.43
36:1:1618:G:H2'	36:1:1619:A:O4'	2.19	0.43
36:1:2718:U:OP2	86:1:3983:OHX:N3	2.51	0.43
4:S2:175:GLY:O	11:S9:53:ARG:NH1	3.07	0.43
36:1:573:C:H2'	36:1:574:U:H6	1.80	0.43
24:D2:70:ASN:HB2	24:D2:130:TYR:C	2.56	0.43
64:N8:10:LYS:HA	64:N8:10:LYS:HD2	1.61	0.43
36:1:114:A:H2'	36:1:115:A:O4'	2.18	0.43
36:5:330:G:OP2	86:5:4044:OHX:N1	2.52	0.43
43:L6:42:LEU:HD11	43:L6:52:VAL:HG21	2.69	0.43
1:6:1697:G:H8	1:6:1705:C:C2	2.37	0.43
40:L3:37:ARG:HA	40:L3:186:GLY:HA2	2.08	0.43
39:L2:139:HIS:O	39:L2:141:PRO:HD3	2.19	0.43
36:5:614:C:H2'	36:5:615:U:C6	2.53	0.43
5:S3:23:GLU:HG3	12:C0:61:TRP:HE1	1.83	0.43
36:1:3018:C:H2'	36:1:3019:U:O4'	2.18	0.43
25:D3:72:VAL:O	25:D3:84:THR:HA	2.57	0.43
36:5:344:A:C4	36:5:345:G:C8	3.07	0.43
37:3:20:A:H2'	37:3:21:G:C8	2.54	0.43
4:S2:103:VAL:HG22	4:S2:113:LEU:HD23	2.16	0.43
67:O1:85:ALA:O	67:O1:87:ASN:N	2.68	0.43
11:S9:44:ARG:O	11:S9:48:GLN:HG3	2.19	0.43
36:1:3231:U:H2'	36:1:3232:G:H8	1.84	0.43
20:C8:15:LEU:HD23	20:C8:22:VAL:O	2.27	0.43
56:N0:131:LYS:HB2	56:N0:131:LYS:HE3	4.50	0.43
26:D4:45:ALA:HA	26:D4:55:VAL:HG21	2.01	0.43
1:2:679:U:H2'	1:2:680:U:C6	2.53	0.43
36:1:2563:G:H5''	45:L8:27:THR:HG23	2.00	0.43
36:1:1590:G:OP1	70:O4:17:SER:OG	2.36	0.43
36:5:298:U:H3'	36:5:298:U:H6	1.84	0.43
36:5:1770:G:H5'	36:5:1771:C:OP2	2.18	0.43
43:L6:50:LYS:NZ	43:L6:72:ASN:O	3.56	0.43
32:E0:55:ARG:O	32:E0:58:PRO:HD3	2.19	0.43
70:O4:60:ARG:HH21	36:5:1616:U:H5''	141.97	0.43
36:1:3349:C:H42	36:1:3356:G:H1	1.66	0.43
1:2:512:A:H2'	1:2:513:U:C6	2.54	0.43
11:S9:133:HIS:HD2	11:S9:162:SER:HB2	2.66	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
76:Q0:99:CYS:O	76:Q0:100:TYR:HB2	2.47	0.43
1:2:868:G:C2	1:2:961:U:C2	3.07	0.43
40:L3:192:VAL:O	40:L3:195:ALA:HB3	2.32	0.43
13:C1:100:TYR:CD2	25:D3:9:LEU:HD22	3.76	0.43
34:SR:283:LYS:HG3	34:SR:284:ALA:N	4.73	0.43
38:8:80:A:O3'	38:8:81:U:H4'	2.18	0.43
36:5:956:U:C2	36:5:957:C:C5	3.07	0.43
3:S1:180:THR:OG1	3:S1:181:LEU:N	4.36	0.43
1:2:1780:G:H1'	36:1:2262:A:O3'	2.19	0.43
1:2:706:A:C6	1:2:734:A:N6	2.87	0.43
36:5:2822:U:H2'	36:5:2823:G:O4'	2.19	0.43
56:N0:171:PHE:O	56:N0:172:TYR:C	4.11	0.43
3:S1:103:MET:O	3:S1:214:LYS:HA	2.31	0.43
1:2:1783:C:H2'	1:2:1784:C:C6	2.52	0.43
36:1:1636:U:H3	36:1:1710:C:H4'	1.84	0.43
20:C8:60:GLU:H	20:C8:60:GLU:HG2	1.62	0.43
73:O7:81:GLY:O	38:8:95:G:H1'	41.16	0.43
2:S0:119:ARG:HB3	2:S0:119:ARG:NH1	2.34	0.43
1:6:836:U:C2	1:6:837:G:C8	3.07	0.43
46:L9:171:ASP:OD1	46:L9:171:ASP:C	2.66	0.43
1:6:72:A:C6	1:6:73:U:N3	2.86	0.43
38:8:42:G:C6	38:8:103:G:N3	2.87	0.43
52:M6:12:LYS:O	52:M6:14:HIS:N	3.85	0.43
36:5:1024:G:N7	36:5:1027:A:N6	2.67	0.43
36:5:1116:G:N2	36:5:2817:A:O4'	2.52	0.43
15:C3:91:LEU:HB3	15:C3:122:ILE:HG13	2.60	0.43
15:C3:99:ARG:HE	15:C3:115:LEU:HD11	1.84	0.43
36:5:1686:U:O2	36:5:1688:U:H1'	2.19	0.43
51:M5:203:ARG:NH1	36:5:665:A:OP1	122.02	0.43
49:M3:128:ARG:NH2	36:5:168:U:O2'	39.42	0.43
1:6:373:G:O2'	1:6:374:U:H5'	2.19	0.43
36:1:3190:C:H2'	36:1:3191:G:C8	2.54	0.43
44:L7:180:SER:H	44:L7:183:ASP:HB2	2.55	0.43
1:2:1119:G:C6	1:2:1120:U:C4	3.07	0.43
14:C2:55:GLY:HA2	14:C2:85:LYS:HE3	1.99	0.43
49:M3:119:TYR:HA	49:M3:145:PHE:CZ	2.54	0.43
5:S3:30:ALA:C	5:S3:32:GLU:H	2.22	0.43
21:C9:76:LEU:HD23	21:C9:76:LEU:HA	1.72	0.43
15:C3:61:THR:HB	1:6:959:U:O2	350.89	0.43
57:N1:87:LYS:NZ	36:5:2728:G:N7	212.42	0.43
14:C2:91:VAL:HG22	14:C2:92:ALA:H	4.32	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:O5:56:THR:O	71:O5:60:GLU:HG3	5.65	0.43
59:N3:23:MET:HB2	59:N3:99:ALA:HA	2.01	0.43
36:5:2881:C:H2'	36:5:2882:U:H6	1.84	0.43
37:3:89:G:N2	37:3:92:A:OP2	2.49	0.43
59:N3:104:ASN:HD21	59:N3:108:GLU:HB2	4.78	0.43
36:1:209:A:H4'	36:1:211:A:N7	2.34	0.43
24:D2:94:LEU:HA	24:D2:95:PRO:HD3	1.82	0.43
36:5:1439:U:H2'	36:5:1440:G:O4'	2.18	0.43
36:1:2102:U:H2'	36:1:2103:U:C6	2.54	0.43
15:C3:64:ARG:HG3	15:C3:70:LYS:HD2	4.06	0.43
13:C1:40:LEU:HA	13:C1:40:LEU:HD12	1.76	0.43
36:1:2372:A:H5''	36:1:2373:A:H5''	2.01	0.43
7:S5:149:VAL:CG1	7:S5:156:ARG:HG3	5.01	0.43
1:6:690:G:H2'	1:6:690:G:N3	2.33	0.43
48:M1:43:GLN:NE2	48:M1:71:VAL:HG13	3.38	0.43
36:1:793:C:O5'	36:1:793:C:H6	2.02	0.43
42:L5:271:LYS:HA	42:L5:271:LYS:HD3	4.15	0.43
45:L8:33:ASN:O	45:L8:35:GLY:N	3.51	0.43
42:L5:256:THR:OG1	42:L5:258:LYS:NZ	2.24	0.43
6:S4:86:PHE:O	6:S4:87:MET:HB2	2.18	0.43
36:5:3100:U:O2	36:5:3101:G:C8	2.71	0.43
36:5:3203:U:H2'	36:5:3204:C:C6	2.54	0.43
24:D2:111:MET:HB2	24:D2:115:GLU:OE2	2.68	0.43
36:5:2659:G:H4'	36:5:2751:G:O2'	2.19	0.43
1:2:587:C:H2'	1:2:588:U:O4'	2.19	0.43
36:5:359:U:H4'	36:5:817:A:N6	2.33	0.43
5:S3:35:SER:O	5:S3:99:VAL:HG11	4.85	0.43
1:2:86:A:N3	1:2:147:A:H2	2.17	0.43
36:5:830:A:O2'	36:5:1866:C:H2'	2.19	0.43
19:C7:69:ILE:H	19:C7:69:ILE:HD13	1.84	0.43
19:C7:66:VAL:O	19:C7:69:ILE:HG12	2.18	0.43
60:N4:27:LYS:HG2	60:N4:29:PHE:CE1	2.53	0.43
36:5:1552:G:OP2	86:5:4000:OHX:N6	2.51	0.43
36:1:921:A:OP1	36:1:921:A:H3'	2.19	0.43
1:2:1217:A:H5'	1:2:1217:A:H8	1.84	0.43
36:5:1093:A:OP1	36:5:1093:A:H4'	2.19	0.43
23:D1:11:LEU:HG	23:D1:11:LEU:H	2.01	0.43
54:M8:20:LYS:HD3	36:5:671:U:O2'	157.14	0.43
10:S8:176:SER:HB3	1:6:208:U:H5''	288.41	0.43
4:S2:145:GLY:O	4:S2:146:THR:HG22	2.19	0.43
16:C4:19:ILE:O	16:C4:83:ILE:HG13	2.18	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:225:TYR:OH	34:SR:191:ASP:HB2	2.19	0.43
62:N6:36:SER:O	62:N6:39:LEU:N	2.51	0.43
28:D6:6:ALA:C	28:D6:8:ASN:H	2.21	0.43
41:L4:177:ASP:O	41:L4:181:VAL:HG23	3.29	0.43
1:2:558:U:HO2'	1:2:559:C:P	2.42	0.43
36:1:2177:G:O6	86:1:3925:OHX:N2	2.51	0.43
47:M0:100:ASN:O	47:M0:101:LYS:HB2	4.51	0.43
49:M3:100:ARG:O	49:M3:101:ARG:HB3	4.70	0.43
60:N4:6:ASP:HA	60:N4:30:ARG:O	2.19	0.43
27:D5:54:VAL:O	27:D5:54:VAL:HG12	2.19	0.43
3:S1:201:THR:CG2	3:S1:207:LEU:HD22	2.49	0.43
3:S1:222:LYS:HD3	3:S1:223:PHE:H	1.83	0.43
1:2:1390:U:N3	1:2:1413:U:OP2	2.50	0.43
40:L3:59:ASP:HA	40:L3:70:ARG:O	2.66	0.43
36:5:420:G:OP1	36:5:420:G:O5'	2.37	0.43
30:D8:40:ILE:HG13	30:D8:62:GLU:HG3	6.70	0.43
26:D4:23:PHE:HE2	26:D4:75:VAL:HG12	1.83	0.43
71:O5:62:GLN:O	71:O5:66:VAL:HG23	2.18	0.43
24:D2:86:ILE:HB	24:D2:117:ARG:NH2	7.02	0.43
62:N6:115:ARG:O	62:N6:119:ILE:HG13	2.19	0.43
11:S9:171:ARG:NH1	11:S9:174:ARG:HG3	2.34	0.43
55:M9:25:ASP:C	55:M9:27:ASN:H	2.23	0.43
36:5:572:A:C5	36:5:573:C:C5	3.07	0.43
44:L7:158:LYS:HG2	44:L7:159:GLN:N	2.34	0.43
1:2:1684:U:O2	1:2:1718:G:N2	2.52	0.43
36:1:945:C:H2'	36:1:946:U:H6	1.84	0.43
1:2:333:A:C6	1:2:334:G:C6	3.07	0.43
36:1:3364:C:H2'	36:1:3365:U:C6	2.54	0.43
66:O0:13:LYS:NZ	66:O0:103:THR:HG21	2.34	0.43
1:6:1172:G:C6	1:6:1173:C:C4	3.07	0.43
13:C1:128:CYS:HB3	13:C1:129:ARG:H	3.34	0.43
45:L8:101:THR:HG23	45:L8:103:ALA:HB3	1.99	0.43
56:N0:24:LEU:HD22	56:N0:59:VAL:HG21	2.00	0.43
17:C5:33:PHE:HZ	17:C5:112:LEU:HB3	1.84	0.43
20:C8:99:HIS:O	20:C8:101:LEU:HG	2.19	0.43
36:5:3279:A:C6	36:5:3280:U:N3	2.87	0.43
6:S4:247:SER:OG	6:S4:250:GLU:HG3	2.30	0.43
36:1:1449:A:C2	36:1:2356:A:C4	3.07	0.43
51:M5:187:ARG:HD3	51:M5:187:ARG:HH11	1.70	0.43
51:M5:62:TYR:O	51:M5:132:VAL:N	2.42	0.43
7:S5:27:THR:HG23	18:C6:28:LEU:HA	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:N2:43:VAL:C	58:N2:45:GLY:N	3.05	0.43
36:5:1466:G:O6	86:5:3906:OHX:N5	2.52	0.43
44:L7:180:SER:OG	44:L7:183:ASP:N	2.66	0.43
45:L8:91:PHE:HE1	45:L8:180:VAL:HG21	4.99	0.43
47:M0:91:VAL:HG22	47:M0:127:ALA:HB1	3.47	0.43
11:S9:59:LEU:O	11:S9:61:THR:N	2.51	0.43
5:S3:42:THR:O	5:S3:44:THR:N	3.79	0.43
1:2:63:G:N2	1:2:64:U:H1'	2.33	0.43
39:L2:104:LEU:CD2	39:L2:158:ILE:HD11	2.64	0.43
1:2:1748:G:H2'	1:2:1749:A:C8	2.54	0.43
55:M9:8:LYS:HD3	55:M9:8:LYS:HA	3.15	0.43
36:1:1786:G:H2'	36:1:1787:A:C8	2.54	0.43
1:2:1211:A:H1'	17:C5:99:GLY:O	2.18	0.43
36:1:1321:G:O3'	56:N0:117:ARG:NH2	2.52	0.43
1:2:100:A:O5'	1:2:100:A:H8	2.02	0.43
56:N0:161:LYS:HZ2	36:5:3209:A:P	278.43	0.43
78:Q2:43:TYR:OH	78:Q2:47:GLN:NE2	2.52	0.43
1:6:886:U:H2'	1:6:887:A:C8	2.54	0.43
9:S7:110:GLN:HG2	1:6:811:A:C5	340.78	0.43
26:D4:25:VAL:N	26:D4:71:GLY:O	3.33	0.43
2:S0:62:ARG:HG3	2:S0:62:ARG:NH1	4.77	0.43
71:O5:101:THR:HG22	71:O5:104:GLN:HB2	2.01	0.43
40:L3:4:ARG:O	40:L3:5:LYS:HB3	2.19	0.43
36:1:2867:C:O2'	36:1:2868:U:H5'	2.19	0.43
36:1:3008:A:OP1	52:M6:72:HIS:CD2	2.72	0.43
39:L2:13:GLY:O	39:L2:16:PHE:HB2	4.93	0.43
1:2:346:G:N3	1:2:346:G:H2'	2.34	0.43
1:2:1181:U:H2'	1:2:1182:U:O4'	2.19	0.43
36:1:664:U:H5'	41:L4:107:ARG:HA	2.01	0.43
1:6:1030:A:H4'	1:6:1031:U:OP2	2.19	0.43
1:6:417:A:H5'	1:6:418:G:C5	2.54	0.43
36:5:1387:G:OP1	86:5:4195:OHX:N3	2.52	0.43
36:5:817:A:H4'	36:5:818:C:OP2	2.19	0.43
36:1:1571:A:H2'	36:1:1572:U:O4'	2.19	0.43
1:6:156:A:H2'	1:6:157:A:O4'	2.19	0.43
5:S3:102:ALA:HB1	5:S3:173:ARG:HG3	3.07	0.43
52:M6:94:ARG:HG2	52:M6:94:ARG:NH1	3.10	0.43
64:N8:58:MET:SD	36:5:2775:U:H1'	152.29	0.43
36:5:639:G:H1	36:5:650:C:H42	1.67	0.43
65:N9:54:LEU:HD23	65:N9:57:ALA:HB2	2.00	0.43
1:6:1107:G:C6	1:6:1108:G:C6	3.07	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2555:G:H21	70:O4:92:ALA:HB1	1.83	0.43
38:4:107:G:C2	38:4:116:G:C5	3.06	0.43
39:L2:220:GLY:O	39:L2:221:LYS:HG2	2.19	0.43
36:1:1364:C:O5'	36:1:1364:C:H6	2.02	0.43
55:M9:10:LEU:HD12	55:M9:10:LEU:HA	1.89	0.43
13:C1:91:LEU:HD23	13:C1:91:LEU:HA	1.68	0.43
25:D3:57:LEU:HD23	25:D3:57:LEU:HA	1.79	0.43
1:2:811:A:H5'	1:2:816:G:O2'	2.18	0.43
36:1:54:C:O2'	36:1:1547:G:H1'	2.19	0.43
36:1:1613:A:P	74:O8:46:ARG:HH22	2.42	0.42
28:D6:75:VAL:C	28:D6:77:CYS:N	2.72	0.42
59:N3:136:VAL:HG12	59:N3:137:VAL:H	3.39	0.42
11:S9:105:LEU:C	11:S9:107:ARG:H	2.22	0.42
62:N6:3:LYS:HG3	62:N6:8:VAL:CG1	2.47	0.42
36:5:270:U:O2	36:5:318:A:H2	2.02	0.42
14:C2:36:LEU:HD11	14:C2:101:ALA:O	2.18	0.42
47:M0:9:TYR:CG	47:M0:97:LEU:HD13	2.54	0.42
36:5:2105:G:H2'	36:5:2106:A:H8	1.84	0.42
42:L5:148:ILE:HG23	42:L5:151:GLN:HB3	2.17	0.42
21:C9:54:PHE:CE1	21:C9:104:VAL:HG23	2.54	0.42
48:M1:53:THR:CG2	48:M1:60:ARG:HA	2.42	0.42
36:1:1720:U:C4	55:M9:124:TYR:CE2	3.07	0.42
36:5:1064:A:N6	36:5:1096:U:N3	2.67	0.42
19:C7:6:THR:O	19:C7:9:VAL:HG12	4.68	0.42
1:2:884:A:C2	1:2:885:G:C5	3.07	0.42
17:C5:98:ASN:ND2	17:C5:103:ASN:HD21	2.17	0.42
36:5:2821:C:C2'	36:5:2822:U:O5'	2.67	0.42
36:1:186:U:OP1	62:N6:122:LYS:HE2	2.19	0.42
1:6:353:A:P	86:6:2050:OHX:N5	2.92	0.42
36:5:2585:G:H2'	36:5:2585:G:N3	2.34	0.42
41:L4:42:VAL:C	41:L4:44:LYS:N	3.22	0.42
39:L2:174:ARG:HH22	36:5:2180:G:P	211.83	0.42
30:D8:21:SER:HB3	30:D8:67:ARG:CG	6.36	0.42
27:D5:42:LEU:HD23	27:D5:42:LEU:HA	4.53	0.42
2:S0:110:TYR:HA	2:S0:115:PHE:CE2	2.53	0.42
49:M3:48:PRO:HG3	49:M3:126:PHE:HE2	2.29	0.42
53:M7:36:ILE:HG21	53:M7:36:ILE:HD13	1.72	0.42
34:SR:61:PHE:CE1	34:SR:97:GLY:HA2	2.71	0.42
1:2:1432:U:H4'	1:2:1433:G:O5'	2.19	0.42
20:C8:87:ASN:H	20:C8:99:HIS:CD2	2.37	0.42
40:L3:328:ILE:HG23	40:L3:329:PRO:O	2.47	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:180:GLU:OE1	2:S0:183:ARG:HD3	2.19	0.42
20:C8:32:LEU:O	20:C8:35:ILE:HG13	2.19	0.42
1:2:887:A:H61	1:2:925:G:H1	1.66	0.42
40:L3:293:ASN:HA	40:L3:293:ASN:HD22	1.58	0.42
25:D3:62:LYS:H	25:D3:116:ASP:HB2	1.83	0.42
9:S7:117:THR:HG23	9:S7:120:ALA:H	1.84	0.42
15:C3:91:LEU:HD12	15:C3:125:LEU:HD12	2.89	0.42
74:O8:78:LEU:HD13	74:O8:78:LEU:HA	2.28	0.42
30:D8:35:ASP:C	30:D8:37:SER:H	4.69	0.42
36:1:653:A:C2	36:1:1443:G:C4	3.06	0.42
63:N7:17:ARG:HB2	36:5:1635:G:O6	202.56	0.42
48:M1:155:THR:HG23	48:M1:158:ASP:HB2	2.01	0.42
38:4:103:G:C6	38:4:105:A:C6	3.07	0.42
36:5:2725:U:O4	86:5:3952:OHX:N1	2.51	0.42
41:L4:98:ARG:HD3	41:L4:102:PRO:HG3	2.01	0.42
36:1:660:A:C2	36:1:1435:A:C2	3.06	0.42
1:2:711:U:H4'	1:2:712:G:OP1	2.18	0.42
1:2:489:C:H2'	1:2:490:C:C6	2.54	0.42
51:M5:19:LEU:HD12	51:M5:19:LEU:HA	1.75	0.42
54:M8:41:ASP:HB2	54:M8:42:ALA:H	3.85	0.42
54:M8:43:PRO:O	54:M8:47:VAL:HG23	2.37	0.42
67:O1:26:LYS:HD2	67:O1:26:LYS:HA	1.70	0.42
1:6:1145:U:H3	1:6:1633:A:N6	2.17	0.42
1:6:1391:A:C8	1:6:1412:G:C6	3.07	0.42
36:1:2219:A:H2'	36:1:2220:A:C8	2.54	0.42
29:D7:36:LYS:HD3	29:D7:43:ILE:CG2	3.88	0.42
74:O8:12:LEU:HD13	74:O8:12:LEU:HA	2.86	0.42
36:1:2427:U:O2	36:1:2603:G:C2	2.72	0.42
1:2:61:A:H8	1:2:269:G:O2'	2.01	0.42
36:1:1110:U:H2'	36:1:1111:U:C6	2.54	0.42
1:2:1334:U:H2'	1:2:1335:U:H6	1.84	0.42
36:5:2271:A:N7	36:5:2272:G:C6	2.87	0.42
71:O5:49:LYS:O	71:O5:52:ALA:HB3	2.18	0.42
1:2:1082:C:N4	1:2:1091:A:H62	2.17	0.42
36:5:1816:A:H4'	36:5:1816:A:OP1	2.19	0.42
1:2:1648:A:H2'	1:2:1649:G:C8	2.53	0.42
29:D7:34:ASP:O	29:D7:79:PHE:HA	2.40	0.42
33:E1:98:VAL:HG12	33:E1:99:LYS:N	3.47	0.42
36:1:2501:U:H4'	36:1:2502:A:OP1	2.19	0.42
6:S4:107:GLY:HA2	6:S4:189:LEU:HG	2.01	0.42
36:1:272:G:OP2	86:1:4030:OHX:N3	2.52	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:1:3871:OHX:N2	73:O7:46:SER:OG	2.52	0.42
36:1:2444:C:H3'	36:1:2445:A:H5''	2.01	0.42
73:O7:48:ASN:HA	73:O7:54:LYS:NZ	2.46	0.42
45:L8:97:TYR:OH	45:L8:203:VAL:HG22	2.19	0.42
29:D7:40:CYS:C	29:D7:42:ASN:H	3.65	0.42
36:5:2300:G:C6	36:5:2301:U:C4	3.07	0.42
36:1:1517:G:P	75:O9:41:ARG:HH22	2.42	0.42
41:L4:54:GLU:HG3	41:L4:55:LYS:N	2.34	0.42
36:1:550:A:N6	36:1:551:A:H62	2.17	0.42
36:1:265:A:H5''	36:1:266:A:OP2	2.19	0.42
2:S0:12:GLU:HG2	2:S0:12:GLU:H	3.66	0.42
40:L3:102:LEU:HD12	40:L3:102:LEU:HA	1.86	0.42
1:6:264:G:O6	86:6:2057:OHX:N5	2.52	0.42
47:M0:159:PHE:HA	47:M0:160:PRO:HD2	1.87	0.42
8:S6:58:LYS:O	8:S6:59:GLN:HB2	2.19	0.42
36:5:3273:A:O2'	36:5:3274:A:H5'	2.19	0.42
25:D3:42:PRO:HG2	25:D3:122:PHE:CZ	3.28	0.42
28:D6:19:LYS:HG2	28:D6:20:PRO:HD2	1.99	0.42
64:N8:126:LYS:HA	64:N8:146:GLU:O	2.27	0.42
11:S9:105:LEU:O	11:S9:107:ARG:N	2.51	0.42
11:S9:149:ARG:HG2	11:S9:152:SER:HB2	1.99	0.42
11:S9:34:PHE:CE1	11:S9:105:LEU:HB3	2.53	0.42
36:1:2207:A:O2'	36:1:2208:A:H5'	2.19	0.42
86:2:2090:OHX:N3	86:2:2131:OHX:N6	2.67	0.42
1:2:1524:A:H2'	1:2:1525:A:C8	2.54	0.42
18:C6:29:ILE:HG22	18:C6:36:ILE:HB	4.65	0.42
18:C6:36:ILE:HG23	18:C6:49:TYR:HE1	2.76	0.42
73:O7:65:ARG:HG3	73:O7:65:ARG:NH1	2.24	0.42
1:2:197:A:H2'	1:2:198:A:C8	2.54	0.42
67:O1:81:GLU:O	67:O1:82:GLU:HG2	2.62	0.42
59:N3:12:ARG:N	36:5:3040:A:OP1	268.31	0.42
41:L4:6:VAL:O	41:L4:20:LEU:N	2.44	0.42
36:1:412:G:OP1	53:M7:62:ARG:NH1	2.52	0.42
11:S9:22:SER:OG	11:S9:23:ARG:N	2.67	0.42
35:SM:31:SER:OG	36:5:2667:A:OP1	288.33	0.42
51:M5:92:LEU:HD12	51:M5:92:LEU:HA	1.75	0.42
2:S0:125:ASP:OD1	2:S0:127:ARG:HB3	2.19	0.42
2:S0:125:ASP:HA	2:S0:126:PRO:HD2	1.90	0.42
10:S8:63:GLY:O	10:S8:75:LYS:HA	2.19	0.42
1:6:1174:C:C4	1:6:1175:U:C4	3.06	0.42
21:C9:91:TYR:N	21:C9:91:TYR:HD1	2.17	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:N1:62:GLY:HA3	57:N1:76:ILE:HD13	2.01	0.42
39:L2:20:THR:HA	39:L2:23:ARG:NH1	3.33	0.42
61:N5:64:GLU:O	71:O5:32:LYS:HE3	2.19	0.42
9:S7:12:ALA:HB3	9:S7:13:PRO:HD3	2.09	0.42
57:N1:17:ARG:HD2	36:5:2701:U:P	265.62	0.42
30:D8:13:ILE:O	30:D8:14:LYS:HD2	2.19	0.42
6:S4:157:ASN:CG	6:S4:222:LEU:HD11	4.57	0.42
1:2:274:G:C2	1:2:275:C:H1'	2.54	0.42
15:C3:124:ARG:O	15:C3:127:ARG:HB3	2.40	0.42
42:L5:182:GLY:HA2	42:L5:194:LEU:HD13	2.00	0.42
41:L4:60:THR:HG22	41:L4:62:ALA:N	2.98	0.42
1:2:602:U:H2'	1:2:603:U:H6	1.84	0.42
36:5:2726:C:H3'	36:5:2726:C:O2	2.20	0.42
56:N0:107:TYR:CE1	56:N0:118:PHE:CD1	3.31	0.42
36:5:1046:A:H2'	36:5:1049:C:C5	2.54	0.42
1:2:209:U:H2'	1:2:210:A:H8	1.82	0.42
39:L2:88:ILE:HD13	39:L2:88:ILE:HA	1.80	0.42
1:2:25:C:OP2	1:2:26:A:H2'	2.18	0.42
49:M3:27:ASP:OD1	49:M3:31:LYS:HE2	2.19	0.42
42:L5:224:LYS:HE3	42:L5:224:LYS:HB2	4.22	0.42
36:5:595:G:C8	36:5:609:G:C6	3.07	0.42
55:M9:98:ARG:O	55:M9:102:LEU:HG	2.19	0.42
48:M1:86:VAL:HG22	48:M1:111:ASP:O	2.20	0.42
59:N3:135:VAL:HG11	60:N4:26:SER:HB3	2.01	0.42
75:O9:28:ARG:HH11	75:O9:36:ARG:HD3	6.24	0.42
36:5:1152:G:C8	36:5:1152:G:O5'	2.72	0.42
1:2:830:U:HO2'	1:2:831:U:P	2.42	0.42
36:1:1718:G:C6	36:1:1719:G:C6	3.08	0.42
36:1:2933:A:N6	36:1:2934:A:N1	2.67	0.42
58:N2:35:LYS:HA	58:N2:35:LYS:HD2	2.64	0.42
86:1:4056:OHX:N4	86:1:4163:OHX:N1	2.67	0.42
17:C5:52:LYS:HG3	17:C5:53:PRO:HD3	2.01	0.42
52:M6:58:LEU:HD12	52:M6:58:LEU:HA	1.84	0.42
36:5:3284:G:OP1	86:5:4177:OHX:N3	2.52	0.42
32:E0:56:MET:HG2	1:6:590:C:H5'	417.55	0.42
36:5:1794:G:O2'	36:5:1795:U:H5'	2.20	0.42
36:5:1424:C:H2'	36:5:1425:U:O4'	2.18	0.42
1:6:98:U:H2'	1:6:99:C:C6	2.54	0.42
48:M1:31:THR:O	48:M1:35:LYS:N	2.45	0.42
11:S9:81:VAL:O	11:S9:150:LEU:HD22	2.87	0.42
36:1:2267:C:H2'	36:1:2268:U:O4'	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1091:A:O2'	36:5:1092:C:H5'	2.19	0.42
41:L4:212:ASP:OD1	41:L4:216:VAL:HG22	2.19	0.42
36:1:1496:C:C2	36:1:1521:G:N2	2.86	0.42
45:L8:242:ALA:HA	45:L8:245:LYS:HD3	3.57	0.42
36:5:651:G:C6	36:5:652:G:C6	3.08	0.42
37:3:90:U:H2'	37:3:91:G:O4'	2.20	0.42
51:M5:51:LEU:HA	51:M5:51:LEU:HD23	1.98	0.42
58:N2:74:LYS:HD2	58:N2:74:LYS:HA	4.60	0.42
13:C1:11:ARG:HB3	13:C1:11:ARG:HE	2.12	0.42
44:L7:188:ILE:HD13	44:L7:188:ILE:HA	2.18	0.42
1:6:658:C:H5'	1:6:659:C:OP2	2.19	0.42
36:1:3276:G:H1'	36:1:3277:U:O2	2.18	0.42
16:C4:31:THR:HA	16:C4:38:THR:HA	3.15	0.42
1:2:320:U:C2	1:2:321:C:C6	3.07	0.42
10:S8:26:LYS:O	10:S8:29:LEU:HD12	3.53	0.42
64:N8:47:LYS:O	64:N8:48:TYR:HB2	2.19	0.42
11:S9:149:ARG:HG2	11:S9:149:ARG:HH11	4.49	0.42
36:1:3087:A:OP1	86:1:4180:OHX:N5	2.52	0.42
76:Q0:103:LEU:HA	76:Q0:103:LEU:HD23	1.78	0.42
72:O6:62:ARG:NH1	72:O6:94:ILE:HD11	4.22	0.42
4:S2:230:TRP:NE1	24:D2:68:ARG:HB2	3.89	0.42
1:6:1478:G:C6	1:6:1479:A:C5	3.08	0.42
13:C1:93:TYR:HD1	13:C1:100:TYR:CE1	2.37	0.42
61:N5:121:LYS:NZ	61:N5:123:TYR:OH	2.46	0.42
1:2:1320:U:N3	1:2:1323:C:OP1	2.47	0.42
37:3:5:G:OP2	42:L5:27:LYS:NZ	2.44	0.42
1:2:2:A:H3'	4:S2:179:VAL:HG11	2.01	0.42
17:C5:127:ARG:O	17:C5:129:GLY:N	4.24	0.42
36:5:801:A:O2'	86:5:4023:OHX:N1	2.53	0.42
60:N4:52:THR:O	60:N4:55:PHE:HB3	2.19	0.42
41:L4:138:ARG:NH2	41:L4:240:PRO:HB2	2.39	0.42
39:L2:150:LEU:HD23	39:L2:150:LEU:HA	2.46	0.42
63:N7:38:PHE:CE2	63:N7:40:HIS:HB3	2.58	0.42
13:C1:10:GLU:HG2	1:6:327:U:O2'	270.06	0.42
26:D4:43:LYS:HB2	26:D4:43:LYS:HE3	4.91	0.42
36:1:976:U:H2'	36:1:977:C:O4'	2.18	0.42
4:S2:66:PHE:C	4:S2:68:ILE:N	2.72	0.42
56:N0:148:LEU:HD12	56:N0:149:LYS:N	2.35	0.42
1:6:755:A:O2'	1:6:756:A:H8	2.01	0.42
10:S8:48:THR:HG22	1:6:333:A:P	297.42	0.42
21:C9:85:SER:C	21:C9:87:GLY:H	2.22	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:68:LEU:O	8:S6:69:LEU:HB2	2.28	0.42
55:M9:165:LYS:HB3	55:M9:165:LYS:HE2	1.59	0.42
24:D2:8:ALA:CB	24:D2:74:VAL:HG11	2.86	0.42
44:L7:89:ILE:HG22	44:L7:219:LYS:HE3	2.01	0.42
20:C8:40:ARG:NH2	21:C9:44:GLU:OE2	2.52	0.42
70:O4:66:SER:O	70:O4:68:THR:N	2.98	0.42
27:D5:70:LYS:HD3	27:D5:70:LYS:HA	1.79	0.42
1:6:992:A:OP1	1:6:1786:G:H5'	2.18	0.42
1:2:1405:G:C2	1:2:1406:A:C4	3.08	0.42
47:M0:156:ARG:HG2	47:M0:163:GLN:HG2	2.26	0.42
36:5:2805:G:N3	36:5:2967:A:H2	2.17	0.42
1:6:1567:U:H2'	1:6:1568:C:H5'	2.01	0.42
39:L2:241:ARG:HG2	36:5:2155:G:OP1	221.26	0.42
42:L5:235:SER:O	42:L5:239:ILE:HG13	2.18	0.42
51:M5:186:GLY:O	51:M5:190:THR:HG22	2.41	0.42
1:2:1119:G:O6	86:2:2148:OHX:N4	2.52	0.42
37:7:106:U:C4	37:7:107:C:C4	3.07	0.42
1:2:827:C:H2'	1:2:828:U:H6	1.83	0.42
47:M0:193:ASP:OD1	47:M0:198:LYS:HE3	2.19	0.42
52:M6:140:LYS:NZ	52:M6:150:GLU:OE1	2.44	0.42
47:M0:24:ARG:HG3	47:M0:24:ARG:H	3.48	0.42
36:1:2532:U:H3	36:1:2547:A:H61	1.66	0.42
27:D5:81:ARG:NH2	1:6:1532:U:OP1	363.07	0.42
43:L6:82:ARG:HD2	43:L6:82:ARG:HA	3.22	0.42
36:5:998:A:O2'	36:5:999:G:H5'	2.19	0.42
13:C1:58:CYS:HA	13:C1:59:PRO:HD3	2.29	0.42
36:1:685:G:OP2	49:M3:35:ARG:NH1	2.52	0.42
36:1:2594:C:H6	36:1:2594:C:O5'	2.02	0.42
1:2:1637:C:OP2	86:2:2113:OHX:N3	2.51	0.42
1:2:1767:G:OP1	1:2:1770:U:H4'	2.19	0.42
36:1:1131:G:C4	36:1:2373:A:C2	3.07	0.42
41:L4:158:SER:HA	41:L4:213:ASN:HB2	2.01	0.42
75:O9:28:ARG:NH1	75:O9:36:ARG:HD3	6.42	0.42
36:1:2585:G:N3	38:4:151:C:H5	2.17	0.42
36:5:960:U:O2'	36:5:961:C:H5'	2.19	0.42
38:8:59:A:N1	38:8:100:U:H1'	2.33	0.42
36:1:108:A:O2'	36:1:109:A:H2'	2.19	0.42
70:O4:29:ILE:HA	70:O4:29:ILE:HD12	4.41	0.42
68:O2:83:GLU:O	68:O2:86:THR:OG1	2.23	0.42
36:1:2525:G:C6	39:L2:34:TYR:CD2	3.07	0.42
25:D3:3:LYS:HE3	1:6:614:C:OP1	353.01	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:N4:86:SER:C	60:N4:88:ASP:H	2.22	0.42
3:S1:196:GLU:O	3:S1:199:ASN:HB2	2.19	0.42
1:2:1134:C:H2'	1:2:1135:U:O4'	2.18	0.42
63:N7:128:GLN:O	63:N7:131:PHE:N	2.91	0.42
10:S8:137:LYS:O	10:S8:140:GLU:N	2.92	0.42
36:1:2900:A:H2	36:1:3025:C:O2	2.02	0.42
36:5:2124:G:O2'	36:5:2125:A:H5'	2.19	0.42
36:1:802:C:H2'	36:1:803:C:H6	1.85	0.42
46:L9:59:ASN:HB2	50:M4:41:GLN:NE2	2.52	0.42
22:D0:77:LYS:HD2	22:D0:77:LYS:H	4.23	0.42
36:1:2424:A:H8	36:1:2424:A:O5'	2.02	0.42
18:C6:54:LEU:HD22	18:C6:54:LEU:HA	1.77	0.42
46:L9:17:THR:HG21	50:M4:3:THR:O	2.18	0.42
36:1:3181:C:H2'	36:1:3182:G:O4'	2.20	0.42
47:M0:82:ARG:O	47:M0:82:ARG:HG2	4.07	0.42
36:1:1613:A:H2'	36:1:1614:C:C6	2.54	0.42
70:O4:8:ARG:HH21	70:O4:31:ARG:HH11	3.22	0.42
7:S5:91:GLU:CD	7:S5:107:LYS:HZ1	2.22	0.42
11:S9:113:VAL:O	11:S9:118:LEU:HB2	3.12	0.42
67:O1:42:LEU:O	67:O1:42:LEU:HG	2.18	0.42
40:L3:167:ARG:O	86:L3:404:OHX:N5	5.99	0.42
36:5:1942:U:C4	36:5:1943:C:C5	3.07	0.42
36:1:2748:A:O3'	42:L5:48:LYS:NZ	2.50	0.42
36:1:981:U:HO2'	36:1:982:C:P	2.43	0.42
50:M4:121:MET:HE1	36:5:3215:A:O5'	275.80	0.42
52:M6:188:SER:O	52:M6:192:LYS:HG2	2.51	0.42
3:S1:144:ARG:HG3	3:S1:145:LYS:O	2.19	0.42
10:S8:76:THR:HB	10:S8:105:ASP:HB3	2.02	0.42
17:C5:15:HIS:CG	17:C5:16:SER:N	2.88	0.42
11:S9:56:ALA:O	11:S9:60:LEU:HG	3.17	0.42
20:C8:146:ALA:H	35:SM:68:ARG:HH21	1.67	0.42
23:D1:78:LEU:O	23:D1:79:LEU:HD23	3.70	0.42
2:S0:63:ILE:O	2:S0:66:ALA:HB3	2.19	0.42
63:N7:10:VAL:HG23	63:N7:86:THR:HA	2.01	0.42
49:M3:46:ILE:HG22	49:M3:46:ILE:O	2.19	0.42
77:Q1:5:TRP:CH2	1:6:1784:C:N4	296.47	0.42
16:C4:24:ASN:O	16:C4:54:GLU:HB3	2.19	0.42
1:2:397:A:H5''	10:S8:51:GLY:H	1.83	0.42
43:L6:55:LEU:HD12	43:L6:76:LEU:HD21	3.11	0.42
43:L6:57:HIS:NE2	43:L6:61:ASN:HA	2.35	0.42
36:1:860:G:C5	39:L2:181:LYS:HB2	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2841:G:H2'	36:5:2844:C:H42	1.84	0.42
66:O0:68:TYR:C	66:O0:68:TYR:CD2	3.28	0.42
66:O0:68:TYR:HD2	66:O0:68:TYR:C	3.06	0.42
63:N7:54:THR:HG22	63:N7:57:HIS:CE1	3.48	0.42
66:O0:99:ASP:O	66:O0:103:THR:HG23	2.19	0.42
1:2:1172:G:H21	21:C9:88:VAL:CG2	2.33	0.42
31:D9:20:GLN:HB2	31:D9:25:SER:HA	2.02	0.42
1:2:1156:C:O2'	1:2:1157:A:H5'	2.19	0.42
17:C5:17:TYR:CG	17:C5:18:ARG:N	3.38	0.42
9:S7:117:THR:HG22	9:S7:120:ALA:CB	2.83	0.42
5:S3:27:ARG:HB3	12:C0:58:GLN:NE2	2.32	0.42
54:M8:170:ARG:HD2	64:N8:56:VAL:O	2.28	0.42
68:O2:85:LEU:HB2	68:O2:117:ILE:HD13	2.00	0.42
11:S9:52:ILE:HG23	11:S9:76:LEU:HD21	2.66	0.42
1:6:373:G:N2	1:6:603:U:O3'	2.53	0.42
42:L5:34:LYS:HD2	57:N1:30:TYR:CZ	2.75	0.42
14:C2:68:GLU:O	14:C2:70:ASN:N	2.52	0.42
68:O2:109:LEU:HD23	68:O2:109:LEU:HA	1.86	0.42
36:5:173:G:H1'	36:5:174:C:H5'	2.01	0.42
40:L3:183:LEU:HD12	40:L3:183:LEU:HA	1.82	0.42
70:O4:47:CYS:SG	70:O4:81:CYS:SG	3.18	0.42
26:D4:86:GLU:HA	26:D4:87:PRO:HD2	2.24	0.42
1:6:913:G:N7	36:5:2205:U:C2	2.88	0.42
69:O3:73:ARG:NH1	36:5:1167:U:OP2	244.80	0.42
43:L6:165:LEU:HA	43:L6:165:LEU:HD23	1.90	0.42
44:L7:84:VAL:HG21	44:L7:127:LEU:HD11	3.19	0.42
7:S5:70:VAL:HG23	7:S5:72:HIS:H	3.36	0.42
43:L6:46:ARG:HG3	43:L6:47:PHE:CE1	2.95	0.42
36:5:2117:A:H3'	36:5:2118:C:C6	2.54	0.42
71:O5:38:ARG:HG3	71:O5:39:PRO:HD2	2.40	0.42
7:S5:177:ILE:HG12	7:S5:180:ARG:HH12	2.07	0.42
17:C5:34:VAL:HG21	17:C5:45:PHE:HB2	2.01	0.42
57:N1:124:VAL:HB	57:N1:125:ALA:H	1.45	0.42
5:S3:76:ARG:C	5:S3:78:LYS:H	2.50	0.42
39:L2:66:PRO:HB2	39:L2:67:TYR:CE2	2.55	0.42
41:L4:187:LEU:HD23	41:L4:198:ARG:O	2.38	0.42
1:6:737:A:H2'	1:6:738:G:C8	2.55	0.42
1:6:286:C:H2'	1:6:287:G:O4'	2.19	0.42
36:1:3314:A:N1	36:1:3315:G:C6	2.87	0.42
68:O2:89:THR:H	68:O2:89:THR:HG22	2.26	0.42
15:C3:72:MET:HB3	15:C3:72:MET:HE2	4.62	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:O5:103:LYS:HE3	71:O5:103:LYS:HB2	1.78	0.42
27:D5:80:LEU:HD23	27:D5:80:LEU:HA	2.03	0.42
36:5:1376:C:H1'	36:5:1407:A:C4	2.54	0.42
78:Q2:32:LYS:O	78:Q2:33:ALA:HB3	3.45	0.42
43:L6:43:LEU:HD21	43:L6:85:ILE:HG13	2.00	0.42
36:1:1612:A:H5''	74:O8:51:LEU:HD22	2.01	0.42
36:1:642:U:OP1	64:N8:22:ILE:HG23	2.19	0.42
36:1:952:A:H4'	36:1:968:G:N2	2.35	0.42
11:S9:79:ARG:O	11:S9:83:VAL:HG22	2.20	0.42
70:O4:74:ARG:HG2	70:O4:75:ALA:O	2.20	0.42
16:C4:128:LYS:HD3	28:D6:27:SER:OG	3.27	0.42
86:5:4018:OHX:N2	86:5:4211:OHX:N5	2.68	0.42
40:L3:284:ARG:NH2	40:L3:295:ALA:O	2.52	0.42
39:L2:68:LYS:HB3	39:L2:70:ARG:HH21	3.44	0.42
24:D2:66:ASN:OD1	24:D2:68:ARG:HG2	4.29	0.42
50:M4:72:LEU:HA	50:M4:73:PRO:HD3	1.82	0.42
75:O9:23:LEU:HD22	75:O9:24:PRO:CD	2.45	0.42
36:5:438:A:H4'	36:5:439:C:OP2	2.20	0.42
36:1:361:A:O3'	73:O7:45:ARG:NH2	2.52	0.42
2:S0:139:VAL:HG22	2:S0:139:VAL:O	2.32	0.42
49:M3:75:PHE:HA	49:M3:101:ARG:HH12	1.84	0.42
4:S2:140:ARG:NH1	4:S2:229:LEU:HD21	5.33	0.42
1:2:1344:A:H2'	1:2:1345:A:C8	2.54	0.42
36:1:1230:G:H2'	36:1:1231:A:H8	1.84	0.42
10:S8:105:ASP:O	10:S8:107:THR:HG23	2.20	0.42
20:C8:138:THR:N	1:6:1458:G:OP1	352.99	0.42
52:M6:59:ARG:HG3	36:5:1307:G:OP1	253.78	0.42
36:1:1430:U:H2'	64:N8:9:ARG:NH2	2.34	0.42
1:2:853:G:N7	55:M9:173:ARG:NH2	2.66	0.42
46:L9:162:GLN:HG3	46:L9:163:GLN:N	2.32	0.42
36:1:2586:G:C5	45:L8:241:LYS:HB2	2.54	0.42
36:1:1636:U:H4'	63:N7:74:VAL:O	2.19	0.42
45:L8:108:ARG:NH1	36:5:121:A:C4	95.68	0.42
40:L3:14:LEU:HA	40:L3:17:LEU:HD22	2.03	0.42
2:S0:119:ARG:NH1	4:S2:241:ASP:OD2	2.52	0.42
38:8:14:C:C4	38:8:15:G:C6	3.07	0.42
1:6:1296:A:H61	1:6:1301:U:H3	1.66	0.42
2:S0:31:VAL:HG23	2:S0:150:ASP:HA	2.01	0.42
40:L3:187:SER:OG	40:L3:190:GLU:HG3	2.19	0.42
4:S2:56:ILE:HG23	4:S2:61:LEU:HB2	2.02	0.42
4:S2:66:PHE:O	4:S2:69:ILE:N	2.51	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:50:ASN:O	6:S4:53:LYS:NZ	2.53	0.42
54:M8:19:PRO:HD3	54:M8:53:PHE:CD1	2.55	0.42
7:S5:80:LYS:HG3	7:S5:83:ARG:NH1	3.74	0.42
1:2:694:U:H5''	1:2:695:U:H5	1.84	0.42
1:2:53:G:H2'	1:2:54:C:O4'	2.20	0.42
52:M6:41:LEU:HB3	52:M6:138:LEU:HB2	2.02	0.42
15:C3:88:LEU:O	15:C3:88:LEU:HD22	2.20	0.42
28:D6:53:LEU:HA	28:D6:53:LEU:HD13	3.61	0.42
36:1:1047:A:C6	36:1:1048:A:C6	3.08	0.42
1:2:12:U:H2'	1:2:13:C:C6	2.53	0.42
22:D0:117:VAL:HG22	22:D0:118:VAL:N	2.34	0.42
36:5:3333:G:H8	36:5:3333:G:OP2	2.03	0.42
9:S7:169:PHE:O	9:S7:172:VAL:HB	3.04	0.42
14:C2:52:LEU:HD22	14:C2:57:ALA:HB2	2.01	0.42
5:S3:202:LEU:O	19:C7:42:GLN:HG3	3.08	0.42
27:D5:75:LEU:H	27:D5:75:LEU:HG	1.48	0.42
36:5:3347:A:H61	36:5:3358:U:H3	1.68	0.42
66:O0:34:LEU:HG	66:O0:59:TYR:HB3	2.02	0.42
47:M0:26:VAL:HG23	47:M0:27:PRO:HD2	2.97	0.42
36:5:2993:G:C6	36:5:3142:A:C4	3.07	0.42
36:5:2881:C:H2'	36:5:2882:U:C6	2.55	0.42
36:5:262:U:H2'	36:5:263:C:O4'	2.19	0.42
20:C8:62:THR:O	20:C8:65:GLU:N	2.52	0.42
36:1:111:C:C2'	36:1:112:U:H5'	2.49	0.42
36:5:3237:U:C2	36:5:3251:U:C2	3.08	0.42
36:1:3393:U:O2'	36:1:3394:U:H5'	2.19	0.42
36:1:3267:A:H2'	43:L6:69:PHE:CZ	2.55	0.42
55:M9:102:LEU:O	55:M9:106:LEU:HD22	2.19	0.42
36:1:2856:G:H2'	36:1:2857:C:C6	2.54	0.42
44:L7:143:THR:HG22	44:L7:241:LYS:HE3	2.01	0.42
36:5:1781:C:H2'	36:5:1782:U:C6	2.54	0.42
1:6:763:G:C5	1:6:764:U:C5	3.07	0.42
44:L7:105:LEU:HD11	36:5:985:U:C2	238.74	0.42
51:M5:53:TYR:HB2	51:M5:133:ILE:HD13	2.01	0.42
33:E1:87:THR:HA	1:6:1445:G:C6	379.08	0.42
71:O5:41:LEU:HD12	71:O5:41:LEU:HA	1.67	0.42
38:4:93:U:H2'	38:4:94:C:H6	1.84	0.42
1:6:1312:A:C2	1:6:1414:U:C5	3.07	0.42
36:1:199:A:C4	36:1:201:A:C8	3.08	0.42
1:6:90:C:C2	1:6:91:G:C8	3.08	0.42
36:1:3271:G:P	53:M7:171:ARG:HG2	2.59	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:84:ARG:O	45:L8:87:ALA:HB3	2.77	0.42
71:O5:13:SER:O	71:O5:17:LEU:HD12	3.15	0.42
65:N9:6:ASN:ND2	36:5:2643:A:H5'	225.51	0.42
1:6:103:A:C8	1:6:360:A:C2	3.07	0.42
36:1:256:G:O6	86:1:4159:OHX:N3	2.52	0.42
36:1:3045:G:H2'	36:1:3046:A:O4'	2.19	0.42
52:M6:108:ILE:HG12	52:M6:108:ILE:O	4.27	0.42
44:L7:163:LEU:H	44:L7:163:LEU:HG	2.16	0.42
23:D1:48:GLY:O	23:D1:49:GLU:HB2	2.20	0.42
36:1:296:A:C5	36:1:297:G:C6	3.08	0.42
36:1:2243:A:N1	36:1:2313:A:C5	2.87	0.42
5:S3:121:GLY:HA2	35:SM:127:ALA:HB1	5.26	0.42
42:L5:111:GLN:HA	42:L5:116:ASP:CG	2.40	0.42
41:L4:302:ALA:HB2	54:M8:39:ARG:NH1	2.35	0.42
1:2:477:A:N7	1:2:538:A:N1	2.67	0.42
1:6:475:A:C6	1:6:476:U:C2	3.08	0.42
11:S9:105:LEU:HD13	11:S9:105:LEU:HA	1.79	0.42
11:S9:41:GLU:OE1	11:S9:126:ARG:NH2	2.52	0.42
76:Q0:111:ARG:HG3	76:Q0:112:LYS:HD2	3.61	0.42
78:Q2:46:LYS:HG2	78:Q2:54:THR:OG1	2.19	0.42
7:S5:30:PRO:HB2	7:S5:33:VAL:CG2	2.50	0.42
7:S5:165:LEU:HG	7:S5:169:ASN:HD21	1.84	0.42
1:2:1202:A:C2	1:2:1457:C:C4	3.07	0.42
65:N9:28:LYS:HB2	36:5:1065:A:C4	212.47	0.42
57:N1:101:CYS:HB3	36:5:990:U:C1'	252.28	0.42
1:2:72:A:C3'	1:2:73:U:H5''	2.50	0.42
59:N3:120:LYS:HB2	59:N3:120:LYS:HE3	4.85	0.42
24:D2:117:ARG:HD2	24:D2:117:ARG:HA	1.67	0.42
41:L4:118:LYS:O	41:L4:122:THR:HG23	2.19	0.42
1:2:902:G:H8	1:2:902:G:O5'	2.02	0.42
18:C6:116:LEU:HB3	18:C6:117:LEU:HD22	2.01	0.42
1:2:1584:G:H5'	18:C6:123:ARG:H	1.85	0.42
15:C3:37:ILE:HG21	15:C3:74:ILE:HD12	3.84	0.42
36:5:22:G:O2'	38:8:40:A:N1	2.41	0.42
8:S6:141:ILE:HD13	8:S6:153:VAL:HG11	2.00	0.42
17:C5:87:PRO:O	17:C5:90:ILE:HG13	2.85	0.42
20:C8:133:VAL:HG21	1:6:1546:G:OP1	354.67	0.42
36:1:3121:U:C1'	36:1:3122:A:H5''	2.49	0.42
1:2:1337:A:H5'	1:2:1338:C:OP2	2.18	0.42
2:S0:173:ILE:HA	2:S0:176:LEU:HD12	2.01	0.42
36:1:2202:C:H2'	36:1:2203:U:O4'	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:C3:87:ASP:HB3	15:C3:88:LEU:H	3.88	0.42
75:O9:5:LYS:HD3	75:O9:13:MET:CE	3.35	0.42
51:M5:12:ARG:HH11	51:M5:12:ARG:HD3	1.90	0.42
34:SR:293:ALA:HB3	34:SR:302:PHE:HB2	3.47	0.42
1:2:1776:A:C2	1:2:1786:G:C6	3.07	0.42
1:2:1484:G:H8	1:2:1484:G:O5'	2.02	0.42
36:5:59:G:C4'	36:5:60:A:H4'	2.46	0.42
39:L2:188:LYS:HD3	39:L2:189:TYR:CE2	3.57	0.42
38:8:144:G:O2'	38:8:145:U:H5'	2.20	0.42
1:2:755:A:O2'	1:2:756:A:OP1	2.35	0.42
1:6:1475:A:H2'	1:6:1476:C:O4'	2.20	0.42
40:L3:252:ILE:HD13	40:L3:252:ILE:HA	2.51	0.42
39:L2:83:HIS:CE1	39:L2:86:GLN:HB2	2.54	0.42
14:C2:44:GLY:O	14:C2:48:SER:N	2.51	0.42
36:5:3155:U:H3'	36:5:3156:U:H5''	2.01	0.42
1:6:454:U:H3'	1:6:455:C:C6	2.55	0.42
6:S4:195:ILE:HG23	6:S4:208:VAL:HG13	3.25	0.42
21:C9:125:SER:OG	21:C9:126:GLU:OE1	2.37	0.42
36:1:1812:G:H5''	36:1:1813:A:OP2	2.20	0.42
36:5:1304:A:N1	36:5:2938:G:O2'	2.41	0.42
1:2:23:G:OP1	11:S9:14:THR:HG21	2.19	0.42
36:1:3134:A:H2'	36:1:3134:A:N3	2.35	0.42
36:1:1756:C:H2'	36:1:1757:A:C8	2.54	0.42
36:5:90:C:H2'	36:5:91:G:H5'	2.02	0.42
36:5:1241:U:HO2'	36:5:1242:G:P	2.42	0.42
9:S7:126:LEU:HD11	9:S7:152:VAL:HG21	2.01	0.42
1:2:1530:C:C2	1:2:1531:G:C8	3.07	0.42
9:S7:153:LEU:HD22	9:S7:184:GLU:HB2	2.02	0.42
1:6:1026:A:H4'	1:6:1028:C:C5	2.55	0.42
36:5:1339:C:H2'	36:5:1340:G:O4'	2.19	0.42
51:M5:73:ARG:HA	51:M5:74:PRO:HD3	1.74	0.42
56:N0:36:ILE:HD13	56:N0:36:ILE:HG21	1.75	0.42
36:5:3200:G:H2'	36:5:3201:C:H6	1.85	0.42
36:5:3255:U:H2'	36:5:3256:G:C8	2.55	0.42
59:N3:35:TYR:HB2	59:N3:63:LYS:HD3	2.02	0.42
1:6:909:U:O2'	1:6:910:C:H5'	2.19	0.42
33:E1:98:VAL:HG13	33:E1:99:LYS:N	2.35	0.42
47:M0:65:LEU:HD23	47:M0:159:PHE:CZ	2.93	0.42
37:7:14:U:C4	37:7:67:G:N2	2.87	0.42
36:1:763:G:HO2'	36:1:764:U:P	2.42	0.42
36:5:524:U:H2'	36:5:525:C:H5'	2.00	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:21:ILE:HG21	48:M1:33:ALA:HB1	2.01	0.42
4:S2:82:ASN:HB2	4:S2:207:LEU:HD13	2.00	0.42
38:4:35:C:H5'	73:O7:70:VAL:HG11	2.02	0.42
36:1:324:A:H2'	36:1:325:A:C8	2.55	0.42
1:2:1442:U:H2'	1:2:1443:U:H6	1.85	0.42
1:2:1402:G:H2'	1:2:1403:C:C6	2.55	0.42
1:6:206:A:H1'	1:6:262:U:C2	2.55	0.42
1:6:108:A:H2'	1:6:109:G:C8	2.55	0.42
1:2:1425:A:C6	1:2:1426:C:N4	2.88	0.42
1:2:153:G:H2'	1:2:154:G:C8	2.55	0.42
40:L3:123:TYR:CZ	40:L3:124:LYS:HG3	2.55	0.42
36:1:1908:A:H2'	36:1:1909:A:O4'	2.18	0.42
38:8:18:U:H2'	38:8:19:C:C6	2.54	0.42
36:1:631:U:H2'	36:1:632:G:C8	2.54	0.42
42:L5:150:LEU:HD23	42:L5:150:LEU:HA	1.81	0.42
63:N7:118:PHE:HA	63:N7:118:PHE:HD1	2.06	0.42
4:S2:76:LEU:H	4:S2:76:LEU:HD23	4.81	0.42
5:S3:62:ASN:ND2	5:S3:62:ASN:O	4.35	0.42
36:1:1368:U:H5'	68:O2:43:ARG:NH1	2.34	0.42
47:M0:87:LEU:HA	47:M0:87:LEU:HD23	1.97	0.42
42:L5:86:TYR:CD1	42:L5:247:ILE:HG13	2.54	0.42
1:2:386:G:OP2	10:S8:25:ARG:NH2	2.53	0.42
62:N6:51:ARG:HA	62:N6:73:VAL:HG21	2.59	0.42
28:D6:34:LYS:HB3	28:D6:35:ALA:H	3.65	0.42
28:D6:75:VAL:O	28:D6:77:CYS:N	2.52	0.42
7:S5:89:ILE:HD12	7:S5:90:ILE:H	1.84	0.42
1:2:1167:G:OP1	7:S5:101:GLY:HA3	2.20	0.42
11:S9:113:VAL:CG1	11:S9:119:ALA:HB2	3.10	0.42
39:L2:68:LYS:HD3	39:L2:70:ARG:HH21	2.98	0.42
27:D5:46:LYS:HE3	27:D5:46:LYS:HB2	4.16	0.42
1:6:1315:U:P	1:6:1328:G:H1	2.43	0.42
40:L3:117:ARG:HA	40:L3:175:LYS:HG3	2.76	0.42
41:L4:22:LEU:CD1	41:L4:26:PHE:HB2	2.44	0.42
50:M4:21:VAL:HG11	50:M4:65:LEU:HD23	2.01	0.42
36:1:120:G:N1	45:L8:124:ASP:OD2	2.53	0.42
6:S4:31:PRO:CB	6:S4:38:LEU:HD22	2.82	0.42
18:C6:10:PHE:CE2	1:6:1379:C:H5'	431.62	0.42
59:N3:6:ALA:HB2	59:N3:126:TRP:CH2	2.55	0.42
54:M8:141:ARG:HD3	36:5:743:C:O2	174.03	0.42
1:6:970:A:C6	1:6:971:A:H1'	2.55	0.42
1:6:971:A:C8	1:6:972:G:C8	3.08	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1239:U:OP1	86:2:2144:OHX:N5	2.53	0.42
49:M3:28:GLN:HB3	51:M5:201:ARG:HD3	2.02	0.42
74:O8:10:GLN:O	74:O8:14:LEU:HB2	3.83	0.42
22:D0:63:LEU:HD23	22:D0:63:LEU:N	2.75	0.42
6:S4:246:LEU:HD12	6:S4:246:LEU:H	1.84	0.42
36:5:1027:A:N7	36:5:1029:G:C2	2.87	0.42
55:M9:180:LYS:HD3	55:M9:184:LEU:HD11	3.39	0.42
66:O0:51:LEU:HA	66:O0:51:LEU:HD12	1.88	0.42
2:S0:172:LEU:HA	2:S0:172:LEU:HD23	2.02	0.42
18:C6:66:ARG:HD2	18:C6:67:VAL:N	2.34	0.42
5:S3:191:ASP:HB3	5:S3:194:LYS:HE3	2.01	0.42
5:S3:115:ILE:HB	5:S3:116:ARG:H	3.99	0.42
15:C3:94:LYS:O	15:C3:97:SER:N	3.05	0.42
36:1:3153:U:O2	36:1:3158:G:N1	2.52	0.42
58:N2:36:TYR:CE1	58:N2:40:HIS:ND1	2.87	0.42
48:M1:82:ARG:HH12	48:M1:113:GLY:HA3	4.16	0.42
68:O2:19:ARG:HH22	36:5:1433:A:P	164.23	0.42
25:D3:142:LYS:HA	25:D3:143:PRO:HD3	1.92	0.42
1:2:1226:A:HO2'	1:2:1227:A:P	2.42	0.42
36:5:1673:G:C4	36:5:1775:G:C2	3.07	0.42
24:D2:97:ARG:HH11	24:D2:97:ARG:HG2	3.08	0.42
57:N1:39:ILE:HG22	57:N1:99:SER:HB3	2.01	0.42
53:M7:3:ARG:NH2	36:5:398:A:C8	127.31	0.42
41:L4:304:GLN:O	41:L4:305:ALA:HB3	2.43	0.42
1:2:1657:U:H4'	1:2:1658:G:O5'	2.18	0.42
34:SR:134:TRP:CZ3	34:SR:140:CYS:HB2	3.14	0.42
36:5:2397:A:H8	36:5:2941:A:N1	2.17	0.42
86:1:4056:OHX:N6	86:1:4163:OHX:N3	2.67	0.42
51:M5:10:LEU:O	51:M5:10:LEU:HD22	2.19	0.42
36:1:96:G:H5'	49:M3:15:ARG:NH2	2.35	0.42
9:S7:77:LEU:O	9:S7:81:LEU:HG	2.20	0.42
34:SR:278:PHE:CE1	34:SR:287:PRO:HD2	2.55	0.42
1:2:1003:A:H4'	1:2:1004:U:O5'	2.20	0.42
36:5:1052:U:O2	37:7:103:A:O2'	2.34	0.42
36:5:1676:A:C6	36:5:1677:G:N7	2.87	0.42
34:SR:107:LYS:HB2	34:SR:128:ASP:CB	3.34	0.42
36:5:1498:A:H2'	36:5:1499:C:C6	2.53	0.42
78:Q2:7:THR:O	78:Q2:8:ARG:HB2	2.19	0.42
36:5:160:G:H2'	36:5:161:G:O4'	2.20	0.42
36:5:1710:C:H2'	36:5:1711:C:C6	2.54	0.42
1:2:581:U:O4	35:SM:115:LYS:NZ	2.53	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:306:U:H2'	1:2:307:G:C8	2.55	0.42
36:1:1420:C:OP2	41:L4:193:LYS:NZ	2.51	0.42
24:D2:58:SER:OG	1:6:636:A:H1'	354.67	0.42
17:C5:96:ILE:HB	17:C5:120:SER:HB2	2.31	0.42
36:1:29:C:H4'	36:1:62:A:H4'	2.02	0.42
61:N5:25:LYS:HE3	61:N5:25:LYS:HB2	4.41	0.42
56:N0:142:GLN:HB3	56:N0:142:GLN:HE21	1.55	0.42
1:6:669:G:HO2'	1:6:670:U:P	2.42	0.42
56:N0:45:LEU:HA	56:N0:45:LEU:HD22	1.74	0.42
46:L9:29:GLY:HA3	46:L9:30:PRO:HD2	2.68	0.42
36:1:3255:U:H2'	36:1:3256:G:H8	1.83	0.42
47:M0:148:VAL:O	47:M0:151:GLY:N	2.46	0.42
1:2:1497:U:OP2	86:2:2031:OHX:N1	2.52	0.42
52:M6:65:ASN:O	52:M6:68:ARG:HG2	2.19	0.42
32:E0:34:ALA:O	32:E0:37:ARG:HB3	2.20	0.42
39:L2:121:GLY:C	39:L2:123:ARG:H	2.21	0.42
48:M1:13:LYS:HB2	48:M1:14:ILE:H	2.10	0.42
12:C0:2:LEU:HD22	1:6:1258:U:H4'	433.36	0.42
57:N1:145:GLY:O	57:N1:146:ASN:HB2	3.00	0.42
5:S3:70:THR:HG22	5:S3:86:LEU:HD13	2.01	0.42
1:2:1607:G:H2'	1:2:1608:U:C6	2.55	0.42
36:1:1941:C:H1'	36:1:3362:A:C8	2.55	0.42
1:2:788:A:H3'	6:S4:108:ARG:HH22	1.84	0.42
1:2:788:A:P	6:S4:108:ARG:HH12	2.36	0.42
36:1:1447:G:H3'	53:M7:67:ILE:CD1	2.49	0.42
21:C9:13:ASP:HA	21:C9:16:ASN:HB2	3.10	0.42
41:L4:130:ALA:HA	41:L4:148:ILE:CG2	2.50	0.42
44:L7:33:ARG:HG3	44:L7:34:LYS:N	3.99	0.42
7:S5:192:GLU:O	7:S5:195:ALA:N	3.50	0.42
3:S1:229:MET:C	3:S1:231:LEU:H	2.52	0.42
1:6:1330:G:O5'	1:6:1330:G:H8	2.02	0.42
19:C7:5:ARG:HB3	19:C7:9:VAL:HG11	3.01	0.42
19:C7:7:LYS:HG3	19:C7:8:THR:N	3.18	0.42
36:1:1807:G:C5	36:1:1808:G:C6	3.07	0.42
7:S5:81:ARG:HH22	30:D8:48:VAL:H	1.67	0.42
40:L3:116:ARG:HG2	40:L3:175:LYS:HB2	2.90	0.42
2:S0:61:ALA:O	2:S0:63:ILE:N	2.52	0.42
49:M3:9:ILE:HD13	64:N8:52:TYR:CE1	2.55	0.42
50:M4:21:VAL:HB	50:M4:63:VAL:HG13	3.46	0.42
47:M0:170:LYS:HA	47:M0:177:ASP:HA	2.00	0.42
86:5:3995:OHX:N4	86:5:4084:OHX:N1	2.68	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:C6:109:PHE:O	18:C6:112:TYR:N	3.22	0.42
18:C6:83:GLN:OE1	18:C6:119:ALA:HA	2.19	0.42
8:S6:216:LEU:HD21	1:6:242:U:OP1	339.97	0.42
4:S2:134:LEU:O	4:S2:136:VAL:N	2.53	0.42
36:5:1194:G:HO2'	36:5:1319:G:HO2'	1.65	0.42
1:2:867:G:N7	86:2:2032:OHX:N2	2.67	0.42
27:D5:38:HIS:CG	27:D5:70:LYS:HG2	7.20	0.42
47:M0:51:HIS:CD2	47:M0:168:SER:HB2	3.30	0.42
52:M6:118:VAL:HB	56:N0:164:SER:O	2.43	0.42
1:6:1744:A:N6	1:6:1745:G:C6	2.87	0.42
1:6:138:A:N6	1:6:266:A:N6	2.68	0.42
1:2:12:U:H4'	1:2:1300:A:O4'	2.20	0.42
1:2:17:C:HO2'	1:2:1137:A:H61	1.67	0.42
1:2:1776:A:H2'	1:2:1777:G:H8	1.81	0.42
71:O5:21:LEU:HD21	71:O5:51:ILE:HG23	2.01	0.42
1:6:1372:U:H6	1:6:1372:U:OP1	2.03	0.42
34:SR:123:ILE:HG22	34:SR:133:VAL:HG22	2.02	0.42
15:C3:54:LEU:O	15:C3:60:VAL:HB	2.19	0.42
11:S9:59:LEU:C	11:S9:61:THR:H	2.22	0.42
36:5:173:G:HO2'	36:5:174:C:P	2.43	0.42
57:N1:79:MET:HB3	57:N1:84:TYR:CE2	2.54	0.42
36:1:1456:A:N7	67:O1:26:LYS:HE2	2.34	0.42
27:D5:75:LEU:O	27:D5:79:ALA:N	3.26	0.42
13:C1:90:TYR:OH	13:C1:105:LYS:HE2	3.23	0.42
70:O4:107:GLU:O	70:O4:110:GLU:HB2	2.19	0.42
25:D3:126:LYS:HG2	25:D3:131:SER:H	1.85	0.42
49:M3:64:LYS:HG3	64:N8:69:TRP:CD2	2.55	0.42
36:5:999:G:C6	36:5:1000:C:N4	2.88	0.42
9:S7:41:LEU:HD13	9:S7:70:PHE:CD1	2.54	0.42
1:2:61:A:N1	1:2:62:A:N6	2.68	0.42
34:SR:228:LYS:HE3	34:SR:228:LYS:HB2	2.33	0.42
36:1:2714:G:H8	36:1:2714:G:H5''	1.85	0.42
17:C5:107:ILE:HG12	17:C5:107:ILE:H	2.69	0.42
42:L5:207:TYR:CD2	37:7:33:U:C2	293.06	0.42
6:S4:47:PHE:HD2	6:S4:48:LEU:HD12	1.84	0.42
1:6:809:A:O5'	1:6:809:A:H8	2.02	0.42
10:S8:70:GLU:HG3	10:S8:112:TRP:CH2	2.54	0.42
44:L7:163:LEU:HA	44:L7:163:LEU:HD23	1.86	0.42
1:6:1778:G:H2'	1:6:1779:U:H6	1.85	0.42
36:1:966:U:H2'	36:1:967:A:C8	2.55	0.42
36:1:1139:G:C6	36:1:1140:G:N7	2.88	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2608:G:H2'	36:5:2609:A:H8	1.85	0.42
46:L9:79:ILE:O	46:L9:83:THR:HG23	2.32	0.42
1:6:719:U:C4	1:6:721:U:H5	2.38	0.42
64:N8:18:GLY:O	36:5:1370:G:H5''	174.25	0.42
36:5:1378:U:OP1	86:5:4022:OHX:N3	2.53	0.42
70:O4:20:ILE:HA	70:O4:20:ILE:HD12	1.58	0.42
26:D4:133:ASN:OD1	26:D4:133:ASN:N	2.53	0.42
36:1:1009:A:H2'	36:1:1010:G:C1'	2.50	0.42
13:C1:78:THR:HG23	13:C1:119:VAL:HG23	4.55	0.42
52:M6:157:GLU:O	52:M6:160:ARG:HB3	2.26	0.42
63:N7:95:VAL:HG13	63:N7:110:ALA:HB1	2.01	0.42
36:1:1072:G:H21	65:N9:50:THR:HB	1.85	0.42
36:1:1595:U:C2	36:1:1596:C:C5	3.07	0.42
8:S6:48:TYR:CD1	8:S6:116:LYS:HA	2.54	0.42
36:1:952:A:N3	36:1:1114:U:O2'	2.47	0.42
1:2:542:A:H8	1:2:543:C:H2'	1.84	0.42
40:L3:214:MET:HE2	40:L3:350:ALA:HB2	2.02	0.42
5:S3:55:THR:HA	5:S3:58:VAL:HG23	2.02	0.42
1:2:954:G:H2'	1:2:955:A:H8	1.84	0.42
57:N1:70:SER:O	57:N1:92:ARG:HG2	2.20	0.42
37:3:25:G:H2'	37:3:26:C:O4'	2.19	0.42
70:O4:58:ARG:HG3	70:O4:59:PRO:HD2	3.99	0.42
61:N5:75:LYS:HD3	61:N5:123:TYR:CE1	2.54	0.42
59:N3:13:ILE:HG12	59:N3:53:SER:CB	2.50	0.42
30:D8:30:VAL:HG22	30:D8:40:ILE:O	2.20	0.42
2:S0:58:VAL:O	2:S0:61:ALA:HB3	2.50	0.42
23:D1:62:ARG:C	23:D1:64:GLU:H	2.99	0.42
41:L4:50:TYR:CD2	41:L4:109:TRP:HH2	2.71	0.42
4:S2:137:ILE:HG21	4:S2:137:ILE:HD13	2.09	0.42
39:L2:168:VAL:HG23	39:L2:169:ILE:O	3.80	0.42
22:D0:95:ALA:HB1	22:D0:99:ILE:HG21	2.01	0.42
63:N7:40:HIS:N	63:N7:77:TYR:HD1	3.79	0.42
36:1:1362:G:H2'	36:1:1363:A:H8	1.85	0.42
26:D4:29:HIS:HB2	26:D4:67:GLY:HA2	5.72	0.42
8:S6:215:ARG:O	8:S6:216:LEU:HD23	4.22	0.42
56:N0:50:LYS:NZ	37:7:76:A:N3	299.16	0.42
36:1:1774:C:H2'	36:1:1775:G:O4'	2.20	0.42
63:N7:51:LEU:CB	63:N7:65:ARG:HD2	2.50	0.42
20:C8:61:LEU:HD22	20:C8:61:LEU:HA	1.83	0.42
4:S2:130:ILE:O	4:S2:134:LEU:HD22	2.20	0.42
1:2:1172:G:C5	1:2:1173:C:C4	3.08	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:129:ARG:HG3	13:C1:131:ILE:HD13	2.02	0.42
1:2:169:A:OP1	8:S6:137:ARG:HG3	2.20	0.42
35:SM:58:GLU:OE2	35:SM:62:ARG:HD2	5.04	0.42
36:1:1213:G:C2	36:1:1293:U:C2	3.08	0.42
58:N2:19:VAL:O	58:N2:22:PRO:HD2	2.20	0.42
36:1:2578:U:H2'	36:1:2579:G:O4'	2.20	0.42
28:D6:47:ALA:O	28:D6:50:VAL:HG12	2.20	0.42
12:C0:31:LYS:H	12:C0:38:LYS:HA	3.99	0.42
36:1:604:G:C2	36:1:605:U:C2	3.07	0.42
1:6:602:U:H2'	1:6:603:U:C6	2.55	0.42
9:S7:31:SER:O	9:S7:35:LYS:HB3	2.20	0.42
36:5:1818:U:H2'	36:5:1819:U:H6	1.83	0.42
36:1:1044:U:OP1	47:M0:90:ARG:NH1	2.53	0.42
30:D8:50:GLU:O	30:D8:51:ASN:HB2	2.50	0.42
12:C0:56:LYS:HB2	12:C0:67:THR:HG23	6.64	0.42
36:1:2146:C:O2'	36:1:2147:A:H5'	2.20	0.42
1:6:1720:G:O6	86:6:2092:OHX:N4	2.52	0.42
42:L5:119:TYR:OH	42:L5:141:PRO:HD3	2.61	0.42
1:6:1715:G:C6	1:6:1716:C:N4	2.88	0.42
36:5:1728:G:H4'	36:5:1729:A:H5''	2.02	0.42
66:O0:28:LYS:HE2	66:O0:28:LYS:HB3	2.23	0.42
61:N5:57:LEU:HD23	61:N5:57:LEU:HA	4.30	0.42
7:S5:216:GLU:HA	7:S5:216:GLU:OE2	3.40	0.42
1:6:15:U:H2'	1:6:16:G:O4'	2.20	0.42
61:N5:86:VAL:HG13	61:N5:90:ALA:HB3	2.85	0.42
68:O2:12:LYS:HD3	68:O2:57:TYR:C	3.24	0.42
16:C4:16:VAL:HG22	16:C4:33:LEU:HA	2.01	0.42
68:O2:91:THR:HG22	68:O2:92:TYR:CD2	2.55	0.42
11:S9:87:SER:O	11:S9:89:ASP:N	2.81	0.42
1:2:577:G:O6	35:SM:100:THR:O	2.38	0.42
36:1:2103:U:H2'	36:1:2104:A:C8	2.54	0.42
52:M6:16:VAL:HG21	52:M6:43:ILE:HG12	2.76	0.42
36:5:237:G:N2	36:5:238:A:O4'	2.53	0.42
36:5:2601:A:H2'	36:5:2602:G:C8	2.55	0.42
1:2:621:A:N3	1:2:1107:G:H1'	2.35	0.42
1:2:976:G:C5	1:2:1023:A:C2	3.07	0.42
24:D2:28:ARG:HG3	24:D2:29:PRO:HA	2.00	0.42
13:C1:118:GLN:HG3	13:C1:121:ASP:OD2	2.20	0.42
39:L2:180:LEU:HD23	39:L2:180:LEU:HA	1.85	0.42
38:4:93:U:H2'	38:4:94:C:C6	2.55	0.42
34:SR:117:LYS:H	34:SR:117:LYS:HD2	1.85	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1344:A:H2'	1:6:1345:A:C8	2.54	0.42
36:1:1311:G:O2'	36:1:2381:G:H4'	2.20	0.42
36:1:255:A:O2'	36:1:256:G:H5'	2.19	0.42
34:SR:107:LYS:HB2	34:SR:128:ASP:HB3	3.05	0.42
36:1:3010:U:O2'	36:1:3011:A:H2'	2.19	0.42
36:1:3011:A:C5	40:L3:13:HIS:CD2	3.08	0.42
36:1:1677:G:H5'	58:N2:97:SER:HB2	2.02	0.42
35:SM:83:LYS:O	35:SM:84:LYS:HB2	4.85	0.42
30:D8:32:PHE:CE2	30:D8:38:ARG:HB3	2.54	0.42
14:C2:23:THR:CB	14:C2:26:ASP:HB2	2.49	0.42
1:2:517:U:H2'	1:2:518:A:O4'	2.19	0.42
1:6:1643:U:H2'	1:6:1644:C:O4'	2.20	0.42
36:1:3312:U:H2'	36:1:3313:U:H5''	2.02	0.42
1:6:1740:A:H2'	1:6:1741:U:C6	2.55	0.42
3:S1:151:LYS:O	3:S1:151:LYS:HG3	2.56	0.42
3:S1:179:SER:OG	3:S1:179:SER:O	2.36	0.42
36:1:2536:A:O5'	36:1:2536:A:H8	2.02	0.42
39:L2:95:SER:O	39:L2:100:ASN:ND2	3.20	0.42
36:1:1745:C:H2'	36:1:1746:U:O4'	2.19	0.42
64:N8:95:SER:O	64:N8:99:ALA:HB2	2.20	0.42
2:S0:89:PHE:HE2	2:S0:177:LEU:HB3	1.90	0.42
1:6:1120:U:H2'	1:6:1121:C:C6	2.54	0.42
16:C4:39:ILE:H	16:C4:39:ILE:HG12	2.94	0.42
36:5:3166:C:H2'	36:5:3166:C:O2	2.19	0.42
42:L5:273:ARG:O	42:L5:273:ARG:HG2	2.75	0.42
7:S5:51:VAL:HA	7:S5:131:GLN:CD	2.39	0.42
7:S5:164:PRO:O	7:S5:167:ARG:HB2	2.20	0.42
42:L5:290:ILE:O	42:L5:293:LEU:N	4.64	0.42
62:N6:5:SER:OG	62:N6:6:LEU:N	2.53	0.42
1:6:990:C:H2'	1:6:991:G:O4'	2.20	0.42
12:C0:1:MET:N	1:6:1217:A:OP2	430.85	0.42
6:S4:17:HIS:HB2	6:S4:108:ARG:HA	2.02	0.42
6:S4:77:ARG:HD2	6:S4:82:TYR:CE1	4.55	0.42
38:8:85:G:C2	38:8:87:G:N2	2.88	0.42
36:1:979:U:H1'	36:1:980:A:C5	2.54	0.42
60:N4:4:GLU:HG2	60:N4:30:ARG:CD	2.44	0.42
3:S1:173:THR:O	3:S1:177:GLN:HB2	6.30	0.42
10:S8:39:GLY:HA2	10:S8:61:GLU:HB3	2.01	0.42
10:S8:76:THR:HG21	10:S8:109:PHE:CE1	2.55	0.42
42:L5:75:LEU:HD22	42:L5:112:LYS:HE2	4.09	0.42
35:SM:74:LYS:HB2	35:SM:74:LYS:HE2	4.62	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:40:HIS:CD2	42:L5:42:ALA:H	2.24	0.42
7:S5:81:ARG:HB3	7:S5:82:PHE:HD2	2.66	0.42
7:S5:81:ARG:HG3	1:6:1615:C:C5	374.27	0.42
23:D1:74:GLN:HG2	23:D1:79:LEU:O	4.69	0.42
56:N0:155:ARG:O	56:N0:170:THR:HG22	2.20	0.42
70:O4:102:LYS:HG2	70:O4:103:LYS:HE3	4.30	0.42
36:1:2180:G:O6	86:1:4022:OHX:N1	2.53	0.42
18:C6:82:ARG:HH12	18:C6:114:ARG:HB3	1.85	0.42
18:C6:127:LYS:HG2	18:C6:128:LYS:N	3.12	0.42
40:L3:2:SER:N	36:5:2943:G:C8	235.45	0.42
33:E1:137:ASP:HB2	33:E1:138:ARG:H	1.63	0.42
21:C9:88:VAL:O	1:6:1467:C:O2'	363.41	0.42
8:S6:64:LYS:O	8:S6:67:VAL:HG22	2.20	0.42
36:1:3195:U:O2'	36:1:3196:U:H5'	2.19	0.42
56:N0:103:VAL:O	56:N0:106:LEU:HB3	2.58	0.42
36:5:1587:A:C4	36:5:1590:G:C5	3.08	0.42
1:2:1535:U:H1'	1:2:1536:G:C2	2.55	0.42
74:O8:17:ARG:HG2	74:O8:19:ASP:OD2	3.72	0.42
36:5:1560:G:O2'	36:5:1561:G:P	2.77	0.42
36:5:1578:C:H3'	36:5:1579:C:C6	2.55	0.42
36:1:2723:U:H5'	57:N1:88:ARG:O	2.20	0.42
9:S7:99:LEU:HA	9:S7:100:PRO:HD2	2.41	0.42
36:5:3353:G:O2'	36:5:3356:G:OP2	2.38	0.42
1:6:496:G:O6	1:6:497:G:N2	2.50	0.42
26:D4:120:GLY:HA2	1:6:85:A:O2'	334.79	0.42
1:6:452:A:OP2	86:6:2060:OHX:N1	2.53	0.42
61:N5:135:ILE:HD12	61:N5:135:ILE:HG23	1.85	0.42
58:N2:28:PHE:CE1	58:N2:83:TYR:HE2	2.74	0.42
68:O2:44:ARG:HD2	68:O2:44:ARG:HH11	1.80	0.42
35:SM:101:ASP:HB3	35:SM:102:THR:H	1.63	0.42
36:1:900:G:H2'	36:1:901:G:H8	1.85	0.42
1:6:1431:C:H1'	1:6:1437:U:O4	2.20	0.42
86:1:4132:OHX:N1	86:1:4164:OHX:N4	2.68	0.42
36:1:2849:C:N4	36:1:2850:G:C6	2.88	0.42
53:M7:151:THR:HG22	53:M7:152:GLU:N	2.49	0.42
29:D7:30:SER:O	1:6:959:U:H5	354.76	0.42
20:C8:23:ASP:OD1	20:C8:25:ASN:ND2	3.59	0.42
45:L8:78:PHE:C	45:L8:80:TYR:H	2.21	0.42
1:6:1122:G:C6	86:6:2160:OHX:N6	2.88	0.42
39:L2:87:PHE:O	39:L2:88:ILE:HD13	2.20	0.42
67:O1:102:LYS:HA	67:O1:102:LYS:HE3	5.05	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:198:MET:SD	19:C7:85:VAL:HG11	2.60	0.42
58:N2:48:GLY:C	58:N2:50:LEU:H	2.71	0.42
36:1:1355:A:H1'	36:1:1356:U:OP2	2.20	0.42
4:S2:49:LYS:HD3	4:S2:49:LYS:HA	1.68	0.42
38:4:12:A:C2	53:M7:120:ASN:ND2	2.88	0.42
1:2:61:A:C6	1:2:62:A:C6	3.08	0.42
36:1:2584:G:H5''	36:1:2585:G:OP2	2.20	0.42
1:6:483:A:N6	1:6:504:U:H3	2.17	0.42
47:M0:72:ALA:HB2	47:M0:155:ALA:HB2	2.26	0.42
36:1:2242:A:H5'	39:L2:243:THR:HG23	2.01	0.42
36:1:1394:A:H4'	36:1:1420:C:H4'	2.02	0.42
36:5:2376:G:C6	36:5:2377:G:O6	2.73	0.42
1:2:1534:G:OP2	27:D5:74:SER:OG	2.32	0.42
1:2:1313:A:C2	1:2:1315:U:H4'	2.54	0.42
36:1:817:A:C4	73:O7:13:ASN:O	2.73	0.42
51:M5:91:GLU:HG3	51:M5:91:GLU:H	2.89	0.42
52:M6:155:LYS:HB2	52:M6:155:LYS:HE3	2.00	0.42
36:5:688:G:H8	36:5:688:G:O5'	2.03	0.42
1:2:1454:G:C4	1:2:1455:G:C8	3.07	0.42
1:2:372:G:H1'	1:2:612:U:O2	2.19	0.42
40:L3:227:GLU:CG	40:L3:270:ARG:HE	2.70	0.41
12:C0:40:LEU:O	12:C0:40:LEU:HD22	3.29	0.41
7:S5:53:VAL:HB	7:S5:59:VAL:HG22	2.02	0.41
38:4:70:G:C8	38:4:70:G:OP2	2.72	0.41
36:1:20:A:OP2	71:O5:90:ARG:NH1	2.53	0.41
71:O5:88:LEU:HD23	71:O5:88:LEU:HA	1.59	0.41
1:6:1257:U:O2'	1:6:1258:U:O2	2.35	0.41
36:1:2407:C:H2'	36:1:2408:U:C6	2.55	0.41
27:D5:95:HIS:CG	27:D5:96:SER:N	2.87	0.41
18:C6:27:GLY:HA2	18:C6:63:ILE:O	2.20	0.41
51:M5:35:VAL:HG23	36:5:1543:G:P	140.66	0.41
40:L3:286:GLY:O	40:L3:320:ASP:HA	2.92	0.41
4:S2:87:GLN:HA	4:S2:95:ARG:O	2.20	0.41
3:S1:222:LYS:HD3	3:S1:222:LYS:HA	1.86	0.41
6:S4:73:ASP:HB3	6:S4:164:LEU:HD22	2.23	0.41
40:L3:55:THR:HG22	40:L3:73:VAL:HG23	3.08	0.41
41:L4:276:LEU:HA	41:L4:277:PRO:HD3	2.17	0.41
18:C6:123:ARG:HA	18:C6:124:PRO:HD2	1.67	0.41
8:S6:160:ARG:NH1	1:6:68:A:OP1	345.67	0.41
1:2:447:U:C4	1:2:448:C:C4	3.08	0.41
13:C1:109:VAL:HG11	13:C1:125:VAL:HG11	2.11	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:11:LEU:HD22	24:D2:72:CYS:HB2	2.60	0.41
17:C5:119:PHE:HA	35:SM:57:ASN:ND2	2.82	0.41
1:6:292:U:H2'	1:6:293:U:C6	2.55	0.41
6:S4:248:ILE:HD12	11:S9:71:PHE:CD2	3.50	0.41
36:5:2964:G:N1	36:5:2968:G:C6	2.88	0.41
28:D6:44:ILE:CD1	28:D6:44:ILE:H	2.24	0.41
15:C3:92:ILE:CA	15:C3:122:ILE:HD11	3.23	0.41
25:D3:85:ALA:HA	25:D3:120:VAL:HG13	2.02	0.41
16:C4:92:LYS:HE2	16:C4:92:LYS:HB2	2.63	0.41
12:C0:33:GLU:O	12:C0:34:GLU:HB2	2.20	0.41
1:2:1298:U:H4'	4:S2:212:LYS:NZ	2.35	0.41
36:5:430:U:H2'	36:5:431:U:O4'	2.20	0.41
3:S1:30:PHE:CD1	3:S1:96:LEU:HD22	2.54	0.41
1:2:953:G:OP2	15:C3:94:LYS:NZ	2.53	0.41
11:S9:111:THR:O	11:S9:115:LYS:HB2	2.55	0.41
48:M1:106:ILE:HD12	48:M1:112:LEU:HD13	3.80	0.41
70:O4:46:ASP:OD1	70:O4:88:ARG:NH2	2.53	0.41
36:1:3268:A:OP2	53:M7:181:ARG:NH1	2.52	0.41
79:Q3:54:ILE:HG12	79:Q3:54:ILE:O	4.88	0.41
1:2:159:U:H1'	8:S6:87:ARG:NH1	2.34	0.41
6:S4:212:ASP:OD2	6:S4:216:ASN:HB2	2.20	0.41
36:5:41:G:H4'	36:5:2410:U:H2'	2.02	0.41
55:M9:8:LYS:HD2	55:M9:22:VAL:HG23	2.01	0.41
54:M8:43:PRO:HA	54:M8:46:LYS:HD2	2.02	0.41
8:S6:3:LEU:O	8:S6:15:THR:HA	2.36	0.41
2:S0:50:VAL:O	2:S0:53:THR:HB	2.49	0.41
1:6:577:G:C3'	1:6:577:G:C8	3.03	0.41
38:4:123:G:C6	38:4:131:A:N1	2.88	0.41
59:N3:80:ARG:HB2	59:N3:99:ALA:HB3	2.02	0.41
36:1:2220:A:C6	36:1:2221:G:C6	3.08	0.41
3:S1:31:ASP:OD2	3:S1:45:LYS:HE2	6.65	0.41
68:O2:22:SER:HA	68:O2:28:VAL:CG1	2.50	0.41
68:O2:101:SER:HB3	36:5:1389:G:OP1	130.42	0.41
36:1:2902:A:P	46:L9:170:LYS:HE3	2.60	0.41
74:O8:11:PHE:O	74:O8:15:THR:HG23	2.20	0.41
36:5:1278:A:H2'	36:5:1279:C:H5'	2.01	0.41
31:D9:16:LYS:HG2	1:6:1596:C:OP1	400.08	0.41
40:L3:262:TRP:HE1	52:M6:66:LYS:NZ	2.17	0.41
1:6:1452:U:H2'	1:6:1453:G:H8	1.85	0.41
29:D7:20:LYS:HG2	29:D7:21:LEU:HD23	2.02	0.41
45:L8:116:VAL:HG13	45:L8:121:SER:O	2.19	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:889:U:H4'	1:6:989:U:OP1	2.20	0.41
36:5:2861:U:H2'	36:5:2862:U:C6	2.55	0.41
36:1:2564:G:C6	36:1:2565:U:N3	2.88	0.41
5:S3:80:ALA:HB3	5:S3:83:THR:CG2	2.50	0.41
2:S0:164:ASN:HA	2:S0:170:ILE:HD11	3.99	0.41
36:1:241:G:C5	36:1:242:C:C4	3.08	0.41
36:1:40:A:N7	64:N8:29:PRO:O	2.53	0.41
69:O3:24:ASN:OD1	69:O3:26:ASN:HB2	3.12	0.41
42:L5:51:LEU:HB2	42:L5:144:VAL:CG1	2.50	0.41
1:2:240:U:OP1	1:2:240:U:H4'	2.19	0.41
9:S7:77:LEU:O	9:S7:81:LEU:N	2.81	0.41
10:S8:157:GLU:O	10:S8:160:PHE:HB2	2.20	0.41
36:1:830:A:H2'	36:1:831:G:O4'	2.20	0.41
1:2:587:C:OP2	32:E0:23:LYS:NZ	2.48	0.41
1:6:1410:A:H2'	1:6:1411:A:O4'	2.20	0.41
63:N7:6:LYS:HB3	63:N7:6:LYS:HE2	1.89	0.41
36:1:3290:G:C6	36:1:3291:G:C5	3.07	0.41
1:2:1125:A:C5	1:2:1126:G:H1'	2.55	0.41
36:1:331:G:O6	86:1:4043:OHX:N5	2.53	0.41
48:M1:115:LYS:HB3	48:M1:116:TYR:H	1.50	0.41
36:5:8:C:H2'	36:5:9:U:O4'	2.20	0.41
36:5:3096:C:H2'	36:5:3097:C:C6	2.55	0.41
23:D1:70:ASN:OD1	23:D1:70:ASN:N	2.80	0.41
36:5:1034:U:H2'	36:5:1035:G:O4'	2.19	0.41
36:5:1020:G:H2'	36:5:1021:G:O4'	2.20	0.41
21:C9:102:ARG:O	21:C9:105:LEU:N	3.27	0.41
36:1:1613:A:H2'	36:1:1614:C:H6	1.85	0.41
36:1:1072:G:C4	36:1:1087:G:C2	3.08	0.41
41:L4:302:ALA:HB2	54:M8:39:ARG:HH12	2.15	0.41
8:S6:120:GLU:OE1	8:S6:125:THR:HG22	4.80	0.41
1:6:542:A:H1'	1:6:543:C:P	2.60	0.41
48:M1:101:ASN:HB3	48:M1:129:VAL:O	2.20	0.41
86:2:2090:OHX:N5	86:2:2131:OHX:N2	2.68	0.41
86:2:2090:OHX:N5	86:2:2131:OHX:N6	2.68	0.41
67:O1:12:TYR:OH	67:O1:43:HIS:HB3	2.77	0.41
67:O1:13:THR:HG22	67:O1:72:ARG:NH1	2.35	0.41
31:D9:44:ARG:NH2	1:6:1280:C:H5'	399.67	0.41
36:1:2746:A:H2'	36:1:2747:A:O4'	2.20	0.41
36:1:371:G:H4'	36:1:396:A:N1	2.34	0.41
34:SR:127:ARG:C	34:SR:129:LYS:H	2.72	0.41
36:1:360:G:H2'	36:1:361:A:C8	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1661:G:H2'	36:1:1662:G:C8	2.54	0.41
36:1:3215:A:C4	36:1:3259:U:C2	3.09	0.41
52:M6:192:LYS:O	52:M6:195:ALA:HB3	2.20	0.41
51:M5:175:ASN:H	51:M5:184:LYS:HB2	2.50	0.41
39:L2:5:ILE:HG22	39:L2:208:ASP:O	2.40	0.41
39:L2:4:VAL:HG13	39:L2:8:GLN:HG3	3.85	0.41
10:S8:76:THR:HG21	10:S8:105:ASP:O	5.93	0.41
1:2:567:A:H4'	32:E0:13:LYS:HB3	2.02	0.41
45:L8:161:GLU:CD	51:M5:26:ARG:HH12	2.23	0.41
40:L3:173:GLN:NE2	40:L3:175:LYS:O	2.47	0.41
1:6:1565:C:H2'	1:6:1566:U:O4'	2.20	0.41
36:1:1426:C:H4'	41:L4:40:THR:HB	2.01	0.41
33:E1:82:LYS:HB3	33:E1:82:LYS:HE3	4.75	0.41
39:L2:174:ARG:HA	79:Q3:69:TYR:CE2	2.99	0.41
63:N7:36:HIS:HB3	63:N7:40:HIS:CE1	3.46	0.41
86:5:3995:OHX:N6	86:5:4084:OHX:N2	2.68	0.41
40:L3:221:THR:HG22	40:L3:272:TYR:H	2.01	0.41
7:S5:113:ILE:HG23	7:S5:191:ALA:HB2	2.02	0.41
11:S9:24:LEU:HD23	11:S9:27:GLU:OE1	2.20	0.41
18:C6:47:LYS:HZ1	18:C6:114:ARG:NH2	2.13	0.41
36:1:2687:G:N7	86:1:3901:OHX:N5	2.67	0.41
38:8:104:A:H3'	38:8:105:A:H5''	2.01	0.41
46:L9:99:ILE:HG22	46:L9:101:VAL:HG23	2.61	0.41
1:2:1433:G:H22	31:D9:45:GLU:CD	2.23	0.41
13:C1:128:CYS:HB2	13:C1:136:ARG:O	5.19	0.41
8:S6:98:ARG:HD3	8:S6:99:GLY:H	2.35	0.41
63:N7:27:LYS:HA	63:N7:28:PRO:HD2	2.15	0.41
17:C5:33:PHE:CD2	17:C5:87:PRO:HD2	2.55	0.41
17:C5:119:PHE:CE1	20:C8:119:ILE:HG23	2.55	0.41
2:S0:9:LEU:HD13	2:S0:10:THR:C	2.92	0.41
2:S0:179:ARG:HD2	2:S0:183:ARG:HD2	2.01	0.41
20:C8:16:ARG:HG3	20:C8:20:THR:O	2.20	0.41
1:2:237:C:C5'	1:2:238:U:H5'	2.46	0.41
47:M0:153:ARG:HG3	47:M0:165:ILE:CD1	5.25	0.41
1:6:638:U:H3'	1:6:639:U:H5'	2.02	0.41
1:2:1051:G:O2'	1:2:1052:U:P	2.78	0.41
4:S2:139:ILE:CD1	4:S2:191:ALA:HB1	2.49	0.41
75:O9:9:ILE:HA	75:O9:9:ILE:HD13	1.82	0.41
46:L9:189:GLU:C	46:L9:191:LEU:H	2.24	0.41
12:C0:31:LYS:HA	12:C0:37:THR:O	2.32	0.41
1:2:1142:A:H2'	1:2:1143:A:C8	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:O5:47:VAL:O	71:O5:51:ILE:HG13	2.20	0.41
43:L6:148:GLU:OE2	43:L6:151:LYS:HE2	2.20	0.41
43:L6:149:ILE:C	43:L6:151:LYS:H	2.23	0.41
58:N2:36:TYR:O	58:N2:40:HIS:HB2	2.20	0.41
36:1:3190:C:H2'	36:1:3191:G:H8	1.84	0.41
34:SR:156:VAL:HA	34:SR:169:ILE:HG22	2.48	0.41
36:5:943:U:C2	36:5:1432:C:C5	3.08	0.41
45:L8:153:ILE:HA	45:L8:197:VAL:HG12	3.33	0.41
45:L8:151:VAL:HA	45:L8:199:ALA:HB2	2.42	0.41
36:5:1658:G:C2	36:5:1796:G:N1	2.88	0.41
40:L3:257:PRO:O	40:L3:259:HIS:N	2.78	0.41
36:1:1472:U:H2'	36:1:1473:G:H8	1.84	0.41
1:6:1092:A:C5	1:6:1094:G:C8	3.09	0.41
36:1:2681:U:H6	36:1:2681:U:O5'	2.04	0.41
38:8:91:C:H2'	38:8:92:A:H8	1.84	0.41
36:5:247:C:H3'	36:5:248:U:O4'	2.20	0.41
14:C2:66:VAL:HB	14:C2:67:THR:H	1.51	0.41
42:L5:90:HIS:HB3	42:L5:226:TYR:CE1	2.55	0.41
2:S0:88:LYS:HE2	2:S0:201:LEU:HD21	4.63	0.41
42:L5:211:LEU:HA	42:L5:211:LEU:HD23	1.71	0.41
1:6:1758:U:H2'	1:6:1759:C:C6	2.55	0.41
1:6:1367:G:C6	1:6:1368:G:N7	2.88	0.41
1:2:246:G:C6	1:2:247:A:C6	3.08	0.41
36:5:65:A:H4'	36:5:66:A:O5'	2.20	0.41
42:L5:12:TYR:OH	36:5:2688:U:OP1	299.52	0.41
36:5:926:A:H2'	36:5:927:C:C6	2.55	0.41
1:2:773:C:OP1	6:S4:22:LYS:N	2.53	0.41
36:5:372:A:C6	36:5:373:A:C6	3.07	0.41
1:2:46:A:N6	1:2:433:C:H4'	2.35	0.41
44:L7:236:ILE:HA	44:L7:236:ILE:HD12	1.87	0.41
52:M6:108:ILE:HG21	52:M6:108:ILE:HD13	2.13	0.41
36:5:687:U:H2'	36:5:688:G:C8	2.55	0.41
15:C3:40:TYR:CE2	15:C3:53:LEU:HD23	2.55	0.41
1:6:976:G:O6	86:6:2078:OHX:N6	2.53	0.41
42:L5:67:SER:HB2	57:N1:31:LEU:HD11	3.94	0.41
39:L2:90:ALA:HB2	39:L2:101:VAL:HG13	2.01	0.41
74:O8:30:LYS:NZ	74:O8:40:GLN:HE22	4.90	0.41
36:1:1823:A:C6	36:1:1824:U:C4	3.08	0.41
36:1:869:G:H1'	36:1:891:G:N2	2.34	0.41
42:L5:31:TYR:O	42:L5:35:ARG:HD2	2.20	0.41
35:SM:49:LYS:HG3	35:SM:50:ASN:N	3.50	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:N3:26:ALA:HB1	59:N3:115:THR:O	2.69	0.41
1:2:1358:G:H2'	1:2:1359:C:C6	2.55	0.41
36:1:522:A:OP1	86:1:3944:OHX:N5	2.53	0.41
36:1:2925:C:H2'	36:1:2926:A:O4'	2.20	0.41
36:1:1205:A:H4'	36:1:2835:U:O2'	2.20	0.41
36:5:1845:G:C6	36:5:1849:C:C6	3.08	0.41
36:1:1172:G:H2'	36:1:1173:U:H6	1.85	0.41
36:1:1542:G:C5	36:1:1552:G:N2	2.87	0.41
44:L7:38:LYS:HA	44:L7:38:LYS:HD2	4.28	0.41
48:M1:40:LEU:O	48:M1:40:LEU:HD22	2.19	0.41
15:C3:46:THR:O	15:C3:50:ILE:HD12	2.20	0.41
24:D2:44:HIS:CG	24:D2:101:TYR:HE1	2.38	0.41
36:5:3181:C:H2'	36:5:3182:G:C8	2.55	0.41
36:5:3181:C:H2'	36:5:3182:G:O4'	2.20	0.41
25:D3:79:ASN:HB2	25:D3:81:LYS:H	4.67	0.41
28:D6:12:LYS:HB3	28:D6:13:LYS:H	4.42	0.41
37:3:1:G:C2	37:3:2:G:C8	3.09	0.41
49:M3:151:ALA:O	49:M3:153:ASP:N	4.41	0.41
11:S9:129:ILE:HA	11:S9:134:ILE:HG12	3.44	0.41
16:C4:89:THR:O	16:C4:128:LYS:HG3	2.21	0.41
5:S3:71:LEU:O	5:S3:75:LYS:HG2	2.19	0.41
47:M0:175:ASN:C	47:M0:176:LEU:HG	3.75	0.41
18:C6:52:LEU:HA	18:C6:60:PHE:CE1	3.09	0.41
36:5:291:C:H2'	36:5:292:U:C6	2.55	0.41
19:C7:21:TYR:N	19:C7:22:PRO:HD2	2.35	0.41
2:S0:74:VAL:HG12	2:S0:76:ILE:HG12	2.57	0.41
44:L7:208:SER:HB2	36:5:1334:U:H1'	241.10	0.41
44:L7:150:LYS:HE2	44:L7:151:ARG:NH1	2.35	0.41
36:5:1591:G:C1'	36:5:1798:A:H61	2.33	0.41
70:O4:37:LYS:HE3	70:O4:58:ARG:HH22	1.85	0.41
6:S4:99:PHE:CE1	6:S4:111:VAL:HG13	2.56	0.41
19:C7:6:THR:OG1	19:C7:8:THR:HG23	4.52	0.41
42:L5:109:THR:O	42:L5:112:LYS:N	2.53	0.41
36:1:1307:G:OP1	52:M6:59:ARG:NH1	2.53	0.41
63:N7:10:VAL:O	63:N7:83:THR:HB	2.93	0.41
63:N7:85:TYR:CE2	63:N7:129:TRP:CD2	4.04	0.41
36:1:1295:G:OP1	56:N0:84:ARG:HG3	2.21	0.41
9:S7:162:ILE:O	9:S7:165:LYS:N	3.48	0.41
1:2:327:U:H2'	1:2:328:A:H8	1.85	0.41
43:L6:55:LEU:HB2	43:L6:64:LEU:HD13	2.26	0.41
40:L3:221:THR:O	40:L3:272:TYR:HA	2.49	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1014:U:C2'	36:1:1015:U:H5''	2.48	0.41
49:M3:124:ILE:HD11	49:M3:126:PHE:HE1	1.85	0.41
18:C6:82:ARG:NH1	18:C6:114:ARG:HB2	3.95	0.41
53:M7:52:LEU:HD13	53:M7:88:VAL:CG1	2.47	0.41
57:N1:120:LYS:C	57:N1:122:GLN:H	2.24	0.41
40:L3:105:VAL:HG22	40:L3:147:GLU:HB3	2.01	0.41
1:6:168:A:H2'	1:6:169:A:C8	2.55	0.41
1:6:74:U:H5''	1:6:75:U:OP2	2.20	0.41
36:5:1192:C:C5	86:5:4085:OHX:N4	2.87	0.41
49:M3:89:TYR:HB2	71:O5:111:PHE:HE1	3.70	0.41
1:2:1085:G:N2	1:2:1088:A:OP2	2.45	0.41
1:6:1207:C:N4	1:6:1456:C:H5	2.14	0.41
7:S5:27:THR:HG22	18:C6:30:LYS:HE2	2.02	0.41
34:SR:23:LEU:HB2	34:SR:293:ALA:HB2	2.71	0.41
68:O2:27:ARG:HB3	36:5:655:C:P	160.97	0.41
53:M7:59:PRO:HG3	53:M7:76:PHE:CG	2.78	0.41
1:2:1339:C:O2'	1:2:1340:U:OP1	2.38	0.41
32:E0:44:PHE:HD2	32:E0:54:ARG:HH22	7.91	0.41
1:2:710:U:H2'	1:2:711:U:H5'	2.01	0.41
61:N5:58:ASP:OD2	61:N5:59:SER:N	3.70	0.41
66:O0:18:ILE:HA	66:O0:18:ILE:HD12	1.86	0.41
76:Q0:77:ILE:HG23	76:Q0:78:ILE:HG22	5.29	0.41
1:6:16:G:H2'	1:6:17:C:C6	2.55	0.41
64:N8:66:ALA:HB1	64:N8:69:TRP:HB2	4.40	0.41
49:M3:57:VAL:HG12	49:M3:69:VAL:HG22	2.03	0.41
9:S7:160:GLN:HA	9:S7:163:ASP:HB2	3.65	0.41
14:C2:66:VAL:HG11	14:C2:71:ILE:HG21	2.02	0.41
36:5:1108:U:H2'	36:5:1109:U:C6	2.55	0.41
36:5:2880:U:H2'	36:5:2881:C:C6	2.55	0.41
15:C3:78:ASN:HB3	15:C3:80:LEU:HD22	3.83	0.41
36:5:2265:C:H2'	36:5:2266:U:O4'	2.21	0.41
3:S1:83:LYS:HE2	3:S1:104:ASP:HB3	2.02	0.41
36:1:209:A:C4	41:L4:162:THR:HG21	2.56	0.41
36:1:747:A:H2'	36:1:748:U:C6	2.55	0.41
6:S4:66:MET:HG3	1:6:454:U:N1	373.41	0.41
36:1:113:C:H3'	36:1:154:U:O4	2.20	0.41
36:5:3238:G:N2	36:5:3250:U:H1'	2.36	0.41
13:C1:124:THR:O	13:C1:140:VAL:HG12	2.19	0.41
36:5:2620:G:O6	86:5:4236:OHX:N4	2.54	0.41
39:L2:108:PRO:O	39:L2:111:THR:OG1	2.29	0.41
44:L7:147:LEU:HA	44:L7:147:LEU:HD23	2.17	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:Q1:22:ALA:O	77:Q1:25:LYS:HG3	2.21	0.41
86:5:4005:OHX:N4	86:5:4195:OHX:N2	2.68	0.41
36:1:1657:C:C5	36:1:1797:A:H5''	2.54	0.41
36:1:123:A:C6	36:1:150:A:C5	3.08	0.41
30:D8:54:LEU:HA	30:D8:54:LEU:HD12	1.93	0.41
1:6:909:U:H2'	1:6:910:C:H6	1.85	0.41
1:6:1642:G:H2'	1:6:1643:U:C6	2.55	0.41
36:5:880:G:C8	36:5:882:A:C8	3.08	0.41
36:5:1678:G:N2	36:5:1679:A:H1'	2.36	0.41
36:5:2634:U:O2	36:5:2645:G:C6	2.73	0.41
1:2:1612:U:H4'	7:S5:96:SER:OG	2.20	0.41
29:D7:11:THR:C	29:D7:13:ALA:H	2.24	0.41
36:5:3038:U:H2'	36:5:3039:C:O4'	2.21	0.41
36:5:726:G:H5'	36:5:727:G:P	2.59	0.41
86:2:2083:OHX:N3	86:2:2085:OHX:N1	2.69	0.41
36:1:2630:C:H3'	57:N1:4:SER:OG	2.19	0.41
36:1:552:G:H5''	36:1:553:U:OP2	2.20	0.41
36:5:3264:G:N1	36:5:3265:C:C2	2.88	0.41
6:S4:123:LEU:HA	6:S4:123:LEU:HD12	1.89	0.41
36:5:139:G:H2'	36:5:140:C:C6	2.54	0.41
37:7:22:A:C6	37:7:23:A:C6	3.09	0.41
7:S5:71:ALA:HB1	7:S5:91:GLU:HA	2.03	0.41
79:Q3:36:ARG:HB2	79:Q3:48:LYS:CE	4.31	0.41
11:S9:146:PHE:O	11:S9:147:MET:HB2	2.21	0.41
39:L2:31:THR:HG21	36:5:2521:U:C5'	182.64	0.41
5:S3:117:ARG:HA	35:SM:123:ALA:HB1	3.57	0.41
36:1:1580:A:OP1	39:L2:68:LYS:NZ	2.53	0.41
47:M0:174:THR:OG1	47:M0:175:ASN:O	5.97	0.41
63:N7:46:ILE:HD11	63:N7:49:TYR:N	2.35	0.41
1:6:1503:A:H2'	1:6:1504:G:O4'	2.20	0.41
13:C1:93:TYR:HB2	13:C1:100:TYR:HE1	2.54	0.41
47:M0:16:PRO:HG3	47:M0:128:ARG:HH11	3.03	0.41
19:C7:24:LEU:O	19:C7:25:THR:HG23	2.20	0.41
52:M6:195:ALA:O	52:M6:197:LEU:N	3.05	0.41
7:S5:117:THR:HA	7:S5:120:ILE:HD12	2.02	0.41
3:S1:35:PRO:HB3	3:S1:231:LEU:HD11	4.75	0.41
41:L4:338:LYS:HE2	41:L4:338:LYS:HA	2.03	0.41
41:L4:338:LYS:HD2	41:L4:338:LYS:N	2.34	0.41
42:L5:110:LEU:HD12	42:L5:110:LEU:HA	1.73	0.41
36:1:1463:U:H2'	36:1:1464:G:O4'	2.20	0.41
59:N3:12:ARG:HG2	59:N3:13:ILE:N	2.69	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:9:ILE:HG12	64:N8:49:HIS:CE1	4.07	0.41
50:M4:32:LEU:HA	50:M4:32:LEU:HD23	1.85	0.41
47:M0:170:LYS:HA	47:M0:170:LYS:HD3	2.49	0.41
41:L4:29:PRO:HD2	41:L4:277:PRO:HB2	2.03	0.41
36:1:2697:A:C2	36:1:2698:G:C5	3.09	0.41
1:6:1097:U:OP1	1:6:1098:U:H2'	2.20	0.41
28:D6:41:ILE:HG22	28:D6:68:TYR:CD1	2.56	0.41
36:1:1233:G:H22	36:1:1255:C:H42	1.67	0.41
11:S9:17:ARG:O	11:S9:23:ARG:NH2	3.32	0.41
46:L9:7:GLU:O	46:L9:8:GLN:HG2	2.97	0.41
1:2:1229:G:O2'	1:2:1255:G:N2	2.53	0.41
36:1:1064:A:H4'	36:1:1065:A:O5'	2.21	0.41
38:4:79:A:C6	38:4:80:A:H2	2.38	0.41
36:1:1439:U:H5''	41:L4:87:GLN:NE2	2.35	0.41
8:S6:68:LEU:HA	8:S6:68:LEU:HD13	1.88	0.41
36:5:1129:A:C6	36:5:1130:A:C6	3.08	0.41
44:L7:214:TRP:CD2	44:L7:219:LYS:HD3	3.73	0.41
71:O5:95:PHE:O	71:O5:99:GLN:HG2	2.19	0.41
46:L9:188:THR:HG22	46:L9:189:GLU:N	4.66	0.41
36:5:1104:G:N2	36:5:1105:A:C4	2.89	0.41
12:C0:14:TYR:CE1	12:C0:18:GLU:HG3	2.61	0.41
36:5:86:G:N2	36:5:99:A:OP2	2.34	0.41
36:5:731:U:O5'	36:5:731:U:H6	2.04	0.41
45:L8:91:PHE:CZ	45:L8:185:ARG:HD3	4.29	0.41
34:SR:303:ALA:HB3	34:SR:313:TRP:HZ3	2.18	0.41
36:1:3383:G:H2'	36:1:3384:U:C6	2.56	0.41
49:M3:119:TYR:HD1	49:M3:145:PHE:CE2	2.38	0.41
1:2:499:U:H2'	1:2:499:U:H6	1.48	0.41
56:N0:40:ARG:HD2	56:N0:40:ARG:HA	1.72	0.41
41:L4:77:VAL:HG12	41:L4:78:GLY:N	2.58	0.41
46:L9:161:LEU:HD22	46:L9:161:LEU:O	2.64	0.41
56:N0:1:MET:HE3	56:N0:32:SER:HB3	2.02	0.41
36:1:607:A:C4	43:L6:26:ARG:NH2	2.89	0.41
39:L2:83:HIS:NE2	39:L2:86:GLN:HB2	2.59	0.41
36:5:594:U:H2'	36:5:609:G:O6	2.20	0.41
36:5:1944:U:C2	36:5:1945:A:C8	3.08	0.41
1:6:1759:C:H2'	1:6:1760:G:O4'	2.21	0.41
36:1:112:U:H6	36:1:112:U:H2'	1.70	0.41
36:1:1467:A:N1	36:1:1511:U:O2'	2.46	0.41
70:O4:98:GLN:HE21	70:O4:101:VAL:HB	4.65	0.41
36:5:2442:G:C2	36:5:2443:A:N7	2.88	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1273:A:H3'	36:5:1274:A:H8	1.86	0.41
36:1:611:A:H1'	36:1:612:U:C6	2.55	0.41
36:1:3020:U:O4	86:1:3989:OHX:N4	2.53	0.41
37:3:71:G:H2'	37:3:72:A:C8	2.55	0.41
36:1:1924:U:OP1	77:Q1:25:LYS:NZ	2.47	0.41
36:5:815:G:N1	36:5:906:A:C2	2.88	0.41
36:1:994:G:N2	36:1:995:U:O4	2.49	0.41
4:S2:59:HIS:CD2	4:S2:238:SER:HA	2.55	0.41
1:6:386:G:C6	1:6:387:A:N6	2.89	0.41
36:5:344:A:C6	36:5:345:G:C5	3.09	0.41
1:2:1003:A:N3	1:2:1005:A:C5	2.88	0.41
36:1:2717:U:H4'	78:Q2:13:LYS:HD3	2.01	0.41
39:L2:221:LYS:O	36:5:2245:C:H4'	218.22	0.41
53:M7:170:SER:OG	53:M7:171:ARG:HG3	2.20	0.41
1:6:1388:A:C5	1:6:1411:A:C6	3.09	0.41
36:5:3264:G:N2	36:5:3265:C:H1'	2.35	0.41
1:2:1292:G:H2'	1:2:1293:U:C6	2.56	0.41
51:M5:5:LYS:HE2	72:O6:37:THR:HG22	2.02	0.41
53:M7:100:ALA:O	53:M7:103:GLU:N	2.53	0.41
36:5:1124:U:O4	86:5:4140:OHX:N5	2.53	0.41
15:C3:95:ALA:HB2	15:C3:118:ILE:HG22	2.52	0.41
36:5:3045:G:H2'	36:5:3046:A:O4'	2.21	0.41
1:2:218:A:HO2'	1:2:219:A:P	2.43	0.41
24:D2:85:ASP:O	24:D2:88:LYS:HB2	2.55	0.41
36:1:1324:U:H2'	36:1:1325:U:O4'	2.20	0.41
1:2:1261:G:N2	1:2:1262:U:O2	2.53	0.41
38:4:60:U:C4	38:4:98:U:H4'	2.56	0.41
39:L2:29:LEU:HA	39:L2:76:PHE:CE1	2.55	0.41
36:5:2405:C:O2	36:5:2819:A:N1	2.53	0.41
36:1:2561:A:N1	45:L8:32:LYS:HB2	2.34	0.41
1:2:1150:G:C6	1:2:1768:G:C5	3.08	0.41
22:D0:37:VAL:O	22:D0:41:ILE:HD13	2.20	0.41
63:N7:34:LYS:HA	63:N7:34:LYS:HD2	2.00	0.41
54:M8:94:PHE:N	54:M8:94:PHE:CD2	3.05	0.41
53:M7:168:LEU:HD12	53:M7:168:LEU:O	2.19	0.41
36:5:3288:G:O2'	36:5:3289:G:P	2.79	0.41
8:S6:116:LYS:HD3	8:S6:125:THR:HG21	3.89	0.41
36:1:1821:U:C2	70:O4:67:LYS:HB2	2.55	0.41
73:O7:87:SER:C	86:O7:103:OHX:N1	2.74	0.41
1:2:585:A:N6	1:2:586:G:O6	2.54	0.41
1:6:1255:G:OP2	1:6:1255:G:H8	2.03	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:D0:72:ASN:N	22:D0:72:ASN:OD1	2.49	0.41
41:L4:298:ALA:HB1	54:M8:133:LYS:HE3	2.02	0.41
21:C9:100:ILE:O	21:C9:104:VAL:HG23	2.73	0.41
1:2:856:A:N6	9:S7:96:ARG:HB3	2.36	0.41
19:C7:30:THR:HG22	34:SR:127:ARG:NH2	5.57	0.41
7:S5:118:LEU:O	7:S5:129:PRO:HB3	2.67	0.41
3:S1:35:PRO:HB2	3:S1:36:SER:H	1.61	0.41
1:2:584:C:OP2	86:2:2026:OHX:N6	2.53	0.41
41:L4:203:ARG:NH2	41:L4:240:PRO:HB3	2.58	0.41
50:M4:62:GLN:HG2	50:M4:62:GLN:H	3.68	0.41
1:2:729:G:C4	1:2:730:G:H8	2.38	0.41
1:6:521:A:H2'	1:6:522:U:O4'	2.19	0.41
75:O9:48:LYS:NZ	36:5:1492:G:O3'	122.29	0.41
40:L3:187:SER:HB3	40:L3:190:GLU:HB2	2.96	0.41
52:M6:110:PRO:HA	52:M6:113:ASP:OD2	2.20	0.41
36:5:945:C:O2'	36:5:1406:A:H1'	2.20	0.41
33:E1:144:CYS:C	33:E1:146:SER:H	2.60	0.41
56:N0:13:ARG:NH2	37:7:73:C:O2	302.28	0.41
40:L3:50:LYS:HE2	40:L3:328:ILE:CG2	5.12	0.41
2:S0:185:ARG:CB	23:D1:45:ALA:H	2.33	0.41
74:O8:17:ARG:O	74:O8:18:ALA:HB3	2.47	0.41
6:S4:248:ILE:O	6:S4:252:ARG:N	2.52	0.41
36:1:760:G:C2	36:1:770:G:C4	3.08	0.41
1:6:1756:A:O5'	1:6:1756:A:C8	2.72	0.41
56:N0:8:GLN:HG3	56:N0:26:ARG:NE	5.14	0.41
76:Q0:127:LEU:HD22	76:Q0:128:LYS:N	2.31	0.41
7:S5:27:THR:HA	7:S5:28:PRO:HD2	2.32	0.41
36:5:1635:G:N2	36:5:1638:A:OP2	2.46	0.41
2:S0:77:SER:OG	2:S0:82:GLY:HA3	2.20	0.41
36:1:1403:C:N4	36:1:1408:G:H1	2.15	0.41
40:L3:332:ARG:NH1	40:L3:332:ARG:HG2	2.36	0.41
1:2:1169:G:O2'	1:2:1576:A:N6	2.50	0.41
45:L8:52:TRP:CD1	45:L8:60:ARG:NH1	3.75	0.41
10:S8:147:ALA:HA	10:S8:150:ALA:CB	2.77	0.41
36:1:2707:C:H2'	36:1:2708:C:H6	1.85	0.41
1:2:756:A:N3	6:S4:12:LEU:HD12	2.35	0.41
36:5:2223:A:OP2	36:5:2223:A:H8	2.03	0.41
36:1:1184:A:C2	36:1:1323:G:C4	3.09	0.41
36:5:2810:C:OP1	86:5:4073:OHX:N3	2.54	0.41
25:D3:126:LYS:HB3	25:D3:131:SER:H	3.24	0.41
1:6:1354:G:C6	1:6:1355:C:C4	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:C2:67:THR:C	14:C2:69:ALA:H	2.24	0.41
17:C5:77:ARG:HH12	1:6:1241:G:P	382.42	0.41
26:D4:63:GLN:CB	26:D4:68:LYS:HB3	2.64	0.41
38:8:154:C:H2'	38:8:155:A:O4'	2.20	0.41
34:SR:256:THR:HG21	34:SR:261:LYS:NZ	3.55	0.41
34:SR:256:THR:OG1	34:SR:259:GLY:N	3.57	0.41
41:L4:221:ASN:OD1	36:5:211:A:H3'	79.55	0.41
12:C0:17:GLN:O	12:C0:89:ALA:HB2	2.19	0.41
2:S0:167:LYS:HB3	2:S0:168:HIS:H	1.39	0.41
36:1:112:U:O2'	36:1:113:C:H5''	2.21	0.41
35:SM:88:ARG:HG2	35:SM:91:THR:HG23	2.01	0.41
34:SR:201:THR:HB	34:SR:242:SER:HA	2.03	0.41
65:N9:7:HIS:C	65:N9:7:HIS:ND1	2.74	0.41
40:L3:130:PHE:CE1	36:5:3149:G:H4'	221.70	0.41
36:1:2603:G:O6	86:1:3867:OHX:N2	2.53	0.41
18:C6:5:PRO:HB2	18:C6:96:TYR:CE2	2.78	0.41
1:6:1220:C:H6	1:6:1220:C:OP2	2.04	0.41
1:2:1194:A:C2'	1:2:1195:C:H5'	2.51	0.41
36:5:3199:G:C2	36:5:3200:G:C8	3.09	0.41
36:5:926:A:C6	36:5:927:C:C4	3.09	0.41
1:6:1571:C:H5''	1:6:1572:G:OP2	2.20	0.41
1:6:201:G:H2'	1:6:202:A:O4'	2.20	0.41
36:1:906:A:OP1	86:1:4000:OHX:N1	2.54	0.41
36:1:3030:G:C6	36:1:3031:G:C4	3.09	0.41
36:5:374:A:H4'	36:5:375:A:OP1	2.20	0.41
38:8:157:U:H2'	38:8:158:U:C6	2.55	0.41
49:M3:83:ALA:HB3	49:M3:116:LEU:HD12	2.02	0.41
1:2:348:U:O4	86:2:2127:OHX:N5	2.54	0.41
73:O7:13:ASN:N	73:O7:13:ASN:HD22	4.69	0.41
56:N0:134:ASP:O	56:N0:136:LYS:HG2	2.21	0.41
36:1:321:C:H2'	36:1:322:U:H6	1.85	0.41
36:1:1388:U:H5	41:L4:186:LYS:HZ3	1.67	0.41
38:4:56:G:C2	38:4:57:C:C2	3.09	0.41
36:1:2289:U:H2'	36:1:2290:C:C6	2.56	0.41
36:1:537:A:C2	36:1:557:A:C4	3.08	0.41
61:N5:27:ARG:H	61:N5:27:ARG:HG2	1.99	0.41
36:1:1484:U:O5'	36:1:1484:U:H6	2.02	0.41
6:S4:242:LYS:N	6:S4:242:LYS:HE3	2.35	0.41
4:S2:41:LEU:HA	4:S2:41:LEU:HD22	2.21	0.41
45:L8:146:LYS:HE3	45:L8:146:LYS:HB2	1.62	0.41
36:1:3072:C:H2'	36:1:3073:A:O4'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:N3:70:ARG:O	59:N3:72:LYS:HG2	2.28	0.41
41:L4:283:THR:HG21	41:L4:288:ARG:HH12	5.73	0.41
1:2:339:C:OP2	10:S8:10:LYS:NZ	2.53	0.41
36:1:964:G:OP1	86:1:3965:OHX:N2	2.53	0.41
36:1:2208:A:C6	86:1:4044:OHX:N2	2.88	0.41
36:5:265:A:H5''	36:5:266:A:OP2	2.20	0.41
36:1:1579:C:N4	36:1:1580:A:H62	2.19	0.41
22:D0:58:LEU:HD12	22:D0:88:LYS:CD	2.51	0.41
47:M0:171:TRP:CD2	47:M0:181:TYR:CD2	3.08	0.41
52:M6:122:GLN:NE2	36:5:1181:U:H2'	272.34	0.41
50:M4:55:ARG:HD3	56:N0:70:THR:OG1	2.80	0.41
73:O7:65:ARG:HH11	73:O7:65:ARG:CG	2.27	0.41
38:8:80:A:OP2	38:8:80:A:C8	2.74	0.41
36:1:409:A:OP2	86:1:4057:OHX:N6	2.54	0.41
61:N5:56:ARG:NH2	38:8:135:G:OP2	82.45	0.41
36:1:596:C:H2'	36:1:597:G:O4'	2.21	0.41
61:N5:115:ARG:NH1	61:N5:119:THR:OG1	2.97	0.41
1:2:875:G:OP1	3:S1:158:SER:HB2	2.20	0.41
6:S4:89:VAL:O	6:S4:99:PHE:O	4.78	0.41
71:O5:9:LEU:HD23	71:O5:9:LEU:HA	1.75	0.41
41:L4:22:LEU:HA	41:L4:23:PRO:HD3	1.70	0.41
23:D1:64:GLU:OE1	29:D7:3:LEU:HB2	2.21	0.41
41:L4:38:VAL:HG21	41:L4:121:ALA:HB2	2.01	0.41
63:N7:29:HIS:HB2	63:N7:40:HIS:O	2.89	0.41
40:L3:221:THR:HG22	40:L3:273:HIS:H	2.84	0.41
36:1:1035:G:C6	36:1:1036:A:C6	3.09	0.41
1:6:1605:G:C5	1:6:1606:C:C5	3.09	0.41
52:M6:112:TYR:O	52:M6:114:LYS:N	3.33	0.41
56:N0:147:ASP:O	56:N0:149:LYS:HG2	3.02	0.41
10:S8:59:ARG:O	10:S8:60:ILE:HD13	2.20	0.41
52:M6:186:ALA:O	52:M6:187:GLU:HB2	2.20	0.41
15:C3:87:ASP:OD2	15:C3:88:LEU:N	2.48	0.41
1:6:1057:U:C5	1:6:1060:U:C2	3.09	0.41
9:S7:43:PHE:CD1	9:S7:60:ILE:HG22	2.55	0.41
36:5:187:A:C5	36:5:188:U:C4	3.09	0.41
44:L7:176:TYR:O	44:L7:178:ILE:HG13	2.73	0.41
2:S0:117:GLU:OE1	4:S2:39:THR:HG22	4.54	0.41
30:D8:19:THR:HB	30:D8:20:GLY:H	2.38	0.41
36:5:2340:U:H5''	36:5:2340:U:H6	1.85	0.41
46:L9:164:ILE:HD13	46:L9:164:ILE:HA	1.96	0.41
56:N0:117:ARG:NH2	36:5:1322:U:OP1	280.99	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D5:65:LEU:HD23	27:D5:65:LEU:HA	1.88	0.41
36:1:1601:U:H2'	36:1:1603:A:OP2	2.21	0.41
57:N1:35:LYS:H	57:N1:38:ASP:CG	2.80	0.41
51:M5:140:LYS:HA	51:M5:140:LYS:HD3	2.35	0.41
20:C8:19:ASN:ND2	35:SM:11:ASP:O	2.54	0.41
1:2:510:G:H8	1:2:510:G:OP2	2.02	0.41
4:S2:49:LYS:HB3	4:S2:243:TYR:CD1	3.50	0.41
36:1:1109:U:H2'	36:1:1110:U:C6	2.56	0.41
36:5:1782:U:H2'	36:5:1783:U:C6	2.55	0.41
25:D3:30:LYS:O	25:D3:34:LEU:HG	2.21	0.41
86:1:4056:OHX:N2	86:1:4163:OHX:N1	2.68	0.41
1:2:1672:G:H2'	1:2:1673:G:C8	2.56	0.41
24:D2:28:ARG:HB3	24:D2:28:ARG:HE	2.60	0.41
36:1:352:A:H61	36:1:365:A:H5''	1.85	0.41
28:D6:90:GLU:N	28:D6:90:GLU:CD	3.27	0.41
71:O5:105:ARG:NH2	71:O5:105:ARG:HB2	2.36	0.41
36:5:2420:C:C4	36:5:2421:U:C4	3.08	0.41
53:M7:170:SER:OG	53:M7:171:ARG:N	2.54	0.41
68:O2:35:GLN:HB3	68:O2:43:ARG:HB2	3.42	0.41
6:S4:103:TYR:CE2	6:S4:184:THR:HG22	2.55	0.41
36:1:674:G:O6	54:M8:56:LYS:NZ	2.54	0.41
36:5:1828:A:O2'	36:5:1829:G:H5'	2.20	0.41
36:5:1190:A:C8	36:5:1193:A:H1'	2.55	0.41
36:5:653:A:H1'	36:5:2360:C:C2	2.56	0.41
36:1:538:G:N2	36:1:554:A:O2'	2.54	0.41
36:5:2413:A:H2'	36:5:2414:G:H8	1.85	0.41
54:M8:166:LEU:HA	54:M8:166:LEU:HD23	1.82	0.41
59:N3:28:ASN:OD1	59:N3:28:ASN:N	2.51	0.41
63:N7:81:LEU:HD23	63:N7:81:LEU:HA	1.87	0.41
1:2:423:G:N7	86:2:2108:OHX:N3	2.67	0.41
36:1:2973:G:N7	86:1:4098:OHX:N2	2.67	0.41
36:1:2958:A:O2'	36:1:2959:C:H5'	2.20	0.41
36:5:966:U:N3	36:5:967:A:N7	2.68	0.41
36:5:1047:A:C6	36:5:1048:A:C6	3.09	0.41
36:5:3374:U:O4	86:5:4030:OHX:N5	2.53	0.41
1:6:215:A:C6	1:6:216:U:N3	2.89	0.41
36:1:3276:G:H3'	43:L6:48:ARG:HH22	1.85	0.41
36:1:3181:C:O4'	36:1:3181:C:O2	2.38	0.41
57:N1:34:TYR:CZ	57:N1:96:ILE:HG22	3.12	0.41
36:1:1804:A:H5'	70:O4:70:LYS:HB3	2.03	0.41
5:S3:75:LYS:HA	5:S3:75:LYS:HD3	2.70	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:D0:32:LYS:O	22:D0:36:ASN:HB2	2.21	0.41
36:1:1939:G:C4	36:1:1940:G:C8	3.08	0.41
36:1:2388:U:O3'	53:M7:80:LYS:HE2	2.21	0.41
38:8:81:U:O2	38:8:82:U:H3'	2.21	0.41
36:1:981:U:O2'	36:1:982:C:P	2.78	0.41
7:S5:188:LYS:HE2	7:S5:196:GLU:OE2	2.21	0.41
42:L5:25:GLU:HB2	42:L5:27:LYS:HG3	2.61	0.41
42:L5:22:ARG:HG2	42:L5:28:THR:OG1	2.20	0.41
1:2:1459:C:OP1	20:C8:126:ARG:NH1	2.54	0.41
35:SM:64:LYS:HB2	35:SM:65:THR:H	3.37	0.41
64:N8:3:SER:O	64:N8:5:PHE:N	3.82	0.41
1:6:585:A:H2'	1:6:586:G:C8	2.55	0.41
7:S5:82:PHE:CE1	30:D8:49:ARG:HD2	3.30	0.41
36:5:2820:A:C6	88:5:4246:3J6:C2	3.03	0.41
36:1:1295:G:C5	36:1:1296:C:C4	3.08	0.41
23:D1:18:SER:OG	23:D1:54:ALA:N	3.14	0.41
63:N7:77:TYR:HA	63:N7:80:LEU:HD12	3.07	0.41
39:L2:181:LYS:HB3	36:5:860:G:C6	213.99	0.41
66:O0:54:SER:HA	66:O0:57:GLU:OE2	3.40	0.41
18:C6:127:LYS:HD3	1:6:1605:G:OP2	390.22	0.41
44:L7:88:ARG:HA	44:L7:134:VAL:HG12	2.07	0.41
36:1:956:U:H2'	36:1:957:C:C6	2.55	0.41
52:M6:113:ASP:OD1	52:M6:114:LYS:HG3	2.21	0.41
1:6:1698:G:N2	1:6:1699:G:C5	2.88	0.41
36:1:2339:C:OP2	59:N3:48:ARG:HG3	2.20	0.41
33:E1:95:HIS:CE1	1:6:1245:G:N2	420.76	0.41
33:E1:148:TYR:O	33:E1:149:LYS:HG3	4.46	0.41
53:M7:69:ARG:HB3	36:5:3309:G:O4'	183.69	0.41
13:C1:132:SER:OG	13:C1:135:VAL:HB	2.95	0.41
1:2:401:A:H4'	6:S4:3:ARG:HD3	2.02	0.41
1:6:350:U:H4'	1:6:351:C:H5"	2.01	0.41
54:M8:90:ASP:O	54:M8:92:ARG:N	2.86	0.41
52:M6:121:PRO:HA	52:M6:124:LEU:HD22	2.70	0.41
6:S4:253:ASP:O	6:S4:257:ALA:N	2.54	0.41
36:5:1560:G:C6	36:5:1580:A:N6	2.89	0.41
12:C0:14:TYR:CD2	12:C0:35:ILE:HD11	2.55	0.41
36:1:1815:U:H6	36:1:1815:U:P	2.44	0.41
26:D4:127:LYS:O	26:D4:131:ARG:HG2	2.20	0.41
1:2:12:U:H3	1:2:1142:A:H61	1.68	0.41
9:S7:78:THR:HG23	9:S7:92:PHE:CE1	4.22	0.41
15:C3:136:PRO:HA	15:C3:137:PRO:HD2	1.93	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2842:U:C5	36:1:2843:U:C4	3.09	0.41
51:M5:8:GLU:O	51:M5:12:ARG:HD2	3.13	0.41
58:N2:17:VAL:N	58:N2:63:VAL:O	3.01	0.41
1:2:1365:C:H5''	18:C6:28:LEU:CD2	2.50	0.41
20:C8:72:ILE:HA	20:C8:79:TYR:CE2	4.41	0.41
41:L4:146:PRO:HB2	41:L4:147:GLU:H	1.60	0.41
36:1:1845:G:C5'	36:1:1845:G:H8	2.33	0.41
40:L3:89:VAL:HA	40:L3:160:VAL:HA	2.50	0.41
38:8:145:U:H2'	38:8:146:U:C6	2.56	0.41
42:L5:15:ARG:CZ	36:5:1003:A:H1'	289.75	0.41
36:5:2507:C:O2'	36:5:2508:U:OP1	2.26	0.41
55:M9:15:VAL:HG11	55:M9:52:LYS:HG3	2.03	0.41
36:5:767:U:H1'	36:5:768:C:H6	1.82	0.41
36:5:2147:A:H2'	36:5:2148:U:O4'	2.21	0.41
51:M5:63:ARG:HH11	51:M5:63:ARG:HD2	1.70	0.41
6:S4:95:THR:O	6:S4:95:THR:OG1	3.09	0.41
1:6:1158:C:H42	1:6:1163:A:N6	2.16	0.41
36:1:2100:A:H5'	36:1:2101:C:OP1	2.21	0.41
55:M9:5:ARG:HG3	55:M9:5:ARG:HH11	4.03	0.41
43:L6:42:LEU:HD23	43:L6:84:VAL:CG2	2.95	0.41
6:S4:34:GLY:HA3	6:S4:83:PRO:CG	2.75	0.41
36:1:2725:U:H5''	36:1:2726:C:OP2	2.21	0.41
55:M9:102:LEU:O	55:M9:106:LEU:HB2	3.15	0.41
36:1:2585:G:N3	36:1:2585:G:H2'	2.36	0.41
36:1:1781:C:H2'	36:1:1782:U:C6	2.55	0.41
1:2:1170:G:H1	1:2:1469:A:H61	1.69	0.41
1:6:1026:A:C2	1:6:1792:G:C4	3.09	0.41
36:5:1338:C:H2'	36:5:1339:C:C6	2.56	0.41
86:1:3961:OHX:N2	86:1:4140:OHX:N6	2.69	0.41
36:1:815:G:C6	36:1:906:A:C4	3.08	0.41
36:1:194:U:H3	36:1:201:A:H61	1.68	0.41
2:S0:89:PHE:CE2	2:S0:177:LEU:HB3	2.56	0.41
61:N5:27:ARG:HE	61:N5:27:ARG:HB3	2.27	0.41
49:M3:53:LEU:HB3	49:M3:96:ALA:HB2	2.62	0.41
41:L4:337:GLU:HB2	41:L4:339:LEU:HG	2.02	0.41
7:S5:138:THR:OG1	7:S5:139:ASN:N	3.22	0.41
54:M8:52:LEU:HD21	54:M8:124:LEU:HD12	2.03	0.41
52:M6:93:ALA:HB3	36:5:632:G:OP1	219.59	0.41
36:1:2378:C:H2'	36:1:2379:U:C6	2.56	0.41
1:6:1001:A:C6	1:6:1002:G:C6	3.09	0.41
8:S6:76:LEU:HD23	8:S6:76:LEU:HA	1.96	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:211:LEU:HD12	8:S6:211:LEU:O	3.59	0.41
56:N0:35:VAL:H	56:N0:35:VAL:HG23	2.59	0.41
36:5:2764:C:O5'	36:5:2764:C:H6	2.04	0.41
37:7:43:U:C4	37:7:44:C:C4	3.09	0.41
36:5:1310:G:O6	86:5:4021:OHX:N4	2.54	0.41
8:S6:32:ILE:HA	8:S6:52:ILE:HG22	2.02	0.41
66:O0:43:ILE:HB	66:O0:90:VAL:HB	2.15	0.41
36:5:3275:U:H4'	36:5:3276:G:OP2	2.13	0.41
1:2:1796:C:O5'	28:D6:5:ARG:NH1	2.54	0.41
1:2:1795:U:H3'	28:D6:5:ARG:HH12	1.85	0.41
8:S6:7:TYR:CD1	8:S6:125:THR:HA	3.41	0.41
36:1:968:G:H2'	36:1:969:C:C6	2.55	0.41
39:L2:31:THR:HG21	36:5:2521:U:H5'	183.28	0.41
5:S3:90:ARG:HH22	5:S3:94:ARG:HE	11.49	0.41
67:O1:44:MET:HB3	67:O1:77:ARG:CZ	4.13	0.41
36:1:1560:G:H2'	36:1:1561:G:H5'	2.01	0.41
37:3:36:C:O2	37:3:45:A:H1'	2.20	0.41
51:M5:93:LYS:HA	51:M5:93:LYS:HD3	1.82	0.41
19:C7:25:THR:OG1	19:C7:31:ASN:ND2	4.39	0.41
5:S3:170:THR:HG22	5:S3:171:ALA:N	2.35	0.41
36:1:979:U:O2'	36:1:980:A:N7	2.43	0.41
3:S1:72:ASP:OD2	28:D6:59:TYR:OH	2.28	0.41
8:S6:56:ASN:HB3	8:S6:60:GLY:HA2	2.02	0.41
12:C0:49:LEU:O	12:C0:54:TYR:HB2	2.21	0.41
46:L9:23:ARG:NH2	46:L9:39:LYS:O	2.51	0.41
2:S0:38:PHE:CD2	19:C7:109:LEU:HD13	3.15	0.41
2:S0:52:LYS:H	2:S0:52:LYS:HG2	1.46	0.41
20:C8:41:ARG:NH1	21:C9:38:LYS:HG3	2.35	0.41
3:S1:202:LYS:O	3:S1:202:LYS:HE3	2.21	0.41
1:2:143:G:C2	1:2:173:A:N3	2.89	0.41
62:N6:122:LYS:HE2	62:N6:122:LYS:HB3	1.82	0.41
62:N6:45:ILE:HD12	62:N6:119:ILE:CG2	2.47	0.41
41:L4:31:ARG:O	41:L4:35:VAL:HG23	2.20	0.41
22:D0:49:ASN:O	22:D0:50:LEU:HD23	5.53	0.41
36:1:1635:G:N2	36:1:1638:A:OP2	2.50	0.41
63:N7:36:HIS:H	63:N7:37:PRO:HD3	3.27	0.41
9:S7:58:LEU:HA	9:S7:58:LEU:HD23	2.01	0.41
10:S8:84:HIS:CE1	10:S8:90:LEU:HD13	3.14	0.41
45:L8:54:GLU:HG3	36:5:1558:A:OP2	149.04	0.41
16:C4:66:ASP:O	16:C4:68:ALA:N	3.76	0.41
36:1:2571:U:C1'	36:1:2572:C:H5'	2.47	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:130:ILE:HG21	44:L7:130:ILE:HD13	2.32	0.41
7:S5:200:ASN:HB3	7:S5:208:SER:HB2	4.12	0.41
21:C9:91:TYR:CD1	21:C9:91:TYR:N	2.89	0.41
75:O9:8:ARG:NH2	38:8:112:U:OP2	112.61	0.41
25:D3:63:GLN:HA	25:D3:65:ASN:H	1.86	0.41
17:C5:18:ARG:HE	17:C5:38:PRO:HD3	2.39	0.41
52:M6:14:HIS:CE1	52:M6:119:VAL:HG12	2.56	0.41
1:2:1046:G:OP1	3:S1:157:GLN:NE2	2.54	0.41
36:1:2724:U:OP1	57:N1:57:TYR:OH	2.30	0.41
1:6:1508:U:H2'	1:6:1509:C:C6	2.56	0.41
36:5:1116:G:O3'	36:5:1117:G:H4'	2.21	0.41
15:C3:125:LEU:HD22	15:C3:129:TYR:CE2	3.87	0.41
36:1:1047:A:N3	36:1:2633:U:O2'	2.51	0.41
1:2:11:A:O2'	1:2:12:U:H5'	2.21	0.41
28:D6:2:PRO:HB3	1:6:1142:A:H5"	346.84	0.41
1:6:869:A:H2'	1:6:870:C:O4'	2.20	0.41
15:C3:23:PRO:HG2	15:C3:26:PHE:HB2	2.02	0.41
61:N5:135:ILE:O	61:N5:139:ILE:HG13	5.90	0.41
11:S9:143:ILE:HD12	1:6:767:U:C5	422.93	0.41
44:L7:173:LEU:HA	44:L7:173:LEU:HD12	2.15	0.41
70:O4:85:VAL:HA	70:O4:88:ARG:HB2	4.99	0.41
14:C2:81:ASP:HA	14:C2:82:PRO:HD2	2.43	0.41
14:C2:57:ALA:O	14:C2:58:LEU:HD23	2.20	0.41
36:5:1658:G:O6	86:5:4192:OHX:N4	2.54	0.41
34:SR:192:PHE:HD1	34:SR:223:TRP:CD2	2.39	0.41
48:M1:8:PRO:HG2	48:M1:9:MET:HB3	2.02	0.41
56:N0:1:MET:HB3	56:N0:118:PHE:CZ	3.93	0.41
8:S6:3:LEU:HA	8:S6:3:LEU:HD23	2.24	0.41
26:D4:86:GLU:OE2	26:D4:90:ARG:NH1	2.53	0.41
40:L3:252:ILE:HD12	40:L3:252:ILE:HA	1.60	0.41
1:6:407:A:O2'	1:6:1671:A:N3	2.43	0.41
46:L9:92:TYR:CD1	46:L9:142:ASP:HB3	3.96	0.41
36:5:2513:U:C2	36:5:2592:G:N2	2.89	0.41
36:5:2594:C:H2'	36:5:2595:A:O4'	2.21	0.41
4:S2:157:LYS:HE3	24:D2:94:LEU:O	2.20	0.41
34:SR:295:SER:HB3	34:SR:300:THR:HB	3.70	0.41
43:L6:22:ARG:C	43:L6:23:LYS:HG2	2.41	0.41
19:C7:71:PHE:O	19:C7:73:LEU:N	2.51	0.41
15:C3:3:ARG:HA	15:C3:3:ARG:NE	2.66	0.41
1:6:1014:G:H2'	1:6:1015:U:O4'	2.21	0.41
36:1:3008:A:OP1	52:M6:72:HIS:HD2	2.03	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1181:U:H2'	1:6:1182:U:H6	1.86	0.41
6:S4:44:LEU:HD23	6:S4:44:LEU:HA	1.86	0.41
1:6:433:C:H5''	1:6:434:G:OP2	2.21	0.41
1:2:301:A:C6	1:2:302:U:C4	3.09	0.41
1:2:301:A:H2'	1:2:302:U:O4'	2.21	0.41
1:6:484:C:H42	1:6:503:G:H1	1.66	0.41
36:1:1146:C:H4'	36:1:1331:U:C4	2.55	0.41
74:O8:40:GLN:HG2	74:O8:41:THR:N	2.36	0.41
8:S6:38:GLY:HA3	8:S6:45:PHE:O	2.21	0.41
36:1:269:G:H5'	51:M5:120:TRP:CE3	2.55	0.41
1:6:619:A:N3	1:6:1141:G:H1'	2.36	0.41
86:1:3971:OHX:N4	55:M9:87:ALA:O	2.54	0.41
40:L3:277:SER:HG	40:L3:280:HIS:CE1	2.38	0.41
36:5:2936:A:H2'	36:5:2937:G:C8	2.55	0.41
1:6:526:A:N6	1:6:527:A:C6	2.89	0.41
36:5:648:C:H4'	36:5:649:A:O5'	2.20	0.41
58:N2:37:LEU:O	58:N2:41:ILE:HG13	2.20	0.41
36:5:2136:C:O2'	36:5:2137:U:H5'	2.20	0.41
58:N2:99:LYS:HB2	58:N2:102:GLU:OE1	4.39	0.41
1:6:114:C:H6	1:6:114:C:H5'	1.85	0.41
48:M1:139:THR:HA	48:M1:146:GLY:O	2.21	0.41
43:L6:48:ARG:NH2	36:5:3276:G:O2'	239.57	0.41
21:C9:73:VAL:HG11	21:C9:102:ARG:HB2	2.03	0.41
36:5:1613:A:C2	36:5:1614:C:C2	3.09	0.41
36:1:1073:U:H1'	65:N9:50:THR:HG22	2.03	0.41
3:S1:65:VAL:HG12	1:6:920:U:H5''	264.21	0.41
1:6:1627:U:C4	1:6:1628:U:C4	3.08	0.41
1:2:1369:U:O4	86:2:2095:OHX:N5	2.54	0.41
41:L4:289:ILE:O	41:L4:292:SER:HB3	2.21	0.41
10:S8:6:ASP:OD1	10:S8:8:ARG:HB2	3.57	0.41
36:1:2762:A:C6	36:1:2763:U:C4	3.08	0.41
37:3:1:G:O6	42:L5:262:LYS:HD3	2.20	0.41
37:3:22:A:C6	37:3:23:A:C6	3.08	0.41
86:5:4184:OHX:N1	86:5:4186:OHX:N2	2.69	0.41
11:S9:149:ARG:NE	1:6:765:G:N7	428.81	0.41
36:5:317:A:C2	36:5:318:A:C4	3.08	0.41
36:5:20:A:O2'	36:5:21:G:H5'	2.21	0.41
14:C2:36:LEU:C	14:C2:38:HIS:H	2.24	0.41
14:C2:89:ILE:HG12	14:C2:90:LYS:H	1.86	0.41
40:L3:291:GLU:O	40:L3:292:ALA:HB3	2.21	0.41
40:L3:53:MET:HE2	40:L3:77:THR:HG22	2.57	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:128:ARG:HH11	39:L2:128:ARG:HD3	1.64	0.41
36:5:2106:A:H2'	36:5:2107:A:H8	1.84	0.41
36:5:2224:A:N7	36:5:2225:U:H1'	2.36	0.41
42:L5:48:LYS:NZ	36:5:2748:A:O3'	243.51	0.41
16:C4:81:VAL:HG22	16:C4:115:ILE:CB	2.49	0.41
51:M5:66:VAL:O	51:M5:127:TYR:HA	2.53	0.41
13:C1:92:HIS:O	13:C1:100:TYR:HA	2.20	0.41
19:C7:21:TYR:C	19:C7:23:LYS:H	2.25	0.41
4:S2:87:GLN:OE1	4:S2:96:THR:HB	4.44	0.41
36:5:956:U:H2'	36:5:957:C:C6	2.56	0.41
4:S2:226:THR:HG23	4:S2:229:LEU:CD2	3.72	0.41
1:6:569:C:N3	1:6:574:G:N1	2.48	0.41
10:S8:138:ASN:O	10:S8:142:LYS:HG3	2.20	0.41
3:S1:158:SER:O	3:S1:161:ILE:N	2.54	0.41
3:S1:181:LEU:HD23	3:S1:181:LEU:HA	4.35	0.41
3:S1:225:VAL:O	3:S1:229:MET:HG2	2.85	0.41
3:S1:152:ARG:H	3:S1:152:ARG:HG3	4.31	0.41
3:S1:35:PRO:HG3	3:S1:98:THR:O	2.20	0.41
67:O1:82:GLU:C	67:O1:84:ASP:H	2.24	0.41
42:L5:25:GLU:H	42:L5:25:GLU:HG2	2.94	0.41
12:C0:54:TYR:HA	12:C0:71:GLU:HG2	2.95	0.41
36:5:1308:A:C8	36:5:1308:A:OP2	2.74	0.41
34:SR:245:PHE:HD1	34:SR:251:TRP:O	3.45	0.41
1:6:586:G:C6	1:6:587:C:C4	3.09	0.41
1:6:561:G:C2	1:6:585:A:C2	3.08	0.41
23:D1:73:ALA:HB1	23:D1:79:LEU:HG	3.88	0.41
41:L4:258:LEU:HD12	41:L4:258:LEU:HA	1.91	0.41
41:L4:23:PRO:O	41:L4:25:VAL:HG23	2.48	0.41
41:L4:134:LEU:O	41:L4:138:ARG:HB2	2.20	0.41
41:L4:138:ARG:HD2	41:L4:245:GLY:O	2.67	0.41
70:O4:4:ARG:HD2	36:5:1485:G:N2	151.60	0.41
1:6:647:G:N2	1:6:687:G:N2	2.69	0.41
41:L4:244:LEU:HD23	41:L4:244:LEU:HA	2.39	0.41
1:6:281:G:C6	1:6:282:C:C4	3.08	0.41
40:L3:139:GLN:HB2	40:L3:141:GLY:H	4.10	0.41
40:L3:139:GLN:C	40:L3:141:GLY:H	2.21	0.41
22:D0:96:PRO:HD2	22:D0:99:ILE:HG13	5.02	0.41
1:2:1783:C:C5	77:Q1:5:TRP:CD1	3.09	0.41
36:1:1709:C:H2'	36:1:1710:C:H6	1.86	0.41
13:C1:74:THR:HA	13:C1:122:ILE:HA	2.27	0.41
36:5:1542:G:N7	86:5:4087:OHX:N3	2.68	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:S9:21:SER:HA	11:S9:24:LEU:HG	4.15	0.41
64:N8:75:LEU:O	64:N8:77:LYS:N	2.53	0.41
22:D0:30:LYS:HB3	22:D0:30:LYS:HE2	1.83	0.41
54:M8:123:THR:OG1	54:M8:126:GLN:HG3	2.20	0.41
38:4:79:A:C6	38:4:80:A:C2	3.09	0.41
20:C8:61:LEU:HB3	20:C8:66:LEU:HG	2.03	0.41
4:S2:53:ILE:CD1	4:S2:73:LEU:HD22	3.02	0.41
1:2:304:U:H2'	1:2:305:C:H6	1.85	0.41
59:N3:48:ARG:NH2	36:5:3043:C:P	250.92	0.41
6:S4:42:LEU:CD2	6:S4:46:VAL:HB	2.50	0.41
39:L2:137:ILE:HG13	39:L2:138:GLY:N	3.31	0.41
36:1:2899:C:H2'	46:L9:171:ASP:HB2	2.03	0.41
1:2:850:A:C2	1:2:851:U:C2	3.09	0.41
1:2:1096:C:OP2	24:D2:71:LYS:NZ	2.35	0.41
17:C5:110:GLU:H	17:C5:110:GLU:CD	2.57	0.41
1:6:93:A:C4	1:6:399:A:C2	3.08	0.41
29:D7:26:GLN:HB2	29:D7:26:GLN:HE21	1.67	0.41
86:1:4004:OHX:N5	86:1:4172:OHX:N5	2.69	0.41
74:O8:43:PHE:HB2	74:O8:54:LEU:HB3	2.03	0.41
52:M6:121:PRO:O	52:M6:124:LEU:HB2	3.32	0.41
31:D9:33:LYS:HG2	31:D9:34:TYR:CD2	3.52	0.41
65:N9:55:ALA:O	65:N9:58:LYS:HB2	5.03	0.41
16:C4:41:ARG:O	16:C4:42:VAL:HG22	2.21	0.41
1:6:1540:G:C6	1:6:1541:G:C4	3.08	0.41
4:S2:188:LEU:HA	4:S2:191:ALA:HB3	2.35	0.41
14:C2:56:GLU:HB3	14:C2:124:LYS:NZ	4.01	0.41
1:2:186:C:H42	1:2:199:G:H1	1.69	0.41
18:C6:38:LEU:HD22	21:C9:10:ALA:HB2	2.03	0.41
1:2:1141:G:C2	1:2:1142:A:C4	3.08	0.41
28:D6:2:PRO:HB2	28:D6:3:LYS:H	1.62	0.41
5:S3:116:ARG:HD3	5:S3:120:TYR:HE2	3.59	0.41
71:O5:31:LEU:CD1	71:O5:47:VAL:HG11	2.50	0.41
1:2:1392:U:H2'	1:2:1393:C:O4'	2.21	0.41
61:N5:129:ASP:HB2	61:N5:130:TYR:CD1	2.78	0.41
36:1:3189:G:C6	36:1:3190:C:C4	3.09	0.41
52:M6:3:VAL:HG13	52:M6:4:GLU:N	2.33	0.41
28:D6:23:CYS:CB	28:D6:74:CYS:HB3	2.50	0.41
36:5:2689:A:C8	36:5:2702:A:C6	3.09	0.41
36:1:2916:U:H5	36:1:2935:U:HO2'	1.64	0.41
36:5:1228:C:H2'	36:5:1229:G:C8	2.56	0.41
12:C0:56:LYS:HE2	12:C0:56:LYS:HB3	3.41	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:778:G:C5	1:2:783:G:N1	2.89	0.41
1:6:225:A:N6	1:6:226:A:H62	2.19	0.41
5:S3:26:THR:HA	5:S3:34:TYR:HD1	1.85	0.41
5:S3:31:GLU:HB2	5:S3:32:GLU:OE2	2.21	0.41
5:S3:34:TYR:HB2	5:S3:52:ALA:HB2	3.59	0.41
6:S4:11:ARG:O	6:S4:12:LEU:CB	2.69	0.41
56:N0:67:ALA:O	56:N0:69:PRO:HD3	2.70	0.41
1:2:368:U:H1'	1:2:603:U:O2'	2.21	0.41
36:1:1079:A:H4'	42:L5:141:PRO:O	2.21	0.41
55:M9:85:ARG:NH2	36:5:1916:U:H4'	228.61	0.41
1:6:1685:G:O6	1:6:1716:C:N4	2.53	0.41
14:C2:87:PRO:HA	14:C2:140:PHE:CE1	3.27	0.41
14:C2:88:LEU:H	14:C2:140:PHE:HE1	1.69	0.41
1:6:1231:U:O5'	1:6:1259:U:H1'	2.21	0.41
1:6:272:U:O2'	1:6:273:G:OP2	2.30	0.41
45:L8:75:ILE:C	45:L8:77:GLN:H	2.23	0.41
1:2:1225:U:C2'	1:2:1226:A:H5'	2.51	0.41
36:1:1438:U:H5''	41:L4:74:ILE:CD1	2.51	0.41
36:1:1321:G:C6	36:1:1322:U:C4	3.09	0.41
36:1:3389:U:HO2'	36:1:3390:G:P	2.42	0.41
2:S0:50:VAL:HA	2:S0:53:THR:OG1	2.21	0.41
1:2:1079:U:H2'	1:2:1080:U:H6	1.85	0.41
9:S7:166:LEU:HA	9:S7:166:LEU:HD12	1.97	0.41
1:6:1268:G:O4'	1:6:1448:G:H4'	2.21	0.41
36:5:811:U:H2'	36:5:812:G:O4'	2.21	0.41
19:C7:46:LEU:O	19:C7:50:ILE:HG13	2.20	0.41
47:M0:207:GLU:C	47:M0:209:ASN:N	2.75	0.41
1:6:149:C:H2'	1:6:150:U:H6	1.85	0.41
43:L6:157:GLN:O	43:L6:160:SER:N	2.54	0.41
5:S3:177:MET:HE2	5:S3:178:ARG:HH12	1.85	0.41
46:L9:68:LEU:HD23	46:L9:68:LEU:HA	1.84	0.41
36:5:599:C:H2'	36:5:600:G:O4'	2.21	0.41
36:5:2765:C:H2'	36:5:2766:U:C6	2.56	0.41
36:1:2515:A:H61	36:1:2592:G:H1'	1.86	0.41
36:1:539:C:H2'	36:1:540:U:H6	1.84	0.41
39:L2:230:VAL:O	39:L2:233:GLN:HG3	3.48	0.41
44:L7:104:GLN:C	44:L7:106:LEU:N	2.71	0.41
2:S0:93:THR:HG21	2:S0:181:VAL:HG21	2.02	0.41
36:5:25:U:H4'	36:5:26:A:N7	2.36	0.41
36:1:972:A:H2'	36:1:973:A:C8	2.55	0.41
19:C7:71:PHE:C	19:C7:73:LEU:H	2.24	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:N6:59:VAL:HG12	62:N6:103:LYS:O	2.20	0.41
55:M9:143:ILE:O	55:M9:145:ALA:N	3.41	0.41
16:C4:103:ARG:O	16:C4:107:ARG:N	2.79	0.41
1:6:1711:C:H2'	1:6:1712:A:H5''	2.03	0.41
4:S2:246:GLU:HG3	4:S2:246:GLU:H	2.43	0.41
36:5:1110:U:H2'	36:5:1111:U:C6	2.55	0.41
45:L8:29:SER:O	45:L8:31:PRO:HD3	3.51	0.41
68:O2:6:HIS:HA	68:O2:7:PRO:HD2	2.41	0.41
25:D3:19:ARG:O	25:D3:23:ARG:HG2	2.21	0.41
53:M7:112:LEU:HA	53:M7:112:LEU:HD12	1.68	0.41
21:C9:108:LEU:HD23	21:C9:108:LEU:HA	2.22	0.41
24:D2:53:ILE:HG23	24:D2:60:LYS:O	2.21	0.41
36:1:2714:G:C8	36:1:2714:G:H5''	2.55	0.41
1:2:830:U:C2	1:2:831:U:C5	3.09	0.41
51:M5:204:LYS:HE2	51:M5:204:LYS:HB3	2.12	0.41
17:C5:57:MET:HA	17:C5:60:LEU:HB3	2.03	0.41
36:5:783:A:OP2	86:5:4188:OHX:N3	2.54	0.41
36:1:627:U:H4'	36:1:1399:A:C2'	2.51	0.41
36:5:1622:U:H2'	36:5:1623:G:H8	1.86	0.41
45:L8:106:LYS:HE2	45:L8:107:GLU:N	2.35	0.41
86:1:3961:OHX:N5	86:1:4140:OHX:N6	2.69	0.41
4:S2:237:VAL:O	4:S2:238:SER:OG	5.29	0.41
36:5:3199:G:O2'	36:5:3200:G:H5'	2.20	0.41
45:L8:72:PRO:HG3	51:M5:18:VAL:HA	2.02	0.41
36:5:950:G:N7	36:5:1367:G:C6	2.89	0.41
71:O5:38:ARG:CG	71:O5:39:PRO:HD2	2.51	0.41
16:C4:49:LYS:HD3	16:C4:49:LYS:HA	3.01	0.41
70:O4:25:THR:HG23	70:O4:29:ILE:HG22	8.00	0.41
36:1:1908:A:H8	36:1:1908:A:O5'	2.04	0.41
39:L2:41:ILE:HG22	39:L2:90:ALA:O	2.21	0.41
66:O0:25:LEU:HD22	66:O0:90:VAL:HG22	2.02	0.41
36:5:3106:A:H2'	36:5:3107:U:O4'	2.21	0.41
41:L4:153:SER:OG	41:L4:155:ASP:N	2.48	0.41
36:1:306:A:C2	36:1:307:A:C8	3.09	0.41
71:O5:72:GLY:O	71:O5:73:LYS:HB3	2.21	0.41
34:SR:135:THR:HG23	34:SR:139:GLN:O	2.34	0.41
36:1:601:U:H2'	36:1:602:A:O4'	2.21	0.41
55:M9:167:ARG:HB3	55:M9:167:ARG:NH1	4.71	0.41
45:L8:43:LYS:HD3	45:L8:43:LYS:HA	1.79	0.41
78:Q2:72:LEU:N	78:Q2:72:LEU:HD12	2.36	0.41
24:D2:36:LYS:O	24:D2:40:VAL:HG23	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:83:LEU:HB3	42:L5:88:ILE:HB	2.03	0.41
3:S1:58:SER:O	3:S1:60:ALA:N	2.53	0.41
56:N0:14:LEU:HD12	56:N0:55:SER:C	3.51	0.41
63:N7:124:ALA:O	63:N7:126:LYS:N	2.81	0.41
36:5:2774:C:C2	36:5:2787:G:C2	3.08	0.41
10:S8:81:VAL:HG21	10:S8:95:THR:O	2.67	0.41
36:5:71:A:C2	36:5:2778:G:H1'	2.56	0.41
36:1:3346:U:O5'	36:1:3346:U:H6	2.03	0.41
8:S6:105:ASP:N	8:S6:105:ASP:OD2	2.69	0.41
41:L4:345:GLU:OE2	41:L4:345:GLU:HA	4.42	0.41
1:6:793:A:OP2	1:6:793:A:H2'	2.21	0.41
64:N8:7:LYS:HA	64:N8:7:LYS:HD3	3.80	0.41
71:O5:94:LYS:HB2	71:O5:94:LYS:HE2	1.92	0.41
74:O8:61:LYS:H	74:O8:61:LYS:HG2	3.05	0.41
36:1:190:U:C4	36:1:224:C:H1'	2.55	0.41
36:1:190:U:N3	36:1:224:C:O4'	2.54	0.41
38:8:31:G:C6	38:8:32:C:C4	3.09	0.41
45:L8:49:TYR:HD2	36:5:2587:U:H4'	177.99	0.41
44:L7:74:SER:OG	57:N1:142:SER:HA	2.37	0.41
74:O8:46:ARG:HH11	74:O8:46:ARG:HG3	2.36	0.41
41:L4:328:ASN:HA	41:L4:329:PRO:HD2	2.09	0.41
25:D3:42:PRO:HG2	25:D3:122:PHE:HZ	2.78	0.41
1:2:1368:G:C2	1:2:1369:U:C2	3.09	0.41
7:S5:97:LEU:HD11	7:S5:114:ILE:HG12	3.59	0.41
39:L2:30:ARG:HG2	39:L2:74:GLU:OE1	2.21	0.41
40:L3:292:ALA:HA	40:L3:303:LYS:H	1.86	0.41
47:M0:99:ILE:HG22	47:M0:123:HIS:HB2	2.02	0.41
1:6:1584:G:O2'	1:6:1610:G:O6	2.32	0.41
42:L5:148:ILE:HG12	42:L5:159:VAL:HG11	2.03	0.41
67:O1:16:LEU:O	67:O1:20:LEU:N	2.46	0.41
9:S7:67:LEU:HD13	9:S7:71:HIS:CE1	2.62	0.41
23:D1:60:ARG:HG2	23:D1:65:SER:OG	4.17	0.41
34:SR:16:HIS:CE1	34:SR:43:ILE:HG12	2.76	0.41
70:O4:16:ARG:O	70:O4:18:ASN:N	2.53	0.41
1:2:188:A:N7	1:2:197:A:H2	2.18	0.41
3:S1:68:VAL:HG22	3:S1:69:CYS:O	2.21	0.41
6:S4:163:ASP:O	6:S4:164:LEU:CB	2.91	0.41
59:N3:13:ILE:HD12	59:N3:85:TRP:CD1	2.55	0.41
39:L2:54:ARG:HG2	39:L2:55:GLY:O	4.52	0.41
17:C5:126:VAL:HG13	17:C5:127:ARG:N	2.32	0.41
1:2:1350:U:P	18:C6:68:ARG:HH22	2.43	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:O5:4:VAL:HG21	71:O5:9:LEU:HD11	2.38	0.41
36:1:1211:U:H1'	36:1:1295:G:N2	2.35	0.41
9:S7:56:LYS:HB2	9:S7:88:ARG:NH1	2.36	0.41
36:1:1565:G:H1'	36:1:1575:A:C2	2.53	0.41
46:L9:52:LEU:HA	46:L9:52:LEU:HD23	1.81	0.41
53:M7:51:VAL:HG12	53:M7:52:LEU:N	2.35	0.41
51:M5:9:GLU:O	51:M5:13:LYS:HE3	2.21	0.41
2:S0:26:ALA:O	2:S0:46:HIS:ND1	3.34	0.41
8:S6:169:TYR:HD1	8:S6:170:THR:H	1.69	0.41
36:5:1393:A:C8	36:5:1418:A:C6	3.08	0.41
6:S4:42:LEU:HA	6:S4:42:LEU:HD23	2.05	0.41
13:C1:4:GLU:HG3	13:C1:5:LEU:H	3.33	0.41
33:E1:144:CYS:HB3	33:E1:147:VAL:HG12	3.22	0.41
8:S6:137:ARG:NH1	1:6:144:U:C5	311.23	0.41
36:5:2206:G:O2'	36:5:2207:A:H5'	2.21	0.41
74:O8:21:LYS:HD3	74:O8:21:LYS:HA	4.39	0.41
42:L5:279:LYS:HG2	42:L5:282:ARG:HH12	1.86	0.41
79:Q3:47:VAL:CG1	79:Q3:55:TRP:HB3	2.51	0.41
16:C4:29:HIS:O	16:C4:29:HIS:CG	2.74	0.41
2:S0:17:LEU:HA	2:S0:172:LEU:HD12	2.02	0.41
1:2:1053:G:C2	1:2:1067:C:C2	3.08	0.41
36:5:2202:C:H2'	36:5:2203:U:O4'	2.21	0.41
15:C3:88:LEU:HD11	15:C3:135:LEU:HD11	3.89	0.41
38:4:106:C:C5	38:4:138:A:C2	3.09	0.41
51:M5:187:ARG:O	51:M5:190:THR:HG23	2.35	0.41
1:6:1645:G:OP2	86:6:2183:OHX:N3	2.54	0.41
1:6:1492:A:O2'	1:6:1493:A:C8	2.74	0.41
36:5:2297:U:H2'	36:5:2299:A:N7	2.35	0.41
20:C8:72:ILE:HA	20:C8:79:TYR:CD2	3.90	0.41
15:C3:56:ASP:HA	29:D7:47:PHE:HB3	2.40	0.41
24:D2:104:LEU:HA	24:D2:126:LEU:HB2	2.02	0.41
70:O4:71:THR:CG2	70:O4:78:GLY:H	2.34	0.41
36:1:500:C:O2'	36:1:501:A:H5'	2.21	0.41
10:S8:146:ARG:O	10:S8:147:ALA:HB3	2.21	0.41
63:N7:115:LYS:O	63:N7:119:GLU:HB2	2.79	0.41
6:S4:211:LYS:HD3	6:S4:215:ASP:OD2	5.11	0.41
71:O5:119:LYS:HG3	71:O5:119:LYS:HZ3	1.76	0.41
57:N1:154:VAL:HG23	57:N1:155:PRO:O	2.60	0.41
49:M3:143:ALA:O	49:M3:146:PRO:HD3	2.21	0.41
42:L5:182:GLY:O	42:L5:190:ILE:HD12	2.21	0.41
36:1:351:A:N6	75:O9:35:ILE:HG23	2.35	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:104:LEU:HD12	39:L2:104:LEU:HA	1.93	0.41
40:L3:255:TRP:CD1	36:5:2395:G:H5'	216.09	0.41
48:M1:37:LEU:HD22	48:M1:37:LEU:HA	2.11	0.41
57:N1:79:MET:HA	57:N1:84:TYR:HA	2.03	0.41
1:6:1681:A:N6	1:6:1720:G:O2'	2.54	0.41
42:L5:261:THR:H	42:L5:264:GLN:CD	2.57	0.41
24:D2:47:ILE:HG22	24:D2:65:LEU:CB	2.51	0.41
1:6:711:U:C2	1:6:728:U:C2	3.08	0.41
1:6:886:U:H2'	1:6:887:A:O4'	2.20	0.41
14:C2:62:LEU:HA	14:C2:120:VAL:HA	2.03	0.41
12:C0:16:PHE:HD2	12:C0:76:LEU:CB	2.34	0.41
36:1:2218:G:C4	36:1:2228:A:C2	3.09	0.41
1:2:4:C:OP2	4:S2:200:SER:OG	2.31	0.41
6:S4:193:GLY:O	6:S4:195:ILE:N	2.50	0.41
40:L3:4:ARG:HG3	40:L3:6:TYR:O	4.97	0.41
36:1:2694:A:C6	36:1:2695:A:C6	3.09	0.41
38:4:143:U:H2'	38:4:144:G:O4'	2.21	0.41
36:5:1692:U:O4	36:5:1693:C:N4	2.54	0.41
9:S7:55:LYS:HB3	9:S7:55:LYS:HE2	2.12	0.41
25:D3:24:TRP:CE3	25:D3:30:LYS:HE2	5.28	0.41
36:5:2291:A:H2'	36:5:2292:U:O4'	2.21	0.41
1:6:1170:G:C6	1:6:1574:G:C5	3.09	0.41
36:5:1271:A:N6	36:5:1272:C:C4	2.89	0.41
36:1:831:G:H8	36:1:831:G:O5'	2.04	0.41
56:N0:130:GLU:HB3	56:N0:131:LYS:H	1.59	0.41
52:M6:94:ARG:O	52:M6:97:ALA:HB3	2.36	0.41
1:2:155:U:H4'	8:S6:59:GLN:H	1.85	0.41
6:S4:36:HIS:CG	6:S4:85:GLY:HA3	2.56	0.41
17:C5:31:GLU:O	17:C5:35:LYS:HG3	4.91	0.41
36:1:2413:A:H2'	36:1:2414:G:C8	2.56	0.41
34:SR:158:PRO:O	34:SR:208:GLY:HA3	2.21	0.41
34:SR:116:ASP:O	34:SR:119:ALA:N	2.43	0.41
37:7:85:G:O6	86:7:221:OHX:N5	2.54	0.41
36:1:3282:U:H2'	36:1:3283:U:O4'	2.21	0.41
38:8:121:U:O2'	38:8:122:U:H5'	2.21	0.41
36:5:2572:C:O2'	36:5:2573:G:OP2	2.39	0.41
55:M9:60:LYS:HA	55:M9:63:THR:HG23	5.21	0.41
73:O7:50:GLY:O	73:O7:53:ALA:HB3	2.20	0.41
38:8:130:C:H2'	38:8:131:A:C8	2.56	0.41
38:8:107:G:OP2	86:8:230:OHX:N1	2.54	0.41
1:2:234:G:N1	1:2:235:G:H1'	2.36	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:383:G:H2'	36:5:385:A:OP2	2.21	0.41
1:2:428:A:N3	1:2:440:U:O2'	2.45	0.41
36:1:629:U:H2'	36:1:630:A:C8	2.56	0.41
1:2:344:A:C5	1:2:345:U:C5	3.09	0.41
36:5:729:C:O5'	36:5:729:C:H6	2.04	0.41
45:L8:230:LYS:HE3	45:L8:230:LYS:HB2	4.35	0.41
54:M8:140:LEU:HD23	54:M8:140:LEU:HA	2.17	0.41
63:N7:93:LYS:HD3	63:N7:93:LYS:HA	1.87	0.41
36:5:401:U:H4'	36:5:403:C:C2	2.56	0.41
36:1:1612:A:OP1	74:O8:46:ARG:NE	2.55	0.40
1:2:896:U:O4'	16:C4:38:THR:HG21	2.21	0.40
1:2:323:A:OP2	10:S8:10:LYS:HA	2.21	0.40
10:S8:8:ARG:NH2	10:S8:22:ARG:HH11	8.18	0.40
62:N6:52:ARG:HG2	62:N6:53:ASP:N	3.82	0.40
7:S5:164:PRO:HA	7:S5:167:ARG:HG3	2.89	0.40
79:Q3:36:ARG:HE	79:Q3:48:LYS:CE	4.48	0.40
11:S9:109:LEU:O	11:S9:112:GLN:N	3.60	0.40
1:2:990:C:O2'	16:C4:127:ARG:HD3	2.21	0.40
5:S3:17:PHE:HE1	5:S3:77:PHE:CD2	2.93	0.40
36:1:2107:A:C2	36:1:3344:A:C8	3.09	0.40
50:M4:55:ARG:NH2	50:M4:77:ARG:HA	2.49	0.40
18:C6:53:LEU:H	18:C6:53:LEU:HG	1.81	0.40
21:C9:37:VAL:CG2	21:C9:100:ILE:HD11	3.56	0.40
51:M5:93:LYS:O	51:M5:94:TYR:HB3	2.21	0.40
48:M1:60:ARG:O	48:M1:63:GLU:HB2	2.21	0.40
10:S8:82:VAL:HG13	10:S8:196:LEU:HD21	4.59	0.40
36:5:956:U:H2'	36:5:957:C:H6	1.86	0.40
28:D6:58:VAL:HG23	28:D6:59:TYR:N	2.37	0.40
1:2:875:G:P	3:S1:158:SER:HB2	2.61	0.40
1:2:884:A:O2'	1:2:885:G:H5'	2.21	0.40
1:2:582:U:H3'	1:2:583:C:C6	2.56	0.40
1:2:819:G:N3	1:2:820:U:H5	2.18	0.40
60:N4:9:SER:O	60:N4:53:VAL:HG23	2.96	0.40
50:M4:21:VAL:HB	50:M4:63:VAL:HG22	2.02	0.40
36:1:1295:G:H2'	36:1:1296:C:C6	2.56	0.40
39:L2:130:SER:HA	39:L2:169:ILE:HG22	2.03	0.40
36:1:2698:G:O2'	57:N1:12:ARG:HG3	2.21	0.40
9:S7:162:ILE:O	9:S7:164:TYR:N	3.94	0.40
4:S2:224:PHE:HE2	1:6:1098:U:C4	392.64	0.40
27:D5:47:TYR:OH	27:D5:51:LEU:HD21	3.05	0.40
55:M9:109:TYR:OH	55:M9:139:VAL:HG22	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1676:U:O2'	1:2:1677:C:H5'	2.21	0.40
11:S9:17:ARG:HD2	11:S9:20:GLU:OE2	4.21	0.40
11:S9:17:ARG:HB2	11:S9:20:GLU:CD	3.81	0.40
8:S6:22:HIS:HA	8:S6:25:ARG:HH11	1.86	0.40
36:1:1135:A:O5'	36:1:2642:A:H1'	2.21	0.40
20:C8:91:ASP:O	20:C8:92:ILE:HB	2.22	0.40
74:O8:32:ASN:HD21	74:O8:34:ALA:HB3	6.35	0.40
46:L9:101:VAL:HG12	46:L9:136:PHE:HE1	1.87	0.40
21:C9:88:VAL:HG13	1:6:1601:G:C2	361.83	0.40
63:N7:26:VAL:HB	63:N7:89:VAL:HG21	2.02	0.40
2:S0:179:ARG:CD	2:S0:183:ARG:HD2	2.51	0.40
52:M6:73:PHE:CE2	52:M6:78:ARG:NH1	2.89	0.40
36:1:2282:U:O2	36:1:2310:U:H4'	2.21	0.40
69:O3:49:ILE:CG2	69:O3:100:ILE:HG13	3.03	0.40
28:D6:44:ILE:HD13	28:D6:64:LEU:HD22	2.03	0.40
62:N6:126:LEU:HB3	62:N6:127:GLU:H	4.25	0.40
19:C7:51:ALA:O	19:C7:54:THR:OG1	4.15	0.40
36:1:3329:U:C4	36:1:3330:A:N7	2.90	0.40
36:1:345:G:O2'	38:4:25:G:N3	2.50	0.40
25:D3:53:VAL:HG12	25:D3:98:GLU:HA	3.33	0.40
36:1:7:C:H5''	45:L8:193:LYS:HG2	2.03	0.40
11:S9:6:ARG:HD2	11:S9:6:ARG:HA	2.71	0.40
36:1:1079:A:C6	36:1:1080:A:C6	3.09	0.40
34:SR:70:ASP:CB	34:SR:112:SER:HA	2.51	0.40
41:L4:179:LEU:HA	41:L4:179:LEU:HD23	2.11	0.40
1:6:1240:U:N3	1:6:1242:A:H5''	2.35	0.40
36:1:1467:A:O2'	36:1:1469:C:OP2	2.30	0.40
73:O7:17:THR:C	73:O7:25:ARG:HA	2.41	0.40
36:1:372:A:H2'	36:1:373:A:O4'	2.21	0.40
9:S7:21:ALA:O	9:S7:25:VAL:HG23	2.46	0.40
36:1:1528:G:H2'	36:1:1529:A:O4'	2.20	0.40
1:2:404:G:C2	1:2:405:C:C2	3.09	0.40
36:5:342:A:H4'	36:5:344:A:N7	2.36	0.40
1:6:703:G:H2'	1:6:704:C:C6	2.56	0.40
1:6:819:G:C2	1:6:853:G:C2	3.08	0.40
41:L4:169:LEU:HD22	41:L4:249:ILE:HD12	2.64	0.40
69:O3:54:ARG:HD2	36:5:3171:U:O4	220.51	0.40
11:S9:7:THR:HG21	1:6:758:U:OP1	381.78	0.40
36:1:1567:U:C2	36:1:1571:A:N6	2.89	0.40
63:N7:3:LYS:O	63:N7:6:LYS:HG3	2.22	0.40
1:2:1222:C:H2'	1:2:1223:A:O4'	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2973:G:O6	86:1:4098:OHX:N2	2.54	0.40
36:5:3084:C:H2'	36:5:3085:G:O4'	2.22	0.40
76:Q0:79:GLU:HA	76:Q0:80:PRO:HD2	2.24	0.40
1:2:1668:G:OP2	86:2:2055:OHX:N6	2.54	0.40
45:L8:218:ILE:O	45:L8:222:PHE:HB2	3.36	0.40
49:M3:29:ALA:O	49:M3:32:LYS:N	3.16	0.40
54:M8:68:ALA:O	54:M8:72:LYS:HG3	2.21	0.40
1:6:20:G:H5'	1:6:571:G:C5	2.56	0.40
36:5:1563:C:O2	36:5:1577:G:N2	2.55	0.40
36:1:1186:G:N3	56:N0:112:ALA:HB1	2.36	0.40
36:5:3266:G:C6	36:5:3267:A:C6	3.08	0.40
4:S2:97:ARG:H	4:S2:97:ARG:HG2	1.59	0.40
34:SR:46:LYS:HB2	34:SR:46:LYS:HE3	1.94	0.40
61:N5:111:ASN:N	61:N5:111:ASN:HD22	2.54	0.40
62:N6:75:ARG:HD2	62:N6:75:ARG:HH11	1.77	0.40
36:1:2865:U:C4	36:1:2866:U:C4	3.09	0.40
1:6:678:A:H2'	1:6:679:U:O4'	2.20	0.40
1:6:210:A:C6	1:6:211:U:C4	3.09	0.40
36:5:2249:G:C8	36:5:2249:G:H3'	2.56	0.40
1:6:1151:A:O2'	1:6:1766:A:N7	2.44	0.40
72:O6:26:ILE:C	72:O6:28:TYR:N	2.74	0.40
30:D8:33:LEU:HD21	30:D8:53:ILE:HD13	7.03	0.40
7:S5:91:GLU:OE2	7:S5:107:LYS:NZ	2.51	0.40
7:S5:91:GLU:HA	7:S5:94:THR:OG1	3.64	0.40
49:M3:153:ASP:CG	49:M3:154:VAL:H	2.25	0.40
38:8:141:C:O2'	38:8:142:C:H5'	2.22	0.40
36:1:3088:G:H2'	36:1:3089:C:C6	2.56	0.40
1:6:1255:G:H4'	1:6:1256:A:OP1	2.20	0.40
14:C2:76:GLU:O	14:C2:80:ASN:HB2	3.24	0.40
4:S2:230:TRP:NE1	24:D2:68:ARG:HB3	2.36	0.40
63:N7:22:LYS:HE3	63:N7:134:LEU:HB2	2.03	0.40
21:C9:53:TRP:O	21:C9:56:LYS:HB2	2.56	0.40
36:1:1544:G:H5'	51:M5:67:ARG:HE	1.86	0.40
51:M5:98:LEU:HA	51:M5:98:LEU:HD13	1.79	0.40
47:M0:16:PRO:HD3	47:M0:128:ARG:CZ	2.51	0.40
38:8:80:A:N3	38:8:82:U:O4	2.54	0.40
55:M9:99:LEU:O	55:M9:103:ARG:HB2	2.21	0.40
57:N1:109:VAL:HG13	36:5:1063:G:C6	245.27	0.40
40:L3:205:VAL:HG11	40:L3:322:ILE:HD11	2.03	0.40
36:1:1171:G:O6	86:1:3959:OHX:N2	2.54	0.40
50:M4:120:VAL:HG22	52:M6:197:LEU:HD13	2.03	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
69:O3:86:ARG:HH22	36:5:497:C:C3'	212.99	0.40
4:S2:179:VAL:HG11	1:6:2:A:H3'	390.30	0.40
59:N3:88:ARG:C	59:N3:90:GLY:H	2.48	0.40
1:2:1553:G:O6	17:C5:43:ARG:HD3	2.21	0.40
36:5:419:G:N2	38:8:5:U:C2	2.89	0.40
36:1:2656:A:C4	36:1:2658:G:N7	2.90	0.40
21:C9:31:PRO:HG3	21:C9:103:LYS:CG	2.48	0.40
41:L4:22:LEU:HD22	41:L4:26:PHE:HB2	3.58	0.40
38:4:85:G:C3'	38:4:85:G:C8	3.04	0.40
36:1:338:A:OP1	41:L4:47:ARG:HG3	2.21	0.40
2:S0:109:ASN:ND2	1:6:1294:G:H1'	413.00	0.40
18:C6:83:GLN:O	18:C6:87:LYS:HB2	2.21	0.40
36:1:2882:U:H2'	36:1:2883:U:C6	2.56	0.40
36:1:2294:U:OP2	59:N3:71:LYS:HE2	2.20	0.40
4:S2:42:GLY:HA2	4:S2:68:ILE:HD11	2.03	0.40
4:S2:61:LEU:HD23	4:S2:61:LEU:HA	1.71	0.40
4:S2:69:ILE:HD11	4:S2:133:LYS:HG2	2.03	0.40
1:2:446:A:N1	1:2:461:G:O2'	2.50	0.40
1:2:1567:U:C5	1:2:1568:C:C4	3.09	0.40
45:L8:101:THR:HG22	45:L8:104:GLU:CD	2.41	0.40
27:D5:37:GLN:O	27:D5:70:LYS:HD3	7.53	0.40
36:1:3006:A:C2	36:1:3141:A:C4	3.09	0.40
1:2:1410:A:H2'	1:2:1411:A:O4'	2.20	0.40
36:5:2416:U:H4'	36:5:2967:A:O4'	2.22	0.40
79:Q3:47:VAL:HA	79:Q3:56:THR:O	2.21	0.40
36:5:1302:A:N1	36:5:2832:C:O2'	2.45	0.40
86:5:4060:OHX:N1	86:5:4137:OHX:N4	2.68	0.40
1:6:1308:G:H2'	1:6:1309:C:C6	2.57	0.40
18:C6:42:GLU:HG3	18:C6:45:ARG:HH21	1.85	0.40
36:1:1815:U:HO2'	36:1:1816:A:P	2.41	0.40
9:S7:30:SER:O	9:S7:34:LEU:HB2	2.21	0.40
25:D3:92:CYS:C	25:D3:94:ASN:N	2.73	0.40
54:M8:57:ILE:HD13	54:M8:57:ILE:HG21	1.67	0.40
36:5:541:U:O4	86:5:4007:OHX:N3	2.54	0.40
1:6:730:G:C5	1:6:731:C:C4	3.09	0.40
71:O5:21:LEU:CD2	71:O5:51:ILE:HG23	2.51	0.40
61:N5:135:ILE:HA	61:N5:135:ILE:HD13	1.86	0.40
52:M6:4:GLU:HB3	52:M6:6:VAL:O	3.71	0.40
30:D8:11:LYS:HE3	30:D8:31:GLU:OE1	2.95	0.40
8:S6:27:PHE:CD1	8:S6:36:VAL:HG21	2.57	0.40
41:L4:98:ARG:HH11	41:L4:98:ARG:HD2	1.69	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:98:ARG:HG2	41:L4:99:MET:N	2.35	0.40
1:2:205:U:H2'	1:2:206:A:O4'	2.21	0.40
4:S2:40:LYS:HA	4:S2:43:ARG:CZ	2.51	0.40
39:L2:113:VAL:HG12	39:L2:166:ILE:HA	2.21	0.40
61:N5:40:LEU:HB3	61:N5:41:ALA:H	3.35	0.40
70:O4:44:CYS:SG	70:O4:45:GLY:N	3.26	0.40
86:5:4049:OHX:N1	86:5:4194:OHX:N4	2.69	0.40
1:6:1140:G:OP2	86:6:2070:OHX:N3	2.54	0.40
14:C2:140:PHE:O	14:C2:143:GLN:NE2	2.53	0.40
51:M5:75:VAL:HA	51:M5:76:PRO:HD3	2.46	0.40
39:L2:44:ILE:HG23	39:L2:87:PHE:CE1	2.57	0.40
4:S2:67:GLN:O	4:S2:71:THR:HG23	2.28	0.40
49:M3:35:ARG:NH1	36:5:685:G:P	83.21	0.40
76:Q0:97:ARG:NH2	36:5:2847:A:OP1	323.58	0.40
9:S7:63:PRO:C	9:S7:65:PRO:HD2	2.42	0.40
13:C1:83:THR:HB	13:C1:110:HIS:HA	2.03	0.40
69:O3:80:VAL:HG12	69:O3:81:VAL:H	2.24	0.40
1:2:526:A:N6	1:2:527:A:C6	2.89	0.40
19:C7:74:GLN:O	19:C7:78:ARG:HD3	2.21	0.40
44:L7:95:ILE:HA	44:L7:96:PRO:HD3	1.92	0.40
86:5:3966:OHX:N3	86:5:4236:OHX:N2	2.69	0.40
4:S2:148:LEU:HA	4:S2:148:LEU:HD22	1.75	0.40
38:8:132:G:C6	38:8:133:G:N7	2.89	0.40
1:2:1658:G:C4	1:2:1659:A:C8	3.09	0.40
36:5:1443:G:C6	36:5:1444:G:C6	3.09	0.40
1:2:830:U:O2'	1:2:831:U:P	2.79	0.40
36:5:2429:G:C6	36:5:2601:A:N1	2.89	0.40
13:C1:79:LYS:HA	13:C1:79:LYS:HD3	4.51	0.40
72:O6:99:ARG:HB3	72:O6:100:HIS:H	1.52	0.40
55:M9:128:LYS:HZ3	55:M9:128:LYS:HG3	3.82	0.40
86:1:4056:OHX:N4	86:1:4163:OHX:N3	2.69	0.40
1:6:523:G:O6	86:6:2081:OHX:N6	2.54	0.40
36:5:2516:U:H2'	36:5:2517:U:H6	1.86	0.40
52:M6:54:TYR:CE2	52:M6:58:LEU:HD22	3.58	0.40
36:5:3255:U:H2'	36:5:3256:G:H8	1.85	0.40
11:S9:45:ILE:HD13	11:S9:48:GLN:NE2	2.36	0.40
63:N7:81:LEU:HD22	63:N7:81:LEU:HA	2.02	0.40
36:1:307:A:H4'	36:1:2224:A:O4'	2.20	0.40
1:2:832:U:H2'	1:2:833:U:O4'	2.21	0.40
3:S1:93:GLY:C	3:S1:95:ASN:H	2.67	0.40
52:M6:75:ALA:O	52:M6:76:PRO:C	2.82	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:222:HIS:CE1	44:L7:224:ILE:HD12	3.10	0.40
21:C9:18:TYR:HB3	21:C9:59:ALA:HB1	2.03	0.40
36:1:2903:A:H2'	36:1:2904:U:O4'	2.21	0.40
73:O7:6:PRO:HB3	36:5:1851:G:O2'	164.05	0.40
36:1:1338:C:C2'	36:1:1339:C:H5'	2.51	0.40
38:8:98:U:H2'	38:8:99:C:O4'	2.21	0.40
60:N4:45:ASN:HA	60:N4:46:PRO:HD3	1.86	0.40
72:O6:81:THR:O	72:O6:84:LYS:HB2	2.27	0.40
72:O6:79:SER:OG	72:O6:82:ARG:HG2	5.75	0.40
36:5:1757:A:H2'	36:5:1758:G:C8	2.56	0.40
33:E1:118:ARG:HD2	33:E1:118:ARG:N	3.08	0.40
9:S7:129:LEU:HD23	9:S7:129:LEU:HA	2.05	0.40
36:5:2347:U:H2'	36:5:2348:A:O4'	2.21	0.40
36:1:1654:A:H2'	36:1:1655:G:H5'	2.02	0.40
70:O4:8:ARG:HB2	70:O4:34:HIS:CD2	2.55	0.40
28:D6:85:ARG:O	28:D6:86:VAL:HG23	2.22	0.40
36:1:156:G:O2'	36:1:157:A:H4'	2.21	0.40
76:Q0:103:LEU:CD1	76:Q0:110:CYS:HA	2.52	0.40
40:L3:63:PRO:HD2	40:L3:348:ARG:HH21	1.87	0.40
1:6:1230:A:H2	1:6:1255:G:N2	2.06	0.40
36:1:1560:G:N1	36:1:1561:G:C5	2.88	0.40
1:2:1486:G:N7	1:2:1487:A:C8	2.89	0.40
1:2:1524:A:C6	1:2:1525:A:C6	3.09	0.40
1:6:1382:A:C2	1:6:1383:G:C5	3.10	0.40
47:M0:47:PRO:HB3	47:M0:171:TRP:CZ2	2.62	0.40
62:N6:9:SER:HA	36:5:336:A:OP1	77.17	0.40
57:N1:104:GLU:HG2	36:5:989:A:O2'	257.07	0.40
40:L3:46:PHE:CE2	40:L3:81:THR:HG22	2.57	0.40
44:L7:206:LYS:HB3	36:5:1334:U:H5"	236.09	0.40
27:D5:83:LEU:O	27:D5:89:ILE:HG12	3.21	0.40
7:S5:194:LEU:HD22	7:S5:198:LEU:CD1	5.09	0.40
7:S5:198:LEU:O	7:S5:202:ALA:N	2.54	0.40
6:S4:121:TYR:HA	6:S4:163:ASP:O	3.21	0.40
1:2:1390:U:OP1	19:C7:5:ARG:HD2	2.21	0.40
36:5:2820:A:C4	88:5:4246:3J6:C	3.05	0.40
1:6:353:A:C4	1:6:354:C:C6	3.09	0.40
33:E1:113:LYS:HE3	33:E1:113:LYS:HB3	2.93	0.40
39:L2:116:VAL:HG11	39:L2:134:VAL:HG11	3.15	0.40
39:L2:126:LEU:HD13	39:L2:150:LEU:HD21	2.27	0.40
39:L2:150:LEU:HA	39:L2:151:PRO:HD2	1.79	0.40
22:D0:45:ALA:HA	22:D0:50:LEU:HD12	4.71	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:Q1:4:LYS:HG2	77:Q1:5:TRP:CZ3	2.56	0.40
36:1:2696:A:H2'	36:1:2697:A:C8	2.56	0.40
36:5:572:A:H2'	36:5:573:C:H6	1.85	0.40
4:S2:133:LYS:O	4:S2:136:VAL:HG23	2.21	0.40
74:O8:32:ASN:O	74:O8:34:ALA:N	2.54	0.40
46:L9:173:ARG:HD3	46:L9:173:ARG:HH11	1.84	0.40
1:2:925:G:H4'	1:2:986:G:O2'	2.20	0.40
46:L9:20:ILE:CG1	46:L9:25:VAL:HG22	4.42	0.40
47:M0:51:HIS:O	47:M0:165:ILE:HA	2.43	0.40
1:6:1654:G:H2'	1:6:1745:G:N2	2.35	0.40
1:6:639:U:H1'	1:6:640:U:C5	2.57	0.40
79:Q3:47:VAL:HA	79:Q3:57:CYS:HA	2.56	0.40
1:6:130:C:H4'	1:6:176:C:OP1	2.21	0.40
65:N9:14:ARG:HH22	65:N9:18:ARG:HH11	3.57	0.40
36:1:3329:U:O5'	36:1:3329:U:H6	2.03	0.40
1:6:1713:G:H8	1:6:1713:G:O5'	2.05	0.40
36:1:3198:U:C4	46:L9:26:LYS:HB2	2.56	0.40
48:M1:112:LEU:HD11	48:M1:127:PHE:HZ	2.93	0.40
5:S3:45:LYS:HB2	5:S3:45:LYS:HE2	1.86	0.40
49:M3:119:TYR:CZ	49:M3:123:ILE:HG21	2.62	0.40
48:M1:9:MET:HG2	37:7:55:A:C4	326.98	0.40
36:5:2673:A:N6	36:5:2681:U:H3	2.19	0.40
36:5:593:C:C4	36:5:594:U:C4	3.09	0.40
9:S7:38:LEU:HD23	9:S7:38:LEU:HA	2.12	0.40
36:5:2321:A:H2'	36:5:2322:C:O4'	2.21	0.40
36:1:1193:A:O2'	36:1:1194:G:H5'	2.21	0.40
36:1:94:G:H5'	64:N8:53:PHE:CE2	2.56	0.40
25:D3:23:ARG:O	25:D3:26:GLU:HB2	2.43	0.40
45:L8:79:GLN:O	45:L8:81:THR:HG22	2.22	0.40
36:1:2932:U:O2	36:1:2934:A:H8	2.04	0.40
36:1:1831:U:H2'	36:1:1832:C:C6	2.54	0.40
36:1:827:A:C2	36:1:828:A:C4	3.10	0.40
17:C5:53:PRO:O	17:C5:56:PHE:HB3	2.21	0.40
17:C5:108:ARG:O	17:C5:111:MET:HB2	2.83	0.40
36:1:1506:A:H1'	36:1:1848:G:O6	2.21	0.40
60:N4:39:LEU:O	60:N4:44:LYS:HB2	2.22	0.40
1:2:1271:G:C6	1:2:1272:U:C4	3.10	0.40
42:L5:131:LEU:HA	42:L5:131:LEU:HD13	2.81	0.40
36:5:560:G:C2	36:5:561:C:C2	3.09	0.40
1:6:1000:C:N4	1:6:1003:A:OP2	2.54	0.40
1:2:224:C:H2'	1:2:225:A:H8	1.85	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:C7:2:GLY:N	1:6:1312:A:OP1	391.42	0.40
36:1:3311:C:C4	36:1:3312:U:C4	3.09	0.40
40:L3:275:ARG:HD3	40:L3:275:ARG:HA	2.50	0.40
1:2:1287:A:H4'	1:2:1288:G:OP1	2.21	0.40
34:SR:87:LYS:HA	34:SR:108:SER:O	2.20	0.40
36:5:2919:A:N1	36:5:2927:C:O2	2.55	0.40
36:1:2303:A:P	77:Q1:23:ARG:HH22	2.44	0.40
1:2:1205:C:H5''	1:2:1206:U:OP2	2.21	0.40
1:2:945:U:H2'	1:2:946:U:H6	1.87	0.40
1:6:11:A:C2'	1:6:12:U:H5'	2.52	0.40
68:O2:80:LYS:NZ	36:5:1386:A:OP2	136.09	0.40
10:S8:151:LYS:HZ3	10:S8:152:ILE:H	5.76	0.40
37:7:40:C:C5	37:7:42:A:N6	2.89	0.40
36:5:2606:G:H2'	36:5:2606:G:N3	2.36	0.40
13:C1:63:LEU:H	13:C1:63:LEU:HG	1.49	0.40
6:S4:127:LYS:HB3	6:S4:127:LYS:HE3	4.54	0.40
36:1:3374:U:O5'	36:1:3374:U:H6	2.04	0.40
36:1:2846:U:O4'	36:1:2846:U:O2	2.39	0.40
67:O1:53:PRO:O	67:O1:57:GLN:HG3	2.21	0.40
8:S6:35:GLU:HA	8:S6:50:PHE:O	2.29	0.40
58:N2:76:LEU:O	58:N2:80:THR:HG23	2.21	0.40
47:M0:3:ARG:HH22	36:5:2854:U:P	291.26	0.40
16:C4:30:VAL:HG12	16:C4:39:ILE:HG13	4.60	0.40
28:D6:31:PRO:HB2	28:D6:33:ASP:OD1	2.22	0.40
36:5:1238:C:H2'	36:5:1239:C:O4'	2.21	0.40
7:S5:59:VAL:O	7:S5:60:ASP:HB2	2.22	0.40
7:S5:101:GLY:HA2	7:S5:104:ASN:OD1	2.22	0.40
36:1:3107:U:OP1	76:Q0:112:LYS:HE3	2.21	0.40
86:2:2090:OHX:N1	86:2:2131:OHX:N4	2.70	0.40
71:O5:81:ARG:HB3	38:8:38:U:C4	67.39	0.40
12:C0:3:MET:HA	12:C0:4:PRO:HD2	2.55	0.40
5:S3:79:TYR:CD1	5:S3:84:ILE:HB	2.57	0.40
86:6:2103:OHX:N1	86:6:2190:OHX:N4	2.69	0.40
67:O1:29:ALA:HA	67:O1:67:VAL:HG21	2.03	0.40
9:S7:124:LYS:HB3	9:S7:124:LYS:HE2	4.35	0.40
48:M1:63:GLU:O	48:M1:64:LYS:HB2	2.21	0.40
5:S3:132:LYS:HG3	5:S3:156:PHE:HB3	2.85	0.40
5:S3:168:ILE:HG22	5:S3:189:MET:CB	2.81	0.40
86:7:220:OHX:N1	86:7:226:OHX:N5	2.68	0.40
3:S1:113:MET:O	3:S1:115:ARG:N	2.87	0.40
3:S1:178:GLY:HA3	3:S1:187:LYS:NZ	2.36	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:130:SER:OG	3:S1:180:THR:HG22	5.99	0.40
39:L2:51:ASP:HB3	39:L2:54:ARG:HD2	2.50	0.40
1:6:1270:G:N3	1:6:1270:G:H2'	2.35	0.40
1:2:1281:G:H2'	1:2:1282:U:C6	2.56	0.40
1:2:1281:G:H1'	22:D0:74:GLU:OE1	2.21	0.40
36:5:568:G:O6	86:5:3933:OHX:N2	2.54	0.40
1:6:486:G:H22	1:6:501:U:H3	1.68	0.40
36:1:1263:A:H2'	36:1:1263:A:N3	2.36	0.40
45:L8:54:GLU:OE1	36:5:1557:A:H5''	149.66	0.40
55:M9:62:ARG:CZ	55:M9:62:ARG:HB2	3.25	0.40
36:1:2185:G:OP1	39:L2:202:VAL:HB	2.21	0.40
1:6:1698:G:O2'	1:6:1699:G:P	2.80	0.40
7:S5:205:SER:O	7:S5:207:THR:N	2.54	0.40
1:6:381:C:O2'	1:6:755:A:N1	2.46	0.40
1:2:1433:G:C5	31:D9:41:GLN:HB3	2.56	0.40
36:1:3367:C:C4	36:1:3368:U:C4	3.10	0.40
1:2:917:U:H2'	1:2:918:U:H5'	2.03	0.40
1:6:71:A:N1	1:6:72:A:C2	2.90	0.40
44:L7:25:GLN:O	44:L7:28:ALA:HB3	3.99	0.40
40:L3:50:LYS:HG2	40:L3:331:ASN:O	3.06	0.40
34:SR:50:ASP:OD2	34:SR:53:LYS:HG3	3.64	0.40
18:C6:39:VAL:O	18:C6:45:ARG:HD3	5.26	0.40
49:M3:3:ILE:HG12	64:N8:34:MET:CE	2.84	0.40
3:S1:41:ARG:HH22	3:S1:232:HIS:HA	3.07	0.40
9:S7:15:GLU:O	9:S7:18:LEU:HB2	2.21	0.40
40:L3:242:THR:HG23	40:L3:246:LEU:HB3	4.15	0.40
43:L6:149:ILE:HG23	43:L6:155:LEU:HD13	2.02	0.40
2:S0:124:THR:HG22	2:S0:174:TRP:NE1	2.35	0.40
36:5:2112:U:H1'	86:5:3969:OHX:N1	2.36	0.40
18:C6:97:VAL:HG12	18:C6:98:ASP:N	2.53	0.40
25:D3:142:LYS:HA	25:D3:143:PRO:HD2	2.28	0.40
50:M4:53:VAL:HA	50:M4:54:PRO:HD3	1.88	0.40
60:N4:37:ALA:O	60:N4:41:LYS:HG2	2.21	0.40
51:M5:15:GLN:O	72:O6:52:PRO:HD2	2.22	0.40
1:2:776:G:N2	1:2:785:U:H1'	2.36	0.40
45:L8:78:PHE:CD2	45:L8:179:ILE:HG21	3.49	0.40
1:6:1354:G:C5	1:6:1355:C:C4	3.09	0.40
39:L2:86:GLN:HG2	39:L2:88:ILE:HD13	2.86	0.40
14:C2:44:GLY:HA2	14:C2:120:VAL:O	3.46	0.40
1:6:1776:A:H2'	1:6:1777:G:C8	2.56	0.40
59:N3:86:ARG:HB2	59:N3:92:PHE:CE1	2.56	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:43:VAL:HG12	46:L9:57:VAL:CG2	2.52	0.40
61:N5:113:LEU:O	61:N5:113:LEU:HD12	3.63	0.40
36:1:1469:C:O2'	36:1:1509:A:H2	2.05	0.40
36:1:1509:A:H2'	36:1:1510:G:C8	2.56	0.40
1:6:1079:U:C4	1:6:1080:U:C4	3.09	0.40
36:1:398:A:O2'	36:1:1416:C:OP1	2.30	0.40
36:1:1694:U:H2'	36:1:1695:U:C6	2.57	0.40
36:1:627:U:H4'	36:1:1399:A:O2'	2.21	0.40
1:6:655:G:C6	1:6:676:G:C2	3.10	0.40
1:2:1081:A:O2'	1:2:1083:G:N7	2.47	0.40
78:Q2:5:PRO:HG2	36:5:2655:U:C2	232.84	0.40
10:S8:69:SER:HA	13:C1:22:ASN:HD21	3.73	0.40
36:1:1069:C:H2'	36:1:1070:U:H6	1.87	0.40
36:5:507:U:H2'	36:5:508:U:C6	2.56	0.40
7:S5:126:ASP:HB3	7:S5:127:GLN:H	1.74	0.40
49:M3:162:ASN:ND2	49:M3:164:GLU:OE1	6.72	0.40
11:S9:3:ARG:HB3	11:S9:4:ALA:H	3.26	0.40
72:O6:66:GLU:HB3	72:O6:70:ARG:HH21	1.87	0.40
36:1:23:A:H2'	36:1:24:G:H8	1.86	0.40
1:6:44:U:OP2	1:6:437:A:N6	2.54	0.40
55:M9:159:ALA:HB2	55:M9:162:ARG:HH22	1.86	0.40
36:5:3012:A:OP2	36:5:3099:C:H5	2.05	0.40
20:C8:108:LYS:HA	20:C8:108:LYS:HD2	1.75	0.40
54:M8:159:LYS:HD2	54:M8:159:LYS:HA	2.16	0.40
47:M0:10:ARG:HG2	47:M0:11:TYR:CD1	2.74	0.40
16:C4:32:ASP:N	16:C4:39:ILE:HD11	3.55	0.40
1:2:1368:G:C6	1:2:1369:U:C4	3.09	0.40
6:S4:106:LYS:HB2	6:S4:108:ARG:NE	2.36	0.40
72:O6:74:LYS:O	72:O6:74:LYS:HG2	2.21	0.40
50:M4:36:VAL:HG11	50:M4:55:ARG:NH2	2.37	0.40
18:C6:36:ILE:O	18:C6:36:ILE:HG12	2.21	0.40
36:5:494:G:H3'	36:5:495:G:C8	2.57	0.40
36:5:856:G:C6	36:5:857:G:N1	2.89	0.40
23:D1:60:ARG:HB3	23:D1:65:SER:HB2	2.03	0.40
1:6:1619:C:H2'	1:6:1620:C:C6	2.57	0.40
3:S1:167:VAL:O	3:S1:171:ILE:HG13	2.46	0.40
10:S8:76:THR:HG23	10:S8:108:PRO:HG2	3.41	0.40
19:C7:6:THR:HG23	19:C7:9:VAL:CG2	2.49	0.40
11:S9:60:LEU:HD21	11:S9:93:LEU:HB3	5.18	0.40
59:N3:85:TRP:NE1	59:N3:121:GLU:OE1	2.50	0.40
34:SR:249:ARG:HD3	34:SR:251:TRP:CE3	2.56	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:24:SER:OG	40:L3:25:ILE:N	3.15	0.40
7:S5:81:ARG:HH21	30:D8:47:PRO:HB3	1.86	0.40
36:5:2586:G:O2'	36:5:2588:U:OP1	2.38	0.40
36:1:1638:A:N3	36:1:1709:C:H1'	2.37	0.40
10:S8:98:LYS:C	10:S8:100:ALA:H	2.24	0.40
20:C8:28:ILE:HA	20:C8:31:ALA:HB3	2.03	0.40
36:1:1235:U:C4'	36:1:1236:G:H5'	2.50	0.40
79:Q3:17:ARG:HH11	79:Q3:17:ARG:HD2	1.78	0.40
1:2:452:A:H3'	1:2:453:U:C5	2.57	0.40
36:1:585:A:H4'	69:O3:72:THR:HB	2.04	0.40
10:S8:18:ARG:HH11	10:S8:18:ARG:HD3	1.73	0.40
41:L4:311:HIS:CE1	41:L4:314:LYS:HA	2.62	0.40
51:M5:70:ASN:ND2	36:5:2599:U:H5''	155.53	0.40
1:6:1699:G:C2	1:6:1701:A:H5''	2.57	0.40
3:S1:191:GLU:O	3:S1:194:ASN:HB2	2.61	0.40
44:L7:77:VAL:HG12	56:N0:59:VAL:O	2.41	0.40
20:C8:40:ARG:HH11	20:C8:40:ARG:HG2	2.02	0.40
6:S4:3:ARG:HG2	1:6:399:A:H4'	319.89	0.40
36:5:284:A:H4'	36:5:285:A:C2	2.56	0.40
1:6:194:U:O2	1:6:194:U:H2'	2.21	0.40
1:2:640:U:C4	1:2:641:G:C5	3.10	0.40
9:S7:98:ILE:HG12	9:S7:121:VAL:HG21	2.03	0.40
4:S2:78:ASP:HB3	4:S2:129:ILE:HD13	2.04	0.40
42:L5:278:SER:O	42:L5:281:GLU:HB2	2.20	0.40
6:S4:176:ASP:HB2	6:S4:179:LYS:NZ	2.37	0.40
69:O3:49:ILE:HG13	69:O3:85:PHE:CE1	5.45	0.40
74:O8:69:LEU:HA	74:O8:70:PRO:HD3	1.94	0.40
74:O8:77:ARG:HD2	74:O8:77:ARG:HA	2.21	0.40
12:C0:34:GLU:O	12:C0:35:ILE:HB	4.66	0.40
36:5:1610:G:C6	36:5:1611:G:C6	3.10	0.40
43:L6:152:THR:OG1	43:L6:155:LEU:HB2	2.47	0.40
36:5:741:U:H2'	36:5:742:G:O4'	2.20	0.40
33:E1:111:GLU:HA	33:E1:112:GLY:HA2	1.67	0.40
26:D4:64:PHE:CZ	1:6:767:U:C4	423.78	0.40
48:M1:104:PHE:O	48:M1:127:PHE:N	2.52	0.40
45:L8:186:LEU:HB2	45:L8:195:SER:HB3	2.03	0.40
68:O2:109:LEU:HD23	68:O2:119:VAL:HG21	2.02	0.40
34:SR:274:LEU:HD13	34:SR:313:TRP:CD2	2.83	0.40
47:M0:90:ARG:O	47:M0:91:VAL:HG23	2.21	0.40
22:D0:24:ILE:HG12	22:D0:116:VAL:HG13	2.03	0.40
62:N6:86:THR:HB	62:N6:95:VAL:O	3.06	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:95:TRP:CZ2	42:L5:161:GLY:HA2	2.56	0.40
42:L5:95:TRP:O	42:L5:98:ALA:HB3	2.22	0.40
41:L4:8:VAL:HG12	41:L4:9:HIS:N	2.36	0.40
41:L4:60:THR:HG22	41:L4:61:SER:H	1.86	0.40
36:5:2509:U:O4	36:5:2510:U:C4	2.75	0.40
13:C1:94:ILE:HG22	13:C1:97:TYR:H	2.66	0.40
21:C9:113:ILE:HD13	21:C9:128:GLY:HA2	3.29	0.40
70:O4:23:VAL:HG12	70:O4:24:LYS:O	4.20	0.40
65:N9:23:LYS:HB3	65:N9:24:PRO:CD	2.76	0.40
65:N9:23:LYS:HD2	65:N9:23:LYS:HA	1.93	0.40
36:5:1858:A:O2'	36:5:1859:A:P	2.79	0.40
6:S4:62:LYS:NZ	6:S4:66:MET:HE3	6.86	0.40
36:5:1438:U:H2'	36:5:1439:U:H6	1.85	0.40
73:O7:18:LEU:HA	73:O7:25:ARG:HA	2.29	0.40
6:S4:33:ALA:HB3	1:6:121:U:H1'	348.60	0.40
6:S4:34:GLY:HA3	6:S4:83:PRO:HG3	2.29	0.40
24:D2:106:THR:C	24:D2:108:ALA:H	2.53	0.40
53:M7:112:LEU:HG	53:M7:150:VAL:HB	2.68	0.40
66:O0:77:LEU:O	66:O0:81:VAL:HG22	2.22	0.40
42:L5:196:ARG:HH11	42:L5:196:ARG:HB3	1.86	0.40
1:2:1657:U:C4	86:2:2089:OHX:N4	2.89	0.40
13:C1:77:SER:O	13:C1:84:ILE:HB	2.22	0.40
65:N9:4:SER:O	65:N9:5:LYS:C	2.58	0.40
71:O5:49:LYS:HD2	71:O5:49:LYS:HA	1.81	0.40
49:M3:70:ARG:HD2	49:M3:70:ARG:HH11	2.81	0.40
36:1:826:G:C4	36:1:827:A:C8	3.10	0.40
1:6:158:U:O2'	1:6:159:U:H3'	2.21	0.40
14:C2:60:VAL:HG13	14:C2:122:VAL:HG22	2.02	0.40
71:O5:105:ARG:HH21	71:O5:105:ARG:HB2	1.86	0.40
72:O6:56:ARG:O	72:O6:60:LEU:HB2	2.21	0.40
1:6:98:U:O2'	1:6:99:C:H5'	2.21	0.40
40:L3:275:ARG:NH1	36:5:3045:G:O3'	234.38	0.40
36:5:2413:A:H2'	36:5:2414:G:C8	2.57	0.40
36:5:303:G:N2	36:5:2778:G:C5	2.89	0.40
50:M4:8:LYS:HB3	50:M4:9:ALA:H	1.53	0.40
36:5:585:A:C6	36:5:586:C:N4	2.90	0.40
1:6:1146:G:C6	1:6:1147:A:C6	3.10	0.40
51:M5:99:ARG:HG3	51:M5:130:PHE:CE1	3.30	0.40
1:2:763:G:C6	1:2:764:U:C4	3.09	0.40
26:D4:3:ASP:C	26:D4:5:VAL:H	2.24	0.40
57:N1:8:ARG:HH21	36:5:2756:C:H1'	246.41	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:95:ASN:N	48:M1:95:ASN:OD1	4.34	0.40
66:O0:71:GLN:HA	66:O0:71:GLN:OE1	4.76	0.40
36:1:1846:C:H2'	36:1:1846:C:H6	1.75	0.40
34:SR:31:ASN:O	34:SR:47:LEU:N	2.54	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:531:G:OP1	86:S6:301:OHX:N1[2_545]	2.16	0.04

## 5.3 Torsion angles ⓘ

### 5.3.1 Protein backbone ⓘ

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	S0	204/251 (81%)	139 (68%)	40 (20%)	25 (12%)	0	2
2	s0	204/251 (81%)	148 (72%)	37 (18%)	19 (9%)	1	6
3	S1	212/254 (84%)	147 (69%)	38 (18%)	27 (13%)	0	2
3	s1	214/254 (84%)	164 (77%)	34 (16%)	16 (8%)	1	10
4	S2	215/253 (85%)	177 (82%)	26 (12%)	12 (6%)	2	16
4	s2	215/253 (85%)	171 (80%)	27 (13%)	17 (8%)	1	8
5	S3	221/239 (92%)	176 (80%)	32 (14%)	13 (6%)	2	15
5	s3	221/239 (92%)	172 (78%)	30 (14%)	19 (9%)	1	7
6	S4	258/260 (99%)	205 (80%)	39 (15%)	14 (5%)	2	17
6	s4	258/260 (99%)	206 (80%)	34 (13%)	18 (7%)	1	11
7	S5	204/224 (91%)	149 (73%)	38 (19%)	17 (8%)	1	8
7	s5	204/224 (91%)	145 (71%)	44 (22%)	15 (7%)	1	10
8	S6	224/236 (95%)	194 (87%)	20 (9%)	10 (4%)	3	21

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
8	s6	216/236 (92%)	184 (85%)	20 (9%)	12 (6%)	2	16
9	S7	182/189 (96%)	132 (72%)	33 (18%)	17 (9%)	1	6
9	s7	184/189 (97%)	142 (77%)	23 (12%)	19 (10%)	1	4
10	S8	184/200 (92%)	150 (82%)	23 (12%)	11 (6%)	2	15
10	s8	184/200 (92%)	155 (84%)	21 (11%)	8 (4%)	3	23
11	S9	183/196 (93%)	146 (80%)	24 (13%)	13 (7%)	1	11
11	s9	183/196 (93%)	144 (79%)	25 (14%)	14 (8%)	1	9
12	C0	94/105 (90%)	68 (72%)	17 (18%)	9 (10%)	1	5
12	c0	92/105 (88%)	60 (65%)	16 (17%)	16 (17%)	0	1
13	C1	153/155 (99%)	118 (77%)	22 (14%)	13 (8%)	1	7
13	c1	144/155 (93%)	112 (78%)	25 (17%)	7 (5%)	3	19
14	C2	122/142 (86%)	70 (57%)	28 (23%)	24 (20%)	0	1
14	c2	122/142 (86%)	68 (56%)	36 (30%)	18 (15%)	0	1
15	C3	148/150 (99%)	120 (81%)	16 (11%)	12 (8%)	1	8
15	c3	148/150 (99%)	112 (76%)	23 (16%)	13 (9%)	1	7
16	C4	125/136 (92%)	92 (74%)	22 (18%)	11 (9%)	1	7
16	c4	126/136 (93%)	94 (75%)	22 (18%)	10 (8%)	1	8
17	C5	122/141 (86%)	89 (73%)	24 (20%)	9 (7%)	1	10
17	c5	133/141 (94%)	87 (65%)	28 (21%)	18 (14%)	0	2
18	C6	139/142 (98%)	108 (78%)	18 (13%)	13 (9%)	1	6
18	c6	140/142 (99%)	111 (79%)	19 (14%)	10 (7%)	1	11
19	C7	116/136 (85%)	86 (74%)	19 (16%)	11 (10%)	1	6
19	c7	113/136 (83%)	84 (74%)	21 (19%)	8 (7%)	1	11
20	C8	143/145 (99%)	110 (77%)	22 (15%)	11 (8%)	1	9
20	c8	143/145 (99%)	112 (78%)	21 (15%)	10 (7%)	1	11
21	C9	141/143 (99%)	114 (81%)	20 (14%)	7 (5%)	3	19
21	c9	141/143 (99%)	109 (77%)	27 (19%)	5 (4%)	4	29
22	D0	105/120 (88%)	87 (83%)	13 (12%)	5 (5%)	3	20
22	d0	108/120 (90%)	83 (77%)	13 (12%)	12 (11%)	0	3
23	D1	85/87 (98%)	54 (64%)	21 (25%)	10 (12%)	0	3
23	d1	85/87 (98%)	66 (78%)	12 (14%)	7 (8%)	1	8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
24	D2	127/129 (98%)	103 (81%)	20 (16%)	4 (3%)	5	32
24	d2	127/129 (98%)	111 (87%)	14 (11%)	2 (2%)	12	48
25	D3	142/144 (99%)	107 (75%)	22 (16%)	13 (9%)	1	6
25	d3	142/144 (99%)	120 (84%)	16 (11%)	6 (4%)	3	23
26	D4	132/134 (98%)	107 (81%)	20 (15%)	5 (4%)	4	26
26	d4	132/134 (98%)	101 (76%)	22 (17%)	9 (7%)	1	12
27	D5	68/107 (64%)	39 (57%)	18 (26%)	11 (16%)	0	1
27	d5	67/107 (63%)	51 (76%)	13 (19%)	3 (4%)	3	21
28	D6	95/97 (98%)	55 (58%)	21 (22%)	19 (20%)	0	1
28	d6	95/97 (98%)	72 (76%)	14 (15%)	9 (10%)	1	6
29	D7	79/81 (98%)	58 (73%)	16 (20%)	5 (6%)	2	13
29	d7	79/81 (98%)	64 (81%)	10 (13%)	5 (6%)	2	13
30	D8	61/66 (92%)	45 (74%)	11 (18%)	5 (8%)	1	8
30	d8	61/66 (92%)	40 (66%)	15 (25%)	6 (10%)	1	5
31	D9	51/55 (93%)	43 (84%)	6 (12%)	2 (4%)	4	25
31	d9	51/55 (93%)	41 (80%)	4 (8%)	6 (12%)	0	3
32	E0	58/60 (97%)	48 (83%)	7 (12%)	3 (5%)	2	18
33	E1	69/76 (91%)	31 (45%)	22 (32%)	16 (23%)	0	0
33	e1	74/76 (97%)	35 (47%)	18 (24%)	21 (28%)	0	0
34	SR	316/318 (99%)	263 (83%)	41 (13%)	12 (4%)	4	26
34	sR	316/318 (99%)	269 (85%)	37 (12%)	10 (3%)	5	31
35	SM	155/273 (57%)	101 (65%)	33 (21%)	21 (14%)	0	2
35	sM	98/273 (36%)	56 (57%)	29 (30%)	13 (13%)	0	2
39	L2	250/253 (99%)	208 (83%)	30 (12%)	12 (5%)	3	20
39	l2	250/253 (99%)	206 (82%)	26 (10%)	18 (7%)	1	11
40	L3	384/386 (100%)	319 (83%)	46 (12%)	19 (5%)	3	19
40	l3	384/386 (100%)	331 (86%)	40 (10%)	13 (3%)	5	29
41	L4	359/361 (99%)	289 (80%)	42 (12%)	28 (8%)	1	9
41	l4	359/361 (99%)	290 (81%)	44 (12%)	25 (7%)	1	11
42	L5	294/296 (99%)	235 (80%)	42 (14%)	17 (6%)	2	15
42	l5	292/296 (99%)	244 (84%)	36 (12%)	12 (4%)	3	24

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
43	L6	152/175 (87%)	126 (83%)	21 (14%)	5 (3%)	5	30
43	l6	153/175 (87%)	129 (84%)	21 (14%)	3 (2%)	9	43
44	L7	220/243 (90%)	175 (80%)	35 (16%)	10 (4%)	3	21
44	l7	221/243 (91%)	179 (81%)	34 (15%)	8 (4%)	4	28
45	L8	231/255 (91%)	176 (76%)	42 (18%)	13 (6%)	2	16
45	l8	229/255 (90%)	179 (78%)	32 (14%)	18 (8%)	1	8
46	L9	189/191 (99%)	159 (84%)	23 (12%)	7 (4%)	4	27
46	l9	189/191 (99%)	159 (84%)	24 (13%)	6 (3%)	5	31
47	M0	207/220 (94%)	165 (80%)	27 (13%)	15 (7%)	1	11
47	m0	209/220 (95%)	155 (74%)	39 (19%)	15 (7%)	1	11
48	M1	167/173 (96%)	120 (72%)	27 (16%)	20 (12%)	0	3
48	m1	167/173 (96%)	134 (80%)	22 (13%)	11 (7%)	1	12
49	M3	191/198 (96%)	151 (79%)	29 (15%)	11 (6%)	2	15
49	m3	192/198 (97%)	159 (83%)	17 (9%)	16 (8%)	1	8
50	M4	134/137 (98%)	108 (81%)	17 (13%)	9 (7%)	1	12
50	m4	135/137 (98%)	113 (84%)	18 (13%)	4 (3%)	5	33
51	M5	201/203 (99%)	176 (88%)	20 (10%)	5 (2%)	7	37
51	m5	201/203 (99%)	167 (83%)	26 (13%)	8 (4%)	4	24
52	M6	195/198 (98%)	172 (88%)	18 (9%)	5 (3%)	7	36
52	m6	195/198 (98%)	164 (84%)	22 (11%)	9 (5%)	3	21
53	M7	181/183 (99%)	139 (77%)	32 (18%)	10 (6%)	2	16
53	m7	153/183 (84%)	134 (88%)	17 (11%)	2 (1%)	15	52
54	M8	183/185 (99%)	154 (84%)	24 (13%)	5 (3%)	6	35
54	m8	183/185 (99%)	151 (82%)	27 (15%)	5 (3%)	6	35
55	M9	186/188 (99%)	157 (84%)	25 (13%)	4 (2%)	8	41
55	m9	186/188 (99%)	154 (83%)	28 (15%)	4 (2%)	8	41
56	N0	170/172 (99%)	151 (89%)	13 (8%)	6 (4%)	4	29
56	n0	170/172 (99%)	157 (92%)	11 (6%)	2 (1%)	16	54
57	N1	157/159 (99%)	134 (85%)	16 (10%)	7 (4%)	3	21
57	n1	157/159 (99%)	128 (82%)	23 (15%)	6 (4%)	4	26
58	N2	98/120 (82%)	74 (76%)	16 (16%)	8 (8%)	1	8

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
58	n2	96/120 (80%)	79 (82%)	11 (12%)	6 (6%)	2	13
59	N3	134/136 (98%)	119 (89%)	12 (9%)	3 (2%)	8	41
59	n3	134/136 (98%)	124 (92%)	9 (7%)	1 (1%)	26	66
60	N4	96/155 (62%)	69 (72%)	19 (20%)	8 (8%)	1	8
60	n4	133/155 (86%)	108 (81%)	14 (10%)	11 (8%)	1	8
61	N5	119/141 (84%)	107 (90%)	11 (9%)	1 (1%)	24	62
61	n5	118/141 (84%)	92 (78%)	17 (14%)	9 (8%)	1	9
62	N6	124/126 (98%)	107 (86%)	13 (10%)	4 (3%)	5	31
62	n6	124/126 (98%)	109 (88%)	11 (9%)	4 (3%)	5	31
63	N7	133/135 (98%)	105 (79%)	20 (15%)	8 (6%)	2	15
63	n7	133/135 (98%)	99 (74%)	24 (18%)	10 (8%)	1	10
64	N8	146/148 (99%)	112 (77%)	25 (17%)	9 (6%)	2	14
64	n8	146/148 (99%)	114 (78%)	24 (16%)	8 (6%)	2	16
65	N9	56/58 (97%)	48 (86%)	7 (12%)	1 (2%)	11	46
65	n9	56/58 (97%)	36 (64%)	14 (25%)	6 (11%)	0	4
66	O0	95/104 (91%)	81 (85%)	12 (13%)	2 (2%)	9	42
66	o0	98/104 (94%)	90 (92%)	7 (7%)	1 (1%)	19	58
67	O1	107/112 (96%)	92 (86%)	8 (8%)	7 (6%)	1	13
67	o1	107/112 (96%)	83 (78%)	12 (11%)	12 (11%)	0	3
68	O2	125/129 (97%)	109 (87%)	12 (10%)	4 (3%)	5	31
68	o2	125/129 (97%)	101 (81%)	17 (14%)	7 (6%)	2	16
69	O3	104/106 (98%)	88 (85%)	14 (14%)	2 (2%)	10	45
69	o3	104/106 (98%)	90 (86%)	10 (10%)	4 (4%)	4	26
70	O4	110/119 (92%)	87 (79%)	19 (17%)	4 (4%)	4	28
70	o4	110/119 (92%)	93 (84%)	13 (12%)	4 (4%)	4	28
71	O5	117/119 (98%)	97 (83%)	16 (14%)	4 (3%)	5	29
71	o5	117/119 (98%)	93 (80%)	20 (17%)	4 (3%)	5	29
72	O6	97/99 (98%)	80 (82%)	9 (9%)	8 (8%)	1	8
72	o6	97/99 (98%)	77 (79%)	12 (12%)	8 (8%)	1	8
73	O7	85/87 (98%)	69 (81%)	15 (18%)	1 (1%)	16	54
73	o7	85/87 (98%)	67 (79%)	15 (18%)	3 (4%)	4	29

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
74	O8	75/77 (97%)	60 (80%)	12 (16%)	3 (4%)	4	24
74	o8	75/77 (97%)	62 (83%)	9 (12%)	4 (5%)	2	17
75	O9	48/50 (96%)	38 (79%)	8 (17%)	2 (4%)	3	23
75	o9	48/50 (96%)	40 (83%)	8 (17%)	0	100	100
76	Q0	50/52 (96%)	45 (90%)	3 (6%)	2 (4%)	4	24
76	q0	50/52 (96%)	43 (86%)	5 (10%)	2 (4%)	4	24
77	Q1	23/25 (92%)	21 (91%)	2 (9%)	0	100	100
77	q1	23/25 (92%)	19 (83%)	2 (9%)	2 (9%)	1	7
78	Q2	103/105 (98%)	72 (70%)	23 (22%)	8 (8%)	1	9
78	q2	103/105 (98%)	93 (90%)	8 (8%)	2 (2%)	10	45
79	Q3	89/91 (98%)	76 (85%)	8 (9%)	5 (6%)	2	16
79	q3	89/91 (98%)	75 (84%)	10 (11%)	4 (4%)	3	21
80	e0	60/62 (97%)	44 (73%)	12 (20%)	4 (7%)	1	12
82	p0	139/311 (45%)	119 (86%)	14 (10%)	6 (4%)	3	23
All	All	22333/24141 (92%)	17773 (80%)	3160 (14%)	1400 (6%)	2	13

All (1400) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	39	ASN
2	S0	66	ALA
2	S0	102	PHE
2	S0	103	THR
2	S0	139	VAL
2	S0	140	ASN
2	S0	158	VAL
2	S0	190	ASP
2	S0	191	ARG
2	S0	202	TYR
3	S1	37	THR
3	S1	49	ASN
3	S1	58	SER
3	S1	63	GLY
3	S1	81	PHE
3	S1	93	GLY
3	S1	132	ASP

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type
3	S1	179	SER
4	S2	135	SER
5	S3	62	ASN
5	S3	65	ARG
5	S3	93	ASP
5	S3	195	SER
5	S3	211	PRO
5	S3	220	PRO
6	S4	104	ASP
6	S4	200	ARG
7	S5	39	GLU
7	S5	63	GLN
7	S5	101	GLY
8	S6	173	PRO
8	S6	174	LYS
9	S7	12	ALA
9	S7	64	VAL
9	S7	131	PHE
9	S7	134	GLU
9	S7	159	VAL
10	S8	149	SER
11	S9	134	ILE
11	S9	164	PHE
11	S9	168	ARG
11	S9	169	PRO
12	C0	54	TYR
12	C0	60	SER
12	C0	87	VAL
12	C0	88	PRO
13	C1	3	THR
13	C1	7	VAL
13	C1	30	ARG
14	C2	42	ALA
14	C2	55	GLY
14	C2	125	ASN
14	C2	126	TRP
14	C2	131	ASP
15	C3	3	ARG
15	C3	22	ALA
15	C3	27	LYS
15	C3	68	GLY
15	C3	138	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	C4	39	ILE
16	C4	50	ALA
16	C4	51	ASP
16	C4	124	ASP
16	C4	125	SER
17	C5	54	ALA
17	C5	80	MET
17	C5	125	PRO
17	C5	126	VAL
18	C6	41	PRO
18	C6	59	LYS
18	C6	115	THR
19	C7	85	VAL
19	C7	86	PRO
19	C7	88	VAL
19	C7	113	LEU
20	C8	14	ILE
20	C8	60	GLU
20	C8	83	ALA
20	C8	91	ASP
20	C8	92	ILE
21	C9	31	PRO
21	C9	53	TRP
26	D4	6	THR
26	D4	51	GLU
27	D5	39	ALA
27	D5	43	ASP
27	D5	44	GLN
27	D5	54	VAL
27	D5	86	GLU
27	D5	97	LYS
28	D6	19	LYS
28	D6	36	ILE
28	D6	45	VAL
28	D6	46	GLU
28	D6	65	PRO
28	D6	84	VAL
28	D6	85	ARG
28	D6	86	VAL
29	D7	38	PRO
29	D7	62	ILE
32	E0	47	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
33	E1	84	VAL
33	E1	87	THR
33	E1	98	VAL
33	E1	102	VAL
33	E1	138	ARG
34	SR	117	LYS
34	SR	160	GLU
34	SR	161	LYS
35	SM	32	SER
35	SM	52	PRO
35	SM	87	THR
35	SM	89	ARG
35	SM	140	ASP
35	SM	166	VAL
35	SM	167	PRO
39	L2	202	VAL
39	L2	246	LEU
40	L3	136	LYS
40	L3	138	ALA
40	L3	139	GLN
40	L3	188	ILE
40	L3	212	ASN
40	L3	243	HIS
40	L3	300	ARG
40	L3	385	LYS
41	L4	4	PRO
41	L4	132	ALA
41	L4	146	PRO
41	L4	175	HIS
41	L4	268	ALA
41	L4	270	SER
41	L4	293	SER
41	L4	306	THR
41	L4	317	PRO
41	L4	318	LEU
42	L5	57	ASN
42	L5	153	THR
42	L5	233	ALA
42	L5	234	ASP
42	L5	253	PHE
42	L5	258	LYS
43	L6	59	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
43	L6	98	VAL
44	L7	26	VAL
45	L8	25	PRO
45	L8	31	PRO
45	L8	115	ALA
45	L8	116	VAL
47	M0	145	LYS
47	M0	194	GLY
48	M1	8	PRO
48	M1	9	MET
48	M1	11	ASP
48	M1	94	ARG
48	M1	95	ASN
48	M1	115	LYS
48	M1	165	GLN
48	M1	167	TYR
49	M3	129	ASN
49	M3	136	GLU
49	M3	166	ALA
49	M3	193	ALA
50	M4	8	LYS
50	M4	9	ALA
50	M4	136	ALA
52	M6	110	PRO
52	M6	111	PRO
53	M7	109	ALA
53	M7	159	LYS
54	M8	41	ASP
54	M8	99	THR
55	M9	47	ASN
56	N0	130	GLU
56	N0	142	GLN
57	N1	159	PHE
58	N2	59	ASP
58	N2	60	GLY
58	N2	107	PHE
60	N4	64	THR
60	N4	81	PRO
60	N4	97	LYS
63	N7	35	SER
63	N7	128	GLN
64	N8	76	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
67	O1	5	LYS
67	O1	83	GLU
68	O2	127	ALA
71	O5	118	ILE
72	O6	33	ALA
72	O6	34	SER
72	O6	99	ARG
75	O9	4	GLN
75	O9	50	ASN
76	Q0	78	ILE
78	Q2	8	ARG
78	Q2	15	LYS
78	Q2	30	ALA
78	Q2	33	ALA
78	Q2	100	LYS
2	s0	4	PRO
2	s0	29	VAL
2	s0	95	ALA
2	s0	189	VAL
2	s0	206	ASP
3	s1	206	PRO
3	s1	210	ILE
4	s2	92	ALA
4	s2	106	ASP
4	s2	107	SER
5	s3	115	ILE
5	s3	195	SER
5	s3	211	PRO
5	s3	216	PRO
5	s3	217	ILE
5	s3	220	PRO
6	s4	95	THR
6	s4	104	ASP
6	s4	195	ILE
6	s4	196	VAL
7	s5	28	PRO
7	s5	36	ALA
7	s5	43	PHE
7	s5	55	ASP
7	s5	184	PHE
7	s5	205	SER
8	s6	70	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	s6	153	VAL
8	s6	154	ARG
8	s6	156	PHE
8	s6	173	PRO
8	s6	174	LYS
9	s7	10	SER
9	s7	64	VAL
9	s7	66	SER
9	s7	74	GLN
9	s7	131	PHE
9	s7	163	ASP
11	s9	118	LEU
11	s9	183	ALA
12	c0	31	LYS
12	c0	82	LEU
12	c0	83	PRO
12	c0	88	PRO
12	c0	97	PRO
13	c1	82	ARG
13	c1	129	ARG
14	c2	115	VAL
14	c2	131	ASP
15	c3	19	SER
15	c3	87	ASP
15	c3	88	LEU
16	c4	35	GLY
16	c4	98	GLY
17	c5	11	VAL
17	c5	14	THR
17	c5	51	SER
17	c5	52	LYS
17	c5	68	PRO
17	c5	125	PRO
17	c5	126	VAL
18	c6	39	VAL
18	c6	40	GLU
18	c6	42	GLU
18	c6	113	ASP
18	c6	116	LEU
19	c7	82	ASP
19	c7	86	PRO
19	c7	88	VAL

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
19	c7	99	VAL
19	c7	104	ASN
20	c8	145	ARG
22	d0	15	GLN
22	d0	51	VAL
22	d0	97	VAL
22	d0	118	VAL
23	d1	4	ASP
23	d1	29	HIS
24	d2	68	ARG
25	d3	138	GLU
26	d4	30	PRO
26	d4	32	ARG
26	d4	33	ALA
26	d4	35	VAL
26	d4	52	LYS
26	d4	121	THR
27	d5	85	LYS
28	d6	8	ASN
28	d6	63	ALA
29	d7	38	PRO
29	d7	59	CYS
29	d7	60	SER
30	d8	61	ARG
31	d9	6	VAL
31	d9	16	LYS
80	e0	45	VAL
80	e0	54	ARG
80	e0	60	PRO
33	e1	79	LYS
33	e1	84	VAL
33	e1	87	THR
33	e1	92	LYS
33	e1	98	VAL
33	e1	102	VAL
33	e1	103	LEU
33	e1	106	TYR
34	sR	160	GLU
34	sR	161	LYS
34	sR	163	ASP
34	sR	165	ASP
34	sR	318	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	sM	50	ASN
35	sM	55	SER
39	l2	24	GLN
39	l2	96	LEU
39	l2	115	ASN
39	l2	212	GLY
39	l2	229	ALA
39	l2	249	SER
40	l3	139	GLN
40	l3	235	THR
40	l3	347	SER
41	l4	4	PRO
41	l4	90	PHE
41	l4	301	PRO
41	l4	302	ALA
41	l4	329	PRO
41	l4	330	TYR
41	l4	342	LYS
41	l4	361	HIS
42	l5	132	THR
42	l5	258	LYS
42	l5	260	PHE
43	l6	98	VAL
44	l7	191	VAL
44	l7	193	PRO
44	l7	228	SER
45	l8	25	PRO
45	l8	26	LEU
45	l8	34	PHE
45	l8	122	LYS
47	m0	82	ARG
48	m1	8	PRO
48	m1	10	ARG
48	m1	108	GLU
48	m1	111	ASP
49	m3	47	ALA
49	m3	129	ASN
49	m3	134	GLU
49	m3	152	THR
49	m3	193	ALA
51	m5	91	GLU
52	m6	16	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
52	m6	110	PRO
54	m8	91	ALA
54	m8	99	THR
54	m8	112	ALA
55	m9	36	ASN
56	n0	2	ALA
57	n1	122	GLN
57	n1	135	PRO
57	n1	146	ASN
58	n2	49	ASN
60	n4	26	SER
60	n4	63	ILE
60	n4	71	ARG
60	n4	76	VAL
61	n5	25	LYS
61	n5	44	PRO
61	n5	45	LYS
61	n5	48	SER
61	n5	58	ASP
62	n6	83	ASP
62	n6	84	LYS
62	n6	126	LEU
63	n7	36	HIS
63	n7	129	TRP
64	n8	15	VAL
64	n8	76	ASP
65	n9	23	LYS
65	n9	39	PHE
66	o0	104	LEU
67	o1	5	LYS
67	o1	45	GLY
67	o1	84	ASP
68	o2	4	LEU
68	o2	5	PRO
68	o2	27	ARG
69	o3	90	PRO
70	o4	67	LYS
70	o4	79	SER
72	o6	33	ALA
72	o6	34	SER
72	o6	64	SER
72	o6	98	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
74	o8	3	ARG
74	o8	17	ARG
76	q0	80	PRO
78	q2	60	LYS
82	p0	93	LEU
2	S0	5	ALA
2	S0	26	ALA
2	S0	27	ARG
2	S0	30	GLN
2	S0	49	ASN
2	S0	111	ILE
2	S0	185	ARG
2	S0	187	ALA
3	S1	54	LEU
3	S1	62	LYS
3	S1	82	ARG
3	S1	158	SER
3	S1	177	GLN
3	S1	206	PRO
3	S1	221	PRO
4	S2	107	SER
4	S2	144	TRP
4	S2	148	LEU
5	S3	51	ARG
5	S3	64	ARG
5	S3	112	GLY
5	S3	216	PRO
5	S3	218	LEU
6	S4	26	CYS
6	S4	142	HIS
7	S5	26	ALA
7	S5	51	VAL
7	S5	58	LEU
7	S5	81	ARG
7	S5	153	GLY
9	S7	11	GLN
9	S7	32	PRO
9	S7	73	VAL
9	S7	116	ARG
9	S7	126	LEU
9	S7	155	ASP
10	S8	40	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
10	S8	120	THR
11	S9	118	LEU
11	S9	120	LYS
11	S9	163	PRO
12	C0	34	GLU
13	C1	29	LYS
13	C1	55	ASP
13	C1	145	ALA
13	C1	146	ALA
13	C1	154	ALA
14	C2	66	VAL
14	C2	89	ILE
14	C2	91	VAL
14	C2	93	ASP
14	C2	106	ILE
14	C2	127	GLY
15	C3	24	ALA
16	C4	42	VAL
16	C4	108	SER
16	C4	126	THR
18	C6	39	VAL
18	C6	42	GLU
20	C8	100	THR
21	C9	29	GLU
21	C9	50	ALA
21	C9	69	LYS
21	C9	130	ARG
22	D0	118	VAL
23	D1	49	GLU
25	D3	61	SER
25	D3	70	LYS
25	D3	128	SER
27	D5	71	ILE
28	D6	11	ASN
28	D6	47	ALA
29	D7	51	GLN
29	D7	63	LEU
30	D8	36	THR
31	D9	8	PHE
33	E1	103	LEU
33	E1	110	ALA
33	E1	111	GLU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
33	E1	128	ALA
34	SR	48	THR
34	SR	51	ASP
35	SM	139	GLU
35	SM	153	ASP
35	SM	165	LYS
39	L2	13	GLY
39	L2	143	GLU
39	L2	144	ASN
39	L2	250	GLN
40	L3	140	ASP
40	L3	386	ASP
41	L4	90	PHE
41	L4	190	GLY
41	L4	232	SER
41	L4	292	SER
41	L4	304	GLN
41	L4	320	ASN
41	L4	338	LYS
42	L5	59	ASP
42	L5	252	ALA
43	L6	150	LYS
44	L7	24	GLU
45	L8	39	ALA
45	L8	93	LEU
45	L8	135	GLY
45	L8	156	ASP
46	L9	50	ASN
46	L9	96	HIS
46	L9	110	LYS
47	M0	91	VAL
47	M0	117	GLY
47	M0	149	VAL
47	M0	207	GLU
48	M1	24	GLY
49	M3	13	HIS
49	M3	25	HIS
49	M3	47	ALA
50	M4	28	SER
50	M4	135	LEU
51	M5	81	TYR
52	M6	90	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
53	M7	163	LYS
53	M7	164	LYS
55	M9	53	LYS
56	N0	139	TYR
57	N1	124	VAL
57	N1	144	GLU
58	N2	11	ILE
58	N2	51	GLY
62	N6	43	TYR
62	N6	84	LYS
63	N7	3	LYS
64	N8	66	ALA
64	N8	93	SER
66	O0	96	GLY
67	O1	6	ASP
67	O1	82	GLU
68	O2	27	ARG
69	O3	40	ASP
70	O4	17	SER
71	O5	97	ALA
72	O6	13	LYS
74	O8	33	LYS
78	Q2	32	LYS
79	Q3	84	ARG
2	s0	30	GLN
2	s0	62	ARG
2	s0	158	VAL
2	s0	186	GLY
2	s0	191	ARG
3	s1	26	ARG
3	s1	93	GLY
3	s1	147	ALA
3	s1	209	ASN
3	s1	223	PHE
4	s2	148	LEU
4	s2	163	GLY
4	s2	164	SER
5	s3	61	GLU
5	s3	76	ARG
5	s3	179	GLN
5	s3	219	ALA
6	s4	90	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	s4	164	LEU
6	s4	242	LYS
7	s5	98	MET
7	s5	151	GLY
7	s5	204	GLY
8	s6	68	LEU
8	s6	131	LYS
9	s7	67	LEU
11	s9	120	LYS
11	s9	121	SER
12	c0	73	VAL
12	c0	92	ILE
12	c0	94	GLU
13	c1	61	THR
14	c2	22	VAL
14	c2	39	ASP
14	c2	66	VAL
14	c2	101	ALA
14	c2	106	ILE
14	c2	119	SER
15	c3	66	ILE
15	c3	139	TRP
16	c4	67	VAL
16	c4	97	GLY
16	c4	131	GLY
16	c4	132	ARG
17	c5	50	THR
17	c5	71	GLU
17	c5	117	GLY
18	c6	120	ASP
19	c7	113	LEU
20	c8	91	ASP
20	c8	135	GLY
21	c9	28	LEU
21	c9	34	VAL
22	d0	17	GLN
22	d0	45	ALA
22	d0	96	PRO
23	d1	6	GLY
23	d1	64	GLU
24	d2	56	HIS
25	d3	70	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
25	d3	101	GLU
26	d4	53	ASP
27	d5	87	GLY
28	d6	47	ALA
28	d6	62	TYR
29	d7	20	LYS
30	d8	20	GLY
30	d8	57	MET
30	d8	65	ARG
31	d9	7	TRP
33	e1	81	LYS
33	e1	85	TYR
33	e1	100	LEU
33	e1	127	GLY
33	e1	145	HIS
33	e1	146	SER
33	e1	148	TYR
34	sR	237	GLN
35	sM	47	ALA
35	sM	48	ARG
35	sM	65	THR
35	sM	67	GLY
35	sM	72	ARG
35	sM	120	GLU
39	l2	54	ARG
39	l2	213	GLY
39	l2	215	ASN
39	l2	238	ILE
40	l3	142	ALA
40	l3	187	SER
40	l3	258	ALA
40	l3	348	ARG
41	l4	26	PHE
41	l4	35	VAL
41	l4	142	VAL
41	l4	190	GLY
41	l4	233	LEU
41	l4	272	VAL
41	l4	328	ASN
41	l4	339	LEU
41	l4	349	THR
44	l7	129	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	l8	120	LYS
45	l8	239	GLY
46	l9	144	ILE
47	m0	101	LYS
47	m0	117	GLY
47	m0	174	THR
47	m0	207	GLU
47	m0	219	ALA
48	m1	115	LYS
48	m1	116	TYR
48	m1	167	TYR
49	m3	29	ALA
49	m3	76	THR
49	m3	93	ILE
49	m3	135	ALA
49	m3	162	ASN
51	m5	81	TYR
52	m6	13	GLY
52	m6	160	ARG
53	m7	66	SER
54	m8	84	VAL
54	m8	98	LYS
55	m9	183	ALA
56	n0	142	GLN
58	n2	104	ARG
60	n4	25	ASP
60	n4	77	LYS
60	n4	83	THR
61	n5	38	LEU
61	n5	47	ALA
61	n5	55	ASN
62	n6	125	LYS
63	n7	7	ALA
63	n7	16	GLY
63	n7	102	GLU
63	n7	125	GLY
64	n8	47	LYS
64	n8	56	VAL
64	n8	84	GLU
65	n9	24	PRO
67	o1	83	GLU
67	o1	86	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
67	o1	91	SER
69	o3	60	ARG
71	o5	40	SER
71	o5	119	LYS
72	o6	63	ASN
72	o6	67	LYS
73	o7	67	LEU
78	q2	17	CYS
82	p0	47	GLY
82	p0	68	SER
82	p0	198	PRO
2	S0	195	TRP
3	S1	26	ARG
3	S1	35	PRO
3	S1	36	SER
4	S2	163	GLY
4	S2	236	PRO
5	S3	81	PRO
5	S3	217	ILE
6	S4	17	HIS
6	S4	96	ASN
7	S5	43	PHE
7	S5	64	VAL
8	S6	25	ARG
8	S6	138	ALA
8	S6	148	SER
8	S6	152	ASP
9	S7	30	SER
9	S7	98	ILE
9	S7	112	ARG
10	S8	22	ARG
10	S8	52	ASN
10	S8	59	ARG
10	S8	152	ILE
10	S8	159	GLN
11	S9	60	LEU
11	S9	98	ALA
11	S9	150	LEU
12	C0	25	LYS
12	C0	93	GLN
14	C2	36	LEU
14	C2	37	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	C2	69	ALA
14	C2	107	ASP
14	C2	115	VAL
17	C5	51	SER
17	C5	52	LYS
17	C5	101	ALA
17	C5	130	ARG
18	C6	33	GLY
18	C6	40	GLU
18	C6	114	ARG
18	C6	116	LEU
19	C7	83	GLN
19	C7	87	GLU
19	C7	115	LEU
20	C8	25	ASN
21	C9	100	ILE
23	D1	4	ASP
23	D1	7	GLN
23	D1	15	ARG
23	D1	43	GLY
24	D2	30	SER
24	D2	100	GLY
25	D3	11	SER
25	D3	41	SER
25	D3	44	GLY
25	D3	112	LYS
25	D3	114	LYS
25	D3	143	PRO
26	D4	34	ASN
27	D5	56	THR
27	D5	70	LYS
28	D6	5	ARG
28	D6	10	ARG
28	D6	61	GLU
28	D6	62	TYR
28	D6	63	ALA
28	D6	75	VAL
28	D6	97	PRO
33	E1	137	ASP
34	SR	318	ALA
35	SM	95	SER
39	L2	127	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	L2	133	TYR
39	L2	151	PRO
40	L3	3	HIS
40	L3	83	PRO
40	L3	299	ASP
40	L3	351	LEU
41	L4	15	ALA
41	L4	130	ALA
41	L4	220	ARG
41	L4	361	HIS
42	L5	7	ALA
42	L5	22	ARG
42	L5	137	ASP
42	L5	148	ILE
42	L5	259	LYS
42	L5	276	LYS
44	L7	159	GLN
44	L7	163	LEU
46	L9	2	LYS
47	M0	16	PRO
47	M0	23	ASN
47	M0	113	GLN
47	M0	116	ARG
47	M0	218	ALA
48	M1	28	ASP
48	M1	74	PRO
48	M1	152	HIS
48	M1	166	LYS
50	M4	10	SER
50	M4	29	ALA
50	M4	113	THR
51	M5	144	ARG
53	M7	3	ARG
53	M7	157	VAL
53	M7	160	ALA
53	M7	162	GLU
54	M8	98	LYS
55	M9	26	PRO
55	M9	35	ALA
56	N0	24	LEU
57	N1	123	GLY
57	N1	127	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
57	N1	132	PRO
58	N2	22	PRO
59	N3	46	LEU
63	N7	102	GLU
64	N8	47	LYS
68	O2	126	LEU
70	O4	26	PRO
70	O4	86	LYS
74	O8	24	THR
2	s0	10	THR
2	s0	163	ASN
2	s0	164	ASN
2	s0	200	ASP
4	s2	91	ARG
4	s2	93	GLY
4	s2	149	GLY
4	s2	234	PRO
4	s2	238	SER
5	s3	90	ARG
5	s3	144	ALA
5	s3	160	SER
5	s3	196	ARG
6	s4	96	ASN
7	s5	35	GLN
7	s5	57	SER
8	s6	165	GLY
8	s6	175	ILE
9	s7	83	LYS
9	s7	133	THR
9	s7	185	ILE
10	s8	12	SER
10	s8	136	SER
10	s8	137	LYS
11	s9	20	GLU
11	s9	88	GLU
11	s9	150	LEU
11	s9	167	ALA
12	c0	2	LEU
12	c0	23	ALA
12	c0	32	HIS
12	c0	35	ILE
14	c2	58	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	c2	82	PRO
14	c2	108	ARG
15	c3	43	LYS
15	c3	140	LYS
17	c5	7	ALA
17	c5	48	GLY
18	c6	142	TYR
19	c7	116	LYS
20	c8	61	LEU
21	c9	33	TYR
21	c9	100	ILE
22	d0	49	ASN
25	d3	3	LYS
26	d4	49	LYS
28	d6	13	LYS
28	d6	34	LYS
28	d6	61	GLU
30	d8	36	THR
31	d9	11	PRO
31	d9	17	GLY
33	e1	111	GLU
33	e1	131	PHE
34	sR	279	ALA
35	sM	42	ALA
35	sM	46	LYS
35	sM	171	LYS
39	l2	32	LEU
39	l2	127	ALA
40	l3	386	ASP
41	l4	14	GLU
41	l4	24	ALA
41	l4	43	ASN
41	l4	146	PRO
41	l4	311	HIS
42	l5	178	ASN
42	l5	269	SER
42	l5	270	LYS
42	l5	279	LYS
45	l8	39	ALA
45	l8	69	LEU
45	l8	121	SER
45	l8	133	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	l8	203	VAL
46	l9	2	LYS
46	l9	108	GLY
46	l9	110	LYS
47	m0	196	PHE
47	m0	204	GLY
48	m1	9	MET
48	m1	114	ILE
49	m3	13	HIS
49	m3	141	ALA
50	m4	10	SER
50	m4	136	ALA
51	m5	104	GLU
51	m5	187	ARG
52	m6	90	HIS
52	m6	163	SER
52	m6	186	ALA
57	n1	80	VAL
57	n1	121	ALA
58	n2	23	THR
60	n4	132	GLY
63	n7	134	LEU
64	n8	129	PHE
65	n9	5	LYS
65	n9	21	ILE
67	o1	25	PHE
68	o2	6	HIS
68	o2	124	GLY
68	o2	127	ALA
69	o3	57	LYS
69	o3	59	VAL
71	o5	82	ALA
71	o5	99	GLN
73	o7	55	ARG
74	o8	18	ALA
77	q1	23	ARG
79	q3	10	ILE
79	q3	51	ALA
2	S0	62	ARG
2	S0	192	THR
2	S0	205	ARG
3	S1	156	ALA

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
3	S1	207	LEU
3	S1	209	ASN
4	S2	39	THR
4	S2	248	SER
6	S4	39	ARG
6	S4	194	THR
6	S4	245	LYS
7	S5	100	ASN
7	S5	150	GLY
7	S5	154	ALA
8	S6	154	ARG
9	S7	132	PRO
11	S9	162	SER
12	C0	94	GLU
13	C1	4	GLU
13	C1	51	GLY
14	C2	87	PRO
14	C2	101	ALA
14	C2	119	SER
15	C3	19	SER
15	C3	28	LEU
15	C3	137	PRO
15	C3	144	ALA
16	C4	40	ALA
16	C4	75	GLY
17	C5	69	GLU
18	C6	113	ASP
18	C6	124	PRO
19	C7	72	LYS
19	C7	84	TYR
20	C8	61	LEU
20	C8	142	GLY
20	C8	144	ARG
22	D0	17	GLN
25	D3	96	VAL
26	D4	5	VAL
28	D6	64	LEU
29	D7	75	GLU
30	D8	22	ARG
30	D8	35	ASP
33	E1	118	ARG
34	SR	98	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	SR	237	GLN
35	SM	12	VAL
35	SM	82	THR
35	SM	86	ASN
35	SM	88	ARG
35	SM	101	ASP
35	SM	174	LEU
39	L2	251	LYS
40	L3	155	ALA
40	L3	197	GLU
41	L4	5	GLN
41	L4	140	HIS
41	L4	265	GLU
41	L4	269	SER
41	L4	311	HIS
42	L5	260	PHE
44	L7	217	PRO
44	L7	231	ASN
45	L8	36	ILE
45	L8	94	PHE
45	L8	122	LYS
45	L8	157	VAL
46	L9	177	ASP
47	M0	208	ASN
47	M0	215	GLU
48	M1	108	GLU
48	M1	114	ILE
48	M1	117	ASP
48	M1	151	SER
49	M3	76	THR
50	M4	6	ILE
51	M5	145	ASP
53	M7	23	ARG
53	M7	169	THR
54	M8	162	ALA
54	M8	168	THR
59	N3	47	ASN
60	N4	76	VAL
62	N6	125	LYS
62	N6	126	LEU
63	N7	36	HIS
63	N7	82	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
64	N8	24	LYS
64	N8	78	LEU
67	O1	7	VAL
67	O1	84	ASP
70	O4	46	ASP
72	O6	64	SER
78	Q2	96	GLU
79	Q3	7	LYS
2	s0	103	THR
3	s1	60	ALA
3	s1	129	THR
3	s1	207	LEU
4	s2	162	CYS
4	s2	235	LEU
5	s3	142	LEU
6	s4	11	ARG
6	s4	17	HIS
6	s4	23	LEU
6	s4	260	GLY
7	s5	56	ALA
8	s6	143	LYS
9	s7	5	GLN
9	s7	116	ARG
10	s8	62	THR
10	s8	94	ASN
10	s8	107	THR
11	s9	115	LYS
12	c0	3	MET
13	c1	114	ALA
16	c4	96	PRO
16	c4	114	ARG
17	c5	9	LYS
17	c5	12	PHE
17	c5	32	ASP
17	c5	130	ARG
18	c6	97	VAL
18	c6	141	SER
20	c8	55	HIS
20	c8	90	ASN
20	c8	102	ALA
21	c9	29	GLU
22	d0	13	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	d3	67	ALA
27	d5	103	ARG
28	d6	59	TYR
30	d8	33	LEU
31	d9	12	ARG
33	e1	126	CYS
34	sR	4	ASN
35	sM	43	ASP
35	sM	84	LYS
39	l2	15	ILE
39	l2	56	ALA
39	l2	194	ASN
40	l3	200	GLU
40	l3	239	PRO
41	l4	5	GLN
42	l5	11	ALA
43	l6	10	TYR
43	l6	97	ASN
45	l8	51	LYS
45	l8	82	LEU
47	m0	169	LYS
47	m0	176	LEU
49	m3	60	ALA
50	m4	8	LYS
50	m4	137	LYS
51	m5	68	ARG
51	m5	103	GLU
51	m5	183	THR
52	m6	159	LYS
53	m7	67	ILE
55	m9	143	ILE
58	n2	44	GLU
58	n2	105	LEU
59	n3	16	GLY
61	n5	24	LEU
63	n7	103	GLN
64	n8	12	ARG
67	o1	82	GLU
68	o2	29	ALA
72	o6	4	LYS
72	o6	52	PRO
79	q3	49	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	S0	33	GLN
3	S1	64	ARG
3	S1	111	ARG
4	S2	67	GLN
4	S2	150	GLN
4	S2	234	PRO
6	S4	38	LEU
6	S4	195	ILE
6	S4	259	GLN
7	S5	127	GLN
8	S6	69	LEU
10	S8	10	LYS
10	S8	86	SER
10	S8	158	SER
13	C1	144	ALA
14	C2	21	GLU
14	C2	108	ARG
14	C2	128	ALA
18	C6	58	ASP
18	C6	112	TYR
20	C8	139	LYS
22	D0	16	GLN
22	D0	21	LYS
22	D0	117	VAL
23	D1	8	LEU
23	D1	10	GLU
23	D1	12	TYR
24	D2	78	ARG
25	D3	5	LYS
25	D3	89	ASN
25	D3	110	LYS
27	D5	55	PRO
30	D8	6	PRO
32	E0	51	ASN
33	E1	83	LYS
33	E1	86	THR
33	E1	100	LEU
34	SR	3	SER
35	SM	22	PRO
39	L2	252	THR
40	L3	317	ILE
41	L4	14	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
44	L7	164	SER
44	L7	191	VAL
45	L8	76	ALA
47	M0	24	ARG
48	M1	64	LYS
48	M1	112	LEU
48	M1	173	ASP
49	M3	133	PRO
49	M3	141	ALA
51	M5	94	TYR
56	N0	15	PRO
60	N4	96	LEU
64	N8	117	ARG
65	N9	21	ILE
66	O0	20	SER
67	O1	60	TRP
69	O3	59	VAL
71	O5	75	TYR
72	O6	3	VAL
72	O6	52	PRO
73	O7	87	SER
76	Q0	79	GLU
2	s0	199	PRO
3	s1	22	ASP
3	s1	39	GLU
3	s1	218	LEU
5	s3	43	PRO
6	s4	30	ARG
6	s4	118	GLU
6	s4	168	LYS
9	s7	13	PRO
9	s7	155	ASP
10	s8	78	ILE
11	s9	110	GLN
11	s9	168	ARG
12	c0	24	LYS
13	c1	55	ASP
13	c1	130	PRO
14	c2	40	GLY
14	c2	87	PRO
14	c2	103	LEU
14	c2	118	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
15	c3	12	SER
15	c3	22	ALA
15	c3	29	SER
15	c3	108	ASP
16	c4	37	GLU
17	c5	127	ARG
18	c6	32	ASN
19	c7	120	SER
20	c8	14	ILE
22	d0	52	LYS
22	d0	119	ALA
26	d4	84	LYS
28	d6	46	GLU
29	d7	24	LEU
80	e0	47	VAL
33	e1	124	PRO
40	l3	22	ALA
41	l4	144	LYS
41	l4	145	ILE
42	l5	158	ARG
42	l5	220	SER
44	l7	32	ALA
44	l7	159	GLN
44	l7	163	LEU
45	l8	76	ALA
45	l8	112	GLU
45	l8	163	VAL
45	l8	237	ILE
45	l8	249	ARG
46	l9	130	ASP
46	l9	167	VAL
47	m0	220	GLN
48	m1	117	ASP
49	m3	62	THR
49	m3	101	ARG
51	m5	90	ASN
52	m6	47	PHE
60	n4	72	SER
63	n7	28	PRO
65	n9	52	LYS
67	o1	40	ALA
67	o1	90	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
67	o1	97	LEU
70	o4	76	TYR
73	o7	85	LYS
77	q1	22	ALA
82	p0	33	VAL
82	p0	102	SER
2	S0	194	PRO
3	S1	60	ALA
4	S2	36	VAL
7	S5	45	LYS
9	S7	125	ILE
11	S9	121	SER
15	C3	117	LEU
19	C7	96	SER
24	D2	83	ILE
27	D5	41	ILE
28	D6	88	SER
30	D8	20	GLY
31	D9	11	PRO
33	E1	85	TYR
34	SR	50	ASP
39	L2	14	SER
40	L3	244	ARG
40	L3	307	PRO
41	L4	23	PRO
43	L6	6	ALA
44	L7	91	GLY
46	L9	59	ASN
46	L9	66	ALA
51	M5	77	LYS
52	M6	16	VAL
52	M6	121	PRO
56	N0	129	ILE
57	N1	18	ASP
58	N2	21	SER
58	N2	27	VAL
60	N4	75	THR
61	N5	50	ALA
63	N7	16	GLY
63	N7	103	GLN
64	N8	96	LYS
71	O5	119	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
72	O6	94	ILE
78	Q2	34	SER
79	Q3	51	ALA
2	s0	44	GLY
3	s1	154	SER
4	s2	173	PRO
4	s2	233	GLN
5	s3	45	LYS
5	s3	81	PRO
6	s4	31	PRO
6	s4	214	LEU
6	s4	245	LYS
7	s5	100	ASN
9	s7	53	GLY
9	s7	159	VAL
11	s9	164	PHE
12	c0	95	ARG
12	c0	96	ASN
14	c2	54	ARG
15	c3	137	PRO
16	c4	125	SER
17	c5	100	LYS
20	c8	29	VAL
23	d1	42	GLU
25	d3	27	ASN
33	e1	83	LYS
33	e1	112	GLY
39	l2	41	ILE
39	l2	80	GLU
39	l2	125	ALA
42	l5	12	TYR
42	l5	125	VAL
48	m1	12	LEU
57	n1	124	VAL
60	n4	98	PRO
63	n7	130	PHE
70	o4	78	GLY
3	S1	210	ILE
8	S6	146	GLY
34	SR	206	PRO
35	SM	111	GLY
59	N3	134	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
68	O2	70	GLY
2	s0	139	VAL
3	s1	114	VAL
4	s2	150	GLN
5	s3	161	GLY
11	s9	162	SER
23	d1	9	VAL
34	sR	49	GLY
40	l3	305	ILE
44	l7	178	ILE
76	q0	78	ILE
3	S1	21	VAL
6	S4	196	VAL
13	C1	130	PRO
15	C3	11	ILE
19	C7	124	VAL
23	D1	46	ILE
35	SM	20	LEU
44	L7	178	ILE
47	M0	148	VAL
60	N4	16	GLY
64	N8	70	LYS
9	s7	100	PRO
9	s7	172	VAL
10	s8	108	PRO
11	s9	165	GLY
22	d0	19	ILE
23	d1	43	GLY
47	m0	47	PRO
55	m9	48	GLY
64	n8	138	ILE
79	q3	71	VAL
7	S5	89	ILE
12	C0	92	ILE
16	C4	57	PRO
43	L6	36	PRO
49	M3	46	ILE
74	O8	37	PRO
79	Q3	50	GLY
79	Q3	71	VAL
4	s2	182	PRO
7	s5	30	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
13	c1	7	VAL
14	c2	91	VAL
34	sR	194	GLY
47	m0	70	ILE
49	m3	50	PRO
74	o8	37	PRO
3	S1	176	VAL
6	S4	233	LYS
7	S5	33	VAL
8	S6	70	PRO
11	S9	160	PRO
13	C1	113	PRO
14	C2	82	PRO
33	E1	127	GLY
34	SR	28	GLY
35	SM	172	VAL
42	L5	19	PRO
42	L5	125	VAL
2	s0	68	PRO
3	s1	221	PRO
8	s6	26	VAL
9	s7	144	VAL
14	c2	89	ILE
15	c3	47	PRO
20	c8	28	ILE
40	l3	33	PRO
47	m0	43	VAL
9	S7	172	VAL
14	C2	22	VAL
23	D1	82	VAL
26	D4	35	VAL
32	E0	50	VAL
60	N4	80	ARG
7	s5	29	ILE
47	m0	179	PRO
58	n2	48	GLY
60	n4	15	PRO
67	o1	59	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	S0	164/209 (78%)	135 (82%)	29 (18%)	2	10
2	s0	165/209 (79%)	131 (79%)	34 (21%)	1	6
3	S1	191/223 (86%)	149 (78%)	42 (22%)	1	5
3	s1	192/223 (86%)	156 (81%)	36 (19%)	2	8
4	S2	176/204 (86%)	134 (76%)	42 (24%)	1	3
4	s2	176/204 (86%)	128 (73%)	48 (27%)	0	2
5	S3	182/194 (94%)	141 (78%)	41 (22%)	1	4
5	s3	182/194 (94%)	144 (79%)	38 (21%)	1	6
6	S4	221/221 (100%)	177 (80%)	44 (20%)	1	7
6	s4	221/221 (100%)	183 (83%)	38 (17%)	2	12
7	S5	173/190 (91%)	143 (83%)	30 (17%)	2	11
7	s5	173/190 (91%)	144 (83%)	29 (17%)	2	13
8	S6	188/201 (94%)	154 (82%)	34 (18%)	2	9
8	s6	187/201 (93%)	153 (82%)	34 (18%)	2	9
9	S7	165/169 (98%)	135 (82%)	30 (18%)	2	9
9	s7	165/169 (98%)	130 (79%)	35 (21%)	1	5
10	S8	150/161 (93%)	117 (78%)	33 (22%)	1	5
10	s8	150/161 (93%)	124 (83%)	26 (17%)	2	11
11	S9	158/165 (96%)	120 (76%)	38 (24%)	1	3
11	s9	158/165 (96%)	120 (76%)	38 (24%)	1	3
12	C0	77/98 (79%)	66 (86%)	11 (14%)	4	19
12	c0	73/98 (74%)	63 (86%)	10 (14%)	4	20
13	C1	129/136 (95%)	109 (84%)	20 (16%)	3	16
13	c1	129/136 (95%)	104 (81%)	25 (19%)	2	7
14	C2	88/118 (75%)	67 (76%)	21 (24%)	1	3
14	c2	88/118 (75%)	71 (81%)	17 (19%)	2	7

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
15	C3	127/127 (100%)	104 (82%)	23 (18%)	2	9
15	c3	127/127 (100%)	93 (73%)	34 (27%)	0	2
16	C4	81/104 (78%)	61 (75%)	20 (25%)	1	3
16	c4	97/104 (93%)	69 (71%)	28 (29%)	0	1
17	C5	101/117 (86%)	83 (82%)	18 (18%)	2	10
17	c5	103/117 (88%)	90 (87%)	13 (13%)	5	24
18	C6	117/118 (99%)	92 (79%)	25 (21%)	1	5
18	c6	118/118 (100%)	91 (77%)	27 (23%)	1	4
19	C7	94/124 (76%)	70 (74%)	24 (26%)	1	2
19	c7	92/124 (74%)	74 (80%)	18 (20%)	1	7
20	C8	128/128 (100%)	102 (80%)	26 (20%)	1	6
20	c8	128/128 (100%)	99 (77%)	29 (23%)	1	4
21	C9	115/115 (100%)	93 (81%)	22 (19%)	2	8
21	c9	115/115 (100%)	91 (79%)	24 (21%)	1	6
22	D0	100/113 (88%)	81 (81%)	19 (19%)	2	8
22	d0	103/113 (91%)	76 (74%)	27 (26%)	0	2
23	D1	74/74 (100%)	56 (76%)	18 (24%)	1	3
23	d1	74/74 (100%)	53 (72%)	21 (28%)	0	2
24	D2	110/110 (100%)	92 (84%)	18 (16%)	3	14
24	d2	110/110 (100%)	96 (87%)	14 (13%)	5	24
25	D3	119/119 (100%)	100 (84%)	19 (16%)	3	14
25	d3	119/119 (100%)	94 (79%)	25 (21%)	1	6
26	D4	112/112 (100%)	92 (82%)	20 (18%)	2	10
26	d4	112/112 (100%)	91 (81%)	21 (19%)	2	8
27	D5	61/88 (69%)	42 (69%)	19 (31%)	0	1
27	d5	61/88 (69%)	53 (87%)	8 (13%)	5	22
28	D6	83/83 (100%)	60 (72%)	23 (28%)	0	2
28	d6	83/83 (100%)	62 (75%)	21 (25%)	1	2
29	D7	70/70 (100%)	58 (83%)	12 (17%)	2	12
29	d7	70/70 (100%)	62 (89%)	8 (11%)	7	29
30	D8	56/59 (95%)	44 (79%)	12 (21%)	1	5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
30	d8	56/59 (95%)	46 (82%)	10 (18%)	2	10
31	D9	47/48 (98%)	41 (87%)	6 (13%)	5	23
31	d9	47/48 (98%)	35 (74%)	12 (26%)	1	2
32	E0	51/51 (100%)	42 (82%)	9 (18%)	2	10
33	E1	62/66 (94%)	41 (66%)	21 (34%)	0	1
33	e1	66/66 (100%)	50 (76%)	16 (24%)	1	3
34	SR	260/261 (100%)	227 (87%)	33 (13%)	5	24
34	sR	260/261 (100%)	221 (85%)	39 (15%)	3	17
35	SM	97/228 (42%)	75 (77%)	22 (23%)	1	4
35	sM	54/228 (24%)	42 (78%)	12 (22%)	1	4
39	L2	193/195 (99%)	155 (80%)	38 (20%)	1	7
39	l2	192/195 (98%)	150 (78%)	42 (22%)	1	5
40	L3	321/322 (100%)	250 (78%)	71 (22%)	1	4
40	l3	320/322 (99%)	250 (78%)	70 (22%)	1	5
41	L4	288/288 (100%)	224 (78%)	64 (22%)	1	4
41	l4	288/288 (100%)	222 (77%)	66 (23%)	1	4
42	L5	244/244 (100%)	199 (82%)	45 (18%)	2	9
42	l5	243/244 (100%)	190 (78%)	53 (22%)	1	5
43	L6	134/152 (88%)	115 (86%)	19 (14%)	4	19
43	l6	135/152 (89%)	114 (84%)	21 (16%)	3	16
44	L7	186/204 (91%)	162 (87%)	24 (13%)	5	23
44	l7	187/204 (92%)	158 (84%)	29 (16%)	3	16
45	L8	187/207 (90%)	145 (78%)	42 (22%)	1	4
45	l8	177/207 (86%)	143 (81%)	34 (19%)	2	8
46	L9	171/171 (100%)	136 (80%)	35 (20%)	1	6
46	l9	171/171 (100%)	127 (74%)	44 (26%)	0	2
47	M0	177/186 (95%)	143 (81%)	34 (19%)	2	8
47	m0	179/186 (96%)	146 (82%)	33 (18%)	2	9
48	M1	147/150 (98%)	116 (79%)	31 (21%)	1	6
48	m1	147/150 (98%)	110 (75%)	37 (25%)	1	2
49	M3	154/158 (98%)	130 (84%)	24 (16%)	3	16

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
49	m3	154/158 (98%)	123 (80%)	31 (20%)	1	6
50	M4	107/108 (99%)	88 (82%)	19 (18%)	2	10
50	m4	108/108 (100%)	89 (82%)	19 (18%)	2	10
51	M5	175/175 (100%)	142 (81%)	33 (19%)	2	8
51	m5	175/175 (100%)	142 (81%)	33 (19%)	2	8
52	M6	160/161 (99%)	133 (83%)	27 (17%)	2	12
52	m6	160/161 (99%)	126 (79%)	34 (21%)	1	5
53	M7	140/145 (97%)	110 (79%)	30 (21%)	1	5
53	m7	125/145 (86%)	100 (80%)	25 (20%)	1	6
54	M8	150/150 (100%)	132 (88%)	18 (12%)	6	27
54	m8	150/150 (100%)	120 (80%)	30 (20%)	1	6
55	M9	153/153 (100%)	125 (82%)	28 (18%)	2	9
55	m9	153/153 (100%)	126 (82%)	27 (18%)	2	10
56	N0	156/156 (100%)	125 (80%)	31 (20%)	1	7
56	n0	156/156 (100%)	120 (77%)	36 (23%)	1	4
57	N1	136/136 (100%)	109 (80%)	27 (20%)	1	7
57	n1	136/136 (100%)	104 (76%)	32 (24%)	1	4
58	N2	87/106 (82%)	77 (88%)	10 (12%)	7	29
58	n2	85/106 (80%)	69 (81%)	16 (19%)	2	8
59	N3	104/104 (100%)	84 (81%)	20 (19%)	2	8
59	n3	104/104 (100%)	90 (86%)	14 (14%)	5	21
60	N4	57/129 (44%)	51 (90%)	6 (10%)	8	33
60	n4	100/129 (78%)	83 (83%)	17 (17%)	2	12
61	N5	104/117 (89%)	81 (78%)	23 (22%)	1	4
61	n5	104/117 (89%)	82 (79%)	22 (21%)	1	5
62	N6	109/109 (100%)	83 (76%)	26 (24%)	1	3
62	n6	109/109 (100%)	85 (78%)	24 (22%)	1	5
63	N7	115/115 (100%)	89 (77%)	26 (23%)	1	4
63	n7	115/115 (100%)	90 (78%)	25 (22%)	1	5
64	N8	118/118 (100%)	96 (81%)	22 (19%)	2	9
64	n8	118/118 (100%)	94 (80%)	24 (20%)	1	6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
65	N9	46/46 (100%)	37 (80%)	9 (20%)	1	7
65	n9	46/46 (100%)	35 (76%)	11 (24%)	1	3
66	O0	81/87 (93%)	61 (75%)	20 (25%)	1	3
66	o0	84/87 (97%)	67 (80%)	17 (20%)	1	6
67	O1	92/96 (96%)	73 (79%)	19 (21%)	1	6
67	o1	94/96 (98%)	70 (74%)	24 (26%)	1	2
68	O2	109/110 (99%)	86 (79%)	23 (21%)	1	6
68	o2	109/110 (99%)	85 (78%)	24 (22%)	1	5
69	O3	90/90 (100%)	74 (82%)	16 (18%)	2	10
69	o3	90/90 (100%)	70 (78%)	20 (22%)	1	4
70	O4	95/101 (94%)	74 (78%)	21 (22%)	1	4
70	o4	95/101 (94%)	73 (77%)	22 (23%)	1	4
71	O5	104/104 (100%)	84 (81%)	20 (19%)	2	8
71	o5	103/104 (99%)	80 (78%)	23 (22%)	1	4
72	O6	81/81 (100%)	64 (79%)	17 (21%)	1	6
72	o6	80/81 (99%)	58 (72%)	22 (28%)	0	2
73	O7	70/70 (100%)	55 (79%)	15 (21%)	1	5
73	o7	70/70 (100%)	57 (81%)	13 (19%)	2	9
74	O8	68/68 (100%)	50 (74%)	18 (26%)	0	2
74	o8	67/68 (98%)	51 (76%)	16 (24%)	1	3
75	O9	45/45 (100%)	38 (84%)	7 (16%)	3	16
75	o9	45/45 (100%)	37 (82%)	8 (18%)	2	10
76	Q0	47/47 (100%)	40 (85%)	7 (15%)	4	17
76	q0	47/47 (100%)	33 (70%)	14 (30%)	0	1
77	Q1	23/23 (100%)	16 (70%)	7 (30%)	0	1
77	q1	23/23 (100%)	15 (65%)	8 (35%)	0	1
78	Q2	90/90 (100%)	68 (76%)	22 (24%)	1	3
78	q2	90/90 (100%)	73 (81%)	17 (19%)	2	8
79	Q3	71/71 (100%)	58 (82%)	13 (18%)	2	9
79	q3	71/71 (100%)	55 (78%)	16 (22%)	1	4
80	e0	53/53 (100%)	38 (72%)	15 (28%)	0	2

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
82	p0	105/253 (42%)	84 (80%)	21 (20%)	1	6
All	All	18729/20239 (92%)	14954 (80%)	3775 (20%)	1	6

All (3775) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	S0	7	PHE
2	S0	12	GLU
2	S0	17	LEU
2	S0	22	THR
2	S0	32	HIS
2	S0	37	VAL
2	S0	41	ARG
2	S0	50	VAL
2	S0	59	LEU
2	S0	84	ARG
2	S0	86	VAL
2	S0	87	LEU
2	S0	88	LYS
2	S0	96	THR
2	S0	101	ARG
2	S0	111	ILE
2	S0	131	GLN
2	S0	140	ASN
2	S0	150	ASP
2	S0	156	VAL
2	S0	157	ASP
2	S0	170	ILE
2	S0	172	LEU
2	S0	179	ARG
2	S0	184	LEU
2	S0	185	ARG
2	S0	188	LEU
2	S0	196	SER
2	S0	197	ILE
3	S1	21	VAL
3	S1	25	THR
3	S1	26	ARG
3	S1	29	TRP
3	S1	30	PHE
3	S1	36	SER
3	S1	39	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	S1	42	ASN
3	S1	46	THR
3	S1	51	SER
3	S1	61	LEU
3	S1	70	LEU
3	S1	77	GLU
3	S1	78	ASP
3	S1	80	SER
3	S1	81	PHE
3	S1	85	LYS
3	S1	89	ASP
3	S1	96	LEU
3	S1	97	LEU
3	S1	105	PHE
3	S1	111	ARG
3	S1	112	SER
3	S1	117	TRP
3	S1	126	THR
3	S1	129	THR
3	S1	135	LEU
3	S1	144	ARG
3	S1	146	GLN
3	S1	148	ASN
3	S1	153	HIS
3	S1	154	SER
3	S1	169	SER
3	S1	177	GLN
3	S1	179	SER
3	S1	181	LEU
3	S1	191	GLU
3	S1	193	ILE
3	S1	202	LYS
3	S1	215	VAL
3	S1	222	LYS
3	S1	223	PHE
4	S2	41	LEU
4	S2	50	ILE
4	S2	53	ILE
4	S2	56	ILE
4	S2	60	SER
4	S2	69	ILE
4	S2	72	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	S2	73	LEU
4	S2	77	GLN
4	S2	79	GLU
4	S2	80	VAL
4	S2	87	GLN
4	S2	89	GLN
4	S2	91	ARG
4	S2	94	GLN
4	S2	95	ARG
4	S2	96	THR
4	S2	97	ARG
4	S2	111	VAL
4	S2	116	LYS
4	S2	117	THR
4	S2	134	LEU
4	S2	140	ARG
4	S2	141	ARG
4	S2	146	THR
4	S2	148	LEU
4	S2	159	THR
4	S2	166	THR
4	S2	187	LEU
4	S2	190	LEU
4	S2	207	LEU
4	S2	208	GLU
4	S2	221	THR
4	S2	224	PHE
4	S2	225	LEU
4	S2	226	THR
4	S2	229	LEU
4	S2	235	LEU
4	S2	237	VAL
4	S2	240	LEU
4	S2	245	ASP
4	S2	246	GLU
5	S3	4	LEU
5	S3	7	LYS
5	S3	9	ARG
5	S3	14	ASP
5	S3	21	LEU
5	S3	23	GLU
5	S3	44	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	S3	65	ARG
5	S3	70	THR
5	S3	76	ARG
5	S3	84	ILE
5	S3	89	GLU
5	S3	92	GLN
5	S3	93	ASP
5	S3	94	ARG
5	S3	99	VAL
5	S3	103	GLU
5	S3	104	SER
5	S3	111	ASN
5	S3	113	LEU
5	S3	115	ILE
5	S3	117	ARG
5	S3	128	GLU
5	S3	134	CYS
5	S3	139	SER
5	S3	143	ARG
5	S3	151	LYS
5	S3	157	LEU
5	S3	158	ILE
5	S3	172	THR
5	S3	176	LEU
5	S3	177	MET
5	S3	178	ARG
5	S3	181	VAL
5	S3	182	LEU
5	S3	190	ARG
5	S3	195	SER
5	S3	202	LEU
5	S3	204	ASP
5	S3	215	GLU
5	S3	222	VAL
6	S4	9	LEU
6	S4	12	LEU
6	S4	21	ASP
6	S4	38	LEU
6	S4	42	LEU
6	S4	45	ILE
6	S4	49	ARG
6	S4	56	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	S4	67	GLN
6	S4	68	ARG
6	S4	69	HIS
6	S4	70	VAL
6	S4	77	ARG
6	S4	78	THR
6	S4	92	LEU
6	S4	96	ASN
6	S4	102	VAL
6	S4	108	ARG
6	S4	116	ASP
6	S4	126	VAL
6	S4	129	VAL
6	S4	131	LEU
6	S4	133	LYS
6	S4	156	VAL
6	S4	180	LEU
6	S4	182	TYR
6	S4	184	THR
6	S4	187	ARG
6	S4	192	ILE
6	S4	197	HIS
6	S4	211	LYS
6	S4	212	ASP
6	S4	215	ASP
6	S4	219	VAL
6	S4	221	ARG
6	S4	223	ASN
6	S4	226	PHE
6	S4	227	VAL
6	S4	233	LYS
6	S4	238	LEU
6	S4	240	LYS
6	S4	242	LYS
6	S4	246	LEU
6	S4	259	GLN
7	S5	23	VAL
7	S5	25	LEU
7	S5	32	GLU
7	S5	38	THR
7	S5	41	LYS
7	S5	43	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	S5	45	LYS
7	S5	49	GLU
7	S5	53	VAL
7	S5	65	ARG
7	S5	70	VAL
7	S5	76	ARG
7	S5	79	ASN
7	S5	81	ARG
7	S5	86	GLN
7	S5	89	ILE
7	S5	93	LEU
7	S5	94	THR
7	S5	97	LEU
7	S5	99	MET
7	S5	131	GLN
7	S5	147	THR
7	S5	148	ARG
7	S5	156	ARG
7	S5	157	ARG
7	S5	160	VAL
7	S5	162	VAL
7	S5	163	SER
7	S5	186	ASN
7	S5	217	LEU
8	S6	6	SER
8	S6	15	THR
8	S6	21	GLU
8	S6	25	ARG
8	S6	30	LYS
8	S6	58	LYS
8	S6	71	THR
8	S6	76	LEU
8	S6	78	THR
8	S6	79	LYS
8	S6	98	ARG
8	S6	101	ILE
8	S6	109	LEU
8	S6	115	LYS
8	S6	120	GLU
8	S6	124	LEU
8	S6	125	THR
8	S6	126	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	S6	127	THR
8	S6	128	THR
8	S6	129	VAL
8	S6	132	ARG
8	S6	133	LEU
8	S6	151	ASP
8	S6	155	ASP
8	S6	169	TYR
8	S6	170	THR
8	S6	175	ILE
8	S6	176	GLN
8	S6	182	GLN
8	S6	193	LEU
8	S6	201	GLN
8	S6	212	LEU
8	S6	223	LYS
9	S7	11	GLN
9	S7	28	GLU
9	S7	38	LEU
9	S7	46	ILE
9	S7	50	ASP
9	S7	51	VAL
9	S7	60	ILE
9	S7	66	SER
9	S7	67	LEU
9	S7	70	PHE
9	S7	74	GLN
9	S7	85	PHE
9	S7	97	ARG
9	S7	104	ARG
9	S7	106	SER
9	S7	110	GLN
9	S7	114	ARG
9	S7	116	ARG
9	S7	118	LEU
9	S7	126	LEU
9	S7	129	LEU
9	S7	144	VAL
9	S7	147	ASN
9	S7	149	ILE
9	S7	156	SER
9	S7	163	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	S7	166	LEU
9	S7	167	GLU
9	S7	168	SER
9	S7	185	ILE
10	S8	4	SER
10	S8	8	ARG
10	S8	9	HIS
10	S8	14	THR
10	S8	20	GLN
10	S8	21	PHE
10	S8	22	ARG
10	S8	25	ARG
10	S8	26	LYS
10	S8	29	LEU
10	S8	31	ARG
10	S8	36	THR
10	S8	46	VAL
10	S8	49	ARG
10	S8	56	ARG
10	S8	58	LEU
10	S8	73	SER
10	S8	75	LYS
10	S8	82	VAL
10	S8	97	THR
10	S8	103	GLN
10	S8	107	THR
10	S8	121	LEU
10	S8	135	LYS
10	S8	138	ASN
10	S8	151	LYS
10	S8	152	ILE
10	S8	160	PHE
10	S8	164	ARG
10	S8	168	CYS
10	S8	184	LEU
10	S8	193	LEU
10	S8	196	LEU
11	S9	3	ARG
11	S9	6	ARG
11	S9	9	SER
11	S9	14	THR
11	S9	16	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
11	S9	22	SER
11	S9	28	LEU
11	S9	30	LEU
11	S9	39	LYS
11	S9	40	LYS
11	S9	46	SER
11	S9	59	LEU
11	S9	78	ARG
11	S9	82	ARG
11	S9	83	VAL
11	S9	87	SER
11	S9	89	ASP
11	S9	93	LEU
11	S9	97	LEU
11	S9	99	LEU
11	S9	101	VAL
11	S9	105	LEU
11	S9	109	LEU
11	S9	118	LEU
11	S9	121	SER
11	S9	122	VAL
11	S9	126	ARG
11	S9	134	ILE
11	S9	138	LYS
11	S9	140	ILE
11	S9	149	ARG
11	S9	151	ASP
11	S9	157	ASP
11	S9	161	THR
11	S9	171	ARG
11	S9	172	VAL
11	S9	174	ARG
11	S9	182	GLU
12	C0	8	ARG
12	C0	27	PHE
12	C0	31	LYS
12	C0	46	LEU
12	C0	55	VAL
12	C0	56	LYS
12	C0	71	GLU
12	C0	76	LEU
12	C0	78	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	C0	81	ASN
12	C0	82	LEU
13	C1	2	SER
13	C1	10	GLU
13	C1	21	ASN
13	C1	29	LYS
13	C1	37	ASN
13	C1	40	LEU
13	C1	44	THR
13	C1	56	LYS
13	C1	63	LEU
13	C1	67	ARG
13	C1	69	LYS
13	C1	83	THR
13	C1	109	VAL
13	C1	119	VAL
13	C1	123	VAL
13	C1	127	GLN
13	C1	131	ILE
13	C1	136	ARG
13	C1	141	LYS
13	C1	143	SER
14	C2	28	LEU
14	C2	36	LEU
14	C2	37	VAL
14	C2	43	ARG
14	C2	45	LEU
14	C2	46	ARG
14	C2	50	LYS
14	C2	52	LEU
14	C2	54	ARG
14	C2	66	VAL
14	C2	71	ILE
14	C2	74	LEU
14	C2	86	VAL
14	C2	89	ILE
14	C2	97	LEU
14	C2	103	LEU
14	C2	121	VAL
14	C2	126	TRP
14	C2	129	GLU
14	C2	132	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	C2	139	HIS
15	C3	6	SER
15	C3	9	LYS
15	C3	13	SER
15	C3	19	SER
15	C3	27	LYS
15	C3	34	ILE
15	C3	39	LYS
15	C3	64	ARG
15	C3	66	ILE
15	C3	73	ARG
15	C3	76	LYS
15	C3	94	LYS
15	C3	99	ARG
15	C3	102	LEU
15	C3	109	LYS
15	C3	110	ASP
15	C3	114	ARG
15	C3	115	LEU
15	C3	125	LEU
15	C3	134	VAL
15	C3	142	GLU
15	C3	145	THR
15	C3	151	ASN
16	C4	13	VAL
16	C4	16	VAL
16	C4	29	HIS
16	C4	30	VAL
16	C4	39	ILE
16	C4	42	VAL
16	C4	43	THR
16	C4	48	VAL
16	C4	81	VAL
16	C4	84	ARG
16	C4	92	LYS
16	C4	93	THR
16	C4	108	SER
16	C4	118	VAL
16	C4	123	SER
16	C4	129	LYS
16	C4	132	ARG
16	C4	133	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	C4	136	ARG
16	C4	137	LEU
17	C5	13	LYS
17	C5	22	LEU
17	C5	26	LEU
17	C5	31	GLU
17	C5	34	VAL
17	C5	35	LYS
17	C5	36	LEU
17	C5	44	ARG
17	C5	52	LYS
17	C5	69	GLU
17	C5	84	ILE
17	C5	86	VAL
17	C5	89	MET
17	C5	110	GLU
17	C5	121	ILE
17	C5	124	THR
17	C5	125	PRO
17	C5	128	HIS
18	C6	4	VAL
18	C6	14	LYS
18	C6	19	VAL
18	C6	29	ILE
18	C6	36	ILE
18	C6	43	ILE
18	C6	44	LEU
18	C6	47	LYS
18	C6	53	LEU
18	C6	54	LEU
18	C6	57	LEU
18	C6	66	ARG
18	C6	68	ARG
18	C6	69	VAL
18	C6	70	THR
18	C6	82	ARG
18	C6	98	ASP
18	C6	106	LYS
18	C6	118	ILE
18	C6	121	SER
18	C6	123	ARG
18	C6	127	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
18	C6	137	ARG
18	C6	138	PHE
18	C6	141	SER
19	C7	3	ARG
19	C7	5	ARG
19	C7	6	THR
19	C7	25	THR
19	C7	30	THR
19	C7	32	LYS
19	C7	34	LEU
19	C7	38	ILE
19	C7	42	GLN
19	C7	46	LEU
19	C7	49	LYS
19	C7	54	THR
19	C7	62	GLN
19	C7	69	ILE
19	C7	72	LYS
19	C7	78	ARG
19	C7	83	GLN
19	C7	84	TYR
19	C7	87	GLU
19	C7	104	ASN
19	C7	105	GLN
19	C7	113	LEU
19	C7	115	LEU
19	C7	119	LEU
20	C8	3	LEU
20	C8	5	VAL
20	C8	8	GLN
20	C8	11	PHE
20	C8	13	HIS
20	C8	14	ILE
20	C8	18	LEU
20	C8	20	THR
20	C8	28	ILE
20	C8	40	ARG
20	C8	60	GLU
20	C8	61	LEU
20	C8	71	GLN
20	C8	77	THR
20	C8	80	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
20	C8	86	LEU
20	C8	93	THR
20	C8	94	ASP
20	C8	97	ASP
20	C8	108	LYS
20	C8	110	ARG
20	C8	115	ARG
20	C8	120	ARG
20	C8	132	ARG
20	C8	136	GLN
20	C8	141	THR
21	C9	4	VAL
21	C9	6	VAL
21	C9	18	TYR
21	C9	22	LEU
21	C9	28	LEU
21	C9	30	VAL
21	C9	33	TYR
21	C9	34	VAL
21	C9	35	ASP
21	C9	36	ILE
21	C9	48	GLN
21	C9	57	ARG
21	C9	67	MET
21	C9	89	ARG
21	C9	105	LEU
21	C9	116	ILE
21	C9	126	GLU
21	C9	127	ASN
21	C9	130	ARG
21	C9	131	ASP
21	C9	139	THR
21	C9	144	GLU
22	D0	18	GLN
22	D0	22	ILE
22	D0	23	ARG
22	D0	27	THR
22	D0	29	THR
22	D0	31	VAL
22	D0	33	GLN
22	D0	34	LEU
22	D0	47	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
22	D0	48	HIS
22	D0	51	VAL
22	D0	57	ARG
22	D0	61	LYS
22	D0	74	GLU
22	D0	76	SER
22	D0	89	ARG
22	D0	99	ILE
22	D0	103	ILE
22	D0	121	ASN
23	D1	3	ASN
23	D1	5	LYS
23	D1	9	VAL
23	D1	10	GLU
23	D1	11	LEU
23	D1	18	SER
23	D1	31	SER
23	D1	32	VAL
23	D1	41	GLU
23	D1	52	THR
23	D1	56	SER
23	D1	59	VAL
23	D1	61	SER
23	D1	65	SER
23	D1	69	LEU
23	D1	74	GLN
23	D1	82	VAL
23	D1	84	SER
24	D2	7	LEU
24	D2	23	ARG
24	D2	24	GLN
24	D2	25	VAL
24	D2	53	ILE
24	D2	56	HIS
24	D2	65	LEU
24	D2	71	LYS
24	D2	81	VAL
24	D2	87	GLU
24	D2	93	LEU
24	D2	97	ARG
24	D2	98	GLN
24	D2	103	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	D2	104	LEU
24	D2	105	THR
24	D2	121	VAL
24	D2	129	VAL
25	D3	7	ARG
25	D3	16	ARG
25	D3	19	ARG
25	D3	31	LYS
25	D3	34	LEU
25	D3	53	VAL
25	D3	59	ILE
25	D3	71	CYS
25	D3	73	ARG
25	D3	75	GLN
25	D3	78	LYS
25	D3	84	THR
25	D3	96	VAL
25	D3	103	LEU
25	D3	107	PHE
25	D3	109	ARG
25	D3	114	LYS
25	D3	138	GLU
25	D3	144	ARG
26	D4	14	SER
26	D4	17	LEU
26	D4	28	LEU
26	D4	29	HIS
26	D4	32	ARG
26	D4	34	ASN
26	D4	52	LYS
26	D4	57	VAL
26	D4	61	ARG
26	D4	74	LEU
26	D4	78	SER
26	D4	79	VAL
26	D4	84	LYS
26	D4	96	LEU
26	D4	98	GLU
26	D4	99	LYS
26	D4	102	LYS
26	D4	112	LYS
26	D4	124	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
26	D4	127	LYS
27	D5	37	GLN
27	D5	42	LEU
27	D5	43	ASP
27	D5	48	ASP
27	D5	58	ARG
27	D5	59	TYR
27	D5	60	VAL
27	D5	62	VAL
27	D5	63	SER
27	D5	69	LEU
27	D5	71	ILE
27	D5	75	LEU
27	D5	85	LYS
27	D5	92	ILE
27	D5	95	HIS
27	D5	96	SER
27	D5	100	ILE
27	D5	103	ARG
27	D5	105	THR
28	D6	7	SER
28	D6	15	ARG
28	D6	18	VAL
28	D6	30	ILE
28	D6	36	ILE
28	D6	38	ARG
28	D6	39	MET
28	D6	44	ILE
28	D6	45	VAL
28	D6	52	ASP
28	D6	61	GLU
28	D6	64	LEU
28	D6	66	LYS
28	D6	68	TYR
28	D6	69	ASN
28	D6	70	LYS
28	D6	76	SER
28	D6	79	ILE
28	D6	82	ARG
28	D6	83	ILE
28	D6	85	ARG
28	D6	87	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	D6	90	GLU
29	D7	3	LEU
29	D7	20	LYS
29	D7	26	GLN
29	D7	30	SER
29	D7	33	LEU
29	D7	43	ILE
29	D7	45	THR
29	D7	55	THR
29	D7	63	LEU
29	D7	67	THR
29	D7	74	SER
29	D7	79	PHE
30	D8	5	THR
30	D8	14	LYS
30	D8	19	THR
30	D8	34	GLU
30	D8	36	THR
30	D8	38	ARG
30	D8	39	THR
30	D8	49	ARG
30	D8	51	ASN
30	D8	54	LEU
30	D8	58	GLU
30	D8	61	ARG
31	D9	6	VAL
31	D9	7	TRP
31	D9	12	ARG
31	D9	40	ARG
31	D9	41	GLN
31	D9	49	ASP
32	E0	16	SER
32	E0	20	LYS
32	E0	26	LYS
32	E0	28	LYS
32	E0	38	LEU
32	E0	42	ARG
32	E0	47	VAL
32	E0	49	LEU
32	E0	50	VAL
33	E1	86	THR
33	E1	89	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
33	E1	91	ILE
33	E1	97	LYS
33	E1	98	VAL
33	E1	103	LEU
33	E1	108	VAL
33	E1	113	LYS
33	E1	115	THR
33	E1	117	LEU
33	E1	118	ARG
33	E1	120	GLU
33	E1	126	CYS
33	E1	130	VAL
33	E1	135	HIS
33	E1	137	ASP
33	E1	139	LEU
33	E1	140	TYR
33	E1	145	HIS
33	E1	146	SER
33	E1	151	ASN
34	SR	6	VAL
34	SR	7	LEU
34	SR	10	ARG
34	SR	29	GLN
34	SR	52	GLN
34	SR	60	SER
34	SR	66	HIS
34	SR	76	ASP
34	SR	100	TYR
34	SR	102	ARG
34	SR	117	LYS
34	SR	136	ILE
34	SR	143	THR
34	SR	144	LEU
34	SR	145	LEU
34	SR	149	ASP
34	SR	188	ILE
34	SR	193	ILE
34	SR	195	HIS
34	SR	207	ASP
34	SR	232	TYR
34	SR	238	ASP
34	SR	256	THR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	SR	258	THR
34	SR	266	ASP
34	SR	270	LEU
34	SR	277	GLU
34	SR	291	SER
34	SR	292	LEU
34	SR	300	THR
34	SR	308	ASN
34	SR	314	GLN
34	SR	317	THR
35	SM	24	GLU
35	SM	34	LYS
35	SM	45	SER
35	SM	51	ARG
35	SM	61	ILE
35	SM	62	ARG
35	SM	68	ARG
35	SM	72	ARG
35	SM	77	THR
35	SM	84	LYS
35	SM	89	ARG
35	SM	91	THR
35	SM	97	THR
35	SM	100	THR
35	SM	102	THR
35	SM	105	LYS
35	SM	106	VAL
35	SM	116	GLU
35	SM	117	LEU
35	SM	121	LYS
35	SM	130	GLU
35	SM	139	GLU
39	L2	14	SER
39	L2	22	LEU
39	L2	23	ARG
39	L2	32	LEU
39	L2	33	ASP
39	L2	36	GLU
39	L2	44	ILE
39	L2	45	VAL
39	L2	48	ILE
39	L2	70	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	L2	71	LEU
39	L2	73	GLU
39	L2	74	GLU
39	L2	95	SER
39	L2	96	LEU
39	L2	101	VAL
39	L2	104	LEU
39	L2	109	GLU
39	L2	112	ILE
39	L2	114	SER
39	L2	148	VAL
39	L2	165	VAL
39	L2	179	LEU
39	L2	180	LEU
39	L2	193	ARG
39	L2	196	TRP
39	L2	200	ARG
39	L2	202	VAL
39	L2	204	MET
39	L2	206	PRO
39	L2	207	VAL
39	L2	223	SER
39	L2	225	ILE
39	L2	227	ARG
39	L2	230	VAL
39	L2	231	SER
39	L2	247	ARG
39	L2	252	THR
40	L3	3	HIS
40	L3	7	GLU
40	L3	10	ARG
40	L3	17	LEU
40	L3	19	ARG
40	L3	25	ILE
40	L3	30	LYS
40	L3	37	ARG
40	L3	47	LEU
40	L3	55	THR
40	L3	66	LYS
40	L3	69	LYS
40	L3	72	VAL
40	L3	73	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	L3	79	VAL
40	L3	85	VAL
40	L3	100	ARG
40	L3	103	THR
40	L3	104	THR
40	L3	114	VAL
40	L3	116	ARG
40	L3	120	LYS
40	L3	126	LYS
40	L3	139	GLN
40	L3	146	ARG
40	L3	148	LEU
40	L3	150	ARG
40	L3	151	ILE
40	L3	164	THR
40	L3	169	THR
40	L3	173	GLN
40	L3	178	LEU
40	L3	187	SER
40	L3	188	ILE
40	L3	196	ARG
40	L3	200	GLU
40	L3	202	THR
40	L3	205	VAL
40	L3	212	ASN
40	L3	226	PHE
40	L3	229	VAL
40	L3	236	LYS
40	L3	238	LEU
40	L3	241	LYS
40	L3	244	ARG
40	L3	252	ILE
40	L3	264	VAL
40	L3	284	ARG
40	L3	296	THR
40	L3	304	THR
40	L3	305	ILE
40	L3	308	MET
40	L3	320	ASP
40	L3	324	VAL
40	L3	328	ILE
40	L3	332	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	L3	335	ILE
40	L3	337	THR
40	L3	338	LEU
40	L3	347	SER
40	L3	349	LYS
40	L3	351	LEU
40	L3	353	GLU
40	L3	354	VAL
40	L3	355	SER
40	L3	364	LYS
40	L3	379	PHE
40	L3	380	MET
40	L3	382	THR
40	L3	383	LEU
40	L3	385	LYS
41	L4	4	PRO
41	L4	6	VAL
41	L4	7	THR
41	L4	14	GLU
41	L4	25	VAL
41	L4	37	THR
41	L4	41	SER
41	L4	47	ARG
41	L4	54	GLU
41	L4	60	THR
41	L4	63	GLU
41	L4	74	ILE
41	L4	93	MET
41	L4	99	MET
41	L4	112	LYS
41	L4	124	SER
41	L4	133	SER
41	L4	138	ARG
41	L4	145	ILE
41	L4	147	GLU
41	L4	150	LEU
41	L4	152	VAL
41	L4	153	SER
41	L4	156	LEU
41	L4	179	LEU
41	L4	180	LYS
41	L4	182	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	L4	187	LEU
41	L4	193	LYS
41	L4	198	ARG
41	L4	203	ARG
41	L4	206	LEU
41	L4	215	ILE
41	L4	217	LYS
41	L4	220	ARG
41	L4	222	VAL
41	L4	225	VAL
41	L4	230	VAL
41	L4	246	ARG
41	L4	256	THR
41	L4	258	LEU
41	L4	259	ASP
41	L4	264	SER
41	L4	265	GLU
41	L4	267	VAL
41	L4	269	SER
41	L4	275	THR
41	L4	283	THR
41	L4	284	SER
41	L4	287	THR
41	L4	292	SER
41	L4	297	SER
41	L4	306	THR
41	L4	313	LEU
41	L4	316	ASN
41	L4	323	VAL
41	L4	327	LEU
41	L4	332	LYS
41	L4	333	VAL
41	L4	338	LYS
41	L4	339	LEU
41	L4	346	LYS
41	L4	347	THR
41	L4	361	HIS
42	L5	3	PHE
42	L5	5	LYS
42	L5	8	LYS
42	L5	9	SER
42	L5	22	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
42	L5	23	ARG
42	L5	34	LYS
42	L5	35	ARG
42	L5	41	LYS
42	L5	66	SER
42	L5	75	LEU
42	L5	81	HIS
42	L5	89	THR
42	L5	105	ILE
42	L5	109	THR
42	L5	110	LEU
42	L5	111	GLN
42	L5	112	LYS
42	L5	115	LEU
42	L5	117	GLU
42	L5	118	THR
42	L5	124	GLU
42	L5	131	LEU
42	L5	132	THR
42	L5	137	ASP
42	L5	140	ARG
42	L5	144	VAL
42	L5	146	LEU
42	L5	148	ILE
42	L5	155	THR
42	L5	159	VAL
42	L5	163	LEU
42	L5	177	GLU
42	L5	185	PHE
42	L5	187	THR
42	L5	196	ARG
42	L5	216	GLU
42	L5	222	LEU
42	L5	227	LEU
42	L5	232	ASP
42	L5	236	LEU
42	L5	257	GLU
42	L5	259	LYS
42	L5	263	GLU
42	L5	273	ARG
43	L6	5	LYS
43	L6	15	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
43	L6	18	LEU
43	L6	21	THR
43	L6	46	ARG
43	L6	50	LYS
43	L6	52	VAL
43	L6	64	LEU
43	L6	65	ILE
43	L6	78	ARG
43	L6	84	VAL
43	L6	89	THR
43	L6	90	LYS
43	L6	99	GLU
43	L6	129	GLU
43	L6	134	ARG
43	L6	151	LYS
43	L6	155	LEU
43	L6	173	MET
44	L7	24	GLU
44	L7	25	GLN
44	L7	26	VAL
44	L7	39	GLU
44	L7	40	LYS
44	L7	43	ILE
44	L7	83	LEU
44	L7	88	ARG
44	L7	98	LYS
44	L7	110	ARG
44	L7	111	ILE
44	L7	115	THR
44	L7	120	THR
44	L7	124	LEU
44	L7	128	LYS
44	L7	129	LEU
44	L7	157	ASN
44	L7	178	ILE
44	L7	179	LEU
44	L7	182	ASP
44	L7	184	LEU
44	L7	228	SER
44	L7	239	LEU
44	L7	244	ASN
45	L8	26	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	L8	27	THR
45	L8	41	GLN
45	L8	43	LYS
45	L8	47	SER
45	L8	50	VAL
45	L8	71	VAL
45	L8	74	THR
45	L8	79	GLN
45	L8	84	ARG
45	L8	86	THR
45	L8	108	ARG
45	L8	126	SER
45	L8	132	VAL
45	L8	136	LEU
45	L8	144	GLU
45	L8	146	LYS
45	L8	147	LYS
45	L8	150	LEU
45	L8	155	ASN
45	L8	156	ASP
45	L8	163	VAL
45	L8	164	VAL
45	L8	169	LEU
45	L8	173	MET
45	L8	180	VAL
45	L8	181	LYS
45	L8	185	ARG
45	L8	188	THR
45	L8	194	THR
45	L8	197	VAL
45	L8	203	VAL
45	L8	214	LEU
45	L8	217	THR
45	L8	224	ASP
45	L8	227	ASP
45	L8	238	LEU
45	L8	240	ASN
45	L8	241	LYS
45	L8	246	MET
45	L8	248	LYS
45	L8	251	LYS
46	L9	5	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	L9	9	GLN
46	L9	14	GLU
46	L9	16	VAL
46	L9	18	VAL
46	L9	20	ILE
46	L9	28	VAL
46	L9	41	ILE
46	L9	42	ASP
46	L9	44	THR
46	L9	48	VAL
46	L9	52	LEU
46	L9	53	ILE
46	L9	68	LEU
46	L9	69	ARG
46	L9	70	THR
46	L9	115	ARG
46	L9	118	LEU
46	L9	129	ARG
46	L9	130	ASP
46	L9	133	THR
46	L9	138	THR
46	L9	141	LYS
46	L9	146	LEU
46	L9	151	VAL
46	L9	157	ASN
46	L9	161	LEU
46	L9	162	GLN
46	L9	164	ILE
46	L9	172	ILE
46	L9	173	ARG
46	L9	174	LYS
46	L9	177	ASP
46	L9	182	SER
46	L9	189	GLU
47	M0	3	ARG
47	M0	15	LYS
47	M0	24	ARG
47	M0	28	ASP
47	M0	30	LYS
47	M0	31	ILE
47	M0	32	ARG
47	M0	33	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	M0	34	TYR
47	M0	39	LYS
47	M0	40	LYS
47	M0	42	THR
47	M0	48	LEU
47	M0	52	LEU
47	M0	54	SER
47	M0	57	LEU
47	M0	63	GLU
47	M0	73	ASN
47	M0	74	LYS
47	M0	87	LEU
47	M0	91	VAL
47	M0	102	MET
47	M0	139	ARG
47	M0	143	SER
47	M0	145	LYS
47	M0	156	ARG
47	M0	163	GLN
47	M0	165	ILE
47	M0	169	LYS
47	M0	175	ASN
47	M0	176	LEU
47	M0	189	GLU
47	M0	203	LYS
47	M0	205	SER
48	M1	9	MET
48	M1	10	ARG
48	M1	12	LEU
48	M1	13	LYS
48	M1	16	LYS
48	M1	19	LEU
48	M1	28	ASP
48	M1	34	SER
48	M1	37	LEU
48	M1	39	GLN
48	M1	46	VAL
48	M1	52	TYR
48	M1	53	THR
48	M1	70	THR
48	M1	80	LEU
48	M1	82	ARG

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
48	M1	92	ARG
48	M1	94	ARG
48	M1	101	ASN
48	M1	106	ILE
48	M1	107	ASP
48	M1	112	LEU
48	M1	115	LYS
48	M1	140	ARG
48	M1	142	LYS
48	M1	147	THR
48	M1	155	THR
48	M1	158	ASP
48	M1	166	LYS
48	M1	168	ASP
48	M1	171	VAL
49	M3	24	VAL
49	M3	33	VAL
49	M3	54	LEU
49	M3	55	ARG
49	M3	59	ARG
49	M3	62	THR
49	M3	67	ARG
49	M3	70	ARG
49	M3	81	LYS
49	M3	107	GLU
49	M3	114	GLN
49	M3	117	LYS
49	M3	124	ILE
49	M3	131	LYS
49	M3	136	GLU
49	M3	138	VAL
49	M3	147	ILE
49	M3	155	GLU
49	M3	157	ARG
49	M3	164	GLU
49	M3	169	THR
49	M3	171	ARG
49	M3	190	LYS
49	M3	194	GLU
50	M4	8	LYS
50	M4	20	VAL
50	M4	24	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
50	M4	43	LYS
50	M4	50	LYS
50	M4	53	VAL
50	M4	64	VAL
50	M4	66	THR
50	M4	72	LEU
50	M4	74	ARG
50	M4	90	VAL
50	M4	91	CYS
50	M4	98	SER
50	M4	102	LYS
50	M4	125	LYS
50	M4	126	GLN
50	M4	130	THR
50	M4	133	LYS
50	M4	137	LYS
51	M5	7	LEU
51	M5	10	LEU
51	M5	18	VAL
51	M5	19	LEU
51	M5	22	LEU
51	M5	24	ARG
51	M5	43	THR
51	M5	49	ARG
51	M5	50	ARG
51	M5	56	LYS
51	M5	65	ARG
51	M5	68	ARG
51	M5	71	ARG
51	M5	80	THR
51	M5	85	THR
51	M5	92	LEU
51	M5	93	LYS
51	M5	97	SER
51	M5	98	LEU
51	M5	109	ARG
51	M5	133	ILE
51	M5	138	GLN
51	M5	142	ILE
51	M5	151	ILE
51	M5	155	VAL
51	M5	159	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	M5	167	THR
51	M5	171	SER
51	M5	184	LYS
51	M5	187	ARG
51	M5	188	ARG
51	M5	190	THR
51	M5	198	SER
52	M6	22	VAL
52	M6	25	LYS
52	M6	34	VAL
52	M6	41	LEU
52	M6	42	ASN
52	M6	44	SER
52	M6	67	THR
52	M6	78	ARG
52	M6	82	LYS
52	M6	84	LEU
52	M6	85	ARG
52	M6	89	SER
52	M6	94	ARG
52	M6	106	GLU
52	M6	108	ILE
52	M6	110	PRO
52	M6	117	ARG
52	M6	122	GLN
52	M6	126	VAL
52	M6	128	ARG
52	M6	140	LYS
52	M6	143	THR
52	M6	144	SER
52	M6	151	ASP
52	M6	180	SER
52	M6	184	THR
52	M6	187	GLU
53	M7	7	THR
53	M7	24	VAL
53	M7	29	THR
53	M7	32	THR
53	M7	36	ILE
53	M7	40	GLU
53	M7	41	LEU
53	M7	49	GLU

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
53	M7	52	LEU
53	M7	53	ASP
53	M7	56	ARG
53	M7	69	ARG
53	M7	78	VAL
53	M7	79	THR
53	M7	94	LEU
53	M7	112	LEU
53	M7	119	VAL
53	M7	120	ASN
53	M7	126	ARG
53	M7	127	ARG
53	M7	141	SER
53	M7	142	SER
53	M7	144	SER
53	M7	146	ILE
53	M7	148	LEU
53	M7	153	LYS
53	M7	154	GLU
53	M7	171	ARG
53	M7	180	LYS
53	M7	181	ARG
54	M8	3	ILE
54	M8	7	SER
54	M8	26	LEU
54	M8	32	LEU
54	M8	34	THR
54	M8	49	LEU
54	M8	57	ILE
54	M8	67	ILE
54	M8	73	GLN
54	M8	95	GLU
54	M8	100	THR
54	M8	105	ARG
54	M8	113	LYS
54	M8	129	VAL
54	M8	135	GLN
54	M8	161	LYS
54	M8	174	ARG
54	M8	178	ARG
55	M9	5	ARG
55	M9	8	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
55	M9	17	VAL
55	M9	22	VAL
55	M9	25	ASP
55	M9	27	ASN
55	M9	28	GLU
55	M9	29	THR
55	M9	31	GLU
55	M9	44	LEU
55	M9	55	VAL
55	M9	70	LYS
55	M9	72	GLU
55	M9	75	HIS
55	M9	81	ARG
55	M9	103	ARG
55	M9	104	ARG
55	M9	106	LEU
55	M9	116	ASP
55	M9	117	LYS
55	M9	127	SER
55	M9	134	HIS
55	M9	155	LEU
55	M9	156	ASN
55	M9	164	LEU
55	M9	175	GLN
55	M9	180	LYS
55	M9	182	ASP
56	N0	1	MET
56	N0	3	HIS
56	N0	23	LYS
56	N0	34	GLU
56	N0	45	LEU
56	N0	51	VAL
56	N0	79	VAL
56	N0	80	ARG
56	N0	81	TYR
56	N0	87	THR
56	N0	88	HIS
56	N0	98	SER
56	N0	100	VAL
56	N0	105	THR
56	N0	106	LEU
56	N0	113	ARG

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
56	N0	115	ARG
56	N0	117	ARG
56	N0	123	ILE
56	N0	131	LYS
56	N0	136	LYS
56	N0	137	ARG
56	N0	138	GLN
56	N0	142	GLN
56	N0	145	THR
56	N0	155	ARG
56	N0	156	VAL
56	N0	162	THR
56	N0	167	ARG
56	N0	171	PHE
56	N0	172	TYR
57	N1	12	ARG
57	N1	16	GLN
57	N1	21	LYS
57	N1	26	HIS
57	N1	27	LEU
57	N1	32	LYS
57	N1	36	VAL
57	N1	52	MET
57	N1	75	ILE
57	N1	78	LYS
57	N1	79	MET
57	N1	83	ARG
57	N1	87	LYS
57	N1	88	ARG
57	N1	89	LEU
57	N1	103	GLN
57	N1	104	GLU
57	N1	124	VAL
57	N1	127	GLN
57	N1	128	LEU
57	N1	134	GLN
57	N1	139	ARG
57	N1	144	GLU
57	N1	149	GLN
57	N1	151	LEU
57	N1	154	VAL
57	N1	158	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
58	N2	10	LYS
58	N2	29	ASP
58	N2	39	ASP
58	N2	43	VAL
58	N2	52	ASN
58	N2	54	VAL
58	N2	66	VAL
58	N2	70	LYS
58	N2	88	GLN
58	N2	93	ILE
59	N3	13	ILE
59	N3	14	SER
59	N3	32	ARG
59	N3	44	SER
59	N3	54	LEU
59	N3	58	VAL
59	N3	64	LYS
59	N3	69	LEU
59	N3	72	LYS
59	N3	83	LYS
59	N3	84	SER
59	N3	88	ARG
59	N3	102	ILE
59	N3	104	ASN
59	N3	106	LYS
59	N3	115	THR
59	N3	120	LYS
59	N3	125	LEU
59	N3	135	VAL
59	N3	137	VAL
60	N4	5	ILE
60	N4	7	SER
60	N4	19	THR
60	N4	39	LEU
60	N4	42	GLN
60	N4	64	THR
61	N5	27	ARG
61	N5	38	LEU
61	N5	39	LYS
61	N5	40	LEU
61	N5	59	SER
61	N5	63	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
61	N5	75	LYS
61	N5	92	LYS
61	N5	96	LYS
61	N5	108	LEU
61	N5	109	LYS
61	N5	113	LEU
61	N5	115	ARG
61	N5	116	PRO
61	N5	119	THR
61	N5	125	ARG
61	N5	126	LEU
61	N5	133	LEU
61	N5	134	ASP
61	N5	135	ILE
61	N5	138	ARG
61	N5	139	ILE
61	N5	142	ILE
62	N6	3	LYS
62	N6	5	SER
62	N6	6	LEU
62	N6	13	ARG
62	N6	30	LEU
62	N6	35	LEU
62	N6	36	SER
62	N6	37	LYS
62	N6	40	ARG
62	N6	42	GLN
62	N6	45	ILE
62	N6	56	VAL
62	N6	57	LEU
62	N6	58	VAL
62	N6	80	VAL
62	N6	81	GLN
62	N6	88	GLU
62	N6	94	SER
62	N6	97	ILE
62	N6	105	VAL
62	N6	110	HIS
62	N6	115	ARG
62	N6	122	LYS
62	N6	125	LYS
62	N6	126	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
62	N6	127	GLU
63	N7	14	VAL
63	N7	17	ARG
63	N7	24	VAL
63	N7	26	VAL
63	N7	27	LYS
63	N7	34	LYS
63	N7	42	LEU
63	N7	46	ILE
63	N7	52	LYS
63	N7	54	THR
63	N7	55	LYS
63	N7	57	HIS
63	N7	60	LYS
63	N7	64	LYS
63	N7	72	ILE
63	N7	81	LEU
63	N7	83	THR
63	N7	86	THR
63	N7	87	LEU
63	N7	95	VAL
63	N7	106	GLN
63	N7	107	ARG
63	N7	109	GLU
63	N7	127	ASN
63	N7	135	ARG
63	N7	136	PHE
64	N8	6	THR
64	N8	7	LYS
64	N8	8	THR
64	N8	10	LYS
64	N8	14	HIS
64	N8	19	LYS
64	N8	27	LYS
64	N8	29	PRO
64	N8	34	MET
64	N8	42	ARG
64	N8	46	ASP
64	N8	47	LYS
64	N8	56	VAL
64	N8	60	TYR
64	N8	88	ASP

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
64	N8	93	SER
64	N8	96	LYS
64	N8	115	LYS
64	N8	120	ASN
64	N8	130	VAL
64	N8	133	LEU
64	N8	139	ARG
65	N9	8	THR
65	N9	13	THR
65	N9	14	ARG
65	N9	18	ARG
65	N9	21	ILE
65	N9	25	LYS
65	N9	33	LYS
65	N9	50	THR
65	N9	59	LYS
66	O0	11	ASN
66	O0	12	GLN
66	O0	14	LEU
66	O0	16	LEU
66	O0	20	SER
66	O0	24	THR
66	O0	30	THR
66	O0	32	LYS
66	O0	34	LEU
66	O0	36	GLN
66	O0	41	LEU
66	O0	52	ARG
66	O0	54	SER
66	O0	61	MET
66	O0	66	LYS
66	O0	83	LYS
66	O0	87	VAL
66	O0	99	ASP
66	O0	101	LEU
66	O0	102	THR
67	O1	6	ASP
67	O1	13	THR
67	O1	16	LEU
67	O1	26	LYS
67	O1	31	ARG
67	O1	47	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
67	O1	64	VAL
67	O1	68	GLU
67	O1	73	LEU
67	O1	76	SER
67	O1	79	ARG
67	O1	82	GLU
67	O1	84	ASP
67	O1	86	LYS
67	O1	89	LEU
67	O1	94	GLU
67	O1	104	LEU
67	O1	106	THR
67	O1	107	VAL
68	O2	4	LEU
68	O2	19	ARG
68	O2	33	ARG
68	O2	41	VAL
68	O2	44	ARG
68	O2	51	SER
68	O2	54	LYS
68	O2	61	LYS
68	O2	67	SER
68	O2	72	LYS
68	O2	73	THR
68	O2	75	LEU
68	O2	76	VAL
68	O2	81	ASP
68	O2	82	LEU
68	O2	84	THR
68	O2	87	MET
68	O2	89	THR
68	O2	101	SER
68	O2	103	LYS
68	O2	111	ARG
68	O2	123	LYS
68	O2	125	ARG
69	O3	14	LEU
69	O3	15	SER
69	O3	21	ARG
69	O3	22	VAL
69	O3	37	THR
69	O3	40	ASP

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
69	O3	42	GLN
69	O3	59	VAL
69	O3	60	ARG
69	O3	70	LYS
69	O3	72	THR
69	O3	80	VAL
69	O3	81	VAL
69	O3	86	ARG
69	O3	93	THR
69	O3	106	ASN
70	O4	7	PHE
70	O4	8	ARG
70	O4	20	ILE
70	O4	23	VAL
70	O4	24	LYS
70	O4	29	ILE
70	O4	33	GLN
70	O4	36	LYS
70	O4	44	CYS
70	O4	51	LEU
70	O4	52	GLN
70	O4	56	THR
70	O4	71	THR
70	O4	79	SER
70	O4	81	CYS
70	O4	86	LYS
70	O4	87	GLU
70	O4	97	GLU
70	O4	100	ILE
70	O4	102	LYS
70	O4	103	LYS
71	O5	11	THR
71	O5	20	GLN
71	O5	21	LEU
71	O5	27	GLU
71	O5	31	LEU
71	O5	48	ARG
71	O5	49	LYS
71	O5	62	GLN
71	O5	83	LYS
71	O5	85	THR
71	O5	89	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
71	O5	90	ARG
71	O5	100	VAL
71	O5	101	THR
71	O5	102	GLU
71	O5	105	ARG
71	O5	107	LYS
71	O5	114	ARG
71	O5	118	ILE
71	O5	119	LYS
72	O6	2	THR
72	O6	7	ILE
72	O6	9	ILE
72	O6	20	MET
72	O6	21	THR
72	O6	26	ILE
72	O6	29	LYS
72	O6	45	ARG
72	O6	52	PRO
72	O6	57	LEU
72	O6	58	ILE
72	O6	60	LEU
72	O6	76	ARG
72	O6	79	SER
72	O6	81	THR
72	O6	98	ARG
72	O6	99	ARG
73	O7	13	ASN
73	O7	17	THR
73	O7	24	ARG
73	O7	25	ARG
73	O7	26	SER
73	O7	33	THR
73	O7	35	SER
73	O7	44	THR
73	O7	45	ARG
73	O7	55	ARG
73	O7	58	THR
73	O7	59	THR
73	O7	65	ARG
73	O7	67	LEU
73	O7	84	SER
74	O8	3	ARG

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
74	O8	5	ILE
74	O8	8	ILE
74	O8	12	LEU
74	O8	25	VAL
74	O8	29	LYS
74	O8	31	LEU
74	O8	32	ASN
74	O8	39	ARG
74	O8	45	VAL
74	O8	50	SER
74	O8	53	THR
74	O8	58	ASP
74	O8	64	LYS
74	O8	65	LEU
74	O8	67	GLN
74	O8	72	THR
74	O8	77	ARG
75	O9	5	LYS
75	O9	21	ARG
75	O9	25	GLN
75	O9	27	ILE
75	O9	29	LEU
75	O9	32	ASN
75	O9	36	ARG
76	Q0	78	ILE
76	Q0	97	ARG
76	Q0	113	ARG
76	Q0	114	LYS
76	Q0	126	LYS
76	Q0	127	LEU
76	Q0	128	LYS
77	Q1	2	ARG
77	Q1	4	LYS
77	Q1	6	ARG
77	Q1	9	ARG
77	Q1	11	ARG
77	Q1	17	ARG
77	Q1	19	LYS
78	Q2	2	VAL
78	Q2	3	ASN
78	Q2	8	ARG
78	Q2	12	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
78	Q2	21	THR
78	Q2	23	HIS
78	Q2	26	THR
78	Q2	35	LEU
78	Q2	38	GLN
78	Q2	47	GLN
78	Q2	60	LYS
78	Q2	78	LYS
78	Q2	80	ARG
78	Q2	83	LEU
78	Q2	84	THR
78	Q2	85	LEU
78	Q2	90	HIS
78	Q2	92	GLU
78	Q2	93	LEU
78	Q2	100	LYS
78	Q2	104	LEU
78	Q2	105	GLN
79	Q3	11	THR
79	Q3	21	SER
79	Q3	25	GLN
79	Q3	45	LYS
79	Q3	46	THR
79	Q3	49	ARG
79	Q3	58	SER
79	Q3	59	CYS
79	Q3	60	CYS
79	Q3	70	THR
79	Q3	73	THR
79	Q3	90	VAL
79	Q3	91	GLU
2	s0	6	THR
2	s0	12	GLU
2	s0	17	LEU
2	s0	18	LEU
2	s0	30	GLN
2	s0	31	VAL
2	s0	34	GLU
2	s0	41	ARG
2	s0	45	VAL
2	s0	50	VAL
2	s0	55	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	s0	62	ARG
2	s0	71	GLU
2	s0	78	SER
2	s0	87	LEU
2	s0	88	LYS
2	s0	106	SER
2	s0	110	TYR
2	s0	124	THR
2	s0	131	GLN
2	s0	144	ILE
2	s0	151	SER
2	s0	156	VAL
2	s0	157	ASP
2	s0	164	ASN
2	s0	165	ARG
2	s0	172	LEU
2	s0	179	ARG
2	s0	180	GLU
2	s0	183	ARG
2	s0	185	ARG
2	s0	188	LEU
2	s0	189	VAL
2	s0	200	ASP
3	s1	21	VAL
3	s1	25	THR
3	s1	37	THR
3	s1	47	LEU
3	s1	48	VAL
3	s1	51	SER
3	s1	56	SER
3	s1	70	LEU
3	s1	74	GLN
3	s1	80	SER
3	s1	82	ARG
3	s1	83	LYS
3	s1	89	ASP
3	s1	96	LEU
3	s1	105	PHE
3	s1	110	LEU
3	s1	114	VAL
3	s1	115	ARG
3	s1	119	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	s1	120	LEU
3	s1	125	VAL
3	s1	126	THR
3	s1	129	THR
3	s1	135	LEU
3	s1	137	ILE
3	s1	152	ARG
3	s1	159	SER
3	s1	175	GLU
3	s1	180	THR
3	s1	181	LEU
3	s1	195	LYS
3	s1	202	LYS
3	s1	203	ASP
3	s1	210	ILE
3	s1	212	VAL
3	s1	231	LEU
4	s2	39	THR
4	s2	41	LEU
4	s2	52	THR
4	s2	53	ILE
4	s2	54	GLU
4	s2	58	LEU
4	s2	60	SER
4	s2	69	ILE
4	s2	70	ASP
4	s2	72	LEU
4	s2	79	GLU
4	s2	80	VAL
4	s2	81	MET
4	s2	83	ILE
4	s2	87	GLN
4	s2	89	GLN
4	s2	90	THR
4	s2	91	ARG
4	s2	95	ARG
4	s2	97	ARG
4	s2	106	ASP
4	s2	108	ASN
4	s2	111	VAL
4	s2	117	THR
4	s2	130	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	s2	139	ILE
4	s2	141	ARG
4	s2	146	THR
4	s2	152	HIS
4	s2	158	THR
4	s2	159	THR
4	s2	165	VAL
4	s2	166	THR
4	s2	170	ILE
4	s2	182	PRO
4	s2	185	LYS
4	s2	194	GLU
4	s2	195	ASP
4	s2	207	LEU
4	s2	222	TYR
4	s2	225	LEU
4	s2	226	THR
4	s2	229	LEU
4	s2	233	GLN
4	s2	237	VAL
4	s2	240	LEU
4	s2	244	SER
4	s2	248	SER
5	s3	4	LEU
5	s3	7	LYS
5	s3	9	ARG
5	s3	32	GLU
5	s3	34	TYR
5	s3	35	SER
5	s3	37	VAL
5	s3	41	VAL
5	s3	44	THR
5	s3	50	ILE
5	s3	59	LEU
5	s3	61	GLU
5	s3	67	ASN
5	s3	70	THR
5	s3	83	THR
5	s3	84	ILE
5	s3	89	GLU
5	s3	90	ARG
5	s3	97	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	s3	103	GLU
5	s3	109	LEU
5	s3	111	ASN
5	s3	115	ILE
5	s3	125	TYR
5	s3	128	GLU
5	s3	132	LYS
5	s3	142	LEU
5	s3	146	ARG
5	s3	154	ASP
5	s3	158	ILE
5	s3	169	ASP
5	s3	172	THR
5	s3	185	LYS
5	s3	207	THR
5	s3	212	LYS
5	s3	213	GLU
5	s3	223	LYS
5	s3	224	ASP
6	s4	9	LEU
6	s4	12	LEU
6	s4	23	LEU
6	s4	26	CYS
6	s4	32	SER
6	s4	39	ARG
6	s4	42	LEU
6	s4	49	ARG
6	s4	51	ARG
6	s4	62	LYS
6	s4	89	VAL
6	s4	93	ASP
6	s4	98	ASN
6	s4	104	ASP
6	s4	113	ARG
6	s4	125	LYS
6	s4	126	VAL
6	s4	130	GLN
6	s4	146	THR
6	s4	148	ARG
6	s4	170	THR
6	s4	176	ASP
6	s4	181	VAL

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
6	s4	182	TYR
6	s4	187	ARG
6	s4	194	THR
6	s4	196	VAL
6	s4	209	HIS
6	s4	214	LEU
6	s4	226	PHE
6	s4	227	VAL
6	s4	236	ILE
6	s4	244	ILE
6	s4	245	LYS
6	s4	246	LEU
6	s4	247	SER
6	s4	248	ILE
6	s4	254	ARG
7	s5	25	LEU
7	s5	27	THR
7	s5	31	GLU
7	s5	38	THR
7	s5	40	ILE
7	s5	45	LYS
7	s5	58	LEU
7	s5	63	GLN
7	s5	64	VAL
7	s5	68	ILE
7	s5	83	ARG
7	s5	89	ILE
7	s5	93	LEU
7	s5	99	MET
7	s5	102	ARG
7	s5	103	ASN
7	s5	119	ASP
7	s5	125	THR
7	s5	128	ASN
7	s5	130	ILE
7	s5	148	ARG
7	s5	157	ARG
7	s5	163	SER
7	s5	190	ILE
7	s5	192	GLU
7	s5	194	LEU
7	s5	203	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	s5	216	GLU
7	s5	219	ARG
8	s6	1	MET
8	s6	6	SER
8	s6	10	ASN
8	s6	12	SER
8	s6	15	THR
8	s6	22	HIS
8	s6	43	ASP
8	s6	57	ASP
8	s6	67	VAL
8	s6	71	THR
8	s6	73	ILE
8	s6	74	LYS
8	s6	76	LEU
8	s6	78	THR
8	s6	93	LYS
8	s6	108	VAL
8	s6	109	LEU
8	s6	115	LYS
8	s6	120	GLU
8	s6	121	LEU
8	s6	126	ASP
8	s6	127	THR
8	s6	143	LYS
8	s6	151	ASP
8	s6	153	VAL
8	s6	155	ASP
8	s6	156	PHE
8	s6	162	VAL
8	s6	168	THR
8	s6	182	GLN
8	s6	184	LEU
8	s6	193	LEU
8	s6	211	LEU
8	s6	215	ARG
9	s7	8	ILE
9	s7	11	GLN
9	s7	14	THR
9	s7	28	GLU
9	s7	33	GLU
9	s7	49	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	s7	50	ASP
9	s7	55	LYS
9	s7	60	ILE
9	s7	67	LEU
9	s7	75	THR
9	s7	77	LEU
9	s7	78	THR
9	s7	97	ARG
9	s7	108	GLN
9	s7	110	GLN
9	s7	112	ARG
9	s7	114	ARG
9	s7	115	SER
9	s7	116	ARG
9	s7	117	THR
9	s7	118	LEU
9	s7	119	THR
9	s7	123	ASP
9	s7	126	LEU
9	s7	129	LEU
9	s7	135	ILE
9	s7	143	LEU
9	s7	144	VAL
9	s7	160	GLN
9	s7	163	ASP
9	s7	166	LEU
9	s7	176	LEU
9	s7	185	ILE
9	s7	187	SER
10	s8	6	ASP
10	s8	7	SER
10	s8	12	SER
10	s8	18	ARG
10	s8	20	GLN
10	s8	22	ARG
10	s8	25	ARG
10	s8	29	LEU
10	s8	36	THR
10	s8	46	VAL
10	s8	48	THR
10	s8	58	LEU
10	s8	59	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
10	s8	64	ASN
10	s8	66	SER
10	s8	74	LYS
10	s8	76	THR
10	s8	121	LEU
10	s8	152	ILE
10	s8	155	SER
10	s8	161	SER
10	s8	172	ARG
10	s8	175	GLN
10	s8	176	SER
10	s8	183	ILE
10	s8	184	LEU
11	s9	3	ARG
11	s9	9	SER
11	s9	13	SER
11	s9	24	LEU
11	s9	28	LEU
11	s9	33	GLU
11	s9	37	LYS
11	s9	39	LYS
11	s9	46	SER
11	s9	49	LEU
11	s9	52	ILE
11	s9	54	ARG
11	s9	63	ASP
11	s9	78	ARG
11	s9	81	VAL
11	s9	82	ARG
11	s9	90	LYS
11	s9	92	LYS
11	s9	101	VAL
11	s9	105	LEU
11	s9	109	LEU
11	s9	110	GLN
11	s9	126	ARG
11	s9	127	VAL
11	s9	133	HIS
11	s9	134	ILE
11	s9	142	ASN
11	s9	147	MET
11	s9	148	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	s9	149	ARG
11	s9	157	ASP
11	s9	161	THR
11	s9	162	SER
11	s9	168	ARG
11	s9	172	VAL
11	s9	179	ARG
11	s9	180	LYS
11	s9	182	GLU
12	c0	2	LEU
12	c0	15	LEU
12	c0	20	VAL
12	c0	27	PHE
12	c0	28	ASN
12	c0	40	LEU
12	c0	47	GLN
12	c0	49	LEU
12	c0	55	VAL
12	c0	56	LYS
13	c1	5	LEU
13	c1	10	GLU
13	c1	18	HIS
13	c1	21	ASN
13	c1	26	LYS
13	c1	30	ARG
13	c1	32	LYS
13	c1	33	ARG
13	c1	40	LEU
13	c1	44	THR
13	c1	56	LYS
13	c1	60	PHE
13	c1	67	ARG
13	c1	69	LYS
13	c1	72	THR
13	c1	74	THR
13	c1	80	MET
13	c1	82	ARG
13	c1	90	TYR
13	c1	99	ARG
13	c1	117	VAL
13	c1	122	ILE
13	c1	128	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
13	c1	129	ARG
13	c1	136	ARG
14	c2	28	LEU
14	c2	30	VAL
14	c2	53	THR
14	c2	59	LEU
14	c2	61	VAL
14	c2	62	LEU
14	c2	71	ILE
14	c2	74	LEU
14	c2	83	GLU
14	c2	85	LYS
14	c2	89	ILE
14	c2	97	LEU
14	c2	103	LEU
14	c2	121	VAL
14	c2	132	GLU
14	c2	136	ILE
14	c2	140	PHE
15	c3	6	SER
15	c3	12	SER
15	c3	14	SER
15	c3	16	ILE
15	c3	18	TYR
15	c3	21	ASN
15	c3	23	PRO
15	c3	27	LYS
15	c3	28	LEU
15	c3	32	SER
15	c3	35	GLU
15	c3	39	LYS
15	c3	42	ARG
15	c3	46	THR
15	c3	60	VAL
15	c3	66	ILE
15	c3	70	LYS
15	c3	72	MET
15	c3	76	LYS
15	c3	80	LEU
15	c3	84	ILE
15	c3	99	ARG
15	c3	102	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
15	c3	104	ARG
15	c3	106	ARG
15	c3	115	LEU
15	c3	116	ILE
15	c3	121	ARG
15	c3	122	ILE
15	c3	125	LEU
15	c3	127	ARG
15	c3	128	TYR
15	c3	134	VAL
15	c3	149	LEU
16	c4	13	VAL
16	c4	16	VAL
16	c4	19	ILE
16	c4	24	ASN
16	c4	31	THR
16	c4	32	ASP
16	c4	39	ILE
16	c4	43	THR
16	c4	49	LYS
16	c4	52	ARG
16	c4	58	TYR
16	c4	61	MET
16	c4	70	LYS
16	c4	71	CYS
16	c4	76	ILE
16	c4	81	VAL
16	c4	83	ILE
16	c4	93	THR
16	c4	102	LEU
16	c4	107	ARG
16	c4	114	ARG
16	c4	118	VAL
16	c4	119	THR
16	c4	123	SER
16	c4	124	ASP
16	c4	133	ARG
16	c4	136	ARG
16	c4	137	LEU
17	c5	12	PHE
17	c5	29	SER
17	c5	36	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
17	c5	49	MET
17	c5	52	LYS
17	c5	77	ARG
17	c5	92	SER
17	c5	97	TYR
17	c5	107	ILE
17	c5	110	GLU
17	c5	111	MET
17	c5	124	THR
17	c5	127	ARG
18	c6	17	THR
18	c6	23	LYS
18	c6	26	LYS
18	c6	28	LEU
18	c6	36	ILE
18	c6	37	THR
18	c6	43	ILE
18	c6	44	LEU
18	c6	48	VAL
18	c6	53	LEU
18	c6	54	LEU
18	c6	55	VAL
18	c6	57	LEU
18	c6	63	ILE
18	c6	65	ILE
18	c6	68	ARG
18	c6	69	VAL
18	c6	81	ILE
18	c6	83	GLN
18	c6	110	THR
18	c6	114	ARG
18	c6	117	LEU
18	c6	118	ILE
18	c6	127	LYS
18	c6	128	LYS
18	c6	137	ARG
18	c6	143	ARG
19	c7	3	ARG
19	c7	4	VAL
19	c7	6	THR
19	c7	9	VAL
19	c7	17	ILE

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
19	c7	34	LEU
19	c7	45	ARG
19	c7	46	LEU
19	c7	47	ARG
19	c7	60	ARG
19	c7	61	ILE
19	c7	69	ILE
19	c7	72	LYS
19	c7	83	GLN
19	c7	85	VAL
19	c7	88	VAL
19	c7	112	SER
19	c7	113	LEU
20	c8	3	LEU
20	c8	4	VAL
20	c8	13	HIS
20	c8	15	LEU
20	c8	25	ASN
20	c8	28	ILE
20	c8	29	VAL
20	c8	33	THR
20	c8	36	LYS
20	c8	38	VAL
20	c8	40	ARG
20	c8	41	ARG
20	c8	57	ARG
20	c8	63	GLN
20	c8	69	ILE
20	c8	77	THR
20	c8	85	PHE
20	c8	94	ASP
20	c8	97	ASP
20	c8	100	THR
20	c8	106	GLU
20	c8	115	ARG
20	c8	116	LEU
20	c8	133	VAL
20	c8	136	GLN
20	c8	138	THR
20	c8	141	THR
20	c8	143	ARG
20	c8	145	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	c9	6	VAL
21	c9	13	ASP
21	c9	20	SER
21	c9	25	GLN
21	c9	27	LYS
21	c9	28	LEU
21	c9	30	VAL
21	c9	34	VAL
21	c9	57	ARG
21	c9	68	ARG
21	c9	71	VAL
21	c9	75	LYS
21	c9	85	SER
21	c9	86	ARG
21	c9	89	ARG
21	c9	123	ARG
21	c9	125	SER
21	c9	126	GLU
21	c9	133	ASP
21	c9	135	ILE
21	c9	139	THR
21	c9	140	LEU
21	c9	141	GLU
21	c9	142	GLU
22	d0	20	ILE
22	d0	21	LYS
22	d0	22	ILE
22	d0	23	ARG
22	d0	27	THR
22	d0	30	LYS
22	d0	31	VAL
22	d0	34	LEU
22	d0	37	VAL
22	d0	44	ASN
22	d0	51	VAL
22	d0	57	ARG
22	d0	60	THR
22	d0	61	LYS
22	d0	63	LEU
22	d0	70	THR
22	d0	72	ASN
22	d0	74	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
22	d0	76	SER
22	d0	77	LYS
22	d0	81	THR
22	d0	99	ILE
22	d0	102	ARG
22	d0	103	ILE
22	d0	105	GLN
22	d0	108	ILE
22	d0	115	GLU
23	d1	2	GLU
23	d1	3	ASN
23	d1	4	ASP
23	d1	5	LYS
23	d1	8	LEU
23	d1	10	GLU
23	d1	12	TYR
23	d1	18	SER
23	d1	25	LYS
23	d1	31	SER
23	d1	32	VAL
23	d1	34	ILE
23	d1	38	LYS
23	d1	41	GLU
23	d1	50	TYR
23	d1	52	THR
23	d1	56	SER
23	d1	69	LEU
23	d1	70	ASN
23	d1	78	LEU
23	d1	87	ARG
24	d2	7	LEU
24	d2	20	THR
24	d2	23	ARG
24	d2	25	VAL
24	d2	31	SER
24	d2	47	ILE
24	d2	56	HIS
24	d2	65	LEU
24	d2	93	LEU
24	d2	98	GLN
24	d2	105	THR
24	d2	114	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	d2	117	ARG
24	d2	129	VAL
25	d3	5	LYS
25	d3	7	ARG
25	d3	9	LEU
25	d3	14	LYS
25	d3	15	LEU
25	d3	19	ARG
25	d3	36	THR
25	d3	40	SER
25	d3	41	SER
25	d3	68	ILE
25	d3	73	ARG
25	d3	83	VAL
25	d3	84	THR
25	d3	96	VAL
25	d3	97	ASP
25	d3	100	ASP
25	d3	103	LEU
25	d3	107	PHE
25	d3	109	ARG
25	d3	112	LYS
25	d3	114	LYS
25	d3	121	ARG
25	d3	125	VAL
25	d3	133	LEU
25	d3	144	ARG
26	d4	10	ARG
26	d4	22	GLN
26	d4	26	ASP
26	d4	36	SER
26	d4	38	ASP
26	d4	42	GLU
26	d4	43	LYS
26	d4	44	LEU
26	d4	46	GLU
26	d4	49	LYS
26	d4	51	GLU
26	d4	62	THR
26	d4	78	SER
26	d4	83	LYS
26	d4	88	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	d4	92	VAL
26	d4	98	GLU
26	d4	102	LYS
26	d4	116	LYS
26	d4	128	LYS
26	d4	131	ARG
27	d5	41	ILE
27	d5	43	ASP
27	d5	51	LEU
27	d5	53	GLU
27	d5	57	TYR
27	d5	81	ARG
27	d5	88	ILE
27	d5	90	LYS
28	d6	5	ARG
28	d6	8	ASN
28	d6	10	ARG
28	d6	12	LYS
28	d6	15	ARG
28	d6	28	LYS
28	d6	33	ASP
28	d6	39	MET
28	d6	44	ILE
28	d6	46	GLU
28	d6	51	ARG
28	d6	53	LEU
28	d6	54	SER
28	d6	55	GLU
28	d6	67	THR
28	d6	76	SER
28	d6	82	ARG
28	d6	85	ARG
28	d6	86	VAL
28	d6	89	ARG
28	d6	90	GLU
29	d7	3	LEU
29	d7	11	THR
29	d7	26	GLN
29	d7	43	ILE
29	d7	45	THR
29	d7	55	THR
29	d7	59	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
29	d7	77	THR
30	d8	11	LYS
30	d8	14	LYS
30	d8	22	ARG
30	d8	28	VAL
30	d8	32	PHE
30	d8	33	LEU
30	d8	52	ASP
30	d8	54	LEU
30	d8	58	GLU
30	d8	66	LEU
31	d9	6	VAL
31	d9	10	HIS
31	d9	12	ARG
31	d9	22	ARG
31	d9	24	CYS
31	d9	25	SER
31	d9	28	THR
31	d9	31	ILE
31	d9	39	CYS
31	d9	42	CYS
31	d9	49	ASP
31	d9	54	LYS
80	e0	4	VAL
80	e0	13	LYS
80	e0	21	VAL
80	e0	22	GLU
80	e0	29	LYS
80	e0	31	LYS
80	e0	36	LYS
80	e0	38	LEU
80	e0	39	LEU
80	e0	42	ARG
80	e0	45	VAL
80	e0	46	ASN
80	e0	49	LEU
80	e0	55	ARG
80	e0	61	SER
33	e1	78	LYS
33	e1	80	ARG
33	e1	87	THR
33	e1	89	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
33	e1	90	LYS
33	e1	100	LEU
33	e1	102	VAL
33	e1	106	TYR
33	e1	107	LYS
33	e1	113	LYS
33	e1	115	THR
33	e1	116	LYS
33	e1	121	CYS
33	e1	135	HIS
33	e1	147	VAL
33	e1	151	ASN
34	sR	8	VAL
34	sR	10	ARG
34	sR	16	HIS
34	sR	23	LEU
34	sR	25	THR
34	sR	32	LEU
34	sR	58	VAL
34	sR	64	HIS
34	sR	65	SER
34	sR	66	HIS
34	sR	72	THR
34	sR	76	ASP
34	sR	82	SER
34	sR	94	VAL
34	sR	96	THR
34	sR	98	GLU
34	sR	100	TYR
34	sR	123	ILE
34	sR	145	LEU
34	sR	152	SER
34	sR	161	LYS
34	sR	164	ASP
34	sR	168	THR
34	sR	176	LYS
34	sR	178	VAL
34	sR	188	ILE
34	sR	199	ILE
34	sR	210	LEU
34	sR	228	LYS
34	sR	232	TYR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	sR	250	TYR
34	sR	266	ASP
34	sR	275	ARG
34	sR	282	SER
34	sR	286	GLU
34	sR	297	ASP
34	sR	309	VAL
34	sR	310	ILE
34	sR	319	ASN
35	sM	23	LYS
35	sM	28	SER
35	sM	30	THR
35	sM	41	SER
35	sM	43	ASP
35	sM	61	ILE
35	sM	68	ARG
35	sM	71	ASN
35	sM	74	LYS
35	sM	75	ASP
35	sM	77	THR
35	sM	78	ASP
39	l2	8	GLN
39	l2	15	ILE
39	l2	19	HIS
39	l2	23	ARG
39	l2	28	LYS
39	l2	30	ARG
39	l2	31	THR
39	l2	32	LEU
39	l2	44	ILE
39	l2	45	VAL
39	l2	48	ILE
39	l2	49	VAL
39	l2	62	VAL
39	l2	70	ARG
39	l2	74	GLU
39	l2	80	GLU
39	l2	82	VAL
39	l2	84	THR
39	l2	101	VAL
39	l2	104	LEU
39	l2	114	SER

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
39	12	118	GLU
39	12	119	LYS
39	12	137	ILE
39	12	142	ASP
39	12	146	THR
39	12	147	ARG
39	12	148	VAL
39	12	149	ARG
39	12	168	VAL
39	12	179	LEU
39	12	180	LEU
39	12	190	ARG
39	12	193	ARG
39	12	200	ARG
39	12	205	ASN
39	12	207	VAL
39	12	218	HIS
39	12	224	THR
39	12	227	ARG
39	12	243	THR
39	12	246	LEU
40	13	3	HIS
40	13	4	ARG
40	13	5	LYS
40	13	7	GLU
40	13	10	ARG
40	13	17	LEU
40	13	19	ARG
40	13	24	SER
40	13	38	SER
40	13	43	LEU
40	13	47	LEU
40	13	50	LYS
40	13	55	THR
40	13	56	ILE
40	13	60	LEU
40	13	70	ARG
40	13	73	VAL
40	13	77	THR
40	13	85	VAL
40	13	103	THR
40	13	104	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	l3	112	ASP
40	l3	113	GLU
40	l3	114	VAL
40	l3	120	LYS
40	l3	123	TYR
40	l3	146	ARG
40	l3	148	LEU
40	l3	150	ARG
40	l3	157	VAL
40	l3	160	VAL
40	l3	165	GLN
40	l3	167	ARG
40	l3	169	THR
40	l3	183	LEU
40	l3	184	ASN
40	l3	188	ILE
40	l3	192	VAL
40	l3	201	LYS
40	l3	202	THR
40	l3	205	VAL
40	l3	208	VAL
40	l3	211	GLN
40	l3	214	MET
40	l3	221	THR
40	l3	229	VAL
40	l3	232	ARG
40	l3	235	THR
40	l3	242	THR
40	l3	249	VAL
40	l3	252	ILE
40	l3	264	VAL
40	l3	274	SER
40	l3	301	THR
40	l3	304	THR
40	l3	312	VAL
40	l3	316	GLU
40	l3	320	ASP
40	l3	324	VAL
40	l3	328	ILE
40	l3	332	ARG
40	l3	340	LYS
40	l3	344	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	l3	348	ARG
40	l3	354	VAL
40	l3	359	ILE
40	l3	361	THR
40	l3	369	ARG
40	l3	376	LYS
40	l3	380	MET
41	l4	2	SER
41	l4	16	THR
41	l4	22	LEU
41	l4	25	VAL
41	l4	27	SER
41	l4	47	ARG
41	l4	53	SER
41	l4	55	LYS
41	l4	63	GLU
41	l4	73	ARG
41	l4	82	THR
41	l4	90	PHE
41	l4	92	ASN
41	l4	93	MET
41	l4	99	MET
41	l4	112	LYS
41	l4	118	LYS
41	l4	120	TYR
41	l4	122	THR
41	l4	126	ILE
41	l4	129	THR
41	l4	131	VAL
41	l4	136	LEU
41	l4	144	LYS
41	l4	145	ILE
41	l4	148	ILE
41	l4	150	LEU
41	l4	156	LEU
41	l4	159	ILE
41	l4	177	ASP
41	l4	179	LEU
41	l4	181	VAL
41	l4	183	LYS
41	l4	186	LYS
41	l4	187	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	14	191	LYS
41	14	198	ARG
41	14	201	GLN
41	14	203	ARG
41	14	206	LEU
41	14	222	VAL
41	14	230	VAL
41	14	246	ARG
41	14	258	LEU
41	14	261	VAL
41	14	265	GLU
41	14	266	THR
41	14	267	VAL
41	14	275	THR
41	14	278	SER
41	14	287	THR
41	14	300	ARG
41	14	301	PRO
41	14	304	GLN
41	14	307	GLN
41	14	308	LYS
41	14	312	VAL
41	14	313	LEU
41	14	316	ASN
41	14	322	GLN
41	14	333	VAL
41	14	339	LEU
41	14	345	GLU
41	14	347	THR
41	14	356	THR
41	14	359	LEU
42	15	25	GLU
42	15	34	LYS
42	15	35	ARG
42	15	38	THR
42	15	41	LYS
42	15	51	LEU
42	15	56	THR
42	15	65	ILE
42	15	66	SER
42	15	67	SER
42	15	68	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	15	70	THR
42	15	75	LEU
42	15	110	LEU
42	15	112	LYS
42	15	113	LEU
42	15	118	THR
42	15	120	LYS
42	15	131	LEU
42	15	132	THR
42	15	133	GLU
42	15	135	VAL
42	15	140	ARG
42	15	146	LEU
42	15	148	ILE
42	15	152	ARG
42	15	154	THR
42	15	155	THR
42	15	158	ARG
42	15	164	LYS
42	15	183	TRP
42	15	185	PHE
42	15	186	GLU
42	15	187	THR
42	15	189	GLU
42	15	190	ILE
42	15	194	LEU
42	15	211	LEU
42	15	222	LEU
42	15	224	LYS
42	15	227	LEU
42	15	241	THR
42	15	242	SER
42	15	258	LYS
42	15	259	LYS
42	15	268	GLU
42	15	270	LYS
42	15	271	LYS
42	15	273	ARG
42	15	275	THR
42	15	280	GLU
42	15	281	GLU
42	15	293	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
43	16	8	LYS
43	16	15	VAL
43	16	21	THR
43	16	31	ARG
43	16	46	ARG
43	16	50	LYS
43	16	52	VAL
43	16	64	LEU
43	16	82	ARG
43	16	89	THR
43	16	98	VAL
43	16	104	GLU
43	16	109	GLU
43	16	131	LYS
43	16	143	LYS
43	16	146	ILE
43	16	152	THR
43	16	155	LEU
43	16	160	SER
43	16	162	SER
43	16	170	LYS
44	17	26	VAL
44	17	41	ARG
44	17	45	LEU
44	17	46	GLU
44	17	48	ASN
44	17	60	ARG
44	17	62	ILE
44	17	82	LYS
44	17	83	LEU
44	17	88	ARG
44	17	93	ASN
44	17	98	LYS
44	17	124	LEU
44	17	128	LYS
44	17	129	LEU
44	17	130	ILE
44	17	156	ILE
44	17	157	ASN
44	17	158	LYS
44	17	173	LEU
44	17	175	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
44	17	179	LEU
44	17	184	LEU
44	17	193	PRO
44	17	196	LYS
44	17	199	ASN
44	17	228	SER
44	17	229	PHE
44	17	239	LEU
45	18	26	LEU
45	18	36	ILE
45	18	40	VAL
45	18	49	TYR
45	18	67	ILE
45	18	68	ARG
45	18	71	VAL
45	18	79	GLN
45	18	81	THR
45	18	95	ASN
45	18	98	ARG
45	18	101	THR
45	18	109	LEU
45	18	136	LEU
45	18	146	LYS
45	18	149	LYS
45	18	155	ASN
45	18	160	ILE
45	18	163	VAL
45	18	164	VAL
45	18	173	MET
45	18	185	ARG
45	18	191	ASN
45	18	192	GLN
45	18	200	LEU
45	18	211	LEU
45	18	214	LEU
45	18	216	SER
45	18	219	ASP
45	18	222	PHE
45	18	230	LYS
45	18	240	ASN
45	18	245	LYS
45	18	248	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	19	1	MET
46	19	5	GLN
46	19	6	THR
46	19	18	VAL
46	19	31	ARG
46	19	39	LYS
46	19	46	THR
46	19	48	VAL
46	19	52	LEU
46	19	55	VAL
46	19	62	ARG
46	19	68	LEU
46	19	69	ARG
46	19	70	THR
46	19	73	SER
46	19	77	ASN
46	19	79	ILE
46	19	82	VAL
46	19	84	LYS
46	19	92	TYR
46	19	105	GLU
46	19	106	LYS
46	19	115	ARG
46	19	118	LEU
46	19	120	ASP
46	19	122	LYS
46	19	123	ILE
46	19	124	ARG
46	19	133	THR
46	19	137	SER
46	19	138	THR
46	19	143	GLU
46	19	144	ILE
46	19	149	ASN
46	19	151	VAL
46	19	152	GLU
46	19	157	ASN
46	19	161	LEU
46	19	162	GLN
46	19	163	GLN
46	19	166	ARG
46	19	179	ILE

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
46	l9	181	VAL
46	l9	191	LEU
47	m0	24	ARG
47	m0	26	VAL
47	m0	36	LEU
47	m0	42	THR
47	m0	50	VAL
47	m0	52	LEU
47	m0	58	GLU
47	m0	63	GLU
47	m0	71	CYS
47	m0	74	LYS
47	m0	76	MET
47	m0	77	THR
47	m0	78	THR
47	m0	83	ASP
47	m0	87	LEU
47	m0	135	ILE
47	m0	139	ARG
47	m0	140	THR
47	m0	154	ARG
47	m0	156	ARG
47	m0	162	GLN
47	m0	169	LYS
47	m0	176	LEU
47	m0	177	ASP
47	m0	189	GLU
47	m0	197	VAL
47	m0	200	LEU
47	m0	206	LEU
47	m0	208	ASN
47	m0	209	ASN
47	m0	211	ARG
47	m0	212	GLU
47	m0	217	PHE
48	m1	6	GLN
48	m1	10	ARG
48	m1	13	LYS
48	m1	16	LYS
48	m1	18	VAL
48	m1	19	LEU
48	m1	23	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	m1	30	LEU
48	m1	34	SER
48	m1	37	LEU
48	m1	40	LEU
48	m1	43	GLN
48	m1	44	THR
48	m1	46	VAL
48	m1	56	THR
48	m1	64	LYS
48	m1	71	VAL
48	m1	80	LEU
48	m1	92	ARG
48	m1	93	ASP
48	m1	101	ASN
48	m1	106	ILE
48	m1	107	ASP
48	m1	112	LEU
48	m1	115	LYS
48	m1	129	VAL
48	m1	130	VAL
48	m1	132	ASN
48	m1	137	ARG
48	m1	140	ARG
48	m1	145	LYS
48	m1	153	LYS
48	m1	154	THR
48	m1	155	THR
48	m1	159	THR
48	m1	171	VAL
48	m1	174	LYS
49	m3	5	LYS
49	m3	13	HIS
49	m3	46	ILE
49	m3	52	ASP
49	m3	53	LEU
49	m3	54	LEU
49	m3	55	ARG
49	m3	58	VAL
49	m3	63	VAL
49	m3	67	ARG
49	m3	68	LYS
49	m3	69	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	m3	73	ARG
49	m3	76	THR
49	m3	104	ARG
49	m3	107	GLU
49	m3	108	ILE
49	m3	113	VAL
49	m3	121	SER
49	m3	123	ILE
49	m3	128	ARG
49	m3	131	LYS
49	m3	149	GLN
49	m3	152	THR
49	m3	153	ASP
49	m3	164	GLU
49	m3	168	ARG
49	m3	171	ARG
49	m3	176	GLU
49	m3	180	ARG
49	m3	184	GLU
50	m4	2	SER
50	m4	3	THR
50	m4	12	TRP
50	m4	27	GLN
50	m4	41	GLN
50	m4	43	LYS
50	m4	45	LEU
50	m4	53	VAL
50	m4	55	ARG
50	m4	60	LEU
50	m4	62	GLN
50	m4	63	VAL
50	m4	64	VAL
50	m4	66	THR
50	m4	91	CYS
50	m4	113	THR
50	m4	128	ARG
50	m4	130	THR
50	m4	135	LEU
51	m5	5	LYS
51	m5	8	GLU
51	m5	15	GLN
51	m5	24	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	m5	50	ARG
51	m5	54	LYS
51	m5	60	VAL
51	m5	66	VAL
51	m5	72	LYS
51	m5	80	THR
51	m5	85	THR
51	m5	92	LEU
51	m5	96	ARG
51	m5	106	VAL
51	m5	109	ARG
51	m5	125	SER
51	m5	138	GLN
51	m5	144	ARG
51	m5	153	ASP
51	m5	155	VAL
51	m5	159	ARG
51	m5	165	THR
51	m5	170	LYS
51	m5	175	ASN
51	m5	176	LYS
51	m5	180	PHE
51	m5	184	LYS
51	m5	188	ARG
51	m5	190	THR
51	m5	194	GLN
51	m5	196	THR
51	m5	198	SER
51	m5	204	LYS
52	m6	3	VAL
52	m6	4	GLU
52	m6	12	LYS
52	m6	16	VAL
52	m6	21	SER
52	m6	36	VAL
52	m6	49	ARG
52	m6	58	LEU
52	m6	66	LYS
52	m6	67	THR
52	m6	74	ARG
52	m6	78	ARG
52	m6	79	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
52	m6	82	LYS
52	m6	84	LEU
52	m6	85	ARG
52	m6	94	ARG
52	m6	100	GLU
52	m6	106	GLU
52	m6	110	PRO
52	m6	117	ARG
52	m6	119	VAL
52	m6	128	ARG
52	m6	140	LYS
52	m6	143	THR
52	m6	152	VAL
52	m6	160	ARG
52	m6	166	GLU
52	m6	171	LYS
52	m6	177	LYS
52	m6	180	SER
52	m6	182	ASN
52	m6	190	VAL
52	m6	197	LEU
53	m7	9	THR
53	m7	16	SER
53	m7	28	ASN
53	m7	32	THR
53	m7	51	VAL
53	m7	52	LEU
53	m7	53	ASP
53	m7	55	GLN
53	m7	69	ARG
53	m7	79	THR
53	m7	80	LYS
53	m7	107	LEU
53	m7	112	LEU
53	m7	118	GLN
53	m7	119	VAL
53	m7	126	ARG
53	m7	127	ARG
53	m7	136	ILE
53	m7	137	ASN
53	m7	138	LYS
53	m7	141	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
53	m7	142	SER
53	m7	150	VAL
53	m7	153	LYS
53	m7	155	GLU
54	m8	7	SER
54	m8	24	VAL
54	m8	26	LEU
54	m8	31	LYS
54	m8	32	LEU
54	m8	34	THR
54	m8	49	LEU
54	m8	58	ASN
54	m8	63	SER
54	m8	64	VAL
54	m8	66	ARG
54	m8	69	ARG
54	m8	79	LYS
54	m8	81	VAL
54	m8	82	VAL
54	m8	88	THR
54	m8	93	ILE
54	m8	127	LEU
54	m8	129	VAL
54	m8	135	GLN
54	m8	136	ASN
54	m8	137	THR
54	m8	138	LEU
54	m8	141	ARG
54	m8	165	ILE
54	m8	170	ARG
54	m8	174	ARG
54	m8	176	ARG
54	m8	178	ARG
54	m8	185	LYS
55	m9	7	GLN
55	m9	8	LYS
55	m9	10	LEU
55	m9	17	VAL
55	m9	20	ARG
55	m9	29	THR
55	m9	39	ASN
55	m9	43	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
55	m9	49	THR
55	m9	56	THR
55	m9	63	THR
55	m9	70	LYS
55	m9	88	ARG
55	m9	99	LEU
55	m9	104	ARG
55	m9	105	LEU
55	m9	119	LEU
55	m9	126	GLU
55	m9	128	LYS
55	m9	138	LEU
55	m9	148	ASP
55	m9	152	GLU
55	m9	153	LYS
55	m9	164	LEU
55	m9	166	ASN
55	m9	173	ARG
55	m9	177	VAL
56	n0	1	MET
56	n0	5	LYS
56	n0	13	ARG
56	n0	16	THR
56	n0	17	GLU
56	n0	19	VAL
56	n0	32	SER
56	n0	40	ARG
56	n0	45	LEU
56	n0	50	LYS
56	n0	60	SER
56	n0	70	THR
56	n0	82	ASP
56	n0	85	SER
56	n0	87	THR
56	n0	88	HIS
56	n0	89	ASN
56	n0	97	VAL
56	n0	100	VAL
56	n0	105	THR
56	n0	113	ARG
56	n0	117	ARG
56	n0	120	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
56	n0	124	LEU
56	n0	125	LYS
56	n0	130	GLU
56	n0	136	LYS
56	n0	137	ARG
56	n0	142	GLN
56	n0	145	THR
56	n0	148	LEU
56	n0	155	ARG
56	n0	157	GLN
56	n0	160	THR
56	n0	162	THR
56	n0	172	TYR
57	n1	3	LYS
57	n1	10	ARG
57	n1	12	ARG
57	n1	16	GLN
57	n1	17	ARG
57	n1	22	HIS
57	n1	25	VAL
57	n1	27	LEU
57	n1	31	LEU
57	n1	35	LYS
57	n1	36	VAL
57	n1	39	ILE
57	n1	55	LYS
57	n1	78	LYS
57	n1	80	VAL
57	n1	82	ASN
57	n1	83	ARG
57	n1	93	VAL
57	n1	96	ILE
57	n1	97	LYS
57	n1	100	LYS
57	n1	102	ARG
57	n1	104	GLU
57	n1	124	VAL
57	n1	126	VAL
57	n1	128	LEU
57	n1	131	GLN
57	n1	135	PRO
57	n1	139	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
57	n1	150	THR
57	n1	154	VAL
57	n1	160	ILE
58	n2	13	LYS
58	n2	14	THR
58	n2	16	THR
58	n2	27	VAL
58	n2	33	TYR
58	n2	38	ILE
58	n2	39	ASP
58	n2	50	LEU
58	n2	58	GLU
58	n2	68	THR
58	n2	74	LYS
58	n2	75	TYR
58	n2	90	ARG
58	n2	94	ARG
58	n2	96	VAL
58	n2	100	THR
59	n3	13	ILE
59	n3	14	SER
59	n3	32	ARG
59	n3	45	ARG
59	n3	48	ARG
59	n3	49	LEU
59	n3	67	PRO
59	n3	69	LEU
59	n3	72	LYS
59	n3	74	MET
59	n3	88	ARG
59	n3	91	VAL
59	n3	120	LYS
59	n3	128	ARG
60	n4	1	MET
60	n4	2	LYS
60	n4	36	SER
60	n4	39	LEU
60	n4	41	LYS
60	n4	54	LEU
60	n4	57	LYS
60	n4	63	ILE
60	n4	89	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
60	n4	96	LEU
60	n4	97	LYS
60	n4	98	PRO
60	n4	107	GLU
60	n4	126	GLU
60	n4	127	LYS
60	n4	130	SER
60	n4	135	SER
61	n5	27	ARG
61	n5	33	ARG
61	n5	37	THR
61	n5	39	LYS
61	n5	52	PRO
61	n5	56	ARG
61	n5	57	LEU
61	n5	63	ILE
61	n5	71	THR
61	n5	74	LYS
61	n5	78	ASP
61	n5	86	VAL
61	n5	87	SER
61	n5	105	VAL
61	n5	108	LEU
61	n5	114	VAL
61	n5	115	ARG
61	n5	117	ASN
61	n5	125	ARG
61	n5	135	ILE
61	n5	137	ASN
61	n5	142	ILE
62	n6	4	GLN
62	n6	12	ARG
62	n6	13	ARG
62	n6	32	SER
62	n6	37	LYS
62	n6	45	ILE
62	n6	50	ILE
62	n6	51	ARG
62	n6	56	VAL
62	n6	57	LEU
62	n6	62	SER
62	n6	67	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
62	n6	74	TYR
62	n6	84	LYS
62	n6	90	VAL
62	n6	95	VAL
62	n6	99	LEU
62	n6	105	VAL
62	n6	108	LYS
62	n6	111	LEU
62	n6	112	ASP
62	n6	115	ARG
62	n6	120	GLN
62	n6	122	LYS
63	n7	3	LYS
63	n7	5	LEU
63	n7	12	VAL
63	n7	17	ARG
63	n7	21	LYS
63	n7	24	VAL
63	n7	25	ILE
63	n7	28	PRO
63	n7	33	SER
63	n7	34	LYS
63	n7	36	HIS
63	n7	46	ILE
63	n7	52	LYS
63	n7	65	ARG
63	n7	72	ILE
63	n7	77	TYR
63	n7	81	LEU
63	n7	86	THR
63	n7	90	GLU
63	n7	93	LYS
63	n7	95	VAL
63	n7	99	GLU
63	n7	105	SER
63	n7	121	ARG
63	n7	127	ASN
64	n8	3	SER
64	n8	4	ARG
64	n8	8	THR
64	n8	10	LYS
64	n8	14	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
64	n8	15	VAL
64	n8	22	ILE
64	n8	26	ARG
64	n8	27	LYS
64	n8	42	ARG
64	n8	47	LYS
64	n8	60	TYR
64	n8	64	GLN
64	n8	65	GLN
64	n8	73	LEU
64	n8	78	LEU
64	n8	82	ILE
64	n8	88	ASP
64	n8	91	LEU
64	n8	92	LYS
64	n8	97	GLU
64	n8	120	ASN
64	n8	123	VAL
64	n8	133	LEU
65	n9	22	LYS
65	n9	23	LYS
65	n9	26	THR
65	n9	31	SER
65	n9	33	LYS
65	n9	38	LYS
65	n9	40	ARG
65	n9	42	ASN
65	n9	50	THR
65	n9	58	LYS
65	n9	59	LYS
66	o0	8	GLU
66	o0	9	SER
66	o0	10	ILE
66	o0	18	ILE
66	o0	19	LYS
66	o0	34	LEU
66	o0	40	LYS
66	o0	41	LEU
66	o0	48	THR
66	o0	55	GLU
66	o0	61	MET
66	o0	64	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
66	o0	66	LYS
66	o0	68	TYR
66	o0	69	TYR
66	o0	74	ASN
66	o0	86	ARG
67	o1	6	ASP
67	o1	13	THR
67	o1	16	LEU
67	o1	24	SER
67	o1	26	LYS
67	o1	28	ARG
67	o1	31	ARG
67	o1	34	LYS
67	o1	44	MET
67	o1	46	THR
67	o1	64	VAL
67	o1	70	ARG
67	o1	76	SER
67	o1	83	GLU
67	o1	84	ASP
67	o1	89	LEU
67	o1	91	SER
67	o1	96	VAL
67	o1	98	VAL
67	o1	102	LYS
67	o1	104	LEU
67	o1	106	THR
67	o1	110	GLU
67	o1	112	ASP
68	o2	3	SER
68	o2	4	LEU
68	o2	8	LYS
68	o2	9	ILE
68	o2	10	VAL
68	o2	15	LYS
68	o2	24	ARG
68	o2	27	ARG
68	o2	33	ARG
68	o2	34	LYS
68	o2	44	ARG
68	o2	45	ARG
68	o2	52	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
68	o2	54	LYS
68	o2	61	LYS
68	o2	62	LYS
68	o2	66	LEU
68	o2	73	THR
68	o2	75	LEU
68	o2	82	LEU
68	o2	86	THR
68	o2	89	THR
68	o2	101	SER
68	o2	125	ARG
69	o3	4	SER
69	o3	6	ARG
69	o3	15	SER
69	o3	31	LYS
69	o3	42	GLN
69	o3	45	LEU
69	o3	57	LYS
69	o3	58	GLU
69	o3	59	VAL
69	o3	64	ILE
69	o3	70	LYS
69	o3	73	ARG
69	o3	74	THR
69	o3	81	VAL
69	o3	84	THR
69	o3	86	ARG
69	o3	90	PRO
69	o3	93	THR
69	o3	105	SER
69	o3	107	ILE
70	o4	5	VAL
70	o4	15	THR
70	o4	20	ILE
70	o4	22	VAL
70	o4	24	LYS
70	o4	25	THR
70	o4	29	ILE
70	o4	30	LEU
70	o4	35	VAL
70	o4	49	SER
70	o4	57	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
70	o4	58	ARG
70	o4	71	THR
70	o4	72	VAL
70	o4	81	CYS
70	o4	83	ASN
70	o4	85	VAL
70	o4	86	LYS
70	o4	88	ARG
70	o4	98	GLN
70	o4	104	VAL
70	o4	107	GLU
71	o5	4	VAL
71	o5	11	THR
71	o5	13	SER
71	o5	20	GLN
71	o5	21	LEU
71	o5	27	GLU
71	o5	28	LEU
71	o5	36	LEU
71	o5	38	ARG
71	o5	44	ILE
71	o5	45	LYS
71	o5	46	THR
71	o5	47	VAL
71	o5	48	ARG
71	o5	59	ASN
71	o5	66	VAL
71	o5	69	LEU
71	o5	79	ASP
71	o5	81	ARG
71	o5	86	ARG
71	o5	89	ARG
71	o5	107	LYS
71	o5	119	LYS
72	o6	3	VAL
72	o6	7	ILE
72	o6	9	ILE
72	o6	21	THR
72	o6	26	ILE
72	o6	35	ASN
72	o6	36	ARG
72	o6	41	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
72	o6	42	SER
72	o6	43	LEU
72	o6	45	ARG
72	o6	56	ARG
72	o6	57	LEU
72	o6	58	ILE
72	o6	59	ASP
72	o6	68	ARG
72	o6	75	LYS
72	o6	76	ARG
72	o6	79	SER
72	o6	88	GLU
72	o6	94	ILE
72	o6	97	SER
73	o7	17	THR
73	o7	19	CYS
73	o7	25	ARG
73	o7	31	LYS
73	o7	33	THR
73	o7	36	SER
73	o7	44	THR
73	o7	58	THR
73	o7	59	THR
73	o7	65	ARG
73	o7	67	LEU
73	o7	80	THR
73	o7	85	LYS
74	o8	5	ILE
74	o8	12	LEU
74	o8	14	LEU
74	o8	16	ARG
74	o8	17	ARG
74	o8	24	THR
74	o8	41	THR
74	o8	46	ARG
74	o8	50	SER
74	o8	53	THR
74	o8	61	LYS
74	o8	63	LYS
74	o8	64	LYS
74	o8	65	LEU
74	o8	72	THR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
74	o8	73	LEU
75	o9	4	GLN
75	o9	5	LYS
75	o9	6	SER
75	o9	9	ILE
75	o9	15	LYS
75	o9	21	ARG
75	o9	29	LEU
75	o9	47	THR
76	q0	79	GLU
76	q0	83	LYS
76	q0	85	LEU
76	q0	87	SER
76	q0	88	LYS
76	q0	93	LYS
76	q0	99	CYS
76	q0	106	ARG
76	q0	108	THR
76	q0	112	LYS
76	q0	113	ARG
76	q0	114	LYS
76	q0	122	ARG
76	q0	127	LEU
77	q1	6	ARG
77	q1	9	ARG
77	q1	11	ARG
77	q1	13	LEU
77	q1	16	LYS
77	q1	19	LYS
77	q1	21	ARG
77	q1	23	ARG
78	q2	7	THR
78	q2	8	ARG
78	q2	20	HIS
78	q2	35	LEU
78	q2	45	ARG
78	q2	48	SER
78	q2	61	LYS
78	q2	63	LYS
78	q2	78	LYS
78	q2	79	THR
78	q2	80	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
78	q2	83	LEU
78	q2	84	THR
78	q2	85	LEU
78	q2	99	GLN
78	q2	100	LYS
78	q2	104	LEU
79	q3	3	LYS
79	q3	8	VAL
79	q3	16	VAL
79	q3	20	SER
79	q3	24	ARG
79	q3	40	SER
79	q3	46	THR
79	q3	49	ARG
79	q3	54	ILE
79	q3	56	THR
79	q3	58	SER
79	q3	62	LYS
79	q3	70	THR
79	q3	72	SER
79	q3	73	THR
79	q3	80	ARG
82	p0	4	ILE
82	p0	5	ARG
82	p0	6	GLU
82	p0	15	LEU
82	p0	25	LEU
82	p0	30	VAL
82	p0	41	VAL
82	p0	42	ARG
82	p0	48	ARG
82	p0	51	VAL
82	p0	55	LYS
82	p0	70	LEU
82	p0	72	ASP
82	p0	74	GLU
82	p0	76	LEU
82	p0	89	THR
82	p0	93	LEU
82	p0	97	LYS
82	p0	104	ARG
82	p0	185	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
82	p0	193	ASN

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (79) such sidechains are listed below:

Mol	Chain	Res	Type
3	S1	149	GLN
3	S1	211	HIS
4	S2	87	GLN
5	S3	162	GLN
5	S3	165	ASN
7	S5	131	GLN
9	S7	74	GLN
11	S9	139	GLN
13	C1	104	HIS
14	C2	70	ASN
16	C4	12	GLN
17	C5	103	ASN
19	C7	105	GLN
20	C8	19	ASN
20	C8	99	HIS
21	C9	70	GLN
22	D0	33	GLN
23	D1	74	GLN
26	D4	63	GLN
33	E1	135	HIS
34	SR	17	ASN
39	L2	38	HIS
39	L2	79	ASN
40	L3	293	ASN
41	L4	307	GLN
42	L5	40	HIS
44	L7	244	ASN
46	L9	49	ASN
48	M1	39	GLN
51	M5	194	GLN
54	M8	126	GLN
56	N0	65	ASN
56	N0	142	GLN
57	N1	98	HIS
59	N3	98	ASN
61	N5	111	ASN
65	N9	48	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
69	O3	106	ASN
74	O8	32	ASN
76	Q0	117	HIS
79	Q3	33	GLN
6	s4	98	ASN
9	s7	71	HIS
11	s9	110	GLN
11	s9	124	HIS
12	c0	32	HIS
12	c0	58	GLN
19	c7	42	GLN
20	c8	25	ASN
20	c8	90	ASN
22	d0	98	GLN
23	d1	3	ASN
24	d2	113	HIS
25	d3	79	ASN
27	d5	37	GLN
30	d8	27	GLN
80	e0	17	GLN
33	e1	95	HIS
34	sR	187	GLN
39	l2	38	HIS
39	l2	218	HIS
40	l3	165	GLN
41	l4	328	ASN
42	l5	94	ASN
42	l5	151	GLN
42	l5	264	GLN
43	l6	61	ASN
44	l7	48	ASN
48	m1	132	ASN
51	m5	194	GLN
54	m8	145	ASN
55	m9	7	GLN
57	n1	98	HIS
57	n1	122	GLN
59	n3	33	ASN
62	n6	120	GLN
63	n7	57	HIS
68	o2	88	HIS
73	o7	13	ASN

## 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	1747/1800 (97%)	511 (29%)	56 (3%)
1	6	1793/1800 (99%)	498 (27%)	50 (2%)
36	1	3145/3396 (92%)	747 (23%)	83 (2%)
36	5	3145/3396 (92%)	744 (23%)	85 (2%)
37	3	120/121 (99%)	19 (15%)	3 (2%)
37	7	120/121 (99%)	23 (19%)	3 (2%)
38	4	157/158 (99%)	45 (28%)	4 (2%)
38	8	157/158 (99%)	41 (26%)	2 (1%)
All	All	10384/10950 (94%)	2628 (25%)	286 (2%)

All (2628) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	2	2	A
1	2	4	C
1	2	20	G
1	2	21	U
1	2	25	C
1	2	26	A
1	2	27	U
1	2	34	G
1	2	39	A
1	2	46	A
1	2	47	A
1	2	57	G
1	2	60	U
1	2	63	G
1	2	66	U
1	2	67	A
1	2	68	A
1	2	69	G
1	2	72	A
1	2	73	U
1	2	74	U
1	2	75	U
1	2	76	A
1	2	77	U
1	2	104	A
1	2	114	C
1	2	130	C
1	2	131	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	132	U
1	2	133	U
1	2	134	U
1	2	135	A
1	2	136	C
1	2	137	U
1	2	140	A
1	2	141	U
1	2	144	U
1	2	145	A
1	2	146	U
1	2	153	G
1	2	158	U
1	2	159	U
1	2	167	U
1	2	169	A
1	2	178	U
1	2	179	A
1	2	185	U
1	2	186	C
1	2	188	A
1	2	190	C
1	2	191	C
1	2	192	U
1	2	193	U
1	2	194	U
1	2	195	G
1	2	197	A
1	2	198	A
1	2	200	A
1	2	207	U
1	2	215	A
1	2	217	A
1	2	218	A
1	2	219	A
1	2	220	A
1	2	226	A
1	2	227	U
1	2	228	G
1	2	229	U
1	2	231	U
1	2	233	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	234	G
1	2	235	G
1	2	236	A
1	2	238	U
1	2	239	C
1	2	240	U
1	2	241	U
1	2	242	U
1	2	249	U
1	2	250	C
1	2	260	U
1	2	261	U
1	2	262	U
1	2	265	A
1	2	267	U
1	2	270	C
1	2	271	A
1	2	272	U
1	2	274	G
1	2	275	C
1	2	276	C
1	2	277	U
1	2	278	U
1	2	279	G
1	2	280	U
1	2	281	G
1	2	288	A
1	2	299	A
1	2	302	U
1	2	304	U
1	2	308	C
1	2	309	C
1	2	314	C
1	2	316	A
1	2	319	U
1	2	321	C
1	2	322	G
1	2	332	U
1	2	333	A
1	2	337	G
1	2	338	C
1	2	341	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	352	A
1	2	359	A
1	2	360	A
1	2	361	C
1	2	365	G
1	2	393	C
1	2	399	A
1	2	400	A
1	2	401	A
1	2	402	C
1	2	404	G
1	2	416	A
1	2	418	G
1	2	419	G
1	2	424	C
1	2	425	A
1	2	426	G
1	2	428	A
1	2	431	C
1	2	433	C
1	2	434	G
1	2	437	A
1	2	439	U
1	2	444	C
1	2	445	A
1	2	446	A
1	2	448	C
1	2	452	A
1	2	468	A
1	2	469	C
1	2	484	C
1	2	485	A
1	2	486	G
1	2	488	G
1	2	493	U
1	2	494	U
1	2	495	C
1	2	496	G
1	2	497	G
1	2	498	G
1	2	499	U
1	2	500	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	2	502	U
1	2	503	G
1	2	504	U
1	2	505	A
1	2	506	A
1	2	507	U
1	2	510	G
1	2	511	A
1	2	513	U
1	2	514	G
1	2	515	A
1	2	518	A
1	2	519	C
1	2	520	A
1	2	524	U
1	2	525	A
1	2	527	A
1	2	532	U
1	2	534	A
1	2	536	C
1	2	538	A
1	2	539	G
1	2	540	G
1	2	541	A
1	2	542	A
1	2	543	C
1	2	544	A
1	2	546	U
1	2	548	G
1	2	555	A
1	2	556	A
1	2	557	G
1	2	558	U
1	2	559	C
1	2	565	C
1	2	579	A
1	2	580	A
1	2	584	C
1	2	594	A
1	2	595	G
1	2	609	U
1	2	610	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	619	A
1	2	620	A
1	2	622	A
1	2	623	A
1	2	624	G
1	2	630	A
1	2	639	U
1	2	640	U
1	2	643	G
1	2	650	U
1	2	653	C
1	2	655	G
1	2	656	G
1	2	658	C
1	2	677	G
1	2	679	U
1	2	680	U
1	2	682	C
1	2	684	A
1	2	685	A
1	2	686	C
1	2	692	C
1	2	694	U
1	2	695	U
1	2	696	C
1	2	697	C
1	2	700	C
1	2	701	U
1	2	702	G
1	2	703	G
1	2	704	C
1	2	705	U
1	2	707	A
1	2	709	C
1	2	710	U
1	2	711	U
1	2	712	G
1	2	713	A
1	2	714	G
1	2	717	C
1	2	718	U
1	2	719	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	720	G
1	2	721	U
1	2	722	G
1	2	723	G
1	2	725	U
1	2	727	U
1	2	728	U
1	2	730	G
1	2	731	C
1	2	732	G
1	2	733	A
1	2	734	A
1	2	735	C
1	2	736	C
1	2	737	A
1	2	738	G
1	2	742	U
1	2	743	U
1	2	752	A
1	2	754	A
1	2	755	A
1	2	756	A
1	2	765	G
1	2	766	U
1	2	768	C
1	2	774	A
1	2	775	G
1	2	777	C
1	2	778	G
1	2	779	U
1	2	781	U
1	2	782	U
1	2	783	G
1	2	784	C
1	2	789	A
1	2	793	A
1	2	794	U
1	2	795	U
1	2	803	A
1	2	812	A
1	2	813	U
1	2	815	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	816	G
1	2	818	C
1	2	819	G
1	2	820	U
1	2	821	U
1	2	822	U
1	2	824	G
1	2	830	U
1	2	831	U
1	2	833	U
1	2	837	G
1	2	838	G
1	2	840	U
1	2	846	G
1	2	850	A
1	2	854	U
1	2	856	A
1	2	863	A
1	2	864	U
1	2	876	G
1	2	886	U
1	2	887	A
1	2	892	A
1	2	896	U
1	2	898	A
1	2	912	U
1	2	914	G
1	2	916	U
1	2	921	U
1	2	933	A
1	2	935	U
1	2	942	G
1	2	951	A
1	2	960	U
1	2	966	A
1	2	984	G
1	2	988	A
1	2	991	G
1	2	992	A
1	2	993	A
1	2	994	G
1	2	996	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1003	A
1	2	1004	U
1	2	1005	A
1	2	1020	A
1	2	1026	A
1	2	1028	C
1	2	1029	U
1	2	1031	U
1	2	1039	A
1	2	1040	G
1	2	1052	U
1	2	1053	G
1	2	1058	U
1	2	1059	U
1	2	1060	U
1	2	1061	A
1	2	1062	A
1	2	1064	G
1	2	1066	C
1	2	1067	C
1	2	1074	G
1	2	1076	A
1	2	1080	U
1	2	1081	A
1	2	1082	C
1	2	1083	G
1	2	1086	A
1	2	1091	A
1	2	1092	A
1	2	1096	C
1	2	1097	U
1	2	1100	G
1	2	1101	G
1	2	1109	G
1	2	1137	A
1	2	1138	A
1	2	1139	A
1	2	1143	A
1	2	1146	G
1	2	1149	G
1	2	1150	G
1	2	1151	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1157	A
1	2	1158	C
1	2	1159	C
1	2	1160	A
1	2	1163	A
1	2	1167	G
1	2	1168	U
1	2	1180	C
1	2	1185	U
1	2	1191	U
1	2	1194	A
1	2	1196	A
1	2	1197	C
1	2	1199	G
1	2	1200	G
1	2	1202	A
1	2	1207	C
1	2	1208	A
1	2	1217	A
1	2	1218	G
1	2	1226	A
1	2	1227	A
1	2	1228	G
1	2	1229	G
1	2	1241	G
1	2	1243	G
1	2	1244	A
1	2	1245	G
1	2	1250	U
1	2	1251	U
1	2	1258	U
1	2	1260	U
1	2	1267	G
1	2	1268	G
1	2	1276	U
1	2	1285	U
1	2	1286	U
1	2	1287	A
1	2	1314	U
1	2	1315	U
1	2	1316	G
1	2	1319	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1321	A
1	2	1325	A
1	2	1337	A
1	2	1339	C
1	2	1340	U
1	2	1341	A
1	2	1344	A
1	2	1345	A
1	2	1350	U
1	2	1355	C
1	2	1361	U
1	2	1363	U
1	2	1364	G
1	2	1370	U
1	2	1371	A
1	2	1390	U
1	2	1395	G
1	2	1398	U
1	2	1399	C
1	2	1400	A
1	2	1410	A
1	2	1412	G
1	2	1413	U
1	2	1414	U
1	2	1415	U
1	2	1418	G
1	2	1420	C
1	2	1421	A
1	2	1424	A
1	2	1427	A
1	2	1428	G
1	2	1431	C
1	2	1433	G
1	2	1446	A
1	2	1457	C
1	2	1458	G
1	2	1459	C
1	2	1461	C
1	2	1465	C
1	2	1471	A
1	2	1473	U
1	2	1474	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1475	A
1	2	1482	C
1	2	1483	A
1	2	1485	C
1	2	1486	G
1	2	1489	U
1	2	1490	C
1	2	1491	U
1	2	1492	A
1	2	1493	A
1	2	1503	A
1	2	1506	G
1	2	1514	U
1	2	1516	A
1	2	1517	U
1	2	1523	G
1	2	1524	A
1	2	1526	A
1	2	1530	C
1	2	1535	U
1	2	1536	G
1	2	1537	C
1	2	1538	U
1	2	1542	G
1	2	1557	U
1	2	1559	A
1	2	1572	G
1	2	1574	G
1	2	1584	G
1	2	1600	A
1	2	1601	G
1	2	1614	A
1	2	1616	G
1	2	1625	C
1	2	1631	A
1	2	1636	C
1	2	1637	C
1	2	1652	C
1	2	1657	U
1	2	1658	G
1	2	1683	C
1	2	1684	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1719	A
1	2	1731	A
1	2	1738	U
1	2	1754	A
1	2	1755	A
1	2	1760	G
1	2	1762	A
1	2	1766	A
1	2	1768	G
1	2	1769	U
1	2	1770	U
1	2	1780	G
1	2	1782	A
1	2	1783	C
1	2	1791	A
1	2	1792	G
1	2	1793	G
1	2	1794	A
1	2	1795	U
1	2	1796	C
1	2	1798	U
36	1	13	A
36	1	14	U
36	1	15	C
36	1	16	A
36	1	26	A
36	1	37	U
36	1	40	A
36	1	43	A
36	1	49	A
36	1	54	C
36	1	57	A
36	1	59	G
36	1	60	A
36	1	61	A
36	1	65	A
36	1	66	A
36	1	68	C
36	1	74	G
36	1	76	G
36	1	83	U
36	1	93	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	94	G
36	1	99	A
36	1	109	A
36	1	110	G
36	1	111	C
36	1	113	C
36	1	115	A
36	1	121	A
36	1	122	A
36	1	133	U
36	1	135	C
36	1	136	G
36	1	156	G
36	1	157	A
36	1	160	G
36	1	166	C
36	1	169	U
36	1	187	A
36	1	190	U
36	1	191	U
36	1	195	U
36	1	197	G
36	1	210	U
36	1	211	A
36	1	218	G
36	1	219	A
36	1	232	G
36	1	235	A
36	1	240	U
36	1	241	G
36	1	243	G
36	1	247	C
36	1	249	U
36	1	250	U
36	1	251	G
36	1	252	U
36	1	263	C
36	1	269	G
36	1	282	G
36	1	283	G
36	1	286	U
36	1	295	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	298	U
36	1	305	U
36	1	306	A
36	1	315	C
36	1	318	A
36	1	323	A
36	1	329	U
36	1	334	A
36	1	339	C
36	1	349	A
36	1	350	C
36	1	359	U
36	1	376	G
36	1	395	A
36	1	398	A
36	1	399	A
36	1	401	U
36	1	402	A
36	1	403	C
36	1	404	G
36	1	420	G
36	1	421	G
36	1	422	A
36	1	438	A
36	1	439	C
36	1	440	A
36	1	495	G
36	1	498	A
36	1	521	A
36	1	531	G
36	1	535	G
36	1	541	U
36	1	544	C
36	1	546	C
36	1	547	G
36	1	548	G
36	1	552	G
36	1	553	U
36	1	555	U
36	1	556	U
36	1	557	A
36	1	559	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	560	G
36	1	569	A
36	1	578	A
36	1	579	G
36	1	588	G
36	1	592	A
36	1	604	G
36	1	609	G
36	1	611	A
36	1	619	A
36	1	620	U
36	1	621	A
36	1	636	C
36	1	638	C
36	1	648	C
36	1	649	A
36	1	658	G
36	1	660	A
36	1	661	G
36	1	675	C
36	1	677	A
36	1	681	U
36	1	691	A
36	1	692	A
36	1	697	A
36	1	705	A
36	1	711	A
36	1	712	G
36	1	715	A
36	1	716	A
36	1	719	U
36	1	725	G
36	1	759	U
36	1	764	U
36	1	766	U
36	1	767	U
36	1	768	C
36	1	776	U
36	1	777	U
36	1	780	A
36	1	781	G
36	1	785	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	787	G
36	1	802	C
36	1	803	C
36	1	806	A
36	1	817	A
36	1	826	G
36	1	830	A
36	1	831	G
36	1	849	C
36	1	861	C
36	1	874	U
36	1	876	A
36	1	878	G
36	1	879	U
36	1	890	C
36	1	891	G
36	1	896	A
36	1	901	G
36	1	907	G
36	1	908	G
36	1	909	G
36	1	914	A
36	1	916	G
36	1	917	A
36	1	921	A
36	1	923	C
36	1	924	G
36	1	933	A
36	1	937	G
36	1	938	C
36	1	944	C
36	1	953	G
36	1	958	C
36	1	959	C
36	1	960	U
36	1	962	A
36	1	979	U
36	1	980	A
36	1	981	U
36	1	982	C
36	1	994	G
36	1	1001	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1002	A
36	1	1006	A
36	1	1010	G
36	1	1012	G
36	1	1017	C
36	1	1018	G
36	1	1020	G
36	1	1021	G
36	1	1024	G
36	1	1025	A
36	1	1029	G
36	1	1036	A
36	1	1037	C
36	1	1047	A
36	1	1049	C
36	1	1052	U
36	1	1063	G
36	1	1064	A
36	1	1068	C
36	1	1072	G
36	1	1081	U
36	1	1082	U
36	1	1083	G
36	1	1087	G
36	1	1093	A
36	1	1094	U
36	1	1095	U
36	1	1096	U
36	1	1097	G
36	1	1098	A
36	1	1103	A
36	1	1104	G
36	1	1117	G
36	1	1131	G
36	1	1144	U
36	1	1153	A
36	1	1159	A
36	1	1180	A
36	1	1181	U
36	1	1182	A
36	1	1186	G
36	1	1191	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1192	C
36	1	1196	C
36	1	1201	C
36	1	1209	G
36	1	1211	U
36	1	1213	G
36	1	1216	C
36	1	1217	A
36	1	1221	A
36	1	1222	G
36	1	1227	C
36	1	1232	C
36	1	1233	G
36	1	1235	U
36	1	1236	G
36	1	1237	G
36	1	1238	C
36	1	1241	U
36	1	1243	G
36	1	1245	A
36	1	1246	G
36	1	1248	C
36	1	1249	G
36	1	1258	U
36	1	1259	A
36	1	1262	G
36	1	1263	A
36	1	1264	G
36	1	1265	U
36	1	1266	G
36	1	1267	U
36	1	1269	U
36	1	1270	A
36	1	1271	A
36	1	1274	A
36	1	1278	A
36	1	1279	C
36	1	1280	C
36	1	1285	G
36	1	1286	A
36	1	1287	A
36	1	1297	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1305	U
36	1	1307	G
36	1	1308	A
36	1	1309	U
36	1	1313	G
36	1	1314	C
36	1	1318	A
36	1	1330	A
36	1	1331	U
36	1	1332	A
36	1	1339	C
36	1	1345	G
36	1	1348	U
36	1	1349	G
36	1	1350	A
36	1	1351	U
36	1	1352	A
36	1	1353	U
36	1	1355	A
36	1	1356	U
36	1	1357	G
36	1	1385	C
36	1	1386	A
36	1	1387	G
36	1	1397	C
36	1	1398	U
36	1	1399	A
36	1	1400	G
36	1	1408	G
36	1	1417	G
36	1	1418	A
36	1	1419	A
36	1	1421	G
36	1	1431	G
36	1	1434	G
36	1	1437	C
36	1	1438	U
36	1	1446	A
36	1	1450	G
36	1	1455	U
36	1	1481	A
36	1	1482	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1485	G
36	1	1488	G
36	1	1490	A
36	1	1503	A
36	1	1508	C
36	1	1511	U
36	1	1518	U
36	1	1519	G
36	1	1526	U
36	1	1529	A
36	1	1533	U
36	1	1535	A
36	1	1536	G
36	1	1538	G
36	1	1549	U
36	1	1554	U
36	1	1555	U
36	1	1556	C
36	1	1560	G
36	1	1561	G
36	1	1562	C
36	1	1563	C
36	1	1564	U
36	1	1565	G
36	1	1566	A
36	1	1567	U
36	1	1568	U
36	1	1569	U
36	1	1570	U
36	1	1571	A
36	1	1572	U
36	1	1575	A
36	1	1576	G
36	1	1578	C
36	1	1579	C
36	1	1580	A
36	1	1581	C
36	1	1582	C
36	1	1583	A
36	1	1586	G
36	1	1587	A
36	1	1589	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1593	A
36	1	1605	A
36	1	1607	U
36	1	1608	C
36	1	1609	C
36	1	1620	U
36	1	1621	A
36	1	1629	U
36	1	1633	C
36	1	1639	C
36	1	1642	A
36	1	1643	A
36	1	1645	U
36	1	1655	G
36	1	1658	G
36	1	1664	G
36	1	1683	A
36	1	1692	U
36	1	1705	U
36	1	1716	U
36	1	1717	U
36	1	1724	U
36	1	1734	G
36	1	1736	G
36	1	1741	A
36	1	1742	U
36	1	1750	A
36	1	1751	G
36	1	1760	A
36	1	1761	C
36	1	1762	C
36	1	1765	U
36	1	1766	G
36	1	1767	C
36	1	1768	U
36	1	1770	G
36	1	1775	G
36	1	1779	C
36	1	1780	G
36	1	1797	A
36	1	1809	A
36	1	1810	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1812	G
36	1	1813	A
36	1	1814	A
36	1	1815	U
36	1	1816	A
36	1	1817	G
36	1	1819	U
36	1	1820	U
36	1	1821	U
36	1	1822	C
36	1	1829	G
36	1	1835	A
36	1	1839	A
36	1	1840	U
36	1	1841	A
36	1	1842	A
36	1	1845	G
36	1	1846	C
36	1	1847	A
36	1	1849	C
36	1	1863	G
36	1	1864	A
36	1	1866	C
36	1	1879	A
36	1	1880	U
36	1	1897	G
36	1	1901	A
36	1	1906	G
36	1	1920	U
36	1	1927	G
36	1	1935	G
36	1	1937	U
36	1	1951	C
36	1	1952	G
36	1	1953	G
36	1	1954	G
36	1	2094	C
36	1	2097	U
36	1	2101	C
36	1	2102	U
36	1	2111	G
36	1	2112	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2113	A
36	1	2121	G
36	1	2122	G
36	1	2126	A
36	1	2130	G
36	1	2131	A
36	1	2134	G
36	1	2140	U
36	1	2158	A
36	1	2169	G
36	1	2187	G
36	1	2188	A
36	1	2194	G
36	1	2198	A
36	1	2205	U
36	1	2206	G
36	1	2208	A
36	1	2209	U
36	1	2210	G
36	1	2223	A
36	1	2228	A
36	1	2231	C
36	1	2239	G
36	1	2245	C
36	1	2246	G
36	1	2249	G
36	1	2250	G
36	1	2252	A
36	1	2255	A
36	1	2256	A
36	1	2260	U
36	1	2268	U
36	1	2272	G
36	1	2273	G
36	1	2281	A
36	1	2282	U
36	1	2283	G
36	1	2284	C
36	1	2288	G
36	1	2301	U
36	1	2303	A
36	1	2306	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2307	G
36	1	2308	C
36	1	2309	A
36	1	2310	U
36	1	2313	A
36	1	2314	U
36	1	2315	G
36	1	2317	A
36	1	2334	U
36	1	2335	G
36	1	2336	U
36	1	2360	C
36	1	2373	A
36	1	2374	C
36	1	2375	G
36	1	2385	G
36	1	2392	C
36	1	2393	G
36	1	2394	G
36	1	2397	A
36	1	2402	A
36	1	2403	G
36	1	2404	A
36	1	2405	C
36	1	2411	U
36	1	2418	G
36	1	2419	A
36	1	2437	G
36	1	2443	A
36	1	2444	C
36	1	2445	A
36	1	2502	A
36	1	2503	G
36	1	2504	U
36	1	2514	U
36	1	2515	A
36	1	2520	A
36	1	2522	G
36	1	2523	A
36	1	2525	G
36	1	2526	C
36	1	2532	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2533	G
36	1	2534	G
36	1	2537	U
36	1	2538	U
36	1	2539	C
36	1	2540	A
36	1	2541	U
36	1	2542	U
36	1	2543	U
36	1	2544	U
36	1	2547	A
36	1	2548	C
36	1	2549	G
36	1	2552	C
36	1	2554	A
36	1	2555	G
36	1	2561	A
36	1	2568	C
36	1	2569	A
36	1	2570	U
36	1	2571	U
36	1	2572	C
36	1	2573	G
36	1	2581	U
36	1	2585	G
36	1	2591	A
36	1	2593	A
36	1	2594	C
36	1	2602	G
36	1	2606	G
36	1	2607	G
36	1	2614	G
36	1	2618	G
36	1	2626	A
36	1	2628	A
36	1	2629	U
36	1	2637	A
36	1	2638	C
36	1	2648	G
36	1	2652	U
36	1	2656	A
36	1	2672	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2674	A
36	1	2677	G
36	1	2689	A
36	1	2690	G
36	1	2691	A
36	1	2694	A
36	1	2695	A
36	1	2696	A
36	1	2705	A
36	1	2706	G
36	1	2714	G
36	1	2728	G
36	1	2729	U
36	1	2737	C
36	1	2744	U
36	1	2752	U
36	1	2753	G
36	1	2755	C
36	1	2762	A
36	1	2764	C
36	1	2771	U
36	1	2772	C
36	1	2773	C
36	1	2777	G
36	1	2778	G
36	1	2779	A
36	1	2783	U
36	1	2794	G
36	1	2796	G
36	1	2799	A
36	1	2800	G
36	1	2801	A
36	1	2802	A
36	1	2803	A
36	1	2810	C
36	1	2815	G
36	1	2817	A
36	1	2818	U
36	1	2829	U
36	1	2830	G
36	1	2839	G
36	1	2842	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2843	U
36	1	2845	A
36	1	2847	A
36	1	2853	A
36	1	2856	G
36	1	2858	U
36	1	2860	U
36	1	2867	C
36	1	2871	G
36	1	2872	A
36	1	2876	C
36	1	2880	U
36	1	2886	U
36	1	2887	A
36	1	2888	U
36	1	2898	G
36	1	2899	C
36	1	2917	G
36	1	2923	U
36	1	2935	U
36	1	2936	A
36	1	2942	C
36	1	2947	G
36	1	2951	G
36	1	2954	U
36	1	2955	U
36	1	2971	A
36	1	2977	G
36	1	2979	U
36	1	2983	C
36	1	2990	G
36	1	2992	U
36	1	2997	G
36	1	3012	A
36	1	3028	G
36	1	3055	U
36	1	3056	U
36	1	3057	U
36	1	3059	G
36	1	3074	G
36	1	3078	U
36	1	3079	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	1	3080	G
36	1	3086	A
36	1	3087	A
36	1	3088	G
36	1	3092	C
36	1	3094	A
36	1	3101	G
36	1	3104	U
36	1	3113	A
36	1	3122	A
36	1	3130	A
36	1	3131	U
36	1	3142	A
36	1	3143	C
36	1	3145	C
36	1	3147	G
36	1	3151	U
36	1	3153	U
36	1	3154	C
36	1	3155	U
36	1	3156	U
36	1	3157	U
36	1	3164	C
36	1	3165	A
36	1	3168	A
36	1	3170	A
36	1	3171	U
36	1	3173	G
36	1	3174	A
36	1	3176	G
36	1	3179	U
36	1	3181	C
36	1	3187	A
36	1	3196	U
36	1	3206	C
36	1	3207	U
36	1	3210	A
36	1	3217	C
36	1	3218	A
36	1	3219	G
36	1	3220	G
36	1	3223	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	3228	C
36	1	3229	G
36	1	3235	C
36	1	3244	A
36	1	3245	A
36	1	3246	G
36	1	3247	G
36	1	3253	G
36	1	3259	U
36	1	3268	A
36	1	3269	U
36	1	3270	U
36	1	3273	A
36	1	3276	G
36	1	3280	U
36	1	3281	U
36	1	3286	G
36	1	3287	U
36	1	3289	G
36	1	3293	U
36	1	3294	A
36	1	3295	A
36	1	3303	G
36	1	3304	U
36	1	3307	A
36	1	3313	U
36	1	3316	A
36	1	3317	U
36	1	3318	G
36	1	3319	U
36	1	3320	A
36	1	3322	A
36	1	3330	A
36	1	3335	A
36	1	3336	A
36	1	3341	U
36	1	3342	A
36	1	3345	G
36	1	3347	A
36	1	3350	C
36	1	3351	U
36	1	3352	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	3353	G
36	1	3354	U
36	1	3355	U
36	1	3356	G
36	1	3358	U
36	1	3369	G
36	1	3375	A
36	1	3376	A
36	1	3378	C
36	1	3382	U
36	1	3383	G
36	1	3389	U
37	3	7	G
37	3	11	A
37	3	13	A
37	3	14	U
37	3	17	A
37	3	21	G
37	3	22	A
37	3	41	G
37	3	42	A
37	3	53	U
37	3	54	U
37	3	65	G
37	3	74	C
37	3	76	A
37	3	91	G
37	3	102	A
37	3	109	G
37	3	112	G
37	3	121	U
38	4	20	U
38	4	21	C
38	4	26	U
38	4	34	U
38	4	35	C
38	4	43	A
38	4	48	A
38	4	49	G
38	4	52	A
38	4	53	A
38	4	55	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	4	58	G
38	4	59	A
38	4	62	C
38	4	63	G
38	4	70	G
38	4	79	A
38	4	80	A
38	4	81	U
38	4	82	U
38	4	83	C
38	4	84	C
38	4	85	G
38	4	86	U
38	4	87	G
38	4	90	U
38	4	93	U
38	4	95	G
38	4	96	A
38	4	97	A
38	4	102	U
38	4	104	A
38	4	105	A
38	4	106	C
38	4	111	A
38	4	113	U
38	4	125	U
38	4	126	A
38	4	128	U
38	4	138	A
38	4	148	G
38	4	152	G
38	4	155	A
38	4	157	U
38	4	158	U
1	6	2	A
1	6	4	C
1	6	6	G
1	6	24	U
1	6	25	C
1	6	26	A
1	6	27	U
1	6	34	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	47	A
1	6	50	C
1	6	57	G
1	6	61	A
1	6	68	A
1	6	69	G
1	6	72	A
1	6	73	U
1	6	75	U
1	6	76	A
1	6	77	U
1	6	78	A
1	6	114	C
1	6	115	G
1	6	126	A
1	6	127	G
1	6	129	U
1	6	130	C
1	6	132	U
1	6	137	U
1	6	138	A
1	6	140	A
1	6	141	U
1	6	142	G
1	6	144	U
1	6	145	A
1	6	146	U
1	6	149	C
1	6	153	G
1	6	158	U
1	6	159	U
1	6	166	C
1	6	174	U
1	6	177	U
1	6	178	U
1	6	181	A
1	6	185	U
1	6	187	G
1	6	188	A
1	6	190	C
1	6	191	C
1	6	192	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	193	U
1	6	195	G
1	6	196	G
1	6	197	A
1	6	199	G
1	6	200	A
1	6	215	A
1	6	216	U
1	6	218	A
1	6	219	A
1	6	220	A
1	6	222	A
1	6	226	A
1	6	227	U
1	6	228	G
1	6	230	C
1	6	232	U
1	6	233	C
1	6	234	G
1	6	235	G
1	6	240	U
1	6	241	U
1	6	250	C
1	6	261	U
1	6	265	A
1	6	269	G
1	6	270	C
1	6	271	A
1	6	272	U
1	6	273	G
1	6	275	C
1	6	277	U
1	6	278	U
1	6	280	U
1	6	287	G
1	6	299	A
1	6	301	A
1	6	314	C
1	6	316	A
1	6	319	U
1	6	320	U
1	6	321	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	322	G
1	6	330	G
1	6	333	A
1	6	337	G
1	6	338	C
1	6	341	A
1	6	346	G
1	6	350	U
1	6	352	A
1	6	359	A
1	6	360	A
1	6	361	C
1	6	393	C
1	6	400	A
1	6	401	A
1	6	402	C
1	6	404	G
1	6	416	A
1	6	418	G
1	6	419	G
1	6	421	A
1	6	424	C
1	6	425	A
1	6	426	G
1	6	434	G
1	6	437	A
1	6	439	U
1	6	444	C
1	6	454	U
1	6	464	A
1	6	468	A
1	6	475	A
1	6	477	A
1	6	484	C
1	6	485	A
1	6	486	G
1	6	487	G
1	6	488	G
1	6	489	C
1	6	490	C
1	6	492	A
1	6	493	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	494	U
1	6	496	G
1	6	497	G
1	6	500	C
1	6	501	U
1	6	502	U
1	6	504	U
1	6	505	A
1	6	506	A
1	6	507	U
1	6	508	U
1	6	510	G
1	6	511	A
1	6	515	A
1	6	519	C
1	6	520	A
1	6	527	A
1	6	536	C
1	6	539	G
1	6	540	G
1	6	541	A
1	6	542	A
1	6	543	C
1	6	544	A
1	6	548	G
1	6	555	A
1	6	556	A
1	6	557	G
1	6	558	U
1	6	559	C
1	6	565	C
1	6	566	C
1	6	570	A
1	6	574	G
1	6	579	A
1	6	580	A
1	6	582	U
1	6	594	A
1	6	595	G
1	6	606	A
1	6	609	U
1	6	610	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	6	619	A
1	6	620	A
1	6	622	A
1	6	623	A
1	6	624	G
1	6	637	C
1	6	639	U
1	6	640	U
1	6	645	C
1	6	648	G
1	6	650	U
1	6	652	G
1	6	653	C
1	6	654	C
1	6	658	C
1	6	661	A
1	6	662	U
1	6	665	U
1	6	667	U
1	6	668	C
1	6	669	G
1	6	670	U
1	6	676	G
1	6	678	A
1	6	679	U
1	6	681	U
1	6	682	C
1	6	683	C
1	6	684	A
1	6	685	A
1	6	691	C
1	6	698	U
1	6	709	C
1	6	710	U
1	6	711	U
1	6	714	G
1	6	718	U
1	6	719	U
1	6	720	G
1	6	721	U
1	6	722	G
1	6	730	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	742	U
1	6	743	U
1	6	744	U
1	6	751	G
1	6	753	A
1	6	754	A
1	6	755	A
1	6	756	A
1	6	757	A
1	6	765	G
1	6	766	U
1	6	767	U
1	6	768	C
1	6	774	A
1	6	775	G
1	6	780	A
1	6	781	U
1	6	782	U
1	6	783	G
1	6	787	G
1	6	789	A
1	6	792	U
1	6	793	A
1	6	794	U
1	6	806	A
1	6	808	U
1	6	811	A
1	6	812	A
1	6	815	G
1	6	816	G
1	6	821	U
1	6	823	G
1	6	825	U
1	6	826	U
1	6	828	U
1	6	829	A
1	6	830	U
1	6	831	U
1	6	832	U
1	6	834	G
1	6	835	U
1	6	842	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	847	A
1	6	863	A
1	6	873	U
1	6	886	U
1	6	898	A
1	6	904	G
1	6	905	A
1	6	906	A
1	6	910	C
1	6	912	U
1	6	913	G
1	6	914	G
1	6	916	U
1	6	933	A
1	6	935	U
1	6	942	G
1	6	945	U
1	6	958	U
1	6	959	U
1	6	960	U
1	6	969	C
1	6	970	A
1	6	971	A
1	6	983	A
1	6	985	G
1	6	988	A
1	6	992	A
1	6	993	A
1	6	1003	A
1	6	1004	U
1	6	1005	A
1	6	1010	C
1	6	1018	U
1	6	1026	A
1	6	1028	C
1	6	1029	U
1	6	1039	A
1	6	1040	G
1	6	1052	U
1	6	1053	G
1	6	1057	U
1	6	1058	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1059	U
1	6	1060	U
1	6	1063	U
1	6	1065	A
1	6	1067	C
1	6	1070	C
1	6	1072	C
1	6	1073	G
1	6	1075	C
1	6	1081	A
1	6	1082	C
1	6	1092	A
1	6	1096	C
1	6	1097	U
1	6	1098	U
1	6	1099	U
1	6	1100	G
1	6	1101	G
1	6	1104	U
1	6	1109	G
1	6	1113	A
1	6	1137	A
1	6	1138	A
1	6	1146	G
1	6	1150	G
1	6	1151	A
1	6	1155	G
1	6	1158	C
1	6	1159	C
1	6	1160	A
1	6	1162	C
1	6	1163	A
1	6	1167	G
1	6	1183	A
1	6	1185	U
1	6	1190	C
1	6	1194	A
1	6	1196	A
1	6	1199	G
1	6	1200	G
1	6	1202	A
1	6	1208	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1213	G
1	6	1214	U
1	6	1217	A
1	6	1218	G
1	6	1219	A
1	6	1220	C
1	6	1226	A
1	6	1228	G
1	6	1229	G
1	6	1230	A
1	6	1236	A
1	6	1238	A
1	6	1239	U
1	6	1240	U
1	6	1241	G
1	6	1242	A
1	6	1243	G
1	6	1244	A
1	6	1245	G
1	6	1246	C
1	6	1248	C
1	6	1252	C
1	6	1255	G
1	6	1256	A
1	6	1257	U
1	6	1258	U
1	6	1259	U
1	6	1261	G
1	6	1262	U
1	6	1275	A
1	6	1284	C
1	6	1286	U
1	6	1288	G
1	6	1291	G
1	6	1300	A
1	6	1306	C
1	6	1307	U
1	6	1314	U
1	6	1315	U
1	6	1316	G
1	6	1321	A
1	6	1338	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1341	A
1	6	1344	A
1	6	1345	A
1	6	1346	A
1	6	1354	G
1	6	1355	C
1	6	1360	A
1	6	1361	U
1	6	1362	U
1	6	1363	U
1	6	1364	G
1	6	1371	A
1	6	1372	U
1	6	1373	C
1	6	1388	A
1	6	1390	U
1	6	1398	U
1	6	1399	C
1	6	1400	A
1	6	1402	G
1	6	1413	U
1	6	1415	U
1	6	1418	G
1	6	1424	A
1	6	1425	A
1	6	1427	A
1	6	1428	G
1	6	1429	G
1	6	1430	U
1	6	1431	C
1	6	1433	G
1	6	1437	U
1	6	1438	G
1	6	1445	G
1	6	1446	A
1	6	1448	G
1	6	1451	C
1	6	1459	C
1	6	1461	C
1	6	1471	A
1	6	1481	C
1	6	1482	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1489	U
1	6	1490	C
1	6	1491	U
1	6	1492	A
1	6	1493	A
1	6	1506	G
1	6	1514	U
1	6	1516	A
1	6	1523	G
1	6	1524	A
1	6	1531	G
1	6	1535	U
1	6	1536	G
1	6	1537	C
1	6	1538	U
1	6	1540	G
1	6	1554	U
1	6	1557	U
1	6	1559	A
1	6	1569	A
1	6	1573	A
1	6	1574	G
1	6	1575	G
1	6	1577	A
1	6	1584	G
1	6	1590	G
1	6	1597	A
1	6	1601	G
1	6	1616	G
1	6	1620	C
1	6	1621	U
1	6	1622	G
1	6	1631	A
1	6	1635	A
1	6	1637	C
1	6	1638	G
1	6	1656	U
1	6	1657	U
1	6	1658	G
1	6	1697	G
1	6	1698	G
1	6	1699	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1700	C
1	6	1701	A
1	6	1702	A
1	6	1712	A
1	6	1716	C
1	6	1717	G
1	6	1731	A
1	6	1736	G
1	6	1745	G
1	6	1755	A
1	6	1760	G
1	6	1762	A
1	6	1766	A
1	6	1767	G
1	6	1769	U
1	6	1770	U
1	6	1772	C
1	6	1780	G
1	6	1782	A
1	6	1783	C
1	6	1790	A
1	6	1792	G
1	6	1793	G
1	6	1794	A
1	6	1795	U
1	6	1796	C
1	6	1799	U
1	6	1800	A
36	5	14	U
36	5	15	C
36	5	26	A
36	5	40	A
36	5	43	A
36	5	44	U
36	5	49	A
36	5	60	A
36	5	62	A
36	5	65	A
36	5	66	A
36	5	73	C
36	5	74	G
36	5	76	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	5	83	U
36	5	85	A
36	5	92	G
36	5	93	C
36	5	96	G
36	5	97	U
36	5	99	A
36	5	101	G
36	5	109	A
36	5	110	G
36	5	111	C
36	5	113	C
36	5	116	A
36	5	120	G
36	5	121	A
36	5	122	A
36	5	124	U
36	5	133	U
36	5	134	U
36	5	135	C
36	5	136	G
36	5	152	U
36	5	156	G
36	5	157	A
36	5	161	G
36	5	165	A
36	5	166	C
36	5	170	G
36	5	171	G
36	5	172	G
36	5	174	C
36	5	180	C
36	5	181	U
36	5	182	U
36	5	186	U
36	5	187	A
36	5	190	U
36	5	191	U
36	5	192	C
36	5	200	C
36	5	206	G
36	5	210	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	211	A
36	5	218	G
36	5	219	A
36	5	221	A
36	5	231	G
36	5	234	G
36	5	237	G
36	5	239	G
36	5	240	U
36	5	242	C
36	5	244	G
36	5	245	U
36	5	246	U
36	5	248	U
36	5	249	U
36	5	250	U
36	5	251	G
36	5	252	U
36	5	253	A
36	5	254	A
36	5	257	U
36	5	269	G
36	5	284	A
36	5	286	U
36	5	295	A
36	5	323	A
36	5	329	U
36	5	334	A
36	5	339	C
36	5	349	A
36	5	350	C
36	5	351	A
36	5	352	A
36	5	356	C
36	5	370	U
36	5	372	A
36	5	375	A
36	5	376	G
36	5	395	A
36	5	397	A
36	5	398	A
36	5	399	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	401	U
36	5	402	A
36	5	403	C
36	5	404	G
36	5	421	G
36	5	422	A
36	5	436	A
36	5	438	A
36	5	439	C
36	5	441	U
36	5	492	U
36	5	495	G
36	5	507	U
36	5	521	A
36	5	532	A
36	5	535	G
36	5	542	G
36	5	546	C
36	5	547	G
36	5	548	G
36	5	555	U
36	5	557	A
36	5	559	A
36	5	578	A
36	5	579	G
36	5	592	A
36	5	604	G
36	5	607	A
36	5	609	G
36	5	610	G
36	5	611	A
36	5	619	A
36	5	620	U
36	5	621	A
36	5	636	C
36	5	644	G
36	5	649	A
36	5	653	A
36	5	656	A
36	5	660	A
36	5	675	C
36	5	677	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	681	U
36	5	683	U
36	5	691	A
36	5	705	A
36	5	708	G
36	5	712	G
36	5	715	A
36	5	716	A
36	5	717	C
36	5	725	G
36	5	727	G
36	5	748	U
36	5	763	G
36	5	766	U
36	5	767	U
36	5	776	U
36	5	777	U
36	5	781	G
36	5	785	G
36	5	786	A
36	5	801	A
36	5	806	A
36	5	813	G
36	5	817	A
36	5	830	A
36	5	860	G
36	5	861	C
36	5	869	G
36	5	871	U
36	5	874	U
36	5	877	C
36	5	879	U
36	5	891	G
36	5	896	A
36	5	897	U
36	5	898	U
36	5	907	G
36	5	908	G
36	5	910	G
36	5	913	A
36	5	914	A
36	5	916	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	917	A
36	5	921	A
36	5	923	C
36	5	924	G
36	5	926	A
36	5	937	G
36	5	944	C
36	5	959	C
36	5	960	U
36	5	964	G
36	5	979	U
36	5	993	G
36	5	994	G
36	5	1000	C
36	5	1001	G
36	5	1002	A
36	5	1006	A
36	5	1010	G
36	5	1015	U
36	5	1017	C
36	5	1019	G
36	5	1021	G
36	5	1024	G
36	5	1025	A
36	5	1026	A
36	5	1027	A
36	5	1028	U
36	5	1029	G
36	5	1035	G
36	5	1041	U
36	5	1047	A
36	5	1049	C
36	5	1051	U
36	5	1064	A
36	5	1065	A
36	5	1072	G
36	5	1075	A
36	5	1081	U
36	5	1082	U
36	5	1083	G
36	5	1087	G
36	5	1088	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1093	A
36	5	1094	U
36	5	1095	U
36	5	1096	U
36	5	1097	G
36	5	1098	A
36	5	1103	A
36	5	1104	G
36	5	1117	G
36	5	1118	C
36	5	1131	G
36	5	1138	U
36	5	1144	U
36	5	1152	G
36	5	1153	A
36	5	1159	A
36	5	1160	C
36	5	1162	U
36	5	1165	A
36	5	1172	G
36	5	1173	U
36	5	1178	G
36	5	1179	A
36	5	1180	A
36	5	1181	U
36	5	1182	A
36	5	1186	G
36	5	1190	A
36	5	1191	U
36	5	1192	C
36	5	1200	A
36	5	1201	C
36	5	1209	G
36	5	1222	G
36	5	1232	C
36	5	1236	G
36	5	1237	G
36	5	1239	C
36	5	1241	U
36	5	1242	G
36	5	1243	G
36	5	1245	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1246	G
36	5	1248	C
36	5	1252	A
36	5	1258	U
36	5	1262	G
36	5	1263	A
36	5	1264	G
36	5	1265	U
36	5	1266	G
36	5	1274	A
36	5	1285	G
36	5	1301	A
36	5	1307	G
36	5	1308	A
36	5	1309	U
36	5	1311	G
36	5	1313	G
36	5	1324	U
36	5	1330	A
36	5	1348	U
36	5	1349	G
36	5	1351	U
36	5	1352	A
36	5	1353	U
36	5	1356	U
36	5	1357	G
36	5	1369	A
36	5	1370	G
36	5	1379	G
36	5	1385	C
36	5	1386	A
36	5	1398	U
36	5	1399	A
36	5	1400	G
36	5	1418	A
36	5	1419	A
36	5	1421	G
36	5	1428	A
36	5	1431	G
36	5	1433	A
36	5	1434	G
36	5	1437	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1438	U
36	5	1443	G
36	5	1446	A
36	5	1450	G
36	5	1465	A
36	5	1472	U
36	5	1481	A
36	5	1482	A
36	5	1490	A
36	5	1503	A
36	5	1508	C
36	5	1519	G
36	5	1528	G
36	5	1533	U
36	5	1536	G
36	5	1539	A
36	5	1541	G
36	5	1549	U
36	5	1554	U
36	5	1555	U
36	5	1556	C
36	5	1557	A
36	5	1560	G
36	5	1561	G
36	5	1562	C
36	5	1564	U
36	5	1566	A
36	5	1567	U
36	5	1569	U
36	5	1570	U
36	5	1571	A
36	5	1572	U
36	5	1574	C
36	5	1575	A
36	5	1576	G
36	5	1577	G
36	5	1578	C
36	5	1579	C
36	5	1581	C
36	5	1582	C
36	5	1583	A
36	5	1589	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1594	A
36	5	1600	U
36	5	1605	A
36	5	1607	U
36	5	1614	C
36	5	1618	G
36	5	1619	A
36	5	1620	U
36	5	1629	U
36	5	1639	C
36	5	1641	U
36	5	1642	A
36	5	1643	A
36	5	1644	C
36	5	1645	U
36	5	1656	A
36	5	1658	G
36	5	1677	G
36	5	1683	A
36	5	1685	C
36	5	1687	U
36	5	1699	A
36	5	1708	C
36	5	1715	A
36	5	1716	U
36	5	1717	U
36	5	1724	U
36	5	1736	G
36	5	1741	A
36	5	1750	A
36	5	1751	G
36	5	1758	G
36	5	1759	C
36	5	1761	C
36	5	1762	C
36	5	1764	U
36	5	1765	U
36	5	1766	G
36	5	1767	C
36	5	1770	G
36	5	1772	U
36	5	1775	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1780	G
36	5	1781	C
36	5	1787	A
36	5	1788	C
36	5	1793	C
36	5	1795	U
36	5	1797	A
36	5	1808	G
36	5	1810	A
36	5	1814	A
36	5	1815	U
36	5	1816	A
36	5	1817	G
36	5	1818	U
36	5	1820	U
36	5	1821	U
36	5	1839	A
36	5	1841	A
36	5	1842	A
36	5	1846	C
36	5	1849	C
36	5	1850	A
36	5	1859	A
36	5	1863	G
36	5	1864	A
36	5	1866	C
36	5	1871	U
36	5	1878	G
36	5	1879	A
36	5	1880	U
36	5	1884	A
36	5	1886	A
36	5	1891	A
36	5	1893	A
36	5	1895	A
36	5	1901	A
36	5	1906	G
36	5	1918	C
36	5	1920	U
36	5	1935	G
36	5	1948	G
36	5	1952	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1953	G
36	5	2101	C
36	5	2102	U
36	5	2112	U
36	5	2113	A
36	5	2114	C
36	5	2121	G
36	5	2122	G
36	5	2131	A
36	5	2134	G
36	5	2140	U
36	5	2144	A
36	5	2145	A
36	5	2146	C
36	5	2158	A
36	5	2169	G
36	5	2177	G
36	5	2184	U
36	5	2185	G
36	5	2187	G
36	5	2192	C
36	5	2198	A
36	5	2205	U
36	5	2208	A
36	5	2209	U
36	5	2210	G
36	5	2213	A
36	5	2215	A
36	5	2221	G
36	5	2223	A
36	5	2225	U
36	5	2229	A
36	5	2231	C
36	5	2244	A
36	5	2246	G
36	5	2249	G
36	5	2250	G
36	5	2253	G
36	5	2255	A
36	5	2256	A
36	5	2257	C
36	5	2258	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2266	U
36	5	2269	U
36	5	2270	A
36	5	2273	G
36	5	2278	C
36	5	2279	A
36	5	2281	A
36	5	2286	U
36	5	2288	G
36	5	2297	U
36	5	2298	U
36	5	2303	A
36	5	2307	G
36	5	2310	U
36	5	2313	A
36	5	2315	G
36	5	2321	A
36	5	2336	U
36	5	2339	C
36	5	2352	A
36	5	2366	C
36	5	2367	A
36	5	2368	A
36	5	2372	A
36	5	2373	A
36	5	2374	C
36	5	2375	G
36	5	2383	C
36	5	2385	G
36	5	2388	U
36	5	2392	C
36	5	2393	G
36	5	2394	G
36	5	2397	A
36	5	2400	G
36	5	2402	A
36	5	2403	G
36	5	2404	A
36	5	2405	C
36	5	2411	U
36	5	2418	G
36	5	2419	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2435	G
36	5	2437	G
36	5	2439	A
36	5	2440	G
36	5	2441	A
36	5	2443	A
36	5	2444	C
36	5	2504	U
36	5	2505	U
36	5	2506	U
36	5	2507	C
36	5	2508	U
36	5	2510	U
36	5	2511	A
36	5	2514	U
36	5	2515	A
36	5	2518	C
36	5	2523	A
36	5	2524	A
36	5	2526	C
36	5	2530	G
36	5	2531	C
36	5	2532	U
36	5	2537	U
36	5	2538	U
36	5	2539	C
36	5	2540	A
36	5	2541	U
36	5	2543	U
36	5	2549	G
36	5	2552	C
36	5	2555	G
36	5	2566	C
36	5	2567	C
36	5	2568	C
36	5	2569	A
36	5	2570	U
36	5	2571	U
36	5	2572	C
36	5	2574	G
36	5	2584	G
36	5	2585	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2586	G
36	5	2593	A
36	5	2594	C
36	5	2606	G
36	5	2607	G
36	5	2614	G
36	5	2615	G
36	5	2618	G
36	5	2636	A
36	5	2637	A
36	5	2642	A
36	5	2652	U
36	5	2656	A
36	5	2657	A
36	5	2674	A
36	5	2677	G
36	5	2683	U
36	5	2689	A
36	5	2690	G
36	5	2691	A
36	5	2694	A
36	5	2696	A
36	5	2705	A
36	5	2714	G
36	5	2717	U
36	5	2727	A
36	5	2728	G
36	5	2729	U
36	5	2740	A
36	5	2748	A
36	5	2750	U
36	5	2752	U
36	5	2753	G
36	5	2755	C
36	5	2762	A
36	5	2771	U
36	5	2772	C
36	5	2773	C
36	5	2777	G
36	5	2778	G
36	5	2783	U
36	5	2796	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2797	C
36	5	2800	G
36	5	2801	A
36	5	2802	A
36	5	2810	C
36	5	2814	G
36	5	2817	A
36	5	2818	U
36	5	2821	C
36	5	2822	U
36	5	2828	G
36	5	2837	A
36	5	2838	A
36	5	2839	G
36	5	2843	U
36	5	2845	A
36	5	2849	C
36	5	2853	A
36	5	2858	U
36	5	2867	C
36	5	2871	G
36	5	2872	A
36	5	2876	C
36	5	2880	U
36	5	2887	A
36	5	2889	C
36	5	2899	C
36	5	2923	U
36	5	2928	C
36	5	2935	U
36	5	2936	A
36	5	2939	G
36	5	2941	A
36	5	2942	C
36	5	2947	G
36	5	2957	G
36	5	2966	G
36	5	2972	G
36	5	2973	G
36	5	2983	C
36	5	2990	G
36	5	2993	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2995	A
36	5	2996	U
36	5	2997	G
36	5	3012	A
36	5	3013	U
36	5	3028	G
36	5	3039	C
36	5	3056	U
36	5	3059	G
36	5	3069	G
36	5	3078	U
36	5	3079	U
36	5	3086	A
36	5	3087	A
36	5	3092	C
36	5	3104	U
36	5	3119	U
36	5	3122	A
36	5	3130	A
36	5	3131	U
36	5	3142	A
36	5	3143	C
36	5	3148	U
36	5	3153	U
36	5	3155	U
36	5	3156	U
36	5	3157	U
36	5	3158	G
36	5	3164	C
36	5	3165	A
36	5	3168	A
36	5	3171	U
36	5	3172	A
36	5	3173	G
36	5	3174	A
36	5	3176	G
36	5	3178	A
36	5	3179	U
36	5	3180	A
36	5	3181	C
36	5	3187	A
36	5	3195	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	5	3196	U
36	5	3198	U
36	5	3207	U
36	5	3217	C
36	5	3218	A
36	5	3219	G
36	5	3224	G
36	5	3227	A
36	5	3228	C
36	5	3229	G
36	5	3239	G
36	5	3243	A
36	5	3245	A
36	5	3246	G
36	5	3247	G
36	5	3253	G
36	5	3259	U
36	5	3260	G
36	5	3265	C
36	5	3270	U
36	5	3273	A
36	5	3275	U
36	5	3276	G
36	5	3277	U
36	5	3279	A
36	5	3280	U
36	5	3282	U
36	5	3284	G
36	5	3285	C
36	5	3286	G
36	5	3288	G
36	5	3289	G
36	5	3290	G
36	5	3294	A
36	5	3304	U
36	5	3310	A
36	5	3313	U
36	5	3316	A
36	5	3317	U
36	5	3318	G
36	5	3319	U
36	5	3333	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	3341	U
36	5	3342	A
36	5	3345	G
36	5	3350	C
36	5	3351	U
36	5	3352	U
36	5	3354	U
36	5	3356	G
36	5	3358	U
36	5	3369	G
36	5	3377	G
36	5	3378	C
36	5	3386	G
36	5	3389	U
36	5	3390	G
36	5	3396	U
37	7	7	G
37	7	22	A
37	7	23	A
37	7	27	A
37	7	33	U
37	7	38	U
37	7	41	G
37	7	49	G
37	7	51	A
37	7	52	G
37	7	54	U
37	7	60	G
37	7	65	G
37	7	73	C
37	7	74	C
37	7	76	A
37	7	77	G
37	7	99	G
37	7	101	G
37	7	102	A
37	7	103	A
37	7	110	G
37	7	112	G
38	8	21	C
38	8	23	U
38	8	34	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	8	35	C
38	8	42	G
38	8	48	A
38	8	49	G
38	8	51	G
38	8	52	A
38	8	59	A
38	8	60	U
38	8	62	C
38	8	63	G
38	8	79	A
38	8	80	A
38	8	81	U
38	8	82	U
38	8	83	C
38	8	84	C
38	8	85	G
38	8	86	U
38	8	87	G
38	8	90	U
38	8	95	G
38	8	96	A
38	8	97	A
38	8	102	U
38	8	104	A
38	8	105	A
38	8	106	C
38	8	111	A
38	8	113	U
38	8	125	U
38	8	126	A
38	8	127	U
38	8	136	G
38	8	137	C
38	8	152	G
38	8	156	U
38	8	157	U
38	8	158	U

All (286) RNA pucker outliers are listed below:

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
-----	-------	-----	------

Mol	Chain	Res	Type
1	2	25	C
1	2	68	A
1	2	73	U
1	2	113	U
1	2	130	C
1	2	131	C
1	2	139	C
1	2	158	U
1	2	217	A
1	2	218	A
1	2	232	U
1	2	240	U
1	2	278	U
1	2	280	U
1	2	321	C
1	2	417	A
1	2	468	A
1	2	484	C
1	2	497	G
1	2	499	U
1	2	501	U
1	2	503	G
1	2	512	A
1	2	545	A
1	2	555	A
1	2	558	U
1	2	685	A
1	2	704	C
1	2	720	G
1	2	721	U
1	2	734	A
1	2	755	A
1	2	782	U
1	2	794	U
1	2	829	A
1	2	913	G
1	2	1058	U
1	2	1081	A
1	2	1108	G
1	2	1157	A
1	2	1196	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1207	C
1	2	1226	A
1	2	1244	A
1	2	1250	U
1	2	1339	C
1	2	1344	A
1	2	1370	U
1	2	1481	C
1	2	1489	U
1	2	1490	C
1	2	1573	A
1	2	1600	A
1	2	1615	C
1	2	1657	U
1	2	1761	U
36	1	43	A
36	1	65	A
36	1	210	U
36	1	239	G
36	1	282	G
36	1	369	A
36	1	547	G
36	1	594	U
36	1	619	A
36	1	637	C
36	1	715	A
36	1	763	G
36	1	873	C
36	1	896	A
36	1	916	G
36	1	932	U
36	1	979	U
36	1	981	U
36	1	993	G
36	1	1094	U
36	1	1097	G
36	1	1103	A
36	1	1196	C
36	1	1273	A
36	1	1307	G
36	1	1317	A
36	1	1329	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1331	U
36	1	1352	A
36	1	1355	A
36	1	1419	A
36	1	1481	A
36	1	1484	U
36	1	1554	U
36	1	1562	C
36	1	1716	U
36	1	1751	G
36	1	1778	G
36	1	1815	U
36	1	1816	A
36	1	1820	U
36	1	1841	A
36	1	1846	C
36	1	1849	C
36	1	1858	A
36	1	1879	A
36	1	2101	C
36	1	2112	U
36	1	2209	U
36	1	2249	G
36	1	2281	A
36	1	2372	A
36	1	2374	C
36	1	2418	G
36	1	2513	U
36	1	2522	G
36	1	2537	U
36	1	2538	U
36	1	2541	U
36	1	2554	A
36	1	2571	U
36	1	2593	A
36	1	2704	A
36	1	2728	G
36	1	2772	C
36	1	2801	A
36	1	2818	U
36	1	2842	U
36	1	2950	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	3048	A
36	1	3078	U
36	1	3121	U
36	1	3195	U
36	1	3218	A
36	1	3228	C
36	1	3275	U
36	1	3276	G
36	1	3319	U
36	1	3350	C
36	1	3351	U
36	1	3353	G
36	1	3375	A
36	1	3382	U
37	3	13	A
37	3	49	G
37	3	52	G
38	4	82	U
38	4	85	G
38	4	111	A
38	4	125	U
1	6	25	C
1	6	76	A
1	6	114	C
1	6	136	C
1	6	145	A
1	6	158	U
1	6	187	G
1	6	192	U
1	6	217	A
1	6	240	U
1	6	272	U
1	6	345	U
1	6	400	A
1	6	417	A
1	6	542	A
1	6	543	C
1	6	555	A
1	6	557	G
1	6	558	U
1	6	651	G
1	6	697	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	717	C
1	6	755	A
1	6	829	A
1	6	834	G
1	6	1051	G
1	6	1058	U
1	6	1097	U
1	6	1137	A
1	6	1207	C
1	6	1218	G
1	6	1227	A
1	6	1238	A
1	6	1241	G
1	6	1244	A
1	6	1255	G
1	6	1344	A
1	6	1398	U
1	6	1481	C
1	6	1489	U
1	6	1535	U
1	6	1568	C
1	6	1572	G
1	6	1573	A
1	6	1615	C
1	6	1620	C
1	6	1657	U
1	6	1696	G
1	6	1698	G
1	6	1700	C
36	5	43	A
36	5	122	A
36	5	151	A
36	5	210	U
36	5	221	A
36	5	238	A
36	5	369	A
36	5	438	A
36	5	594	U
36	5	715	A
36	5	765	C
36	5	816	A
36	5	873	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	5	896	A
36	5	916	G
36	5	993	G
36	5	1027	A
36	5	1064	A
36	5	1081	U
36	5	1152	G
36	5	1178	G
36	5	1181	U
36	5	1196	C
36	5	1238	C
36	5	1241	U
36	5	1284	C
36	5	1307	G
36	5	1317	A
36	5	1329	U
36	5	1331	U
36	5	1352	A
36	5	1355	A
36	5	1370	G
36	5	1434	G
36	5	1481	A
36	5	1554	U
36	5	1560	G
36	5	1574	C
36	5	1580	A
36	5	1605	A
36	5	1716	U
36	5	1816	A
36	5	1819	U
36	5	1841	A
36	5	1846	C
36	5	1878	G
36	5	2101	C
36	5	2112	U
36	5	2121	G
36	5	2204	C
36	5	2209	U
36	5	2249	G
36	5	2255	A
36	5	2257	C
36	5	2372	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2374	C
36	5	2404	A
36	5	2418	G
36	5	2440	G
36	5	2507	C
36	5	2513	U
36	5	2531	C
36	5	2682	C
36	5	2689	A
36	5	2772	C
36	5	2801	A
36	5	2818	U
36	5	2821	C
36	5	2887	A
36	5	2971	A
36	5	3065	G
36	5	3078	U
36	5	3121	U
36	5	3154	C
36	5	3167	A
36	5	3195	U
36	5	3218	A
36	5	3228	C
36	5	3269	U
36	5	3275	U
36	5	3289	G
36	5	3317	U
36	5	3340	G
36	5	3341	U
36	5	3357	U
37	7	54	U
37	7	76	A
37	7	111	U
38	8	111	A
38	8	126	A

## 5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

There are no non-standard protein/DNA/RNA residues in this entry.

## 5.5 Carbohydrates

There are no carbohydrates in this entry.

## 5.6 Ligand geometry

Of 2554 ligands modelled in this entry, 1422 are monoatomic - leaving 1132 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	$\# Z  > 2$
86	OHX	1	3866	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3867	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3868	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3869	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3870	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3871	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3872	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3873	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3874	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3875	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3876	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3877	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3878	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3879	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3880	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3881	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3882	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3883	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3884	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3885	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3886	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3887	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3888	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3889	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3890	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3891	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3892	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	1	3893	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3894	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3895	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3896	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3897	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3898	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3899	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3900	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3901	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3902	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3903	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3904	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3905	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3906	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3907	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3908	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3909	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3910	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3911	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3912	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3913	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3914	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3915	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3916	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3917	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3918	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3919	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3920	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3921	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3922	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3923	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3924	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3925	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3926	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3927	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3928	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3929	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3930	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3931	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3932	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3933	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3934	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3935	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	1	3936	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3937	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3938	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3939	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3940	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3941	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3942	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3943	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3944	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3945	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3946	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3947	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3948	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3949	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3950	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3951	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3952	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3953	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3954	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3955	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3956	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3957	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3958	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3959	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3960	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3961	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3962	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3963	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3964	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3965	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3966	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3967	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3968	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3969	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3970	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3971	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3972	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3973	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3974	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3975	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3976	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3977	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3978	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	1	3979	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3980	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3981	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3982	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3983	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3984	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3985	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3986	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3987	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3988	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3989	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3990	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3991	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3992	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3993	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3994	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3995	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3996	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3997	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3998	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	3999	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4000	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4001	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4002	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4003	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4004	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4005	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4006	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4007	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4008	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4009	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4010	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4011	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4012	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4013	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4014	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4015	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4016	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4017	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4018	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4019	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4020	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4021	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	1	4022	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4023	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4024	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4025	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4026	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4027	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4028	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4029	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4030	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4031	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4032	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4033	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4034	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4035	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4036	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4037	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4038	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4039	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4040	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4041	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4042	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4043	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4044	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4045	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4046	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4047	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4048	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4049	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4050	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4051	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4052	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4053	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4054	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4055	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4056	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4057	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4058	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4059	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4060	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4061	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4062	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4063	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4064	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	1	4065	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4066	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4067	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4068	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4069	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4070	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4071	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4072	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4073	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4074	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4075	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4076	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4077	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4078	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4079	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4080	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4081	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4082	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4083	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4084	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4085	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4086	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4087	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4088	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4089	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4090	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4091	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4092	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4093	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4094	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4095	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4096	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4097	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4098	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4099	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4100	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4101	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4102	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4103	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4104	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4105	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4106	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4107	-	0,6,6	0.00	-	0,15,15	0.00	-



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	1	4108	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4109	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4110	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4111	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4112	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4113	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4114	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4115	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4116	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4117	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4118	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4119	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4120	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4121	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4122	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4123	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4124	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4125	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4126	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4127	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4128	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4129	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4130	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4131	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4132	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4133	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4134	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4135	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4136	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4137	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4138	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4139	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4140	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4141	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4142	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4143	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4144	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4145	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4146	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4147	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4148	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4149	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4150	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	1	4151	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4152	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4153	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4154	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4155	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4156	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4157	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4158	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4159	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4160	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4161	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4162	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4163	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4164	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4165	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4166	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4167	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4168	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4169	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4170	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4171	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4172	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4173	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4174	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4175	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4176	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4177	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4178	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4179	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4180	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4181	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4182	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4183	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4184	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4185	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4186	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4187	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4188	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4189	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4190	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4191	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4192	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4193	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	1	4194	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4195	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4196	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4197	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4198	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4199	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4200	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4202	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4204	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4205	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4206	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4207	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4208	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4209	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4210	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4211	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4212	-	0,6,6	0.00	-	0,15,15	0.00	-
88	3J6	1	4213	85	20,24,24	1.50	2 (10%)	23,42,42	2.08	8 (34%)
86	OHX	2	2023	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2024	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2025	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2026	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2027	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2028	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2029	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2030	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2031	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2032	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2033	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2034	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2035	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2036	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2037	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2038	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2039	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2040	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2041	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2042	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2043	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2044	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2045	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	2	2046	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2047	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2048	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2049	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2050	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2051	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2052	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2053	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2054	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2055	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2056	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2057	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2058	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2059	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2060	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2061	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2062	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2063	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2064	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2065	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2066	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2067	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2068	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2069	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2070	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2071	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2072	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2073	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2074	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2075	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2076	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2077	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2078	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2079	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2080	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2081	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2082	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2083	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2084	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2085	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2086	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2087	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2088	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	2	2089	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2090	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2091	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2092	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2093	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2094	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2095	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2096	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2097	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2098	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2099	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2100	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2101	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2102	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2103	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2104	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2105	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2106	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2107	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2108	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2109	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2110	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2111	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2112	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2113	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2114	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2115	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2116	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2117	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2118	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2119	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2120	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2121	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2122	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2123	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2124	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2125	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2126	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2127	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2128	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2129	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2130	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2131	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	2	2132	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2133	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2134	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2135	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2136	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2137	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2138	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2139	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2140	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2141	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2142	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2143	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2144	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2145	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2146	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2147	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2148	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2149	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2150	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2151	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2152	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2153	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2154	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2155	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2156	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2157	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2158	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2159	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2160	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2161	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2162	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2163	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2164	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2165	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2166	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2167	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2168	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2169	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2170	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2171	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2172	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2173	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2174	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	2	2175	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2176	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2177	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2178	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	2	2179	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	215	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	216	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	217	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	218	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	219	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	220	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	221	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	222	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	223	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	224	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	225	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	226	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	221	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	222	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	223	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	224	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	225	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	226	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	227	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	228	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	229	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	230	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	231	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	232	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	233	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	234	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	235	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	236	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3893	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3894	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3895	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3896	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3897	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3898	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3899	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3900	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3901	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3902	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	5	3903	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3904	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3905	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3906	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3907	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3908	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3909	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3910	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3911	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3912	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3913	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3914	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3915	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3916	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3917	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3918	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3919	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3920	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3921	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3922	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3923	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3924	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3925	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3926	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3927	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3928	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3929	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3930	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3931	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3932	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3933	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3934	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3935	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3936	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3937	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3938	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3939	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3940	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3941	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3942	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3943	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3944	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3945	-	0,6,6	0.00	-	0,15,15	0.00	-



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	5	3946	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3947	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3948	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3949	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3950	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3951	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3952	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3953	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3954	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3955	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3956	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3957	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3958	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3959	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3960	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3961	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3962	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3963	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3964	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3965	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3966	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3967	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3968	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3969	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3970	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3971	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3972	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3973	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3974	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3975	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3976	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3977	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3978	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3979	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3980	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3981	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3982	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3983	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3984	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3985	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3986	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3987	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3988	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	5	3989	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3990	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3991	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3992	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3993	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3994	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3995	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3996	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3997	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3998	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	3999	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4000	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4001	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4002	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4003	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4004	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4005	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4006	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4007	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4008	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4009	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4010	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4011	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4012	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4013	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4014	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4015	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4016	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4017	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4018	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4019	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4020	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4021	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4022	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4023	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4024	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4025	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4026	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4027	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4028	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4029	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4030	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4031	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	5	4032	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4033	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4034	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4035	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4036	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4037	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4038	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4039	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4040	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4041	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4042	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4043	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4044	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4045	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4046	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4047	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4048	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4049	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4050	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4051	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4052	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4053	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4054	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4055	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4056	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4057	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4058	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4059	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4060	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4061	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4062	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4063	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4064	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4065	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4066	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4067	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4068	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4069	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4070	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4071	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4072	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4073	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4074	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	5	4075	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4076	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4077	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4078	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4079	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4080	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4081	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4082	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4083	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4084	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4085	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4086	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4087	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4088	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4089	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4090	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4091	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4092	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4093	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4094	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4095	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4096	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4097	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4098	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4099	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4100	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4101	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4102	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4103	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4104	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4105	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4106	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4107	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4108	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4109	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4110	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4111	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4112	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4113	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4114	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4115	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4116	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4117	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	5	4118	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4119	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4120	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4121	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4122	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4123	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4124	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4125	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4126	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4127	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4128	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4129	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4130	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4131	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4132	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4133	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4134	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4135	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4136	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4137	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4138	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4139	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4140	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4141	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4142	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4143	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4144	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4145	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4146	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4147	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4148	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4149	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4150	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4151	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4152	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4153	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4154	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4155	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4156	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4157	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4158	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4159	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4160	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	5	4161	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4162	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4163	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4164	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4165	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4166	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4167	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4168	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4169	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4170	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4171	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4172	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4173	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4174	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4175	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4176	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4177	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4178	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4179	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4180	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4181	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4182	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4183	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4184	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4185	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4186	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4187	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4188	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4189	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4190	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4191	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4192	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4193	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4194	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4195	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4196	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4197	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4198	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4199	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4200	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4202	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4203	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	5	4204	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4205	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4206	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4207	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4208	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4209	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4210	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4211	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4212	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4213	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4214	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4215	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4216	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4217	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4218	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4219	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4220	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4221	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4222	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4223	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4224	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4225	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4226	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4227	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4228	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4229	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4230	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4231	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4232	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4233	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4234	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4235	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4236	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4237	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4238	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4239	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4240	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4241	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4242	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4243	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4244	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4245	-	0,6,6	0.00	-	0,15,15	0.00	-
88	3J6	5	4246	85	20,24,24	0.96	0	23,42,42	1.32	2 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	6	2045	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2046	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2047	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2048	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2049	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2050	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2051	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2052	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2053	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2054	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2055	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2056	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2057	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2058	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2059	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2060	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2061	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2062	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2063	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2064	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2065	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2066	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2067	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2068	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2069	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2070	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2071	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2072	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2073	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2074	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2075	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2076	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2077	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2078	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2079	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2080	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2081	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2082	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2083	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2084	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2085	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2086	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2087	-	0,6,6	0.00	-	0,15,15	0.00	-



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	6	2088	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2089	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2090	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2091	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2092	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2093	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2094	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2095	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2096	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2097	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2098	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2099	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2100	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2101	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2102	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2103	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2104	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2105	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2106	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2107	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2108	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2109	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2110	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2111	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2112	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2113	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2114	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2115	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2116	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2117	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2118	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2119	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2120	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2121	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2122	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2123	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2124	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2125	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2126	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2127	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2128	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2129	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2130	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	6	2131	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2132	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2133	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2134	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2135	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2136	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2137	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2138	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2139	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2140	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2141	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2142	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2143	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2144	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2145	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2146	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2147	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2148	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2149	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2150	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2151	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2152	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2153	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2154	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2155	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2156	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2157	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2158	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2159	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2160	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2161	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2162	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2163	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2164	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2165	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2166	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2167	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2168	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2169	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2170	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2171	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2172	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2173	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	6	2174	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2175	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2176	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2177	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2178	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2179	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2180	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2181	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2182	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2183	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2184	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2185	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2186	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2187	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2188	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2189	1	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2190	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2191	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2192	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2193	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2194	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2195	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2196	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2197	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2198	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2199	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2200	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2202	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2204	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	218	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	219	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	220	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	221	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	222	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	223	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	224	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	225	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	226	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	227	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	216	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	217	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	8	218	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	219	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	220	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	221	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	222	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	223	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	224	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	225	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	226	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	227	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	228	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	229	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	230	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	8	231	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	C3	202	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	C5	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	C8	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	D3	202	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	D9	102	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	L3	404	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	L3	405	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	L4	403	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	M0	304	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	M5	303	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	M7	205	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	M7	206	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	M9	203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	N9	101	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	O1	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	O3	202	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	O4	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	O6	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	O7	103	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	O9	101	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	Q2	502	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	S6	301	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	S8	302	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	SR	401	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	c3	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	c5	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	c8	203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	d4	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	d9	102	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	l3	404	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	l3	405	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	l4	402	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	l4	403	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	l5	304	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	l5	305	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	l5	306	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	l5	307	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	l9	202	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	m0	302	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	m0	303	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	m1	202	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	m4	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	m5	303	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	m6	203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	m7	206	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	m8	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	n3	203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	n3	204	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	n6	203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	n9	102	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	o2	201	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	o3	203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	o7	502	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	o7	503	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	q2	502	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	s1	302	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	s1	303	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	s8	303	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	sR	401	-	0,6,6	0.00	-	0,15,15	0.00	-

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
86	OHX	1	3866	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3867	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3868	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3869	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3870	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3871	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	3872	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3873	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3874	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3875	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3876	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3877	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3878	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3879	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3880	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3881	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3882	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3883	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3884	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3885	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3886	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3887	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3888	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3889	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3890	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3891	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3892	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3893	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3894	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3895	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3896	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3897	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3898	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3899	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3900	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3901	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3902	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3903	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3904	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3905	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3906	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3907	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3908	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3909	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3910	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3911	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3912	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3913	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	3914	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3915	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3916	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3917	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3918	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3919	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3920	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3921	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3922	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3923	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3924	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3925	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3926	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3927	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3928	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3929	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3930	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3931	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3932	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3933	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3934	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3935	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3936	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3937	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3938	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3939	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3940	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3941	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3942	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3943	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3944	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3945	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3946	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3947	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3948	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3949	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3950	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3951	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3952	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3953	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3954	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3955	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	3956	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3957	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3958	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3959	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3960	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3961	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3962	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3963	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3964	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3965	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3966	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3967	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3968	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3969	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3970	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3971	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3972	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3973	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3974	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3975	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3976	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3977	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3978	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3979	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3980	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3981	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3982	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3983	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3984	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3985	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3986	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3987	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3988	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3989	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3990	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3991	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3992	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3993	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3994	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3995	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3996	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3997	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	3998	-	-	0/0/0/0	0/0/0/0
86	OHX	1	3999	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4000	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4001	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4002	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4003	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4004	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4005	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4006	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4007	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4008	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4009	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4010	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4011	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4012	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4013	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4014	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4015	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4016	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4017	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4018	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4019	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4020	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4021	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4022	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4023	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4024	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4025	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4026	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4027	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4028	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4029	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4030	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4031	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4032	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4033	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4034	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4035	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4036	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4037	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4038	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4039	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	4040	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4041	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4042	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4043	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4044	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4045	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4046	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4047	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4048	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4049	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4050	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4051	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4052	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4053	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4054	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4055	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4056	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4057	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4058	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4059	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4060	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4061	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4062	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4063	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4064	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4065	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4066	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4067	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4068	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4069	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4070	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4071	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4072	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4073	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4074	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4075	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4076	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4077	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4078	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4079	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4080	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4081	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	4082	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4083	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4084	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4085	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4086	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4087	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4088	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4089	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4090	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4091	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4092	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4093	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4094	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4095	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4096	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4097	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4098	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4099	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4100	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4101	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4102	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4103	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4104	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4105	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4106	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4107	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4108	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4109	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4110	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4111	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4112	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4113	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4114	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4115	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4116	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4117	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4118	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4119	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4120	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4121	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4122	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4123	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	4124	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4125	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4126	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4127	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4128	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4129	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4130	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4131	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4132	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4133	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4134	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4135	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4136	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4137	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4138	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4139	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4140	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4141	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4142	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4143	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4144	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4145	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4146	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4147	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4148	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4149	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4150	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4151	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4152	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4153	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4154	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4155	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4156	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4157	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4158	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4159	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4160	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4161	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4162	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4163	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4164	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4165	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	4166	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4167	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4168	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4169	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4170	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4171	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4172	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4173	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4174	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4175	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4176	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4177	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4178	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4179	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4180	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4181	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4182	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4183	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4184	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4185	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4186	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4187	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4188	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4189	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4190	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4191	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4192	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4193	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4194	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4195	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4196	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4197	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4198	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4199	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4200	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4201	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4202	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4203	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4204	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4205	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4206	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4207	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	1	4208	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4209	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4210	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4211	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4212	-	-	0/0/0/0	0/0/0/0
88	3J6	1	4213	85	-	0/3/68/68	0/1/4/4
86	OHX	2	2023	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2024	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2025	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2026	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2027	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2028	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2029	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2030	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2031	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2032	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2033	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2034	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2035	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2036	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2037	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2038	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2039	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2040	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2041	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2042	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2043	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2044	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2045	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2046	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2047	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2048	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2049	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2050	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2051	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2052	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2053	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2054	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2055	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2056	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2057	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2058	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	2	2059	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2060	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2061	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2062	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2063	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2064	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2065	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2066	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2067	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2068	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2069	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2070	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2071	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2072	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2073	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2074	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2075	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2076	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2077	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2078	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2079	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2080	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2081	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2082	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2083	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2084	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2085	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2086	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2087	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2088	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2089	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2090	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2091	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2092	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2093	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2094	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2095	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2096	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2097	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2098	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2099	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2100	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	2	2101	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2102	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2103	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2104	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2105	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2106	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2107	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2108	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2109	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2110	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2111	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2112	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2113	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2114	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2115	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2116	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2117	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2118	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2119	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2120	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2121	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2122	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2123	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2124	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2125	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2126	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2127	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2128	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2129	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2130	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2131	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2132	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2133	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2134	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2135	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2136	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2137	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2138	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2139	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2140	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2141	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2142	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	2	2143	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2144	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2145	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2146	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2147	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2148	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2149	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2150	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2151	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2152	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2153	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2154	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2155	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2156	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2157	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2158	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2159	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2160	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2161	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2162	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2163	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2164	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2165	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2166	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2167	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2168	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2169	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2170	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2171	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2172	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2173	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2174	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2175	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2176	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2177	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2178	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2179	-	-	0/0/0/0	0/0/0/0
86	OHX	3	215	-	-	0/0/0/0	0/0/0/0
86	OHX	3	216	-	-	0/0/0/0	0/0/0/0
86	OHX	3	217	-	-	0/0/0/0	0/0/0/0
86	OHX	3	218	-	-	0/0/0/0	0/0/0/0
86	OHX	3	219	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	3	220	-	-	0/0/0/0	0/0/0/0
86	OHX	3	221	-	-	0/0/0/0	0/0/0/0
86	OHX	3	222	-	-	0/0/0/0	0/0/0/0
86	OHX	3	223	-	-	0/0/0/0	0/0/0/0
86	OHX	3	224	-	-	0/0/0/0	0/0/0/0
86	OHX	3	225	-	-	0/0/0/0	0/0/0/0
86	OHX	3	226	-	-	0/0/0/0	0/0/0/0
86	OHX	4	221	-	-	0/0/0/0	0/0/0/0
86	OHX	4	222	-	-	0/0/0/0	0/0/0/0
86	OHX	4	223	-	-	0/0/0/0	0/0/0/0
86	OHX	4	224	-	-	0/0/0/0	0/0/0/0
86	OHX	4	225	-	-	0/0/0/0	0/0/0/0
86	OHX	4	226	-	-	0/0/0/0	0/0/0/0
86	OHX	4	227	-	-	0/0/0/0	0/0/0/0
86	OHX	4	228	-	-	0/0/0/0	0/0/0/0
86	OHX	4	229	-	-	0/0/0/0	0/0/0/0
86	OHX	4	230	-	-	0/0/0/0	0/0/0/0
86	OHX	4	231	-	-	0/0/0/0	0/0/0/0
86	OHX	4	232	-	-	0/0/0/0	0/0/0/0
86	OHX	4	233	-	-	0/0/0/0	0/0/0/0
86	OHX	4	234	-	-	0/0/0/0	0/0/0/0
86	OHX	4	235	-	-	0/0/0/0	0/0/0/0
86	OHX	4	236	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3893	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3894	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3895	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3896	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3897	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3898	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3899	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3900	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3901	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3902	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3903	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3904	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3905	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3906	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3907	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3908	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3909	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3910	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3911	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	5	3912	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3913	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3914	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3915	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3916	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3917	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3918	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3919	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3920	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3921	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3922	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3923	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3924	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3925	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3926	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3927	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3928	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3929	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3930	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3931	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3932	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3933	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3934	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3935	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3936	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3937	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3938	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3939	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3940	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3941	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3942	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3943	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3944	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3945	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3946	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3947	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3948	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3949	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3950	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3951	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3952	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3953	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	5	3954	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3955	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3956	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3957	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3958	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3959	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3960	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3961	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3962	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3963	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3964	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3965	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3966	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3967	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3968	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3969	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3970	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3971	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3972	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3973	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3974	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3975	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3976	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3977	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3978	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3979	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3980	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3981	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3982	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3983	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3984	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3985	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3986	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3987	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3988	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3989	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3990	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3991	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3992	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3993	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3994	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3995	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	5	3996	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3997	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3998	-	-	0/0/0/0	0/0/0/0
86	OHX	5	3999	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4000	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4001	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4002	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4003	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4004	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4005	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4006	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4007	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4008	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4009	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4010	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4011	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4012	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4013	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4014	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4015	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4016	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4017	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4018	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4019	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4020	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4021	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4022	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4023	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4024	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4025	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4026	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4027	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4028	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4029	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4030	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4031	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4032	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4033	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4034	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4035	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4036	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4037	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	5	4038	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4039	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4040	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4041	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4042	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4043	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4044	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4045	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4046	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4047	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4048	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4049	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4050	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4051	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4052	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4053	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4054	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4055	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4056	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4057	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4058	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4059	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4060	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4061	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4062	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4063	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4064	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4065	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4066	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4067	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4068	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4069	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4070	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4071	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4072	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4073	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4074	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4075	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4076	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4077	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4078	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4079	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	5	4080	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4081	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4082	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4083	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4084	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4085	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4086	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4087	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4088	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4089	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4090	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4091	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4092	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4093	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4094	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4095	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4096	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4097	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4098	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4099	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4100	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4101	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4102	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4103	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4104	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4105	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4106	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4107	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4108	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4109	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4110	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4111	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4112	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4113	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4114	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4115	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4116	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4117	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4118	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4119	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4120	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4121	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	5	4122	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4123	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4124	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4125	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4126	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4127	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4128	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4129	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4130	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4131	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4132	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4133	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4134	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4135	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4136	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4137	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4138	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4139	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4140	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4141	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4142	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4143	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4144	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4145	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4146	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4147	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4148	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4149	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4150	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4151	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4152	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4153	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4154	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4155	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4156	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4157	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4158	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4159	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4160	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4161	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4162	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4163	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	5	4164	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4165	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4166	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4167	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4168	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4169	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4170	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4171	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4172	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4173	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4174	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4175	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4176	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4177	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4178	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4179	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4180	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4181	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4182	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4183	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4184	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4185	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4186	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4187	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4188	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4189	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4190	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4191	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4192	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4193	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4194	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4195	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4196	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4197	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4198	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4199	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4200	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4201	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4202	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4203	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4204	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4205	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	5	4206	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4207	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4208	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4209	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4210	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4211	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4212	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4213	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4214	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4215	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4216	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4217	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4218	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4219	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4220	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4221	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4222	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4223	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4224	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4225	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4226	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4227	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4228	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4229	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4230	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4231	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4232	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4233	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4234	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4235	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4236	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4237	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4238	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4239	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4240	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4241	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4242	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4243	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4244	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4245	-	-	0/0/0/0	0/0/0/0
88	3J6	5	4246	85	-	0/3/68/68	0/1/4/4
86	OHX	6	2045	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	6	2046	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2047	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2048	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2049	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2050	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2051	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2052	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2053	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2054	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2055	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2056	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2057	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2058	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2059	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2060	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2061	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2062	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2063	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2064	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2065	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2066	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2067	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2068	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2069	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2070	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2071	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2072	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2073	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2074	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2075	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2076	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2077	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2078	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2079	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2080	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2081	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2082	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2083	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2084	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2085	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2086	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2087	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	6	2088	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2089	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2090	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2091	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2092	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2093	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2094	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2095	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2096	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2097	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2098	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2099	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2100	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2101	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2102	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2103	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2104	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2105	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2106	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2107	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2108	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2109	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2110	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2111	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2112	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2113	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2114	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2115	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2116	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2117	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2118	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2119	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2120	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2121	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2122	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2123	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2124	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2125	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2126	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2127	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2128	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2129	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	6	2130	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2131	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2132	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2133	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2134	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2135	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2136	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2137	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2138	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2139	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2140	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2141	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2142	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2143	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2144	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2145	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2146	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2147	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2148	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2149	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2150	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2151	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2152	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2153	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2154	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2155	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2156	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2157	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2158	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2159	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2160	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2161	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2162	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2163	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2164	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2165	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2166	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2167	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2168	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2169	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2170	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2171	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	6	2172	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2173	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2174	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2175	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2176	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2177	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2178	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2179	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2180	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2181	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2182	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2183	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2184	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2185	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2186	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2187	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2188	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2189	1	-	0/0/0/0	0/0/0/0
86	OHX	6	2190	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2191	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2192	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2193	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2194	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2195	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2196	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2197	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2198	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2199	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2200	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2201	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2202	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2203	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2204	-	-	0/0/0/0	0/0/0/0
86	OHX	7	218	-	-	0/0/0/0	0/0/0/0
86	OHX	7	219	-	-	0/0/0/0	0/0/0/0
86	OHX	7	220	-	-	0/0/0/0	0/0/0/0
86	OHX	7	221	-	-	0/0/0/0	0/0/0/0
86	OHX	7	222	-	-	0/0/0/0	0/0/0/0
86	OHX	7	223	-	-	0/0/0/0	0/0/0/0
86	OHX	7	224	-	-	0/0/0/0	0/0/0/0
86	OHX	7	225	-	-	0/0/0/0	0/0/0/0
86	OHX	7	226	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	7	227	-	-	0/0/0/0	0/0/0/0
86	OHX	8	216	-	-	0/0/0/0	0/0/0/0
86	OHX	8	217	-	-	0/0/0/0	0/0/0/0
86	OHX	8	218	-	-	0/0/0/0	0/0/0/0
86	OHX	8	219	-	-	0/0/0/0	0/0/0/0
86	OHX	8	220	-	-	0/0/0/0	0/0/0/0
86	OHX	8	221	-	-	0/0/0/0	0/0/0/0
86	OHX	8	222	-	-	0/0/0/0	0/0/0/0
86	OHX	8	223	-	-	0/0/0/0	0/0/0/0
86	OHX	8	224	-	-	0/0/0/0	0/0/0/0
86	OHX	8	225	-	-	0/0/0/0	0/0/0/0
86	OHX	8	226	-	-	0/0/0/0	0/0/0/0
86	OHX	8	227	-	-	0/0/0/0	0/0/0/0
86	OHX	8	228	-	-	0/0/0/0	0/0/0/0
86	OHX	8	229	-	-	0/0/0/0	0/0/0/0
86	OHX	8	230	-	-	0/0/0/0	0/0/0/0
86	OHX	8	231	-	-	0/0/0/0	0/0/0/0
86	OHX	C3	202	-	-	0/0/0/0	0/0/0/0
86	OHX	C5	201	-	-	0/0/0/0	0/0/0/0
86	OHX	C8	201	-	-	0/0/0/0	0/0/0/0
86	OHX	D3	202	-	-	0/0/0/0	0/0/0/0
86	OHX	D9	102	-	-	0/0/0/0	0/0/0/0
86	OHX	L3	404	-	-	0/0/0/0	0/0/0/0
86	OHX	L3	405	-	-	0/0/0/0	0/0/0/0
86	OHX	L4	403	-	-	0/0/0/0	0/0/0/0
86	OHX	M0	304	-	-	0/0/0/0	0/0/0/0
86	OHX	M5	303	-	-	0/0/0/0	0/0/0/0
86	OHX	M7	205	-	-	0/0/0/0	0/0/0/0
86	OHX	M7	206	-	-	0/0/0/0	0/0/0/0
86	OHX	M9	203	-	-	0/0/0/0	0/0/0/0
86	OHX	N9	101	-	-	0/0/0/0	0/0/0/0
86	OHX	O1	201	-	-	0/0/0/0	0/0/0/0
86	OHX	O3	202	-	-	0/0/0/0	0/0/0/0
86	OHX	O4	201	-	-	0/0/0/0	0/0/0/0
86	OHX	O6	201	-	-	0/0/0/0	0/0/0/0
86	OHX	O7	103	-	-	0/0/0/0	0/0/0/0
86	OHX	O9	101	-	-	0/0/0/0	0/0/0/0
86	OHX	Q2	502	-	-	0/0/0/0	0/0/0/0
86	OHX	S6	301	-	-	0/0/0/0	0/0/0/0
86	OHX	S8	302	-	-	0/0/0/0	0/0/0/0
86	OHX	SR	401	-	-	0/0/0/0	0/0/0/0
86	OHX	c3	201	-	-	0/0/0/0	0/0/0/0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
86	OHX	c5	201	-	-	0/0/0/0	0/0/0/0
86	OHX	c8	203	-	-	0/0/0/0	0/0/0/0
86	OHX	d4	201	-	-	0/0/0/0	0/0/0/0
86	OHX	d9	102	-	-	0/0/0/0	0/0/0/0
86	OHX	l3	404	-	-	0/0/0/0	0/0/0/0
86	OHX	l3	405	-	-	0/0/0/0	0/0/0/0
86	OHX	l4	402	-	-	0/0/0/0	0/0/0/0
86	OHX	l4	403	-	-	0/0/0/0	0/0/0/0
86	OHX	l5	304	-	-	0/0/0/0	0/0/0/0
86	OHX	l5	305	-	-	0/0/0/0	0/0/0/0
86	OHX	l5	306	-	-	0/0/0/0	0/0/0/0
86	OHX	l5	307	-	-	0/0/0/0	0/0/0/0
86	OHX	l9	202	-	-	0/0/0/0	0/0/0/0
86	OHX	m0	302	-	-	0/0/0/0	0/0/0/0
86	OHX	m0	303	-	-	0/0/0/0	0/0/0/0
86	OHX	m1	202	-	-	0/0/0/0	0/0/0/0
86	OHX	m4	201	-	-	0/0/0/0	0/0/0/0
86	OHX	m5	303	-	-	0/0/0/0	0/0/0/0
86	OHX	m6	203	-	-	0/0/0/0	0/0/0/0
86	OHX	m7	206	-	-	0/0/0/0	0/0/0/0
86	OHX	m8	201	-	-	0/0/0/0	0/0/0/0
86	OHX	n3	203	-	-	0/0/0/0	0/0/0/0
86	OHX	n3	204	-	-	0/0/0/0	0/0/0/0
86	OHX	n6	203	-	-	0/0/0/0	0/0/0/0
86	OHX	n9	102	-	-	0/0/0/0	0/0/0/0
86	OHX	o2	201	-	-	0/0/0/0	0/0/0/0
86	OHX	o3	203	-	-	0/0/0/0	0/0/0/0
86	OHX	o7	502	-	-	0/0/0/0	0/0/0/0
86	OHX	o7	503	-	-	0/0/0/0	0/0/0/0
86	OHX	q2	502	-	-	0/0/0/0	0/0/0/0
86	OHX	s1	302	-	-	0/0/0/0	0/0/0/0
86	OHX	s1	303	-	-	0/0/0/0	0/0/0/0
86	OHX	s8	303	-	-	0/0/0/0	0/0/0/0
86	OHX	sR	401	-	-	0/0/0/0	0/0/0/0

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
88	1	4213	3J6	C11-C7	-2.55	1.49	1.56
88	1	4213	3J6	O2-C11	5.69	1.55	1.44

All (10) bond angle outliers are listed below:



Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
88	1	4213	3J6	C11-C7-C4	-4.58	103.63	106.64
88	5	4246	3J6	O1-C5-C6	-3.63	101.39	109.33
88	1	4213	3J6	O2-C11-C7	-3.00	113.91	118.08
88	1	4213	3J6	C12-O2-C11	-2.55	57.23	61.04
88	1	4213	3J6	O1-C5-C6	-2.54	103.77	109.33
88	1	4213	3J6	O-C6-C5	-2.31	115.78	120.17
88	5	4246	3J6	O3-C3-C2	2.24	109.28	105.86
88	1	4213	3J6	O2-C11-C10	2.36	120.38	115.66
88	1	4213	3J6	O3-C3-C4	3.01	116.13	112.33
88	1	4213	3J6	O2-C12-C11	4.80	64.68	59.23

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

504 monomers are involved in 781 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	1	3867	OHX	1	0
86	1	3869	OHX	1	0
86	1	3870	OHX	2	0
86	1	3871	OHX	1	0
86	1	3873	OHX	1	0
86	1	3876	OHX	1	0
86	1	3878	OHX	1	0
86	1	3880	OHX	1	0
86	1	3882	OHX	1	0
86	1	3885	OHX	1	0
86	1	3886	OHX	2	0
86	1	3887	OHX	1	0
86	1	3888	OHX	2	0
86	1	3891	OHX	1	0
86	1	3892	OHX	1	0
86	1	3894	OHX	1	0
86	1	3895	OHX	1	0
86	1	3896	OHX	1	0
86	1	3898	OHX	1	0
86	1	3901	OHX	2	0
86	1	3903	OHX	1	0
86	1	3907	OHX	1	0
86	1	3908	OHX	1	0
86	1	3910	OHX	1	0
86	1	3913	OHX	2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	1	3915	OHX	1	0
86	1	3921	OHX	1	0
86	1	3925	OHX	1	0
86	1	3926	OHX	1	0
86	1	3927	OHX	2	0
86	1	3928	OHX	2	0
86	1	3932	OHX	2	0
86	1	3934	OHX	3	0
86	1	3935	OHX	2	0
86	1	3940	OHX	1	0
86	1	3941	OHX	2	0
86	1	3942	OHX	1	0
86	1	3943	OHX	1	0
86	1	3944	OHX	1	0
86	1	3946	OHX	1	0
86	1	3948	OHX	1	0
86	1	3955	OHX	1	0
86	1	3958	OHX	1	0
86	1	3959	OHX	5	0
86	1	3961	OHX	4	0
86	1	3964	OHX	2	0
86	1	3965	OHX	1	0
86	1	3966	OHX	1	0
86	1	3967	OHX	1	0
86	1	3968	OHX	1	0
86	1	3971	OHX	1	0
86	1	3972	OHX	7	0
86	1	3973	OHX	1	0
86	1	3975	OHX	1	0
86	1	3977	OHX	1	0
86	1	3981	OHX	1	0
86	1	3982	OHX	1	0
86	1	3983	OHX	1	0
86	1	3984	OHX	1	0
86	1	3986	OHX	1	0
86	1	3987	OHX	1	0
86	1	3989	OHX	1	0
86	1	3993	OHX	1	0
86	1	3998	OHX	2	0
86	1	4000	OHX	1	0
86	1	4002	OHX	1	0
86	1	4004	OHX	6	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	1	4007	OHX	1	0
86	1	4009	OHX	1	0
86	1	4011	OHX	1	0
86	1	4014	OHX	2	0
86	1	4018	OHX	1	0
86	1	4022	OHX	1	0
86	1	4028	OHX	2	0
86	1	4030	OHX	1	0
86	1	4032	OHX	6	0
86	1	4033	OHX	1	0
86	1	4034	OHX	1	0
86	1	4038	OHX	1	0
86	1	4039	OHX	2	0
86	1	4040	OHX	1	0
86	1	4043	OHX	1	0
86	1	4044	OHX	3	0
86	1	4045	OHX	6	0
86	1	4046	OHX	1	0
86	1	4048	OHX	2	0
86	1	4049	OHX	1	0
86	1	4056	OHX	5	0
86	1	4057	OHX	4	0
86	1	4058	OHX	2	0
86	1	4059	OHX	1	0
86	1	4063	OHX	1	0
86	1	4064	OHX	1	0
86	1	4066	OHX	1	0
86	1	4067	OHX	1	0
86	1	4075	OHX	1	0
86	1	4076	OHX	1	0
86	1	4077	OHX	1	0
86	1	4082	OHX	1	0
86	1	4085	OHX	1	0
86	1	4087	OHX	1	0
86	1	4088	OHX	1	0
86	1	4095	OHX	1	0
86	1	4096	OHX	1	0
86	1	4098	OHX	2	0
86	1	4099	OHX	1	0
86	1	4107	OHX	1	0
86	1	4109	OHX	1	0
86	1	4118	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	1	4122	OHX	2	0
86	1	4125	OHX	1	0
86	1	4128	OHX	2	0
86	1	4132	OHX	4	0
86	1	4133	OHX	1	0
86	1	4135	OHX	1	0
86	1	4139	OHX	3	0
86	1	4140	OHX	4	0
86	1	4141	OHX	1	0
86	1	4142	OHX	1	0
86	1	4143	OHX	2	0
86	1	4144	OHX	1	0
86	1	4146	OHX	1	0
86	1	4147	OHX	1	0
86	1	4150	OHX	2	0
86	1	4152	OHX	1	0
86	1	4156	OHX	7	0
86	1	4158	OHX	1	0
86	1	4159	OHX	1	0
86	1	4160	OHX	1	0
86	1	4163	OHX	4	0
86	1	4164	OHX	2	0
86	1	4165	OHX	1	0
86	1	4167	OHX	1	0
86	1	4168	OHX	3	0
86	1	4169	OHX	1	0
86	1	4172	OHX	7	0
86	1	4177	OHX	1	0
86	1	4179	OHX	1	0
86	1	4180	OHX	5	0
86	1	4182	OHX	1	0
86	1	4188	OHX	1	0
86	1	4192	OHX	1	0
86	1	4193	OHX	1	0
86	1	4194	OHX	1	0
86	1	4195	OHX	1	0
86	1	4197	OHX	8	0
86	1	4198	OHX	1	0
86	1	4202	OHX	2	0
86	1	4203	OHX	1	0
86	1	4205	OHX	1	0
86	1	4207	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
88	1	4213	3J6	3	0
86	2	2023	OHX	1	0
86	2	2026	OHX	3	0
86	2	2029	OHX	2	0
86	2	2031	OHX	8	0
86	2	2032	OHX	2	0
86	2	2034	OHX	1	0
86	2	2035	OHX	1	0
86	2	2036	OHX	3	0
86	2	2038	OHX	1	0
86	2	2039	OHX	2	0
86	2	2041	OHX	1	0
86	2	2042	OHX	1	0
86	2	2044	OHX	6	0
86	2	2045	OHX	1	0
86	2	2047	OHX	2	0
86	2	2048	OHX	1	0
86	2	2049	OHX	1	0
86	2	2051	OHX	1	0
86	2	2054	OHX	1	0
86	2	2055	OHX	1	0
86	2	2058	OHX	1	0
86	2	2064	OHX	1	0
86	2	2067	OHX	1	0
86	2	2070	OHX	3	0
86	2	2071	OHX	2	0
86	2	2072	OHX	2	0
86	2	2074	OHX	1	0
86	2	2076	OHX	2	0
86	2	2077	OHX	2	0
86	2	2078	OHX	2	0
86	2	2082	OHX	1	0
86	2	2083	OHX	1	0
86	2	2085	OHX	1	0
86	2	2086	OHX	1	0
86	2	2089	OHX	1	0
86	2	2090	OHX	4	0
86	2	2092	OHX	1	0
86	2	2093	OHX	1	0
86	2	2095	OHX	1	0
86	2	2097	OHX	1	0
86	2	2099	OHX	7	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	2	2101	OHX	1	0
86	2	2104	OHX	1	0
86	2	2105	OHX	1	0
86	2	2106	OHX	1	0
86	2	2108	OHX	1	0
86	2	2110	OHX	2	0
86	2	2111	OHX	3	0
86	2	2113	OHX	1	0
86	2	2117	OHX	1	0
86	2	2121	OHX	2	0
86	2	2123	OHX	1	0
86	2	2127	OHX	1	0
86	2	2130	OHX	1	0
86	2	2131	OHX	6	0
86	2	2132	OHX	1	0
86	2	2136	OHX	1	0
86	2	2138	OHX	1	0
86	2	2140	OHX	1	0
86	2	2143	OHX	2	0
86	2	2144	OHX	2	0
86	2	2145	OHX	1	0
86	2	2146	OHX	6	0
86	2	2147	OHX	1	0
86	2	2148	OHX	2	0
86	2	2154	OHX	3	0
86	2	2155	OHX	1	0
86	2	2156	OHX	1	0
86	2	2157	OHX	3	0
86	2	2159	OHX	1	0
86	2	2160	OHX	1	0
86	2	2165	OHX	1	0
86	2	2166	OHX	1	0
86	2	2168	OHX	1	0
86	2	2169	OHX	1	0
86	3	218	OHX	2	0
86	3	221	OHX	2	0
86	3	226	OHX	1	0
86	4	223	OHX	1	0
86	4	225	OHX	1	0
86	4	226	OHX	1	0
86	4	228	OHX	2	0
86	4	229	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	4	230	OHX	1	0
86	4	232	OHX	2	0
86	4	234	OHX	1	0
86	5	3893	OHX	2	0
86	5	3896	OHX	1	0
86	5	3898	OHX	1	0
86	5	3900	OHX	2	0
86	5	3902	OHX	2	0
86	5	3904	OHX	1	0
86	5	3906	OHX	2	0
86	5	3909	OHX	1	0
86	5	3910	OHX	3	0
86	5	3911	OHX	1	0
86	5	3913	OHX	2	0
86	5	3914	OHX	1	0
86	5	3915	OHX	1	0
86	5	3916	OHX	1	0
86	5	3918	OHX	1	0
86	5	3924	OHX	1	0
86	5	3926	OHX	1	0
86	5	3927	OHX	1	0
86	5	3928	OHX	1	0
86	5	3931	OHX	1	0
86	5	3933	OHX	2	0
86	5	3935	OHX	1	0
86	5	3936	OHX	7	0
86	5	3939	OHX	2	0
86	5	3942	OHX	1	0
86	5	3947	OHX	1	0
86	5	3949	OHX	2	0
86	5	3950	OHX	3	0
86	5	3951	OHX	1	0
86	5	3952	OHX	2	0
86	5	3953	OHX	1	0
86	5	3955	OHX	5	0
86	5	3958	OHX	1	0
86	5	3959	OHX	1	0
86	5	3966	OHX	5	0
86	5	3967	OHX	1	0
86	5	3969	OHX	2	0
86	5	3971	OHX	8	0
86	5	3975	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	5	3976	OHX	2	0
86	5	3979	OHX	1	0
86	5	3980	OHX	1	0
86	5	3984	OHX	3	0
86	5	3988	OHX	1	0
86	5	3989	OHX	1	0
86	5	3993	OHX	1	0
86	5	3995	OHX	4	0
86	5	3996	OHX	6	0
86	5	3997	OHX	1	0
86	5	4000	OHX	1	0
86	5	4001	OHX	1	0
86	5	4003	OHX	1	0
86	5	4005	OHX	6	0
86	5	4007	OHX	2	0
86	5	4008	OHX	1	0
86	5	4009	OHX	1	0
86	5	4010	OHX	1	0
86	5	4012	OHX	1	0
86	5	4013	OHX	1	0
86	5	4015	OHX	7	0
86	5	4018	OHX	2	0
86	5	4019	OHX	2	0
86	5	4021	OHX	1	0
86	5	4022	OHX	1	0
86	5	4023	OHX	1	0
86	5	4026	OHX	1	0
86	5	4030	OHX	1	0
86	5	4033	OHX	1	0
86	5	4034	OHX	1	0
86	5	4040	OHX	1	0
86	5	4041	OHX	1	0
86	5	4044	OHX	1	0
86	5	4045	OHX	1	0
86	5	4046	OHX	1	0
86	5	4047	OHX	1	0
86	5	4049	OHX	1	0
86	5	4060	OHX	8	0
86	5	4066	OHX	1	0
86	5	4068	OHX	1	0
86	5	4069	OHX	1	0
86	5	4073	OHX	1	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	5	4082	OHX	2	0
86	5	4083	OHX	1	0
86	5	4084	OHX	5	0
86	5	4085	OHX	2	0
86	5	4087	OHX	2	0
86	5	4090	OHX	1	0
86	5	4091	OHX	1	0
86	5	4093	OHX	1	0
86	5	4096	OHX	4	0
86	5	4099	OHX	2	0
86	5	4101	OHX	2	0
86	5	4103	OHX	1	0
86	5	4104	OHX	1	0
86	5	4105	OHX	2	0
86	5	4108	OHX	1	0
86	5	4113	OHX	1	0
86	5	4114	OHX	2	0
86	5	4115	OHX	1	0
86	5	4123	OHX	1	0
86	5	4124	OHX	1	0
86	5	4125	OHX	1	0
86	5	4127	OHX	1	0
86	5	4128	OHX	1	0
86	5	4131	OHX	1	0
86	5	4132	OHX	1	0
86	5	4134	OHX	1	0
86	5	4136	OHX	1	0
86	5	4137	OHX	6	0
86	5	4138	OHX	2	0
86	5	4140	OHX	1	0
86	5	4141	OHX	1	0
86	5	4147	OHX	1	0
86	5	4148	OHX	1	0
86	5	4151	OHX	1	0
86	5	4153	OHX	2	0
86	5	4154	OHX	1	0
86	5	4155	OHX	1	0
86	5	4156	OHX	1	0
86	5	4162	OHX	1	0
86	5	4167	OHX	1	0
86	5	4168	OHX	1	0
86	5	4171	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	5	4172	OHX	1	0
86	5	4173	OHX	1	0
86	5	4175	OHX	1	0
86	5	4176	OHX	1	0
86	5	4177	OHX	1	0
86	5	4179	OHX	1	0
86	5	4180	OHX	2	0
86	5	4184	OHX	3	0
86	5	4185	OHX	1	0
86	5	4186	OHX	3	0
86	5	4187	OHX	2	0
86	5	4188	OHX	2	0
86	5	4190	OHX	1	0
86	5	4192	OHX	3	0
86	5	4193	OHX	11	0
86	5	4194	OHX	2	0
86	5	4195	OHX	7	0
86	5	4196	OHX	1	0
86	5	4205	OHX	1	0
86	5	4208	OHX	2	0
86	5	4211	OHX	7	0
86	5	4213	OHX	1	0
86	5	4215	OHX	1	0
86	5	4218	OHX	3	0
86	5	4220	OHX	1	0
86	5	4222	OHX	1	0
86	5	4228	OHX	7	0
86	5	4231	OHX	1	0
86	5	4233	OHX	1	0
86	5	4236	OHX	5	0
86	5	4237	OHX	1	0
86	5	4242	OHX	2	0
86	5	4244	OHX	1	0
88	5	4246	3J6	7	0
86	6	2048	OHX	1	0
86	6	2050	OHX	2	0
86	6	2053	OHX	1	0
86	6	2054	OHX	1	0
86	6	2057	OHX	1	0
86	6	2058	OHX	6	0
86	6	2060	OHX	2	0
86	6	2061	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	6	2064	OHX	1	0
86	6	2067	OHX	1	0
86	6	2068	OHX	1	0
86	6	2069	OHX	1	0
86	6	2070	OHX	2	0
86	6	2073	OHX	1	0
86	6	2074	OHX	1	0
86	6	2076	OHX	1	0
86	6	2078	OHX	1	0
86	6	2081	OHX	1	0
86	6	2082	OHX	1	0
86	6	2091	OHX	1	0
86	6	2092	OHX	1	0
86	6	2094	OHX	1	0
86	6	2095	OHX	2	0
86	6	2096	OHX	1	0
86	6	2097	OHX	1	0
86	6	2099	OHX	3	0
86	6	2101	OHX	1	0
86	6	2102	OHX	1	0
86	6	2103	OHX	2	0
86	6	2104	OHX	1	0
86	6	2106	OHX	2	0
86	6	2108	OHX	1	0
86	6	2110	OHX	1	0
86	6	2111	OHX	1	0
86	6	2113	OHX	2	0
86	6	2117	OHX	1	0
86	6	2118	OHX	8	0
86	6	2119	OHX	1	0
86	6	2120	OHX	1	0
86	6	2121	OHX	2	0
86	6	2124	OHX	5	0
86	6	2128	OHX	3	0
86	6	2132	OHX	1	0
86	6	2134	OHX	1	0
86	6	2135	OHX	1	0
86	6	2136	OHX	1	0
86	6	2138	OHX	1	0
86	6	2141	OHX	2	0
86	6	2142	OHX	1	0
86	6	2144	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	6	2145	OHX	7	0
86	6	2147	OHX	1	0
86	6	2148	OHX	2	0
86	6	2149	OHX	1	0
86	6	2152	OHX	2	0
86	6	2153	OHX	1	0
86	6	2157	OHX	2	0
86	6	2158	OHX	1	0
86	6	2160	OHX	2	0
86	6	2166	OHX	1	0
86	6	2170	OHX	7	0
86	6	2174	OHX	1	0
86	6	2175	OHX	2	0
86	6	2177	OHX	2	0
86	6	2178	OHX	1	0
86	6	2179	OHX	1	0
86	6	2180	OHX	1	0
86	6	2182	OHX	4	0
86	6	2183	OHX	1	0
86	6	2184	OHX	2	0
86	6	2186	OHX	2	0
86	6	2187	OHX	1	0
86	6	2188	OHX	2	0
86	6	2189	OHX	4	0
86	6	2190	OHX	3	0
86	6	2191	OHX	1	0
86	6	2192	OHX	1	0
86	6	2194	OHX	1	0
86	6	2198	OHX	1	0
86	6	2202	OHX	1	0
86	6	2204	OHX	1	0
86	7	220	OHX	1	0
86	7	221	OHX	1	0
86	7	226	OHX	2	0
86	7	227	OHX	1	0
86	8	216	OHX	1	0
86	8	217	OHX	2	0
86	8	218	OHX	7	0
86	8	219	OHX	1	0
86	8	221	OHX	1	0
86	8	224	OHX	1	0
86	8	225	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	8	226	OHX	6	0
86	8	227	OHX	1	0
86	8	230	OHX	1	0
86	C5	201	OHX	2	0
86	D3	202	OHX	1	0
86	L3	404	OHX	3	0
86	L4	403	OHX	1	0
86	M7	206	OHX	1	0
86	M9	203	OHX	1	0
86	O1	201	OHX	8	0
86	O3	202	OHX	1	0
86	O6	201	OHX	1	0
86	O7	103	OHX	3	0
86	O9	101	OHX	1	0
86	Q2	502	OHX	5	0
86	S6	301	OHX	1	1
86	S8	302	OHX	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 [i](#)

### 6.1 Protein, DNA and RNA chains [i](#)

EDS failed to run properly - this section will therefore be empty.

### 6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

EDS failed to run properly - this section will therefore be empty.

### 6.3 Carbohydrates [i](#)

EDS failed to run properly - this section will therefore be empty.

### 6.4 Ligands [i](#)

EDS failed to run properly - this section will therefore be empty.

### 6.5 Other polymers [i](#)

EDS failed to run properly - this section will therefore be empty.