



# Full wwPDB X-ray Structure Validation Report ⓘ

Feb 1, 2016 – 09:57 PM GMT

PDB ID : 4U4Q  
Title : Crystal structure of Homoharringtonine bound to the yeast 80S ribosome  
Authors : Garreau de Loubresse, N.; Prokhorova, I.; Yusupova, G.; Yusupov, M.  
Deposited on : 2014-07-24  
Resolution : 3.00 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

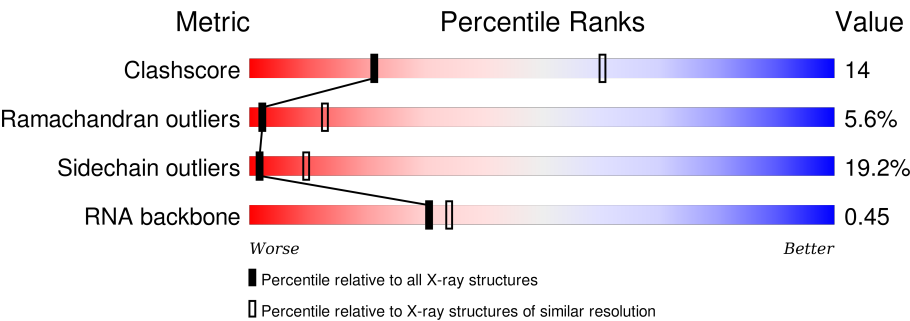
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.00 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	1912 (3.00-3.00)
Ramachandran outliers	100387	1853 (3.00-3.00)
Sidechain outliers	100360	1856 (3.00-3.00)
RNA backbone	2183	1036 (3.40-2.60)

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></div><div><div>35%</div><div>42%</div><div>16%</div><div>•</div><div>•</div></div></div>
1	6	1800	<div><div></div><div><div>37%</div><div>41%</div><div>18%</div><div>•</div></div></div>
2	S0	251	<div><div></div><div><div>23%</div><div>43%</div><div>14%</div><div>•</div><div>18%</div></div></div>
2	s0	251	<div><div></div><div><div>61%</div><div>20%</div><div>•</div><div>18%</div></div></div>
3	S1	254	<div><div></div><div><div>18%</div><div>47%</div><div>19%</div><div>•</div><div>16%</div></div></div>
3	s1	254	<div><div></div><div><div>65%</div><div>19%</div><div>•</div><div>15%</div></div></div>


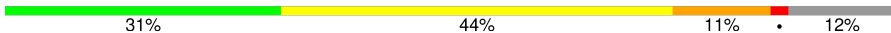



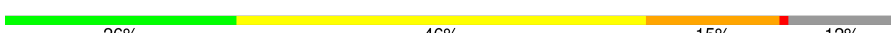





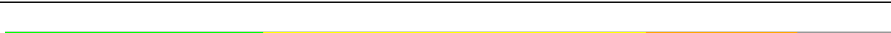












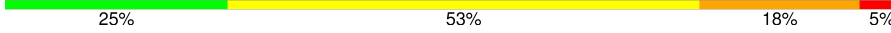
Continued on next page...

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...



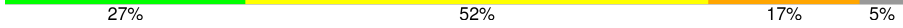

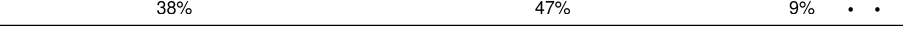
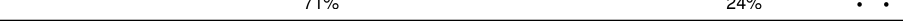

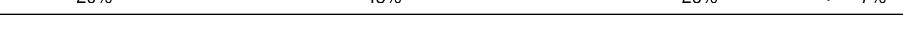
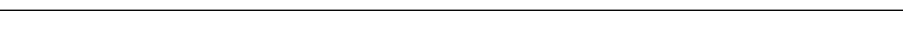
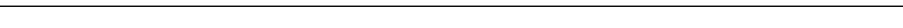




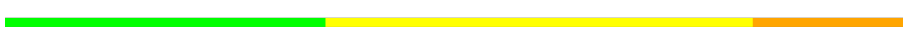
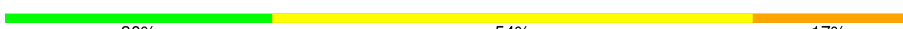


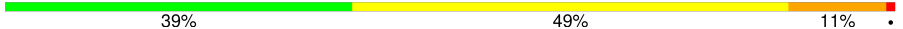






Continued from previous page...

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...



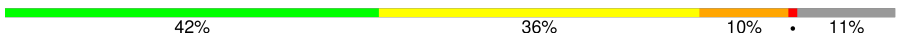



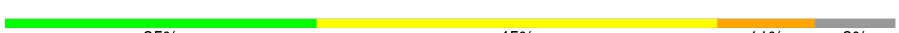




















Continued from previous page...

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	




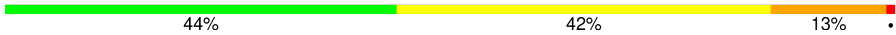

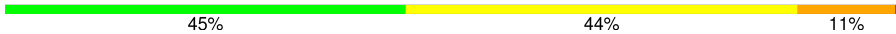

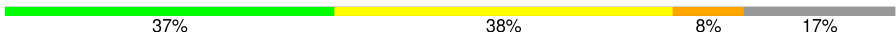



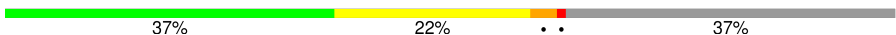

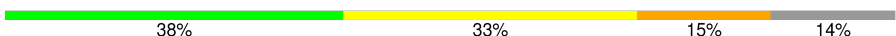











Continued on next page...

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	







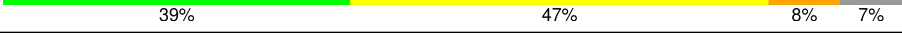

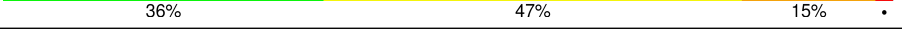

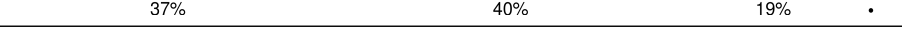
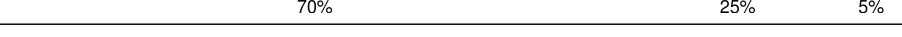

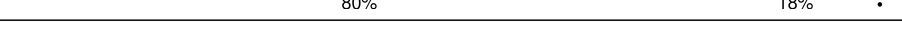


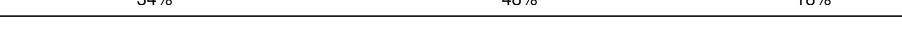

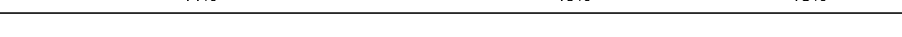




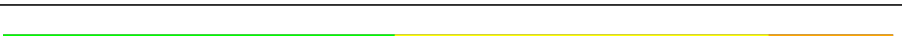

Continued on next page...

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	




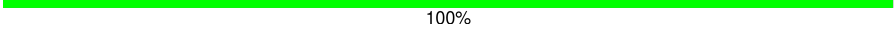
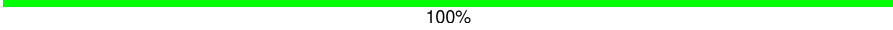
Continued on next page...

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	120	
70	o4	120	
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	
80	e0	62	
81	m2	160	
82	p0	311	
83	p1	47	
84	p2	46	

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	3940	-	-	X	-
86	OHX	1	3960	-	-	X	-
86	OHX	1	3962	-	-	X	-
86	OHX	1	3974	-	-	X	-
86	OHX	1	4007	-	-	X	-
86	OHX	1	4036	-	-	X	-
86	OHX	1	4041	-	-	X	-
86	OHX	1	4048	-	-	X	-
86	OHX	1	4059	-	-	X	-
86	OHX	1	4060	-	-	X	-
86	OHX	1	4088	-	-	X	-
86	OHX	1	4144	-	-	X	-
86	OHX	1	4158	-	-	X	-
86	OHX	1	4160	-	-	X	-
86	OHX	1	4167	-	-	X	-
86	OHX	1	4170	-	-	X	-
86	OHX	1	4176	-	-	X	-
86	OHX	1	4185	-	-	X	-
86	OHX	1	4201	-	-	X	-
86	OHX	2	2030	-	-	X	-
86	OHX	2	2043	-	-	X	-
86	OHX	2	2089	-	-	X	-
86	OHX	2	2098	-	-	X	-
86	OHX	2	2110	-	-	X	-
86	OHX	2	2131	-	-	X	-
86	OHX	2	2146	-	-	X	-
86	OHX	5	3945	-	-	X	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
86	OHX	5	3965	-	-	X	-
86	OHX	5	3976	-	-	X	-
86	OHX	5	3981	-	-	X	-
86	OHX	5	4003	-	-	X	-
86	OHX	5	4004	-	-	X	-
86	OHX	5	4013	-	-	X	-
86	OHX	5	4022	-	-	X	-
86	OHX	5	4057	-	-	X	-
86	OHX	5	4068	-	-	X	-
86	OHX	5	4091	-	-	X	-
86	OHX	5	4145	-	-	X	-
86	OHX	5	4192	-	-	X	-
86	OHX	5	4194	-	-	X	-
86	OHX	5	4201	-	-	X	-
86	OHX	5	4202	-	-	X	-
86	OHX	5	4203	-	-	X	-
86	OHX	5	4206	-	-	X	-
86	OHX	5	4219	-	-	X	-
86	OHX	5	4226	-	-	X	-
86	OHX	5	4236	-	-	X	-
86	OHX	5	4245	-	-	X	-
86	OHX	6	2062	-	-	X	-
86	OHX	6	2122	-	-	X	-
86	OHX	6	2127	-	-	X	-
86	OHX	6	2149	-	-	X	-
86	OHX	6	2152	-	-	X	-
86	OHX	6	2173	-	-	X	-
86	OHX	7	219	-	-	X	-
86	OHX	7	227	-	-	X	-
86	OHX	8	218	-	-	X	-
86	OHX	8	225	-	-	X	-
86	OHX	8	226	-	-	X	-
86	OHX	C5	201	-	-	X	-
86	OHX	O7	104	-	-	X	-
86	OHX	Q2	502	-	-	X	-
87	ZN	Q2	501	-	-	X	-

## 2 Entry composition

There are 88 unique types of molecules in this entry. The entry contains 411245 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			
			1111	711	204	196	0	0	0

- 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		
			926	577	177	170	2	0	0
19	c7	117	Total	C	N	O	S		
			906	563	174	167	2	0	0

- 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		
			1192	743	237	210	2	0	0
20	c8	145	Total	C	N	O	S		
			1192	743	237	210	2	0	0

- 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		
			1112	694	208	208	2	0	0
21	c9	143	Total	C	N	O	S		
			1112	694	208	208	2	0	0

- 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		
			855	539	156	159	1	0	0
22	d0	110	Total	C	N	O	S		
			882	554	161	166	1	0	0

- 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		
			684	420	125	137	2	0	0
23	d1	87	Total	C	N	O	S		
			684	420	125	137	2	0	0

- 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	0	0	0
			1420	882	281	257			
53	m7	155	Total	C	N	O	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	0	0	0
			1521	935	326	260			
55	m9	188	Total	C	N	O	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			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
O4	121	LYS	-	expression tag	UNP P87262
o4	121	LYS	-	expression tag	UNP P87262

- 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			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
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			
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 chain 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 chain 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 chain 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	4	Total	Mg	0	0
			4	4		
85	m6	2	Total	Mg	0	0
			2	2		
85	n8	5	Total	Mg	0	0
			5	5		
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	O4	1	Total	Mg	0	0
			1	1		
85	q1	1	Total	Mg	0	0
			1	1		
85	l3	3	Total	Mg	0	0
			3	3		
85	M1	2	Total	Mg	0	0
			2	2		
85	n0	2	Total	Mg	0	0
			2	2		
85	d6	1	Total	Mg	0	0
			1	1		
85	C8	1	Total	Mg	0	0
			1	1		
85	O3	1	Total	Mg	0	0
			1	1		
85	S6	1	Total	Mg	0	0
			1	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	L4	1	Total 1	Mg 1	0	0
85	l7	3	Total 3	Mg 3	0	0
85	M5	2	Total 2	Mg 2	0	0
85	c9	2	Total 2	Mg 2	0	0
85	S2	2	Total 2	Mg 2	0	0
85	L8	1	Total 1	Mg 1	0	0
85	D3	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	o4	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	500	Total 500	Mg 500	0	0
85	L5	1	Total 1	Mg 1	0	0
85	O7	2	Total 2	Mg 2	0	0
85	s6	1	Total 1	Mg 1	0	0
85	l4	1	Total 1	Mg 1	0	0
85	1	466	Total 466	Mg 466	0	0
85	s4	1	Total 1	Mg 1	0	0
85	d3	2	Total 2	Mg 2	0	0
85	S8	1	Total 1	Mg 1	0	0

*Continued on next page...*



*Continued from previous page...*

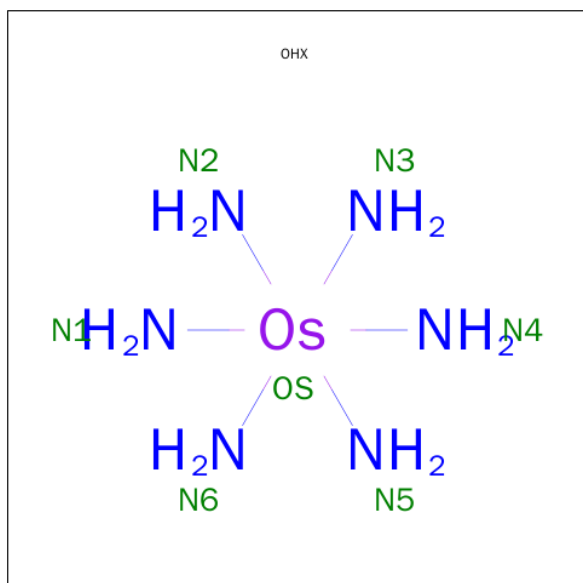
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	m1	2	Total 2	Mg 2	0	0
85	O2	1	Total 1	Mg 1	0	0
85	s9	1	Total 1	Mg 1	0	0
85	o3	2	Total 2	Mg 2	0	0
85	M3	3	Total 3	Mg 3	0	0
85	N3	2	Total 2	Mg 2	0	0
85	N8	6	Total 6	Mg 6	0	0
85	4	23	Total 23	Mg 23	0	0
85	n6	2	Total 2	Mg 2	0	0
85	S4	2	Total 2	Mg 2	0	0
85	L2	2	Total 2	Mg 2	0	0
85	o7	1	Total 1	Mg 1	0	0
85	l5	1	Total 1	Mg 1	0	0
85	m7	5	Total 5	Mg 5	0	0
85	M7	5	Total 5	Mg 5	0	0
85	L6	1	Total 1	Mg 1	0	0
85	s1	1	Total 1	Mg 1	0	0
85	l9	1	Total 1	Mg 1	0	0
85	O1	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

*Continued on next page...*

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	7	16	Total	Mg	0	0
			16	16		
85	n3	2	Total	Mg	0	0
			2	2		
85	L3	3	Total	Mg	0	0
			3	3		
85	2	121	Total	Mg	0	0
			121	121		
85	12	2	Total	Mg	0	0
			2	2		
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	1	Total	Mg	0	0
			1	1		
85	3	13	Total	Mg	0	0
			13	13		

- 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		

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		
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	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	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		

*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	1	1	Total	N	Os	0	0
			7	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	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		

*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	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		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	M7	1	Total	N	Os	0	0
			7	6	1		
86	M8	1	Total	N	Os	0	0
			7	6	1		
86	M9	1	Total	N	Os	0	0
			7	6	1		
86	N1	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	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		

*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	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	s1	1	Total	N	Os	0	0
			7	6	1		
86	s4	1	Total	N	Os	0	0
			7	6	1		
86	s8	1	Total	N	Os	0	0
			7	6	1		
86	s9	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	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		

*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		
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		
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	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	7	1	Total	N	Os	0	0
			7	6	1		
86	7	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	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	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		

*Continued on next page...*

*Continued from previous page...*

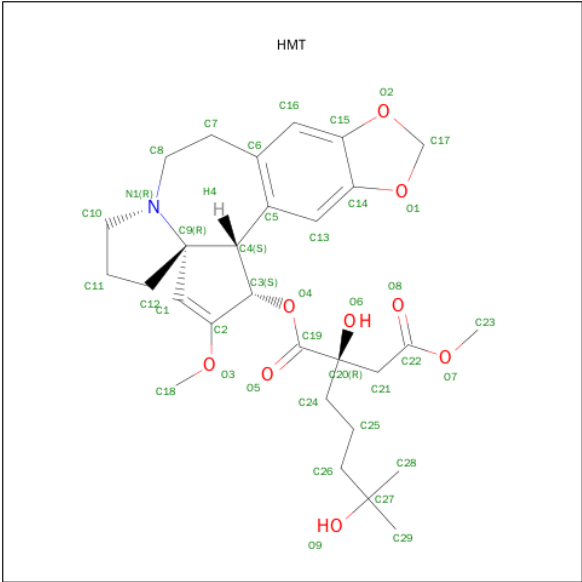
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
86	l5	1	Total	N	Os	0	0
			7	6	1		
86	l5	1	Total	N	Os	0	0
			7	6	1		
86	l9	1	Total	N	Os	0	0
			7	6	1		
86	m0	1	Total	N	Os	0	0
			7	6	1		
86	m0	1	Total	N	Os	0	0
			7	6	1		
86	m1	1	Total	N	Os	0	0
			7	6	1		
86	m4	1	Total	N	Os	0	0
			7	6	1		
86	m5	1	Total	N	Os	0	0
			7	6	1		
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	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	o9	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 1 1	0	0
87	D6	1	Total Zn 1 1	0	0
87	Q2	1	Total Zn 1 1	0	0
87	e1	1	Total Zn 1 1	0	0
87	Q3	1	Total Zn 1 1	0	0
87	D9	1	Total Zn 1 1	0	0
87	E1	1	Total Zn 1 1	0	0
87	Q0	1	Total Zn 1 1	0	0
87	d7	1	Total Zn 1 1	0	0
87	q3	1	Total Zn 1 1	0	0
87	d9	1	Total Zn 1 1	0	0
87	D7	1	Total Zn 1 1	0	0
87	d6	1	Total Zn 1 1	0	0
87	o7	1	Total Zn 1 1	0	0
87	O7	1	Total Zn 1 1	0	0
87	q2	1	Total Zn 1 1	0	0

- Molecule 88 is (3beta)-O 3 -[(2R)-2,6-dihydroxy-2-(2-methoxy-2-oxoethyl)-6-methylheptano  
yl]cephalotaxine (three-letter code: HMT) (formula: C<sub>29</sub>H<sub>39</sub>NO<sub>9</sub>).



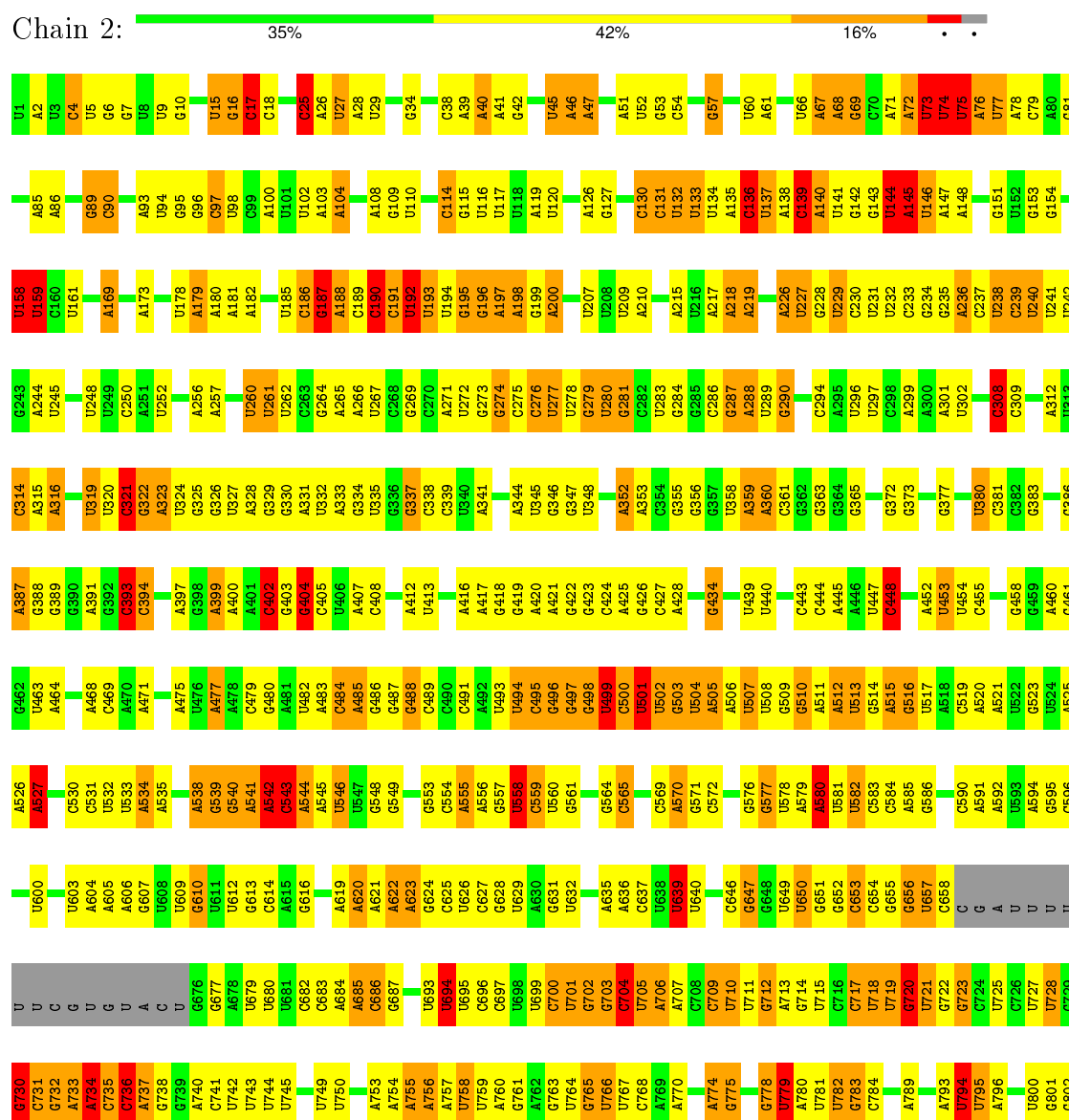
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
88	1	1	Total	C	N	O	0	0
			39	29	1	9		
88	5	1	Total	C	N	O	0	0
			39	29	1	9		

### 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.

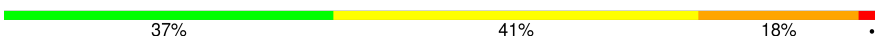
Note EDS failed to run properly.

#### • Molecule 1: 18S ribosomal RNA



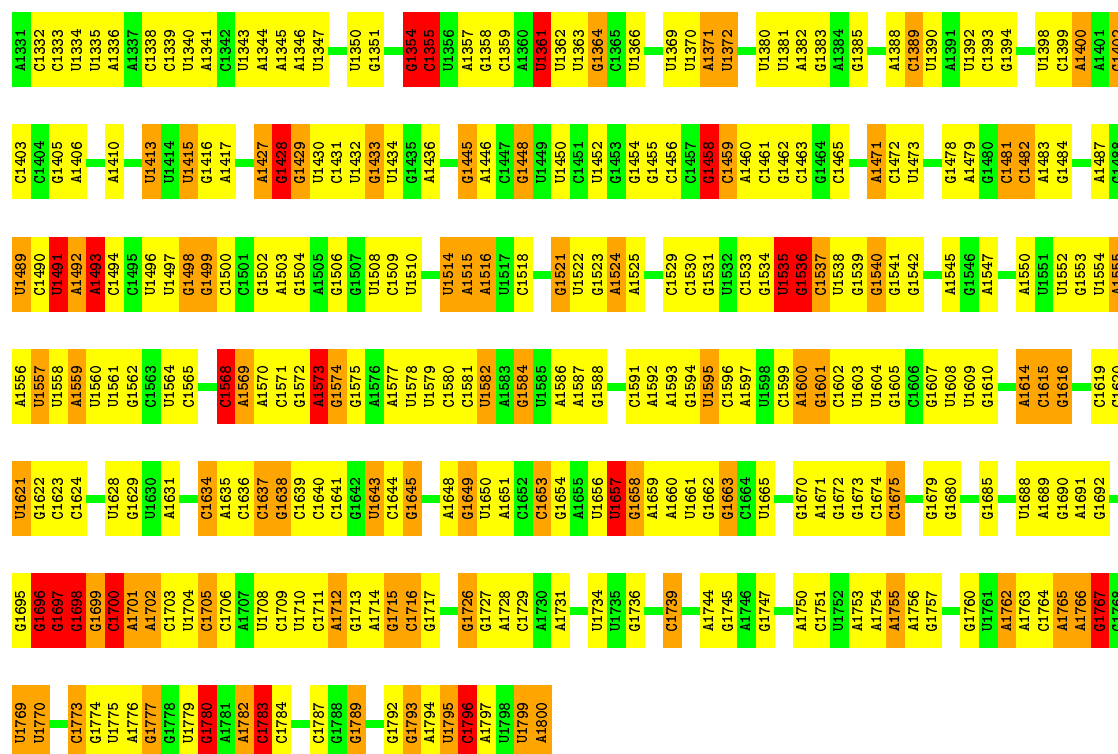
U1741	G1663	A1592	G1523	A1460	U1381	G1316	G1237	C1173	C1105	A1030	A941	A869	A803
G1745	C1664	A1593	A1524	C1461	A1382	C1317	A1238	C1174	C1106	U1031	G942	G872	U808
A1746	U1665	G1594	A1525	C1462	A1383	A1318	U1239	U1175	G1107	C1032	C943	U873	A809
G1747	G1670	U1595	U1528	G1463	G1384	A1319	U1240	G1176	U1108	C1033	G944	G876	G810
G1748	A1671	A1596	C1529	G1464	U1320	A1321	G1241	G1177	G1109	G1034	A944	A877	A811
A1749	G1672	U1598	C1530	G1465	A1322	A1322	A1244	G1178	G1110	A1039	A951	A881	A812
A1750	G1673	C1599	U1531	G1466	C1323	C1323	G1245	G1179	G1111	A1039	A952	U882	U813
G1751	G1680	A1600	U1532	A1469	C1324	A1325	G1246	C1180	G1112	A1040	A958	U883	A814
U1752	A1681	C1601	G1533	C1470	A1326	A1326	U1247	U1181	G1113	G1041	U958	C883	G815
A1753	U1682	G1602	G1534	A1471	C1327	A1327	G1248	A1182	G1114	G1042	U959	A884	G816
A1754	U1683	U1603	U1535	C1472	G1328	C1328	U1249	A1183	G1115	G1043	U960	G885	A817
A1755	U1684	G1604	G1536	U1473	C1329	A1329	U1250	A1184	G1116	G1044	U961	U886	C818
A1756	U1685	G1605	C1537	G1474	A1330	A1330	U1251	U1185	G1117	G1045	A966	A887	G819
C1759	C	C1606	U1538	A1475	C1331	A1331	C1252	U1186	G1118	G1046	A967	U888	U820
U1760	U	G1607	U1539	C1476	A1332	A1332	G1253	U1187	U1120	G1047	A971	U889	U821
U1761	U	U1608	G1540	A1476	C1333	A1333	G1254	U1188	U1121	G1048	A972	C890	U822
A1762	A	G1610	G1541	A1479	C1334	A1334	G1255	U1189	A1125	U1052	A978	A891	G823
A1765	G	A1611	G1542	U1479	U1335	A1335	U1256	U1191	A1126	G1053	A979	A892	G824
A1766	A	A1612	A1547	C1481	U1336	A1336	U1257	A1194	C1128	U1056	A987	U893	U825
G1767	G	A1613	A1550	G1482	A1337	A1337	U1258	A1195	C1129	U1057	G987	U894	U826
G1768	A	G1614	A1551	A1483	A1338	A1338	U1266	A1196	G1130	U1058	A988	G895	C827
U1769	G	G1615	U1552	G1484	A1339	A1339	G1267	C1197	A1131	U1059	U989	U896	U828
U1770	G	U1553	G1552	C1485	U1432	C1339	G1268	G1198	A1132	U1060	C897	A897	A829
C1773	G	U1554	U1553	A1487	U1433	U1340	G1271	G1199	C1133	A1061	A898	G899	U830
U1774	G	U1555	U1554	G1488	U1434	A1344	G1272	G1201	U1135	A1062	A993	A900	U832
U1775	G	A1556	U1555	U1489	U1415	A1345	G1273	A1202	A1138	U1063	G994	G901	U833
A1776	C	U1557	U1556	C1490	G1416	A1346	C1274	A1203	G1140	G1066	A995	G902	G834
G1777	A	U1558	A1558	U1491	A1424	U1347	G1277	U1206	G1141	C1067	A996	A905	U839
C1778	C	A1559	A1559	A1492	A1425	A1348	G1278	C1207	G1142	C1068	C1000	A906	U840
U1779	C	U1560	U1560	A1493	A1426	A1349	G1279	A1208	A1143	U1069	A1001	C910	U841
A1780	U	U1561	U1561	C1494	A1427	U1350	C1279	A1209	A1144	U1070	U911	U912	C842
A1781	C	U1562	U1562	U1495	G1428	U1351	G1280	C1210	A1145	U1071	A1002	U913	U843
A1782	C	U1563	U1563	U1496	U1430	U1352	G1281	A1211	U1146	U1072	A1003	G913	A844
A1783	U	U1564	U1564	U1497	U1431	G1354	U1282	U1214	A1147	U1073	A1004	G914	G845
C1784	C	C1565	U1565	G1498	U1432	C1355	U1283	C1215	A1148	C1074	A1005	A915	G846
U1785	C	U1566	U1566	G1499	U1433	U1356	U1284	C1216	U1079	U1075	C1006	A916	A847
U1786	C	U1567	U1567	C1501	U1434	A1357	U1285	C1217	U1080	U1076	U1009	U917	C848
U1787	C	U1568	U1568	C1502	A1435	C1358	U1286	A1218	A1081	U1081	C1010	U918	C849
U1788	A	A1569	U1569	A1503	A1436	C1359	U1290	A1219	A1082	U1082	G1011	A919	A850
G1792	G	A1570	A1570	U1504	U1437	A1360	G1291	A1220	A1083	U1083	U1012	U920	U851
G1793	A	C1571	U1571	A1505	G1438	U1361	G1292	A1221	A1084	U1084	A1013	U921	C852
A1794	G	U1572	U1572	G1506	U1439	U1362	U1293	A1222	G1085	U1085	G1014	A924	G853
U1795	C	U1573	U1573	U1507	A1446	U1363	G1294	C1223	A1086	U1086	A925	A926	A855
A1796	C	U1574	U1574	U1508	C1447	C1364	G1295	A1224	A1087	U1087	A927	A928	A856
A1797	G	G1575	G1575	U1509	G1448	U1365	G1297	A1225	A1088	U1088	C927	U927	U857
U1798	U	A1576	A1576	U1510	U1449	U1366	U1298	U1226	C1161	U1089	A1019	U928	G858
A	A	U1577	U1577	U1511	U1450	U1367	A1300	A1227	C1162	A1091	A1020	A929	A859
G1717	C	U1578	U1578	G1512	U1451	U1368	U1301	A1228	A1163	A1092	A1021	A930	U860
G1718	C	U1579	U1579	G1513	U1452	U1369	U1302	G1229	G1164	A1093	C1022	A931	U861
A1719	G	U1580	U1580	U1514	U1453	U1370	U1303	A1230	A1165	C1096	A1023	U932	A862
G1720	C	U1581	U1581	U1515	G1454	A1371	U1304	A1231	A1166	U1097	U1024	A933	A863
A1721	C	U1582	U1582	U1516	U1455	U1372	G1305	U1231	G1167	U1098	A1025	C934	U864
A1722	C	U1583	U1583	U1517	U1456	U1373	G1306	U1232	G1168	U1099	A1026	U935	A865
G1726	C	U1584	U1584	U1518	U1457	A1375	G1307	G1233	G1169	U1100	A1027	G936	G866
U1735	C	U1585	U1585	U1519	U1458	A1376	U1308	A1234	G1170	G1101	U1028	C937	G867
U1738	C	U1586	U1586	U1520	U1459	A1377	U1309	G1235	G1171	G1102	U1029	G938	G868
U1739	C	U1587	U1587	U1521	U1460	C1379	U1314	U1236	G1172				
A1740	C	U1588	U1588	U1522	U1461	U1380	U1315	A1236					

• Molecule 1: 18S ribosomal RNA

Chain 6:  37% 41% 18%

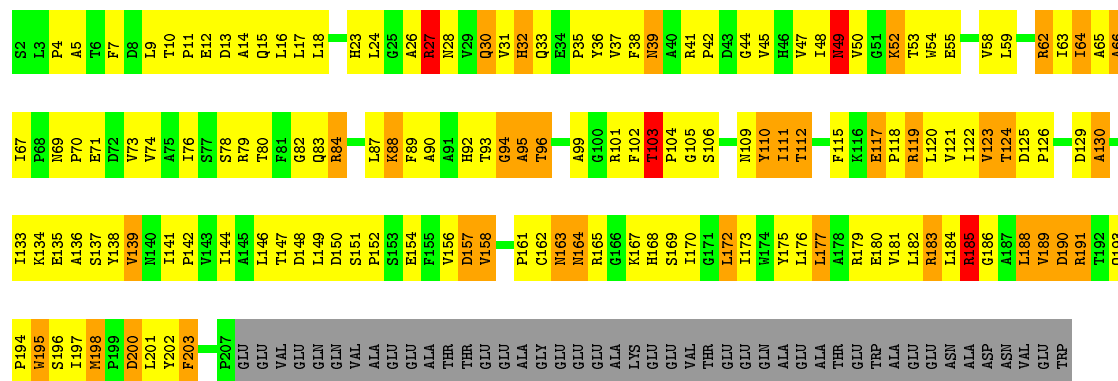
U1	A65
A2	U66
U3	A67
C4	A68
U5	G69
G6	
G7	
U8	
U9	
G10	
A11	
U12	
G13	
C14	
U15	
G16	
C17	
U18	
A19	
G20	
U21	
A22	
G23	
U24	
C25	
A26	
U27	
A28	
U29	
G34	
U37	
U44	
U45	
A46	
A47	
G48	
C49	
U52	
G53	
U56	
G57	
U58	
C59	
U60	
A61	
A65	
U66	
A67	
A68	
G69	
A72	
U73	
C74	

G1245	U1175	C1096	A1027	C956	A881	A809	A734	U665	U593	A525	G461	C381	C308	U227	U150	U75
G1246	G1176	U1097	C1028	G957	U882	G910	A737	U666	A594	A526	G462	C382	C309	G228	G151	A76
U1247	G1177	U1098	U1029	U958	C883	A811	A738	U667	G595	A527	U463	G383		U229	U152	U77
C1248	U1178	U1099	A1030	U959	A884	A812	G739	C668	C596	U528	A464	G384	A312	C230	G153	A78
U1249	G1179	U1100	U1031	U960	C885	G815	G740	C669	G597	A529	G465	A385	U313	U231	U154	C79
U1250	G1180	G1101	G1032	U961	U886	G816	G741	U670	U598			A386	U314	U232	U155	
U1251	U1181	G1102	G1033	C962	A887	G817	U742	U	A599	U532	A468	A387	A315	C233	A156	U82
G1252	U1182	U1103	C1034	A963	A891	G819	U743	A673	U600	U533	C469	G388	A316	C234	A157	G83
U1253	U1183	U1104	G1035	U964		U820	U745	U	A601	U534	A470	G389	A317	G235	U158	A84
U1254	U1184	U1105	A1036	U965	U894	U821			U602	A535	A471	G390	U318	A236	U159	A85
G1255	G1185	U1106		U966	U895	U822	G751	G676	U603	C536	U472	A391	U319	C237	C160	A86
U1256	U1186	U1107	A1039	U967	G896	U823	G752	G677	A599	G537	A475	G392	C320	U238	U161	
U1257	C1189	G1108	G1040	U968	U896	G824	A753	A678	U604	A538	U476	A397	C321	U239	A162	G89
U1258	U1191	G1109	G1041	C969	C897	G825	A754	U679	U609	G539	U477	A398	G322	U240	G163	G90
U1259	U1192	U1110	G1042	U970	A898	U826	A755	U680	G610	G540	A478	G399	A323	U241	A164	G91
C1260	A1193	G1111		A971	U899	U827	A756	U681	U611	G541	A479	A399	U324	U242	G165	A92
U1262	U1194	U1112	C1045	G972	G901	C827	A757	C682	U612	A542	C479	A400	G325		C166	A93
U1263	G1195	G1113		A973	U902	U828	U758	C683	G613	C543	G480	A401		G246	U162	U94
G1268	U1196	G1114	U1049	A974	U903	A829	U759	A684	C614	A544		A402	A328	G247	A169	G95
U1269	A1197	G1115	G1050	G976	G904	U830		A685	A615	A545	C484	G403	G329	A247	U170	G96
G1271	U1198	U1120	G1051	A977	A905	U831	G761	C886	G616	U546	A485	G404	G330	U248	A171	
U1272	U1199	G1121	U1052	A978	A906	U832		C687	U617	U547	G486	A405	A331	C250		A103
G1273	G1200	G1122	G1053	A979	A907	U833	G765	U687	U618	U548	G487	G406	U332		C176	A104
C1274	U1201	U1123	U1054	U982	U908	G834	G766	C691	U619	G549	G488	A407	A333	U260	U177	A105
U1275	A1202	G1126	U1055	U983	U909	U835	U767	U688	A620	A550	C489	C408	A334	U261	U178	U106
G1279	A1203	G1127	U1056	U984	U910	U836	U768	U689	A621		C490		U335	U262	A179	G107
C1280	U1207	U1128	U1057	U985	U911	G837	A770	U695	A622	G553	G491	A412	G336	G263	U179	
G1281	A1208	U1129	U1058	A988	C996	A623	A771	C696	A624	C554	G492	G416	G337	C264	A181	A108
U1282	U1209	U1130	U1059	U989	G997	G838	G772	C697	G624	A555	U493	A417	C338	A265	G109	
U1283	C1208	A1132	U1060	C990	G998	C842	C773	U698	C625	A556	U494	A418	C339	A266		U110
G1284	G1210	A1133	U1061	G991	U943	U843	A774	U699	C626	G557	C495	G419	C340	U267	U185	U111
U1285	A1211	C1134	U1062	A992	U946	A844	G775	C700	C627	U558	G496	G420	A341		C186	
U1286	U1212	U1135	G1064	A993	U947	G845		U701	G628	C559	G497	A421	G346	A271	C187	G114
A1287	U1213	U1136	A1065	G997	U948	G846	U778	G702	U629	U563	G498	C424	G347	U272	A188	G115
G1288	U1214	A1137	C1066		U949	A847	U779	G703	A630	G564	U499	G425	G348	G273	C190	U116
U1293	A1217	A1138	G1067	C1000	U921	C849	U781	U705	A635	C565	U501	G426	U349	C276	C191	A119
G1298	U1218	A1143	A1068	A1001	G922		U782	A706	A636	C566	U502		U350	U277	U192	U120
A1296	U1219	U1144	C1070	G1002	A923	G853	G783	A707	C637	A567	G503	G432	C351	U278	U193	U121
U1299	U1220	U1145	U1071	U1003		U854	C784	C708	U638	G568	U504	G433	A352	U279	U194	U122
A1300	U1224	G1150	C1072	U1004	A926	A855	U785	C709	U639	C569	A505	G434	A353	U280	G195	G123
G1308	U1225	U1151	G1073	A1005		A856	C786	U710	U640	U570	A506		A354	G281	G196	
C1309	A1226	A1152	G1074		A933	U857	G787	U711		G571	U507	A437	G355	C282	A197	G127
U1314	U1227	U1153	C1075	U1009	C934	G858	A788	G712	C645	G574	U508	A438	G356	U283	G198	U132
U1315	G1228	G1154	U1079	C1010	U935	A859	U790	A713	C646	C575	G509	U439	G357		A200	U
G1316	U1230	U1155	U1080	G1011	U936	U860	U791	G714	G647	U581	G510	C444	U358	G287	A213	A
C1317	U1231	G1156	A1081	U1012	C937	U861	U792		G648	G576	A511	A445	A359	A288	G214	G136
U1318	U1234	C1158	C1082	G1013	G938	A862	A793	C717	U650	U578	U513	A446	A360	U289	A215	U137
	C1235	C1159	G1083	U1015	A941	U864	U794	U718	G651	A579	G514	U447	A361	G290	G290	U138
A1321	U1236	A1160	A1084	G1016	G942	A865	U795	U719	G652	A580	A515	C448	A362	G291	U216	A139
C1322	G1237	U1161	G1085	U1017		G866		G720	G653	U581	G516	C449	A363	U292	A217	C139
G1323	U1238	A1162	U1086	U1018	U945	G867	G801	G721	C654	U582	U517	U450	G371	U297	A218	A140
U1324	U1239	G1163	U1089	A1019	U946	G868	G802	G722	G655	C583	A518	A451	A372	A298	A219	U141
A1325	U1240	A1091	C1090	U1020	U947	G869	G803	G723	C656	C584	C519	A452	A373	A299	A221	G142
A1326	G1241	A1171	A1092	C1022	C950	G871	A804	G724	C657	C585	A520	U453	A374	A300	A222	U144
C1327	A1242	G1172	A1093	U1023	G872	G873	U805	U728	G660	U588	A521	U454	A375	A301	U223	A145
G1330	U1244	C1174	U1095	A1026	A952	C880	A806	G730	U662	A591	U522	U455	A377	A302	C224	U146
							U808				U524	A460		C305	A226	C149



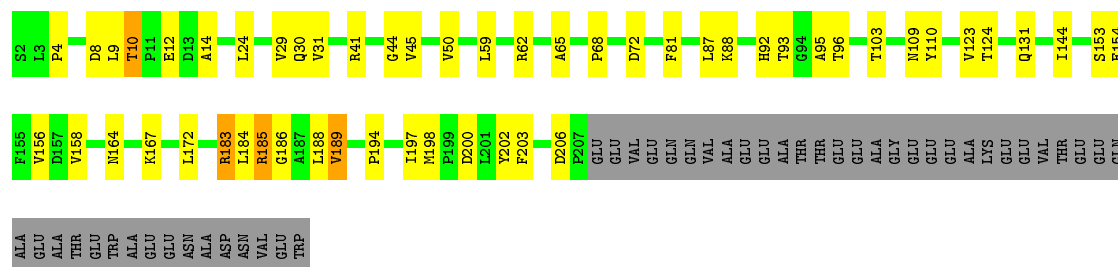
### • Molecule 2: 40S ribosomal protein S0-A

Chain S0: 23% 43% 14% 18%

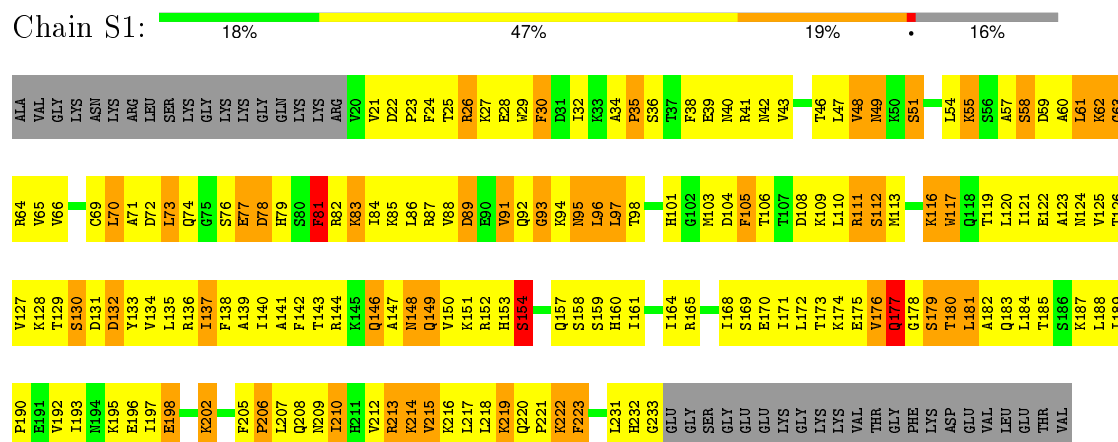


### • Molecule 2: 40S ribosomal protein S0-A

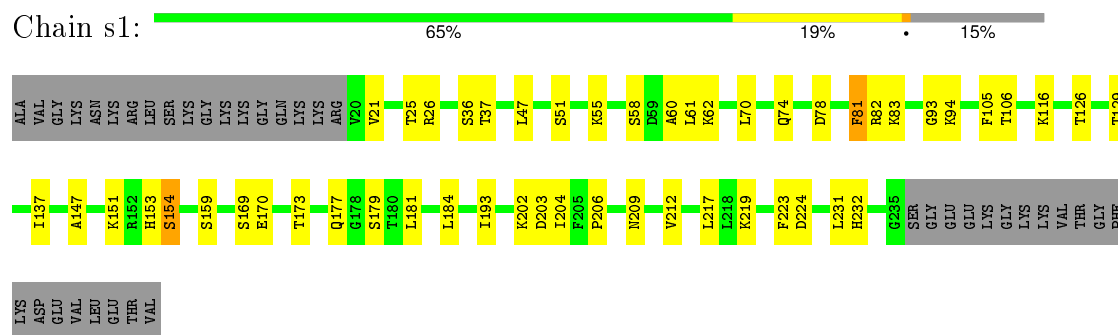
Chain s0: 61% 20% 18%



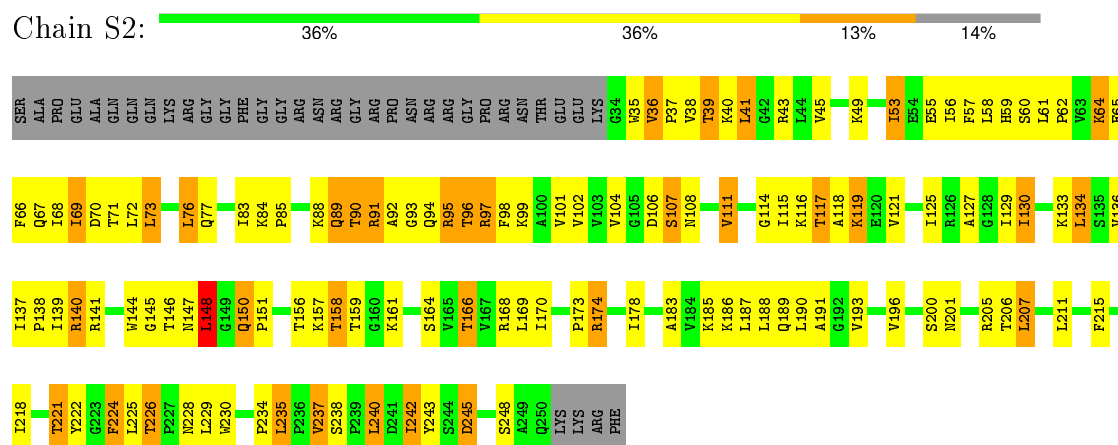
- Molecule 3: 40S ribosomal protein S1-A



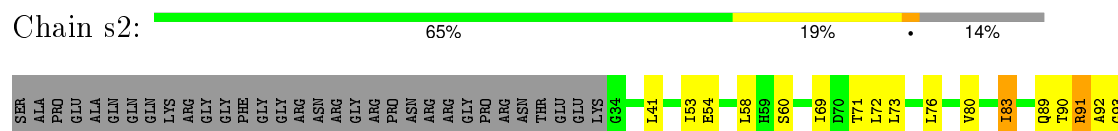
- Molecule 3: 40S ribosomal protein S1-A

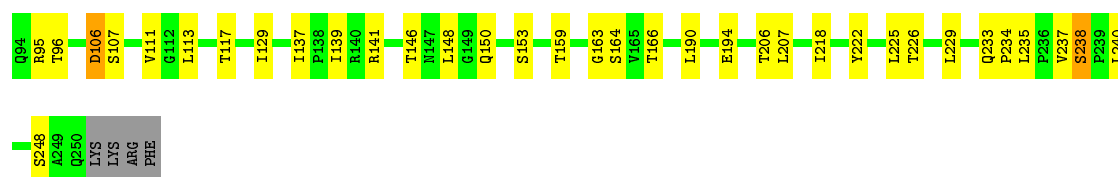


- Molecule 4: 40S ribosomal protein S2



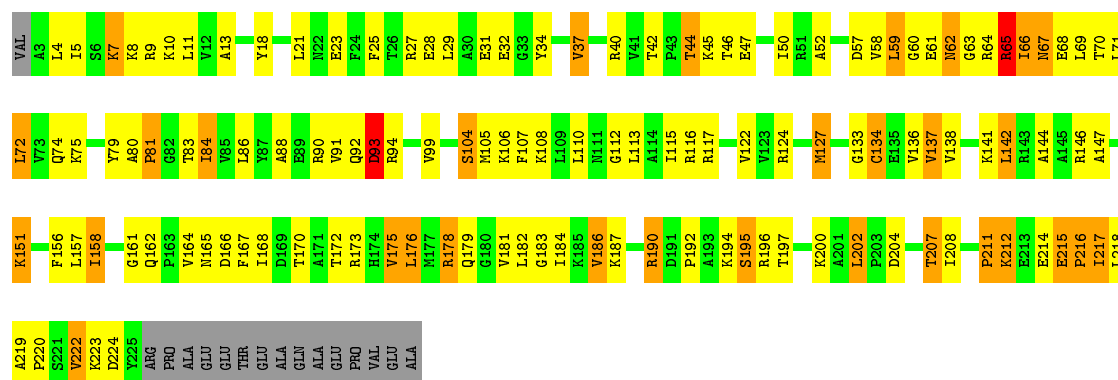
- Molecule 4: 40S ribosomal protein S2





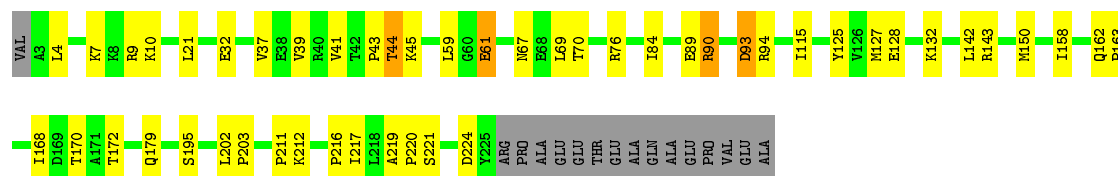
• Molecule 5: 40S ribosomal protein S3

Chain S3: 39% 40% 13% 7%



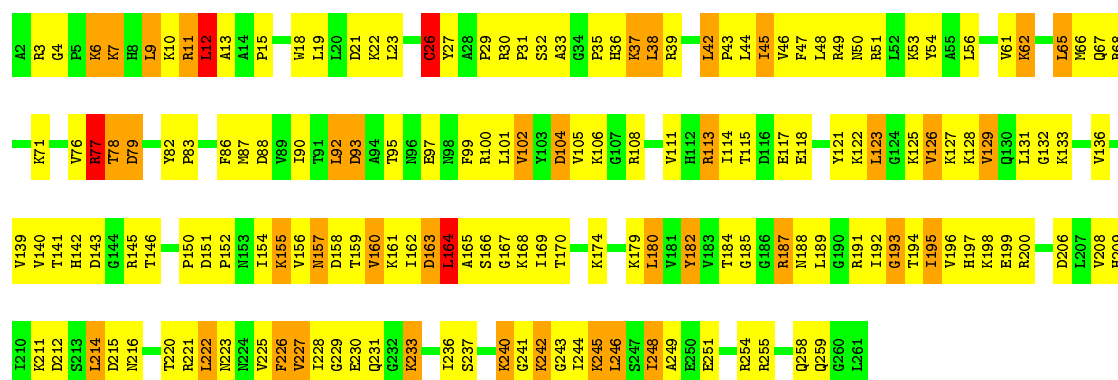
• Molecule 5: 40S ribosomal protein S3

Chain s3: 73% 19% 7%



• Molecule 6: 40S ribosomal protein S4-A

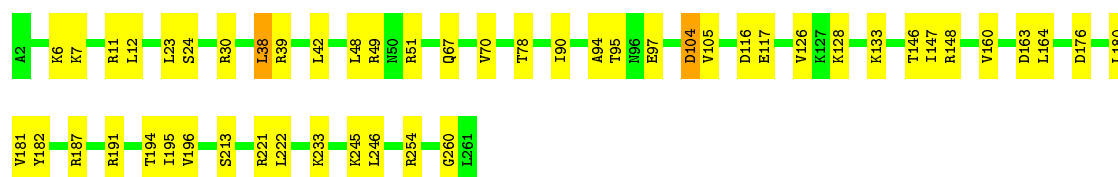
Chain S4: 35% 48% 15%



• Molecule 6: 40S ribosomal protein S4-A

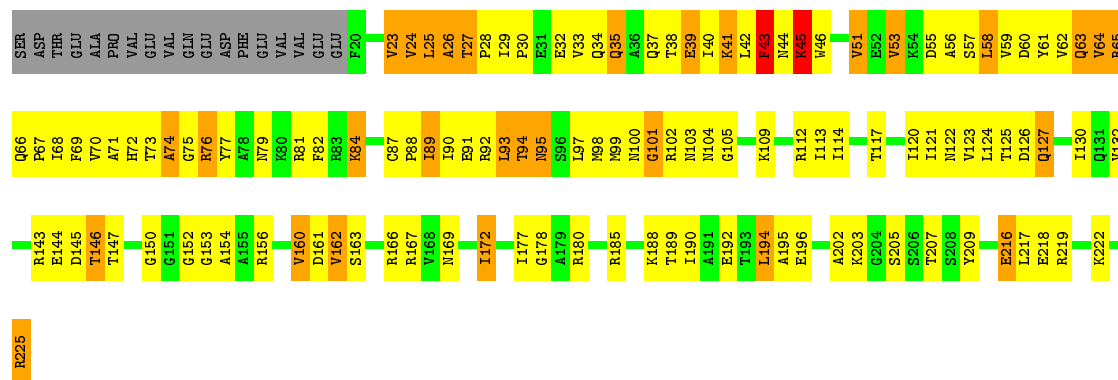
Chain s4: 81% 18%





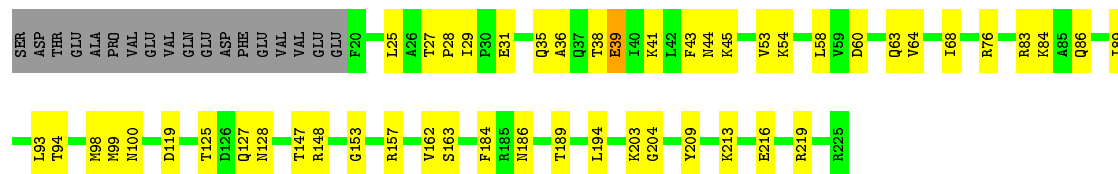
• Molecule 7: 40S ribosomal protein S5

Chain S5: 37% 41% 13% 8%



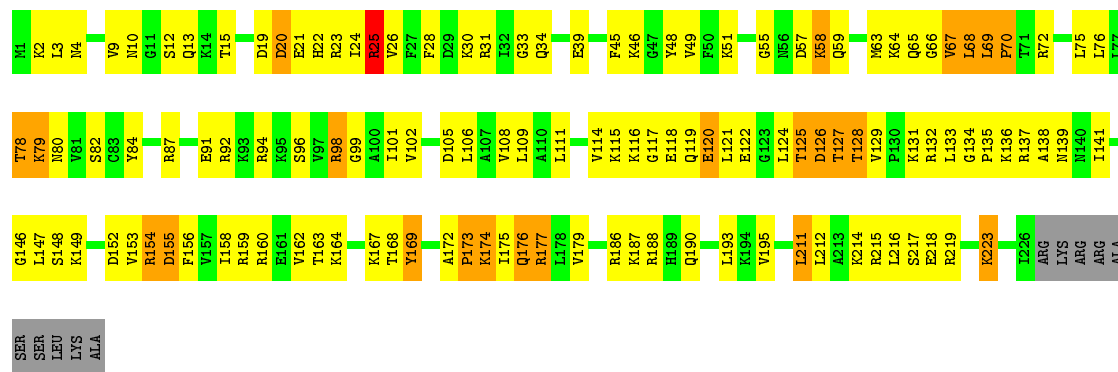
• Molecule 7: 40S ribosomal protein S5

Chain s5: 70% 22% 8%



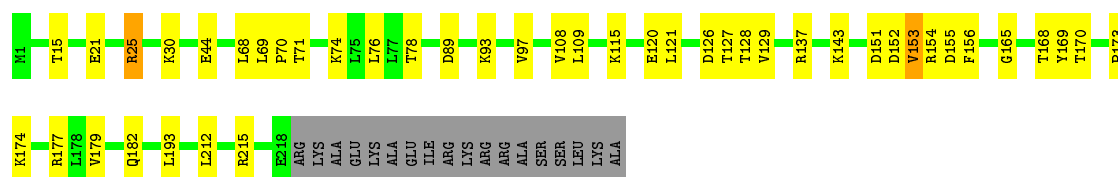
• Molecule 8: 40S ribosomal protein S6-A

Chain S6: 42% 43% 10%



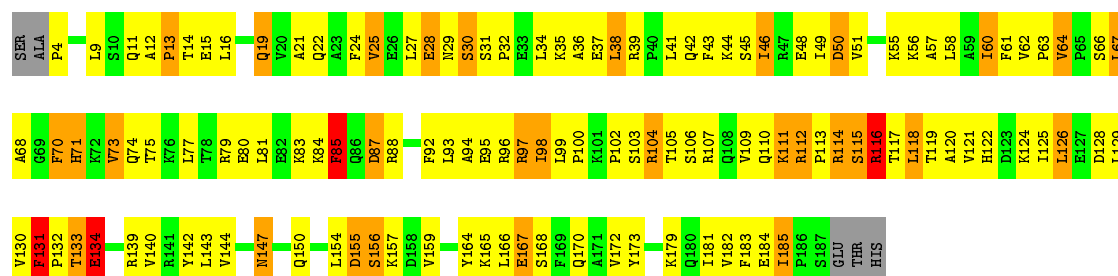
• Molecule 8: 40S ribosomal protein S6-A

Chain s6: 74% 18% 8%



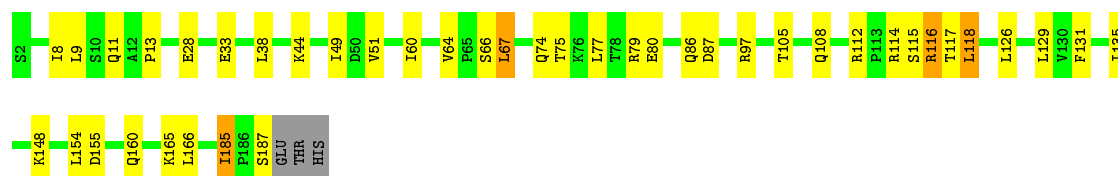
- Molecule 9: 40S ribosomal protein S7-A

Chain S7: 31% 49% 16% • •



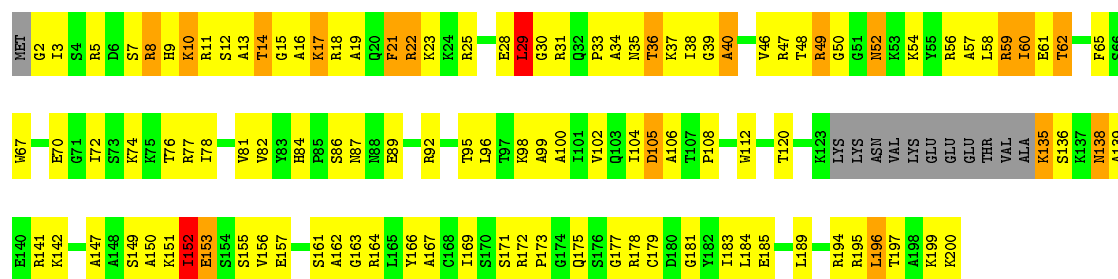
- Molecule 9: 40S ribosomal protein S7-A

Chain s7: 76% 20% • •



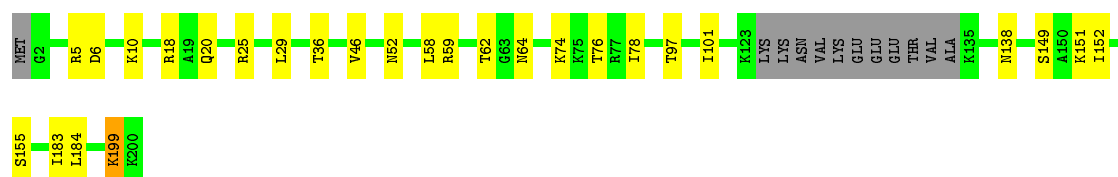
- Molecule 10: 40S ribosomal protein S8-A

Chain S8: 38% 47% 9% 6% • •

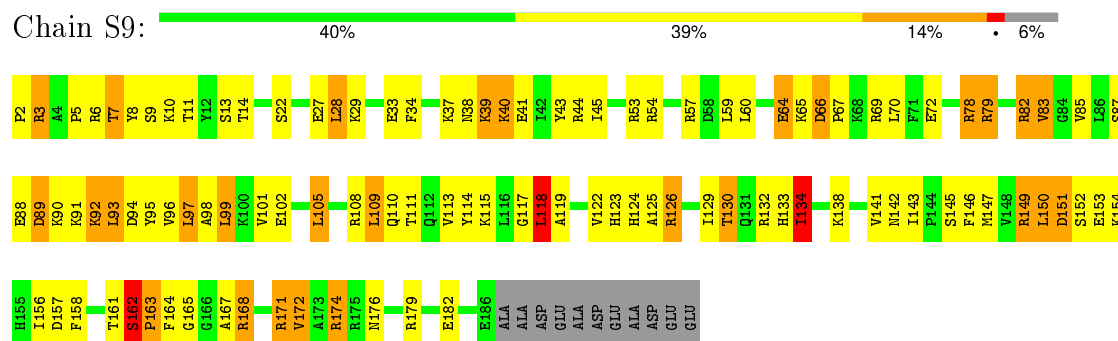


- Molecule 10: 40S ribosomal protein S8-A

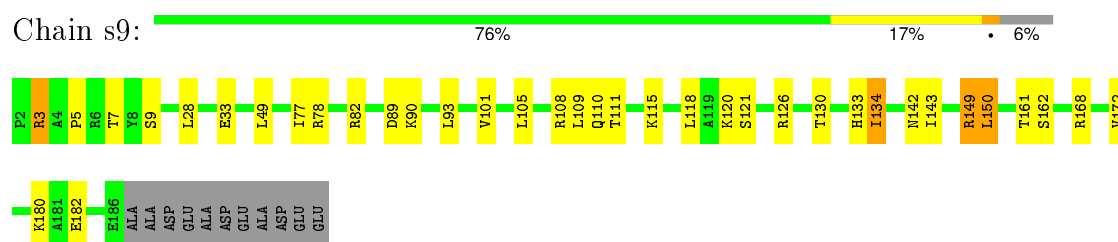
Chain s8: 81% 13% 6% • •



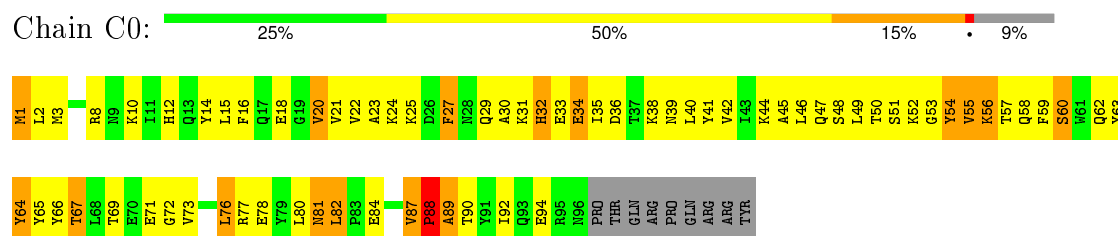
- Molecule 11: 40S ribosomal protein S9-A



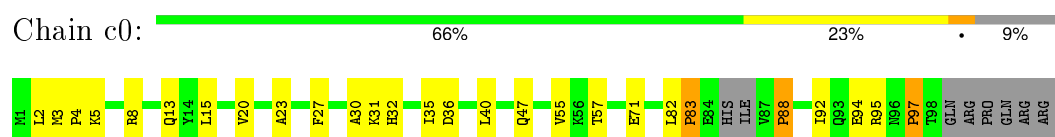
- Molecule 11: 40S ribosomal protein S9-A



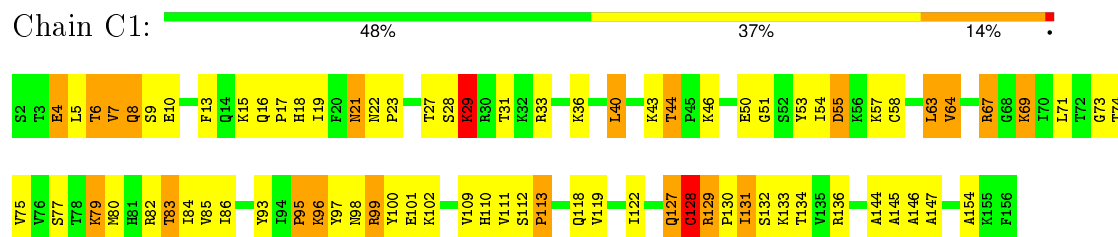
- Molecule 12: 40S ribosomal protein S10-A



- Molecule 12: 40S ribosomal protein S10-A

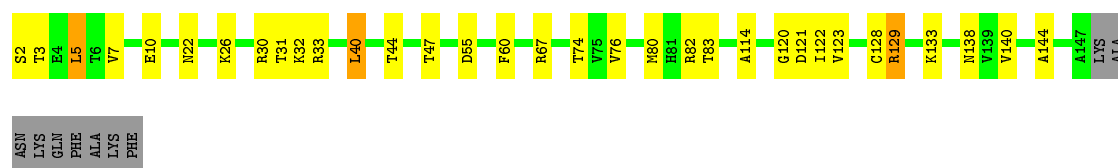


- Molecule 13: 40S ribosomal protein S11-A



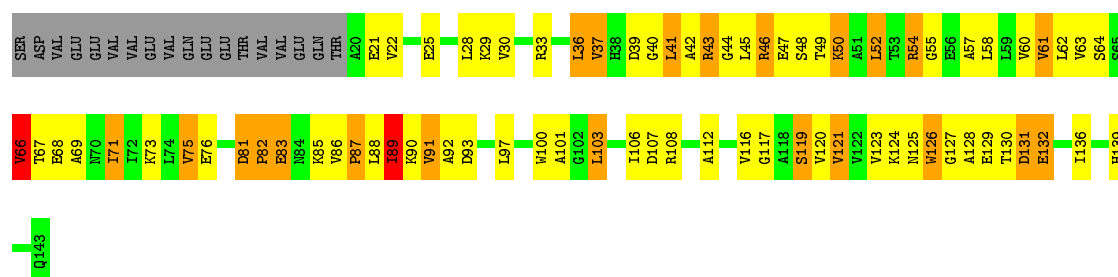
- Molecule 13: 40S ribosomal protein S11-A

Chain c1:  73% 19% • 6%



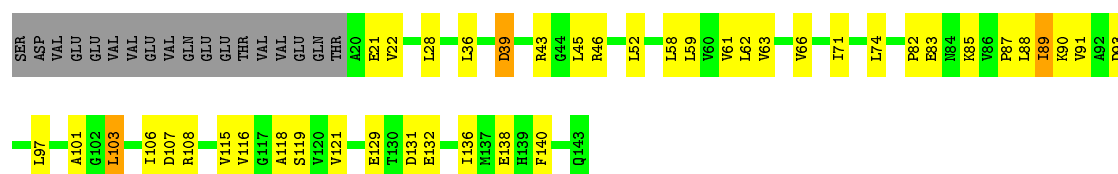
- Molecule 14: 40S ribosomal protein S12

Chain C2: 



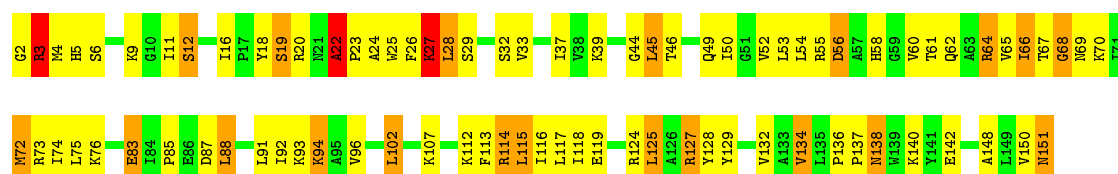
- Molecule 14: 40S ribosomal protein S12

Chain c2:  57% 28% • 13%



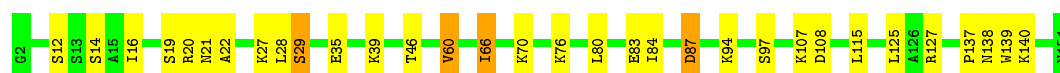
- Molecule 15: 40S ribosomal protein S13

Chain C3: 



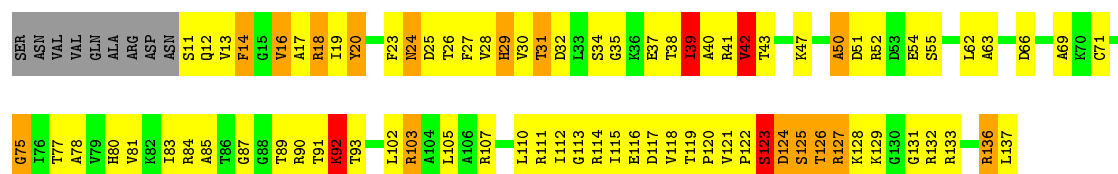
- Molecule 15: 40S ribosomal protein S13

Chain c3:  79% 19%



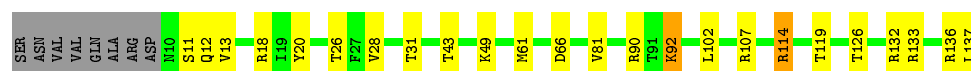
- Molecule 16: 40S ribosomal protein S14-A

Chain C4: 



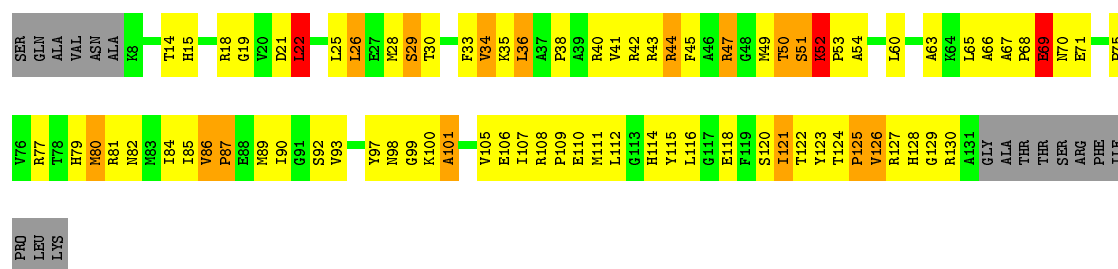
- Molecule 16: 40S ribosomal protein S14-A

Chain c4: 76% 16% 6%



- Molecule 17: 40S ribosomal protein S15

Chain C5: 31% 44% 11% 12%



- Molecule 17: 40S ribosomal protein S15

Chain c5: 72% 22% 6%



- Molecule 18: 40S ribosomal protein S16-A

Chain C6: 27% 54% 14% 6%



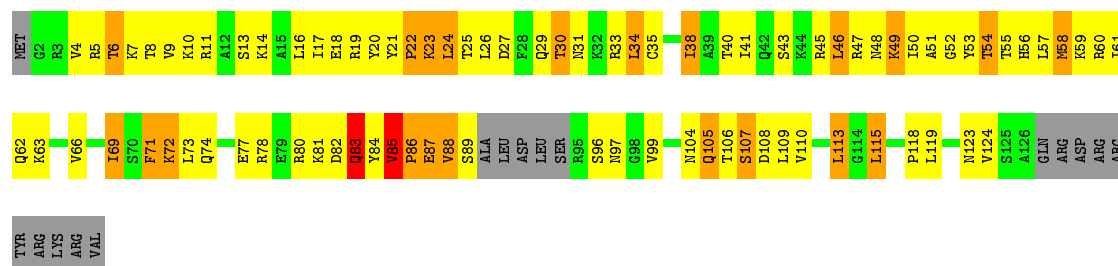
- Molecule 18: 40S ribosomal protein S16-A

Chain c6: 79% 20% 1%



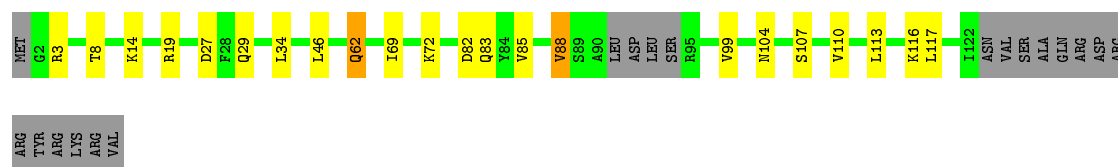
- Molecule 19: 40S ribosomal protein S17-A

Chain C7: 26% 46% 15% 12%



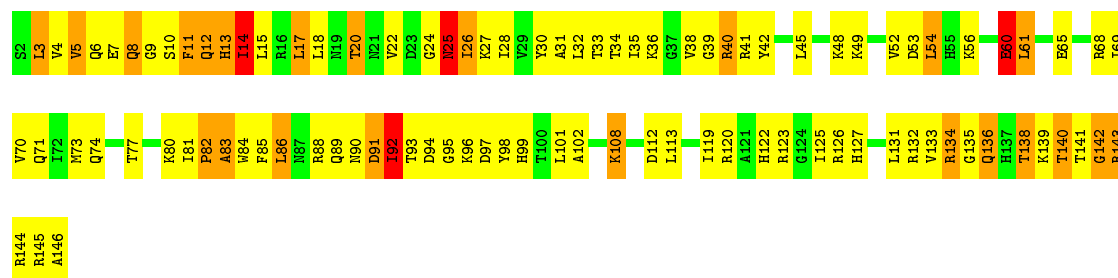
- Molecule 19: 40S ribosomal protein S17-A

Chain c7: 70% 15% 14%



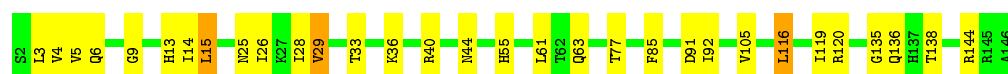
- Molecule 20: 40S ribosomal protein S18-A

Chain C8: 33% 48% 16%



- Molecule 20: 40S ribosomal protein S18-A

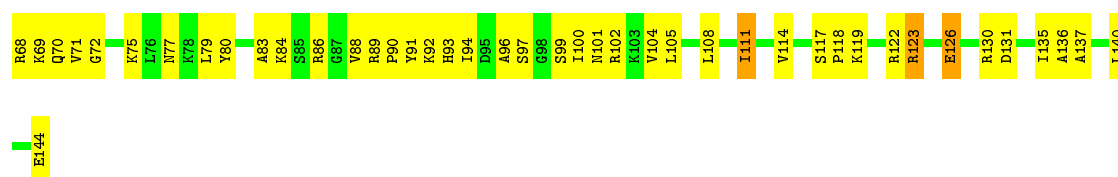
Chain c8: 79% 19%

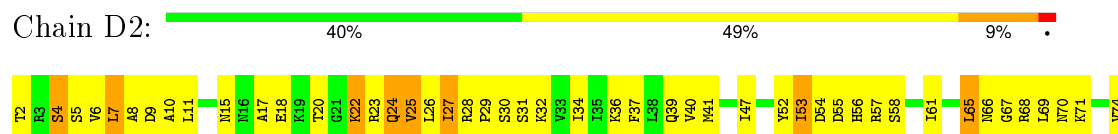


- Molecule 21: 40S ribosomal protein S19-A

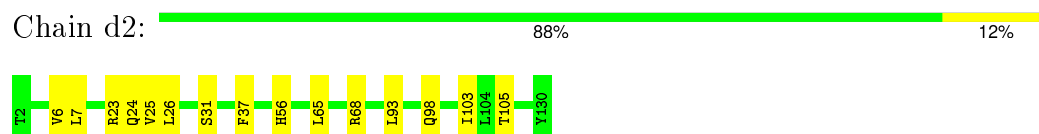
Chain C9: 38% 50% 10%



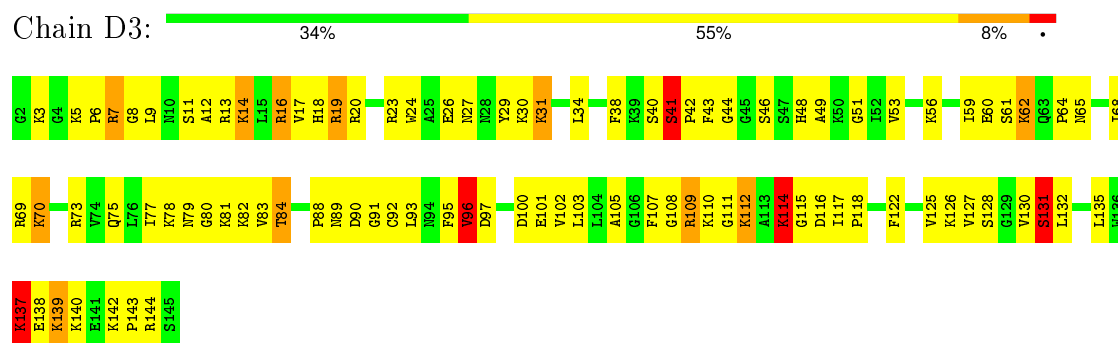




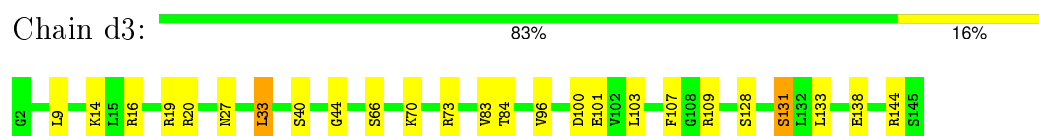
- Molecule 24: 40S ribosomal protein S22-A



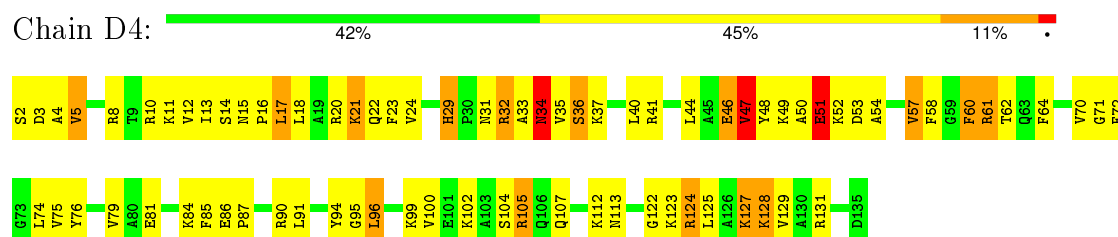
- Molecule 25: 40S ribosomal protein S23-A



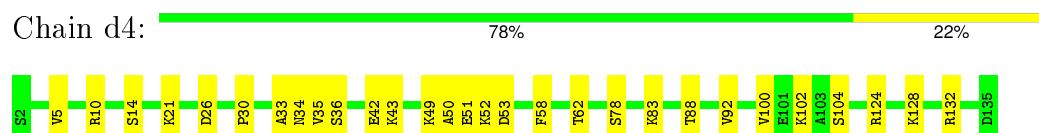
- Molecule 25: 40S ribosomal protein S23-A



- Molecule 26: 40S ribosomal protein S24-A



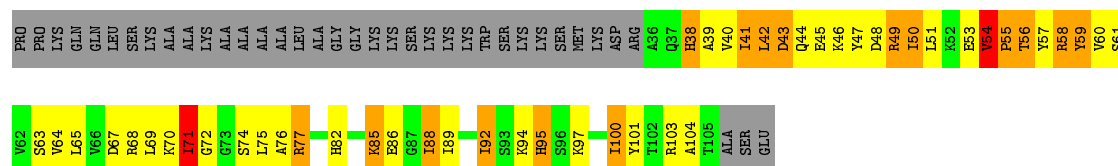
- Molecule 26: 40S ribosomal protein S24-A





- Molecule 27: 40S ribosomal protein S25-A

Chain D5: 



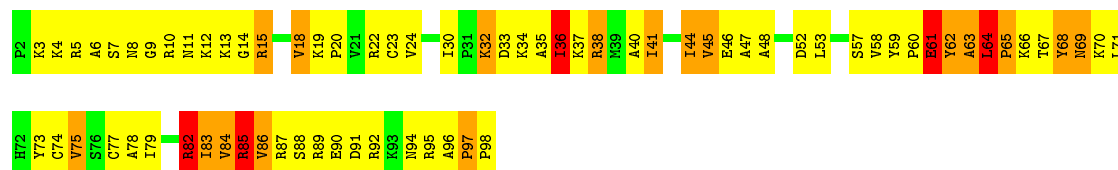
- Molecule 27: 40S ribosomal protein S25-A

Chain d5: 




- Molecule 28: 40S ribosomal protein S26-B

Chain D6: 



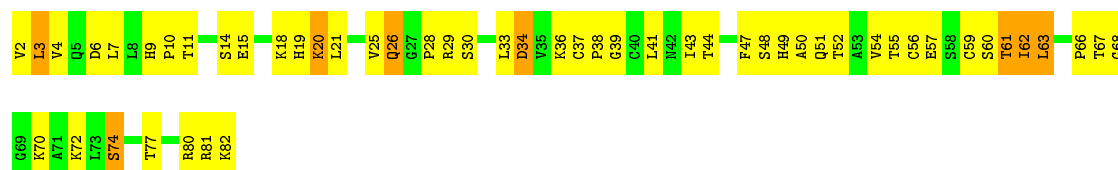
- Molecule 28: 40S ribosomal protein S26-B

Chain d6: 




- Molecule 29: 40S ribosomal protein S27-A

Chain D7: 



- Molecule 29: 40S ribosomal protein S27-A

Chain d7: 



- Molecule 30: 40S ribosomal protein S28-A

Chain D8: 27% 52% 17% 5%



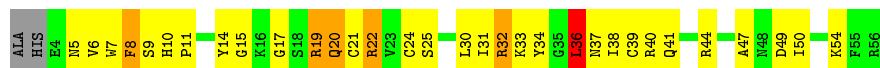
- Molecule 30: 40S ribosomal protein S28-A

Chain d8: 70% 23% 5%



- Molecule 31: 40S ribosomal protein S29-A

Chain D9: 38% 47% 9% 5%



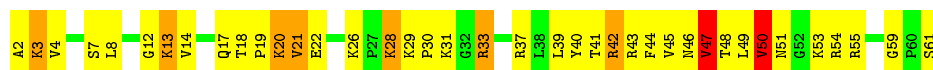
- Molecule 31: 40S ribosomal protein S29-A

Chain d9: 71% 24% 5%



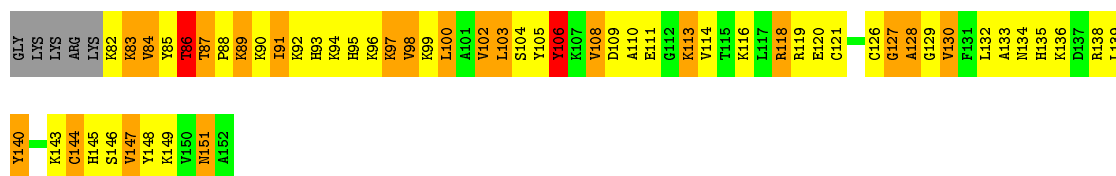
- Molecule 32: 40S ribosomal protein S30-A

Chain E0: 35% 50% 12% 3%



- Molecule 33: Ubiquitin-40S ribosomal protein S31

Chain E1: 20% 45% 26% 7%



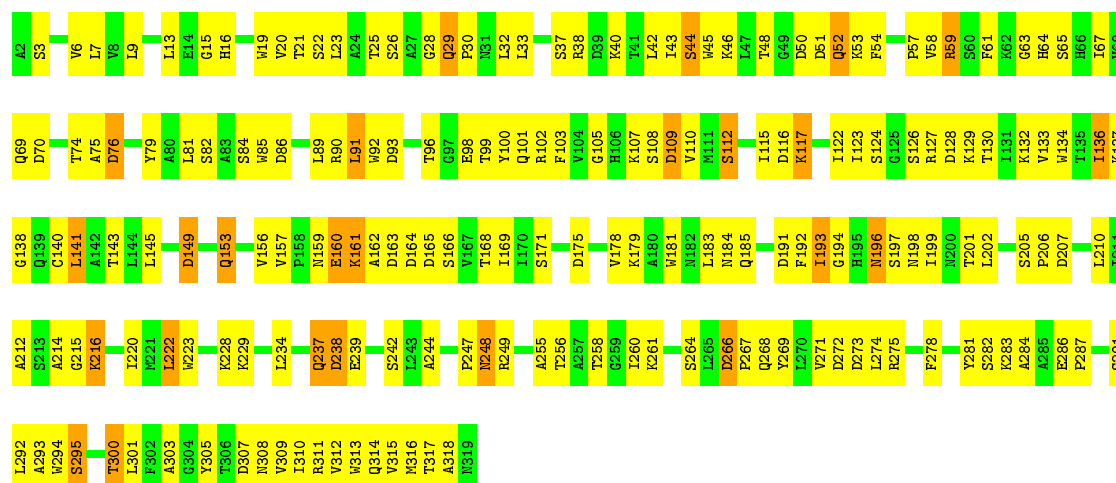
- Molecule 33: Ubiquitin-40S ribosomal protein S31

Chain e1: 




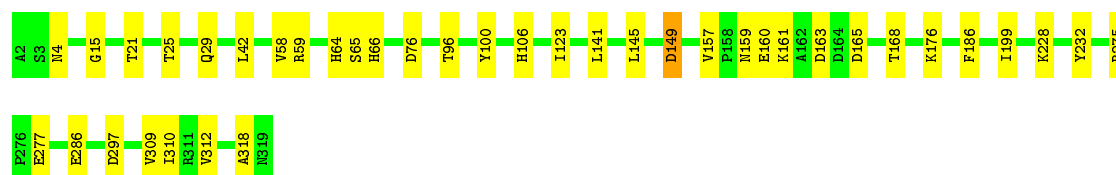
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

Chain SR: 




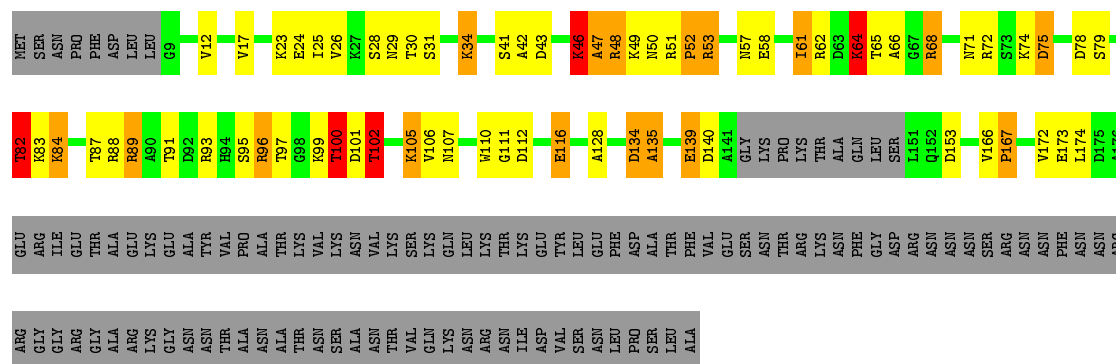
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein

Chain sR: 



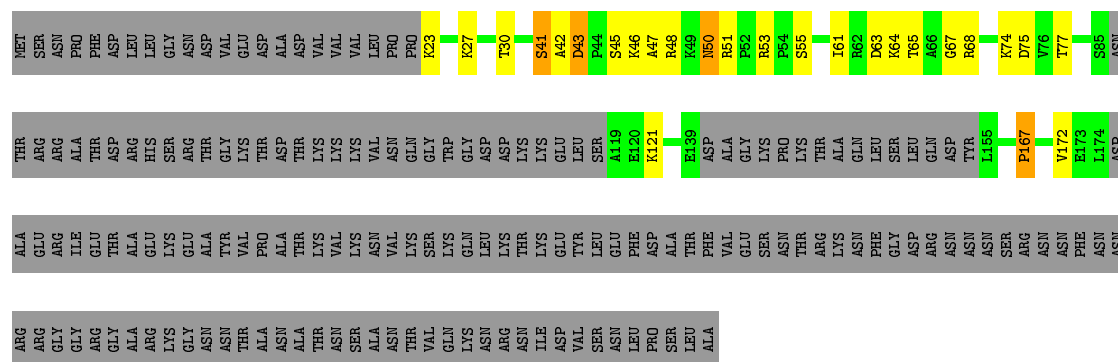
- Molecule 35: Suppressor protein STM1

Chain SM: 



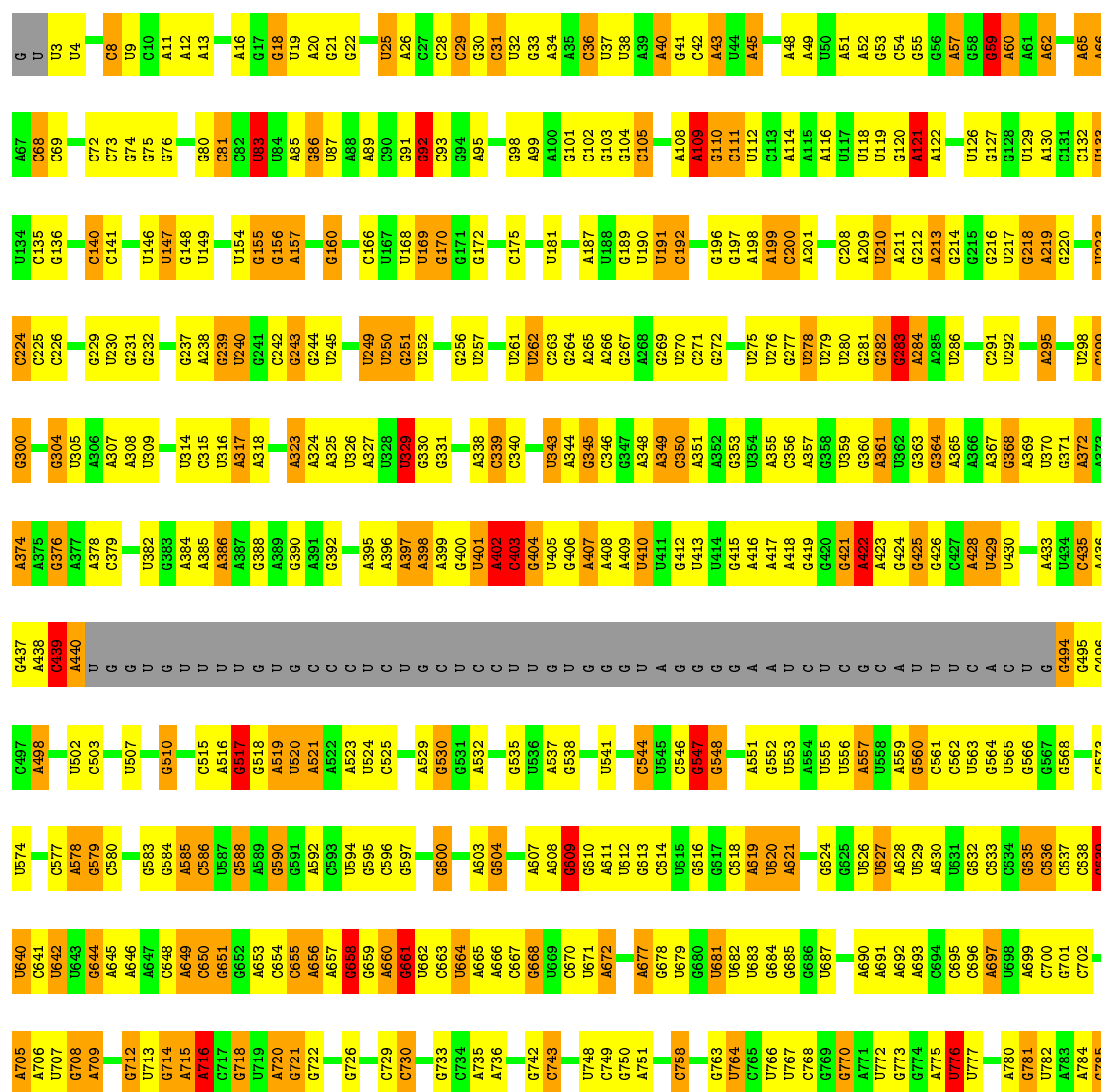
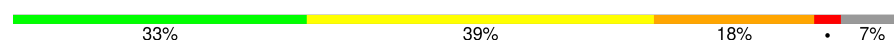
- Molecule 35: Suppressor protein STM1

Chain sM:



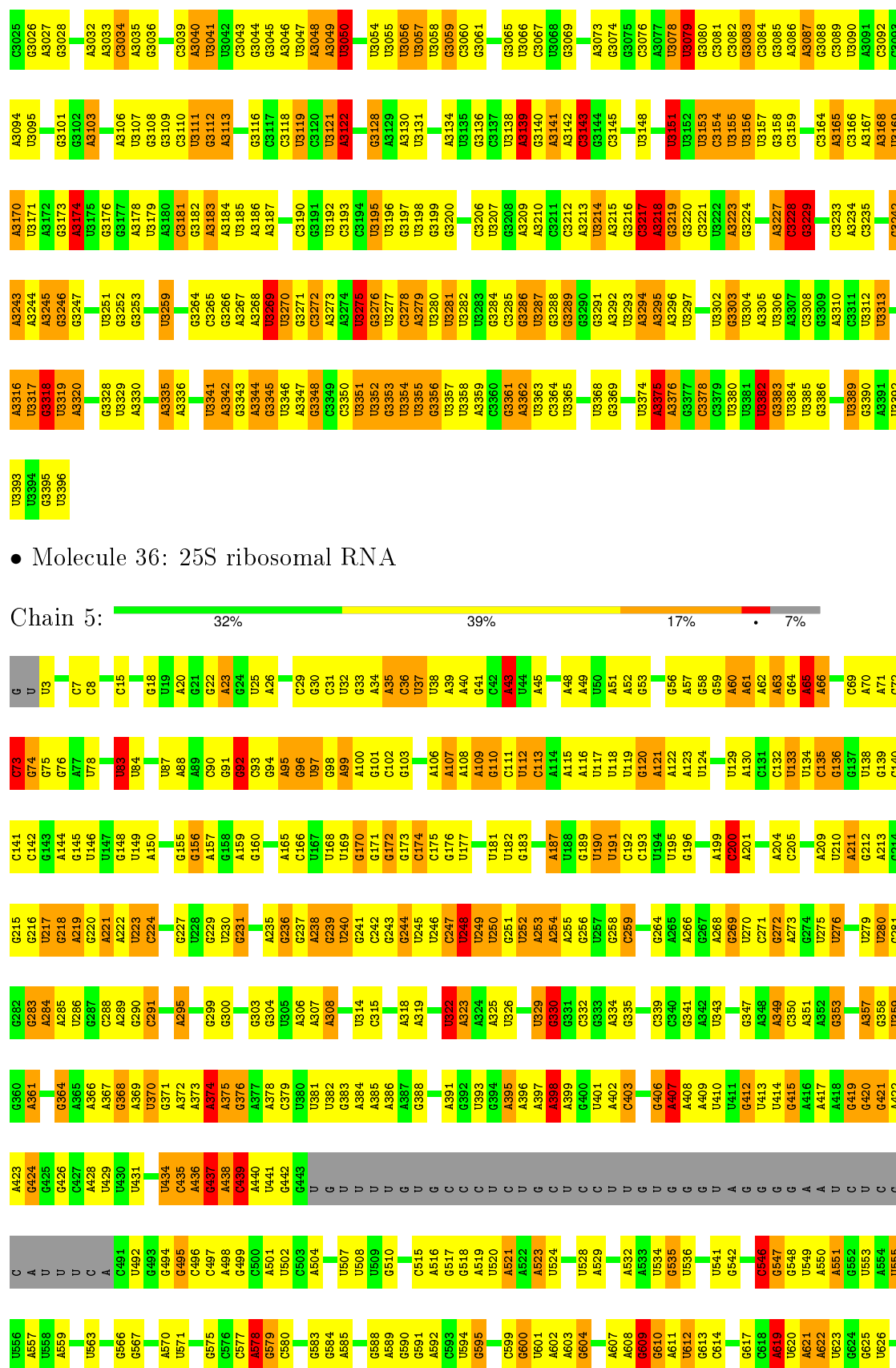
- Molecule 36: 25S ribosomal RNA

Chain 1:



A1850	A1851	A1852	U1782	U1686	G1611	A1546	U1471	C1335	G1268	A1204	C1141	G1072	U995	C923	U855	A786
G1786	G1787	G1788	U1785	U1687	A1612	G1547	U1472	C1403	U1269	A1205	G1142	U1073	A996	G924	U856	G787
U1855	U1856	U1857	G1786	U1688	A1613	G1548	G1404	C1338	A1270	G1206	U1143	U1078	A997	A929	G856	A789
G1788	G1789	G1790	C1615	U1689	C1614	C1551	A1475	C1405	A1271	U1207	U1144	A1079	G999	U930	G859	U790
A1858	A1859	A1860	U1616	U1690	U1617	U1552	G1476	A1406	A1272	U1208	C1146	A1080	G1000	C931	G860	A791
G1790	C1791	C1792	U1617	U1691	U1618	U1553	G1477	A1407	A1273	G1209	C1147	U1081	G1001	U932	G861	G792
G1791	C1793	C1794	U1619	U1692	U1619	U1554	G1478	G1408	C1275	U1210	G1148	U1082	A1002	U933	U862	U793
U1795	U1796	U1797	U1620	U1693	U1620	C1555	U1479	G1409	U1276	U1211	G1149	G1083	A1003	U934	G863	G794
G1796	G1797	G1798	U1621	U1694	U1621	C1556	A1480	U1410	U1277	C1212	G1150	U1087	G1004	U935	G864	G795
A1864	A1865	A1866	U1622	U1695	U1622	C1557	A1481	C1411	U1278	U1213	A1150	U1088	G1005	U936	U796	U796
G1870	G1871	G1872	U1623	U1696	U1623	C1558	G1482	G1412	A1279	U1214	A1151	U1089	G1006	U937	U797	G798
U1871	U1872	U1873	U1624	U1697	U1624	C1559	U1483	G1413	C1280	U1215	G1152	U1090	G1007	U938	U798	G799
A1874	A1875	A1876	U1625	U1698	U1625	C1560	G1484	G1414	U1281	G1216	A1153	U1091	G1008	U939	U872	G800
G1878	G1879	G1880	U1626	U1699	U1626	C1561	G1485	U1415	U1282	A1217	A1154	U1092	U1007	U940	U873	G801
U1881	U1882	U1883	U1627	U1700	U1627	C1562	G1486	A1418	U1283	U1218	C1155	U1093	U1008	U941	U874	A801
A1886	A1887	A1888	U1628	U1701	U1628	C1563	G1487	C1419	U1284	U1219	C1156	U1094	G1009	U942	U875	G802
G1890	G1891	G1892	U1629	U1702	U1629	C1564	G1488	A1419	U1285	A1221	G1157	U1095	G1010	U943	G876	G803
U1891	U1892	U1893	U1630	U1703	U1630	C1565	G1489	C1420	U1286	U1222	U1158	U1096	G1011	U944	A876	C804
A1898	A1899	A1900	U1631	U1704	U1631	C1566	A1490	G1421	U1287	U1223	A1159	U1097	G1012	U945	C877	C805
G1899	G1900	G1901	U1632	U1705	U1632	C1567	G1491	G1422	U1288	A1224	C1160	U1098	G1013	U946	G878	A806
U1902	U1903	U1904	U1633	U1706	U1633	C1568	A1492	C1423	U1289	U1225	G1161	U1099	G1014	U947	G879	A807
C1907	C1908	C1909	U1634	U1707	U1634	C1569	G1493	C1424	U1290	C1226	A1162	U1100	G1015	U948	G880	A808
A1908	A1909	A1910	U1635	U1708	U1635	C1570	A1494	G1425	U1291	U1227	G1163	U1101	G1016	U949	G881	G809
U1911	U1912	U1913	U1636	U1709	U1636	C1571	G1495	C1426	U1292	U1228	C1164	U1102	G1017	U950	A882	A810
G1914	G1915	G1916	U1637	U1710	U1637	C1572	U1496	C1427	U1293	U1229	A1165	U1103	G1018	U951	A883	U811
U1917	U1918	U1919	U1638	U1711	U1638	C1573	G1497	C1428	U1294	U1230	C1166	U1104	G1019	U952	A884	G812
C1917	C1918	C1919	U1639	U1712	U1639	C1574	A1498	G1429	U1295	U1231	G1167	U1105	G1020	U953	U885	U814
U1924	U1925	U1926	U1640	U1713	U1640	C1575	U1499	C1430	U1296	U1232	U1168	U1106	G1021	U954	U886	G815
G1927	G1928	G1929	U1641	U1714	U1641	C1576	G1500	C1431	U1297	U1233	C1169	U1107	G1022	U955	A887	C816
U1931	U1932	U1933	U1642	U1715	U1642	C1577	A1501	C1432	U1298	U1234	C1170	U1108	G1023	U956	U888	A817
A1934	A1935	A1936	U1643	U1716	U1643	C1578	U1502	C1433	U1299	U1235	C1171	U1109	G1024	U957	U889	U818
U1937	U1938	U1939	U1644	U1717	U1644	C1579	G1503	C1434	U1300	U1236	C1172	U1110	G1025	U958	U890	C819
C1937	C1938	C1939	U1645	U1718	U1645	C1580	U1504	C1435	U1301	U1237	C1173	U1111	G1026	U959	U891	C824
U1940	U1941	U1942	U1646	U1719	U1646	C1581	G1505	C1436	U1302	U1238	C1174	U1112	G1027	U960	U892	U829
G1943	G1944	G1945	U1647	U1720	U1647	C1582	U1506	C1437	U1303	U1239	C1175	U1113	G1028	U961	U893	A830
A1946	A1947	A1948	U1648	U1721	U1648	C1583	G1507	C1438	U1304	U1240	C1176	U1114	G1029	U962	U894	A820
U1949	U1950	U1951	U1649	U1722	U1649	C1584	U1508	C1439	U1305	U1241	C1177	U1115	G1030	U963	A895	A896
C1949	C1950	C1951	U1650	U1723	U1650	C1585	G1509	C1440	U1306	U1242	C1178	U1116	G1031	U964	U896	U829
U1952	U1953	U1954	U1651	U1724	U1651	C1586	U1510	C1441	U1307	U1243	C1179	U1117	G1032	U965	U897	U833
G1954	G1955	G1956	U1652	U1725	U1652	C1587	G1511	C1442	U1308	U1244	C1180	U1118	G1033	U966	U898	U834
U1957	U1958	U1959	U1653	U1726	U1653	C1588	U1512	C1443	U1309	U1245	C1181	U1119	G1034	U967	U899	U905
A1959	A1960	A1961	U1654	U1727	U1654	C1589	G1513	C1444	U1310	U1246	C1182	U1120	G1035	U968	U906	G835
C1959	C1960	C1961	U1655	U1728	U1655	C1590	U1514	C1445	U1311	U1247	C1183	U1121	G1036	U969	U907	U836
U1962	U1963	U1964	U1656	U1729	U1656	C1591	G1515	C1446	U1312	U1248	C1184	U1122	G1037	U970	U908	U837
A1965	A1966	A1967	U1657	U1730	U1657	C1592	U1516	C1447	U1313	U1249	C1185	U1123	G1038	U971	U909	U838
U1968	U1969	U1969	U1658	U1731	U1658	C1593	G1517	C1448	U1314	U1250	C1186	U1124	G1039	U972	U910	U839
C1968	C1969	C1969	U1659	U1732	U1659	C1594	U1518	C1449	U1315	U1251	C1187	U1125	G1040	U973	U911	U840
U1970	U1971	U1972	U1660	U1733	U1660	C1595	G1520	C1450	U1316	U1252	C1188	U1126	G1041	U974	U912	A841
A1973	A1974	A1975	U1661	U1734	U1661	C1596	U1521	C1451	U1317	U1253	C1189	U1127	G1042	U975	U913	A842
G1974	G1975	G1976	U1662	U1735	U1662	C1597	G1522	C1452	U1318	U1254	C1190	U1128	G1043	U976	U914	A843
U1977	U1978	U1979	U1663	U1736	U1663	C1598	U1523	C1453	U1319	U1255	C1191	U1129	G1044	U977	U915	A844
C1977	C1978	C1978	U1664	U1737	U1664	C1599	G1524	C1454	U1320	U1256	C1192	U1130	G1045	U978	U916	A845
U1980	U1981	U1982	U1665	U1738	U1665	C1600	U1525	C1455	U1321	U1257	C1193	U1131	G1046	U979	U917	A846
A1983	A1984	A1985	U1666	U1739	U1666	C1601	G1526	C1456	U1322	U1258	C1194	U1132	G1047	U980	U918	A847
U1986	U1987	U1988	U1667	U1740	U1667	C1602	U1527	C1457	U1323	U1259	C1195	U1133	G1048	U981	U919	A848
C1986	C1987	C1987	U1668	U1741	U1668	C1603	G1528	C1458	U1324	U1260	C1196	U1134	G1049	U982	U920	A849
U1989	U1990	U1991	U1669	U1742	U1669	C1604	U1529	C1459	U1325	U1261	C1197	U1135	G1050	U983	U921	U850
A1992	A1993	A1994	U1670	U1743	U1670	C1605	U1530	C1460	U1326	U1262	C1198	U1136	G1051	U984	U922	C851
G1994	G1995	G1996	U1671	U1744	U1671	C1606	U1531	C1461	U1327	U1263	C1199	U1137	G1052	U985	U923	
U1997	U1998	U1999	U1672	U1745	U1672	C1607	G1532	C1462	U1328	U1264	C1200	U1138	G1053	U986	U924	
C1997	C1998	C1998	U1673	U1746	U1673	C1608	U1533	C1463	U1329	U1265	C1201	U1139	G1054	U987	U925	
U1999	U2000	U2001	U1674	U1747	U1674	C1609	U1534	C1464	U1330	U1266		U1140	G1055	U988	U926	
A2002	A2003	A2004	U1675	U1748	U1675	C1610	U1535	C1465	U1331	U1267			G1056	U989	U927	
G2002	G2003	G2004	U1676	U1749	U1676	C1611	U1536	C1466	U1332	U1268			G1057	U990	U928	
U2005	U2006	U2007	U1677	U1750	U1677	C1612	U1537	C1467	U1333	U1269			G1058	U991	U929	
A2008	A2009	A2010	U1678	U1751	U1678	C1613	U1538	C1468	U1334	U1270			G1059	U992	U930	
C2008	C2009	C2009	U1679	U1752	U1679	C1614	U1539	C1469	U1335	U1271			G1060	U993	U931	
U2011	U2012	U2013	U1680	U1753	U1680	C1615	U1540	C1470	U1336	U1272			G1061	U994	U932	
A2014	A2015	A2016	U1681	U1754	U1681	C1616	U1541	C1471	U1337	U1273			G1062	U995	U933	
U2017	U2018	U2019	U1682	U1755	U1682	C1617	U1542	C1472	U1338	U1274			G1063	U996	U934	
C2017	C2018	C2018	U1683	U1756	U1683	C1618	U1543	C1473	U1339	U1275			G1064	U997	U935	
U2020	U2021	U2022	U1684	U1757	U1684	C1619	U1544	C1474	U1340	U1276			G1065	U998	U936	
A2023	A2024	A2025	U1685	U1758	U1685	C1620	U1545	C1475	U1341	U1277			G1066	U999	U937	
U2026	U2027	U2028	U1686	U1759	U1686	C1621	U1546	C1476	U1342	U1278			G1067	U1000	U938	
C2026	C2027	C2027	U1687	U1760	U1687	C1622	U1547	C1477	U1343	U1279			G1068	U1001	U939	
U2029	U2030	U2031	U1688	U1761	U1688											

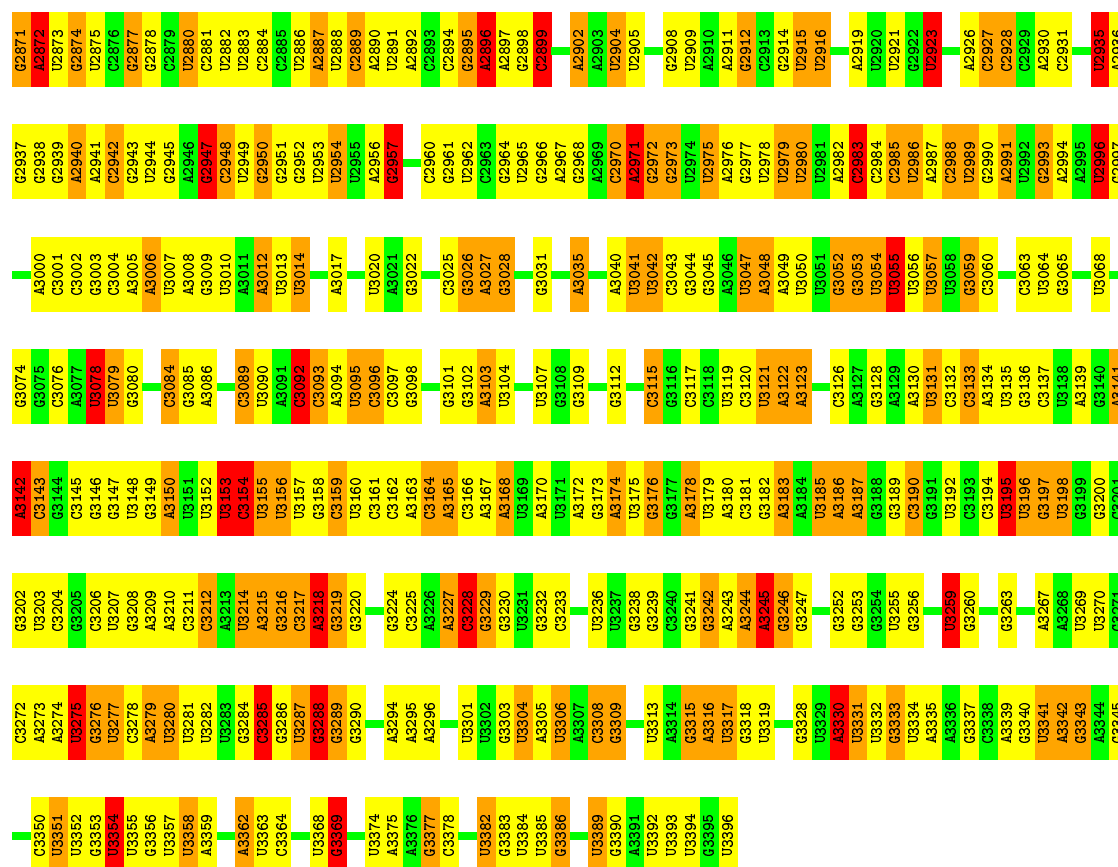




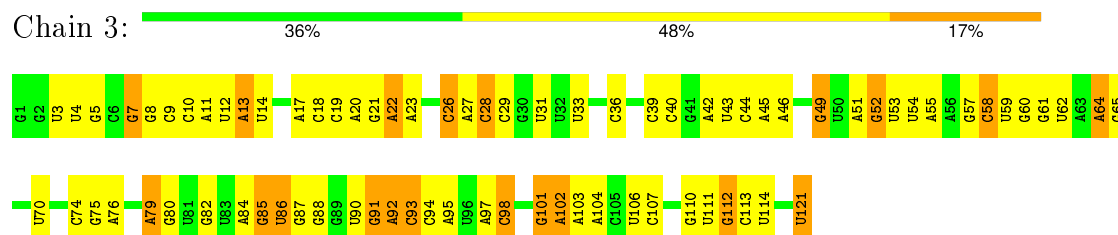
C1701	G1618	A1557	G1475	G1404	C1338	A1263	U1124	U1051	A983	U919	U850	A691	U629
U1702	A1619	A1558	G1476	U1405	C1339	A1264	U1125	A1054	G984	A920	U853	A692	A630
U1703	U1620	A1559	A1406	G1340	U1265	U1191	G1126	A1055	U986	A921	G853	A693	U631
A1621	U1621	G1480	A1407	G1266	C1197	C1192	G1127	A1056	U987	U922	G854	C694	U632
U1622	G1708	G1561	A1481	G1408	C1342	U1267	U1128	U1056	U988	C923	U855	G700	G633
G1628	C1709	C1562	A1482	G1409	A1343	G1268	A1129	U1060	U989	G924	G856	G701	G634
U1629	U1629	U1563	U1483	U1410	U1344	U1269	A1130	A1061	A990	A925	G857	G702	G635
U1630	U1630	U1564	U1484	C1411	G1345	A1270	C1131	A1062	G991	C928	G859	G703	G636
U1631	U1631	G1565	G1485	G1412	U1346	A1197	C1132	A1063	G992	U930	G860	U704	G637
C1632	A1632	U1566	G1486	G1413	U1347	C1198	A1133	G1063	A993	U931	G861	G705	G638
C1633	G1633	U1567	G1487	G1414	U1348	C1199	G1134	A1064	G994	G931	U862	U706	U640
G1634	U1634	U1568	G1488	U1415	G1349	A1200	A1135	A1065	G995	U932	G863	U707	G641
U1635	U1635	U1569	A1489	G1416	A1350	C1201	A1136	G1066	U996	U933	G864	G708	U642
U1720	U1720	U1570	G1490	G1417	U1351	A1202	G1137	U1070	A997	G934	G867	A709	U643
A1715	C1639	A1571	A1491	A1418	G1285	A1203	U1138	A1071	A998	U935	G868	G712	G644
U1716	U1716	U1572	G1492	A1419	A1204	A1204	G1139	U1072	U936	U936	G869	G713	A645
U1717	G1640	G1573	G1493	C1420	C1292	A1205	G1140	G1072	G999	A936	G870	G714	A646
U1718	U1641	C1574	U1494	U1425	G1285	G1285	G1141	U1073	G1000	G937	U871	G715	A647
U1719	A1642	A1575	U1495	U1426	C1296	U1208	G1142	U1074	G1001	U941	U872	A716	G648
G1725	A1643	G1576	C1496	G1427	C1297	U1209	U1143	A1075	A1002	U942	C873	A717	A649
U1720	G1644	G1577	C1502	U1428	C1388	U1298	G1144	U1076	A1003	U943	U874	G718	G650
U1721	U1645	C1578	A1503	G1429	C1389	U1299	G1145	U1077	G1004	G944	G875	G719	G651
A1723	G1646	C1579	U1504	U1430	C1390	U1300	G1147	A1079	U1007	U945	A876	U720	G652
U1724	G1650	A1580	U1506	G1431	A1363	A1301	G1148	A1080	U1008	U946	C877	A801	G655
G1726	U1651	C1581	G1507	C1432	C1364	A1302	G1149	U1081	U1009	U947	G878	G721	G656
U1729	G1652	C1582	C1508	U1433	G1365	A1303	U1150	U1082	A1010	C948	U879	G722	A657
G1730	A1653	U1583	G1434	A1435	C1367	A1304	U1151	G1083	G1005	U950	C881	G725	A658
U1731	G1654	C1584	U1436	U1436	U1368	U1305	G1152	A1084	G1006	U951	G882	G726	G659
U1732	C1657	G1585	U1512	U1437	A1369	G1306	A1153	A1085	G1013	A952	A883	G727	A660
U1733	G1658	U1586	G1513	U1438	G1370	G1307	A1154	U1088	U1014	G953	A884	G728	G661
U1734	U1659	A1587	G1514	U1439	G1371	C1227	C1155	U1089	C1016	U954	U887	A810	G662
U1735	C1660	U1588	G1517	U1440	C1372	U1308	C1156	A1093	C1017	U955	G888	U731	G663
U1736	G1661	G1590	U1518	G1441	A1373	G1310	G1157	U1094	G1018	U956	A889	U732	G664
U1737	G1662	G1591	G1519	G1442	G1374	G1311	A1158	U1095	G1019	U957	U889	G733	A665
U1738	C1663	G1592	G1520	G1443	G1375	G1312	A1159	U1096	G1020	C959	C890	A735	A666
U1739	G1664	A1593	G1521	U1444	C1376	C1313	C1160	U1097	G1021	U960	G891	A736	G667
U1740	U1665	U1594	U1522	U1445	G1377	C1314	G1161	G1098	G1024	C961	U892	G739	G668
A1741	G1666	U1595	U1526	A1446	U1378	U1315	U1162	A1098	A1025	A962	U896	G740	G669
U1742	C1668	C1596	G1527	G1447	G1379	C1238	A1163	G1101	A1026	G963	A896	G741	G670
U1743	G1669	G1597	C1527	U1448	A1381	A1240	G1166	A1102	G964	G964	U897	U741	U671
U1744	C1670	U1598	G1528	A1449	G1382	G1319	A1169	A1103	A1027	U965	U900	G742	A672
U1745	G1671	G1599	A1529	G1450	G1382	U1241	A1170	G1104	U1028	U966	G903	G743	G675
U1746	U1672	U1600	C1451	G1451	C1385	G1242	A1171	C1107	G1029	A967	U903	A744	G676
U1747	G1673	U1601	A1452	A1456	A1386	U1243	G1171	U1108	C1032	G968	U904	A751	G677
U1748	A1676	G1604	A1537	A1456	G1387	A1245	G1174	U1109	U1033	C969	U905	C752	G678
U1749	G1677	U1605	A1537	A1461	U1388	G1246	C1175	U1110	U1034	G970	A906	C753	U679
U1750	U1683	U1606	U1540	U1461	A1389	C1327	G1176	U1111	U1035	A971	G907	G758	G680
U1751	U1686	U1607	G1541	G1465	A1390	U1328	C1177	A1112	U1039	A973	G908	G759	U681
U1752	U1687	C1608	G1542	U1466	G1391	C1329	G1178	U1113	G974	G974	G909	U764	U682
U1753	U1688	C1609	G1543	A1467	C1392	A1252	A1179	U1114	C975	U976	G910	U765	U683
G1754	C1671	G1610	U1544	U1467	U1393	U1253	A1180	G1115	G1045	C977	C911	U766	G685
U1755	U1690	G1611	G1547	A1468	C1397	A1332	U1181	G1116	C1046	G978	A914	U767	G686
U1756	U1691	A1612	C1548	G1469	U1398	A1332	U1182	G1117	A1046	C979	A915	C768	U687
U1757	U1692	A1613	U1549	U1470	A1399	U1334	G1183	G1118	A1047	U979	A916	C769	G688
U1758	C1674	C1614	U1471	U1471	G1400	U1335	C1184	C1119	A1048	U980	A917	G770	U689
U1759	U1696	U1615	U1554	U1472	A1401	C1261	C1185	U1123	C1049	A981	C918	G771	G690
U1760	A1697	U1616	G1473	A1474	C1402	U1337	G1186	U1123	U1050	C982			A690



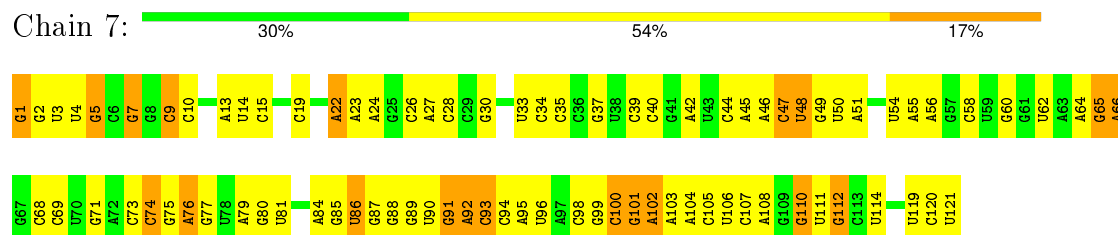




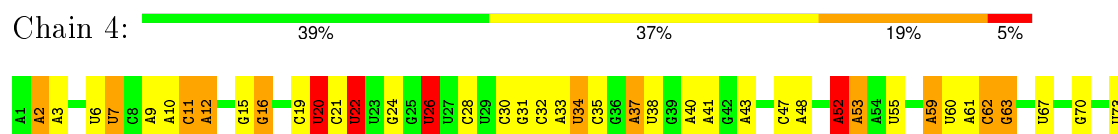
• Molecule 37: 5S ribosomal RNA

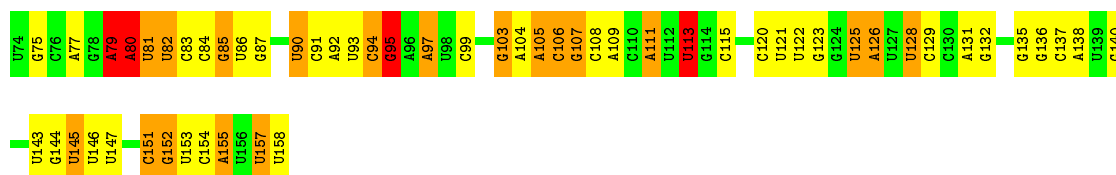


• Molecule 37: 5S ribosomal RNA

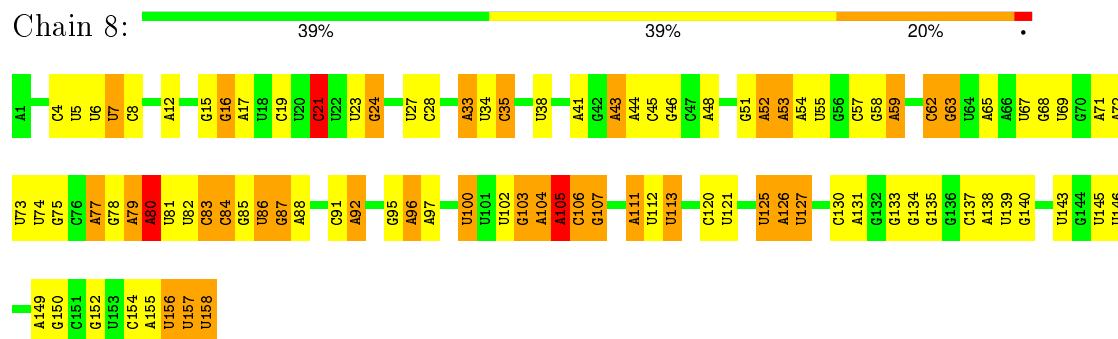


• Molecule 38: 5.8S ribosomal RNA

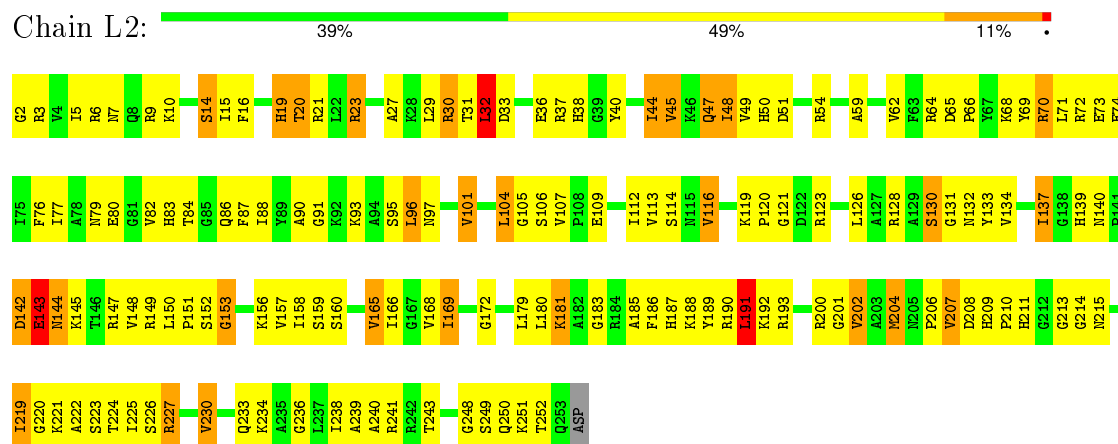




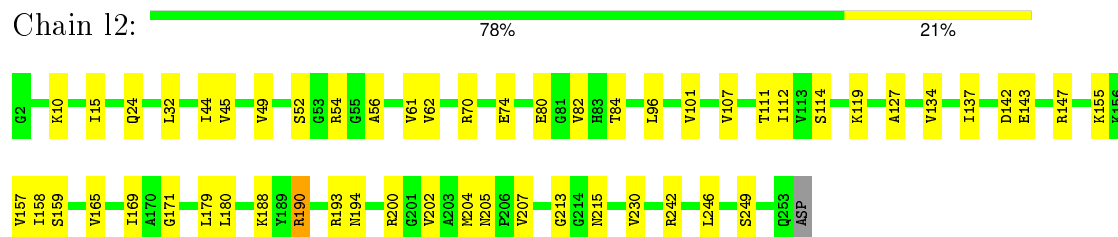
• Molecule 38: 5.8S ribosomal RNA



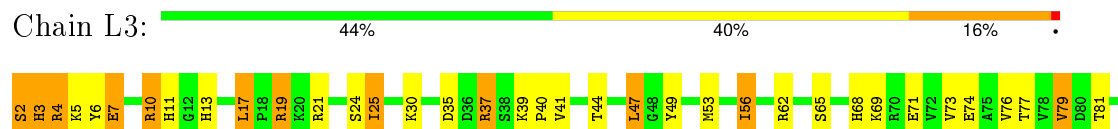
• Molecule 39: 60S ribosomal protein L2-A

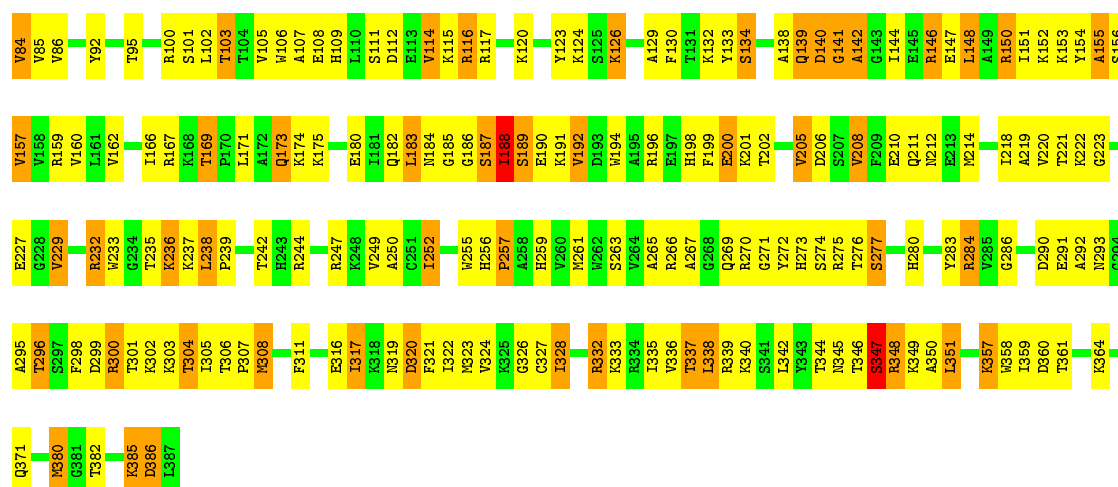


• Molecule 39: 60S ribosomal protein L2-A

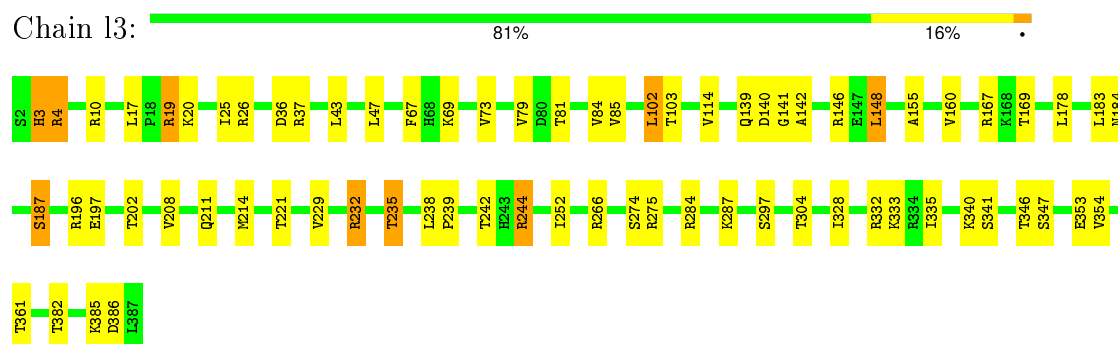


• Molecule 40: 60S ribosomal protein L3

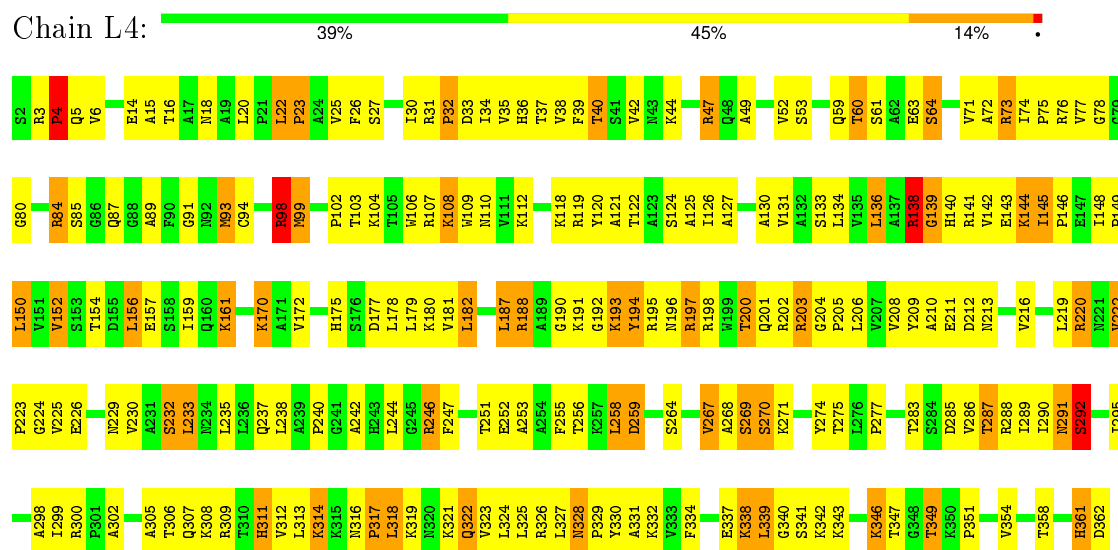




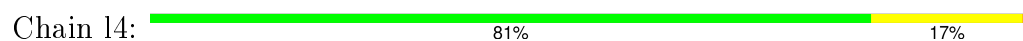
• Molecule 40: 60S ribosomal protein L3

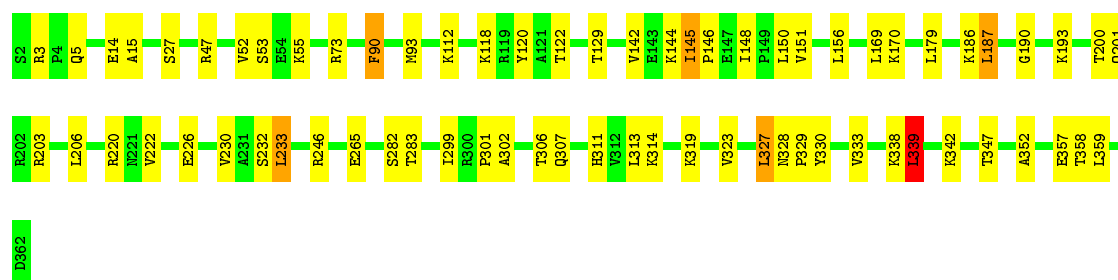


• Molecule 41: 60S ribosomal protein L4-A



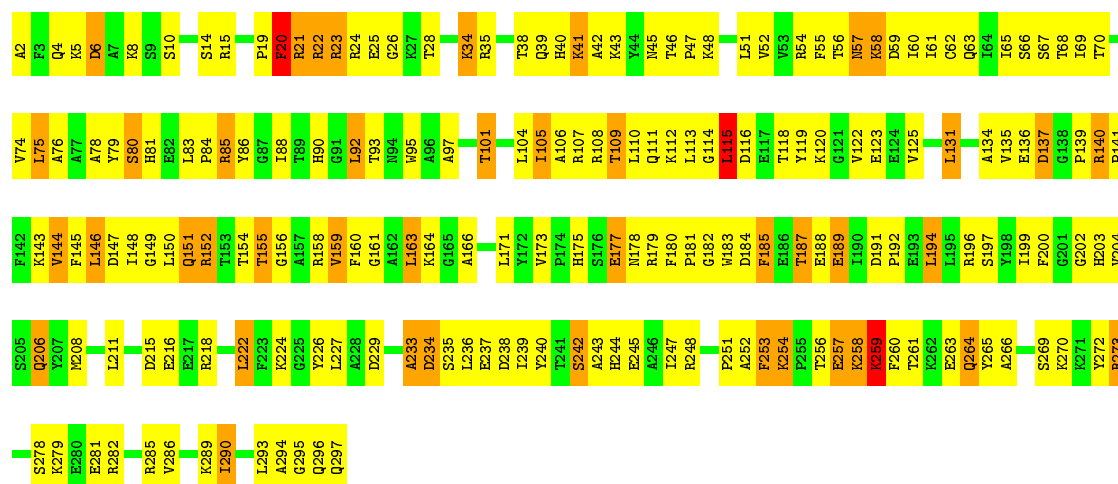
• Molecule 41: 60S ribosomal protein L4-A





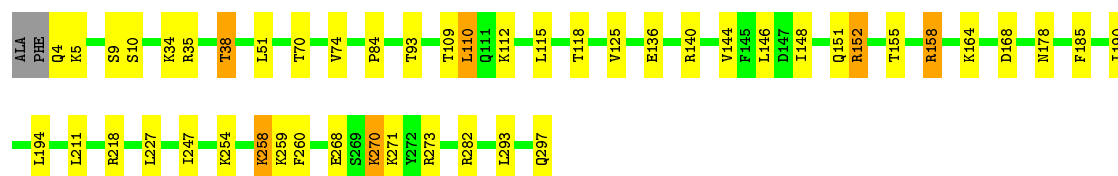
- Molecule 42: 60S ribosomal protein L5

Chain L5: 35% 50% 14%



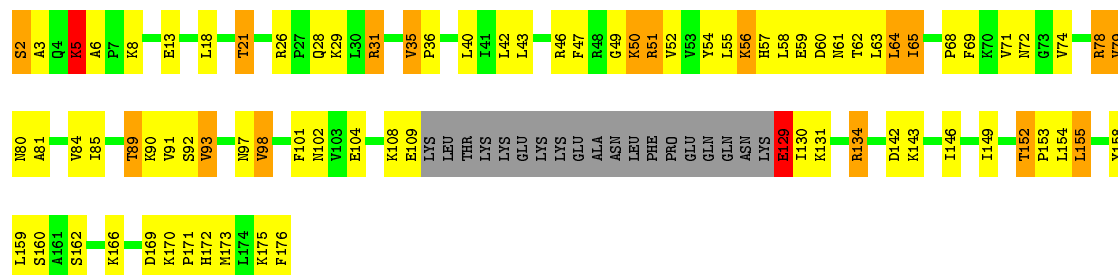
- Molecule 42: 60S ribosomal protein L5

Chain L5: 83% 14%

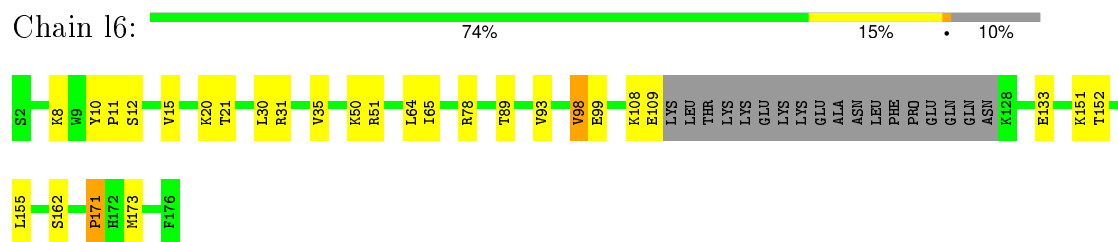


- Molecule 43: 60S ribosomal protein L6-A

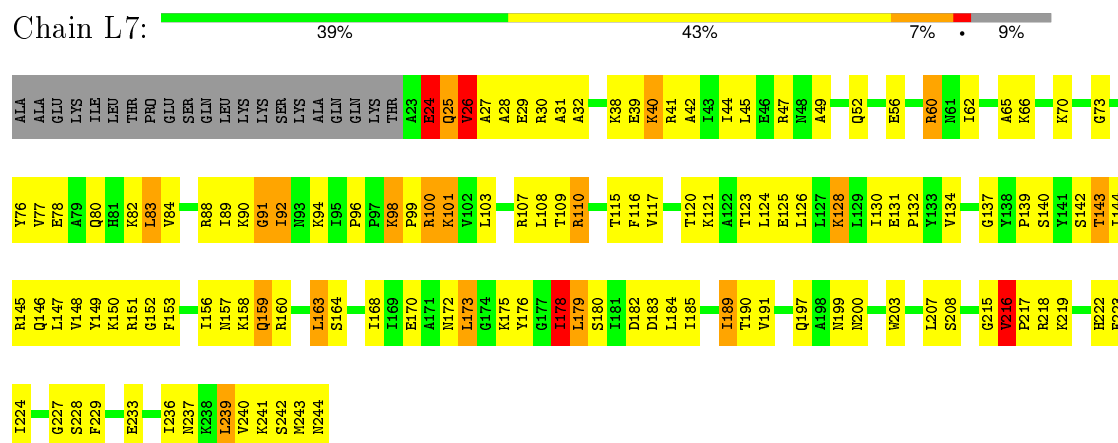
Chain L6: 42% 36% 10% 11%



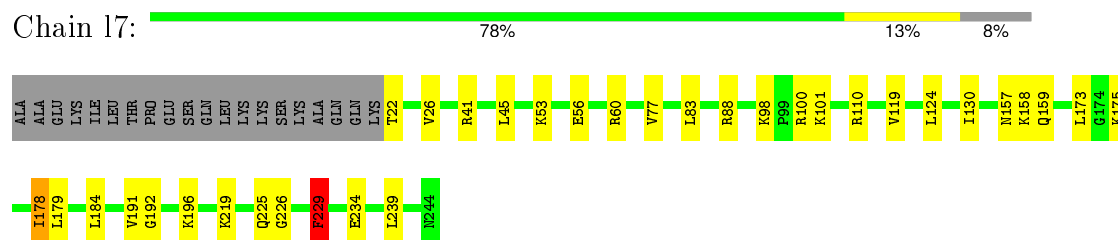
- Molecule 43: 60S ribosomal protein L6-A



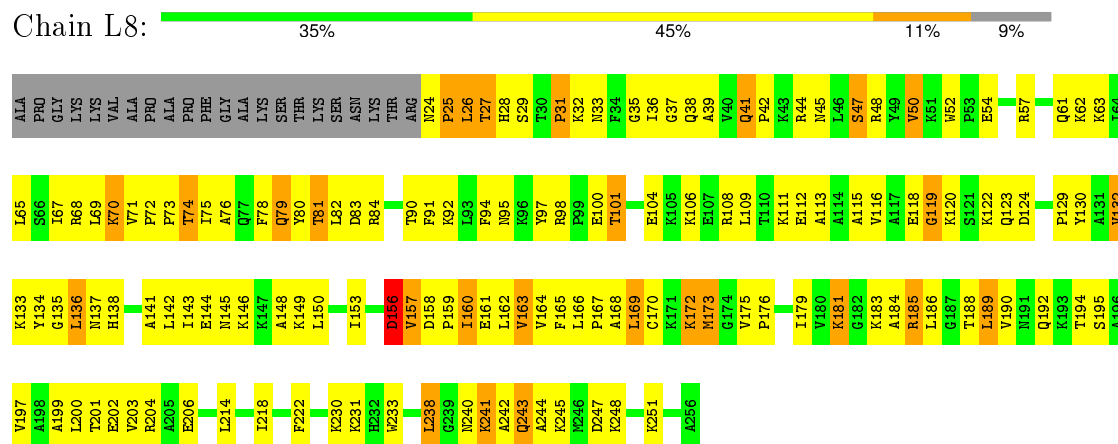
- Molecule 44: 60S ribosomal protein L7-A



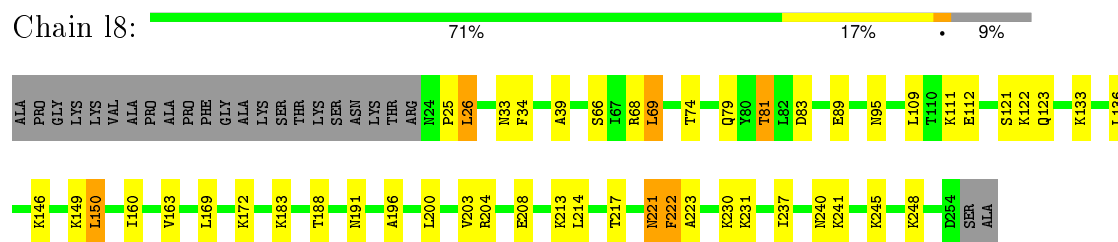
- Molecule 44: 60S ribosomal protein L7-A



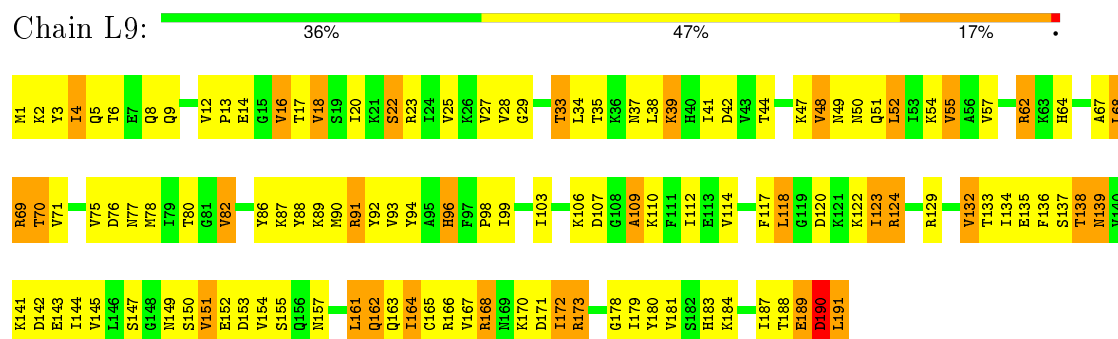
- Molecule 45: 60S ribosomal protein L8-A



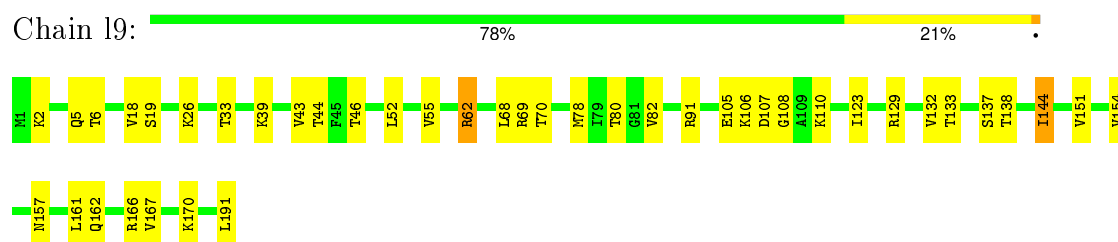
- Molecule 45: 60S ribosomal protein L8-A



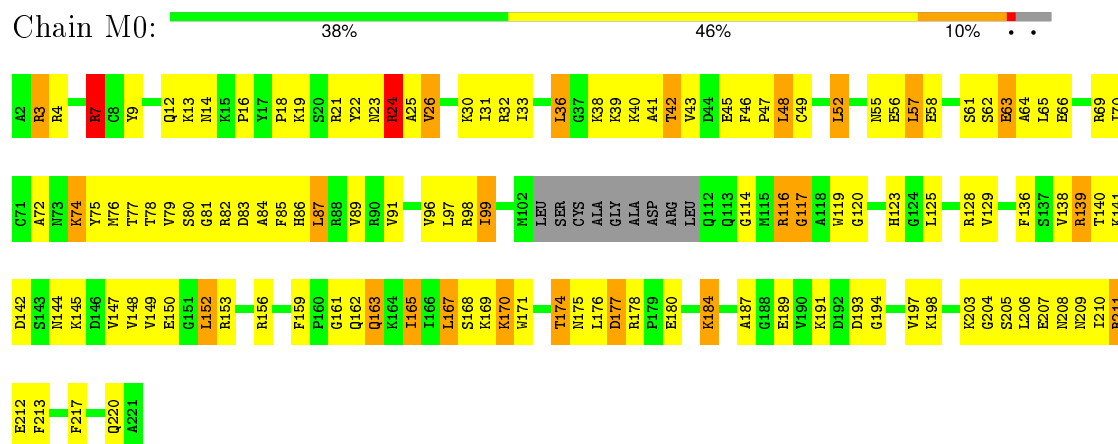
- Molecule 46: 60S ribosomal protein L9-A



- Molecule 46: 60S ribosomal protein L9-A

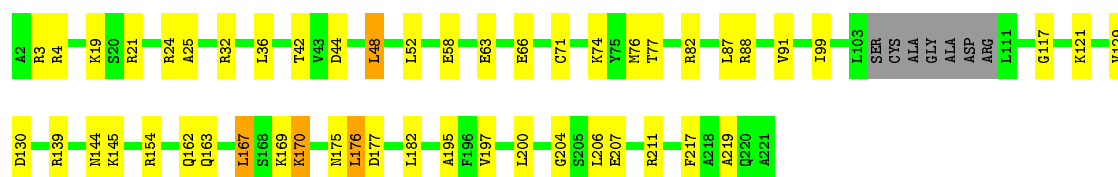


- Molecule 47: 60S ribosomal protein L10

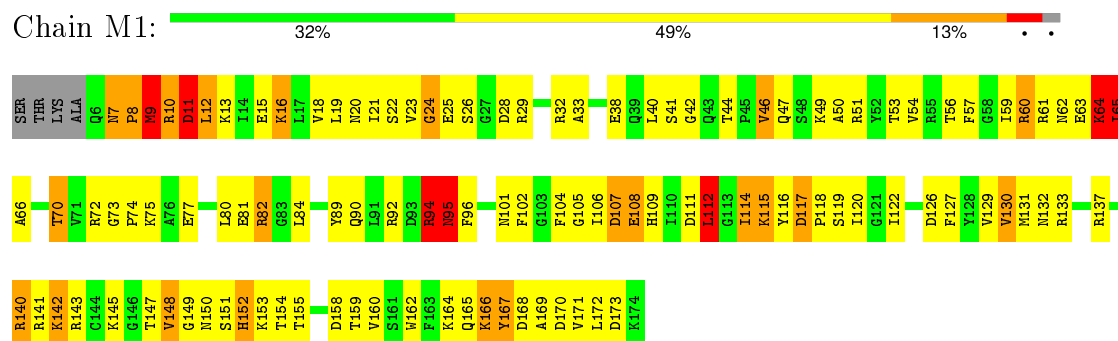


- Molecule 47: 60S ribosomal protein L10

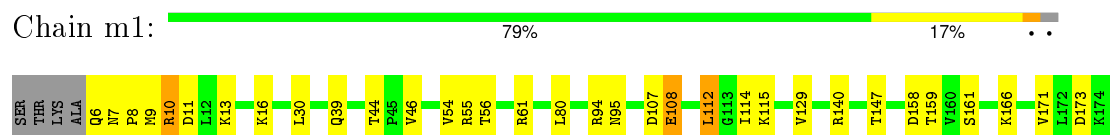




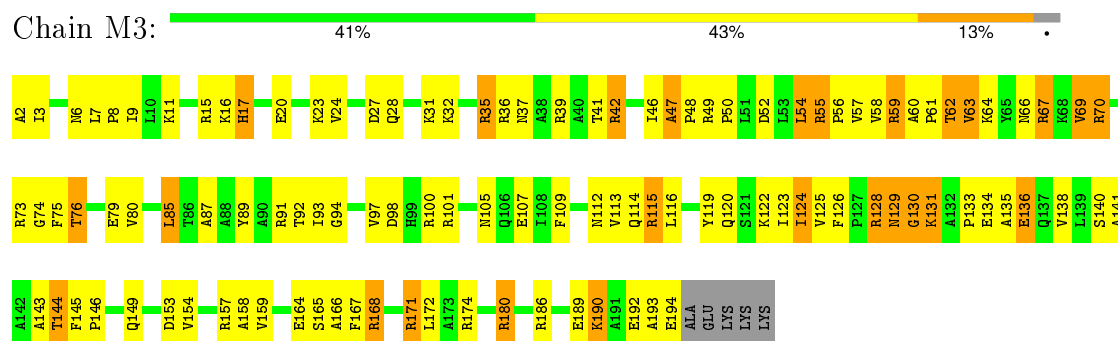
• Molecule 48: 60S ribosomal protein L11-B



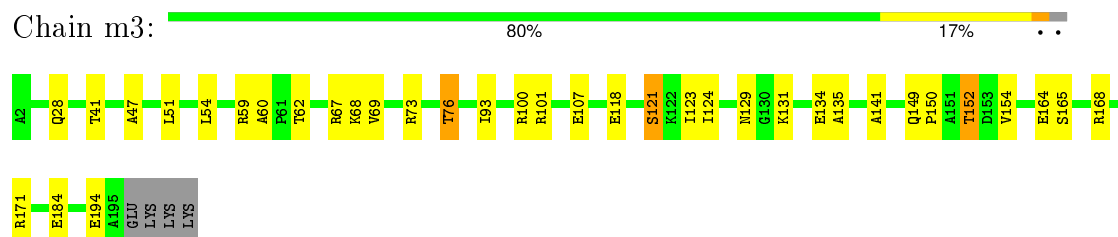
• Molecule 48: 60S ribosomal protein L11-B



• Molecule 49: 60S ribosomal protein L13-A

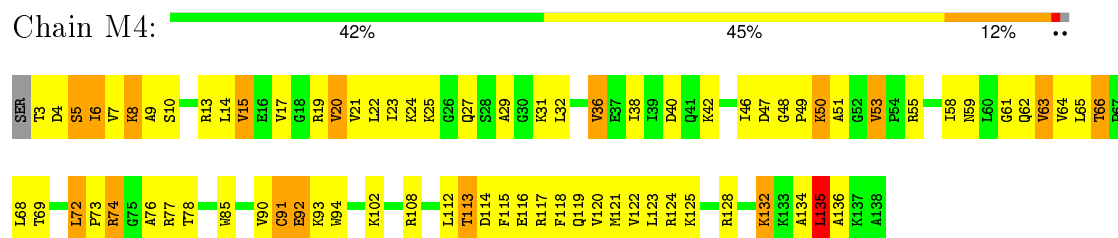


• Molecule 49: 60S ribosomal protein L13-A

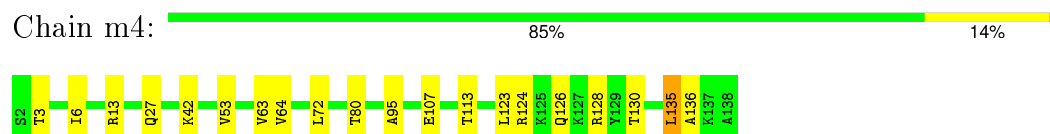


• Molecule 50: 60S ribosomal protein L14-A

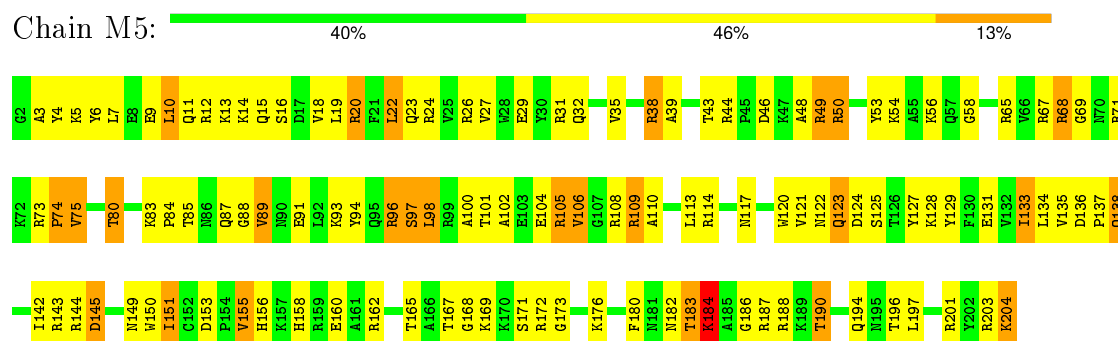




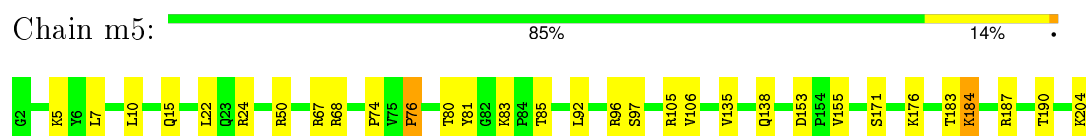
- Molecule 50: 60S ribosomal protein L14-A



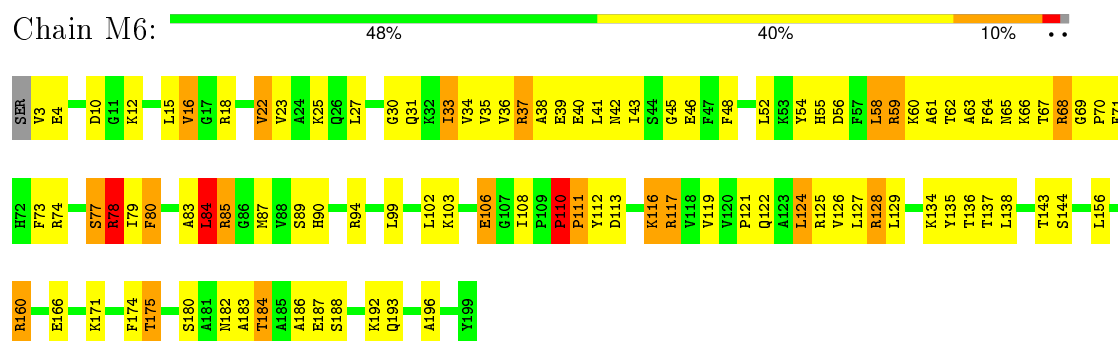
- Molecule 51: 60S ribosomal protein L15-A



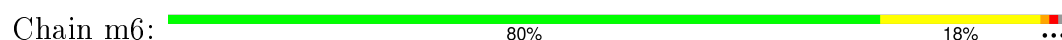
- Molecule 51: 60S ribosomal protein L15-A

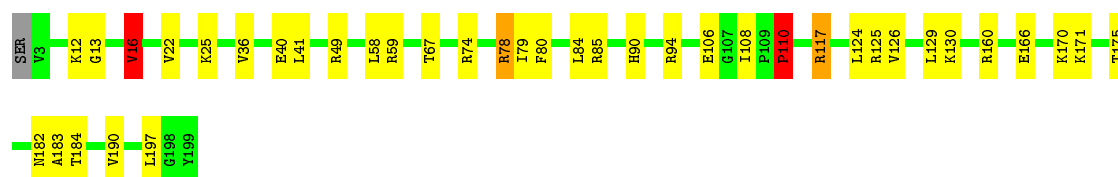


- Molecule 52: 60S ribosomal protein L16-A

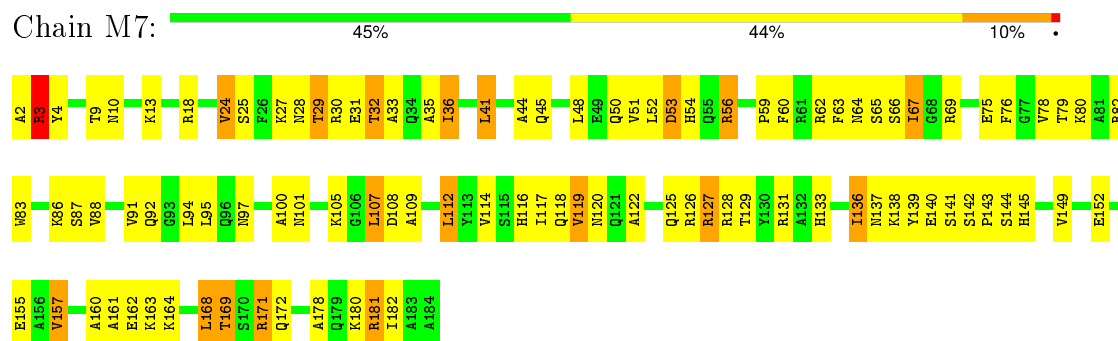


- Molecule 52: 60S ribosomal protein L16-A

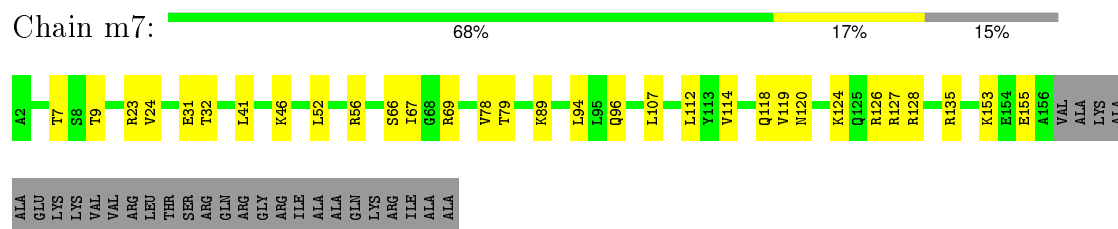




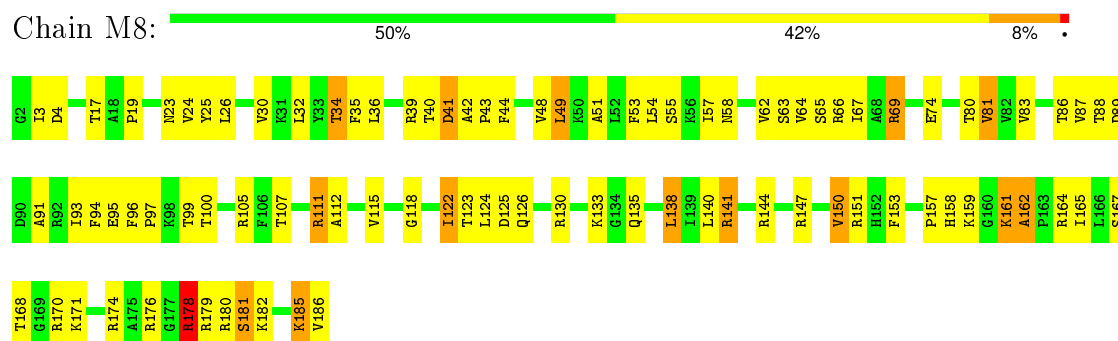
- Molecule 53: 60S ribosomal protein L17-A



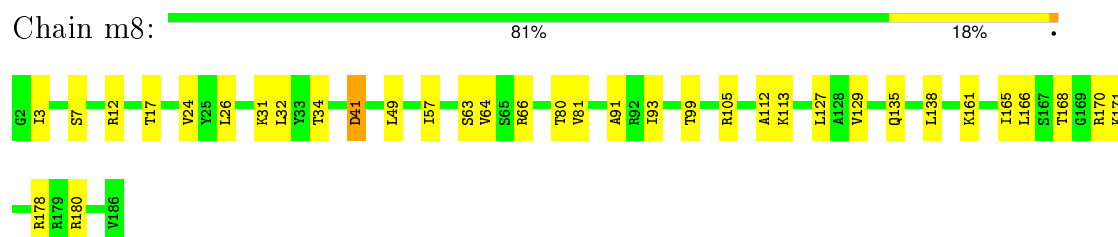
- Molecule 53: 60S ribosomal protein L17-A



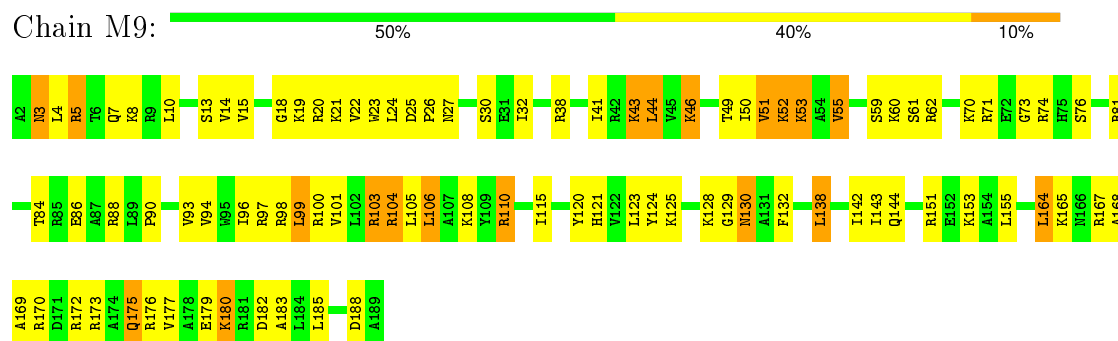
- Molecule 54: 60S ribosomal protein L18-A



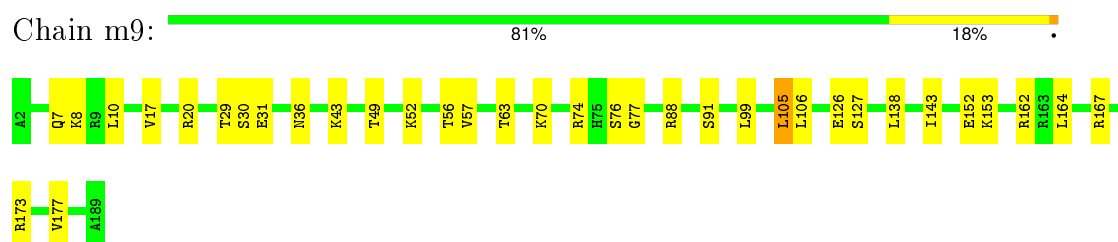
- Molecule 54: 60S ribosomal protein L18-A



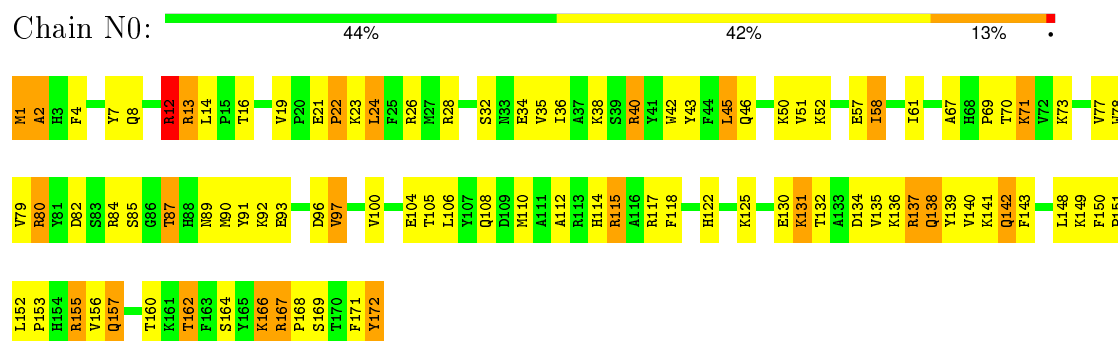
- Molecule 55: 60S ribosomal protein L19-A



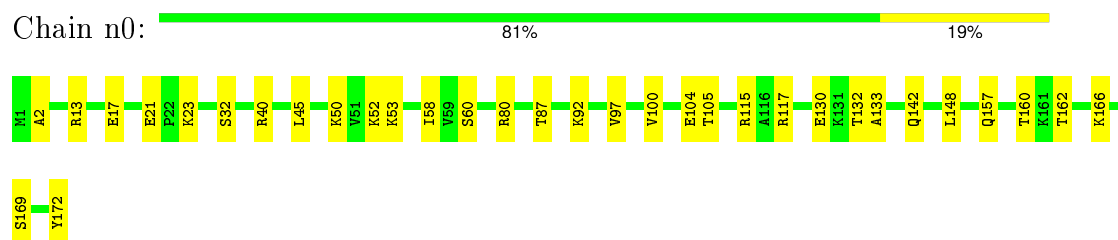
- Molecule 55: 60S ribosomal protein L19-A



- Molecule 56: 60S ribosomal protein L20-A

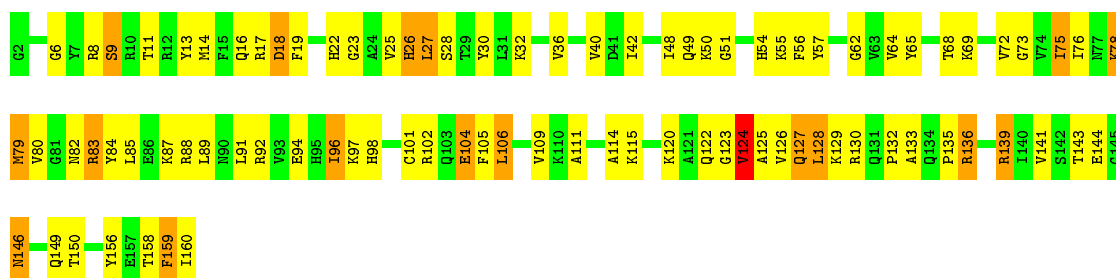


- Molecule 56: 60S ribosomal protein L20-A




- Molecule 57: 60S ribosomal protein L21-A





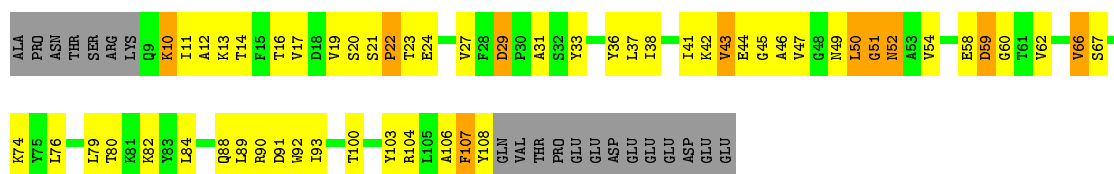
- Molecule 57: 60S ribosomal protein L21-A

Chain n1:  82% 17%



- Molecule 58: 60S ribosomal protein L22-A

Chain N2: 



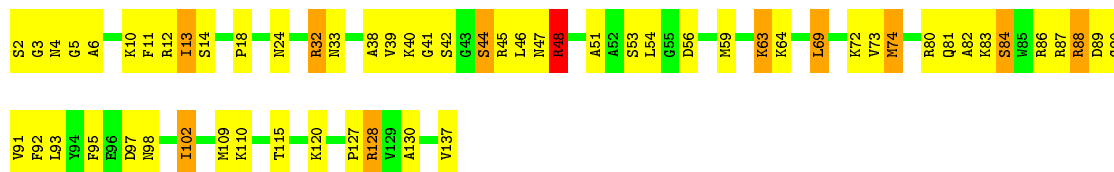
- Molecule 58: 60S ribosomal protein L22-A

Chain n2:  66% 15% • 18%



- Molecule 59: 60S ribosomal protein L23-A

Chain N3: 

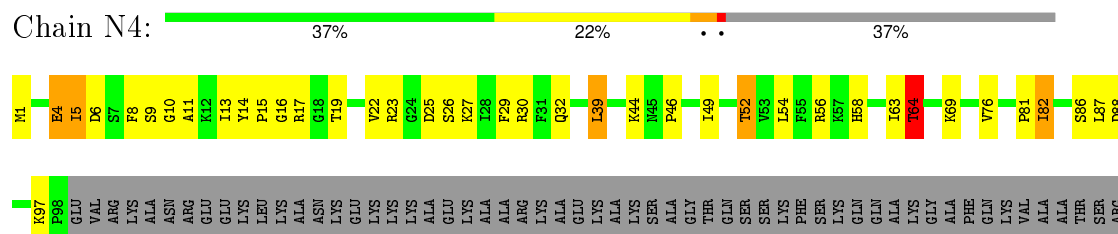


- Molecule 59: 60S ribosomal protein L23-A

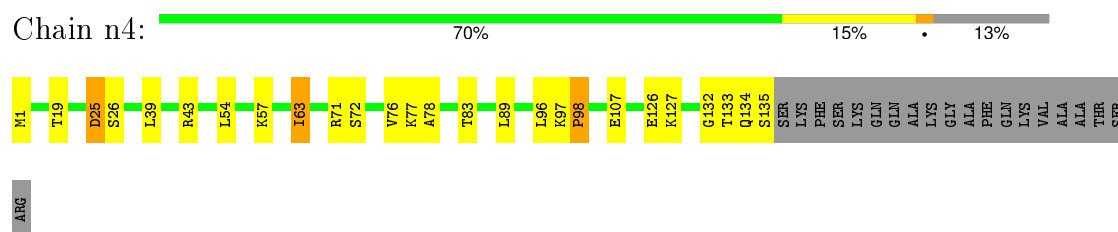
Chain n3:  89% 10%



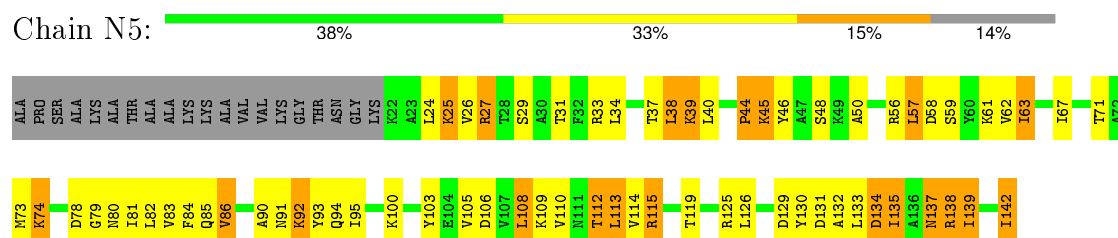
- Molecule 60: 60S ribosomal protein L24-A



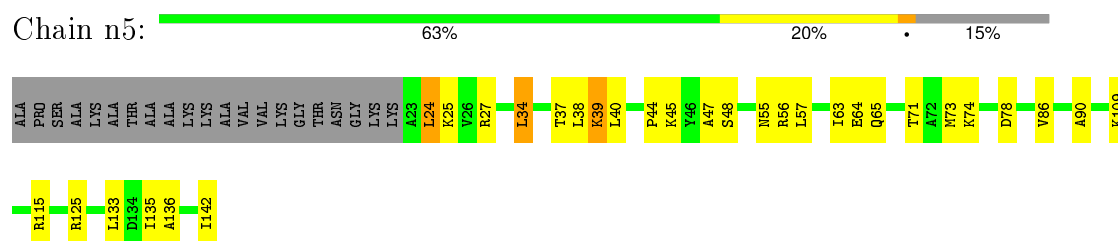
- Molecule 60: 60S ribosomal protein L24-A



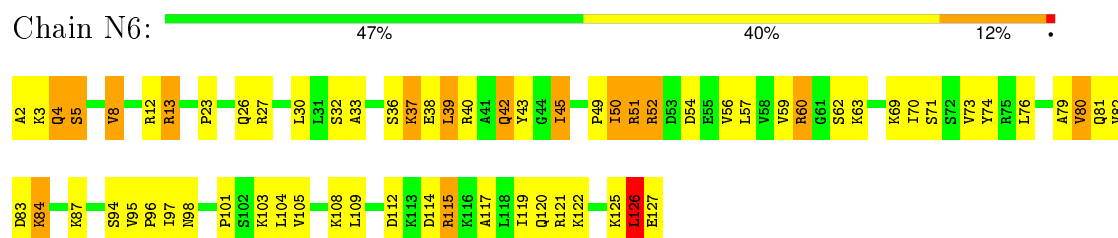
- Molecule 61: 60S ribosomal protein L25



- 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

Chain N7: 30% 53% 16% .



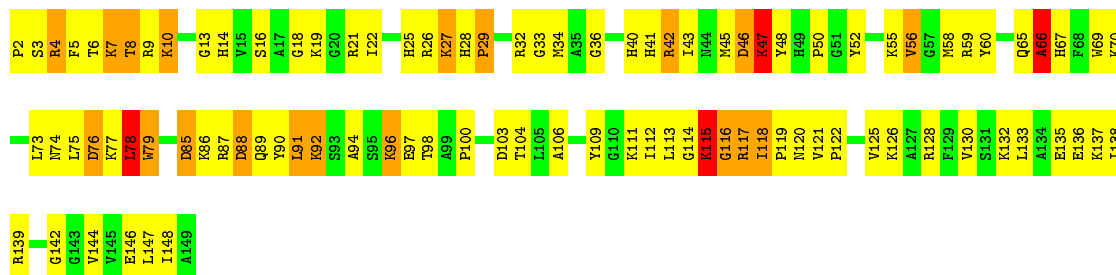
- Molecule 63: 60S ribosomal protein L27-A

Chain n7: 76% 21% .



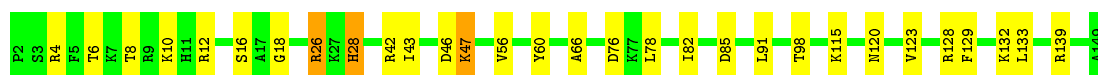
- Molecule 64: 60S ribosomal protein L28

Chain N8: 34% 50% 13% .



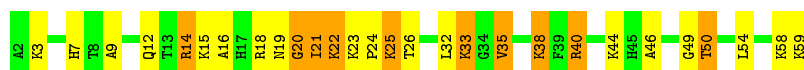
- Molecule 64: 60S ribosomal protein L28

Chain n8: 80% 18% .



- Molecule 65: 60S ribosomal protein L29

Chain N9: 52% 31% 17% .



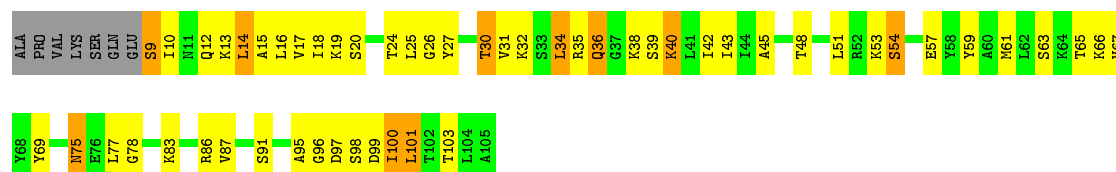
- Molecule 65: 60S ribosomal protein L29

Chain n9:  71% 26% .




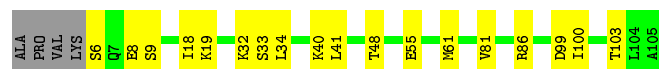
- Molecule 66: 60S ribosomal protein L30

Chain O0:  41% 42% 10% 7%



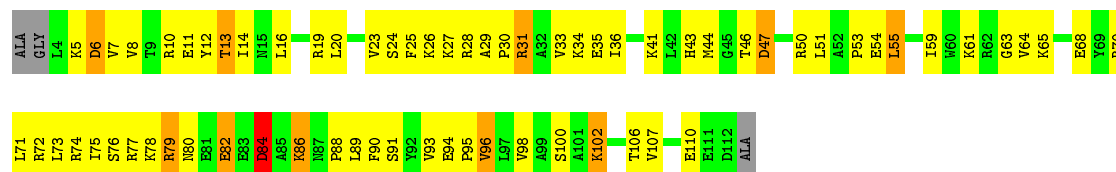
- Molecule 66: 60S ribosomal protein L30

Chain o0:  79% 17% .



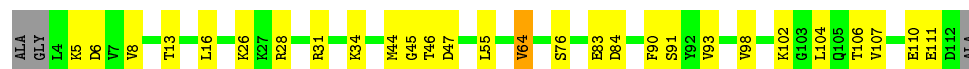
- Molecule 67: 60S ribosomal protein L31-A

Chain O1:  36% 52% 9% . .



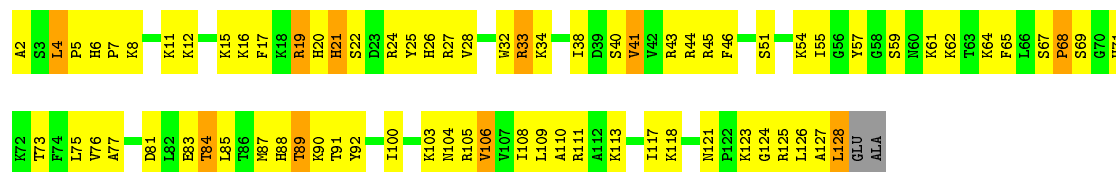
- Molecule 67: 60S ribosomal protein L31-A

Chain o1:  72% 24% . .

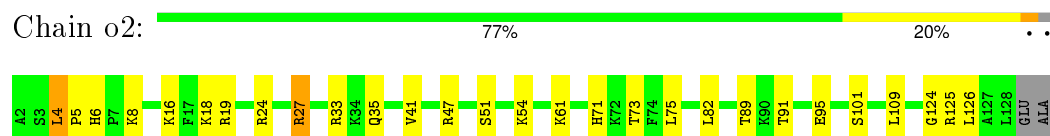


- Molecule 68: 60S ribosomal protein L32

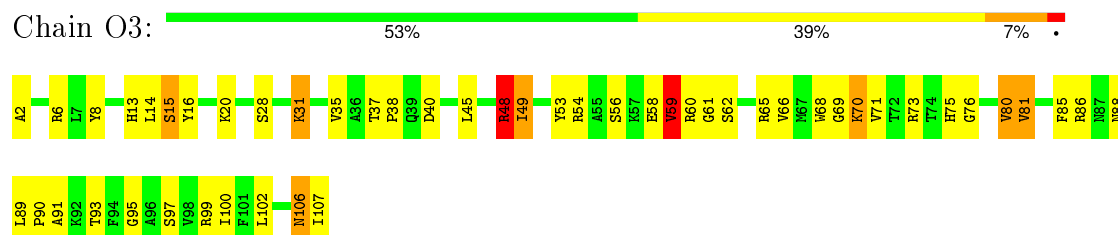
Chain O2:  40% 51% 8% .



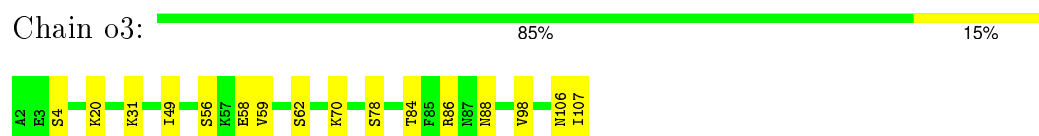
- Molecule 68: 60S ribosomal protein L32



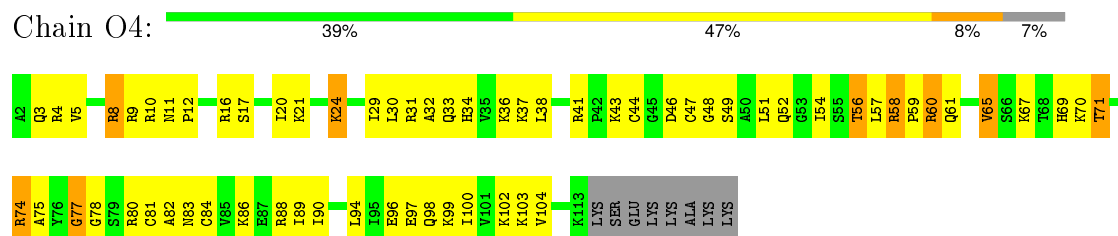
- Molecule 69: 60S ribosomal protein L33-A



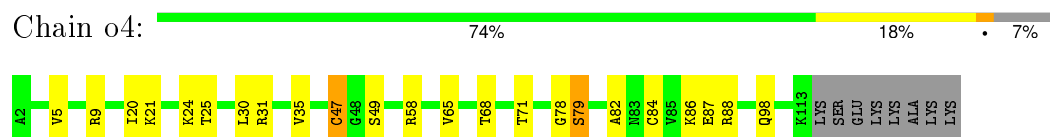
- Molecule 69: 60S ribosomal protein L33-A



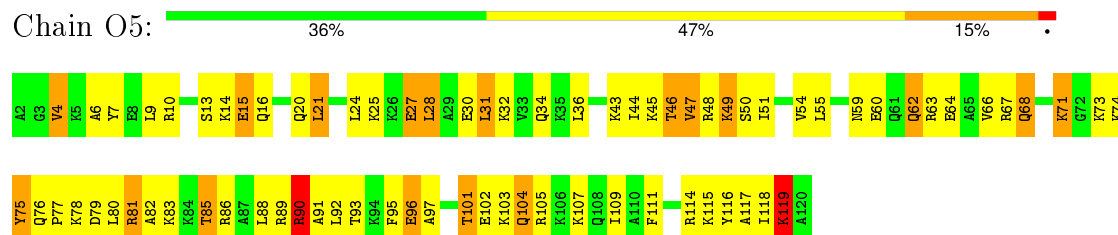
- Molecule 70: 60S ribosomal protein L34-A



- Molecule 70: 60S ribosomal protein L34-A

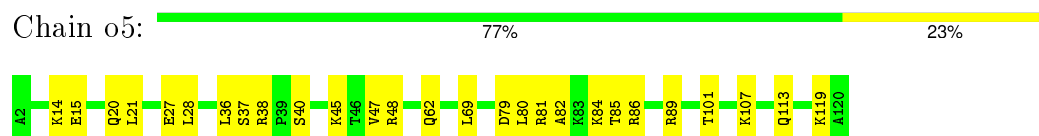


- Molecule 71: 60S ribosomal protein L35-A

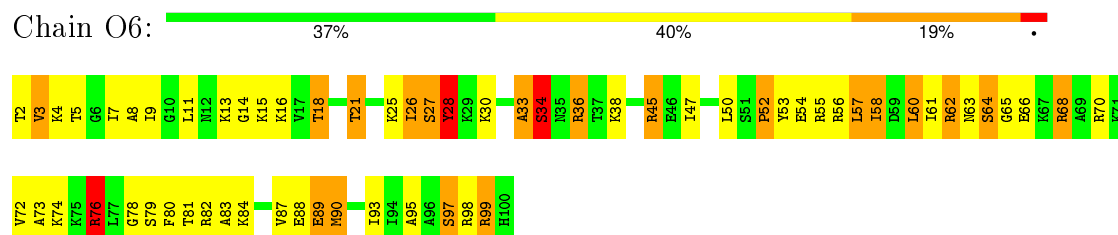


- Molecule 71: 60S ribosomal protein L35-A

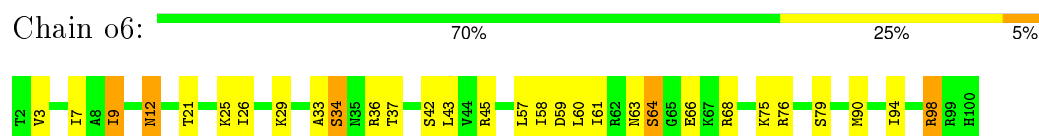




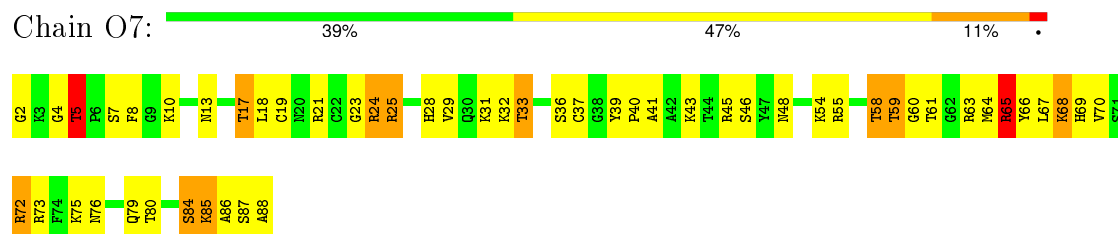
- Molecule 72: 60S ribosomal protein L36-A



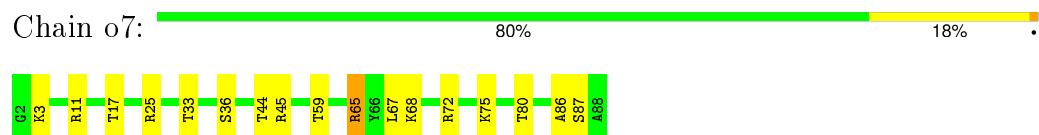
- Molecule 72: 60S ribosomal protein L36-A



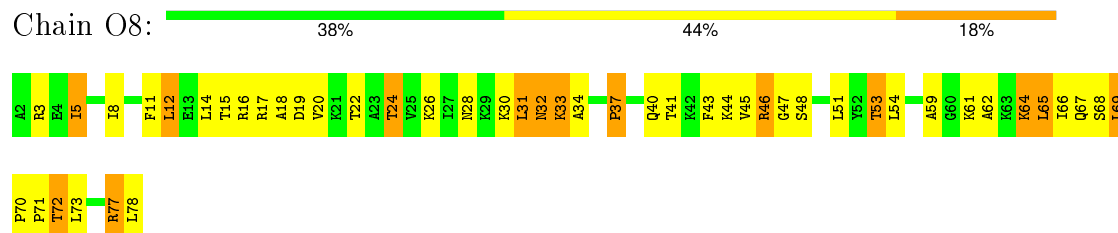
- Molecule 73: 60S ribosomal protein L37-A




- Molecule 73: 60S ribosomal protein L37-A



- Molecule 74: 60S ribosomal protein L38



- Molecule 74: 60S ribosomal protein L38

Chain o8:  78% 22%




- Molecule 75: 60S ribosomal protein L39

Chain O9:  34% 48% 18%



- Molecule 75: 60S ribosomal protein L39

Chain o9:  80% 18%



- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain Q0:  44% 40% 13%



- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain q0:  71% 27%



- Molecule 77: 60S ribosomal protein L41-A

Chain Q1:  28% 48% 20%



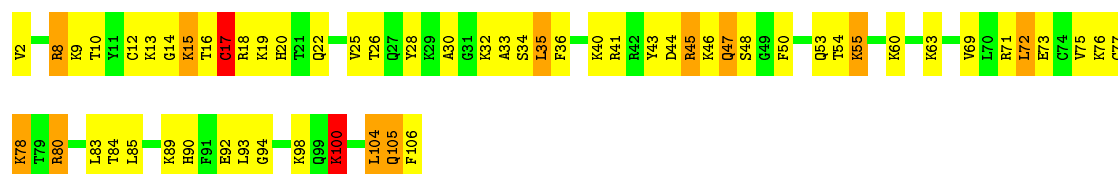
- Molecule 77: 60S ribosomal protein L41-A

Chain q1:  68% 32%



- Molecule 78: 60S ribosomal protein L42-A

Chain Q2:  44% 44% 10%



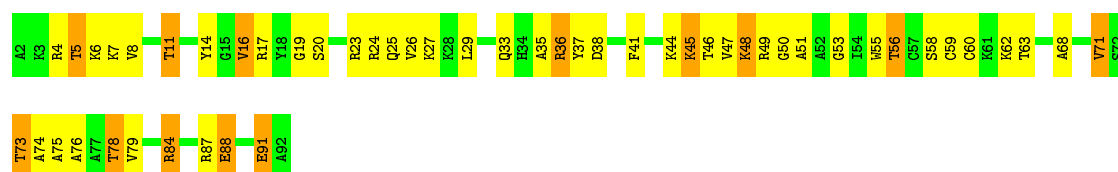
- Molecule 78: 60S ribosomal protein L42-A

Chain q2: 83% 15%



- Molecule 79: 60S ribosomal protein L43-A

Chain Q3: 44% 42% 14%



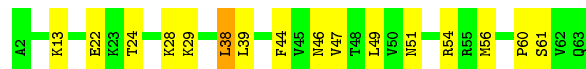
- Molecule 79: 60S ribosomal protein L43-A

Chain q3: 88% 12%



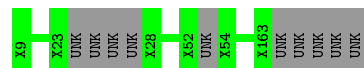
- Molecule 80: 40S ribosomal protein S30-A

Chain e0: 74% 24%



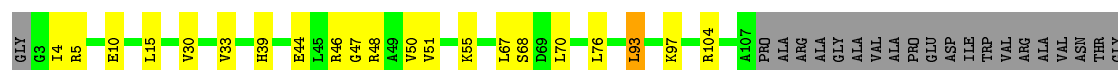
- Molecule 81: Unknown protein chain m2

Chain m2: 94% 6%



- Molecule 82: 60S acidic ribosomal protein P0

Chain p0: 39% 7% 54%



MET	GLU	PRO	GLY	LYS	THR	SER	PHE	GLN	ALA	LEU	GLY	VAL	PRO	PRO	THR	LYS	ILE	ALA	ARG	GLY	THR	ILE	GLU	TYR	LYS	ILE	VAL	SER	ASP	VAL	LYS	VAL	VAL	ASP	ALA	ALA	GLY	ASN	LYS	VAL	GLY	GLN	SER	GLU	ALA	ALA	SER	LEU	LEU	ASN	ILE	SER	PRO	PHE	THR	PHE	G184	L185	P198																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A221	SER	ILE	LEU	ALA	ILE	GLY	TYR	PRO	THR	LEU	PRO	SER	VAL	GLY	HIS	THR	LEU	ILE	ASN	ASN	TYR	LYS	ASP	LEU	LEU	ALA	VAL	VAL	ALA	ALA	ILE	ALA	ALA	SER	TYR	HIS	TYR	PRO	GLU	ILE	GLU	ASP	LEU	VAL	ASP	ARG	ILE	GLU	ASN	PRO	GLU	LYS	TYR	ALA	ALA	ALA	PRO	ALA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
ALA	THR	SER	ALA	SER	GLY	ASP	ALA	ALA	PRO	GLU	GLU	ALA	ALA	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU	GLU</

- Molecule 83: Unknown protein chain p1

Chain p1: 100%

There are no outlier residues recorded for this chain.

- Molecule 84: Unknown protein chain 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, $\alpha$ , $\beta$ , $\gamma$	436.25Å 286.92Å 303.84Å 90.00° 98.90° 90.00°	Depositor
Resolution (Å)	49.69 – 3.00	Depositor
% Data completeness (in resolution range)	98.8 (49.69-3.00)	Depositor
$R_{merge}$	0.34	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.24 (at 3.01Å)	Xtriage
Refinement program	PHENIX (phenix.refine: dev_1702)	Depositor
R, $R_{free}$	0.208 , 0.255	Depositor
Wilson B-factor (Å <sup>2</sup> )	74.0	Xtriage
Anisotropy	0.180	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.48$ , $\langle L^2 \rangle = 0.31$	Xtriage
Outliers	0 of 1451442 reflections	Xtriage
Total number of atoms	411245	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	71.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.51% 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: HMT, 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	0.68	1/41698 (0.0%)	1.25	264/64972 (0.4%)
1	6	0.84	11/42765 (0.0%)	1.37	434/66634 (0.7%)
2	S0	0.46	0/1617	0.68	0/2215
2	s0	0.48	0/1623	0.70	0/2222
3	S1	0.37	0/1735	0.64	0/2335
3	s1	0.50	0/1748	0.66	0/2352
4	S2	0.48	0/1665	0.65	0/2263
4	s2	0.57	0/1665	0.75	0/2263
5	S3	0.47	0/1759	0.64	0/2368
5	s3	0.41	0/1759	0.60	0/2368
6	S4	0.45	0/2109	0.70	0/2839
6	s4	0.55	0/2109	0.78	1/2839 (0.0%)
7	S5	0.37	0/1629	0.58	0/2202
7	s5	0.45	0/1629	0.64	0/2202
8	S6	0.46	0/1823	0.64	0/2439
8	s6	0.56	0/1779	0.70	0/2379
9	S7	0.42	0/1506	0.64	1/2028 (0.0%)
9	s7	0.47	0/1516	0.67	1/2043 (0.0%)
10	S8	0.51	0/1514	0.72	1/2021 (0.0%)
10	s8	0.62	0/1514	0.76	1/2021 (0.0%)
11	S9	0.46	0/1519	0.63	0/2035
11	s9	0.53	0/1519	0.74	2/2035 (0.1%)
12	C0	0.42	0/790	0.69	1/1069 (0.1%)
12	c0	0.36	0/777	0.64	3/1049 (0.3%)
13	C1	0.58	1/1240 (0.1%)	0.67	0/1675
13	c1	0.65	1/1194 (0.1%)	0.78	1/1610 (0.1%)
14	C2	0.37	0/900	0.63	0/1224
14	c2	0.30	0/900	0.56	0/1224
15	C3	0.48	0/1215	0.67	2/1638 (0.1%)
15	c3	0.59	0/1215	0.71	0/1638
16	C4	0.39	0/901	0.65	0/1217
16	c4	0.54	0/960	0.76	0/1290

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	C5	0.43	0/998	0.65	0/1341
17	c5	0.49	0/1060	0.70	0/1426
18	C6	0.43	0/1125	0.69	3/1510 (0.2%)
18	c6	0.48	0/1131	0.67	0/1518
19	C7	0.44	0/935	0.63	0/1254
19	c7	0.49	0/914	0.72	0/1224
20	C8	0.42	0/1211	0.61	0/1628
20	c8	0.49	0/1211	0.71	2/1628 (0.1%)
21	C9	0.40	0/1130	0.59	0/1517
21	c9	0.49	0/1130	0.66	1/1517 (0.1%)
22	D0	0.44	0/865	0.63	0/1169
22	d0	0.48	0/892	0.66	0/1205
23	D1	0.45	0/693	0.64	0/935
23	d1	0.52	0/693	0.72	0/935
24	D2	0.49	0/1038	0.69	2/1395 (0.1%)
24	d2	0.60	0/1038	0.74	1/1395 (0.1%)
25	D3	0.62	0/1139	0.75	1/1518 (0.1%)
25	d3	0.70	0/1139	0.83	1/1518 (0.1%)
26	D4	0.44	0/1087	0.63	1/1449 (0.1%)
26	d4	0.55	0/1087	0.71	0/1449
27	D5	0.39	0/571	0.69	0/768
27	d5	0.41	0/566	0.63	0/761
28	D6	0.45	0/782	0.66	0/1047
28	d6	0.55	0/782	0.71	0/1047
29	D7	0.43	0/620	0.66	0/838
29	d7	0.50	0/620	0.75	1/838 (0.1%)
30	D8	0.36	0/499	0.59	0/670
30	d8	0.44	0/499	0.67	0/670
31	D9	0.47	0/452	0.72	1/600 (0.2%)
31	d9	0.48	0/452	0.64	0/600
32	E0	0.48	0/483	0.63	0/643
33	E1	0.45	0/577	0.77	0/770
33	e1	0.39	0/619	0.74	1/822 (0.1%)
34	SR	0.36	0/2494	0.58	0/3393
34	sR	0.37	0/2495	0.55	0/3395
35	SM	0.54	1/1113 (0.1%)	0.79	4/1502 (0.3%)
35	sM	0.49	0/683	0.70	1/923 (0.1%)
36	1	1.11	100/75394 (0.1%)	1.65	1834/117545 (1.6%)
36	5	1.17	147/75414 (0.2%)	1.69	1950/117575 (1.7%)
37	3	0.90	2/2883 (0.1%)	1.41	33/4491 (0.7%)
37	7	1.15	8/2883 (0.3%)	1.71	80/4491 (1.8%)
38	4	1.06	4/3746 (0.1%)	1.62	86/5832 (1.5%)
38	8	0.98	1/3746 (0.0%)	1.47	39/5832 (0.7%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
39	L2	0.73	0/1948	0.85	2/2617 (0.1%)
39	l2	0.75	1/1946 (0.1%)	0.90	3/2614 (0.1%)
40	L3	0.74	1/3146 (0.0%)	0.83	0/4228
40	l3	0.85	0/3146	0.93	11/4228 (0.3%)
41	L4	0.82	0/2800	0.96	7/3790 (0.2%)
41	l4	0.75	0/2800	0.90	3/3790 (0.1%)
42	L5	0.57	0/2425	0.69	0/3271
42	l5	0.74	0/2408	0.82	2/3248 (0.1%)
43	L6	0.76	0/1260	0.81	0/1694
43	l6	0.80	0/1269	0.87	2/1705 (0.1%)
44	L7	0.79	0/1821	0.89	2/2451 (0.1%)
44	l7	0.87	0/1828	0.89	1/2461 (0.0%)
45	L8	0.57	0/1836	0.70	2/2481 (0.1%)
45	l8	0.53	0/1795	0.67	1/2429 (0.0%)
46	L9	0.66	0/1539	0.77	0/2073
46	l9	0.80	0/1539	0.86	0/2073
47	M0	0.74	0/1741	0.84	4/2335 (0.2%)
47	m0	0.76	0/1758	0.86	3/2358 (0.1%)
48	M1	0.50	0/1374	0.71	1/1842 (0.1%)
48	m1	0.63	0/1374	0.82	1/1842 (0.1%)
49	M3	0.74	0/1568	0.85	0/2106
49	m3	0.71	0/1573	0.85	0/2113
50	M4	0.74	0/1068	0.84	1/1438 (0.1%)
50	m4	0.81	0/1074	0.82	0/1446
51	M5	0.75	0/1757	0.85	0/2354
51	m5	0.67	0/1757	0.82	0/2354
52	M6	0.89	1/1585 (0.1%)	0.91	4/2128 (0.2%)
52	m6	1.01	5/1585 (0.3%)	0.99	8/2128 (0.4%)
53	M7	0.80	0/1443	0.89	2/1944 (0.1%)
53	m7	0.90	0/1250	0.89	1/1683 (0.1%)
54	M8	0.82	0/1465	0.89	2/1965 (0.1%)
54	m8	0.75	0/1465	0.93	2/1965 (0.1%)
55	M9	0.55	0/1538	0.66	0/2050
55	m9	0.65	0/1538	0.70	1/2050 (0.0%)
56	N0	0.77	0/1481	0.89	0/1990
56	n0	0.86	0/1481	0.89	1/1990 (0.1%)
57	N1	0.76	0/1300	0.80	0/1743
57	n1	0.88	1/1300 (0.1%)	0.86	1/1743 (0.1%)
58	N2	0.43	0/812	0.62	0/1099
58	n2	0.51	0/794	0.66	0/1076
59	N3	0.72	0/1018	0.83	1/1369 (0.1%)
59	n3	0.83	0/1018	0.94	3/1369 (0.2%)
60	N4	0.55	0/712	0.67	0/958



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
60	n4	0.68	0/1052	0.74	0/1398
61	N5	0.63	0/979	0.78	0/1321
61	n5	0.66	0/974	0.79	1/1314 (0.1%)
62	N6	0.70	0/1004	0.88	2/1341 (0.1%)
62	n6	0.69	0/1004	0.81	0/1341
63	N7	0.53	0/1118	0.68	1/1497 (0.1%)
63	n7	0.50	0/1118	0.67	0/1497
64	N8	0.80	0/1204	0.92	4/1612 (0.2%)
64	n8	0.76	0/1204	0.91	2/1612 (0.1%)
65	N9	0.76	0/473	0.81	0/629
65	n9	0.84	0/473	0.98	0/629
66	O0	0.50	0/751	0.67	0/1008
66	o0	0.54	0/775	0.68	0/1040
67	O1	0.62	0/890	0.68	0/1196
67	o1	0.80	0/897	0.87	1/1205 (0.1%)
68	O2	0.82	0/1041	0.85	0/1394
68	o2	0.85	0/1041	0.93	1/1394 (0.1%)
69	O3	0.91	0/868	0.92	2/1168 (0.2%)
69	o3	0.95	0/868	0.86	0/1168
70	O4	0.59	0/890	0.83	2/1189 (0.2%)
70	o4	0.60	0/890	0.80	0/1189
71	O5	0.72	0/978	0.82	1/1301 (0.1%)
71	o5	0.58	0/974	0.71	0/1297
72	O6	0.65	0/778	0.81	1/1034 (0.1%)
72	o6	0.61	0/777	0.72	0/1033
73	O7	0.81	0/696	0.94	2/923 (0.2%)
73	o7	0.76	0/696	0.90	1/923 (0.1%)
74	O8	0.53	0/618	0.64	0/826
74	o8	0.46	0/614	0.67	0/822
75	O9	0.79	1/443 (0.2%)	0.87	1/588 (0.2%)
75	o9	0.75	0/443	0.87	1/588 (0.2%)
76	Q0	0.78	0/423	0.81	0/562
76	q0	0.94	0/423	0.94	2/562 (0.4%)
77	Q1	0.57	0/234	1.04	1/300 (0.3%)
77	q1	0.82	0/234	1.05	1/300 (0.3%)
78	Q2	0.94	1/860 (0.1%)	0.84	0/1136
78	q2	0.82	1/860 (0.1%)	0.83	0/1136
79	Q3	0.72	0/701	0.83	0/934
79	q3	0.72	0/701	0.80	0/934
80	e0	0.54	0/499	0.72	0/665
82	p0	0.45	0/1092	0.62	0/1474
All	All	0.88	289/430074 (0.1%)	1.31	4853/631364 (0.8%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
5	s3	0	1
7	s5	0	2
9	S7	0	1
10	S8	0	1
11	s9	0	1
16	C4	0	1
17	c5	0	1
18	c6	0	2
19	C7	0	2
22	d0	0	1
25	d3	0	1
27	D5	0	2
27	d5	0	1
33	E1	0	1
39	L2	0	1
39	l2	0	2
42	l5	0	2
43	L6	0	3
43	l6	0	1
44	l7	0	2
45	l8	0	1
48	M1	0	1
52	M6	0	1
52	m6	0	1
56	N0	0	2
60	n4	0	1
62	n6	0	1
63	n7	0	1
64	n8	0	3
65	N9	0	1
65	n9	0	1
67	O1	0	1
67	o1	0	1
All	All	0	45

All (289) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	Q2	17	CYS	CB-SG	16.24	2.09	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	-11.04	1.29	1.38
36	1	3181	C	N3-C4	-10.76	1.26	1.33
78	q2	17	CYS	CB-SG	10.62	2.00	1.82
36	5	1152	G	C2-N3	-9.57	1.25	1.32
36	5	1152	G	N9-C8	7.75	1.43	1.37
36	5	960	U	N1-C2	7.57	1.45	1.38
36	5	2726	C	N3-C4	-7.48	1.28	1.33
36	5	1152	G	N3-C4	-7.45	1.30	1.35
36	5	1304	A	N3-C4	7.37	1.39	1.34
36	5	953	G	C5-C4	-7.20	1.33	1.38
57	n1	104	GLU	CB-CG	7.13	1.65	1.52
36	5	1158	A	C5-C6	-7.10	1.34	1.41
36	5	2243	A	N3-C4	-7.06	1.30	1.34
36	5	934	G	N7-C5	-7.03	1.35	1.39
36	5	1149	G	N9-C8	-7.01	1.32	1.37
36	1	34	A	N9-C4	-6.90	1.33	1.37
13	C1	128	CYS	CB-SG	-6.87	1.70	1.82
36	5	1874	A	N9-C4	-6.85	1.33	1.37
52	m6	80	PHE	CB-CG	-6.83	1.39	1.51
36	1	659	G	N1-C2	-6.81	1.32	1.37
36	1	1141	C	N1-C6	-6.75	1.33	1.37
36	1	2761	G	N9-C8	-6.74	1.33	1.37
1	6	1659	A	N9-C4	-6.71	1.33	1.37
36	5	2954	U	C4-O4	6.65	1.28	1.23
36	5	1332	A	N3-C4	-6.57	1.30	1.34
38	4	28	C	N1-C6	-6.56	1.33	1.37
36	1	1858	A	N7-C5	-6.55	1.35	1.39
36	5	636	C	N1-C6	-6.54	1.33	1.37
36	5	2138	A	N7-C5	-6.53	1.35	1.39
36	5	2386	A	N7-C5	-6.51	1.35	1.39
36	5	970	A	N9-C4	-6.50	1.33	1.37
36	5	3084	C	N1-C6	-6.50	1.33	1.37
36	5	420	G	N7-C5	-6.50	1.35	1.39
36	5	420	G	N9-C8	-6.48	1.33	1.37
36	5	1370	G	N9-C8	-6.46	1.33	1.37
36	5	2147	A	C5-C6	-6.45	1.35	1.41
36	5	2954	U	N1-C2	6.45	1.44	1.38
36	1	2617	U	N3-C4	-6.43	1.32	1.38
36	5	1152	G	C5-C6	-6.42	1.35	1.42
36	5	2335	G	C5-C4	-6.40	1.33	1.38
36	1	338	A	N7-C5	-6.40	1.35	1.39
36	1	931	C	N3-C4	-6.39	1.29	1.33

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1152	G	N1-C2	6.35	1.42	1.37
36	5	657	A	C5-C6	-6.33	1.35	1.41
36	1	1394	A	N9-C4	-6.27	1.34	1.37
36	1	2147	A	N9-C4	-6.23	1.34	1.37
36	5	2280	A	N9-C4	-6.23	1.34	1.37
1	6	1744	A	N9-C4	-6.22	1.34	1.37
36	5	649	A	C5-C6	-6.22	1.35	1.41
36	5	420	G	C5-C4	-6.21	1.34	1.38
36	1	343	U	N3-C4	-6.19	1.32	1.38
36	5	1429	G	N9-C4	-6.18	1.33	1.38
36	5	36	C	N1-C2	-6.18	1.33	1.40
36	5	2358	A	N9-C4	-6.17	1.34	1.37
38	4	28	C	N3-C4	-6.17	1.29	1.33
36	1	1392	G	C5-C4	-6.14	1.34	1.38
36	5	1847	A	N9-C4	-6.13	1.34	1.37
36	1	931	C	N1-C6	-6.13	1.33	1.37
36	5	1851	G	N7-C5	-6.13	1.35	1.39
36	5	1370	G	C6-N1	-6.12	1.35	1.39
36	1	1452	A	N9-C4	-6.12	1.34	1.37
36	5	2942	C	N1-C6	-6.12	1.33	1.37
36	1	368	G	N7-C5	-6.11	1.35	1.39
36	1	1119	C	N3-C4	-6.08	1.29	1.33
36	5	2813	A	N7-C5	-6.07	1.35	1.39
36	1	653	A	C5-C6	-6.07	1.35	1.41
36	1	1335	C	N1-C6	-6.06	1.33	1.37
36	5	2971	A	N9-C4	6.05	1.41	1.37
36	5	1115	G	N1-C2	-6.05	1.32	1.37
38	4	28	C	C4-C5	-6.03	1.38	1.43
36	1	661	G	N7-C5	-6.02	1.35	1.39
1	6	65	A	N9-C4	-6.02	1.34	1.37
36	1	1429	G	C5-C4	-6.01	1.34	1.38
36	5	947	G	N3-C4	-6.01	1.31	1.35
36	1	1103	A	N7-C5	5.97	1.42	1.39
36	1	189	G	N7-C5	-5.96	1.35	1.39
36	1	2419	A	N9-C4	-5.96	1.34	1.37
36	5	1902	G	C5-C4	-5.94	1.34	1.38
13	c1	128	CYS	CB-SG	-5.94	1.72	1.81
36	5	953	G	N7-C5	-5.94	1.35	1.39
36	1	2147	A	N3-C4	-5.93	1.31	1.34
36	5	2988	C	N3-C4	-5.92	1.29	1.33
36	1	1382	G	C5-C4	-5.89	1.34	1.38
36	1	1159	A	C6-N1	-5.88	1.31	1.35

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2280	A	N3-C4	-5.88	1.31	1.34
36	1	910	G	N7-C5	-5.88	1.35	1.39
36	1	1308	A	N7-C5	-5.87	1.35	1.39
36	5	1103	A	N9-C4	5.87	1.41	1.37
1	6	17	C	N3-C4	-5.87	1.29	1.33
36	5	3047	U	C2-N3	-5.86	1.33	1.37
36	1	2714	G	N9-C4	-5.85	1.33	1.38
36	1	2793	G	C2-N3	-5.84	1.28	1.32
1	6	1119	G	N7-C5	-5.84	1.35	1.39
36	1	800	G	C2-N3	-5.83	1.28	1.32
36	5	3052	G	C2-N3	-5.83	1.28	1.32
36	1	1103	A	N9-C4	5.82	1.41	1.37
36	5	2704	A	C5-C6	-5.81	1.35	1.41
36	5	2302	G	N1-C2	-5.81	1.33	1.37
36	5	2823	G	C5-C6	-5.80	1.36	1.42
36	1	2281	A	N9-C4	-5.80	1.34	1.37
36	5	970	A	N3-C4	-5.79	1.31	1.34
36	5	1199	C	N1-C6	-5.79	1.33	1.37
37	7	96	U	C4-O4	-5.79	1.19	1.23
40	L3	200	GLU	CG-CD	5.79	1.60	1.51
36	5	1177	G	N3-C4	-5.78	1.31	1.35
36	5	1159	A	N9-C4	-5.77	1.34	1.37
36	1	984	G	N7-C5	-5.76	1.35	1.39
36	1	936	A	N9-C4	-5.76	1.34	1.37
36	5	1200	A	N3-C4	-5.75	1.31	1.34
36	1	1367	G	N7-C5	-5.74	1.35	1.39
36	1	2385	G	N9-C4	-5.74	1.33	1.38
36	5	971	G	C5-C4	-5.74	1.34	1.38
36	5	426	G	C5-C4	-5.72	1.34	1.38
36	1	2867	C	N3-C4	-5.71	1.29	1.33
1	6	437	A	N9-C4	-5.69	1.34	1.37
36	5	3076	C	N3-C4	-5.69	1.29	1.33
36	5	2860	U	C4-O4	5.68	1.28	1.23
36	1	1164	G	C6-N1	-5.68	1.35	1.39
36	1	1377	G	N1-C2	-5.68	1.33	1.37
1	6	337	G	C2-N3	5.67	1.37	1.32
36	5	1432	C	N1-C6	-5.67	1.33	1.37
36	5	1110	U	C2-N3	-5.66	1.33	1.37
37	7	96	U	N3-C4	-5.65	1.33	1.38
36	5	3245	A	N9-C4	-5.64	1.34	1.37
36	5	934	G	C5-C4	-5.63	1.34	1.38
36	5	36	C	N1-C6	-5.63	1.33	1.37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2636	A	C5-C6	-5.62	1.35	1.41
1	2	992	A	N9-C4	-5.61	1.34	1.37
36	5	917	A	C6-N1	-5.61	1.31	1.35
36	1	2837	A	C5-C6	-5.61	1.36	1.41
36	5	1152	G	C8-N7	5.61	1.34	1.30
36	1	2836	C	N3-C4	-5.60	1.30	1.33
36	5	2978	U	N1-C2	5.59	1.43	1.38
36	1	2977	G	C5-C4	-5.58	1.34	1.38
36	1	588	G	N7-C5	-5.58	1.35	1.39
52	m6	40	GLU	CG-CD	5.58	1.60	1.51
36	5	973	A	N7-C5	-5.58	1.35	1.39
36	5	2122	G	C5-C4	-5.56	1.34	1.38
36	5	2375	G	C6-N1	-5.56	1.35	1.39
36	1	1133	A	N9-C4	-5.55	1.34	1.37
36	1	943	U	C2-N3	-5.54	1.33	1.37
36	1	33	G	N7-C5	-5.52	1.35	1.39
36	5	2824	G	N7-C5	-5.52	1.35	1.39
36	1	895	A	C5-C6	-5.51	1.36	1.41
36	5	984	G	N7-C5	-5.51	1.35	1.39
36	5	2993	G	C5-C6	-5.50	1.36	1.42
37	7	94	C	N1-C6	-5.49	1.33	1.37
36	5	609	G	C2-N3	-5.48	1.28	1.32
36	1	2726	C	N3-C4	-5.48	1.30	1.33
36	5	3042	U	N3-C4	-5.47	1.33	1.38
36	5	3259	U	N1-C2	-5.47	1.33	1.38
36	5	706	A	N9-C4	-5.47	1.34	1.37
36	1	658	G	N9-C8	-5.47	1.34	1.37
36	1	2984	C	N3-C4	-5.46	1.30	1.33
36	5	2389	C	N3-C4	-5.45	1.30	1.33
36	5	1103	A	C5-C4	5.45	1.42	1.38
36	1	2971	A	N9-C4	5.45	1.41	1.37
36	1	2946	A	N7-C5	-5.44	1.35	1.39
36	5	1309	U	N1-C2	-5.44	1.33	1.38
36	1	969	C	N1-C6	-5.44	1.33	1.37
36	1	716	A	C5-C6	-5.44	1.36	1.41
36	5	1328	C	N1-C6	-5.44	1.33	1.37
36	1	651	G	N1-C2	-5.42	1.33	1.37
52	m6	78	ARG	CZ-NH1	5.41	1.40	1.33
36	5	2860	U	N3-C4	5.41	1.43	1.38
36	5	2372	A	N7-C5	-5.40	1.36	1.39
36	1	2169	G	C5-C6	5.39	1.47	1.42
36	5	2815	G	C5-C4	-5.39	1.34	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	424	G	N1-C2	-5.38	1.33	1.37
36	1	1429	G	N9-C8	-5.38	1.34	1.37
37	7	93	C	N3-C4	-5.38	1.30	1.33
36	1	421	G	N1-C2	-5.37	1.33	1.37
36	5	367	A	N9-C4	-5.36	1.34	1.37
35	SM	134	ASP	CA-C	5.35	1.66	1.52
36	5	891	G	C5-C4	-5.35	1.34	1.38
36	1	3305	A	C6-N1	-5.34	1.31	1.35
36	5	1879	A	C5-C6	-5.34	1.36	1.41
36	5	1886	A	N3-C4	-5.33	1.31	1.34
36	5	2330	C	N1-C6	-5.33	1.33	1.37
36	5	2364	G	N7-C5	-5.33	1.36	1.39
36	5	642	U	C2-N3	-5.32	1.34	1.37
36	5	2830	G	N3-C4	-5.32	1.31	1.35
36	5	2303	A	N9-C4	-5.32	1.34	1.37
36	1	2877	G	N7-C5	-5.31	1.36	1.39
36	5	1143	A	N9-C4	-5.31	1.34	1.37
36	1	2406	C	N1-C6	-5.30	1.33	1.37
36	1	985	U	N1-C2	-5.29	1.33	1.38
36	1	1147	G	N9-C8	-5.29	1.34	1.37
36	1	2649	A	N9-C4	5.29	1.41	1.37
75	O9	2	ALA	CA-CB	-5.29	1.41	1.52
36	5	2697	A	N7-C5	-5.29	1.36	1.39
36	5	3107	U	C2-N3	-5.29	1.34	1.37
36	5	2953	U	C4-O4	5.28	1.27	1.23
36	5	2383	C	N1-C6	-5.28	1.33	1.37
36	1	2162	U	C4-O4	-5.28	1.19	1.23
36	5	636	C	N3-C4	-5.28	1.30	1.33
36	5	2954	U	C4-C5	5.28	1.48	1.43
36	5	2993	G	N1-C2	-5.27	1.33	1.37
36	1	795	G	C5-C4	-5.26	1.34	1.38
36	1	815	G	N3-C4	-5.26	1.31	1.35
36	5	88	A	N9-C4	-5.26	1.34	1.37
36	5	642	U	N1-C2	-5.25	1.33	1.38
36	1	402	A	N3-C4	-5.25	1.31	1.34
1	6	308	C	N3-C4	-5.25	1.30	1.33
36	5	2412	G	N7-C5	-5.25	1.36	1.39
37	7	87	G	N7-C5	-5.25	1.36	1.39
36	5	947	G	N1-C2	-5.24	1.33	1.37
36	5	2971	A	N7-C5	5.24	1.42	1.39
36	1	2364	G	N3-C4	-5.24	1.31	1.35
52	m6	16	VAL	CB-CG2	-5.24	1.41	1.52

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1582	C	N1-C6	5.23	1.40	1.37
36	5	368	G	C6-N1	-5.23	1.35	1.39
36	5	631	U	C2-N3	-5.22	1.34	1.37
1	6	623	A	N9-C4	-5.22	1.34	1.37
36	1	1364	C	N1-C6	-5.21	1.34	1.37
36	5	635	G	C5-C4	-5.21	1.34	1.38
36	5	966	U	N3-C4	-5.21	1.33	1.38
36	5	3143	C	N1-C6	-5.20	1.34	1.37
36	5	1195	A	N3-C4	-5.20	1.31	1.34
36	5	1117	G	C5-C4	-5.19	1.34	1.38
37	7	96	U	C4-C5	-5.19	1.38	1.43
36	5	3004	C	N1-C6	-5.19	1.34	1.37
36	5	2874	G	N3-C4	-5.18	1.31	1.35
36	1	1606	U	N1-C2	-5.17	1.33	1.38
37	7	88	G	C6-N1	-5.17	1.35	1.39
38	8	7	U	N1-C6	-5.17	1.33	1.38
36	5	2351	U	N3-C4	-5.16	1.33	1.38
36	5	875	G	C6-N1	-5.15	1.35	1.39
36	5	36	C	C4-C5	-5.15	1.38	1.43
36	5	2646	C	N1-C6	-5.15	1.34	1.37
36	1	407	A	C5-C6	-5.14	1.36	1.41
36	5	934	G	C5-C6	-5.14	1.37	1.42
37	3	82	G	C6-N1	-5.14	1.35	1.39
36	1	48	A	N7-C5	-5.13	1.36	1.39
37	3	95	A	C5-C6	-5.13	1.36	1.41
36	1	2333	C	N3-C4	-5.12	1.30	1.33
36	1	892	U	C2-N3	-5.12	1.34	1.37
39	l2	213	GLY	C-O	5.11	1.31	1.23
52	M6	80	PHE	CB-CG	-5.11	1.42	1.51
1	6	321	C	N1-C2	5.10	1.45	1.40
36	1	92	G	C5-C4	-5.10	1.34	1.38
36	1	1660	C	N1-C6	-5.09	1.34	1.37
36	5	3362	A	N9-C4	-5.09	1.34	1.37
36	5	3008	A	N9-C4	-5.09	1.34	1.37
36	5	1311	G	C5-C4	-5.08	1.34	1.38
36	5	1331	U	C4-O4	-5.08	1.19	1.23
36	5	2987	A	N7-C5	-5.08	1.36	1.39
52	m6	40	GLU	CD-OE1	5.08	1.31	1.25
36	5	1113	G	N3-C4	-5.08	1.31	1.35
36	5	877	C	N1-C6	5.08	1.40	1.37
36	1	2952	G	N9-C4	-5.07	1.33	1.38
36	1	630	A	N7-C5	-5.07	1.36	1.39

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2605	G	C5-C4	-5.07	1.34	1.38
36	5	952	A	N9-C4	-5.07	1.34	1.37
36	1	85	A	N9-C4	-5.07	1.34	1.37
36	1	155	G	N9-C4	5.07	1.42	1.38
1	6	163	G	N3-C4	-5.07	1.31	1.35
36	1	667	C	N3-C4	-5.07	1.30	1.33
36	1	1427	U	C2-N3	-5.07	1.34	1.37
36	5	1476	G	N9-C4	-5.07	1.33	1.38
36	5	1324	U	C2-N3	-5.07	1.34	1.37
36	1	1335	C	N3-C4	-5.06	1.30	1.33
36	5	2856	G	N7-C5	-5.06	1.36	1.39
36	5	2136	C	N1-C6	-5.06	1.34	1.37
38	4	11	C	C4-C5	-5.06	1.39	1.43
36	5	417	A	C5-C4	-5.06	1.35	1.38
36	5	2943	G	N7-C5	-5.06	1.36	1.39
36	1	2642	A	N9-C4	-5.05	1.34	1.37
36	5	1304	A	N9-C8	-5.05	1.33	1.37
36	1	1326	A	N9-C4	-5.05	1.34	1.37
36	5	2419	A	P-O5'	5.05	1.64	1.59
36	5	652	G	N7-C5	-5.05	1.36	1.39
36	1	339	C	N3-C4	-5.04	1.30	1.33
36	1	635	G	C5-C6	-5.04	1.37	1.42
36	1	1404	G	N9-C8	-5.04	1.34	1.37
36	5	424	G	C5-C4	-5.04	1.34	1.38
36	5	962	A	C5-C4	-5.03	1.35	1.38
36	1	2982	A	N9-C8	-5.03	1.33	1.37
36	5	1432	C	C4-C5	-5.03	1.39	1.43
36	1	3362	A	N7-C5	-5.02	1.36	1.39
36	5	1489	A	N7-C5	-5.02	1.36	1.39
36	1	635	G	C5-C4	-5.02	1.34	1.38
36	5	3209	A	C5-C4	5.02	1.42	1.38
36	1	421	G	C5-C4	-5.02	1.34	1.38
36	1	343	U	C2-N3	-5.00	1.34	1.37
36	5	2354	C	N1-C6	-5.00	1.34	1.37
37	7	88	G	N1-C2	-5.00	1.33	1.37
36	1	323	A	N9-C4	-5.00	1.34	1.37

All (4853) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	N3-C4-C5	26.65	141.93	128.60
36	5	1152	G	N3-C4-N9	-25.57	110.66	126.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	C2-N3-C4	-18.36	102.72	111.90
36	5	2818	U	O5'-P-OP1	-17.90	89.22	110.70
36	5	1116	G	O5'-P-OP1	-16.32	91.01	105.70
36	5	874	U	O5'-P-OP1	-16.28	91.05	105.70
36	5	1152	G	N3-C2-N2	-16.19	108.57	119.90
36	5	1419	A	O5'-P-OP2	-15.91	91.38	105.70
36	1	1104	G	O5'-P-OP1	-15.19	92.03	105.70
36	5	2373	A	O5'-P-OP2	-15.18	92.04	105.70
36	1	1495	U	C5-C6-N1	-14.64	115.38	122.70
36	5	1152	G	C8-N9-C1'	14.16	145.40	127.00
36	1	1308	A	O5'-P-OP2	-14.05	93.06	105.70
1	6	1773	C	N3-C4-C5	-14.02	116.29	121.90
36	5	1152	G	C5-N7-C8	-13.56	97.52	104.30
36	5	2297	U	O5'-P-OP2	-13.46	93.59	105.70
36	1	802	C	O5'-P-OP1	-13.44	93.60	105.70
36	5	3245	A	C5-N7-C8	-13.43	97.19	103.90
36	5	398	A	O5'-P-OP2	-13.42	93.62	105.70
36	5	437	G	C8-N9-C4	-13.39	101.04	106.40
36	5	3245	A	N7-C8-N9	13.32	120.46	113.80
36	5	2726	C	C5-C4-N4	12.89	129.22	120.20
36	1	2936	A	O5'-P-OP1	-12.79	94.19	105.70
36	5	1152	G	N1-C6-O6	12.67	127.50	119.90
36	5	1152	G	C4-N9-C1'	-12.61	110.10	126.50
1	6	1634	C	C2-N1-C1'	12.51	132.56	118.80
36	5	1308	A	O5'-P-OP1	-12.45	94.50	105.70
36	5	2403	G	O5'-P-OP2	-12.26	94.67	105.70
36	1	2714	G	N3-C4-C5	12.23	134.71	128.60
36	5	3245	A	C2-N3-C4	-12.08	104.56	110.60
36	5	1313	G	O5'-P-OP2	-12.04	94.87	105.70
36	1	2617	U	C5-C6-N1	-12.00	116.70	122.70
36	1	2621	G	N3-C2-N2	-11.87	111.59	119.90
36	5	636	C	C6-N1-C2	11.82	125.03	120.30
36	1	2617	U	C5-C4-O4	11.82	132.99	125.90
36	1	2822	U	O5'-P-OP1	-11.76	95.12	105.70
36	5	1304	A	N1-C6-N6	11.76	125.65	118.60
36	5	948	C	C6-N1-C2	11.74	125.00	120.30
36	1	282	G	O5'-P-OP1	-11.62	95.24	105.70
36	5	1304	A	C5-C6-N6	-11.62	114.41	123.70
36	1	1308	A	C8-N9-C4	-11.61	101.16	105.80
36	5	2923	U	O5'-P-OP1	-11.59	95.27	105.70
36	5	3245	A	N1-C6-N6	11.44	125.47	118.60
36	5	1307	G	P-O3'-C3'	11.19	133.13	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	11	C	C5-C6-N1	11.19	126.59	121.00
38	4	11	C	C6-N1-C2	-11.18	115.83	120.30
36	5	1879	A	N1-C6-N6	11.10	125.26	118.60
36	5	2704	A	O5'-P-OP1	-11.08	95.73	105.70
36	5	2290	C	C6-N1-C2	11.03	124.71	120.30
36	5	3245	A	C6-C5-N7	-11.01	124.59	132.30
36	5	2928	C	C6-N1-C2	-11.00	115.90	120.30
36	5	641	C	N1-C2-O2	-11.00	112.30	118.90
36	5	2726	C	C6-N1-C2	-10.93	115.93	120.30
36	5	2824	G	O5'-P-OP2	-10.92	95.87	105.70
1	6	163	G	N3-C4-N9	-10.84	119.50	126.00
36	1	1381	A	O5'-P-OP2	10.84	123.70	110.70
36	1	517	G	C8-N9-C4	-10.78	102.09	106.40
36	5	922	U	N3-C2-O2	-10.76	114.67	122.20
36	5	2375	G	N1-C6-O6	-10.73	113.46	119.90
36	5	2634	U	C2-N3-C4	-10.72	120.57	127.00
36	1	639	G	N1-C6-O6	10.72	126.33	119.90
36	1	218	G	O5'-P-OP2	-10.67	96.10	105.70
36	1	2397	A	N1-C6-N6	10.60	124.96	118.60
36	1	2846	U	N3-C2-O2	-10.57	114.80	122.20
36	5	2726	C	N3-C4-N4	-10.53	110.63	118.00
36	5	1152	G	N1-C2-N2	10.52	125.67	116.20
36	1	3362	A	O4'-C1'-N9	10.51	116.61	108.20
36	1	2169	G	N1-C6-O6	-10.48	113.61	119.90
36	1	28	C	N3-C4-C5	10.46	126.08	121.90
36	1	1389	G	C4-C5-N7	10.46	114.98	110.80
36	1	406	G	O4'-C1'-N9	10.44	116.55	108.20
36	1	1389	G	C5-C6-O6	-10.43	122.34	128.60
37	7	93	C	O5'-P-OP2	-10.41	96.33	105.70
37	7	87	G	N1-C6-O6	10.41	126.14	119.90
36	1	645	A	C6-N1-C2	-10.39	112.37	118.60
36	1	3278	C	N1-C2-O2	10.39	125.13	118.90
36	1	2871	G	O5'-P-OP2	-10.32	96.42	105.70
1	6	1773	C	C6-N1-C2	-10.31	116.18	120.30
36	1	1495	U	C4-C5-C6	10.29	125.88	119.70
36	1	2617	U	N3-C4-O4	-10.27	112.21	119.40
36	1	3306	U	N3-C4-O4	-10.26	112.22	119.40
1	6	453	U	N3-C2-O2	-10.23	115.04	122.20
36	5	2389	C	C6-N1-C2	10.21	124.39	120.30
36	5	652	G	O5'-P-OP2	-10.19	96.53	105.70
1	6	1773	C	N3-C4-N4	10.19	125.13	118.00
36	5	877	C	N3-C4-C5	10.18	125.97	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	SM	135	ALA	N-CA-CB	10.17	124.33	110.10
36	1	1365	G	C8-N9-C4	-10.17	102.33	106.40
36	1	2726	C	N3-C4-N4	-10.17	110.88	118.00
36	5	1110	U	N1-C2-O2	10.16	129.91	122.80
36	1	1308	A	N7-C8-N9	10.15	118.88	113.80
36	5	1190	A	C8-N9-C4	-10.14	101.74	105.80
1	6	453	U	N1-C2-O2	10.13	129.89	122.80
36	1	880	G	N1-C6-O6	-10.11	113.83	119.90
1	6	44	U	N1-C2-O2	-10.11	115.72	122.80
36	5	437	G	N7-C8-N9	10.09	118.15	113.10
36	5	1208	U	C5-C4-O4	10.09	131.96	125.90
36	1	1365	G	N3-C4-C5	-10.07	123.56	128.60
1	6	402	C	O5'-P-OP2	-10.06	96.64	105.70
36	1	2846	U	C5-C4-O4	10.05	131.93	125.90
36	5	437	G	N9-C4-C5	10.04	109.42	105.40
36	5	881	C	O5'-P-OP2	-10.03	96.67	105.70
36	5	2389	C	N3-C4-C5	10.03	125.91	121.90
36	5	3078	U	N3-C2-O2	-10.03	115.18	122.20
36	1	776	U	C4-C5-C6	10.00	125.70	119.70
36	1	339	C	OP1-P-OP2	-9.99	104.61	119.60
36	5	1208	U	N3-C2-O2	-9.95	115.23	122.20
37	7	35	C	C6-N1-C2	9.95	124.28	120.30
36	5	2366	C	C6-N1-C2	-9.93	116.33	120.30
36	1	1216	C	C6-N1-C2	-9.90	116.34	120.30
36	5	2389	C	C5-C6-N1	-9.89	116.05	121.00
37	7	90	U	N3-C4-C5	9.87	120.52	114.60
36	1	3057	U	N3-C2-O2	-9.87	115.29	122.20
36	5	2634	U	N3-C4-C5	9.86	120.52	114.60
36	5	424	G	C5-C6-O6	-9.84	122.69	128.60
36	5	2392	C	N3-C4-C5	9.83	125.83	121.90
36	1	2827	U	C5-C4-O4	9.83	131.80	125.90
36	5	2186	U	O5'-P-OP2	-9.81	96.87	105.70
1	2	553	G	N1-C6-O6	9.79	125.77	119.90
36	1	1838	G	N1-C6-O6	9.78	125.77	119.90
36	1	1492	G	C5-N7-C8	9.78	109.19	104.30
36	5	2678	A	N1-C6-N6	-9.78	112.73	118.60
36	1	776	U	N1-C2-N3	9.77	120.76	114.90
36	5	1452	A	N1-C6-N6	9.76	124.46	118.60
36	5	2136	C	C6-N1-C2	9.75	124.20	120.30
36	5	2234	G	C5-C6-O6	-9.74	122.76	128.60
36	1	1409	G	N1-C6-O6	-9.71	114.07	119.90
1	2	639	U	N3-C2-O2	-9.67	115.43	122.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	922	U	N1-C2-O2	9.66	129.56	122.80
36	1	2923	U	O5'-P-OP1	-9.66	97.01	105.70
36	5	793	C	N1-C2-O2	-9.66	113.11	118.90
36	1	1902	G	C5-C6-O6	-9.64	122.82	128.60
36	5	2331	C	N3-C4-C5	-9.64	118.04	121.90
36	5	3214	U	N3-C2-O2	-9.63	115.46	122.20
36	5	1792	C	O5'-P-OP2	-9.63	97.03	105.70
36	1	3306	U	C5-C4-O4	9.62	131.67	125.90
36	1	3181	C	C5-C4-N4	9.59	126.91	120.20
36	1	2797	C	O5'-P-OP1	-9.57	97.08	105.70
36	1	1346	G	O5'-P-OP2	-9.57	97.08	105.70
1	6	1773	C	N1-C2-O2	-9.57	113.16	118.90
36	1	521	A	N1-C6-N6	9.56	124.34	118.60
36	1	1556	C	C2-N1-C1'	9.53	129.28	118.80
38	4	22	U	C5-C6-N1	-9.53	117.94	122.70
36	1	1153	A	O5'-P-OP1	-9.52	97.13	105.70
36	1	2359	C	N1-C2-O2	-9.50	113.20	118.90
36	5	2611	U	C5-C6-N1	-9.49	117.95	122.70
36	5	1520	G	C5-C6-O6	-9.48	122.91	128.60
36	5	2389	C	O5'-P-OP1	-9.44	97.20	105.70
36	1	716	A	N1-C6-N6	9.42	124.25	118.60
36	5	776	U	N3-C2-O2	-9.41	115.61	122.20
36	5	1101	G	N3-C2-N2	9.40	126.48	119.90
36	5	2726	C	N3-C2-O2	-9.39	115.33	121.90
36	1	2406	C	C6-N1-C2	9.38	124.05	120.30
36	1	640	U	C5-C4-O4	-9.38	120.28	125.90
36	1	1450	G	O5'-P-OP1	-9.37	97.27	105.70
36	1	942	U	C5-C4-O4	-9.35	120.29	125.90
36	5	2618	G	N3-C4-N9	9.35	131.61	126.00
36	1	2726	C	N3-C2-O2	-9.32	115.38	121.90
36	1	2215	A	C8-N9-C4	9.31	109.52	105.80
36	5	2395	G	O5'-P-OP2	-9.29	97.34	105.70
36	5	3154	C	N1-C2-O2	9.28	124.47	118.90
36	5	2632	G	O5'-P-OP1	-9.28	97.35	105.70
36	1	1149	G	N1-C6-O6	9.28	125.47	119.90
36	1	1484	U	P-O3'-C3'	9.27	130.83	119.70
36	1	1452	A	C8-N9-C4	9.26	109.50	105.80
1	2	321	C	C6-N1-C2	-9.26	116.60	120.30
36	5	622	A	N1-C6-N6	9.25	124.15	118.60
1	6	448	C	C6-N1-C2	-9.24	116.60	120.30
36	5	3245	A	C4-C5-N7	9.24	115.32	110.70
36	1	2818	U	O5'-P-OP1	-9.23	97.39	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2572	C	N1-C2-O2	9.22	124.43	118.90
36	5	2836	C	C4-C5-C6	9.22	122.01	117.40
36	1	2144	A	C5-C6-N6	-9.22	116.32	123.70
36	1	2617	U	N1-C2-N3	9.20	120.42	114.90
1	6	609	U	C5-C4-O4	9.17	131.41	125.90
36	1	421	G	C5-C6-O6	-9.17	123.10	128.60
36	1	3181	C	N3-C4-N4	-9.17	111.58	118.00
36	5	88	A	C8-N9-C4	9.16	109.47	105.80
36	1	517	G	N7-C8-N9	9.16	117.68	113.10
36	1	1495	U	N1-C2-N3	9.16	120.39	114.90
36	5	2334	U	N3-C2-O2	-9.16	115.79	122.20
36	5	384	A	C8-N9-C4	9.15	109.46	105.80
36	1	2363	A	N1-C6-N6	-9.14	113.11	118.60
36	1	2642	A	C6-N1-C2	9.14	124.09	118.60
38	4	113	U	C5-C4-O4	9.11	131.37	125.90
36	5	2858	U	N3-C2-O2	-9.09	115.83	122.20
36	1	439	C	N1-C2-O2	9.07	124.34	118.90
36	1	1216	C	O5'-P-OP2	-9.07	97.54	105.70
36	5	922	U	N3-C4-O4	-9.05	113.06	119.40
36	1	716	A	N9-C4-C5	-9.04	102.18	105.80
38	4	109	A	N1-C6-N6	9.04	124.02	118.60
36	1	155	G	N3-C4-C5	-9.03	124.08	128.60
36	5	2978	U	O4'-C1'-N1	9.03	115.42	108.20
36	5	1548	C	N1-C2-O2	-9.03	113.48	118.90
36	5	1369	A	N1-C6-N6	9.02	124.01	118.60
36	5	2362	C	O5'-P-OP2	-8.99	97.61	105.70
36	5	406	G	O4'-C1'-N9	8.99	115.39	108.20
36	5	2385	G	O5'-P-OP1	-8.99	97.61	105.70
36	1	3344	A	N7-C8-N9	8.97	118.29	113.80
36	5	2823	G	C4-C5-N7	8.97	114.39	110.80
36	1	339	C	N3-C2-O2	-8.97	115.62	121.90
36	5	2930	A	N1-C6-N6	-8.97	113.22	118.60
36	1	585	A	C8-N9-C4	8.96	109.38	105.80
36	1	2176	U	N3-C2-O2	-8.96	115.93	122.20
36	1	2714	G	C2-N3-C4	-8.96	107.42	111.90
36	1	1831	U	N3-C2-O2	-8.94	115.94	122.20
36	5	1403	C	C6-N1-C2	8.94	123.88	120.30
1	2	402	C	C6-N1-C2	8.93	123.87	120.30
36	5	1200	A	C8-N9-C4	-8.92	102.23	105.80
36	1	2355	G	N1-C6-O6	8.91	125.25	119.90
36	5	1879	A	C6-C5-N7	-8.91	126.06	132.30
36	5	2930	A	N9-C4-C5	8.91	109.36	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	979	U	C6-N1-C2	-8.90	115.66	121.00
1	6	1634	C	C6-N1-C1'	-8.90	110.12	120.80
36	5	1158	A	N1-C6-N6	8.90	123.94	118.60
36	5	222	A	O5'-P-OP2	-8.90	97.69	105.70
37	3	86	U	C2-N3-C4	-8.89	121.67	127.00
36	1	2693	C	C6-N1-C2	8.89	123.86	120.30
36	5	2973	G	C8-N9-C4	-8.89	102.84	106.40
36	1	3278	C	N3-C2-O2	-8.88	115.68	121.90
36	1	407	A	O5'-P-OP2	-8.88	97.71	105.70
36	1	1495	U	C2-N3-C4	-8.87	121.68	127.00
36	5	922	U	C2-N3-C4	-8.87	121.68	127.00
36	1	2617	U	C4-C5-C6	8.85	125.01	119.70
36	1	1381	A	O5'-P-OP1	-8.84	97.74	105.70
36	1	2942	C	N1-C2-O2	-8.84	113.60	118.90
36	1	2714	G	N3-C4-N9	-8.84	120.70	126.00
36	5	1060	U	N3-C4-O4	-8.84	113.22	119.40
36	5	2865	U	C5-C6-N1	8.84	127.12	122.70
36	5	590	G	C5-C6-O6	-8.83	123.30	128.60
36	5	1152	G	C4-C5-N7	8.83	114.33	110.80
36	5	2354	C	N1-C2-O2	-8.83	113.60	118.90
36	5	1298	C	C6-N1-C2	-8.82	116.77	120.30
36	5	3362	A	C2-N3-C4	-8.82	106.19	110.60
1	2	73	U	O4'-C1'-N1	8.82	115.26	108.20
36	1	3057	U	C5-C4-O4	8.82	131.19	125.90
36	1	655	C	C6-N1-C2	-8.82	116.77	120.30
36	1	2283	G	N1-C6-O6	8.81	125.19	119.90
36	5	2351	U	N3-C2-O2	-8.81	116.03	122.20
36	5	1844	C	C6-N1-C2	-8.80	116.78	120.30
36	1	304	G	N3-C2-N2	-8.80	113.74	119.90
36	1	895	A	C2-N3-C4	-8.80	106.20	110.60
36	1	2870	C	C2-N1-C1'	-8.80	109.12	118.80
36	5	960	U	N3-C4-C5	8.80	119.88	114.60
36	1	365	A	N1-C6-N6	8.78	123.87	118.60
1	6	1657	U	O5'-P-OP2	-8.78	97.80	105.70
36	5	1902	G	C5-C6-O6	-8.78	123.33	128.60
36	5	1513	G	C8-N9-C4	-8.77	102.89	106.40
1	6	44	U	N3-C2-O2	8.76	128.33	122.20
36	5	1452	A	N9-C4-C5	-8.76	102.30	105.80
36	1	2836	C	C5-C4-N4	8.75	126.33	120.20
36	1	1216	C	C5-C6-N1	8.75	125.37	121.00
36	1	1405	U	N3-C4-C5	8.74	119.84	114.60
36	5	1213	G	C5-C6-O6	-8.74	123.36	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	966	U	N3-C2-O2	-8.74	116.08	122.20
36	1	1196	C	C6-N1-C2	8.74	123.80	120.30
36	1	120	G	C8-N9-C4	8.73	109.89	106.40
36	5	952	A	N1-C6-N6	8.73	123.84	118.60
36	5	2398	A	N1-C6-N6	-8.73	113.36	118.60
36	1	802	C	N3-C2-O2	-8.73	115.79	121.90
1	6	144	U	N3-C2-O2	-8.72	116.09	122.20
37	3	86	U	C5-C4-O4	-8.72	120.67	125.90
36	5	189	G	N1-C6-O6	-8.72	114.67	119.90
36	5	1119	C	N3-C4-C5	8.71	125.39	121.90
36	1	709	A	C8-N9-C4	8.71	109.28	105.80
1	6	57	G	O5'-P-OP2	-8.71	97.86	105.70
36	5	3012	A	C8-N9-C4	8.70	109.28	105.80
36	5	96	G	O5'-P-OP2	-8.69	97.88	105.70
36	5	3245	A	C8-N9-C4	-8.68	102.33	105.80
36	1	2358	A	C8-N9-C4	8.68	109.27	105.80
36	1	895	A	N1-C6-N6	8.64	123.78	118.60
36	1	1301	A	O5'-P-OP1	-8.63	97.93	105.70
36	1	2617	U	N3-C2-O2	-8.63	116.16	122.20
36	5	437	G	N3-C2-N2	-8.63	113.86	119.90
1	6	362	G	O5'-P-OP2	-8.63	97.94	105.70
36	5	3041	U	N3-C2-O2	8.61	128.22	122.20
36	5	3200	G	N1-C6-O6	8.60	125.06	119.90
36	1	1389	G	N9-C4-C5	-8.59	101.96	105.40
36	5	1306	G	C5-C6-O6	-8.59	123.45	128.60
36	5	3212	C	N1-C2-O2	-8.59	113.75	118.90
36	1	2850	G	C6-C5-N7	-8.58	125.25	130.40
52	m6	78	ARG	NE-CZ-NH2	-8.58	116.01	120.30
36	5	2383	C	N3-C4-C5	-8.57	118.47	121.90
36	5	2899	C	C6-N1-C2	-8.57	116.87	120.30
36	1	2886	U	C5-C4-O4	-8.56	120.76	125.90
38	8	80	A	N7-C8-N9	8.55	118.08	113.80
36	1	958	C	C2-N3-C4	-8.55	115.62	119.90
36	5	1842	A	O5'-P-OP2	-8.55	98.00	105.70
36	5	2899	C	N1-C2-N3	8.55	125.18	119.20
36	5	1304	A	N9-C4-C5	-8.54	102.38	105.80
36	5	3078	U	N1-C2-O2	8.54	128.78	122.80
36	1	3362	A	N7-C8-N9	8.53	118.07	113.80
36	5	3362	A	N1-C2-N3	8.54	133.57	129.30
36	5	3123	A	C8-N9-C4	8.53	109.21	105.80
36	5	3218	A	N1-C6-N6	8.53	123.72	118.60
36	5	835	G	O4'-C1'-N9	8.52	115.02	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3041	U	C5-C4-O4	-8.52	120.79	125.90
36	5	2644	C	O5'-P-OP1	-8.52	98.04	105.70
36	5	3185	U	O5'-P-OP2	-8.51	98.04	105.70
36	1	1495	U	N1-C2-O2	-8.51	116.84	122.80
36	5	1308	A	O5'-P-OP2	8.51	120.91	110.70
36	1	645	A	N3-C4-C5	-8.51	120.84	126.80
1	6	1700	C	C2-N1-C1'	8.51	128.16	118.80
38	4	79	A	C8-N9-C4	-8.51	102.40	105.80
36	1	2144	A	N1-C6-N6	8.50	123.70	118.60
36	5	3214	U	C5-C4-O4	8.49	131.00	125.90
1	6	371	G	C6-C5-N7	-8.48	125.31	130.40
36	5	2377	G	C8-N9-C4	8.47	109.79	106.40
36	1	2621	G	N1-C6-O6	8.46	124.98	119.90
36	1	895	A	O5'-P-OP1	-8.46	98.09	105.70
36	1	2836	C	C6-N1-C2	-8.45	116.92	120.30
36	5	1101	G	N1-C6-O6	-8.44	114.84	119.90
1	6	337	G	C6-C5-N7	-8.43	125.34	130.40
36	5	1548	C	N3-C2-O2	8.43	127.80	121.90
36	1	1164	G	N1-C6-O6	-8.42	114.85	119.90
36	1	2870	C	C6-N1-C1'	8.42	130.90	120.80
36	5	2398	A	C5-N7-C8	8.41	108.11	103.90
36	5	2797	C	N1-C2-O2	-8.41	113.85	118.90
36	5	3245	A	N1-C2-N3	8.41	133.50	129.30
37	7	40	C	N1-C2-O2	-8.41	113.86	118.90
1	6	1700	C	N1-C2-O2	8.40	123.94	118.90
36	1	2627	C	C6-N1-C2	8.40	123.66	120.30
38	8	80	A	C8-N9-C4	-8.39	102.44	105.80
36	5	1304	A	N3-C4-N9	8.39	134.11	127.40
36	5	1897	G	N1-C6-O6	8.39	124.94	119.90
36	5	2632	G	N1-C6-O6	-8.38	114.87	119.90
36	5	636	C	C5-C6-N1	-8.38	116.81	121.00
36	5	2928	C	N3-C2-O2	-8.37	116.04	121.90
36	1	1303	A	C8-N9-C4	8.37	109.15	105.80
36	1	2393	G	O5'-P-OP2	-8.36	98.17	105.70
36	1	893	C	C6-N1-C2	-8.36	116.96	120.30
36	5	1208	U	N1-C2-N3	8.35	119.91	114.90
36	1	2827	U	N3-C4-O4	-8.35	113.56	119.40
36	5	1113	G	O5'-P-OP1	-8.35	98.19	105.70
36	5	1452	A	C5-C6-N6	-8.35	117.02	123.70
36	5	426	G	C8-N9-C4	8.34	109.74	106.40
36	1	2884	C	N3-C4-C5	8.34	125.24	121.90
36	1	1389	G	N1-C6-O6	8.34	124.90	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2823	G	N1-C6-O6	8.34	124.90	119.90
36	1	895	A	C5-N7-C8	-8.33	99.73	103.90
36	5	869	G	N1-C6-O6	-8.33	114.90	119.90
36	5	1239	C	C5-C6-N1	8.33	125.17	121.00
36	5	424	G	N3-C4-N9	8.32	130.99	126.00
36	1	895	A	C4-C5-N7	8.32	114.86	110.70
36	1	3181	C	N3-C2-O2	-8.32	116.08	121.90
36	1	880	G	C5-C6-O6	8.31	133.58	128.60
36	5	3362	A	N1-C6-N6	8.30	123.58	118.60
36	5	2148	U	N1-C2-O2	-8.29	117.00	122.80
36	5	2272	G	O4'-C1'-N9	8.28	114.83	108.20
1	6	371	G	N3-C4-N9	8.28	130.97	126.00
36	1	659	G	N3-C2-N2	8.28	125.69	119.90
36	1	25	U	N1-C2-O2	-8.27	117.01	122.80
36	1	931	C	C5-C6-N1	-8.27	116.86	121.00
36	1	1404	G	C8-N9-C4	8.27	109.71	106.40
36	5	1788	C	C6-N1-C2	-8.27	116.99	120.30
36	5	2858	U	N1-C2-O2	8.27	128.59	122.80
36	1	1902	G	C4-C5-N7	8.26	114.11	110.80
36	1	3362	A	C6-C5-N7	-8.26	126.52	132.30
36	1	2619	G	O5'-P-OP1	-8.25	98.27	105.70
36	5	2392	C	C2-N3-C4	-8.25	115.78	119.90
36	5	890	C	O5'-P-OP2	-8.25	98.28	105.70
36	1	2373	A	O5'-P-OP1	-8.24	98.28	105.70
36	1	1197	A	N1-C6-N6	8.24	123.54	118.60
36	1	2572	C	C2-N1-C1'	8.24	127.86	118.80
36	1	2144	A	N9-C4-C5	-8.23	102.51	105.80
36	5	2870	C	N3-C4-C5	8.23	125.19	121.90
36	1	2726	C	C5-C4-N4	8.22	125.95	120.20
36	5	1110	U	N3-C2-O2	-8.22	116.45	122.20
36	5	2823	G	C5-C6-O6	-8.22	123.67	128.60
36	5	1208	U	N3-C4-O4	-8.22	113.65	119.40
1	2	453	U	C2-N1-C1'	8.21	127.56	117.70
36	5	2287	C	O5'-P-OP2	-8.21	98.31	105.70
36	1	2376	G	C5-N7-C8	-8.21	100.20	104.30
36	1	922	U	C5-C6-N1	8.20	126.80	122.70
1	2	1096	C	N1-C2-O2	8.20	123.82	118.90
36	5	2764	C	C5-C4-N4	-8.20	114.46	120.20
38	4	113	U	N1-C2-N3	8.20	119.82	114.90
36	5	2385	G	N1-C6-O6	8.20	124.82	119.90
36	1	949	C	C4-C5-C6	8.19	121.50	117.40
36	5	931	C	C2-N3-C4	-8.19	115.81	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	908	G	O4'-C1'-N9	-8.18	101.65	108.20
36	1	2850	G	C5-C6-O6	-8.18	123.69	128.60
36	5	2889	C	C2-N3-C4	-8.18	115.81	119.90
36	5	218	G	O5'-P-OP2	-8.18	98.34	105.70
36	5	968	G	O5'-P-OP1	-8.18	98.34	105.70
36	5	2278	C	C4-C5-C6	-8.17	113.31	117.40
36	5	942	U	C5-C4-O4	-8.17	121.00	125.90
1	6	1100	G	N3-C4-C5	-8.17	124.52	128.60
36	1	650	C	N1-C2-O2	-8.16	114.00	118.90
36	1	984	G	N3-C2-N2	8.16	125.61	119.90
36	1	2836	C	C4-C5-C6	8.16	121.48	117.40
36	5	361	A	N1-C6-N6	-8.16	113.70	118.60
36	1	885	U	C5-C6-N1	-8.15	118.62	122.70
36	1	1405	U	C6-N1-C2	8.15	125.89	121.00
36	5	546	C	N1-C2-O2	8.15	123.79	118.90
38	8	92	A	O5'-P-OP1	-8.15	98.36	105.70
36	1	2942	C	N3-C2-O2	8.15	127.61	121.90
37	7	77	G	O5'-P-OP1	8.15	120.48	110.70
36	5	1372	C	C6-N1-C2	8.14	123.56	120.30
36	5	2877	G	N9-C4-C5	8.14	108.66	105.40
36	5	3103	A	C5-C6-N1	8.14	121.77	117.70
36	1	1307	G	N1-C6-O6	-8.14	115.02	119.90
36	5	2815	G	C8-N9-C4	8.14	109.66	106.40
36	1	350	C	C6-N1-C2	-8.14	117.05	120.30
36	1	1377	G	N3-C2-N2	8.13	125.59	119.90
1	6	1	U	C2-N1-C1'	8.13	127.45	117.70
1	6	1026	A	O5'-P-OP1	-8.12	98.39	105.70
36	5	92	G	C5-C6-N1	8.12	115.56	111.50
36	1	1118	C	C6-N1-C2	-8.12	117.05	120.30
36	1	2996	U	C2-N1-C1'	8.12	127.44	117.70
36	5	1842	A	O5'-P-OP1	8.12	120.44	110.70
1	2	1280	C	N3-C4-C5	-8.11	118.66	121.90
36	1	3214	U	N3-C2-O2	-8.11	116.52	122.20
1	6	1075	C	N1-C2-O2	-8.11	114.03	118.90
36	1	2915	U	N1-C2-O2	-8.11	117.13	122.80
36	5	1292	C	C6-N1-C2	8.11	123.54	120.30
1	2	1039	A	O4'-C1'-N9	8.10	114.68	108.20
36	1	339	C	N3-C4-N4	-8.10	112.33	118.00
36	5	817	A	O5'-P-OP1	-8.10	98.41	105.70
36	5	2142	A	C5-C6-N1	8.09	121.75	117.70
36	5	1587	A	O5'-P-OP1	-8.09	98.42	105.70
36	1	651	G	N3-C4-C5	-8.09	124.56	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2409	G	N1-C6-O6	-8.09	115.05	119.90
1	6	114	C	N1-C2-O2	8.08	123.75	118.90
36	1	802	C	O5'-P-OP2	8.08	120.40	110.70
38	8	111	A	N1-C6-N6	8.08	123.45	118.60
1	6	65	A	C2-N3-C4	-8.07	106.56	110.60
36	1	1310	G	N1-C6-O6	-8.07	115.06	119.90
36	1	1367	G	N1-C6-O6	8.07	124.74	119.90
36	1	2400	G	N3-C2-N2	-8.07	114.25	119.90
36	5	2389	C	C2-N3-C4	-8.07	115.87	119.90
36	5	2420	C	C6-N1-C2	8.07	123.53	120.30
36	5	3209	A	O4'-C1'-N9	8.07	114.65	108.20
36	1	1495	U	C2-N1-C1'	-8.06	108.03	117.70
36	5	2524	A	O4'-C1'-N9	8.06	114.65	108.20
36	1	661	G	C8-N9-C4	-8.06	103.18	106.40
36	5	934	G	N1-C6-O6	8.05	124.73	119.90
36	1	999	G	C5-C6-O6	-8.05	123.77	128.60
36	5	2874	G	C5-C6-N1	-8.05	107.47	111.50
36	5	1160	C	C2-N1-C1'	-8.04	109.96	118.80
36	1	681	U	C5-C4-O4	-8.03	121.08	125.90
1	2	57	G	O5'-P-OP2	-8.02	98.48	105.70
36	1	2176	U	N1-C2-O2	8.02	128.41	122.80
36	5	887	G	N3-C2-N2	8.02	125.51	119.90
36	1	28	C	C6-N1-C2	8.01	123.50	120.30
36	5	637	C	N1-C2-O2	-8.01	114.09	118.90
36	1	1316	C	N3-C4-N4	8.00	123.60	118.00
38	4	32	C	N1-C2-O2	-8.00	114.10	118.90
31	D9	36	LEU	CA-CB-CG	7.99	133.68	115.30
38	4	109	A	C5-C6-N6	-7.99	117.31	123.70
1	6	321	C	N3-C2-O2	-7.99	116.31	121.90
36	5	2375	G	C5-C6-O6	7.99	133.39	128.60
36	1	2764	C	C6-N1-C2	-7.98	117.11	120.30
1	6	973	A	O5'-P-OP2	-7.97	98.53	105.70
36	1	339	C	C5-C4-N4	7.96	125.78	120.20
36	1	797	U	O5'-P-OP2	7.96	120.25	110.70
36	1	984	G	N1-C2-N2	-7.96	109.04	116.20
36	5	2935	U	O5'-P-OP2	-7.96	98.54	105.70
36	5	948	C	C5-C6-N1	-7.96	117.02	121.00
36	1	942	U	C2-N3-C4	-7.95	122.23	127.00
36	1	2867	C	N3-C4-C5	7.95	125.08	121.90
36	1	2411	U	N3-C4-O4	-7.95	113.84	119.40
1	6	941	A	N1-C6-N6	-7.94	113.83	118.60
36	1	1141	C	C4-C5-C6	7.94	121.37	117.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2634	U	C2-N3-C4	-7.94	122.24	127.00
36	1	785	G	C5-C6-N1	7.93	115.47	111.50
36	1	2385	G	N3-C4-C5	7.93	132.56	128.60
36	5	92	G	C2-N3-C4	7.93	115.86	111.90
36	5	2927	C	OP2-P-O3'	7.92	122.63	105.20
36	5	960	U	N1-C2-O2	7.92	128.35	122.80
1	6	1782	A	C8-N9-C4	-7.92	102.63	105.80
36	5	3382	U	C2-N1-C1'	7.92	127.20	117.70
44	17	229	PHE	CB-CG-CD1	7.92	126.34	120.80
1	6	1654	G	O5'-P-OP2	-7.91	98.58	105.70
36	5	804	C	N3-C4-C5	-7.91	118.74	121.90
36	1	1911	A	N1-C6-N6	7.91	123.34	118.60
36	1	2621	G	N1-C2-N2	7.91	123.32	116.20
36	5	1126	G	C8-N9-C4	-7.91	103.24	106.40
36	1	2572	C	N1-C2-O2	7.91	123.64	118.90
36	5	2334	U	O5'-P-OP2	-7.91	98.58	105.70
1	6	1537	C	C6-N1-C2	-7.90	117.14	120.30
36	5	366	A	N1-C6-N6	7.90	123.34	118.60
36	1	2414	G	N3-C2-N2	-7.90	114.37	119.90
36	1	3228	C	N3-C2-O2	-7.89	116.38	121.90
36	5	1108	U	O5'-P-OP2	-7.89	98.60	105.70
36	5	2993	G	C4-C5-N7	7.88	113.95	110.80
36	1	637	C	C2-N3-C4	-7.88	115.96	119.90
1	2	453	U	N3-C2-O2	-7.88	116.68	122.20
36	1	2874	G	N9-C4-C5	7.88	108.55	105.40
1	6	1641	C	N1-C2-O2	-7.88	114.17	118.90
36	1	1365	G	C2-N3-C4	7.87	115.84	111.90
1	6	542	A	O4'-C1'-N9	7.87	114.50	108.20
36	1	2850	G	C4-C5-N7	7.87	113.95	110.80
36	1	2414	G	N1-C6-O6	7.87	124.62	119.90
1	6	609	U	N3-C2-O2	-7.87	116.69	122.20
36	1	2850	G	N1-C6-O6	7.86	124.62	119.90
36	1	1428	A	N1-C6-N6	7.86	123.31	118.60
36	5	2899	C	N3-C2-O2	-7.86	116.40	121.90
36	5	3362	A	C5-N7-C8	-7.86	99.97	103.90
36	1	1138	U	N3-C2-O2	-7.85	116.70	122.20
36	1	1405	U	C2-N3-C4	-7.85	122.29	127.00
36	5	2815	G	N7-C8-N9	-7.85	109.17	113.10
36	1	2359	C	C2-N3-C4	-7.84	115.98	119.90
36	5	2764	C	N3-C4-C5	7.83	125.03	121.90
36	5	2147	A	N1-C6-N6	7.83	123.30	118.60
1	6	308	C	C2-N3-C4	-7.83	115.98	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	776	U	N1-C2-N3	7.83	119.60	114.90
36	5	2572	C	C2-N1-C1'	7.83	127.41	118.80
36	5	2870	C	C2-N1-C1'	-7.82	110.20	118.80
36	5	216	G	C5-C6-O6	-7.82	123.91	128.60
36	5	922	U	N1-C2-N3	7.81	119.59	114.90
38	8	16	G	N1-C6-O6	7.81	124.59	119.90
36	1	2606	G	N3-C2-N2	7.81	125.37	119.90
40	l3	102	LEU	CA-CB-CG	7.80	133.24	115.30
1	2	1560	U	N3-C2-O2	-7.80	116.74	122.20
36	1	421	G	C4-C5-N7	7.80	113.92	110.80
36	5	3095	U	N3-C2-O2	-7.79	116.74	122.20
36	1	3362	A	C5-N7-C8	-7.79	100.00	103.90
36	1	2409	G	N3-C2-N2	7.78	125.35	119.90
53	M7	3	ARG	NE-CZ-NH2	-7.78	116.41	120.30
36	5	3362	A	C6-C5-N7	-7.78	126.86	132.30
1	6	630	A	C2-N3-C4	-7.77	106.71	110.60
1	2	74	U	O5'-P-OP1	-7.77	98.70	105.70
36	1	2960	C	O5'-P-OP2	-7.77	98.71	105.70
38	4	120	C	N1-C2-O2	-7.77	114.24	118.90
36	5	2618	G	C5-C6-N1	7.76	115.38	111.50
37	7	101	G	N1-C6-O6	7.76	124.56	119.90
36	1	2283	G	N3-C2-N2	-7.76	114.47	119.90
36	5	974	G	N3-C4-C5	-7.75	124.72	128.60
1	2	1096	C	N3-C2-O2	-7.75	116.47	121.90
36	5	2255	A	O5'-P-OP1	-7.75	98.72	105.70
36	5	2980	U	N3-C2-O2	-7.75	116.77	122.20
36	5	2985	C	C5-C6-N1	7.75	124.88	121.00
36	1	2165	G	O5'-P-OP2	-7.75	98.73	105.70
36	1	957	C	O5'-P-OP2	-7.75	98.73	105.70
1	6	308	C	C5-C6-N1	-7.75	117.13	121.00
36	5	1918	C	O5'-P-OP2	-7.74	98.73	105.70
36	1	1858	A	N1-C6-N6	7.74	123.24	118.60
36	1	3362	A	N1-C6-N6	7.74	123.24	118.60
1	2	639	U	N1-C2-O2	7.74	128.22	122.80
36	1	1145	G	N1-C6-O6	7.74	124.54	119.90
36	5	3190	C	C6-N1-C2	-7.74	117.21	120.30
36	1	1127	G	N1-C6-O6	7.73	124.54	119.90
36	5	2872	A	O5'-P-OP1	7.73	119.98	110.70
36	1	1103	A	O5'-P-OP2	7.73	119.98	110.70
36	5	776	U	C5-C6-N1	-7.73	118.83	122.70
1	6	543	C	N1-C2-O2	7.73	123.54	118.90
1	2	75	U	N1-C2-O2	7.72	128.21	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	47	A	O5'-P-OP1	-7.72	98.75	105.70
36	5	2726	C	N1-C2-N3	7.72	124.60	119.20
36	5	341	G	C5-C6-O6	-7.71	123.97	128.60
36	1	1116	G	O5'-P-OP1	-7.71	98.76	105.70
36	1	2885	C	C6-N1-C2	7.71	123.39	120.30
36	1	278	U	N1-C2-O2	-7.71	117.40	122.80
1	2	139	C	P-O3'-C3'	7.70	128.94	119.70
36	1	1669	C	C6-N1-C2	7.70	123.38	120.30
36	1	1434	G	N1-C6-O6	7.70	124.52	119.90
36	1	1443	G	C8-N9-C4	-7.69	103.32	106.40
36	1	651	G	N3-C4-N9	7.68	130.61	126.00
36	5	676	G	N9-C4-C5	7.68	108.47	105.40
36	5	3052	G	N3-C4-N9	-7.68	121.39	126.00
36	1	1367	G	C5-C6-O6	-7.68	123.99	128.60
36	1	2640	A	C6-N1-C2	-7.68	113.99	118.60
36	5	2531	C	N1-C2-O2	7.68	123.51	118.90
36	1	421	G	N3-C4-N9	7.67	130.60	126.00
36	1	350	C	N3-C2-O2	-7.67	116.53	121.90
36	1	2633	U	OP1-P-O3'	7.67	122.07	105.20
36	1	2996	U	C6-N1-C1'	-7.66	110.47	121.20
38	4	113	U	C4-C5-C6	7.66	124.30	119.70
37	7	37	G	C5-C6-O6	-7.66	124.00	128.60
36	1	1556	C	C6-N1-C2	-7.66	117.24	120.30
36	5	1897	G	C4-C5-N7	7.66	113.86	110.80
36	5	2402	A	N9-C4-C5	7.66	108.86	105.80
36	1	2812	C	C5-C6-N1	-7.66	117.17	121.00
1	6	1085	G	O5'-P-OP1	-7.65	98.81	105.70
36	1	344	A	N1-C6-N6	-7.65	114.01	118.60
36	1	1116	G	C8-N9-C4	-7.65	103.34	106.40
36	5	2148	U	N3-C2-O2	7.65	127.55	122.20
36	5	3052	G	N9-C4-C5	7.64	108.46	105.40
36	1	2886	U	N3-C4-O4	7.64	124.75	119.40
36	5	934	G	C6-C5-N7	-7.63	125.82	130.40
36	5	3218	A	C4-C5-N7	7.63	114.51	110.70
36	1	716	A	C4-C5-N7	7.62	114.51	110.70
1	6	1634	C	C6-N1-C2	-7.61	117.26	120.30
36	1	979	U	N3-C2-O2	-7.61	116.88	122.20
36	1	3217	C	N3-C2-O2	-7.61	116.58	121.90
36	5	840	C	C6-N1-C2	-7.60	117.26	120.30
36	1	2621	G	O5'-P-OP1	7.60	119.82	110.70
36	1	1589	A	O4'-C1'-N9	-7.60	102.12	108.20
1	6	609	U	N3-C4-O4	-7.60	114.08	119.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	922	U	C5-C6-N1	-7.60	118.90	122.70
36	1	3217	C	C2-N1-C1'	7.59	127.16	118.80
1	6	139	C	N3-C2-O2	-7.59	116.58	121.90
1	6	558	U	N1-C2-O2	7.59	128.12	122.80
36	1	895	A	C6-C5-N7	-7.59	126.99	132.30
36	1	2397	A	C5-C6-N6	-7.59	117.63	123.70
36	5	709	A	O5'-P-OP1	-7.59	98.87	105.70
36	1	2642	A	C5-C6-N1	-7.59	113.91	117.70
36	5	3218	A	C5-N7-C8	-7.59	100.11	103.90
18	C6	40	GLU	C-N-CD	-7.59	103.91	120.60
1	6	337	G	C4-N9-C1'	7.59	136.36	126.50
36	5	622	A	N9-C4-C5	-7.59	102.77	105.80
36	5	908	G	C5-C6-O6	-7.59	124.05	128.60
36	5	1879	A	C4-C5-N7	7.58	114.49	110.70
36	5	2871	G	O5'-P-OP2	-7.58	98.88	105.70
41	L4	327	LEU	CA-CB-CG	7.58	132.74	115.30
1	6	194	U	C2-N1-C1'	7.58	126.80	117.70
36	5	921	A	O5'-P-OP2	-7.58	98.88	105.70
36	1	2601	A	C8-N9-C4	7.58	108.83	105.80
36	5	2403	G	O5'-P-OP1	7.58	119.79	110.70
36	1	958	C	N3-C4-C5	7.58	124.93	121.90
1	6	1657	U	N1-C2-O2	7.57	128.10	122.80
36	1	2305	G	C5-C6-O6	-7.57	124.06	128.60
36	1	3318	G	C4-N9-C1'	7.57	136.34	126.50
36	5	1710	C	C6-N1-C2	7.57	123.33	120.30
36	1	2798	C	N3-C4-C5	-7.56	118.87	121.90
36	5	2278	C	C5-C6-N1	7.56	124.78	121.00
1	6	1634	C	N1-C2-O2	7.56	123.44	118.90
36	1	2131	A	O5'-P-OP2	-7.56	98.90	105.70
1	6	858	G	O4'-C1'-N9	7.56	114.25	108.20
36	5	2872	A	O5'-P-OP2	-7.56	98.90	105.70
36	1	3306	U	N3-C2-O2	-7.55	116.91	122.20
36	1	2606	G	N1-C2-N2	-7.55	109.40	116.20
38	4	113	U	C5-C6-N1	-7.55	118.92	122.70
36	5	546	C	N3-C2-O2	-7.55	116.61	121.90
36	5	1209	G	N1-C6-O6	-7.55	115.37	119.90
36	1	2808	A	N1-C6-N6	7.55	123.13	118.60
37	7	87	G	C5-C6-O6	-7.55	124.07	128.60
36	5	1113	G	C2-N3-C4	-7.54	108.13	111.90
36	5	2142	A	C6-N1-C2	-7.54	114.07	118.60
36	5	2421	U	N1-C2-N3	7.54	119.42	114.90
36	5	2870	C	C6-N1-C1'	7.54	129.85	120.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2400	G	O5'-P-OP1	-7.54	98.92	105.70
1	2	558	U	N1-C2-O2	7.53	128.07	122.80
36	1	645	A	C5-C6-N1	7.53	121.47	117.70
36	1	1312	C	N1-C2-O2	-7.53	114.38	118.90
36	1	1445	U	C2-N3-C4	-7.53	122.48	127.00
36	5	934	G	C4-N9-C1'	7.53	136.29	126.50
36	1	835	G	O4'-C1'-N9	7.53	114.22	108.20
36	1	2359	C	N3-C4-C5	7.52	124.91	121.90
36	5	2113	A	C8-N9-C4	7.52	108.81	105.80
36	5	2956	A	O5'-P-OP1	-7.52	98.93	105.70
36	1	1849	C	N1-C2-O2	-7.52	114.39	118.90
36	1	1149	G	C5-C6-O6	-7.52	124.09	128.60
36	5	2246	G	O5'-P-OP2	7.52	119.72	110.70
36	5	1483	G	O4'-C1'-N9	7.52	114.21	108.20
36	1	1902	G	N1-C6-O6	7.51	124.41	119.90
1	6	1473	U	N3-C2-O2	-7.51	116.94	122.20
36	1	2302	G	C5-C6-O6	7.51	133.11	128.60
1	6	1634	C	C5-C6-N1	7.51	124.75	121.00
36	5	2796	G	O5'-P-OP2	-7.51	98.94	105.70
36	5	358	G	O5'-P-OP2	-7.50	98.95	105.70
36	5	1134	G	O5'-P-OP2	-7.50	98.95	105.70
36	5	2398	A	N7-C8-N9	-7.50	110.05	113.80
1	6	782	U	N3-C2-O2	-7.50	116.95	122.20
36	5	2426	U	N1-C2-O2	7.50	128.05	122.80
1	6	371	G	C5-C6-O6	-7.49	124.11	128.60
36	5	3092	C	O4'-C1'-N1	7.49	114.19	108.20
36	5	3216	G	O5'-P-OP2	-7.49	98.96	105.70
36	1	1197	A	C5-C6-N6	-7.49	117.71	123.70
36	5	3306	U	O5'-P-OP2	-7.49	98.96	105.70
36	1	357	A	O5'-P-OP2	-7.48	98.97	105.70
36	5	2954	U	N3-C2-O2	-7.48	116.96	122.20
36	5	929	A	O5'-P-OP2	-7.48	98.97	105.70
10	S8	29	LEU	CA-CB-CG	7.48	132.50	115.30
36	5	3154	C	C2-N1-C1'	7.48	127.03	118.80
36	5	2371	G	N9-C4-C5	-7.47	102.41	105.40
36	1	282	G	C8-N9-C4	-7.47	103.41	106.40
36	1	648	C	O5'-P-OP1	-7.47	98.98	105.70
36	5	942	U	N3-C4-O4	7.46	124.62	119.40
36	1	2869	U	O5'-P-OP1	-7.46	98.99	105.70
36	5	971	G	N7-C8-N9	-7.46	109.37	113.10
36	1	2418	G	OP1-P-O3'	7.46	121.61	105.20
36	1	2870	C	N3-C4-N4	-7.46	112.78	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2617	U	C2-N3-C4	-7.45	122.53	127.00
36	5	56	G	N1-C6-O6	-7.45	115.43	119.90
36	5	2189	U	O5'-P-OP1	-7.45	98.99	105.70
36	1	155	G	N3-C4-N9	7.45	130.47	126.00
38	4	20	U	C5-C6-N1	-7.45	118.98	122.70
36	5	1367	G	C8-N9-C1'	-7.45	117.32	127.00
1	6	609	U	N1-C2-N3	7.44	119.36	114.90
36	5	3014	U	C5-C4-O4	-7.44	121.44	125.90
36	5	2618	G	C6-N1-C2	-7.44	120.64	125.10
36	5	419	G	C5-C6-O6	-7.43	124.14	128.60
36	5	1309	U	O5'-P-OP1	-7.43	99.01	105.70
36	5	2619	G	C5-C6-O6	-7.43	124.14	128.60
36	1	368	G	C6-C5-N7	-7.43	125.94	130.40
36	5	3047	U	N1-C2-O2	7.43	128.00	122.80
37	7	90	U	C6-N1-C2	7.43	125.46	121.00
36	5	1004	U	N1-C2-O2	7.43	128.00	122.80
36	5	2302	G	N1-C6-O6	-7.43	115.44	119.90
36	1	1604	G	C4-N9-C1'	7.42	136.15	126.50
36	1	2389	C	N3-C4-C5	7.42	124.87	121.90
36	5	2421	U	N1-C2-O2	-7.42	117.61	122.80
36	1	2640	A	C8-N9-C4	-7.42	102.83	105.80
36	5	1897	G	C5-C6-O6	-7.41	124.16	128.60
36	5	3309	G	N3-C4-C5	-7.41	124.90	128.60
36	5	987	U	O5'-P-OP1	-7.40	99.04	105.70
37	7	101	G	C6-C5-N7	-7.40	125.96	130.40
1	2	542	A	O4'-C1'-N9	7.40	114.12	108.20
36	1	3057	U	N3-C4-O4	-7.40	114.22	119.40
36	1	1443	G	N7-C8-N9	7.39	116.80	113.10
36	1	2403	G	O5'-P-OP2	-7.39	99.05	105.70
36	5	1152	G	C4-C5-C6	-7.39	114.36	118.80
36	5	776	U	C4-C5-C6	7.39	124.13	119.70
36	1	2417	U	C2-N3-C4	-7.39	122.57	127.00
36	1	2874	G	C8-N9-C4	-7.39	103.44	106.40
36	5	420	G	N3-C4-N9	7.38	130.43	126.00
36	5	984	G	C4-C5-C6	7.38	123.23	118.80
36	5	1468	A	N1-C6-N6	7.38	123.03	118.60
36	5	1886	A	O5'-P-OP2	-7.38	99.06	105.70
43	16	173	MET	CB-CG-SD	-7.38	90.27	112.40
1	2	453	U	N1-C2-O2	7.37	127.96	122.80
36	1	1520	G	C4-C5-N7	-7.37	107.85	110.80
36	5	3178	A	O5'-P-OP1	-7.37	99.07	105.70
36	1	2808	A	N9-C4-C5	-7.37	102.85	105.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2758	A	C8-N9-C4	-7.37	102.85	105.80
36	1	510	G	N1-C6-O6	7.36	124.32	119.90
1	6	163	G	C2-N3-C4	-7.36	108.22	111.90
36	1	1911	A	C5-C6-N6	-7.36	117.81	123.70
37	3	103	A	N1-C6-N6	7.36	123.02	118.60
36	5	2823	G	N9-C4-C5	-7.36	102.46	105.40
1	2	577	G	C4-C5-N7	7.36	113.74	110.80
36	5	1876	U	C5-C6-N1	7.36	126.38	122.70
1	2	1596	C	N1-C2-O2	7.35	123.31	118.90
38	4	103	G	N3-C4-C5	-7.35	124.92	128.60
36	5	2957	G	C5-C6-O6	-7.35	124.19	128.60
1	6	321	C	N1-C2-O2	7.35	123.31	118.90
36	5	2874	G	C5-C6-O6	7.35	133.01	128.60
36	1	1904	C	C5-C6-N1	7.35	124.67	121.00
36	1	2376	G	C4-C5-N7	7.34	113.74	110.80
36	5	805	G	C8-N9-C4	7.34	109.34	106.40
36	1	2383	C	C6-N1-C2	7.34	123.24	120.30
36	1	931	C	C6-N1-C2	7.34	123.24	120.30
1	6	119	A	C2-N3-C4	-7.33	106.93	110.60
1	6	866	G	C8-N9-C4	7.33	109.33	106.40
36	5	335	G	N1-C6-O6	-7.33	115.50	119.90
36	1	521	A	N9-C4-C5	-7.33	102.87	105.80
36	1	2777	G	C5-C6-O6	7.33	133.00	128.60
36	5	2115	G	N1-C6-O6	7.33	124.30	119.90
1	2	17	C	O5'-P-OP2	-7.32	99.11	105.70
36	1	2327	U	O5'-P-OP1	-7.32	99.11	105.70
36	1	3382	U	N1-C2-O2	7.32	127.93	122.80
36	5	966	U	C6-N1-C2	-7.32	116.61	121.00
12	C0	88	PRO	N-CA-CB	7.32	112.09	103.30
36	5	2231	C	O4'-C1'-N1	7.32	114.06	108.20
36	5	2147	A	C5-C6-N6	-7.32	117.84	123.70
36	1	1429	G	N3-C4-C5	-7.32	124.94	128.60
36	5	1083	G	O5'-P-OP1	-7.32	99.11	105.70
36	5	2281	A	C8-N9-C4	7.31	108.73	105.80
73	o7	65	ARG	NE-CZ-NH1	7.31	123.96	120.30
36	1	101	G	O4'-C1'-N9	7.31	114.05	108.20
36	1	307	A	O5'-P-OP2	-7.31	99.12	105.70
36	1	859	G	N3-C4-N9	7.31	130.39	126.00
36	5	1149	G	N3-C4-C5	-7.31	124.95	128.60
36	1	807	A	N1-C6-N6	7.30	122.98	118.60
36	5	3052	G	C4-C5-N7	-7.30	107.88	110.80
36	5	994	G	N3-C4-N9	7.30	130.38	126.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1004	U	N3-C2-O2	-7.30	117.09	122.20
36	5	1016	C	O5'-P-OP1	-7.30	99.13	105.70
36	1	54	C	N3-C4-C5	7.30	124.82	121.90
36	5	640	U	N1-C2-O2	-7.30	117.69	122.80
36	5	1370	G	N1-C6-O6	-7.29	115.52	119.90
36	1	1445	U	N1-C2-O2	-7.29	117.69	122.80
36	1	641	C	O4'-C1'-N1	7.29	114.03	108.20
36	1	984	G	C6-C5-N7	-7.29	126.03	130.40
36	1	1160	C	C2-N3-C4	7.29	123.55	119.90
38	8	96	A	C8-N9-C4	7.29	108.72	105.80
36	5	914	A	C2-N3-C4	-7.29	106.95	110.60
36	5	932	U	C5-C4-O4	-7.29	121.53	125.90
36	1	2899	C	C2-N1-C1'	7.29	126.82	118.80
36	5	2396	G	C8-N9-C4	-7.29	103.48	106.40
1	6	1031	U	C6-N1-C2	7.29	125.37	121.00
36	5	2948	C	N3-C4-C5	7.29	124.81	121.90
36	1	45	A	O5'-P-OP1	-7.28	99.15	105.70
36	5	645	A	C6-N1-C2	-7.28	114.23	118.60
36	5	2132	C	C6-N1-C2	-7.28	117.39	120.30
36	1	364	G	C5-C6-O6	-7.28	124.23	128.60
37	7	7	G	O5'-P-OP1	7.28	119.43	110.70
36	1	942	U	OP1-P-OP2	-7.27	108.69	119.60
36	1	979	U	N1-C2-N3	7.27	119.26	114.90
36	5	3107	U	OP2-P-O3'	7.27	121.20	105.20
36	5	3050	U	C5-C4-O4	7.27	130.26	125.90
36	5	641	C	C2-N3-C4	-7.27	116.27	119.90
36	5	1405	U	C5-C6-N1	-7.27	119.07	122.70
36	5	1316	C	N3-C4-N4	7.26	123.08	118.00
36	5	668	G	N1-C6-O6	-7.26	115.54	119.90
36	5	909	G	N1-C6-O6	-7.26	115.55	119.90
36	1	2397	A	C6-C5-N7	-7.26	127.22	132.30
36	5	875	G	N1-C6-O6	-7.25	115.55	119.90
36	1	859	G	N9-C4-C5	-7.25	102.50	105.40
1	6	438	A	O5'-P-OP1	-7.25	99.17	105.70
52	m6	94	ARG	NE-CZ-NH1	-7.25	116.67	120.30
36	1	2987	A	N1-C6-N6	7.25	122.95	118.60
1	6	957	G	N1-C6-O6	7.25	124.25	119.90
41	14	339	LEU	CA-CB-CG	7.25	131.97	115.30
1	6	957	G	C5-C6-N1	-7.25	107.88	111.50
1	2	110	U	N3-C2-O2	-7.24	117.13	122.20
36	1	2728	G	C2-N3-C4	7.24	115.52	111.90
36	5	2351	U	C6-N1-C2	-7.24	116.66	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1192	C	N1-C2-O2	7.24	123.24	118.90
38	4	108	C	N1-C2-O2	-7.24	114.56	118.90
36	5	2790	A	O5'-P-OP2	-7.24	99.19	105.70
36	5	2947	G	C8-N9-C4	7.24	109.30	106.40
36	5	3197	G	N3-C2-N2	-7.24	114.83	119.90
1	6	1614	A	N1-C6-N6	7.23	122.94	118.60
1	2	1596	C	N3-C2-O2	-7.23	116.84	121.90
36	1	2142	A	C6-N1-C2	-7.23	114.26	118.60
1	6	163	G	N3-C4-C5	7.23	132.21	128.60
36	5	1926	C	C6-N1-C2	7.23	123.19	120.30
36	1	2937	G	C8-N9-C4	7.22	109.29	106.40
1	6	163	G	N9-C4-C5	7.22	108.29	105.40
36	5	3026	G	C5-C6-O6	-7.22	124.27	128.60
36	1	2861	U	O5'-P-OP2	7.21	119.36	110.70
36	5	1001	G	O5'-P-OP1	-7.21	99.21	105.70
36	5	1316	C	C6-N1-C2	-7.21	117.41	120.30
36	1	1113	G	N9-C4-C5	7.21	108.28	105.40
36	1	2621	G	O5'-P-OP2	-7.21	99.21	105.70
36	5	347	G	N1-C6-O6	7.21	124.23	119.90
36	1	681	U	N3-C4-O4	7.21	124.45	119.40
36	1	2936	A	N1-C6-N6	-7.21	114.28	118.60
36	1	2150	G	C8-N9-C4	-7.21	103.52	106.40
36	5	2881	C	C6-N1-C2	7.21	123.18	120.30
36	1	1164	G	C5-C6-O6	7.20	132.92	128.60
24	d2	93	LEU	CA-CB-CG	7.20	131.87	115.30
36	1	3108	G	N1-C6-O6	-7.20	115.58	119.90
1	6	1789	G	N3-C4-N9	7.20	130.32	126.00
38	4	113	U	N3-C2-O2	-7.20	117.16	122.20
1	6	308	C	N3-C4-N4	-7.20	112.96	118.00
52	M6	78	ARG	NE-CZ-NH1	7.19	123.90	120.30
36	5	934	G	C5-C6-O6	-7.19	124.28	128.60
36	5	700	C	C6-N1-C2	7.19	123.18	120.30
36	5	2136	C	C5-C6-N1	-7.19	117.40	121.00
36	1	2339	C	C6-N1-C2	-7.19	117.42	120.30
36	1	2979	U	C5-C6-N1	-7.18	119.11	122.70
15	C3	22	ALA	C-N-CD	-7.18	104.80	120.60
36	5	3362	A	O4'-C1'-N9	7.18	113.95	108.20
36	5	3047	U	N3-C2-O2	-7.18	117.17	122.20
40	l3	4	ARG	NE-CZ-NH1	7.18	123.89	120.30
36	1	639	G	C5-C6-O6	-7.18	124.29	128.60
36	5	925	A	C8-N9-C4	7.17	108.67	105.80
37	3	88	G	N1-C6-O6	-7.17	115.60	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2827	U	C5-C6-N1	-7.17	119.11	122.70
36	1	1520	G	C5-N7-C8	7.17	107.89	104.30
1	2	1773	C	N3-C4-C5	-7.17	119.03	121.90
36	1	2846	U	N3-C4-O4	-7.17	114.38	119.40
36	1	1405	U	C5-C6-N1	-7.16	119.12	122.70
36	1	3183	A	N1-C6-N6	7.16	122.90	118.60
36	1	659	G	N1-C2-N2	-7.16	109.75	116.20
36	1	3108	G	C5-C6-O6	7.16	132.90	128.60
36	1	645	A	N3-C4-N9	7.16	133.13	127.40
36	1	2714	G	C5-N7-C8	-7.16	100.72	104.30
36	1	2983	C	N3-C4-N4	-7.16	112.99	118.00
36	5	984	G	N3-C4-C5	-7.16	125.02	128.60
36	5	2948	C	N3-C4-N4	-7.16	112.99	118.00
36	1	1858	A	C6-C5-N7	-7.16	127.29	132.30
36	5	546	C	C6-N1-C2	-7.16	117.44	120.30
36	5	3049	A	C8-N9-C4	7.16	108.66	105.80
36	5	984	G	C6-C5-N7	-7.16	126.11	130.40
36	5	2630	C	N1-C2-O2	-7.16	114.61	118.90
36	1	2935	U	O5'-P-OP2	-7.16	99.26	105.70
36	5	2948	C	C4-C5-C6	-7.16	113.82	117.40
36	1	793	C	N1-C2-O2	-7.15	114.61	118.90
36	1	2728	G	C5-C6-O6	-7.15	124.31	128.60
1	6	390	G	O5'-P-OP2	-7.15	99.26	105.70
36	5	283	G	C5-C6-O6	-7.15	124.31	128.60
36	5	2678	A	C5-C6-N6	7.15	129.42	123.70
36	1	1547	G	N7-C8-N9	-7.15	109.53	113.10
36	1	2936	A	O5'-P-OP2	7.15	119.28	110.70
36	5	1117	G	O5'-P-OP1	-7.14	99.27	105.70
36	1	226	C	N3-C4-C5	-7.14	119.04	121.90
36	1	2863	G	N3-C2-N2	7.14	124.90	119.90
36	5	880	G	C4-N9-C1'	-7.14	117.22	126.50
36	5	1116	G	C4-C5-N7	-7.14	107.94	110.80
36	5	2377	G	N7-C8-N9	-7.14	109.53	113.10
36	1	2162	U	N3-C4-C5	7.14	118.88	114.60
36	1	3344	A	C5-N7-C8	-7.14	100.33	103.90
1	6	1127	G	N1-C2-N3	7.14	128.18	123.90
36	1	1429	G	N3-C4-N9	7.13	130.28	126.00
36	1	1909	A	C8-N9-C4	7.13	108.65	105.80
36	5	877	C	C4-C5-C6	-7.13	113.83	117.40
36	5	644	G	C8-N9-C4	-7.13	103.55	106.40
1	6	782	U	N1-C2-O2	7.13	127.79	122.80
36	5	2813	A	C4-C5-C6	7.13	120.56	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
48	m1	112	LEU	CA-CB-CG	7.13	131.69	115.30
36	1	498	A	O5'-P-OP2	-7.12	99.29	105.70
36	5	1006	A	O5'-P-OP2	-7.12	99.29	105.70
36	5	2296	A	C5-C6-N6	-7.12	118.00	123.70
36	5	2411	U	C2-N3-C4	-7.12	122.73	127.00
36	5	361	A	C2-N3-C4	7.12	114.16	110.60
36	1	681	U	N1-C2-O2	-7.12	117.82	122.80
1	2	1745	G	O5'-P-OP2	-7.12	99.30	105.70
36	5	2989	U	C5-C6-N1	-7.12	119.14	122.70
36	1	2283	G	C5-C6-O6	-7.11	124.33	128.60
36	5	2572	C	N3-C2-O2	-7.11	116.92	121.90
36	5	1154	A	N1-C2-N3	-7.11	125.75	129.30
36	5	53	G	O5'-P-OP2	-7.11	99.30	105.70
36	5	3012	A	O5'-P-OP2	-7.11	99.30	105.70
37	3	90	U	C5-C4-O4	-7.11	121.64	125.90
36	5	2639	G	N1-C6-O6	7.11	124.16	119.90
36	5	712	G	O5'-P-OP2	-7.10	99.31	105.70
36	5	2345	A	N1-C6-N6	7.10	122.86	118.60
36	5	2411	U	N3-C4-C5	7.10	118.86	114.60
1	2	1600	A	C2-N3-C4	-7.10	107.05	110.60
36	5	3343	G	N3-C4-N9	7.10	130.26	126.00
36	1	646	A	N1-C2-N3	7.10	132.85	129.30
36	1	1428	A	C5-C6-N6	-7.09	118.03	123.70
36	1	1528	G	O5'-P-OP1	-7.09	99.32	105.70
36	1	1007	U	C5-C4-O4	-7.09	121.64	125.90
36	1	1421	G	C8-N9-C4	7.09	109.24	106.40
36	5	1112	A	O5'-P-OP1	-7.09	99.32	105.70
1	6	610	G	C8-N9-C1'	-7.09	117.78	127.00
36	1	1113	G	N3-C2-N2	-7.09	114.94	119.90
36	1	2942	C	C6-N1-C2	7.09	123.14	120.30
36	1	666	A	N1-C6-N6	-7.09	114.35	118.60
36	5	1311	G	O5'-P-OP2	-7.09	99.32	105.70
36	1	29	C	C6-N1-C2	7.08	123.13	120.30
36	5	2299	A	O5'-P-OP2	-7.08	99.33	105.70
36	1	2412	G	C8-N9-C4	-7.08	103.57	106.40
36	1	406	G	O5'-P-OP2	-7.08	99.33	105.70
36	1	1137	C	O5'-P-OP2	-7.08	99.33	105.70
36	1	2818	U	C5-C6-N1	7.08	126.24	122.70
36	5	1329	U	C2-N3-C4	-7.08	122.75	127.00
36	5	439	C	C4-C5-C6	7.07	120.94	117.40
36	1	709	A	N7-C8-N9	-7.07	110.26	113.80
36	1	2169	G	C6-C5-N7	7.07	134.64	130.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	32	C	N3-C4-C5	7.07	124.73	121.90
36	5	609	G	N3-C2-N2	-7.07	114.95	119.90
36	5	2145	A	N1-C2-N3	7.07	132.84	129.30
1	6	1145	U	N1-C2-O2	-7.06	117.86	122.80
36	1	2359	C	C5-C4-N4	-7.06	115.26	120.20
1	6	1645	G	N1-C6-O6	-7.06	115.67	119.90
36	5	2986	U	C5-C4-O4	-7.06	121.66	125.90
36	1	329	U	N1-C2-N3	7.06	119.13	114.90
36	1	1142	G	C5-C6-N1	7.06	115.03	111.50
36	1	1437	C	C6-N1-C2	-7.05	117.48	120.30
1	6	308	C	C2-N1-C1'	-7.05	111.04	118.80
1	6	957	G	N3-C2-N2	-7.05	114.97	119.90
36	1	672	A	N1-C6-N6	7.05	122.83	118.60
36	5	1169	A	C5-C6-N1	-7.05	114.18	117.70
36	1	426	G	N3-C4-N9	7.04	130.23	126.00
36	1	2634	U	N1-C2-N3	7.04	119.12	114.90
1	6	301	A	O5'-P-OP2	-7.04	99.36	105.70
1	6	453	U	C5-C4-O4	7.04	130.12	125.90
36	5	1152	G	C5-C6-O6	-7.04	124.38	128.60
36	5	694	C	C6-N1-C2	-7.04	117.48	120.30
36	5	1848	G	C5-C6-O6	-7.04	124.38	128.60
36	5	3060	C	N1-C2-O2	-7.03	114.68	118.90
36	1	1852	G	N1-C6-O6	7.03	124.12	119.90
1	6	163	G	C8-N9-C4	-7.03	103.59	106.40
36	1	770	G	O4'-C1'-N9	7.03	113.82	108.20
36	1	2831	G	N1-C6-O6	7.03	124.12	119.90
36	1	1849	C	N3-C2-O2	7.03	126.82	121.90
36	1	2643	A	C8-N9-C4	7.03	108.61	105.80
36	5	200	C	C2-N3-C4	7.03	123.41	119.90
36	1	3036	G	N3-C4-C5	-7.02	125.09	128.60
1	2	1747	G	N1-C6-O6	7.02	124.11	119.90
36	1	1279	C	C6-N1-C2	-7.02	117.49	120.30
50	M4	135	LEU	CA-CB-CG	7.02	131.45	115.30
1	6	1581	C	N3-C4-C5	7.02	124.71	121.90
36	5	1316	C	N1-C2-O2	-7.02	114.69	118.90
1	6	1657	U	C5-C6-N1	7.02	126.21	122.70
36	5	1190	A	N7-C8-N9	7.01	117.31	113.80
36	5	1328	C	N3-C4-C5	-7.01	119.09	121.90
36	1	580	C	N1-C2-O2	-7.01	114.69	118.90
36	5	216	G	N1-C6-O6	7.01	124.11	119.90
38	4	109	A	N9-C4-C5	-7.01	103.00	105.80
36	5	889	U	N3-C4-C5	7.00	118.80	114.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2957	G	N1-C6-O6	7.00	124.10	119.90
36	5	1879	A	C5-C6-N6	-7.00	118.10	123.70
36	1	2393	G	C5-C6-O6	-7.00	124.40	128.60
36	5	1158	A	C5-C6-N6	-7.00	118.10	123.70
36	5	1592	G	C8-N9-C4	-7.00	103.60	106.40
36	5	2891	U	N3-C4-C5	7.00	118.80	114.60
36	1	946	U	N3-C2-O2	-7.00	117.30	122.20
36	5	1878	G	C4-N9-C1'	7.00	135.60	126.50
1	6	1739	C	N1-C2-O2	-7.00	114.70	118.90
36	5	2371	G	C8-N9-C4	6.99	109.20	106.40
1	6	795	U	N3-C2-O2	-6.99	117.31	122.20
36	5	523	A	N1-C6-N6	-6.99	114.41	118.60
36	5	907	G	N9-C4-C5	-6.99	102.61	105.40
1	6	337	G	C8-N9-C1'	-6.99	117.92	127.00
36	5	3285	C	C2-N1-C1'	6.99	126.49	118.80
36	1	805	G	C8-N9-C4	6.99	109.19	106.40
36	1	1489	A	N1-C6-N6	6.99	122.79	118.60
36	1	573	C	C2-N3-C4	-6.98	116.41	119.90
36	1	968	G	C2-N3-C4	6.98	115.39	111.90
36	5	609	G	N1-C6-O6	6.98	124.09	119.90
36	5	2145	A	C6-N1-C2	-6.98	114.41	118.60
36	1	1394	A	OP2-P-O3'	6.98	120.55	105.20
1	2	1389	C	N1-C2-O2	6.98	123.09	118.90
36	1	33	G	N1-C6-O6	6.97	124.08	119.90
36	5	2366	C	C5-C6-N1	6.97	124.49	121.00
1	2	507	U	C2-N1-C1'	6.97	126.06	117.70
36	1	939	U	C2-N1-C1'	-6.97	109.33	117.70
36	5	2234	G	C8-N9-C4	6.97	109.19	106.40
36	1	922	U	N3-C2-O2	-6.97	117.32	122.20
36	1	2874	G	N1-C2-N3	6.96	128.08	123.90
1	6	1581	C	C6-N1-C2	6.96	123.08	120.30
36	5	869	G	C5-C6-N1	6.96	114.98	111.50
36	5	2398	A	C4-C5-N7	-6.96	107.22	110.70
36	1	936	A	N1-C6-N6	6.96	122.77	118.60
36	5	39	A	C8-N9-C4	6.96	108.58	105.80
36	5	1158	A	C4-C5-N7	6.96	114.18	110.70
39	12	190	ARG	NE-CZ-NH1	-6.96	116.82	120.30
36	5	1321	G	N1-C6-O6	6.95	124.07	119.90
36	5	1520	G	N1-C6-O6	6.95	124.07	119.90
36	5	3183	A	N1-C6-N6	6.95	122.77	118.60
35	SM	134	ASP	CB-CA-C	-6.95	96.50	110.40
59	n3	45	ARG	NE-CZ-NH1	-6.95	116.83	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2362	C	N1-C2-O2	6.95	123.07	118.90
36	5	2117	A	N1-C6-N6	-6.95	114.43	118.60
36	5	2869	U	C2-N1-C1'	6.95	126.03	117.70
36	5	3136	G	C6-C5-N7	-6.95	126.23	130.40
36	1	940	G	C5-C6-N1	6.94	114.97	111.50
36	1	1604	G	N3-C4-C5	-6.94	125.13	128.60
1	6	1075	C	N3-C2-O2	6.94	126.76	121.90
36	1	2606	G	C6-C5-N7	-6.93	126.24	130.40
36	1	1147	G	C5-N7-C8	6.93	107.77	104.30
36	1	2659	G	N1-C6-O6	6.93	124.06	119.90
1	6	942	G	C8-N9-C4	-6.93	103.63	106.40
36	5	804	C	C4-C5-C6	6.93	120.86	117.40
36	5	2978	U	N3-C2-O2	-6.92	117.35	122.20
36	1	859	G	C6-C5-N7	-6.92	126.25	130.40
36	1	1891	A	C8-N9-C4	6.92	108.57	105.80
36	1	3069	G	O5'-P-OP2	-6.92	99.47	105.70
36	1	116	A	O4'-C1'-N9	6.92	113.73	108.20
37	7	74	C	N1-C2-O2	-6.91	114.75	118.90
36	5	3339	A	N1-C6-N6	6.91	122.75	118.60
36	1	407	A	N1-C6-N6	6.91	122.75	118.60
1	6	1535	U	N3-C2-O2	-6.91	117.36	122.20
36	5	3211	C	C6-N1-C2	6.91	123.06	120.30
36	5	2286	U	N3-C2-O2	-6.91	117.36	122.20
36	5	672	A	C8-N9-C4	-6.90	103.04	105.80
36	5	3052	G	C5-C6-O6	6.90	132.74	128.60
36	1	1434	G	C5-C6-O6	-6.90	124.46	128.60
1	6	371	G	N1-C6-O6	6.90	124.04	119.90
36	5	868	C	C6-N1-C2	6.90	123.06	120.30
36	5	2211	U	C4-C5-C6	6.90	123.84	119.70
36	5	2823	G	C6-C5-N7	-6.90	126.26	130.40
36	5	2871	G	N3-C4-C5	-6.90	125.15	128.60
1	2	1761	U	C6-N1-C2	-6.89	116.86	121.00
36	1	2986	U	N1-C2-N3	6.89	119.04	114.90
36	5	580	C	C6-N1-C2	-6.89	117.54	120.30
36	1	859	G	C8-N9-C1'	-6.89	118.04	127.00
36	5	2606	G	C8-N9-C4	-6.89	103.65	106.40
36	5	1324	U	C5-C6-N1	-6.88	119.26	122.70
36	5	3245	A	C5-C6-N1	-6.88	114.26	117.70
36	1	3374	U	C5-C4-O4	-6.88	121.77	125.90
36	5	2979	U	O5'-P-OP1	-6.88	99.51	105.70
36	1	66	A	O5'-P-OP1	-6.88	99.51	105.70
36	5	2757	U	N3-C2-O2	-6.88	117.39	122.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2305	G	C6-C5-N7	-6.88	126.28	130.40
36	1	2818	U	O5'-P-OP2	-6.88	99.51	105.70
36	1	1115	G	C8-N9-C4	-6.87	103.65	106.40
36	5	36	C	C5-C6-N1	6.87	124.44	121.00
36	5	2168	A	O5'-P-OP2	-6.87	99.52	105.70
36	1	1182	A	O5'-P-OP1	-6.87	99.52	105.70
36	1	3209	A	N1-C6-N6	6.87	122.72	118.60
1	2	192	U	C2-N1-C1'	6.87	125.94	117.70
36	1	2305	G	N1-C6-O6	6.87	124.02	119.90
36	5	636	C	N3-C4-C5	6.87	124.65	121.90
36	5	2393	G	C2-N3-C4	6.87	115.33	111.90
36	5	1101	G	C5-C6-O6	6.87	132.72	128.60
36	1	922	U	C5-C4-O4	6.86	130.02	125.90
36	5	3080	G	N1-C6-O6	6.86	124.02	119.90
36	1	2714	G	C4-C5-N7	6.86	113.54	110.80
36	1	1131	G	C8-N9-C4	6.86	109.14	106.40
36	5	1884	A	OP2-P-O3'	6.86	120.28	105.20
36	1	3344	A	C2-N3-C4	-6.85	107.17	110.60
1	6	977	A	N1-C6-N6	6.85	122.71	118.60
1	6	308	C	C6-N1-C1'	6.85	129.02	120.80
37	7	45	A	O5'-P-OP2	-6.85	99.53	105.70
36	5	3092	C	N1-C2-O2	6.85	123.01	118.90
36	5	1178	G	OP2-P-O3'	6.85	120.26	105.20
36	5	2931	C	C5-C4-N4	-6.84	115.41	120.20
36	1	278	U	N1-C2-N3	6.84	119.00	114.90
1	6	158	U	P-O3'-C3'	6.84	127.91	119.70
36	1	3184	A	O5'-P-OP1	-6.84	99.55	105.70
36	5	3027	A	N9-C4-C5	-6.84	103.06	105.80
36	1	2329	C	O5'-P-OP2	-6.84	99.55	105.70
36	1	2777	G	C8-N9-C4	-6.84	103.67	106.40
36	1	3344	A	C8-N9-C4	-6.83	103.07	105.80
38	4	30	C	O5'-P-OP1	-6.83	99.55	105.70
36	1	1492	G	N7-C8-N9	-6.83	109.68	113.10
36	5	884	A	C2-N3-C4	-6.83	107.19	110.60
36	5	1049	C	N3-C4-C5	6.83	124.63	121.90
36	5	1370	G	N3-C2-N2	6.83	124.68	119.90
36	5	2794	G	C5-C6-N1	6.83	114.91	111.50
36	5	2813	A	C8-N9-C4	-6.83	103.07	105.80
36	5	3368	U	C2-N1-C1'	-6.83	109.51	117.70
36	1	2144	A	N3-C4-N9	6.82	132.86	127.40
36	1	2305	G	N3-C4-N9	6.82	130.09	126.00
36	1	3242	G	C8-N9-C4	6.82	109.13	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2138	A	C2-N3-C4	-6.82	107.19	110.60
36	5	1365	G	C6-C5-N7	-6.82	126.31	130.40
35	SM	167	PRO	N-CA-CB	6.82	111.48	103.30
37	7	40	C	N3-C2-O2	6.82	126.67	121.90
36	1	939	U	N1-C2-O2	-6.82	118.03	122.80
36	1	1367	G	C6-C5-N7	-6.82	126.31	130.40
1	2	1652	C	C6-N1-C2	-6.81	117.57	120.30
36	5	38	U	C5-C4-O4	-6.81	121.81	125.90
37	7	79	A	N1-C6-N6	6.81	122.69	118.60
36	1	577	C	N1-C2-O2	-6.81	114.81	118.90
36	1	1409	G	C5-C6-O6	6.81	132.69	128.60
36	5	971	G	C5-N7-C8	6.81	107.70	104.30
36	1	1516	C	N1-C2-O2	-6.81	114.81	118.90
36	5	892	U	N3-C4-O4	-6.81	114.64	119.40
36	5	368	G	C5-C6-O6	6.80	132.68	128.60
38	4	43	A	O5'-P-OP1	-6.80	99.58	105.70
36	5	37	U	N1-C2-N3	6.80	118.98	114.90
36	5	1152	G	C5-C6-N1	-6.80	108.10	111.50
1	2	934	C	C2-N1-C1'	6.80	126.28	118.80
36	1	984	G	N3-C4-N9	6.79	130.08	126.00
36	5	1805	C	C6-N1-C2	6.79	123.02	120.30
36	1	2978	U	O4'-C1'-N1	6.79	113.63	108.20
36	5	934	G	C8-N9-C1'	-6.79	118.17	127.00
38	4	37	A	C8-N9-C4	-6.79	103.08	105.80
36	1	716	A	C5-C6-N6	-6.78	118.27	123.70
36	1	2397	A	C4-C5-N7	6.78	114.09	110.70
1	6	421	A	N1-C6-N6	6.78	122.67	118.60
1	6	452	A	N1-C6-N6	6.78	122.67	118.60
36	1	65	A	P-O3'-C3'	6.78	127.83	119.70
36	1	1197	A	N9-C4-C5	-6.78	103.09	105.80
36	1	1421	G	N7-C8-N9	-6.78	109.71	113.10
36	5	952	A	O5'-P-OP2	-6.78	99.60	105.70
36	5	1170	A	N1-C6-N6	6.78	122.67	118.60
36	1	782	U	N3-C4-C5	6.78	118.67	114.60
1	2	704	C	N1-C2-O2	6.77	122.97	118.90
36	1	1127	G	C5-C6-O6	-6.77	124.54	128.60
36	5	83	U	N3-C2-O2	-6.77	117.46	122.20
37	7	37	G	N3-C4-N9	6.77	130.06	126.00
36	1	961	C	C5-C6-N1	-6.77	117.62	121.00
36	5	800	G	C8-N9-C4	6.77	109.11	106.40
36	1	1838	G	C6-C5-N7	-6.76	126.34	130.40
36	1	3143	C	N1-C2-O2	-6.76	114.84	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	349	U	O5'-P-OP2	-6.76	99.61	105.70
1	6	1568	C	C6-N1-C2	-6.76	117.59	120.30
36	5	2704	A	N1-C6-N6	6.76	122.66	118.60
1	2	507	U	N1-C2-O2	6.76	127.53	122.80
36	1	30	G	N1-C6-O6	-6.76	115.84	119.90
36	1	421	G	N9-C4-C5	-6.76	102.70	105.40
36	1	2276	G	C8-N9-C4	-6.76	103.70	106.40
36	5	2404	A	N1-C6-N6	6.76	122.66	118.60
36	1	959	C	N3-C4-C5	6.76	124.60	121.90
36	5	2113	A	N7-C8-N9	-6.76	110.42	113.80
36	1	573	C	C5-C6-N1	-6.75	117.62	121.00
36	1	2867	C	C5-C6-N1	-6.75	117.62	121.00
36	5	357	A	O5'-P-OP2	-6.75	99.62	105.70
36	1	2642	A	N1-C2-N3	-6.75	125.92	129.30
1	6	1514	U	N3-C4-O4	-6.75	114.67	119.40
36	5	3260	G	C5-C6-O6	6.75	132.65	128.60
36	5	660	A	N7-C8-N9	-6.75	110.42	113.80
1	2	558	U	N3-C2-O2	-6.75	117.48	122.20
36	1	921	A	O4'-C1'-N9	-6.75	102.80	108.20
36	1	2376	G	N7-C8-N9	6.75	116.47	113.10
36	5	3049	A	N7-C8-N9	-6.75	110.43	113.80
36	5	1209	G	N9-C4-C5	6.75	108.10	105.40
20	c8	15	LEU	CA-CB-CG	6.74	130.81	115.30
36	5	45	A	C6-N1-C2	-6.74	114.56	118.60
36	1	2247	G	N1-C6-O6	6.74	123.94	119.90
1	6	350	U	C5-C6-N1	-6.74	119.33	122.70
36	5	2794	G	C5-C6-O6	-6.74	124.56	128.60
37	7	110	G	O5'-P-OP2	-6.73	99.64	105.70
36	1	1103	A	O5'-P-OP1	-6.73	99.64	105.70
36	5	2884	C	C5-C4-N4	-6.73	115.49	120.20
36	1	1153	A	N1-C6-N6	6.73	122.64	118.60
36	1	1312	C	N3-C2-O2	6.73	126.61	121.90
1	6	558	U	N3-C2-O2	-6.73	117.49	122.20
36	5	424	G	C2-N3-C4	6.73	115.27	111.90
36	5	1888	U	C2-N3-C4	-6.73	122.96	127.00
36	1	911	C	C2-N3-C4	-6.73	116.53	119.90
36	1	701	G	N3-C2-N2	-6.73	115.19	119.90
36	5	384	A	N7-C8-N9	-6.73	110.44	113.80
36	5	1876	U	C6-N1-C2	-6.73	116.97	121.00
36	1	1161	G	O5'-P-OP1	-6.72	99.65	105.70
36	5	1738	C	N1-C2-O2	-6.72	114.87	118.90
36	5	2869	U	N1-C2-O2	6.72	127.51	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	797	U	OP1-P-OP2	-6.72	109.52	119.60
36	1	2322	C	N3-C4-C5	6.72	124.59	121.90
36	5	3141	A	N1-C2-N3	6.72	132.66	129.30
36	1	639	G	O5'-P-OP1	6.72	118.76	110.70
36	1	1492	G	C4-C5-N7	-6.72	108.11	110.80
36	5	2327	U	C5-C6-N1	-6.72	119.34	122.70
1	6	858	G	C4-C5-N7	6.72	113.49	110.80
1	6	371	G	N9-C4-C5	-6.71	102.71	105.40
36	5	2965	U	N1-C2-O2	-6.71	118.10	122.80
36	1	3382	U	N3-C2-O2	-6.71	117.50	122.20
36	1	917	A	N1-C6-N6	-6.71	114.58	118.60
36	5	2142	A	OP1-P-O3'	6.71	119.96	105.20
36	1	42	C	C6-N1-C2	-6.71	117.62	120.30
36	1	397	A	O4'-C1'-N9	6.71	113.57	108.20
36	5	861	C	C6-N1-C2	6.71	122.98	120.30
36	5	1898	G	O4'-C1'-N9	6.71	113.56	108.20
36	5	2330	C	O5'-P-OP2	-6.70	99.67	105.70
38	8	100	U	C2-N1-C1'	6.70	125.74	117.70
37	7	89	G	N3-C2-N2	6.70	124.59	119.90
1	6	1596	C	N3-C2-O2	-6.70	117.21	121.90
62	N6	13	ARG	NE-CZ-NH2	-6.70	116.95	120.30
36	5	1200	A	N9-C4-C5	6.70	108.48	105.80
36	1	2642	A	C8-N9-C4	6.70	108.48	105.80
36	1	281	G	N3-C2-N2	-6.69	115.21	119.90
38	4	109	A	C4-C5-N7	6.69	114.05	110.70
36	5	420	G	C5-C6-O6	-6.69	124.58	128.60
36	1	1296	C	C6-N1-C2	-6.69	117.62	120.30
36	1	1366	A	C5-N7-C8	-6.69	100.56	103.90
36	5	2133	U	N3-C4-O4	-6.69	114.72	119.40
36	5	2350	C	O5'-P-OP1	6.69	118.73	110.70
36	5	3141	A	C4-C5-C6	6.69	120.34	117.00
37	3	95	A	N1-C6-N6	6.69	122.61	118.60
36	5	1370	G	N1-C2-N2	-6.69	110.18	116.20
36	5	2234	G	N9-C4-C5	-6.69	102.72	105.40
36	1	1116	G	C6-C5-N7	-6.69	126.39	130.40
36	1	2244	A	O5'-P-OP1	6.69	118.73	110.70
1	6	1145	U	N3-C4-O4	6.69	124.08	119.40
36	1	3101	G	N1-C6-O6	-6.68	115.89	119.90
36	1	2874	G	C4-C5-N7	-6.68	108.13	110.80
36	5	1370	G	N3-C4-N9	6.68	130.01	126.00
36	5	1452	A	C8-N9-C4	6.68	108.47	105.80
36	1	796	U	OP2-P-O3'	6.67	119.89	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1405	U	C2-N3-C4	-6.67	123.00	127.00
36	5	2622	C	N3-C4-C5	-6.67	119.23	121.90
38	8	19	C	N3-C4-C5	-6.67	119.23	121.90
36	1	426	G	C8-N9-C1'	-6.67	118.33	127.00
38	4	47	C	N3-C2-O2	-6.67	117.23	121.90
36	5	838	G	C5-C6-O6	6.67	132.60	128.60
36	1	648	C	C2-N1-C1'	6.67	126.14	118.80
36	1	1134	G	C5-C6-O6	-6.67	124.60	128.60
36	5	2350	C	N1-C2-O2	-6.67	114.90	118.90
36	1	1373	A	O5'-P-OP2	-6.66	99.71	105.70
36	1	3217	C	N1-C2-O2	6.66	122.90	118.90
36	1	283	G	O4'-C1'-N9	-6.66	102.87	108.20
36	1	890	C	C6-N1-C2	-6.66	117.64	120.30
36	5	2133	U	N3-C4-C5	6.66	118.59	114.60
36	1	2859	U	C4-C5-C6	6.66	123.69	119.70
1	6	1100	G	N3-C4-N9	6.66	129.99	126.00
36	1	651	G	C8-N9-C1'	-6.65	118.35	127.00
36	5	905	U	O5'-P-OP2	-6.65	99.71	105.70
52	M6	84	LEU	CB-CG-CD2	-6.65	99.69	111.00
36	5	1003	A	C8-N9-C4	6.65	108.46	105.80
36	5	2757	U	N1-C2-N3	6.65	118.89	114.90
36	1	3368	U	C2-N1-C1'	-6.65	109.72	117.70
36	1	785	G	C2-N3-C4	6.65	115.22	111.90
38	4	20	U	N3-C4-C5	6.65	118.59	114.60
36	1	938	C	C6-N1-C2	-6.65	117.64	120.30
36	5	922	U	C5-C4-O4	6.65	129.89	125.90
36	1	2827	U	C2-N1-C1'	-6.64	109.73	117.70
36	5	2772	C	P-O3'-C3'	6.64	127.67	119.70
36	5	3218	A	C6-C5-N7	-6.64	127.65	132.30
36	5	952	A	C5-C6-N6	-6.64	118.39	123.70
36	5	2980	U	N1-C2-N3	6.64	118.89	114.90
36	5	1452	A	C4-C5-N7	6.64	114.02	110.70
36	1	43	A	C8-N9-C4	6.64	108.46	105.80
36	5	2758	A	N9-C4-C5	6.64	108.46	105.80
36	5	2877	G	C4-C5-N7	-6.64	108.14	110.80
40	l3	19	ARG	NE-CZ-NH2	-6.64	116.98	120.30
1	6	352	A	OP2-P-O3'	6.64	119.80	105.20
36	5	332	C	N3-C2-O2	-6.64	117.25	121.90
36	5	2211	U	N3-C2-O2	-6.64	117.55	122.20
36	5	2836	C	C5-C6-N1	-6.64	117.68	121.00
36	1	1617	G	C8-N9-C4	6.63	109.05	106.40
36	5	1592	G	C5-C6-N1	-6.63	108.18	111.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3218	A	P-O3'-C3'	6.63	127.66	119.70
36	1	1332	A	N7-C8-N9	6.63	117.12	113.80
36	1	908	G	C8-N9-C1'	-6.63	118.38	127.00
36	1	3266	G	C8-N9-C4	-6.63	103.75	106.40
1	2	728	U	C2-N1-C1'	6.63	125.66	117.70
36	1	1130	A	C2-N3-C4	6.63	113.92	110.60
36	1	1389	G	C6-C5-N7	-6.63	126.42	130.40
36	5	2326	A	C8-N9-C4	6.63	108.45	105.80
36	5	3210	A	N1-C6-N6	-6.63	114.62	118.60
36	5	2849	C	C5-C6-N1	6.63	124.31	121.00
36	5	217	U	OP1-P-O3'	6.62	119.78	105.20
36	1	422	A	N1-C6-N6	-6.62	114.63	118.60
36	1	2634	U	C5-C6-N1	-6.62	119.39	122.70
1	6	308	C	N1-C2-N3	6.62	123.84	119.20
36	5	3101	G	N1-C6-O6	-6.62	115.93	119.90
1	6	1100	G	C6-N1-C2	-6.62	121.13	125.10
36	5	1130	A	C2-N3-C4	6.62	113.91	110.60
36	5	2300	G	N1-C6-O6	-6.62	115.93	119.90
1	6	1537	C	N3-C4-C5	-6.62	119.25	121.90
1	2	830	U	N3-C2-O2	-6.62	117.57	122.20
36	5	2869	U	C6-N1-C1'	-6.62	111.94	121.20
1	2	1082	C	N1-C2-O2	6.61	122.87	118.90
36	1	281	G	N9-C4-C5	6.61	108.05	105.40
36	1	1124	U	C5-C6-N1	6.61	126.01	122.70
36	1	1440	G	O5'-P-OP1	-6.61	99.75	105.70
36	1	2866	U	N1-C2-O2	-6.61	118.17	122.80
36	5	2693	C	N3-C4-C5	6.61	124.54	121.90
36	1	1396	C	C6-N1-C2	6.61	122.94	120.30
36	5	932	U	N3-C4-O4	6.61	124.03	119.40
1	2	1022	C	N3-C4-C5	6.61	124.54	121.90
36	1	200	C	N1-C2-O2	6.61	122.86	118.90
1	6	542	A	O5'-P-OP1	-6.61	99.75	105.70
36	5	1335	C	N3-C2-O2	6.61	126.52	121.90
36	5	2950	G	O4'-C1'-N9	6.61	113.48	108.20
36	1	1353	U	N3-C2-O2	-6.60	117.58	122.20
36	1	1709	C	N1-C2-O2	-6.60	114.94	118.90
47	M0	57	LEU	CA-CB-CG	6.60	130.49	115.30
36	5	92	G	N1-C6-O6	-6.60	115.94	119.90
36	5	2412	G	N3-C4-C5	-6.60	125.30	128.60
1	2	144	U	N3-C2-O2	-6.60	117.58	122.20
1	2	1745	G	C5-C6-O6	-6.60	124.64	128.60
36	1	1310	G	C5-C6-O6	6.60	132.56	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3027	A	C8-N9-C4	6.60	108.44	105.80
36	5	3362	A	C4-C5-N7	6.60	114.00	110.70
36	1	585	A	N7-C8-N9	-6.59	110.50	113.80
36	5	272	G	N1-C6-O6	6.59	123.86	119.90
36	1	702	C	C2-N3-C4	-6.59	116.61	119.90
36	5	1112	A	C4-C5-C6	6.59	120.30	117.00
36	5	1721	U	N1-C2-O2	6.59	127.41	122.80
36	5	3377	G	N1-C6-O6	6.59	123.85	119.90
1	2	1652	C	C5-C6-N1	6.59	124.29	121.00
36	1	2643	A	N9-C4-C5	-6.59	103.17	105.80
36	5	92	G	N3-C4-C5	-6.59	125.31	128.60
36	5	3309	G	C4-N9-C1'	6.59	135.06	126.50
36	5	1902	G	O5'-P-OP1	-6.58	99.77	105.70
36	5	2372	A	P-O3'-C3'	6.58	127.60	119.70
36	1	81	C	C2-N3-C4	-6.58	116.61	119.90
36	1	2620	G	C8-N9-C4	6.58	109.03	106.40
36	5	159	A	C8-N9-C4	6.58	108.43	105.80
36	5	1832	C	N3-C4-C5	6.58	124.53	121.90
36	1	304	G	N1-C2-N2	6.58	122.12	116.20
37	7	26	C	C4-C5-C6	6.58	120.69	117.40
36	1	2179	C	N3-C4-C5	6.58	124.53	121.90
36	5	1420	C	OP2-P-O3'	6.58	119.67	105.20
42	15	152	ARG	NE-CZ-NH1	6.58	123.59	120.30
36	5	2370	G	C5-C6-N1	6.57	114.79	111.50
36	5	2618	G	N3-C4-C5	-6.57	125.31	128.60
36	5	2849	C	N3-C4-C5	-6.57	119.27	121.90
36	1	1003	A	N1-C6-N6	6.57	122.54	118.60
36	1	1514	G	O5'-P-OP1	-6.57	99.79	105.70
36	1	1904	C	C6-N1-C2	-6.57	117.67	120.30
36	5	2660	G	O5'-P-OP2	-6.57	99.79	105.70
1	2	553	G	C6-C5-N7	-6.57	126.46	130.40
1	6	272	U	P-O3'-C3'	6.57	127.58	119.70
36	5	2234	G	N1-C6-O6	6.57	123.84	119.90
36	5	3362	A	N7-C8-N9	6.57	117.08	113.80
1	2	1125	A	O5'-P-OP1	-6.57	99.79	105.70
36	1	961	C	C6-N1-C2	6.57	122.93	120.30
36	5	1306	G	N1-C6-O6	6.57	123.84	119.90
1	2	1462	G	N1-C6-O6	6.57	123.84	119.90
37	7	93	C	N3-C2-O2	-6.57	117.31	121.90
36	5	1298	C	N1-C2-O2	-6.56	114.96	118.90
36	5	2630	C	O5'-P-OP1	-6.56	99.79	105.70
36	5	2915	U	C2-N3-C4	-6.56	123.06	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3103	A	O5'-P-OP2	-6.56	99.80	105.70
36	5	859	G	N3-C4-C5	-6.56	125.32	128.60
36	1	644	G	C8-N9-C4	-6.56	103.78	106.40
36	1	960	U	N1-C2-O2	-6.56	118.21	122.80
36	5	871	U	C5-C4-O4	6.56	129.84	125.90
36	5	3228	C	N3-C2-O2	-6.56	117.31	121.90
1	2	1462	G	N9-C4-C5	-6.56	102.78	105.40
36	5	1152	G	N7-C8-N9	6.56	116.38	113.10
36	5	1410	U	O5'-P-OP2	-6.56	99.80	105.70
36	5	393	U	C6-N1-C2	-6.56	117.07	121.00
36	5	2142	A	OP1-P-OP2	-6.56	109.77	119.60
36	1	2976	A	N1-C6-N6	-6.55	114.67	118.60
38	4	20	U	N3-C4-O4	-6.55	114.81	119.40
36	1	2397	A	N9-C4-C5	-6.55	103.18	105.80
1	6	1600	A	N9-C1'-C2'	6.55	122.51	114.00
69	O3	48	ARG	NE-CZ-NH2	-6.55	117.03	120.30
36	1	1300	G	C5-C6-O6	-6.54	124.67	128.60
36	1	1391	C	OP1-P-OP2	6.54	129.42	119.60
36	1	2145	A	O5'-P-OP2	-6.54	99.81	105.70
36	5	661	G	C8-N9-C4	-6.54	103.78	106.40
36	1	1329	U	N1-C1'-C2'	-6.54	104.81	112.00
36	1	357	A	C5-N7-C8	-6.54	100.63	103.90
36	1	2627	C	C5-C6-N1	-6.54	117.73	121.00
1	6	455	C	N1-C2-O2	-6.54	114.98	118.90
36	1	2173	U	N1-C2-O2	-6.54	118.22	122.80
36	5	2993	G	C5-C6-O6	-6.54	124.68	128.60
1	2	992	A	N3-C4-C5	6.54	131.38	126.80
36	1	2247	G	C5-C6-O6	-6.54	124.68	128.60
36	1	1168	U	OP1-P-OP2	-6.53	109.80	119.60
36	1	3090	U	C5-C4-O4	-6.53	121.98	125.90
1	2	402	C	N3-C2-O2	6.53	126.47	121.90
36	1	651	G	C5-N7-C8	6.53	107.56	104.30
36	5	578	A	O5'-P-OP2	6.53	118.54	110.70
36	1	2601	A	N7-C8-N9	-6.53	110.53	113.80
38	4	95	G	N3-C4-C5	6.53	131.86	128.60
36	5	1312	C	C6-N1-C2	-6.53	117.69	120.30
1	6	623	A	O5'-P-OP1	-6.53	99.83	105.70
36	5	925	A	N7-C8-N9	-6.53	110.54	113.80
36	5	1212	A	O5'-P-OP2	-6.53	99.83	105.70
36	5	2660	G	C8-N9-C4	6.53	109.01	106.40
36	1	1113	G	C8-N9-C4	-6.52	103.79	106.40
36	5	2631	U	OP1-P-O3'	6.52	119.55	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2630	C	C5-C4-N4	-6.52	115.63	120.20
36	1	2777	G	N9-C4-C5	6.52	108.01	105.40
36	1	639	G	N9-C1'-C2'	-6.52	104.83	112.00
36	1	721	G	C6-C5-N7	-6.52	126.49	130.40
36	1	2169	G	C4-C5-N7	-6.52	108.19	110.80
36	1	2628	A	C8-N9-C4	-6.52	103.19	105.80
37	7	104	A	N1-C6-N6	6.52	122.51	118.60
36	5	2928	C	N3-C4-C5	-6.52	119.29	121.90
36	5	3308	C	N1-C2-O2	-6.52	114.99	118.90
1	6	1025	A	N1-C6-N6	6.51	122.51	118.60
36	5	807	A	C5-N7-C8	-6.51	100.64	103.90
36	5	2164	A	N1-C6-N6	6.51	122.51	118.60
36	1	1556	C	N3-C2-O2	-6.51	117.34	121.90
36	5	1185	C	C6-N1-C2	-6.51	117.69	120.30
36	5	2797	C	N3-C2-O2	6.51	126.46	121.90
36	5	2902	A	N1-C6-N6	6.51	122.51	118.60
1	6	194	U	N1-C2-O2	6.51	127.36	122.80
36	5	954	U	C5-C6-N1	6.51	125.95	122.70
36	1	970	A	C5-N7-C8	-6.51	100.65	103.90
36	5	3009	G	O5'-P-OP1	-6.51	99.84	105.70
36	5	1926	C	N1-C2-O2	-6.50	115.00	118.90
41	14	187	LEU	CA-CB-CG	6.50	130.26	115.30
36	1	2938	G	OP1-P-OP2	6.50	129.35	119.60
36	5	2383	C	N3-C4-N4	6.50	122.55	118.00
36	1	1820	U	P-O3'-C3'	6.50	127.50	119.70
36	1	1838	G	N9-C4-C5	-6.50	102.80	105.40
36	1	941	G	C8-N9-C4	-6.49	103.80	106.40
36	5	864	G	OP2-P-O3'	6.49	119.48	105.20
1	6	1600	A	C2-N3-C4	-6.49	107.36	110.60
36	5	994	G	N3-C2-N2	6.49	124.44	119.90
36	5	1301	A	N1-C6-N6	6.49	122.50	118.60
36	5	99	A	C8-N9-C4	6.49	108.39	105.80
36	5	2294	U	C2-N3-C4	-6.49	123.11	127.00
36	1	2400	G	N1-C6-O6	6.49	123.79	119.90
36	5	2899	C	O5'-P-OP1	6.49	118.48	110.70
36	1	2298	U	O4'-C1'-N1	6.49	113.39	108.20
36	1	60	A	C8-N9-C4	6.48	108.39	105.80
38	4	94	C	C6-N1-C2	6.48	122.89	120.30
1	6	453	U	C2-N1-C1'	6.48	125.48	117.70
36	5	1112	A	N3-C4-C5	-6.48	122.26	126.80
36	5	1434	G	C8-N9-C4	-6.48	103.81	106.40
36	1	2693	C	N3-C4-C5	6.48	124.49	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1330	A	OP1-P-OP2	-6.48	109.88	119.60
36	5	2884	C	C2-N1-C1'	6.48	125.93	118.80
38	8	19	C	C4-C5-C6	6.48	120.64	117.40
1	2	1273	G	O4'-C1'-N9	6.48	113.38	108.20
36	5	629	U	O5'-P-OP2	-6.48	99.87	105.70
38	4	32	C	C2-N3-C4	-6.48	116.66	119.90
36	1	2249	G	N3-C4-N9	6.47	129.88	126.00
36	5	811	U	C5-C4-O4	-6.47	122.02	125.90
1	2	1339	C	P-O3'-C3'	6.47	127.46	119.70
36	5	280	U	C5-C4-O4	-6.47	122.02	125.90
1	6	1560	U	N3-C2-O2	-6.47	117.67	122.20
36	5	2352	A	N1-C2-N3	6.47	132.53	129.30
36	1	645	A	C2-N3-C4	6.46	113.83	110.60
36	1	3362	A	N1-C2-N3	6.46	132.53	129.30
36	1	3122	A	O5'-P-OP1	-6.46	99.89	105.70
36	5	3301	U	C6-N1-C2	6.46	124.88	121.00
36	1	818	C	N3-C2-O2	-6.46	117.38	121.90
36	1	1852	G	C5-C6-O6	-6.46	124.72	128.60
54	M8	178	ARG	NE-CZ-NH1	-6.46	117.07	120.30
1	6	1100	G	C4-N9-C1'	6.46	134.90	126.50
36	1	2314	U	C6-N1-C2	6.46	124.87	121.00
36	5	1116	G	N3-C4-C5	-6.46	125.37	128.60
36	5	3101	G	O5'-P-OP1	-6.46	99.89	105.70
36	1	3228	C	N1-C2-O2	6.45	122.77	118.90
36	5	2405	C	N3-C2-O2	-6.45	117.38	121.90
36	5	3048	A	O5'-P-OP2	-6.45	99.89	105.70
36	1	646	A	O5'-P-OP2	-6.45	99.89	105.70
36	1	1433	A	C8-N9-C4	-6.45	103.22	105.80
36	1	1171	G	C4-C5-N7	6.45	113.38	110.80
36	5	2231	C	C2-N1-C1'	6.45	125.89	118.80
36	5	2606	G	C5-C6-O6	6.45	132.47	128.60
1	2	831	U	C2-N1-C1'	6.45	125.44	117.70
36	1	1881	A	C8-N9-C4	6.45	108.38	105.80
36	1	2850	G	N9-C4-C5	-6.45	102.82	105.40
1	2	136	C	C6-N1-C2	-6.45	117.72	120.30
36	1	339	C	N1-C2-O2	6.45	122.77	118.90
36	5	1316	C	N3-C4-C5	-6.45	119.32	121.90
36	5	2821	C	C6-N1-C2	-6.45	117.72	120.30
36	1	1182	A	C8-N9-C4	6.44	108.38	105.80
36	5	2818	U	C5-C4-O4	-6.44	122.03	125.90
36	5	2953	U	C4-C5-C6	6.44	123.56	119.70
36	5	860	G	O5'-P-OP2	-6.44	99.90	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	931	C	C2-N3-C4	-6.44	116.68	119.90
36	5	2643	A	N1-C6-N6	6.44	122.46	118.60
36	1	1794	G	O5'-P-OP2	-6.44	99.91	105.70
36	1	2383	C	C5-C6-N1	-6.44	117.78	121.00
36	1	2850	G	N3-C4-N9	6.44	129.86	126.00
36	5	853	G	N1-C6-O6	6.44	123.76	119.90
36	5	2606	G	N9-C4-C5	6.44	107.97	105.40
36	5	1126	G	N9-C4-C5	6.43	107.97	105.40
36	1	1949	G	O5'-P-OP1	-6.43	99.91	105.70
36	1	2402	A	C8-N9-C4	-6.43	103.23	105.80
77	Q1	9	ARG	NE-CZ-NH1	6.43	123.52	120.30
36	1	635	G	C5-C6-O6	-6.43	124.74	128.60
36	1	918	C	N1-C2-O2	-6.43	115.04	118.90
36	1	1898	G	C5-C6-O6	-6.43	124.74	128.60
36	1	2968	G	C4-C5-N7	6.43	113.37	110.80
36	5	45	A	C5-C6-N1	6.43	120.92	117.70
36	5	434	U	O5'-P-OP1	6.43	118.42	110.70
47	M0	24	ARG	NE-CZ-NH1	6.43	123.51	120.30
36	5	2890	A	N1-C6-N6	6.43	122.46	118.60
36	1	664	U	C5-C6-N1	-6.42	119.49	122.70
52	m6	125	ARG	NE-CZ-NH1	-6.42	117.09	120.30
36	5	1902	G	N1-C6-O6	6.42	123.75	119.90
36	1	1124	U	C4-C5-C6	-6.42	115.85	119.70
36	1	1864	A	C8-N9-C4	6.42	108.37	105.80
36	1	3216	G	N1-C6-O6	-6.42	116.05	119.90
36	5	776	U	C2-N3-C4	-6.42	123.15	127.00
36	1	2144	A	C8-N9-C4	6.42	108.37	105.80
36	5	1313	G	N1-C6-O6	6.42	123.75	119.90
36	1	1140	G	N3-C2-N2	6.42	124.39	119.90
36	1	1316	C	C5-C4-N4	-6.41	115.71	120.20
36	1	1433	A	C2-N3-C4	6.41	113.81	110.60
36	1	2550	U	C5-C4-O4	6.41	129.75	125.90
36	1	2874	G	C5-C6-O6	6.41	132.45	128.60
36	1	2345	A	N1-C6-N6	6.41	122.44	118.60
36	1	934	G	C4-N9-C1'	6.41	134.83	126.50
36	1	2944	U	C5-C4-O4	-6.41	122.06	125.90
36	5	1434	G	O5'-P-OP2	-6.41	99.93	105.70
47	M0	167	LEU	CA-CB-CG	6.41	130.03	115.30
36	5	1612	A	O5'-P-OP1	-6.41	99.94	105.70
36	5	3080	G	C6-C5-N7	-6.41	126.56	130.40
36	1	931	C	N3-C4-C5	6.40	124.46	121.90
36	5	2700	G	C5-C6-O6	-6.40	124.76	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2358	A	C2-N3-C4	-6.40	107.40	110.60
36	1	3270	U	O5'-P-OP1	-6.40	99.94	105.70
36	5	56	G	C6-C5-N7	6.40	134.24	130.40
36	1	1141	C	C6-N1-C2	-6.39	117.74	120.30
1	6	1793	G	O5'-P-OP1	-6.39	99.94	105.70
37	7	80	G	N3-C4-C5	-6.39	125.40	128.60
38	8	84	C	C6-N1-C2	-6.39	117.74	120.30
1	2	110	U	N1-C2-O2	6.39	127.27	122.80
73	O7	65	ARG	NE-CZ-NH1	6.39	123.50	120.30
36	5	972	A	OP2-P-O3'	6.39	119.26	105.20
36	1	86	G	C5-C6-N1	6.39	114.69	111.50
36	1	2712	U	N3-C2-O2	-6.39	117.73	122.20
36	1	2958	A	C5-C6-N1	6.39	120.90	117.70
1	6	1000	C	C4-C5-C6	6.39	120.60	117.40
36	5	931	C	N3-C4-C5	6.39	124.46	121.90
36	5	2393	G	O5'-P-OP2	-6.39	99.95	105.70
1	6	767	U	N3-C2-O2	-6.39	117.73	122.20
1	6	1700	C	C6-N1-C1'	-6.39	113.13	120.80
36	5	519	A	N1-C6-N6	6.39	122.43	118.60
36	5	2334	U	N1-C2-N3	6.39	118.73	114.90
36	1	1419	A	O4'-C1'-N9	6.38	113.31	108.20
36	1	2298	U	C5-C4-O4	6.38	129.73	125.90
36	5	1051	U	N3-C4-C5	6.38	118.43	114.60
36	5	1909	A	C8-N9-C4	6.38	108.35	105.80
36	1	1429	G	C5-N7-C8	6.38	107.49	104.30
36	1	2979	U	C2-N3-C4	-6.38	123.17	127.00
36	5	671	U	N3-C2-O2	6.38	126.67	122.20
36	5	2187	G	N9-C4-C5	-6.38	102.85	105.40
38	4	40	A	N1-C6-N6	6.38	122.43	118.60
36	5	1403	C	C5-C6-N1	-6.38	117.81	121.00
36	5	63	A	N1-C6-N6	6.38	122.43	118.60
36	5	2639	G	C6-C5-N7	-6.38	126.58	130.40
36	1	1907	C	N3-C4-C5	-6.38	119.35	121.90
36	1	2154	U	C5-C4-O4	-6.37	122.08	125.90
36	1	800	G	C5-C6-N1	-6.37	108.31	111.50
36	1	1144	U	C5-C6-N1	-6.37	119.51	122.70
36	1	1556	C	N1-C2-O2	6.37	122.72	118.90
36	5	3308	C	C4-C5-C6	6.37	120.58	117.40
1	2	1495	C	O5'-P-OP1	-6.37	99.97	105.70
36	1	1122	U	N3-C4-C5	6.37	118.42	114.60
36	1	2983	C	C5-C6-N1	-6.37	117.81	121.00
36	5	1879	A	C5-N7-C8	-6.37	100.72	103.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1923	C	C6-N1-C2	6.37	122.85	120.30
36	1	2356	A	C5-C6-N6	-6.37	118.61	123.70
36	1	2943	G	N3-C2-N2	6.37	124.36	119.90
36	5	931	C	C5-C6-N1	-6.37	117.82	121.00
36	5	1380	G	O5'-P-OP2	-6.37	99.97	105.70
36	5	1124	U	C4-C5-C6	-6.37	115.88	119.70
1	2	1773	C	C6-N1-C2	-6.36	117.75	120.30
36	5	3154	C	N3-C2-O2	-6.36	117.45	121.90
36	1	1907	C	C6-N1-C2	-6.36	117.75	120.30
1	2	1568	C	P-O3'-C3'	6.36	127.33	119.70
36	1	1475	A	C8-N9-C4	6.36	108.34	105.80
36	1	2250	G	O5'-P-OP1	-6.36	99.97	105.70
36	5	3260	G	C4-C5-N7	-6.36	108.26	110.80
36	1	2244	A	C8-N9-C4	6.36	108.34	105.80
36	1	2977	G	N7-C8-N9	-6.36	109.92	113.10
1	2	1761	U	C5-C4-O4	6.36	129.71	125.90
36	5	1838	G	N3-C2-N2	-6.36	115.45	119.90
36	1	1122	U	N3-C4-O4	-6.35	114.95	119.40
36	1	62	A	C2-N3-C4	6.35	113.78	110.60
37	3	103	A	C5-C6-N6	-6.35	118.62	123.70
36	5	2849	C	N1-C2-O2	-6.35	115.09	118.90
36	1	2302	G	N1-C6-O6	-6.35	116.09	119.90
36	1	2927	C	OP2-P-O3'	6.35	119.17	105.20
37	7	100	C	C6-N1-C2	6.35	122.84	120.30
36	1	1094	U	C5-C6-N1	6.35	125.87	122.70
1	6	362	G	C4-N9-C1'	6.35	134.75	126.50
36	5	1402	C	C2-N3-C4	-6.35	116.73	119.90
36	1	1427	U	N3-C2-O2	-6.34	117.76	122.20
1	6	416	A	N1-C6-N6	6.34	122.41	118.60
36	5	1119	C	OP2-P-O3'	6.34	119.16	105.20
36	1	91	G	N1-C6-O6	6.34	123.70	119.90
36	1	1147	G	C4-C5-N7	-6.34	108.26	110.80
36	1	2417	U	N1-C2-O2	-6.34	118.36	122.80
36	1	3362	A	C4-C5-N7	6.34	113.87	110.70
36	5	2383	C	C4-C5-C6	6.34	120.57	117.40
1	2	1096	C	C2-N1-C1'	6.34	125.77	118.80
36	1	895	A	N7-C8-N9	6.34	116.97	113.80
36	1	2893	C	N3-C4-C5	6.34	124.44	121.90
1	6	542	A	P-O3'-C3'	6.34	127.31	119.70
1	6	352	A	N7-C8-N9	-6.34	110.63	113.80
36	1	1142	G	N3-C4-N9	6.33	129.80	126.00
38	4	125	U	C2-N1-C1'	6.33	125.30	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	24	G	C5-C6-O6	-6.33	124.80	128.60
36	1	821	U	N3-C2-O2	-6.33	117.77	122.20
36	1	2967	A	C8-N9-C4	6.33	108.33	105.80
35	sM	167	PRO	N-CA-CB	6.33	110.89	103.30
36	5	585	A	O5'-P-OP2	-6.33	100.00	105.70
36	5	622	A	C5-C6-N6	-6.33	118.64	123.70
1	2	1200	G	N1-C6-O6	6.33	123.70	119.90
36	1	2363	A	C5-C6-N6	6.33	128.76	123.70
36	5	3200	G	C5-C6-O6	-6.33	124.80	128.60
1	2	590	C	C6-N1-C2	-6.32	117.77	120.30
36	1	92	G	N9-C4-C5	-6.32	102.87	105.40
36	1	423	A	C8-N9-C4	-6.32	103.27	105.80
36	5	2873	U	C2-N3-C4	-6.32	123.21	127.00
36	5	3101	G	N1-C2-N2	-6.32	110.51	116.20
36	1	121	A	C8-N9-C4	6.32	108.33	105.80
36	1	2304	C	N3-C2-O2	-6.32	117.48	121.90
36	5	3092	C	N3-C4-C5	6.32	124.43	121.90
36	1	295	A	O5'-P-OP1	-6.32	100.02	105.70
36	1	1429	G	N3-C2-N2	6.32	124.32	119.90
36	5	1882	G	O5'-P-OP1	-6.32	100.02	105.70
36	5	2758	A	C2-N3-C4	6.32	113.76	110.60
1	2	554	C	N1-C2-O2	6.31	122.69	118.90
36	1	1429	G	C2-N3-C4	6.31	115.06	111.90
36	5	706	A	O5'-P-OP1	-6.31	100.02	105.70
36	5	1160	C	C6-N1-C1'	6.31	128.38	120.80
36	1	2359	C	N3-C2-O2	6.31	126.32	121.90
36	5	1200	A	C4-C5-C6	6.31	120.16	117.00
36	5	3026	G	N1-C6-O6	6.31	123.69	119.90
36	5	1489	A	N1-C6-N6	6.31	122.39	118.60
36	1	1331	U	O4'-C1'-N1	-6.31	103.15	108.20
36	5	2971	A	N9-C4-C5	-6.31	103.28	105.80
36	5	838	G	N1-C6-O6	-6.31	116.12	119.90
36	5	934	G	N3-C4-N9	6.31	129.78	126.00
36	5	435	C	O5'-P-OP1	6.31	118.27	110.70
36	5	2815	G	C5-N7-C8	6.31	107.45	104.30
36	1	81	C	N3-C4-C5	6.30	124.42	121.90
36	1	1154	A	C4-C5-C6	6.30	120.15	117.00
36	1	2846	U	N1-C2-N3	6.30	118.68	114.90
36	5	2889	C	N3-C2-O2	-6.30	117.49	121.90
36	1	1905	G	C2-N3-C4	6.30	115.05	111.90
36	5	424	G	C5-C6-N1	6.30	114.65	111.50
36	5	706	A	C8-N9-C4	6.30	108.32	105.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	507	U	N3-C2-O2	-6.30	117.79	122.20
36	1	2285	C	C5-C4-N4	-6.30	115.79	120.20
37	3	98	C	N3-C4-C5	-6.30	119.38	121.90
36	5	982	C	OP2-P-O3'	6.30	119.05	105.20
36	1	1520	G	C2-N3-C4	6.29	115.05	111.90
36	1	2679	A	O4'-C1'-N9	6.29	113.23	108.20
36	5	1331	U	C5-C4-O4	-6.29	122.12	125.90
37	7	37	G	N9-C4-C5	-6.29	102.88	105.40
36	5	810	A	O5'-P-OP1	-6.29	100.04	105.70
36	5	3115	C	N1-C2-O2	-6.29	115.12	118.90
36	1	941	G	N3-C4-C5	-6.29	125.45	128.60
36	5	2775	U	C5-C6-N1	-6.29	119.56	122.70
36	5	2954	U	N1-C2-O2	6.29	127.20	122.80
1	2	1202	A	C8-N9-C4	-6.29	103.28	105.80
36	1	517	G	N3-C4-C5	-6.29	125.45	128.60
36	1	2292	U	C2-N3-C4	-6.29	123.23	127.00
36	5	2948	C	OP1-P-OP2	-6.29	110.17	119.60
36	5	2412	G	N3-C4-N9	6.29	129.77	126.00
36	1	365	A	C5-C6-N6	-6.29	118.67	123.70
36	5	1440	G	N9-C4-C5	6.29	107.92	105.40
36	5	3103	A	C6-N1-C2	-6.29	114.83	118.60
36	1	661	G	C4-N9-C1'	6.28	134.67	126.50
36	1	1741	A	N1-C6-N6	6.28	122.37	118.60
36	5	840	C	N1-C2-N3	6.28	123.60	119.20
36	1	91	G	N3-C4-C5	6.28	131.74	128.60
36	1	609	G	O5'-P-OP2	-6.28	100.05	105.70
36	1	92	G	C8-N9-C4	6.28	108.91	106.40
1	6	421	A	C8-N9-C4	6.28	108.31	105.80
36	5	2645	G	N1-C6-O6	-6.28	116.13	119.90
9	S7	118	LEU	CA-CB-CG	6.28	129.74	115.30
36	5	1725	C	O4'-C1'-N1	6.28	113.22	108.20
36	1	350	C	N1-C2-O2	6.28	122.67	118.90
36	1	934	G	C8-N9-C1'	-6.28	118.84	127.00
52	M6	78	ARG	NE-CZ-NH2	-6.28	117.16	120.30
1	2	1432	U	C5-C6-N1	-6.28	119.56	122.70
36	1	2278	C	C5-C6-N1	6.28	124.14	121.00
38	4	48	A	C8-N9-C4	-6.28	103.29	105.80
36	5	2110	G	C4-C5-N7	6.28	113.31	110.80
36	5	2320	A	C2-N3-C4	-6.28	107.46	110.60
36	5	2954	U	C2-N1-C1'	6.27	125.23	117.70
36	1	1510	G	N3-C4-N9	6.27	129.76	126.00
36	1	2349	U	O5'-P-OP2	-6.27	100.06	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2760	C	N1-C2-O2	-6.27	115.14	118.90
36	5	881	C	C5-C6-N1	6.27	124.14	121.00
36	1	655	C	N1-C2-N3	6.27	123.59	119.20
36	1	52	A	O5'-P-OP2	-6.27	100.06	105.70
37	3	93	C	N3-C4-C5	6.27	124.41	121.90
1	6	1340	U	N3-C2-O2	-6.27	117.81	122.20
36	5	3187	A	N1-C6-N6	-6.27	114.84	118.60
36	5	3214	U	N3-C4-O4	-6.27	115.01	119.40
37	7	15	C	N3-C4-C5	6.26	124.41	121.90
36	5	881	C	C2-N3-C4	6.26	123.03	119.90
36	1	416	A	OP2-P-O3'	6.26	118.96	105.20
36	5	2623	G	N9-C4-C5	-6.25	102.90	105.40
36	5	3060	C	N3-C4-N4	6.25	122.38	118.00
36	5	3244	A	O5'-P-OP1	-6.25	100.07	105.70
1	2	992	A	C2-N3-C4	-6.25	107.47	110.60
36	5	2931	C	N3-C4-N4	6.25	122.38	118.00
36	5	3308	C	C2-N3-C4	-6.25	116.77	119.90
1	6	858	G	C4-N9-C1'	6.25	134.63	126.50
56	n0	40	ARG	NE-CZ-NH1	6.25	123.42	120.30
36	5	2113	A	C5-C6-N1	6.25	120.82	117.70
36	5	2157	G	O5'-P-OP1	-6.25	100.08	105.70
1	2	1748	G	N3-C4-N9	-6.25	122.25	126.00
36	1	3216	G	N9-C4-C5	6.25	107.90	105.40
44	L7	215	GLY	N-CA-C	-6.25	97.49	113.10
36	5	680	G	O5'-P-OP2	-6.25	100.08	105.70
36	1	2726	C	N1-C2-N3	6.24	123.57	119.20
36	5	3176	G	N3-C2-N2	-6.24	115.53	119.90
1	6	1640	C	C5-C4-N4	-6.24	115.83	120.20
36	5	200	C	C5-C6-N1	6.24	124.12	121.00
36	5	984	G	N1-C2-N2	-6.24	110.58	116.20
36	5	2865	U	C4-C5-C6	-6.24	115.96	119.70
36	5	2988	C	N3-C2-O2	-6.24	117.53	121.90
36	5	928	C	O5'-P-OP2	-6.24	100.09	105.70
36	5	2115	G	C5-C6-O6	-6.24	124.86	128.60
36	1	89	A	N3-C4-C5	-6.24	122.44	126.80
36	1	282	G	P-O3'-C3'	6.24	127.18	119.70
1	6	1779	U	N3-C2-O2	-6.23	117.84	122.20
36	1	668	G	N1-C6-O6	-6.23	116.16	119.90
36	1	232	G	N3-C4-C5	-6.23	125.48	128.60
36	1	2150	G	C5-C6-N1	-6.23	108.39	111.50
36	1	2968	G	C6-C5-N7	-6.23	126.66	130.40
36	5	1440	G	C4-C5-N7	-6.23	108.31	110.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2688	U	N1-C2-N3	-6.23	111.16	114.90
1	2	345	U	N1-C2-N3	6.23	118.64	114.90
36	1	2413	A	C8-N9-C4	6.22	108.29	105.80
36	5	1473	G	C8-N9-C4	6.22	108.89	106.40
37	7	1	G	C6-C5-N7	-6.22	126.67	130.40
36	1	405	U	C6-N1-C2	6.22	124.73	121.00
36	1	510	G	C5-C6-O6	-6.22	124.87	128.60
37	7	34	C	O5'-P-OP1	-6.22	100.10	105.70
38	4	97	A	C8-N9-C4	-6.22	103.31	105.80
36	5	2531	C	C2-N1-C1'	6.22	125.64	118.80
1	6	151	G	N3-C2-N2	-6.22	115.55	119.90
36	5	1425	U	C5-C4-O4	6.22	129.63	125.90
36	5	3142	A	O5'-P-OP1	-6.22	100.11	105.70
36	5	2945	G	C5-C6-O6	-6.21	124.87	128.60
1	6	542	A	N1-C6-N6	6.21	122.33	118.60
1	6	1747	G	O5'-P-OP2	-6.21	100.11	105.70
36	5	2966	G	C5-C6-O6	-6.21	124.87	128.60
1	2	159	U	N3-C2-O2	6.21	126.55	122.20
1	2	1615	C	C6-N1-C2	-6.21	117.81	120.30
36	1	2901	G	N1-C6-O6	6.21	123.63	119.90
36	5	1148	G	C8-N9-C4	6.21	108.89	106.40
36	1	1175	C	C2-N3-C4	-6.21	116.80	119.90
36	5	2861	U	O5'-P-OP2	6.21	118.15	110.70
36	1	3362	A	C4-N9-C1'	6.21	137.48	126.30
1	6	426	G	N3-C4-C5	-6.21	125.50	128.60
36	5	1434	G	C5-C6-N1	6.21	114.61	111.50
1	6	1614	A	C4-C5-N7	6.21	113.80	110.70
36	5	3154	C	C5-C6-N1	6.21	124.10	121.00
36	1	2679	A	C2-N3-C4	-6.21	107.50	110.60
36	1	428	A	N1-C6-N6	-6.20	114.88	118.60
36	1	721	G	N1-C6-O6	6.20	123.62	119.90
36	1	1338	C	N3-C4-C5	-6.20	119.42	121.90
36	5	374	A	P-O3'-C3'	6.20	127.14	119.70
36	5	834	U	N3-C4-C5	6.20	118.32	114.60
1	2	694	U	C2-N1-C1'	6.20	125.14	117.70
36	1	2640	A	C5-C6-N1	6.20	120.80	117.70
36	5	652	G	C4-C5-C6	6.20	122.52	118.80
36	5	2919	A	N1-C6-N6	-6.20	114.88	118.60
36	5	2350	C	OP1-P-OP2	-6.19	110.31	119.60
36	5	2941	A	O5'-P-OP2	-6.19	100.12	105.70
36	1	640	U	C2-N3-C4	-6.19	123.29	127.00
36	5	2831	G	N3-C4-C5	-6.19	125.50	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2891	U	N3-C4-O4	-6.19	115.07	119.40
38	8	21	C	N3-C4-C5	-6.19	119.42	121.90
36	5	102	C	N3-C4-N4	6.19	122.33	118.00
36	5	2904	U	C5-C6-N1	-6.19	119.61	122.70
36	5	3040	A	C8-N9-C4	6.19	108.28	105.80
1	6	1009	U	C5-C6-N1	-6.19	119.61	122.70
36	5	3308	C	N1-C2-N3	6.19	123.53	119.20
1	6	1000	C	C2-N3-C4	-6.18	116.81	119.90
36	5	2914	G	C8-N9-C1'	-6.18	118.96	127.00
36	1	521	A	C5-C6-N6	-6.18	118.75	123.70
36	5	1438	U	C6-N1-C2	-6.18	117.29	121.00
36	5	2278	C	N1-C2-O2	6.18	122.61	118.90
36	5	928	C	N3-C2-O2	-6.18	117.57	121.90
36	5	2296	A	N7-C8-N9	6.18	116.89	113.80
1	6	1697	G	N3-C4-C5	-6.18	125.51	128.60
36	5	1314	C	N3-C4-C5	6.18	124.37	121.90
1	2	1331	A	N1-C6-N6	-6.18	114.89	118.60
36	1	636	C	N3-C2-O2	-6.18	117.58	121.90
36	5	2637	A	N1-C6-N6	6.18	122.31	118.60
36	1	300	G	O5'-P-OP1	-6.18	100.14	105.70
1	6	558	U	C2-N1-C1'	6.18	125.11	117.70
36	5	617	G	N9-C4-C5	-6.18	102.93	105.40
36	5	2717	U	N1-C2-N3	6.17	118.60	114.90
36	1	2860	U	C5-C6-N1	6.17	125.79	122.70
36	1	1604	G	C8-N9-C1'	-6.17	118.98	127.00
36	1	1837	U	N3-C2-O2	6.17	126.52	122.20
1	6	116	U	C6-N1-C2	-6.17	117.30	121.00
36	5	630	A	C2-N3-C4	-6.17	107.52	110.60
36	5	1628	C	C6-N1-C2	-6.17	117.83	120.30
36	5	2970	C	C6-N1-C2	6.17	122.77	120.30
36	1	2572	C	N3-C2-O2	-6.17	117.58	121.90
36	1	2957	G	C4-C5-N7	-6.17	108.33	110.80
1	6	114	C	N3-C2-O2	-6.17	117.58	121.90
36	5	2162	U	O5'-P-OP2	-6.17	100.15	105.70
36	1	2352	A	O5'-P-OP2	-6.17	100.15	105.70
36	1	2554	A	P-O3'-C3'	6.17	127.10	119.70
36	5	1205	A	O5'-P-OP2	-6.17	100.15	105.70
36	5	2134	G	C5-C6-O6	6.17	132.30	128.60
36	5	2337	C	C5-C4-N4	-6.17	115.88	120.20
36	1	2281	A	C2-N3-C4	-6.17	107.52	110.60
1	6	371	G	C4-C5-N7	6.17	113.27	110.80
36	1	2356	A	N1-C6-N6	6.16	122.30	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	767	U	C5-C4-O4	6.16	129.60	125.90
1	2	16	G	N3-C4-N9	6.16	129.70	126.00
1	2	1426	C	C4-C5-C6	-6.16	114.32	117.40
36	1	1308	A	O5'-P-OP1	6.16	118.09	110.70
36	5	2377	G	C5-N7-C8	6.16	107.38	104.30
36	5	2896	A	N1-C6-N6	-6.16	114.90	118.60
36	1	421	G	C5-C6-N1	6.16	114.58	111.50
36	1	1114	U	N3-C4-C5	6.16	118.30	114.60
36	1	2150	G	N9-C4-C5	6.16	107.86	105.40
36	5	1495	U	O4'-C1'-N1	6.16	113.13	108.20
36	5	3245	A	C4-C5-C6	6.16	120.08	117.00
36	1	1556	C	C6-N1-C1'	-6.16	113.41	120.80
36	1	3302	U	C6-N1-C2	6.16	124.69	121.00
38	4	94	C	N3-C4-C5	6.16	124.36	121.90
37	7	100	C	C5-C6-N1	-6.16	117.92	121.00
36	1	776	U	C5-C6-N1	-6.16	119.62	122.70
36	1	1377	G	N1-C6-O6	-6.16	116.21	119.90
36	5	1780	G	N1-C6-O6	-6.16	116.21	119.90
36	1	2409	G	N1-C2-N2	-6.15	110.66	116.20
1	6	421	A	N9-C4-C5	-6.15	103.34	105.80
36	5	2816	G	O4'-C1'-N9	6.15	113.12	108.20
36	1	2816	G	O4'-C1'-N9	6.15	113.12	108.20
1	6	426	G	C4-N9-C1'	6.15	134.50	126.50
36	5	1662	G	C5-C6-N1	-6.15	108.42	111.50
36	5	3195	U	OP1-P-O3'	6.15	118.73	105.20
38	8	16	G	O5'-P-OP2	-6.15	100.17	105.70
63	N7	135	ARG	NE-CZ-NH2	6.15	123.37	120.30
36	5	78	U	O5'-P-OP1	-6.15	100.17	105.70
36	5	1010	G	O5'-P-OP2	-6.15	100.17	105.70
36	5	2419	A	C8-N9-C4	-6.15	103.34	105.80
36	5	283	G	C4-C5-N7	6.15	113.26	110.80
1	2	942	G	C8-N9-C4	-6.14	103.94	106.40
36	5	665	A	N1-C6-N6	6.14	122.29	118.60
36	5	2285	C	C6-N1-C2	-6.14	117.84	120.30
38	8	8	C	O5'-P-OP2	-6.14	100.17	105.70
36	1	2192	C	O5'-P-OP2	-6.14	100.17	105.70
1	6	1568	C	C2-N1-C1'	6.14	125.56	118.80
36	5	1444	G	C5-C6-O6	-6.14	124.92	128.60
1	2	75	U	C2-N1-C1'	6.14	125.07	117.70
36	5	43	A	O5'-P-OP1	-6.14	100.17	105.70
36	5	1104	G	C6-C5-N7	-6.14	126.72	130.40
1	6	1111	G	C6-C5-N7	-6.14	126.72	130.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2403	G	O5'-P-OP1	6.14	118.06	110.70
1	6	1614	A	C5-N7-C8	-6.14	100.83	103.90
1	2	1241	G	O4'-C1'-N9	6.14	113.11	108.20
36	1	2424	A	N1-C6-N6	6.14	122.28	118.60
36	5	436	A	N7-C8-N9	6.14	116.87	113.80
1	6	1600	A	C5-N7-C8	-6.13	100.83	103.90
36	5	880	G	C8-N9-C1'	6.13	134.98	127.00
37	7	30	G	N3-C4-C5	-6.13	125.53	128.60
36	1	640	U	N3-C4-O4	6.13	123.69	119.40
36	1	2606	G	N3-C4-N9	6.13	129.68	126.00
36	1	3218	A	C8-N9-C4	-6.13	103.35	105.80
36	5	383	G	C8-N9-C4	6.13	108.85	106.40
36	5	1879	A	N7-C8-N9	6.13	116.87	113.80
36	5	41	G	N1-C6-O6	6.13	123.58	119.90
1	2	1258	U	N3-C2-O2	-6.13	117.91	122.20
36	1	968	G	N3-C4-C5	-6.13	125.54	128.60
36	1	1510	G	C6-C5-N7	-6.13	126.72	130.40
36	1	2727	A	C2-N3-C4	6.13	113.66	110.60
36	5	1440	G	C5-C6-O6	6.13	132.28	128.60
36	5	2310	U	N1-C2-O2	6.13	127.09	122.80
36	1	1362	G	C8-N9-C4	6.13	108.85	106.40
36	5	2858	U	C2-N1-C1'	6.13	125.05	117.70
36	1	1846	C	O5'-P-OP1	-6.12	100.19	105.70
38	4	61	A	C5-C6-N6	-6.12	118.80	123.70
36	5	3195	U	P-O3'-C3'	6.12	127.05	119.70
37	7	1	G	C4-N9-C1'	6.12	134.46	126.50
1	2	158	U	P-O3'-C3'	6.12	127.05	119.70
36	5	1184	A	N1-C6-N6	-6.12	114.93	118.60
36	5	2678	A	N9-C4-C5	6.12	108.25	105.80
36	1	922	U	C4-C5-C6	-6.12	116.03	119.70
36	1	1832	C	C5-C6-N1	-6.12	117.94	121.00
1	6	543	C	N3-C2-O2	-6.12	117.62	121.90
11	s9	3	ARG	NE-CZ-NH2	6.12	123.36	120.30
36	5	2402	A	N1-C6-N6	-6.12	114.93	118.60
36	5	2550	U	C5-C4-O4	6.12	129.57	125.90
36	5	3020	U	N3-C4-O4	6.12	123.68	119.40
36	1	60	A	N9-C4-C5	-6.12	103.35	105.80
1	6	1644	C	O5'-P-OP2	-6.12	100.20	105.70
36	5	329	U	C6-N1-C2	6.12	124.67	121.00
36	5	1132	C	O5'-P-OP1	-6.12	100.20	105.70
36	5	2639	G	C5-C6-O6	-6.12	124.93	128.60
36	5	2908	G	N9-C4-C5	6.12	107.85	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	821	U	C5-C4-O4	6.11	129.57	125.90
36	1	1307	G	OP1-P-O3'	6.11	118.65	105.20
36	1	2834	G	C4-C5-N7	6.11	113.25	110.80
36	1	3209	A	C5-C6-N1	-6.11	114.64	117.70
36	1	3368	U	N1-C2-O2	-6.11	118.52	122.80
36	1	3380	U	O5'-P-OP2	-6.11	100.20	105.70
36	5	1403	C	N3-C4-C5	6.11	124.34	121.90
36	1	351	A	OP1-P-OP2	6.11	128.77	119.60
36	1	1297	C	O5'-P-OP1	-6.11	100.20	105.70
1	2	448	C	C6-N1-C2	-6.11	117.86	120.30
36	1	25	U	N1-C2-N3	6.11	118.57	114.90
1	6	65	A	N1-C6-N6	6.11	122.27	118.60
36	5	3368	U	C5-C6-N1	-6.11	119.64	122.70
36	1	349	A	OP2-P-O3'	6.11	118.64	105.20
36	1	1138	U	C2-N3-C4	-6.11	123.33	127.00
36	1	1154	A	N3-C4-C5	-6.11	122.53	126.80
36	5	639	G	O5'-P-OP1	6.11	118.03	110.70
36	5	644	G	N3-C4-C5	-6.11	125.55	128.60
36	5	2204	C	N3-C4-N4	-6.11	113.72	118.00
36	5	3153	U	N1-C2-O2	6.11	127.08	122.80
36	5	1507	G	O5'-P-OP1	-6.11	100.21	105.70
1	2	577	G	C5-N7-C8	-6.10	101.25	104.30
1	2	647	G	N3-C4-N9	-6.10	122.34	126.00
36	1	776	U	C5-C4-O4	6.10	129.56	125.90
36	5	584	G	C4-C5-N7	-6.10	108.36	110.80
36	5	2634	U	C5-C4-O4	-6.10	122.24	125.90
36	5	2368	A	N1-C6-N6	-6.10	114.94	118.60
38	8	111	A	C5-N7-C8	-6.10	100.85	103.90
36	1	3178	A	N1-C6-N6	6.10	122.26	118.60
37	7	35	C	C5-C6-N1	-6.10	117.95	121.00
36	5	359	U	OP1-P-OP2	-6.10	110.46	119.60
36	1	345	G	O5'-P-OP2	-6.09	100.22	105.70
36	1	2169	G	C5-C6-O6	6.09	132.26	128.60
36	5	800	G	N9-C4-C5	-6.09	102.96	105.40
36	5	1409	G	OP2-P-O3'	6.09	118.61	105.20
36	5	2211	U	N1-C2-N3	6.09	118.56	114.90
36	5	2249	G	N3-C4-C5	-6.09	125.55	128.60
36	1	1133	A	C5-C6-N6	-6.09	118.83	123.70
37	7	77	G	O5'-P-OP2	-6.09	100.22	105.70
36	1	659	G	N3-C4-N9	6.09	129.66	126.00
36	1	1340	G	N3-C2-N2	6.09	124.16	119.90
36	5	3306	U	C5-C4-O4	-6.09	122.25	125.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2293	C	N3-C4-N4	6.09	122.26	118.00
36	1	2893	C	C2-N3-C4	-6.09	116.86	119.90
38	4	20	U	C2-N3-C4	-6.09	123.35	127.00
36	5	999	G	N1-C6-O6	-6.09	116.25	119.90
36	1	2176	U	C5-C4-O4	6.09	129.55	125.90
36	1	2836	C	N3-C4-N4	-6.09	113.74	118.00
1	6	1514	U	C5-C4-O4	6.09	129.55	125.90
1	2	192	U	N1-C2-O2	6.08	127.06	122.80
36	5	612	U	O5'-P-OP1	-6.08	100.22	105.70
36	5	2943	G	C6-C5-N7	-6.08	126.75	130.40
36	5	1365	G	N1-C6-O6	6.08	123.55	119.90
36	5	2947	G	N9-C4-C5	-6.08	102.97	105.40
36	5	2980	U	C6-N1-C2	-6.08	117.35	121.00
36	1	1305	U	N1-C2-O2	6.08	127.06	122.80
36	1	2692	A	N1-C6-N6	6.08	122.25	118.60
36	5	2524	A	N9-C1'-C2'	6.08	121.91	114.00
36	5	3093	C	C6-N1-C2	6.08	122.73	120.30
1	2	1273	G	C2-N3-C4	6.08	114.94	111.90
36	1	1902	G	N9-C4-C5	-6.08	102.97	105.40
36	1	2812	C	C6-N1-C2	6.08	122.73	120.30
36	5	751	A	O5'-P-OP2	-6.08	100.23	105.70
36	1	586	C	C6-N1-C2	6.08	122.73	120.30
36	1	1419	A	O5'-P-OP2	-6.08	100.23	105.70
1	6	647	G	N3-C4-N9	-6.08	122.35	126.00
36	5	946	U	O5'-P-OP2	-6.08	100.23	105.70
36	5	3150	A	N1-C6-N6	6.08	122.25	118.60
1	6	194	U	N3-C2-O2	-6.08	117.95	122.20
36	1	2915	U	C5-C4-O4	-6.08	122.25	125.90
1	6	1663	G	O5'-P-OP2	-6.08	100.23	105.70
1	2	75	U	N3-C2-O2	-6.07	117.95	122.20
36	1	721	G	C4-C5-N7	6.07	113.23	110.80
36	1	2366	C	C5-C6-N1	6.07	124.04	121.00
36	1	2836	C	N1-C2-N3	6.07	123.45	119.20
36	5	419	G	N3-C4-N9	6.07	129.64	126.00
38	8	7	U	O5'-P-OP2	-6.07	100.23	105.70
36	1	803	C	C5-C6-N1	-6.07	117.96	121.00
36	5	2334	U	C2-N3-C4	-6.07	123.36	127.00
36	1	92	G	O5'-P-OP1	-6.07	100.24	105.70
36	1	907	G	N3-C2-N2	6.07	124.15	119.90
36	1	1307	G	C6-C5-N7	6.07	134.04	130.40
1	6	639	U	C2-N1-C1'	6.07	124.98	117.70
36	1	2314	U	N1-C2-N3	-6.07	111.26	114.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2514	U	O5'-P-OP1	-6.07	100.24	105.70
36	5	3101	G	C5-C6-O6	6.07	132.24	128.60
1	2	944	A	C8-N9-C4	6.07	108.23	105.80
36	5	2155	G	C8-N9-C4	6.07	108.83	106.40
36	5	1901	A	O5'-P-OP2	-6.06	100.24	105.70
36	1	37	U	C4-C5-C6	6.06	123.34	119.70
36	1	1484	U	OP2-P-O3'	6.06	118.54	105.20
1	6	418	G	C4-C5-N7	6.06	113.22	110.80
36	5	189	G	C5-C6-O6	6.06	132.24	128.60
36	5	941	G	N1-C6-O6	-6.06	116.26	119.90
1	6	1653	C	C6-N1-C2	-6.06	117.88	120.30
12	c0	83	PRO	N-CA-CB	6.06	110.57	103.30
1	2	580	A	C8-N9-C4	-6.06	103.38	105.80
36	1	2937	G	N7-C8-N9	-6.05	110.07	113.10
37	7	84	A	C4-C5-C6	6.05	120.03	117.00
36	5	1607	U	O5'-P-OP1	-6.05	100.25	105.70
36	1	1307	G	N9-C4-C5	6.05	107.82	105.40
36	5	2700	G	C4-C5-N7	6.05	113.22	110.80
1	2	1051	G	P-O3'-C3'	6.05	126.96	119.70
1	2	1200	G	N3-C2-N2	-6.05	115.67	119.90
36	5	641	C	C2-N1-C1'	-6.05	112.15	118.80
36	5	907	G	O5'-P-OP1	-6.05	100.26	105.70
36	5	1413	G	N1-C6-O6	-6.05	116.27	119.90
36	5	2618	G	N1-C2-N2	-6.05	110.75	116.20
72	O6	76	ARG	NE-CZ-NH1	-6.05	117.28	120.30
36	1	2756	C	C6-N1-C2	-6.05	117.88	120.30
36	1	939	U	O5'-P-OP2	-6.04	100.26	105.70
70	O4	51	LEU	CA-CB-CG	6.04	129.20	115.30
36	1	590	G	C4-C5-N7	6.04	113.22	110.80
36	1	1130	A	C8-N9-C4	-6.04	103.38	105.80
38	4	125	U	N1-C2-O2	6.04	127.03	122.80
36	5	2345	A	C5-C6-N6	-6.04	118.87	123.70
36	1	2731	U	C5-C6-N1	6.04	125.72	122.70
36	5	2296	A	C5-C6-N1	6.04	120.72	117.70
1	2	1486	G	C5-N7-C8	-6.04	101.28	104.30
36	1	658	G	C8-N9-C4	6.04	108.81	106.40
36	1	999	G	C4-C5-N7	6.04	113.22	110.80
1	6	352	A	N1-C6-N6	-6.04	114.98	118.60
36	5	2794	G	N3-C4-N9	6.04	129.62	126.00
36	5	799	G	C6-N1-C2	-6.04	121.48	125.10
36	5	1170	A	N9-C4-C5	-6.04	103.39	105.80
36	1	651	G	C4-N9-C1'	6.03	134.34	126.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3277	U	N3-C2-O2	-6.03	117.98	122.20
1	6	1340	U	N1-C2-O2	6.03	127.02	122.80
36	1	959	C	C6-N1-C2	6.03	122.71	120.30
36	5	1434	G	C2-N3-C4	6.03	114.92	111.90
36	5	1925	U	C5-C4-O4	-6.03	122.28	125.90
36	1	2823	G	OP1-P-O3'	6.03	118.46	105.20
36	5	612	U	O5'-P-OP2	6.03	117.93	110.70
36	5	878	G	C8-N9-C4	-6.03	103.99	106.40
36	1	1489	A	C5-C6-N6	-6.03	118.88	123.70
36	5	909	G	C5-N7-C8	6.03	107.31	104.30
36	1	3318	G	C8-N9-C1'	-6.03	119.17	127.00
1	6	362	G	C8-N9-C1'	-6.02	119.17	127.00
1	2	1749	A	N1-C6-N6	6.02	122.21	118.60
36	1	1002	A	C8-N9-C4	6.02	108.21	105.80
36	5	890	C	O5'-P-OP1	6.02	117.93	110.70
41	L4	138	ARG	NE-CZ-NH2	-6.02	117.29	120.30
38	4	38	U	N3-C2-O2	-6.02	117.99	122.20
36	5	1375	G	C8-N9-C4	-6.02	103.99	106.40
36	1	338	A	OP2-P-O3'	6.02	118.44	105.20
36	5	984	G	N3-C4-N9	6.02	129.61	126.00
36	1	645	A	N1-C2-N3	6.02	132.31	129.30
1	6	362	G	N3-C4-N9	6.02	129.61	126.00
12	c0	97	PRO	N-CA-CB	6.02	110.52	103.30
36	5	792	G	O5'-P-OP1	-6.02	100.28	105.70
36	5	2943	G	O5'-P-OP2	-6.02	100.29	105.70
36	1	344	A	N1-C2-N3	-6.01	126.29	129.30
36	1	435	C	C6-N1-C2	6.01	122.71	120.30
36	5	3054	U	N3-C4-O4	6.01	123.61	119.40
1	2	610	G	N1-C6-O6	6.01	123.51	119.90
36	1	282	G	C2'-C3'-O3'	6.01	123.32	113.70
36	5	2622	C	C6-N1-C2	-6.01	117.89	120.30
36	1	1145	G	C5-C6-O6	-6.01	124.99	128.60
36	5	413	U	N3-C4-O4	6.01	123.61	119.40
59	n3	5	GLY	N-CA-C	-6.01	98.07	113.10
36	1	32	U	N1-C2-O2	-6.01	118.59	122.80
36	1	407	A	C4-C5-N7	6.01	113.70	110.70
36	1	997	A	C4-C5-C6	6.01	120.00	117.00
36	1	1115	G	N7-C8-N9	6.01	116.11	113.10
36	1	1334	U	N3-C4-C5	-6.01	111.00	114.60
36	1	1429	G	N7-C8-N9	-6.01	110.10	113.10
36	5	2112	U	O5'-P-OP1	-6.01	100.29	105.70
36	5	2973	G	N7-C8-N9	6.01	116.11	113.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	811	U	C5-C6-N1	-6.01	119.70	122.70
36	5	1112	A	C2-N3-C4	6.01	113.60	110.60
36	1	345	G	N3-C4-C5	-6.01	125.60	128.60
1	6	425	A	N1-C6-N6	-6.01	115.00	118.60
36	1	1269	U	C2-N1-C1'	6.00	124.91	117.70
36	5	2834	G	O5'-P-OP2	-6.00	100.30	105.70
36	5	2293	C	N3-C4-C5	6.00	124.30	121.90
37	7	90	U	N3-C4-O4	-6.00	115.20	119.40
36	5	1891	A	O5'-P-OP2	-6.00	100.30	105.70
36	5	2310	U	C2-N1-C1'	6.00	124.90	117.70
38	8	33	A	N1-C6-N6	6.00	122.20	118.60
36	1	2726	C	C2-N3-C4	-6.00	116.90	119.90
36	5	2300	G	C5-C6-N1	6.00	114.50	111.50
36	1	2891	U	C5-C4-O4	-6.00	122.30	125.90
36	5	417	A	OP2-P-O3'	6.00	118.40	105.20
36	5	834	U	C6-N1-C2	6.00	124.60	121.00
36	5	2915	U	N3-C4-C5	6.00	118.20	114.60
36	5	2983	C	O5'-P-OP1	-6.00	100.30	105.70
36	1	790	U	C5-C4-O4	6.00	129.50	125.90
36	1	1304	A	O5'-P-OP1	-6.00	100.31	105.70
36	5	662	U	N3-C4-O4	-6.00	115.20	119.40
36	5	1335	C	N1-C2-O2	-6.00	115.30	118.90
36	5	810	A	C2-N3-C4	5.99	113.60	110.60
38	8	113	U	C2-N1-C1'	5.99	124.89	117.70
36	5	649	A	C5-C6-N6	-5.99	118.91	123.70
36	5	1115	G	C5-C6-O6	5.99	132.19	128.60
36	5	107	A	C2-N3-C4	5.99	113.59	110.60
36	5	758	C	O5'-P-OP2	-5.99	100.31	105.70
36	5	1148	G	N9-C4-C5	-5.99	103.00	105.40
36	5	1604	G	C8-N9-C1'	-5.99	119.21	127.00
1	2	404	G	C8-N9-C4	5.99	108.80	106.40
69	O3	48	ARG	NE-CZ-NH1	5.99	123.29	120.30
36	5	1149	G	C4-C5-N7	-5.99	108.41	110.80
36	5	2621	G	N1-C6-O6	5.99	123.49	119.90
36	1	3005	A	N1-C6-N6	-5.99	115.01	118.60
36	5	1367	G	C4-N9-C1'	5.99	134.28	126.50
36	1	3228	C	C2-N1-C1'	5.99	125.38	118.80
1	6	371	G	C8-N9-C1'	-5.99	119.22	127.00
36	5	516	A	C8-N9-C4	5.99	108.19	105.80
25	d3	33	LEU	CA-CB-CG	-5.98	101.54	115.30
36	5	101	G	O4'-C1'-N9	5.98	112.99	108.20
1	2	1573	A	P-O3'-C3'	5.98	126.88	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1858	A	C5-C6-N6	-5.98	118.92	123.70
36	5	684	G	C6-C5-N7	-5.98	126.81	130.40
36	1	2631	U	N3-C4-O4	-5.98	115.22	119.40
36	5	1154	A	C2-N3-C4	5.98	113.59	110.60
36	5	1198	C	N3-C2-O2	-5.98	117.72	121.90
1	2	74	U	O4'-C1'-N1	5.98	112.98	108.20
1	2	736	C	C5-C6-N1	5.98	123.99	121.00
36	5	1788	C	C5-C6-N1	5.98	123.99	121.00
36	5	2191	U	N3-C4-O4	-5.98	115.22	119.40
1	6	305	C	N1-C2-O2	-5.97	115.31	118.90
1	6	309	C	O5'-P-OP1	-5.97	100.32	105.70
36	5	646	A	O5'-P-OP1	5.97	117.87	110.70
36	5	888	A	C2-N3-C4	-5.97	107.61	110.60
36	1	278	U	N3-C4-O4	5.97	123.58	119.40
36	1	1064	A	O4'-C1'-N9	-5.97	103.42	108.20
36	1	2984	C	N3-C2-O2	-5.97	117.72	121.90
1	6	767	U	OP1-P-O3'	5.97	118.34	105.20
36	5	1710	C	C5-C6-N1	-5.97	118.01	121.00
36	5	2281	A	O4'-C1'-N9	5.97	112.98	108.20
36	1	952	A	C8-N9-C4	-5.97	103.41	105.80
36	5	1371	G	C5-N7-C8	5.97	107.28	104.30
36	5	2916	U	OP1-P-O3'	5.97	118.33	105.20
36	1	979	U	O4'-C1'-N1	5.97	112.97	108.20
36	1	1324	U	O5'-P-OP1	5.97	117.86	110.70
36	1	1926	C	N1-C2-O2	-5.97	115.32	118.90
36	5	2323	G	N9-C4-C5	5.97	107.79	105.40
36	1	1360	C	C6-N1-C2	5.96	122.69	120.30
36	5	291	C	N3-C4-N4	-5.96	113.82	118.00
36	5	2372	A	C8-N9-C4	-5.96	103.41	105.80
36	1	2298	U	N3-C4-O4	-5.96	115.23	119.40
36	1	2651	G	C4-C5-N7	-5.96	108.42	110.80
1	6	1751	C	C6-N1-C2	5.96	122.69	120.30
36	5	638	C	C2-N3-C4	-5.96	116.92	119.90
36	5	1112	A	N3-C4-N9	5.96	132.17	127.40
36	1	2385	G	C4-N9-C1'	-5.96	118.75	126.50
36	1	1365	G	N9-C4-C5	5.96	107.78	105.40
36	1	2140	U	O5'-P-OP2	-5.96	100.34	105.70
36	1	2409	G	C5-C6-O6	5.96	132.17	128.60
36	5	1156	C	N1-C2-O2	-5.96	115.33	118.90
36	5	1926	C	N3-C2-O2	5.96	126.07	121.90
36	1	915	A	C8-N9-C4	-5.95	103.42	105.80
36	1	2243	A	O5'-P-OP2	-5.95	100.34	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	614	C	O5'-P-OP2	-5.95	100.34	105.70
36	1	2393	G	C8-N9-C4	5.95	108.78	106.40
1	6	337	G	N3-C4-N9	5.95	129.57	126.00
1	6	453	U	N3-C4-O4	-5.95	115.23	119.40
36	5	2250	G	N1-C6-O6	-5.95	116.33	119.90
38	8	111	A	C6-C5-N7	-5.95	128.13	132.30
1	2	1206	U	N3-C4-O4	5.95	123.56	119.40
36	5	2302	G	C5-C6-O6	5.95	132.17	128.60
36	5	2607	G	OP2-P-O3'	5.95	118.28	105.20
39	L2	191	LEU	CA-CB-CG	-5.94	101.63	115.30
36	1	1435	A	OP1-P-OP2	-5.94	110.69	119.60
36	1	1450	G	O5'-P-OP2	5.94	117.83	110.70
36	5	906	A	C6-N1-C2	-5.94	115.03	118.60
36	5	909	G	C4-C5-N7	-5.94	108.42	110.80
38	8	113	U	C5-C6-N1	5.94	125.67	122.70
36	1	2163	C	C5-C4-N4	5.94	124.36	120.20
36	1	2772	C	O4'-C1'-N1	5.94	112.95	108.20
36	5	2531	C	N3-C2-O2	-5.94	117.74	121.90
36	5	2662	G	N3-C4-C5	-5.94	125.63	128.60
36	1	682	U	N3-C4-C5	5.94	118.16	114.60
36	1	3217	C	C6-N1-C1'	-5.94	113.67	120.80
36	1	629	U	OP2-P-O3'	5.94	118.26	105.20
36	1	2350	C	C5-C6-N1	-5.94	118.03	121.00
36	5	1878	G	C8-N9-C1'	-5.94	119.28	127.00
38	8	55	U	N3-C4-O4	5.94	123.56	119.40
36	1	919	U	N1-C2-O2	5.94	126.95	122.80
36	1	1434	G	N7-C8-N9	5.94	116.07	113.10
36	1	350	C	O5'-P-OP1	-5.93	100.36	105.70
36	1	1848	G	O5'-P-OP1	-5.93	100.36	105.70
36	5	3027	A	N1-C6-N6	5.93	122.16	118.60
36	1	701	G	OP2-P-O3'	5.93	118.25	105.20
1	6	1777	G	N1-C6-O6	5.93	123.46	119.90
36	5	41	G	C4-C5-N7	5.93	113.17	110.80
36	5	1130	A	N1-C2-N3	-5.93	126.33	129.30
36	1	226	C	C6-N1-C2	-5.93	117.93	120.30
36	1	2964	G	O5'-P-OP2	-5.93	100.36	105.70
1	6	804	A	N1-C6-N6	5.93	122.16	118.60
36	5	2180	G	O5'-P-OP2	-5.93	100.36	105.70
37	7	90	U	C4-C5-C6	-5.93	116.14	119.70
36	1	962	A	N9-C4-C5	5.93	108.17	105.80
36	1	392	G	C5-C6-O6	-5.93	125.04	128.60
36	1	658	G	C8-N9-C1'	-5.93	119.30	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1112	A	C5-N7-C8	-5.93	100.94	103.90
1	6	1643	U	C2-N3-C4	-5.93	123.44	127.00
36	5	805	G	N9-C4-C5	-5.93	103.03	105.40
36	1	1902	G	C6-C5-N7	-5.92	126.85	130.40
36	5	1307	G	N1-C6-O6	-5.92	116.34	119.90
36	5	2843	U	N3-C2-O2	-5.92	118.05	122.20
36	5	2878	G	C5-C6-N1	5.92	114.46	111.50
37	7	80	G	N3-C4-N9	5.92	129.56	126.00
37	7	98	C	O5'-P-OP2	-5.92	100.37	105.70
36	1	278	U	C6-N1-C2	-5.92	117.45	121.00
36	1	1931	U	C2-N1-C1'	-5.92	110.59	117.70
36	1	2397	A	C5-N7-C8	-5.92	100.94	103.90
36	1	109	A	N1-C6-N6	-5.92	115.05	118.60
36	5	2611	U	C4-C5-C6	5.92	123.25	119.70
36	1	1295	G	N1-C6-O6	-5.92	116.35	119.90
36	1	2305	G	C8-N9-C1'	-5.92	119.31	127.00
36	1	905	U	O5'-P-OP2	-5.92	100.37	105.70
36	5	1604	G	N3-C4-N9	5.92	129.55	126.00
36	5	2663	G	O5'-P-OP2	-5.92	100.38	105.70
36	1	2621	G	N9-C4-C5	5.92	107.77	105.40
36	1	1098	A	C8-N9-C4	-5.91	103.44	105.80
36	1	3375	A	C8-N9-C4	-5.91	103.44	105.80
36	5	271	C	C6-N1-C2	5.91	122.67	120.30
36	1	2797	C	N3-C4-C5	-5.91	119.53	121.90
36	5	2928	C	C2-N1-C1'	5.91	125.30	118.80
36	1	1159	A	O4'-C1'-N9	5.91	112.93	108.20
36	1	1169	A	OP2-P-O3'	5.91	118.20	105.20
37	3	93	C	C6-N1-C2	5.91	122.66	120.30
36	5	909	G	C5-C6-O6	5.91	132.15	128.60
68	o2	47	ARG	NE-CZ-NH2	-5.91	117.34	120.30
1	2	1174	C	N1-C2-O2	5.91	122.44	118.90
1	2	1196	A	P-O3'-C3'	5.91	126.79	119.70
36	1	399	A	O5'-P-OP1	-5.91	100.38	105.70
36	1	1351	U	N1-C2-O2	5.91	126.94	122.80
36	1	1581	C	N1-C2-O2	5.91	122.45	118.90
36	5	2293	C	N1-C2-O2	5.91	122.44	118.90
36	1	1175	C	O5'-P-OP1	-5.91	100.39	105.70
36	1	2550	U	N1-C2-N3	5.91	118.44	114.90
38	4	41	A	N1-C2-N3	5.91	132.25	129.30
1	6	1634	C	N3-C2-O2	-5.91	117.77	121.90
36	5	693	A	O5'-P-OP2	5.91	117.79	110.70
36	5	2873	U	O5'-P-OP2	-5.91	100.38	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2991	A	C8-N9-C4	-5.91	103.44	105.80
36	1	806	A	O4'-C1'-N9	-5.90	103.48	108.20
36	1	816	A	OP2-P-O3'	5.90	118.18	105.20
36	1	3269	U	C5-C4-O4	5.90	129.44	125.90
1	6	1097	U	P-O3'-C3'	5.90	126.78	119.70
38	8	8	C	C6-N1-C2	-5.90	117.94	120.30
36	1	910	G	C5-C6-N1	-5.90	108.55	111.50
40	l3	275	ARG	NE-CZ-NH1	-5.90	117.35	120.30
36	5	1390	A	C8-N9-C4	-5.90	103.44	105.80
36	5	2836	C	C2-N3-C4	-5.90	116.95	119.90
1	2	1486	G	N7-C8-N9	5.90	116.05	113.10
36	1	220	G	C5-C6-O6	-5.90	125.06	128.60
36	1	2187	G	C5-C6-N1	-5.90	108.55	111.50
36	1	2658	G	C8-N9-C4	5.90	108.76	106.40
36	1	2861	U	O5'-P-OP1	-5.90	100.39	105.70
36	1	2941	A	O4'-C1'-N9	-5.90	103.48	108.20
1	2	1462	G	C5-C6-O6	-5.90	125.06	128.60
1	6	858	G	C6-C5-N7	-5.90	126.86	130.40
36	5	39	A	N9-C4-C5	-5.89	103.44	105.80
36	1	1307	G	P-O3'-C3'	5.89	126.77	119.70
36	5	2164	A	C6-C5-N7	-5.89	128.18	132.30
36	1	25	U	N3-C4-O4	5.89	123.52	119.40
36	1	217	U	OP1-P-O3'	5.89	118.16	105.20
36	1	282	G	N3-C4-C5	-5.89	125.66	128.60
36	1	3048	A	O5'-P-OP2	-5.89	100.40	105.70
1	6	619	A	OP2-P-O3'	5.89	118.16	105.20
36	5	2314	U	N3-C4-O4	5.89	123.52	119.40
36	5	2648	G	OP1-P-O3'	5.89	118.16	105.20
1	6	111	U	N1-C2-N3	5.89	118.43	114.90
36	5	2993	G	C5-C6-N1	5.89	114.44	111.50
36	5	3309	G	N3-C4-N9	5.89	129.53	126.00
36	1	33	G	O5'-P-OP2	-5.89	100.40	105.70
1	6	901	G	C4-C5-N7	5.89	113.16	110.80
36	5	2283	G	C5-C6-O6	-5.89	125.07	128.60
36	5	2660	G	N9-C4-C5	-5.89	103.05	105.40
36	1	636	C	C2-N1-C1'	5.88	125.27	118.80
1	6	1773	C	C4-C5-C6	5.88	120.34	117.40
43	l6	30	LEU	CA-CB-CG	5.88	128.83	115.30
76	q0	111	ARG	NE-CZ-NH1	-5.88	117.36	120.30
1	2	1560	U	C5-C4-O4	5.88	129.43	125.90
36	1	41	G	OP2-P-O3'	5.88	118.14	105.20
36	1	3013	U	O5'-P-OP2	-5.88	100.41	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1328	C	C4-C5-C6	5.88	120.34	117.40
36	1	681	U	N3-C2-O2	5.88	126.32	122.20
1	2	554	C	N3-C4-C5	-5.88	119.55	121.90
36	1	3183	A	C5-C6-N6	-5.88	119.00	123.70
36	5	666	A	N1-C6-N6	-5.88	115.07	118.60
36	5	3126	C	C4-C5-C6	-5.88	114.46	117.40
1	2	1762	A	C8-N9-C4	5.88	108.15	105.80
36	1	2628	A	C6-N1-C2	-5.88	115.07	118.60
36	1	3265	C	C6-N1-C2	5.88	122.65	120.30
37	3	88	G	N3-C4-C5	-5.88	125.66	128.60
1	6	993	A	O5'-P-OP2	-5.88	100.41	105.70
36	5	1107	C	OP2-P-O3'	5.88	118.13	105.20
36	1	200	C	C2-N1-C1'	5.88	125.26	118.80
37	3	86	U	N1-C2-O2	-5.88	118.69	122.80
73	O7	5	THR	C-N-CD	5.88	140.74	128.40
36	5	875	G	O5'-P-OP1	5.88	117.75	110.70
36	1	959	C	C5-C4-N4	-5.87	116.09	120.20
36	1	1397	C	N3-C4-C5	5.87	124.25	121.90
36	1	2244	A	N7-C8-N9	-5.87	110.86	113.80
1	6	299	A	O5'-P-OP2	-5.87	100.41	105.70
36	5	1208	U	O5'-P-OP1	-5.87	100.42	105.70
36	5	2278	C	N3-C4-C5	5.87	124.25	121.90
1	2	1328	G	C8-N9-C4	5.87	108.75	106.40
36	1	281	G	C6-N1-C2	-5.87	121.58	125.10
36	1	668	G	N9-C4-C5	5.87	107.75	105.40
1	6	371	G	C4-N9-C1'	5.87	134.13	126.50
36	5	718	G	N3-C4-C5	-5.87	125.67	128.60
36	1	1131	G	N9-C4-C5	-5.87	103.05	105.40
1	6	1280	C	N3-C4-C5	-5.87	119.55	121.90
36	5	3200	G	C6-C5-N7	-5.87	126.88	130.40
36	1	1117	G	O5'-P-OP1	-5.87	100.42	105.70
36	5	2753	G	N3-C2-N2	-5.87	115.79	119.90
36	1	1060	U	C5-C6-N1	-5.87	119.77	122.70
36	1	1299	U	C5-C6-N1	-5.87	119.77	122.70
36	5	1206	G	C5-C6-O6	5.87	132.12	128.60
36	5	2110	G	C5-C6-O6	-5.87	125.08	128.60
36	1	1442	U	N3-C2-O2	5.86	126.30	122.20
36	1	2139	A	N1-C6-N6	-5.86	115.08	118.60
36	5	1316	C	C4-C5-C6	5.86	120.33	117.40
36	5	2866	U	OP1-P-O3'	5.86	118.10	105.20
36	1	1445	U	C5-C4-O4	-5.86	122.38	125.90
36	1	2314	U	O5'-P-OP2	-5.86	100.42	105.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2598	G	C2-N3-C4	5.86	114.83	111.90
36	5	655	C	C6-N1-C2	-5.86	117.95	120.30
36	1	1112	A	N1-C6-N6	5.86	122.12	118.60
36	1	3059	G	C4-C5-N7	-5.86	108.46	110.80
36	5	666	A	O5'-P-OP1	-5.86	100.43	105.70
37	7	87	G	N3-C2-N2	-5.86	115.80	119.90
1	2	145	A	C8-N9-C4	-5.86	103.46	105.80
1	6	756	A	C8-N9-C4	-5.86	103.46	105.80
36	5	3212	C	C2-N3-C4	-5.86	116.97	119.90
36	1	3181	C	C4-C5-C6	5.86	120.33	117.40
38	4	111	A	N1-C6-N6	5.86	122.11	118.60
36	5	2138	A	C5-C6-N1	-5.86	114.77	117.70
47	m0	88	ARG	NE-CZ-NH1	-5.86	117.37	120.30
1	2	1654	G	O5'-P-OP2	-5.85	100.43	105.70
36	5	1461	A	N1-C6-N6	-5.85	115.09	118.60
36	5	2869	U	N3-C2-O2	-5.85	118.10	122.20
1	2	728	U	N1-C2-O2	5.85	126.90	122.80
36	1	1481	A	C4-N9-C1'	5.85	136.84	126.30
36	1	2293	C	C5-C4-N4	-5.85	116.10	120.20
36	5	2757	U	C6-N1-C2	-5.85	117.49	121.00
36	1	1301	A	N1-C6-N6	5.85	122.11	118.60
36	1	2698	G	O5'-P-OP1	-5.85	100.44	105.70
1	6	75	U	O4'-C1'-N1	5.85	112.88	108.20
36	5	3012	A	N9-C4-C5	-5.85	103.46	105.80
36	5	3123	A	N7-C8-N9	-5.85	110.88	113.80
36	1	2821	C	O5'-P-OP2	5.85	117.72	110.70
36	1	3344	A	N1-C2-N3	5.85	132.22	129.30
1	6	1765	A	N1-C6-N6	-5.85	115.09	118.60
1	6	1775	U	C5-C6-N1	-5.85	119.78	122.70
36	5	820	A	C8-N9-C4	-5.85	103.46	105.80
36	5	1119	C	C2-N3-C4	-5.85	116.98	119.90
36	5	2353	G	C5-C6-O6	-5.85	125.09	128.60
1	2	734	A	OP1-P-O3'	5.84	118.06	105.20
36	1	780	A	N1-C2-N3	5.84	132.22	129.30
36	1	964	G	OP2-P-O3'	5.84	118.06	105.20
1	6	144	U	N1-C2-N3	5.84	118.41	114.90
1	2	1761	U	N3-C2-O2	-5.84	118.11	122.20
38	4	90	U	N1-C2-O2	-5.84	118.71	122.80
36	5	1008	U	C2-N1-C1'	-5.84	110.69	117.70
36	1	343	U	N1-C2-N3	5.84	118.41	114.90
36	1	2411	U	N3-C4-C5	5.84	118.10	114.60
36	1	3244	A	O4'-C1'-N9	-5.84	103.53	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	973	A	N1-C6-N6	5.84	122.10	118.60
36	5	1149	G	C2-N3-C4	5.84	114.82	111.90
36	5	2407	C	O5'-P-OP2	-5.84	100.44	105.70
36	5	2942	C	N3-C4-N4	5.84	122.09	118.00
36	5	3040	A	N7-C8-N9	-5.84	110.88	113.80
36	1	1150	A	C5-C6-N1	5.84	120.62	117.70
36	1	1400	G	O5'-P-OP2	-5.84	100.44	105.70
36	1	1436	U	N3-C2-O2	5.84	126.29	122.20
36	1	2870	C	C4-C5-C6	-5.84	114.48	117.40
64	n8	12	ARG	NE-CZ-NH2	-5.84	117.38	120.30
1	6	1472	C	N1-C2-O2	-5.84	115.40	118.90
36	5	2405	C	C2-N3-C4	-5.84	116.98	119.90
36	5	2627	C	C2-N3-C4	-5.84	116.98	119.90
36	5	3145	C	C6-N1-C2	5.84	122.64	120.30
36	1	2146	C	N3-C4-C5	5.84	124.23	121.90
36	5	341	G	N1-C6-O6	5.84	123.40	119.90
36	5	1128	U	C2-N3-C4	-5.84	123.50	127.00
36	5	1431	G	C4-C5-N7	-5.84	108.47	110.80
36	5	2351	U	C5-C4-O4	5.84	129.40	125.90
36	5	3055	U	C5-C4-O4	-5.84	122.40	125.90
36	1	943	U	N1-C2-O2	5.83	126.89	122.80
36	1	519	A	N1-C6-N6	5.83	122.10	118.60
36	1	1669	C	N3-C2-O2	5.83	125.98	121.90
36	1	2281	A	C5-C6-N1	-5.83	114.78	117.70
36	5	2335	G	N3-C4-C5	-5.83	125.68	128.60
1	6	577	G	C4-C5-N7	5.83	113.13	110.80
36	5	1373	A	O5'-P-OP2	-5.83	100.45	105.70
36	5	3006	A	C8-N9-C4	-5.83	103.47	105.80
36	1	907	G	N3-C4-C5	-5.83	125.69	128.60
36	1	1510	G	N9-C4-C5	-5.83	103.07	105.40
36	1	2865	U	C5-C4-O4	-5.83	122.40	125.90
36	5	41	G	C5-C6-O6	-5.83	125.10	128.60
36	5	2343	C	N3-C4-N4	-5.83	113.92	118.00
1	2	1022	C	C2-N3-C4	-5.83	116.99	119.90
36	1	939	U	N3-C2-O2	5.82	126.28	122.20
36	1	225	C	C4-C5-C6	5.82	120.31	117.40
36	1	2403	G	OP1-P-O3'	5.82	118.01	105.20
36	5	3343	G	N9-C4-C5	-5.82	103.07	105.40
1	2	287	G	O4'-C1'-N9	5.82	112.86	108.20
1	2	736	C	C2-N1-C1'	5.82	125.20	118.80
36	5	2780	A	N1-C6-N6	5.82	122.09	118.60
36	1	2930	A	O4'-C1'-N9	5.82	112.86	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2996	U	C5-C4-O4	-5.82	122.41	125.90
36	1	2121	G	N1-C6-O6	-5.82	116.41	119.90
1	6	418	G	O5'-P-OP1	-5.82	100.46	105.70
1	6	1536	G	O5'-P-OP1	-5.82	100.46	105.70
1	6	1640	C	O5'-P-OP2	-5.82	100.46	105.70
36	5	1604	G	C4-N9-C1'	5.82	134.06	126.50
36	5	1911	A	N1-C6-N6	5.82	122.09	118.60
36	1	3090	U	N1-C2-O2	-5.82	118.73	122.80
1	6	1503	A	C2-N3-C4	-5.82	107.69	110.60
36	5	103	G	N3-C4-N9	-5.82	122.51	126.00
36	5	283	G	C5-N7-C8	-5.82	101.39	104.30
36	5	1163	A	N1-C6-N6	-5.82	115.11	118.60
36	1	498	A	C8-N9-C4	-5.81	103.47	105.80
36	1	859	G	C4-N9-C1'	5.81	134.06	126.50
36	5	859	G	C2-N3-C4	5.81	114.81	111.90
36	1	2847	A	O5'-P-OP1	-5.81	100.47	105.70
1	6	755	A	N9-C1'-C2'	-5.81	105.61	112.00
36	5	424	G	N3-C4-C5	-5.81	125.69	128.60
36	5	1112	A	C4-N9-C1'	5.81	136.76	126.30
36	5	1169	A	C2-N3-C4	-5.81	107.69	110.60
36	5	2396	G	C6-N1-C2	-5.81	121.61	125.10
36	5	2816	G	C5-C6-O6	-5.81	125.11	128.60
36	1	2245	C	C6-N1-C2	-5.81	117.98	120.30
1	6	945	U	N3-C2-O2	-5.81	118.13	122.20
36	5	1496	C	C2-N1-C1'	5.81	125.19	118.80
36	1	348	A	OP2-P-O3'	5.81	117.98	105.20
36	1	1135	A	O5'-P-OP2	-5.81	100.47	105.70
36	1	2358	A	O5'-P-OP2	-5.81	100.47	105.70
36	5	883	A	O5'-P-OP2	5.81	117.67	110.70
36	5	1406	A	N1-C6-N6	5.81	122.08	118.60
36	5	1844	C	N3-C2-O2	-5.81	117.83	121.90
37	3	92	A	C2-N3-C4	-5.81	107.70	110.60
1	6	1657	U	C2-N1-C1'	5.81	124.67	117.70
36	1	2177	G	N3-C4-N9	5.80	129.48	126.00
36	1	2873	U	O5'-P-OP2	-5.80	100.47	105.70
36	5	721	G	C5-C6-N1	5.80	114.40	111.50
36	5	819	U	N1-C2-O2	-5.80	118.74	122.80
36	5	1390	A	N9-C4-C5	5.80	108.12	105.80
36	5	2886	U	C5-C4-O4	5.80	129.38	125.90
36	5	835	G	C5-C6-N1	5.80	114.40	111.50
36	5	2618	G	N9-C4-C5	-5.80	103.08	105.40
36	1	860	G	C8-N9-C4	5.80	108.72	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	908	G	N7-C8-N9	-5.80	110.20	113.10
36	1	2283	G	N1-C2-N2	5.80	121.42	116.20
36	5	1151	U	C5-C6-N1	5.80	125.60	122.70
36	1	1565	G	C8-N9-C4	-5.80	104.08	106.40
36	1	2874	G	C5-C6-N1	-5.80	108.60	111.50
36	5	1206	G	N9-C4-C5	5.80	107.72	105.40
36	5	2110	G	N9-C4-C5	-5.80	103.08	105.40
36	5	2404	A	N1-C2-N3	-5.80	126.40	129.30
36	5	2624	G	C6-C5-N7	-5.80	126.92	130.40
37	7	5	G	N9-C4-C5	-5.80	103.08	105.40
36	1	2631	U	C5-C6-N1	-5.80	119.80	122.70
36	5	200	C	C2-N1-C1'	5.80	125.18	118.80
36	5	280	U	N1-C2-O2	-5.80	118.74	122.80
36	5	956	U	C2-N3-C4	-5.80	123.52	127.00
36	1	1142	G	C5-C6-O6	-5.79	125.12	128.60
36	1	2883	U	N1-C2-O2	5.79	126.86	122.80
36	5	109	A	O5'-P-OP2	-5.79	100.48	105.70
1	2	831	U	C6-N1-C2	-5.79	117.52	121.00
36	1	1586	G	N3-C4-N9	5.79	129.48	126.00
36	5	3052	G	C8-N9-C1'	5.79	134.53	127.00
36	1	954	U	O5'-P-OP2	-5.79	100.49	105.70
37	3	91	G	C6-C5-N7	-5.79	126.92	130.40
36	5	2732	G	O5'-P-OP2	-5.79	100.49	105.70
1	2	734	A	P-O3'-C3'	5.79	126.65	119.70
36	1	2124	G	N1-C6-O6	5.79	123.37	119.90
36	1	2953	U	N1-C2-O2	-5.79	118.75	122.80
36	5	41	G	OP2-P-O3'	5.79	117.94	105.20
36	5	972	A	C4-C5-C6	5.79	119.89	117.00
36	5	2982	A	C8-N9-C4	5.79	108.12	105.80
36	5	3053	G	N1-C6-O6	5.79	123.37	119.90
37	7	105	C	N3-C2-O2	-5.79	117.85	121.90
36	5	812	G	C5-N7-C8	5.79	107.19	104.30
37	7	14	U	N3-C4-O4	-5.79	115.35	119.40
36	1	365	A	C6-C5-N7	-5.79	128.25	132.30
1	6	1751	C	C5-C6-N1	-5.79	118.11	121.00
36	5	815	G	C2-N3-C4	5.79	114.79	111.90
1	6	358	U	O5'-P-OP1	-5.78	100.50	105.70
36	1	2730	G	N3-C2-N2	-5.78	115.85	119.90
36	1	2984	C	C5-C4-N4	5.78	124.25	120.20
36	5	964	G	C8-N9-C4	-5.78	104.09	106.40
36	5	2814	G	C6-C5-N7	-5.78	126.93	130.40
36	5	609	G	C5-C6-O6	-5.78	125.13	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1764	C	C6-N1-C2	5.78	122.61	120.30
36	5	264	G	N1-C6-O6	5.78	123.37	119.90
36	1	1307	G	C5-C6-O6	5.78	132.07	128.60
36	1	1351	U	N3-C2-O2	-5.78	118.16	122.20
1	6	977	A	C5-C6-N6	-5.78	119.08	123.70
36	5	702	C	C6-N1-C2	-5.77	117.99	120.30
36	1	1152	G	C4-C5-N7	5.77	113.11	110.80
36	1	1307	G	C2'-C3'-O3'	5.77	122.94	113.70
36	1	317	A	O5'-P-OP2	-5.77	100.51	105.70
36	1	880	G	C4-C5-N7	-5.77	108.49	110.80
36	5	718	G	C8-N9-C4	-5.77	104.09	106.40
36	5	3052	G	N3-C2-N2	-5.77	115.86	119.90
36	1	404	G	C5-C6-N1	-5.77	108.62	111.50
36	1	1114	U	C4-C5-C6	-5.77	116.24	119.70
36	1	2944	U	O5'-P-OP1	-5.77	100.51	105.70
36	5	1465	A	N1-C2-N3	5.77	132.19	129.30
36	5	2710	C	N1-C2-O2	-5.77	115.44	118.90
36	5	3154	C	C6-N1-C2	-5.77	117.99	120.30
36	1	3206	C	C6-N1-C2	5.77	122.61	120.30
36	5	88	A	N7-C8-N9	-5.77	110.92	113.80
36	5	1306	G	C8-N9-C4	5.77	108.71	106.40
36	5	2633	U	C5-C6-N1	-5.77	119.82	122.70
36	5	2873	U	N1-C2-N3	5.77	118.36	114.90
36	1	155	G	N1-C6-O6	-5.76	116.44	119.90
36	5	2819	A	N1-C6-N6	-5.76	115.14	118.60
53	m7	135	ARG	NE-CZ-NH1	5.76	123.18	120.30
36	1	2190	U	OP2-P-O3'	5.76	117.88	105.20
36	5	640	U	N1-C2-N3	5.76	118.36	114.90
36	5	2273	G	C4-C5-N7	-5.76	108.50	110.80
36	5	2873	U	N1-C2-O2	-5.76	118.77	122.80
36	1	1366	A	N7-C8-N9	5.76	116.68	113.80
36	1	2952	G	C5-C6-N1	-5.76	108.62	111.50
36	5	1598	G	N1-C6-O6	-5.76	116.44	119.90
36	1	3057	U	N1-C2-N3	5.76	118.36	114.90
36	5	1635	G	N1-C6-O6	-5.76	116.44	119.90
36	5	2139	A	C5-C6-N6	5.76	128.31	123.70
36	5	2403	G	C2-N3-C4	5.76	114.78	111.90
36	5	2792	A	C8-N9-C4	-5.76	103.50	105.80
36	5	3109	G	N1-C6-O6	-5.76	116.44	119.90
1	6	1112	G	C5-C6-O6	-5.76	125.14	128.60
36	5	815	G	N3-C4-C5	-5.76	125.72	128.60
36	5	906	A	C5-C6-N1	5.76	120.58	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'	-5.76	119.02	126.50
37	7	19	C	O5'-P-OP2	-5.76	100.52	105.70
36	1	3015	G	C5-C6-O6	-5.75	125.15	128.60
1	6	1355	C	C6-N1-C2	-5.75	118.00	120.30
36	5	1082	U	N1-C2-N3	5.75	118.35	114.90
36	5	1239	C	C6-N1-C2	-5.75	118.00	120.30
36	5	1331	U	N3-C4-C5	5.75	118.05	114.60
1	2	581	U	C2-N1-C1'	5.75	124.60	117.70
1	6	1	U	C6-N1-C1'	-5.75	113.15	121.20
36	5	2290	C	N3-C4-C5	5.75	124.20	121.90
36	5	2838	A	O5'-P-OP1	5.75	117.60	110.70
36	5	1138	U	O5'-P-OP2	-5.75	100.53	105.70
36	5	1331	U	N3-C2-O2	5.75	126.22	122.20
36	1	690	A	OP1-P-O3'	5.75	117.85	105.20
36	1	1335	C	N3-C2-O2	-5.75	117.88	121.90
36	1	2831	G	C5-C6-O6	-5.75	125.15	128.60
1	6	795	U	N1-C2-O2	5.75	126.82	122.80
36	5	682	U	C2-N1-C1'	-5.75	110.80	117.70
36	5	1317	A	C5-C6-N6	-5.75	119.10	123.70
36	5	2354	C	N3-C4-N4	5.75	122.02	118.00
36	1	2572	C	C6-N1-C1'	-5.75	113.91	120.80
36	1	2823	G	C4-C5-N7	-5.75	108.50	110.80
36	5	1127	G	C5-C6-N1	5.75	114.37	111.50
36	5	1141	C	C6-N1-C2	5.75	122.60	120.30
36	5	2161	G	N3-C2-N2	-5.75	115.88	119.90
1	2	393	C	N3-C4-C5	5.75	124.20	121.90
36	5	948	C	N3-C2-O2	5.75	125.92	121.90
36	5	948	C	C5-C4-N4	-5.75	116.18	120.20
37	3	79	A	N1-C2-N3	5.74	132.17	129.30
1	6	755	A	C3'-C2'-C1'	5.74	106.09	101.50
36	5	1156	C	C6-N1-C2	-5.74	118.00	120.30
36	5	1489	A	C4-C5-C6	5.74	119.87	117.00
36	1	1365	G	N1-C6-O6	-5.74	116.45	119.90
36	1	2276	G	N9-C4-C5	5.74	107.70	105.40
37	3	87	G	C8-N9-C4	5.74	108.70	106.40
36	1	851	C	C6-N1-C2	-5.74	118.00	120.30
36	1	3275	U	OP1-P-O3'	5.74	117.83	105.20
36	5	2865	U	N1-C2-N3	-5.74	111.45	114.90
36	1	1434	G	C5-N7-C8	-5.74	101.43	104.30
38	4	12	A	N1-C2-N3	-5.74	126.43	129.30
36	5	1369	A	N9-C4-C5	-5.74	103.50	105.80
1	2	187	G	OP1-P-O3'	5.74	117.82	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	878	G	N3-C4-C5	-5.74	125.73	128.60
36	1	1303	A	O5'-P-OP1	-5.74	100.54	105.70
36	1	2245	C	N3-C2-O2	-5.74	117.89	121.90
36	1	2798	C	C6-N1-C2	-5.74	118.01	120.30
64	N8	115	LYS	C-N-CA	-5.74	110.26	122.30
36	5	2295	A	C5-C6-N1	5.74	120.57	117.70
36	5	3005	A	O5'-P-OP2	-5.74	100.54	105.70
1	6	1389	C	C2-N1-C1'	5.73	125.11	118.80
1	6	1432	U	O4'-C1'-N1	5.73	112.79	108.20
36	5	609	G	N1-C2-N2	5.73	121.36	116.20
36	5	1002	A	O5'-P-OP2	-5.73	100.54	105.70
36	5	3052	G	C6-C5-N7	5.73	133.84	130.40
36	1	292	U	C5-C6-N1	-5.73	119.83	122.70
36	1	718	G	C4-C5-N7	5.73	113.09	110.80
36	1	1838	G	C5-C6-O6	-5.73	125.16	128.60
37	7	35	C	N3-C2-O2	5.73	125.91	121.90
36	1	869	G	N1-C6-O6	-5.73	116.46	119.90
1	6	321	C	C2-N1-C1'	5.73	125.10	118.80
1	6	1481	C	C6-N1-C2	-5.73	118.01	120.30
36	5	3136	G	C2-N3-C4	-5.73	109.04	111.90
36	1	2242	A	N9-C4-C5	5.73	108.09	105.80
36	1	68	C	OP2-P-O3'	5.73	117.80	105.20
36	1	1420	C	N1-C2-N3	5.73	123.21	119.20
36	5	2762	A	N1-C2-N3	-5.73	126.44	129.30
36	1	616	G	C5-C6-O6	-5.72	125.17	128.60
36	1	1163	A	OP1-P-OP2	5.72	128.19	119.60
36	1	1414	G	C5-C6-O6	-5.72	125.17	128.60
36	1	229	G	O5'-P-OP2	5.72	117.57	110.70
36	1	1151	U	N1-C2-N3	5.72	118.33	114.90
36	1	2863	G	N1-C2-N2	-5.72	111.05	116.20
36	5	987	U	N1-C2-N3	5.72	118.33	114.90
36	5	1608	C	N1-C2-O2	5.72	122.33	118.90
38	8	33	A	C5-C6-N6	-5.72	119.12	123.70
1	2	1761	U	P-O3'-C3'	5.72	126.56	119.70
36	1	637	C	C5-C6-N1	-5.72	118.14	121.00
36	5	672	A	N7-C8-N9	5.72	116.66	113.80
36	5	841	A	O5'-P-OP2	-5.72	100.55	105.70
36	5	2295	A	C5-C6-N6	-5.72	119.12	123.70
36	1	1843	C	N1-C2-O2	-5.72	115.47	118.90
36	5	1842	A	N9-C4-C5	-5.72	103.51	105.80
36	1	1102	A	OP1-P-O3'	5.72	117.77	105.20
36	1	2349	U	C5-C6-N1	-5.72	119.84	122.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1499	G	N3-C2-N2	5.72	123.90	119.90
40	13	244	ARG	NE-CZ-NH1	-5.72	117.44	120.30
1	2	831	U	C5-C6-N1	5.71	125.56	122.70
36	1	3264	G	O5'-P-OP1	-5.71	100.56	105.70
36	1	3361	G	N3-C4-C5	-5.71	125.74	128.60
1	6	1783	C	N1-C2-O2	5.71	122.33	118.90
36	5	903	U	N3-C2-O2	-5.71	118.20	122.20
37	7	40	C	C5-C4-N4	-5.71	116.20	120.20
1	2	720	G	OP1-P-O3'	5.71	117.77	105.20
36	1	1634	G	C8-N9-C4	-5.71	104.11	106.40
36	1	1364	C	N3-C4-C5	5.71	124.18	121.90
36	1	3362	A	C8-N9-C4	-5.71	103.52	105.80
1	6	400	A	N1-C6-N6	5.71	122.03	118.60
36	5	1512	U	N3-C2-O2	-5.71	118.20	122.20
36	1	2142	A	N3-C4-C5	-5.71	122.81	126.80
1	6	29	U	C5-C4-O4	5.71	129.32	125.90
36	5	1239	C	C2-N1-C1'	5.71	125.08	118.80
36	1	1507	G	N3-C2-N2	-5.71	115.91	119.90
36	1	3055	U	C5-C4-O4	-5.71	122.48	125.90
36	5	88	A	N9-C4-C5	-5.71	103.52	105.80
36	5	1725	C	C6-N1-C1'	5.71	127.65	120.80
36	1	2983	C	C2-N3-C4	-5.71	117.05	119.90
1	6	1188	G	N1-C6-O6	5.71	123.32	119.90
36	5	2940	A	C6-N1-C2	-5.71	115.18	118.60
36	5	2921	U	N1-C2-N3	5.70	118.32	114.90
36	1	2323	G	N3-C4-C5	-5.70	125.75	128.60
36	5	2836	C	O4'-C1'-N1	5.70	112.76	108.20
36	1	2818	U	C5'-C4'-O4'	-5.70	102.26	109.10
1	6	1478	G	C4-N9-C1'	5.70	133.91	126.50
36	5	1858	A	O4'-C1'-N9	5.70	112.76	108.20
36	1	2162	U	C4-C5-C6	-5.70	116.28	119.70
1	6	542	A	C6-C5-N7	-5.70	128.31	132.30
1	6	1473	U	C5-C4-O4	5.70	129.32	125.90
36	1	213	A	N9-C1'-C2'	-5.70	105.73	112.00
36	5	2354	C	N3-C2-O2	5.70	125.89	121.90
36	5	2904	U	C2-N3-C4	-5.70	123.58	127.00
36	1	2857	C	N3-C4-C5	5.70	124.18	121.90
36	5	2385	G	N3-C4-C5	5.70	131.45	128.60
37	7	37	G	N1-C6-O6	5.70	123.32	119.90
36	1	281	G	C2-N3-C4	5.69	114.75	111.90
36	1	1316	C	N1-C2-O2	-5.69	115.48	118.90
1	6	337	G	N3-C2-N2	5.69	123.89	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	967	A	C5-C6-N1	5.69	120.55	117.70
36	5	97	U	N3-C2-O2	5.69	126.19	122.20
36	5	3041	U	N1-C2-N3	-5.69	111.48	114.90
36	5	3215	A	C2-N3-C4	-5.69	107.75	110.60
37	7	9	C	N3-C4-C5	5.69	124.18	121.90
36	1	943	U	N3-C2-O2	-5.69	118.22	122.20
36	1	1907	C	C5-C6-N1	5.69	123.85	121.00
36	1	2281	A	N3-C4-C5	5.69	130.78	126.80
1	6	965	U	N1-C2-O2	5.69	126.78	122.80
1	6	1767	G	C4-N9-C1'	-5.69	119.10	126.50
36	5	308	A	O5'-P-OP2	-5.69	100.58	105.70
1	2	114	C	N1-C2-O2	-5.69	115.48	118.90
1	6	1739	C	C2-N1-C1'	-5.69	112.54	118.80
36	5	2632	G	N3-C2-N2	5.69	123.88	119.90
36	1	1836	C	N1-C2-O2	5.69	122.31	118.90
36	1	2899	C	OP2-P-O3'	5.69	117.72	105.20
36	1	199	A	O4'-C1'-N9	5.69	112.75	108.20
36	1	949	C	C5-C6-N1	-5.69	118.16	121.00
36	1	1053	A	C8-N9-C4	5.69	108.08	105.80
36	1	2787	G	C5-C6-N1	5.69	114.34	111.50
36	1	3305	A	N1-C6-N6	-5.69	115.19	118.60
36	5	1832	C	C6-N1-C2	5.69	122.58	120.30
36	5	2827	U	C5-C6-N1	-5.69	119.86	122.70
36	1	1152	G	O4'-C1'-N9	5.69	112.75	108.20
38	4	115	C	N3-C4-C5	5.69	124.17	121.90
1	2	830	U	N1-C2-O2	5.68	126.78	122.80
36	1	1425	U	N1-C2-N3	5.68	118.31	114.90
36	1	1464	G	O5'-P-OP2	-5.68	100.58	105.70
36	1	2833	A	C8-N9-C4	5.68	108.07	105.80
36	1	2891	U	C2-N3-C4	-5.68	123.59	127.00
36	5	38	U	C2-N3-C4	-5.68	123.59	127.00
36	5	1918	C	O5'-P-OP1	5.68	117.52	110.70
36	5	2180	G	C4-C5-N7	5.68	113.07	110.80
36	1	515	C	C5-C6-N1	5.68	123.84	121.00
36	5	2246	G	O5'-P-OP1	-5.68	100.59	105.70
36	1	2339	C	OP1-P-O3'	5.68	117.70	105.20
36	5	660	A	C2-N3-C4	5.68	113.44	110.60
36	1	2350	C	C2-N3-C4	-5.68	117.06	119.90
36	5	264	G	C6-C5-N7	-5.68	126.99	130.40
36	5	283	G	O4'-C1'-N9	-5.68	103.66	108.20
36	5	435	C	O5'-P-OP2	-5.68	100.59	105.70
38	8	140	G	C5-C6-N1	-5.68	108.66	111.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1160	C	N1-C2-N3	-5.68	115.22	119.20
36	1	3036	G	C4-N9-C1'	5.68	133.88	126.50
36	5	3126	C	N3-C4-C5	5.68	124.17	121.90
47	m0	167	LEU	CA-CB-CG	5.68	128.36	115.30
1	6	1697	G	N3-C4-N9	5.68	129.41	126.00
36	5	63	A	C5-C6-N6	-5.68	119.16	123.70
36	5	701	G	C4-C5-N7	-5.68	108.53	110.80
36	5	2820	A	O5'-P-OP1	5.68	117.51	110.70
1	2	380	U	N3-C2-O2	-5.67	118.23	122.20
38	4	16	G	O4'-C1'-N9	5.67	112.74	108.20
36	5	869	G	N3-C4-C5	-5.67	125.76	128.60
36	5	2385	G	C5-C6-O6	-5.67	125.20	128.60
36	1	517	G	C6-C5-N7	-5.67	127.00	130.40
36	1	585	A	O5'-P-OP2	-5.67	100.59	105.70
1	6	1582	U	C5-C6-N1	-5.67	119.86	122.70
1	6	1657	U	N3-C2-O2	-5.67	118.23	122.20
1	2	1559	A	O4'-C1'-N9	5.67	112.74	108.20
36	1	1335	C	C5-C6-N1	-5.67	118.16	121.00
36	1	2176	U	N3-C4-O4	-5.67	115.43	119.40
1	6	1109	G	C8-N9-C4	-5.67	104.13	106.40
36	5	1185	C	N3-C2-O2	-5.67	117.93	121.90
36	5	1927	G	C5-C6-O6	5.67	132.00	128.60
36	5	2364	G	C5-C6-O6	5.67	132.00	128.60
36	5	2662	G	C2-N3-C4	5.67	114.73	111.90
36	5	1213	G	C4-C5-N7	5.67	113.07	110.80
36	5	3218	A	C2-N3-C4	-5.67	107.77	110.60
1	2	308	C	N1-C2-O2	-5.67	115.50	118.90
36	1	1428	A	C4-C5-N7	5.67	113.53	110.70
1	6	1739	C	C6-N1-C1'	5.67	127.60	120.80
1	6	1782	A	N9-C4-C5	5.67	108.07	105.80
36	5	264	G	N3-C4-N9	5.67	129.40	126.00
36	5	1128	U	C5-C6-N1	-5.67	119.87	122.70
36	5	2249	G	P-O3'-C3'	5.67	126.50	119.70
36	1	1433	A	N3-C4-C5	-5.67	122.83	126.80
36	5	435	C	C2-N3-C4	-5.67	117.07	119.90
36	5	2550	U	N3-C2-O2	-5.67	118.23	122.20
36	5	2627	C	N3-C4-N4	-5.67	114.03	118.00
1	2	694	U	N1-C2-O2	5.66	126.77	122.80
36	1	1428	A	C6-C5-N7	-5.66	128.34	132.30
1	6	1700	C	N3-C2-O2	-5.66	117.94	121.90
36	5	100	A	N1-C6-N6	5.66	122.00	118.60
36	5	767	U	O4'-C1'-N1	5.66	112.73	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1436	U	C5-C4-O4	-5.66	122.50	125.90
36	5	3331	U	C5-C6-N1	-5.66	119.87	122.70
36	1	1420	C	C6-N1-C2	-5.66	118.03	120.30
36	5	1456	A	C8-N9-C4	5.66	108.06	105.80
36	1	2314	U	C5-C4-O4	-5.66	122.50	125.90
36	1	2712	U	C5-C4-O4	5.66	129.30	125.90
36	1	57	A	C5-C6-N1	-5.66	114.87	117.70
36	5	2930	A	O4'-C1'-N9	5.66	112.73	108.20
36	5	3017	A	N1-C6-N6	5.66	122.00	118.60
36	1	53	G	N9-C4-C5	-5.66	103.14	105.40
36	1	1405	U	N3-C2-O2	5.66	126.16	122.20
36	5	2296	A	C8-N9-C4	-5.66	103.54	105.80
36	5	2655	U	N3-C2-O2	5.66	126.16	122.20
76	q0	103	LEU	CB-CG-CD2	-5.66	101.38	111.00
1	2	1490	C	C6-N1-C2	-5.66	118.04	120.30
36	1	424	G	N3-C2-N2	5.66	123.86	119.90
36	1	815	G	C4-C5-C6	5.66	122.19	118.80
36	1	1332	A	C8-N9-C4	-5.66	103.54	105.80
36	1	2134	G	OP1-P-OP2	-5.66	111.12	119.60
36	1	2375	G	O4'-C1'-N9	5.66	112.72	108.20
36	5	368	G	N9-C4-C5	5.66	107.66	105.40
36	5	2289	U	N1-C2-O2	5.66	126.76	122.80
36	1	426	G	C8-N9-C4	5.65	108.66	106.40
36	5	517	G	N3-C4-C5	-5.65	125.77	128.60
36	5	1381	A	O5'-P-OP1	-5.65	100.61	105.70
36	1	811	U	C4-C5-C6	5.65	123.09	119.70
36	1	940	G	N1-C6-O6	-5.65	116.51	119.90
36	1	1166	G	C8-N9-C4	5.65	108.66	106.40
1	6	1361	U	C2-N1-C1'	5.65	124.48	117.70
36	5	2746	A	C2-N3-C4	-5.65	107.77	110.60
37	7	1	G	N3-C4-N9	5.65	129.39	126.00
18	C6	28	LEU	CA-CB-CG	5.65	128.29	115.30
36	1	95	A	O5'-P-OP1	5.65	117.48	110.70
36	1	498	A	N1-C6-N6	-5.65	115.21	118.60
36	1	655	C	N3-C2-O2	-5.65	117.94	121.90
36	5	3012	A	N1-C6-N6	5.65	121.99	118.60
36	1	2870	C	C5-C4-N4	5.65	124.15	120.20
36	5	3135	U	O5'-P-OP1	-5.65	100.62	105.70
36	1	2355	G	C5-C6-O6	-5.65	125.21	128.60
36	1	2983	C	N3-C2-O2	-5.65	117.95	121.90
1	6	1614	A	O4'-C1'-N9	5.65	112.72	108.20
36	5	824	C	C6-N1-C2	-5.65	118.04	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	903	U	N1-C2-O2	5.65	126.75	122.80
38	4	99	C	C6-N1-C2	5.65	122.56	120.30
36	1	1340	G	N3-C4-N9	5.64	129.39	126.00
36	1	1916	U	C5-C6-N1	-5.64	119.88	122.70
36	1	2192	C	C4-C5-C6	5.64	120.22	117.40
36	5	1846	C	C2-N3-C4	-5.64	117.08	119.90
36	5	3228	C	N1-C2-O2	5.64	122.29	118.90
36	1	1199	C	C6-N1-C2	5.64	122.56	120.30
36	1	3302	U	C5-C6-N1	-5.64	119.88	122.70
36	5	964	G	N7-C8-N9	5.64	115.92	113.10
36	1	439	C	C2-N1-C1'	5.64	125.00	118.80
36	1	3174	A	C5-N7-C8	-5.64	101.08	103.90
36	5	642	U	O5'-P-OP2	-5.64	100.62	105.70
36	5	1547	G	O5'-P-OP1	-5.64	100.62	105.70
36	1	802	C	C6-N1-C2	-5.64	118.05	120.30
36	5	936	A	N9-C4-C5	5.64	108.06	105.80
36	1	91	G	C4-N9-C1'	-5.64	119.17	126.50
36	1	800	G	C4-C5-N7	-5.64	108.55	110.80
36	1	1141	C	N1-C2-N3	5.64	123.15	119.20
36	1	1392	G	C2-N3-C4	5.64	114.72	111.90
36	1	3045	G	C2-N3-C4	5.64	114.72	111.90
36	5	37	U	C6-N1-C2	-5.64	117.62	121.00
36	5	368	G	N1-C6-O6	-5.64	116.52	119.90
36	5	803	C	N1-C2-O2	-5.64	115.52	118.90
36	5	2988	C	N1-C2-O2	5.64	122.28	118.90
1	6	512	A	P-O3'-C3'	5.63	126.46	119.70
1	6	577	G	N7-C8-N9	5.63	115.92	113.10
36	1	815	G	C4-N9-C1'	5.63	133.82	126.50
36	1	1422	G	O5'-P-OP1	-5.63	100.63	105.70
36	1	2851	A	C8-N9-C4	5.63	108.05	105.80
1	2	321	C	N3-C2-O2	-5.63	117.96	121.90
36	1	934	G	N3-C4-N9	5.63	129.38	126.00
36	1	2996	U	N1-C2-O2	5.63	126.74	122.80
1	6	866	G	N7-C8-N9	-5.63	110.28	113.10
36	5	847	A	O5'-P-OP1	-5.63	100.63	105.70
36	5	908	G	N1-C6-O6	5.63	123.28	119.90
36	5	1371	G	C4-C5-N7	-5.63	108.55	110.80
36	5	1489	A	C6-C5-N7	-5.63	128.36	132.30
36	1	1308	A	C4-C5-C6	5.63	119.81	117.00
37	3	33	U	N3-C2-O2	-5.63	118.26	122.20
36	5	641	C	N1-C2-N3	5.63	123.14	119.20
36	5	2343	C	N3-C4-C5	5.63	124.15	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	368	G	N1-C6-O6	5.63	123.28	119.90
36	1	633	C	N1-C2-O2	-5.63	115.52	118.90
36	1	1428	A	C5-N7-C8	-5.63	101.09	103.90
36	1	2694	A	O5'-P-OP2	-5.63	100.63	105.70
36	1	2834	G	N3-C2-N2	5.63	123.84	119.90
1	6	364	G	C6-N1-C2	-5.63	121.72	125.10
36	1	659	G	OP2-P-O3'	5.63	117.58	105.20
36	1	1048	A	N1-C2-N3	-5.63	126.49	129.30
36	1	3344	A	O4'-C1'-N9	5.63	112.70	108.20
36	5	272	G	C5-C6-O6	-5.63	125.22	128.60
36	5	999	G	C5-C6-O6	5.63	131.98	128.60
36	5	3382	U	N3-C2-O2	-5.63	118.26	122.20
1	2	553	G	C5-C6-N1	-5.62	108.69	111.50
36	1	390	G	N1-C6-O6	-5.62	116.53	119.90
36	5	1483	G	O5'-P-OP1	-5.62	100.64	105.70
36	5	3217	C	C2-N1-C1'	-5.62	112.61	118.80
36	1	816	A	C2-N3-C4	5.62	113.41	110.60
1	6	17	C	N1-C2-O2	5.62	122.27	118.90
36	5	1452	A	C6-C5-N7	-5.62	128.36	132.30
36	5	1114	U	OP1-P-O3'	5.62	117.57	105.20
36	5	2426	U	N3-C2-O2	-5.62	118.27	122.20
36	5	2817	A	OP2-P-O3'	5.62	117.57	105.20
36	5	3368	U	N1-C2-O2	-5.62	118.86	122.80
36	1	2209	U	C5-C6-N1	5.62	125.51	122.70
36	1	1834	U	C5-C6-N1	-5.62	119.89	122.70
36	1	2163	C	N3-C4-N4	-5.62	114.07	118.00
36	1	2628	A	N9-C4-C5	5.62	108.05	105.80
1	6	1481	C	N3-C2-O2	-5.62	117.97	121.90
36	5	641	C	C6-N1-C1'	5.62	127.54	120.80
36	5	1101	G	N1-C2-N2	-5.62	111.14	116.20
36	5	1852	G	C8-N9-C4	-5.62	104.15	106.40
1	2	1291	G	N3-C4-N9	-5.62	122.63	126.00
36	1	697	A	O5'-P-OP1	-5.62	100.65	105.70
1	6	630	A	C5-C6-N1	-5.62	114.89	117.70
1	2	42	G	O5'-P-OP1	-5.61	100.65	105.70
36	1	3050	U	N1-C2-O2	5.61	126.73	122.80
36	1	3079	U	C2-N1-C1'	-5.61	110.96	117.70
38	4	103	G	C8-N9-C4	-5.61	104.16	106.40
1	6	355	G	N9-C4-C5	5.61	107.65	105.40
36	5	92	G	N3-C4-N9	5.61	129.37	126.00
36	5	221	A	C2-N3-C4	-5.61	107.79	110.60
36	1	425	G	C8-N9-C4	-5.61	104.16	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2710	C	N1-C2-O2	-5.61	115.53	118.90
38	4	145	U	N1-C2-N3	5.61	118.27	114.90
1	6	609	U	C5-C6-N1	-5.61	119.89	122.70
9	s7	118	LEU	CA-CB-CG	5.61	128.21	115.30
36	5	1060	U	N3-C4-C5	5.61	117.97	114.60
36	5	3208	G	N3-C4-C5	-5.61	125.79	128.60
36	1	782	U	C6-N1-C2	5.61	124.37	121.00
1	6	337	G	O4'-C1'-N9	-5.61	103.71	108.20
36	5	1481	A	P-O3'-C3'	5.61	126.43	119.70
36	1	2306	C	N3-C2-O2	-5.61	117.97	121.90
36	1	2887	A	C8-N9-C4	-5.61	103.56	105.80
36	5	2916	U	N1-C2-O2	-5.61	118.87	122.80
36	1	583	G	N3-C4-N9	-5.61	122.64	126.00
36	1	1138	U	N3-C4-C5	5.61	117.96	114.60
36	1	2334	U	OP2-P-O3'	5.61	117.53	105.20
36	5	2353	G	N1-C6-O6	5.61	123.27	119.90
36	5	2857	C	N3-C4-C5	5.61	124.14	121.90
36	5	3095	U	N1-C2-N3	5.61	118.26	114.90
52	m6	94	ARG	NE-CZ-NH2	5.61	123.10	120.30
36	1	1303	A	N7-C8-N9	-5.61	111.00	113.80
36	1	1487	G	N9-C4-C5	5.61	107.64	105.40
36	1	2946	A	OP1-P-OP2	-5.61	111.19	119.60
36	5	1200	A	OP1-P-O3'	5.61	117.53	105.20
36	1	716	A	C8-N9-C4	5.60	108.04	105.80
36	1	1103	A	P-O3'-C3'	5.60	126.42	119.70
1	6	755	A	O4'-C1'-N9	5.60	112.68	108.20
36	5	2706	G	O5'-P-OP1	5.60	117.42	110.70
1	2	186	C	C6-N1-C2	-5.60	118.06	120.30
36	1	2688	U	C6-N1-C2	5.60	124.36	121.00
1	6	1767	G	N3-C4-C5	5.60	131.40	128.60
52	M6	37	ARG	NE-CZ-NH1	-5.60	117.50	120.30
36	5	2282	U	C5-C6-N1	-5.60	119.90	122.70
38	8	111	A	C4-C5-N7	5.60	113.50	110.70
36	1	949	C	N1-C2-N3	5.60	123.12	119.20
36	1	984	G	N3-C4-C5	-5.60	125.80	128.60
36	1	1458	U	C5-C6-N1	-5.60	119.90	122.70
36	1	1605	A	N7-C8-N9	-5.60	111.00	113.80
36	1	2121	G	C5-C6-N1	5.60	114.30	111.50
36	5	942	U	N1-C2-O2	-5.60	118.88	122.80
38	8	4	C	C2-N3-C4	-5.60	117.10	119.90
36	1	1405	U	C5-C4-O4	-5.60	122.54	125.90
36	1	3265	C	N3-C4-C5	5.60	124.14	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1201	C	O5'-P-OP2	5.60	117.42	110.70
36	1	1008	U	C2-N1-C1'	-5.59	110.99	117.70
36	1	2309	A	O5'-P-OP1	-5.59	100.67	105.70
36	1	2973	G	N1-C6-O6	5.59	123.26	119.90
36	5	2317	A	O5'-P-OP2	-5.59	100.66	105.70
36	1	3229	G	C5-C6-O6	-5.59	125.24	128.60
1	6	194	U	C5-C6-N1	5.59	125.50	122.70
1	6	1596	C	N1-C2-O2	5.59	122.26	118.90
36	1	111	C	C6-N1-C2	5.59	122.54	120.30
36	1	363	G	C4-C5-N7	5.59	113.04	110.80
1	6	187	G	P-O3'-C3'	5.59	126.41	119.70
36	1	639	G	C6-C5-N7	-5.59	127.05	130.40
36	1	2920	U	C2-N3-C4	-5.59	123.65	127.00
36	5	1347	U	N3-C2-O2	5.59	126.11	122.20
36	5	2733	A	N1-C6-N6	5.59	121.95	118.60
36	5	2865	U	N1-C2-O2	5.59	126.71	122.80
1	2	1092	A	N1-C6-N6	5.59	121.95	118.60
36	1	1313	G	N1-C6-O6	5.59	123.25	119.90
36	1	1452	A	N7-C8-N9	-5.59	111.01	113.80
36	1	2964	G	OP1-P-O3'	5.59	117.49	105.20
36	5	349	A	OP2-P-O3'	5.59	117.49	105.20
36	5	3044	G	N3-C4-C5	-5.59	125.81	128.60
36	1	657	A	OP1-P-O3'	5.58	117.49	105.20
36	1	1127	G	O5'-P-OP1	-5.58	100.67	105.70
36	5	873	C	P-O3'-C3'	5.58	126.40	119.70
36	5	1844	C	N1-C2-N3	5.58	123.11	119.20
36	5	3084	C	C6-N1-C2	5.58	122.53	120.30
36	1	678	G	N1-C6-O6	5.58	123.25	119.90
36	1	2867	C	C6-N1-C2	5.58	122.53	120.30
1	6	553	G	N3-C4-N9	-5.58	122.65	126.00
12	c0	88	PRO	N-CA-CB	5.58	110.00	103.30
36	5	1178	G	C4-C5-N7	5.58	113.03	110.80
36	5	2394	G	C5-C6-N1	-5.58	108.71	111.50
36	1	1602	A	C8-N9-C4	5.58	108.03	105.80
36	1	2376	G	C6-C5-N7	-5.58	127.05	130.40
36	1	2632	G	C5-C6-N1	5.58	114.29	111.50
36	5	276	U	C5-C4-O4	-5.58	122.55	125.90
36	5	2157	G	C8-N9-C4	5.58	108.63	106.40
1	2	345	U	N3-C2-O2	-5.58	118.29	122.20
36	1	1127	G	N3-C4-C5	5.58	131.39	128.60
20	c8	116	LEU	CA-CB-CG	5.58	128.13	115.30
36	5	1402	C	C5-C6-N1	-5.58	118.21	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1881	A	OP1-P-OP2	5.58	127.97	119.60
36	1	2802	A	OP2-P-O3'	5.58	117.47	105.20
36	5	1365	G	C5-C6-O6	-5.58	125.25	128.60
36	5	1537	A	C8-N9-C4	5.58	108.03	105.80
37	7	5	G	C6-C5-N7	-5.58	127.05	130.40
36	1	1114	U	C6-N1-C2	5.58	124.34	121.00
36	1	3344	A	C6-C5-N7	-5.58	128.40	132.30
36	1	304	G	N9-C4-C5	5.57	107.63	105.40
36	1	1114	U	N1-C2-N3	-5.57	111.56	114.90
36	1	2356	A	N9-C4-C5	-5.57	103.57	105.80
36	5	960	U	C2-N3-C4	-5.57	123.66	127.00
36	5	2244	A	O5'-P-OP1	5.57	117.39	110.70
1	6	555	A	P-O3'-C3'	5.57	126.39	119.70
36	5	1166	G	C6-C5-N7	-5.57	127.06	130.40
37	7	86	U	N3-C2-O2	-5.57	118.30	122.20
1	2	1633	A	C8-N9-C4	-5.57	103.57	105.80
36	1	655	C	N3-C4-C5	-5.57	119.67	121.90
36	1	1100	U	N1-C2-O2	-5.57	118.90	122.80
36	1	1374	G	N3-C2-N2	5.57	123.80	119.90
36	1	2650	U	N1-C2-N3	5.57	118.24	114.90
1	2	1654	G	N3-C4-C5	-5.57	125.82	128.60
36	1	2162	U	N1-C2-O2	5.57	126.70	122.80
36	5	3288	G	C5-C6-N1	5.57	114.28	111.50
37	7	81	U	N3-C2-O2	-5.57	118.30	122.20
36	5	359	U	O5'-P-OP2	5.57	117.38	110.70
36	5	2187	G	N3-C4-N9	5.57	129.34	126.00
37	7	101	G	C4-C5-N7	5.57	113.03	110.80
1	2	1462	G	C8-N9-C4	5.57	108.63	106.40
36	1	2368	A	N1-C6-N6	-5.57	115.26	118.60
36	1	2987	A	C4-C5-C6	5.57	119.78	117.00
36	1	3361	G	N3-C4-N9	5.57	129.34	126.00
36	5	73	C	N1-C2-O2	-5.57	115.56	118.90
36	5	2601	A	N1-C6-N6	-5.57	115.26	118.60
36	5	2648	G	C5-C6-N1	5.57	114.28	111.50
36	1	53	G	C8-N9-C4	5.56	108.62	106.40
36	1	2867	C	C2-N3-C4	-5.56	117.12	119.90
36	5	1879	A	O5'-P-OP1	5.56	117.38	110.70
37	7	92	A	C8-N9-C4	5.56	108.03	105.80
1	2	1107	G	N1-C6-O6	5.56	123.24	119.90
36	1	800	G	N3-C2-N2	-5.56	116.01	119.90
38	4	53	A	C2-N3-C4	5.56	113.38	110.60
44	L7	216	VAL	N-CA-C	5.56	126.02	111.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	400	A	OP2-P-O3'	5.56	117.44	105.20
36	5	1158	A	C6-C5-N7	-5.56	128.41	132.30
36	1	1898	G	N1-C6-O6	5.56	123.24	119.90
36	1	423	A	N9-C4-C5	5.56	108.02	105.80
36	5	1521	G	C5-C6-O6	5.56	131.94	128.60
36	5	2400	G	C6-C5-N7	-5.56	127.06	130.40
36	1	795	G	O5'-P-OP1	-5.56	100.70	105.70
36	1	922	U	N3-C4-O4	-5.56	115.51	119.40
36	5	2852	C	C5-C4-N4	-5.56	116.31	120.20
36	1	323	A	C8-N9-C4	5.56	108.02	105.80
36	1	2899	C	C2-N3-C4	-5.56	117.12	119.90
36	5	1174	G	C8-N9-C1'	-5.56	119.78	127.00
36	5	2953	U	N3-C4-O4	5.56	123.29	119.40
1	2	394	C	N1-C2-O2	5.55	122.23	118.90
36	1	43	A	N3-C4-C5	5.55	130.69	126.80
36	1	1475	A	N7-C8-N9	-5.55	111.02	113.80
36	5	1419	A	O5'-P-OP1	5.55	117.36	110.70
36	5	3049	A	C6-N1-C2	5.55	121.93	118.60
36	1	2358	A	N7-C8-N9	-5.55	111.02	113.80
36	1	2637	A	O5'-P-OP1	-5.55	100.70	105.70
36	5	1364	C	OP2-P-O3'	5.55	117.42	105.20
36	5	874	U	C2-N1-C1'	-5.55	111.04	117.70
37	7	5	G	N1-C6-O6	5.55	123.23	119.90
1	2	996	U	C5-C6-N1	5.55	125.47	122.70
36	1	1831	U	N1-C2-O2	5.55	126.69	122.80
36	1	3362	A	C2-N3-C4	-5.55	107.83	110.60
1	6	610	G	C4-N9-C1'	5.55	133.71	126.50
38	8	19	C	N3-C4-N4	5.55	121.88	118.00
36	1	859	G	C4-C5-C6	5.55	122.13	118.80
36	1	1377	G	C5-C6-N1	5.55	114.27	111.50
36	1	494	G	N3-C4-N9	5.55	129.33	126.00
36	1	3382	U	C2-N1-C1'	5.55	124.36	117.70
1	6	1109	G	N9-C4-C5	5.55	107.62	105.40
36	5	1548	C	C2-N1-C1'	-5.55	112.70	118.80
36	1	2983	C	C5-C4-N4	5.54	124.08	120.20
36	5	960	U	C6-N1-C1'	-5.54	113.44	121.20
36	5	2311	G	C8-N9-C4	5.54	108.62	106.40
18	C6	40	GLU	C-N-CA	5.54	145.27	122.00
36	1	716	A	C6-C5-N7	-5.54	128.42	132.30
36	1	2522	G	C4-N9-C1'	5.54	133.70	126.50
36	1	2867	C	N3-C4-N4	-5.54	114.12	118.00
41	L4	197	ARG	NE-CZ-NH1	-5.54	117.53	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	347	G	C5-C6-O6	-5.54	125.28	128.60
36	5	1725	C	C5'-C4'-O4'	5.54	115.75	109.10
36	5	2369	G	C8-N9-C1'	-5.54	119.80	127.00
36	5	87	U	C5-C4-O4	5.54	129.22	125.90
36	5	660	A	C8-N9-C4	5.54	108.02	105.80
36	1	2984	C	N3-C4-N4	-5.54	114.12	118.00
1	6	555	A	C2'-C3'-O3'	5.54	122.56	113.70
36	5	98	G	C2-N3-C4	-5.54	109.13	111.90
36	5	977	C	C6-N1-C2	5.54	122.52	120.30
36	5	2114	C	OP1-P-OP2	5.54	127.91	119.60
36	5	2727	A	C8-N9-C4	-5.54	103.58	105.80
36	5	2971	A	C2-N3-C4	5.54	113.37	110.60
36	1	2355	G	N3-C2-N2	-5.54	116.02	119.90
36	5	878	G	C6-C5-N7	-5.54	127.08	130.40
36	1	32	U	N1-C2-N3	5.54	118.22	114.90
36	1	1149	G	N3-C2-N2	-5.54	116.02	119.90
36	1	1313	G	C6-C5-N7	-5.54	127.08	130.40
36	1	3081	C	C5-C6-N1	-5.54	118.23	121.00
36	5	504	A	C8-N9-C4	5.54	108.01	105.80
36	5	2801	A	C8-N9-C4	5.54	108.01	105.80
36	5	3007	U	C2-N3-C4	-5.54	123.68	127.00
36	1	3214	U	C5-C4-O4	5.53	129.22	125.90
38	4	140	G	C8-N9-C4	-5.53	104.19	106.40
1	6	1568	C	P-O3'-C3'	5.53	126.34	119.70
36	5	1181	U	O5'-P-OP1	-5.53	100.72	105.70
36	5	1513	G	N7-C8-N9	5.53	115.87	113.10
36	5	2976	A	C8-N9-C4	5.53	108.01	105.80
36	1	1443	G	C5-N7-C8	-5.53	101.53	104.30
36	1	2723	U	N3-C2-O2	5.53	126.07	122.20
1	6	1656	U	O5'-P-OP1	5.53	117.34	110.70
1	2	720	G	P-O3'-C3'	5.53	126.34	119.70
36	1	1385	C	C6-N1-C2	5.53	122.51	120.30
36	1	2940	A	C4-C5-C6	5.53	119.77	117.00
36	5	426	G	N9-C4-C5	-5.53	103.19	105.40
36	5	1359	C	N3-C4-N4	5.53	121.87	118.00
36	5	1848	G	C5-C6-N1	5.53	114.27	111.50
36	1	633	C	C5-C6-N1	-5.53	118.23	121.00
48	M1	112	LEU	CA-CB-CG	5.53	128.02	115.30
36	5	1902	G	C6-N1-C2	-5.53	121.78	125.10
36	1	36	C	N3-C4-C5	-5.53	119.69	121.90
36	1	1344	G	OP2-P-O3'	5.53	117.36	105.20
36	1	1430	U	C2-N3-C4	-5.53	123.68	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	3	98	C	N1-C2-O2	-5.53	115.58	118.90
36	5	2950	G	C4-C5-N7	5.53	113.01	110.80
36	5	3208	G	C5-C6-O6	-5.53	125.28	128.60
36	5	3392	U	N1-C2-N3	5.53	118.22	114.90
1	2	187	G	P-O3'-C3'	5.53	126.33	119.70
36	1	930	U	O5'-P-OP1	-5.53	100.73	105.70
70	O4	60	ARG	NE-CZ-NH2	-5.53	117.54	120.30
1	6	901	G	C5-C6-O6	-5.53	125.28	128.60
1	6	1058	U	OP1-P-O3'	5.53	117.35	105.20
38	8	127	U	O5'-P-OP1	-5.53	100.73	105.70
36	1	439	C	N3-C2-O2	-5.52	118.03	121.90
36	1	2646	C	C6-N1-C2	5.52	122.51	120.30
36	5	2996	U	N1-C2-O2	5.52	126.67	122.80
36	1	2406	C	N3-C4-C5	5.52	124.11	121.90
36	1	2899	C	C6-N1-C1'	-5.52	114.17	120.80
1	6	891	A	N1-C6-N6	5.52	121.91	118.60
36	1	329	U	C6-N1-C2	-5.52	117.69	121.00
36	1	1412	G	C5-C6-O6	5.52	131.91	128.60
36	5	619	A	N1-C6-N6	-5.52	115.29	118.60
1	2	719	U	C2-N1-C1'	5.52	124.32	117.70
36	5	2093	A	O4'-C1'-N9	5.52	112.61	108.20
36	5	2871	G	N3-C4-N9	5.52	129.31	126.00
36	5	3042	U	N3-C4-O4	-5.52	115.54	119.40
36	5	3215	A	N1-C6-N6	5.52	121.91	118.60
36	5	3218	A	C5-C6-N6	-5.52	119.28	123.70
1	2	25	C	P-O3'-C3'	5.52	126.32	119.70
36	1	3368	U	C6-N1-C1'	5.52	128.93	121.20
1	6	144	U	C6-N1-C2	-5.52	117.69	121.00
36	5	1213	G	N1-C6-O6	5.52	123.21	119.90
36	5	2888	U	N3-C4-O4	5.52	123.26	119.40
36	5	3003	G	OP1-P-OP2	-5.52	111.32	119.60
36	5	3142	A	O5'-P-OP2	5.52	117.32	110.70
36	5	3209	A	N7-C8-N9	5.52	116.56	113.80
36	1	1292	C	C6-N1-C2	5.52	122.51	120.30
36	1	3140	G	C5-C6-O6	-5.52	125.29	128.60
36	1	1300	G	C6-N1-C2	-5.51	121.79	125.10
36	1	1333	C	O5'-P-OP1	5.51	117.32	110.70
36	5	1196	C	N1-C2-O2	5.51	122.21	118.90
36	5	2392	C	C6-N1-C2	5.51	122.51	120.30
37	7	93	C	N3-C4-N4	-5.51	114.14	118.00
1	2	1596	C	C2-N1-C1'	5.51	124.86	118.80
36	1	2351	U	O5'-P-OP2	5.51	117.31	110.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	947	G	O5'-P-OP2	-5.51	100.74	105.70
24	D2	93	LEU	CA-CB-CG	5.51	127.98	115.30
36	1	345	G	N1-C6-O6	-5.51	116.59	119.90
36	1	830	A	N1-C6-N6	5.51	121.91	118.60
36	1	2527	G	N3-C4-N9	-5.51	122.69	126.00
38	4	3	A	C8-N9-C4	5.51	108.00	105.80
38	4	80	A	O5'-P-OP2	-5.51	100.74	105.70
1	6	1537	C	N1-C2-O2	-5.51	115.59	118.90
36	5	2348	A	N1-C2-N3	-5.51	126.54	129.30
36	5	2926	A	C8-N9-C4	-5.51	103.59	105.80
36	5	3343	G	N1-C2-N2	-5.51	111.24	116.20
37	7	89	G	N1-C6-O6	-5.51	116.59	119.90
36	1	2572	C	C6-N1-C2	-5.51	118.10	120.30
36	1	2987	A	C6-C5-N7	-5.51	128.44	132.30
1	6	858	G	C8-N9-C1'	-5.51	119.84	127.00
36	5	1158	A	N9-C4-C5	-5.51	103.60	105.80
36	5	2385	G	C4-C5-N7	5.51	113.00	110.80
36	5	2838	A	N1-C6-N6	5.51	121.91	118.60
1	2	1100	G	N3-C4-C5	-5.51	125.85	128.60
36	1	1329	U	O4'-C1'-N1	5.51	112.61	108.20
36	5	891	G	C2-N3-C4	5.51	114.65	111.90
36	1	105	C	C5-C4-N4	-5.51	116.35	120.20
1	6	696	C	O4'-C1'-N1	5.51	112.61	108.20
1	2	1145	U	N1-C2-O2	-5.50	118.95	122.80
36	1	1919	G	C8-N9-C4	-5.50	104.20	106.40
36	5	41	G	C5-N7-C8	-5.50	101.55	104.30
1	2	1339	C	C6-N1-C2	-5.50	118.10	120.30
36	1	60	A	N1-C6-N6	5.50	121.90	118.60
36	1	1433	A	C5-C6-N1	5.50	120.45	117.70
36	5	2335	G	C2-N3-C4	5.50	114.65	111.90
36	5	2941	A	N9-C4-C5	5.50	108.00	105.80
1	2	704	C	C2-N1-C1'	5.50	124.85	118.80
36	1	397	A	N1-C6-N6	-5.50	115.30	118.60
36	1	1315	U	C5-C6-N1	-5.50	119.95	122.70
36	1	2434	U	N3-C2-O2	-5.50	118.35	122.20
36	1	2611	U	C2-N3-C4	-5.50	123.70	127.00
36	5	358	G	O5'-P-OP1	5.50	117.30	110.70
36	5	2730	G	N1-C6-O6	5.50	123.20	119.90
36	1	2514	U	O5'-P-OP1	-5.50	100.75	105.70
36	5	2819	A	N1-C2-N3	-5.50	126.55	129.30
36	1	120	G	N9-C4-C5	-5.50	103.20	105.40
36	1	885	U	C2-N3-C4	-5.50	123.70	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1160	C	O5'-P-OP1	-5.50	100.75	105.70
36	1	1433	A	C5-C6-N6	-5.50	119.30	123.70
36	5	1083	G	OP1-P-OP2	5.50	127.85	119.60
36	5	1129	A	O5'-P-OP2	-5.50	100.75	105.70
1	6	577	G	C6-C5-N7	-5.50	127.10	130.40
36	5	111	C	C6-N1-C2	5.50	122.50	120.30
36	5	3050	U	N3-C4-O4	-5.50	115.55	119.40
36	1	1164	G	N3-C4-C5	-5.50	125.85	128.60
1	6	1003	A	C8-N9-C4	5.50	108.00	105.80
36	5	420	G	N3-C4-C5	-5.50	125.85	128.60
36	5	3335	A	N1-C6-N6	5.50	121.90	118.60
37	3	28	C	C5-C4-N4	-5.49	116.35	120.20
1	6	378	A	N1-C6-N6	5.49	121.90	118.60
36	5	1190	A	N9-C4-C5	5.49	108.00	105.80
36	5	2895	G	C5-N7-C8	5.49	107.05	104.30
36	1	1346	G	C2-N3-C4	-5.49	109.15	111.90
36	1	573	C	N3-C4-N4	-5.49	114.16	118.00
36	1	644	G	C4-C5-C6	5.49	122.09	118.80
36	1	2241	U	O5'-P-OP1	-5.49	100.76	105.70
36	1	2883	U	O5'-P-OP2	-5.49	100.76	105.70
36	5	982	C	C5-C6-N1	5.49	123.75	121.00
36	1	1411	C	N3-C4-C5	5.49	124.09	121.90
38	4	47	C	C2-N3-C4	-5.49	117.16	119.90
36	5	1160	C	C5-C4-N4	5.49	124.04	120.20
36	1	355	A	C2-N3-C4	-5.49	107.86	110.60
36	1	3054	U	C5-C6-N1	-5.49	119.96	122.70
36	5	973	A	C4-C5-C6	5.49	119.74	117.00
38	8	107	G	N1-C6-O6	5.49	123.19	119.90
24	D2	104	LEU	CA-CB-CG	5.49	127.92	115.30
36	1	2651	G	C6-C5-N7	5.49	133.69	130.40
1	6	1180	C	C6-N1-C2	-5.49	118.11	120.30
36	5	200	C	N3-C4-N4	5.49	121.84	118.00
36	5	366	A	C6-C5-N7	-5.49	128.46	132.30
36	5	1392	G	C8-N9-C4	5.49	108.59	106.40
37	7	102	A	C5-C6-N1	-5.49	114.96	117.70
1	2	992	A	C4-C5-C6	-5.48	114.26	117.00
36	5	1869	C	C6-N1-C2	5.48	122.49	120.30
36	5	2850	G	C5-C6-O6	-5.48	125.31	128.60
36	1	433	A	C2-N3-C4	5.48	113.34	110.60
36	1	1334	U	N3-C4-O4	5.48	123.24	119.40
38	4	140	G	N9-C4-C5	5.48	107.59	105.40
1	6	1127	G	C8-N9-C4	-5.48	104.21	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	42	C	N1-C2-N3	5.48	123.04	119.20
36	1	518	G	O4'-C1'-N9	5.48	112.58	108.20
36	1	714	G	N1-C2-N3	5.48	127.19	123.90
36	1	2725	U	C5-C6-N1	-5.48	119.96	122.70
36	5	989	A	N1-C6-N6	-5.48	115.31	118.60
36	5	1849	C	P-O3'-C3'	5.48	126.28	119.70
36	5	2377	G	N1-C6-O6	-5.48	116.61	119.90
36	5	2549	G	C6-C5-N7	-5.48	127.11	130.40
36	1	1171	G	C5-C6-O6	-5.48	125.31	128.60
1	6	139	C	N1-C2-O2	5.48	122.19	118.90
36	5	1051	U	C2-N3-C4	-5.48	123.71	127.00
36	5	2651	G	C8-N9-C4	5.48	108.59	106.40
1	2	1198	G	C8-N9-C4	-5.48	104.21	106.40
36	1	1125	U	OP2-P-O3'	5.48	117.25	105.20
36	1	1411	C	C2-N3-C4	-5.48	117.16	119.90
36	1	2719	U	N1-C2-N3	5.48	118.19	114.90
1	6	1783	C	C5-C4-N4	5.48	124.03	120.20
36	1	2343	C	N3-C4-C5	5.48	124.09	121.90
1	6	1726	G	OP2-P-O3'	5.48	117.25	105.20
1	2	190	C	O4'-C1'-N1	5.47	112.58	108.20
36	1	363	G	C5-C6-O6	-5.47	125.31	128.60
38	4	109	A	C5-N7-C8	-5.47	101.16	103.90
1	6	1100	G	C8-N9-C1'	-5.47	119.88	127.00
36	5	1213	G	C8-N9-C4	5.47	108.59	106.40
36	5	1897	G	C5-N7-C8	-5.47	101.56	104.30
36	5	2572	C	C6-N1-C1'	-5.47	114.23	120.80
36	5	2817	A	C2-N3-C4	5.47	113.34	110.60
37	7	87	G	C6-C5-N7	-5.47	127.12	130.40
36	1	331	G	C2-N3-C4	5.47	114.64	111.90
36	1	407	A	C5-N7-C8	-5.47	101.16	103.90
36	1	996	A	OP2-P-O3'	5.47	117.24	105.20
36	1	1653	G	C4-C5-N7	-5.47	108.61	110.80
36	1	2776	C	N1-C2-O2	-5.47	115.62	118.90
36	1	3375	A	C5'-C4'-C3'	-5.47	107.24	116.00
36	5	2908	G	N3-C2-N2	-5.47	116.07	119.90
37	7	69	C	C6-N1-C2	5.47	122.49	120.30
36	1	1855	U	N3-C2-O2	-5.47	118.37	122.20
36	5	220	G	O5'-P-OP2	-5.47	100.78	105.70
36	5	675	C	C5-C4-N4	-5.47	116.37	120.20
36	5	812	G	N7-C8-N9	-5.47	110.36	113.10
36	1	1911	A	C6-C5-N7	-5.47	128.47	132.30
1	2	794	U	P-O3'-C3'	5.47	126.26	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	922	U	C2-N3-C4	5.47	130.28	127.00
36	1	1510	G	C4-C5-N7	5.47	112.99	110.80
36	1	2646	C	C2-N3-C4	-5.47	117.17	119.90
1	6	144	U	O4'-C1'-N1	5.47	112.57	108.20
36	5	112	U	O4'-C1'-N1	5.47	112.57	108.20
36	5	1846	C	P-O3'-C3'	-5.47	113.14	119.70
36	5	2158	A	C5-C6-N1	5.47	120.43	117.70
36	5	2643	A	C5-C6-N6	-5.47	119.33	123.70
36	5	2837	A	O5'-P-OP1	-5.47	100.78	105.70
36	5	2931	C	N3-C2-O2	5.47	125.73	121.90
36	1	2787	G	C2-N3-C4	5.46	114.63	111.90
1	6	1288	G	O5'-P-OP2	-5.46	100.78	105.70
36	5	2296	A	C2-N3-C4	5.46	113.33	110.60
36	1	357	A	N7-C8-N9	5.46	116.53	113.80
1	6	402	C	O4'-C1'-N1	5.46	112.57	108.20
36	5	2215	A	C8-N9-C4	5.46	107.98	105.80
36	5	2426	U	N3-C4-O4	-5.46	115.58	119.40
1	2	186	C	C2-N1-C1'	5.46	124.81	118.80
1	6	297	U	C2-N1-C1'	5.46	124.25	117.70
36	5	216	G	N9-C4-C5	-5.46	103.22	105.40
36	5	1180	A	O4'-C1'-N9	-5.46	103.83	108.20
36	5	2830	G	N1-C2-N3	5.46	127.18	123.90
36	5	2988	C	C5-C6-N1	-5.46	118.27	121.00
36	1	2640	A	N9-C4-C5	5.46	107.98	105.80
36	5	2930	A	C6-C5-N7	5.46	136.12	132.30
1	2	992	A	N3-C4-N9	-5.46	123.03	127.40
36	1	1321	G	N9-C4-C5	5.46	107.58	105.40
36	1	2692	A	C5-C6-N6	-5.46	119.33	123.70
1	6	352	A	C8-N9-C4	5.46	107.98	105.80
1	6	1200	G	N3-C4-C5	5.46	131.33	128.60
36	5	1879	A	C8-N9-C4	-5.46	103.62	105.80
1	2	453	U	C6-N1-C1'	-5.46	113.56	121.20
36	1	405	U	N3-C4-C5	5.46	117.87	114.60
36	1	642	U	N1-C2-O2	5.46	126.62	122.80
36	1	1841	A	N1-C6-N6	-5.46	115.33	118.60
1	6	1775	U	C2-N3-C4	-5.46	123.73	127.00
36	5	2818	U	C2-N3-C4	-5.46	123.73	127.00
36	1	1505	C	N1-C2-O2	-5.46	115.63	118.90
1	6	334	G	C5-C6-N1	5.46	114.23	111.50
1	6	1127	G	C4-C5-C6	5.46	122.07	118.80
1	6	1783	C	N3-C2-O2	-5.46	118.08	121.90
36	1	345	G	C6-N1-C2	-5.45	121.83	125.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	s9	149	ARG	NE-CZ-NH1	5.45	123.03	120.30
36	5	281	G	N1-C6-O6	5.45	123.17	119.90
36	5	2283	G	C8-N9-C4	5.45	108.58	106.40
36	5	2323	G	C5-C6-O6	5.45	131.87	128.60
36	5	2411	U	C5-C4-O4	-5.45	122.63	125.90
1	2	1455	G	C5-C6-N1	-5.45	108.77	111.50
36	1	2884	C	C5-C4-N4	-5.45	116.38	120.20
36	5	799	G	C5-C6-N1	5.45	114.23	111.50
36	5	1592	G	N7-C8-N9	5.45	115.83	113.10
38	8	43	A	C8-N9-C4	-5.45	103.62	105.80
36	1	2763	U	N1-C2-O2	-5.45	118.98	122.80
36	1	2891	U	N1-C2-O2	-5.45	118.98	122.80
36	1	993	G	O4'-C1'-N9	5.45	112.56	108.20
36	5	2895	G	N3-C4-C5	-5.45	125.88	128.60
1	2	448	C	N3-C4-C5	-5.45	119.72	121.90
1	2	1777	G	C6-C5-N7	-5.45	127.13	130.40
36	1	343	U	C6-N1-C2	-5.45	117.73	121.00
36	1	498	A	N9-C4-C5	5.45	107.98	105.80
36	1	626	U	O5'-P-OP1	-5.45	100.80	105.70
36	1	1382	G	C8-N9-C4	5.45	108.58	106.40
36	1	1605	A	C8-N9-C4	5.45	107.98	105.80
36	1	2808	A	C6-C5-N7	-5.45	128.49	132.30
36	5	3078	U	C2-N1-C1'	5.45	124.23	117.70
36	5	3080	G	C4-C5-N7	5.45	112.98	110.80
36	1	1389	G	N3-C4-N9	5.44	129.27	126.00
36	1	3034	C	N1-C2-O2	5.44	122.17	118.90
36	5	617	G	C4-C5-N7	5.44	112.98	110.80
36	5	1901	A	C5-C6-N6	-5.44	119.34	123.70
36	5	2401	A	C8-N9-C4	-5.44	103.62	105.80
36	5	3354	U	N3-C2-O2	-5.44	118.39	122.20
36	1	2149	A	O5'-P-OP2	5.44	117.23	110.70
36	1	2281	A	C8-N9-C4	5.44	107.98	105.80
36	1	2918	G	OP1-P-OP2	5.44	127.76	119.60
36	5	1708	C	C6-N1-C2	5.44	122.48	120.30
36	1	1586	G	O5'-P-OP2	-5.44	100.80	105.70
36	1	2414	G	C5-C6-O6	-5.44	125.34	128.60
36	5	941	G	N9-C4-C5	5.44	107.58	105.40
36	5	1512	U	C5-C4-O4	5.44	129.16	125.90
36	5	2207	A	N1-C6-N6	5.44	121.86	118.60
36	5	2290	C	C5-C6-N1	-5.44	118.28	121.00
36	5	2371	G	C2-N3-C4	-5.44	109.18	111.90
36	5	2884	C	C6-N1-C1'	-5.44	114.27	120.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2939	G	C8-N9-C4	5.44	108.58	106.40
36	1	2814	G	C5-C6-O6	-5.44	125.34	128.60
36	1	2884	C	C6-N1-C2	5.44	122.48	120.30
36	5	407	A	C4-C5-C6	5.44	119.72	117.00
36	1	11	A	C8-N9-C4	5.44	107.97	105.80
36	1	2622	C	C6-N1-C2	-5.44	118.12	120.30
61	n5	34	LEU	CA-CB-CG	5.44	127.80	115.30
1	2	1258	U	C2-N1-C1'	5.43	124.22	117.70
15	C3	22	ALA	C-N-CA	5.43	144.82	122.00
36	1	909	G	O5'-P-OP2	5.43	117.22	110.70
36	1	2915	U	C2-N3-C4	-5.43	123.74	127.00
1	6	298	C	OP2-P-O3'	5.43	117.16	105.20
1	6	1039	A	O4'-C1'-N9	5.43	112.55	108.20
36	5	264	G	C5-C6-O6	-5.43	125.34	128.60
36	5	952	A	N9-C4-C5	-5.43	103.63	105.80
36	5	2110	G	N1-C6-O6	5.43	123.16	119.90
36	5	2340	U	N3-C4-C5	5.43	117.86	114.60
36	5	2819	A	N9-C4-C5	5.43	107.97	105.80
36	1	85	A	C2-N3-C4	-5.43	107.88	110.60
36	1	1004	U	N3-C2-O2	-5.43	118.40	122.20
36	1	1142	G	N3-C4-C5	-5.43	125.88	128.60
36	1	2627	C	C2-N3-C4	-5.43	117.18	119.90
36	5	95	A	C8-N9-C4	5.43	107.97	105.80
36	5	1426	C	N3-C4-C5	5.43	124.07	121.90
36	1	1604	G	N3-C4-N9	5.43	129.26	126.00
36	5	307	A	N9-C4-C5	5.43	107.97	105.80
36	5	415	G	N1-C6-O6	-5.43	116.64	119.90
36	5	1046	A	C4-C5-C6	5.43	119.72	117.00
36	5	1112	A	C6-N1-C2	-5.43	115.34	118.60
36	5	3137	C	N3-C4-N4	-5.43	114.20	118.00
1	6	300	A	C8-N9-C4	5.43	107.97	105.80
1	6	1058	U	P-O3'-C3'	5.43	126.22	119.70
36	5	1897	G	C6-C5-N7	-5.43	127.14	130.40
36	5	2618	G	N3-C2-N2	5.43	123.70	119.90
36	1	654	C	C6-N1-C2	5.43	122.47	120.30
36	1	2994	A	N1-C6-N6	5.43	121.86	118.60
36	5	379	C	C6-N1-C2	-5.43	118.13	120.30
36	5	2433	U	C6-N1-C2	5.43	124.26	121.00
36	5	2987	A	C4-C5-C6	5.43	119.71	117.00
1	2	794	U	N1-C2-O2	5.43	126.60	122.80
36	1	55	G	C8-N9-C4	5.43	108.57	106.40
36	1	400	G	O4'-C1'-N9	5.43	112.54	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1389	G	C5-N7-C8	-5.43	101.59	104.30
36	1	1487	G	N3-C4-N9	-5.43	122.74	126.00
36	5	1014	U	C6-N1-C1'	-5.43	113.60	121.20
36	5	2201	G	N3-C2-N2	5.43	123.70	119.90
36	5	2984	C	N3-C4-C5	5.43	124.07	121.90
36	5	3285	C	C5-C6-N1	5.43	123.71	121.00
1	2	1107	G	C6-C5-N7	-5.42	127.14	130.40
26	D4	74	LEU	CA-CB-CG	5.42	127.78	115.30
36	1	630	A	O5'-P-OP2	-5.42	100.82	105.70
36	1	3362	A	C5-C6-N6	-5.42	119.36	123.70
36	5	1390	A	N1-C6-N6	-5.42	115.35	118.60
36	1	351	A	OP1-P-O3'	5.42	117.13	105.20
36	1	1495	U	C6-N1-C1'	5.42	128.79	121.20
1	6	914	G	C4-C5-N7	5.42	112.97	110.80
36	5	1370	G	N3-C4-C5	-5.42	125.89	128.60
36	5	2624	G	C4-N9-C1'	5.42	133.55	126.50
36	5	2655	U	C6-N1-C2	5.42	124.25	121.00
1	2	308	C	C2-N1-C1'	-5.42	112.84	118.80
1	2	758	U	N3-C2-O2	-5.42	118.40	122.20
1	2	1768	G	C4-N9-C1'	-5.42	119.45	126.50
36	1	653	A	C4-C5-N7	5.42	113.41	110.70
36	1	1464	G	N1-C6-O6	-5.42	116.65	119.90
1	6	1274	C	C6-N1-C2	-5.42	118.13	120.30
36	5	2282	U	C6-N1-C2	5.42	124.25	121.00
36	5	2887	A	C4-C5-C6	5.42	119.71	117.00
36	5	834	U	N3-C2-O2	5.42	125.99	122.20
36	1	155	G	C2-N3-C4	5.42	114.61	111.90
38	4	7	U	N1-C2-N3	5.42	118.15	114.90
36	5	92	G	O5'-P-OP2	5.42	117.20	110.70
36	5	2688	U	OP1-P-O3'	5.42	117.12	105.20
36	1	1492	G	N3-C4-C5	-5.42	125.89	128.60
36	1	1498	A	C2-N3-C4	5.42	113.31	110.60
1	6	96	G	C5-C6-O6	5.42	131.85	128.60
36	5	967	A	O5'-P-OP2	-5.42	100.83	105.70
36	5	1440	G	N1-C6-O6	-5.42	116.65	119.90
36	5	2930	A	C8-N9-C1'	5.42	137.45	127.70
37	7	37	G	C6-C5-N7	-5.42	127.15	130.40
36	1	2869	U	OP2-P-O3'	5.42	117.11	105.20
38	4	26	U	N3-C2-O2	-5.42	118.41	122.20
38	4	32	C	N3-C2-O2	5.42	125.69	121.90
36	5	2634	U	N1-C2-N3	5.42	118.15	114.90
36	5	3277	U	C5-C6-N1	5.42	125.41	122.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	499	U	P-O3'-C3'	5.41	126.19	119.70
36	5	1206	G	C4-C5-N7	-5.41	108.63	110.80
36	5	1496	C	C5-C6-N1	5.41	123.71	121.00
36	5	2618	G	C5-C6-O6	-5.41	125.35	128.60
36	5	2989	U	C6-N1-C2	5.41	124.25	121.00
1	2	159	U	C6-N1-C2	5.41	124.25	121.00
36	1	392	G	N1-C6-O6	5.41	123.15	119.90
36	1	2373	A	C5'-C4'-O4'	-5.41	102.61	109.10
36	5	807	A	C4-C5-N7	5.41	113.41	110.70
36	5	3382	U	N1-C2-O2	5.41	126.59	122.80
36	1	2607	G	O5'-P-OP1	5.41	117.19	110.70
38	4	40	A	C5-C6-N6	-5.41	119.37	123.70
36	5	2632	G	C5-C6-O6	5.41	131.85	128.60
52	m6	78	ARG	NE-CZ-NH1	5.41	123.00	120.30
1	2	1370	U	P-O3'-C3'	5.41	126.19	119.70
36	1	87	U	N1-C2-N3	5.41	118.15	114.90
36	1	404	G	C8-N9-C4	5.41	108.56	106.40
36	1	1344	G	C8-N9-C4	5.41	108.56	106.40
36	1	1547	G	C8-N9-C4	5.41	108.56	106.40
38	4	79	A	N7-C8-N9	5.41	116.50	113.80
1	6	372	G	C2-N3-C4	5.41	114.60	111.90
36	5	283	G	N1-C6-O6	5.41	123.14	119.90
40	l3	232	ARG	NE-CZ-NH2	-5.41	117.59	120.30
36	5	1791	C	C2-N1-C1'	5.41	124.75	118.80
37	7	81	U	N1-C2-O2	5.41	126.58	122.80
36	1	999	G	OP2-P-O3'	5.41	117.09	105.20
36	1	1733	G	C6-C5-N7	-5.41	127.16	130.40
37	3	70	U	O5'-P-OP2	-5.41	100.83	105.70
1	6	25	C	C6-N1-C2	-5.41	118.14	120.30
1	6	1796	C	N3-C4-N4	-5.41	114.22	118.00
36	5	37	U	C4-C5-C6	5.41	122.94	119.70
36	5	952	A	C6-C5-N7	-5.41	128.52	132.30
36	1	2965	U	C2-N3-C4	-5.40	123.76	127.00
36	5	2172	A	N1-C6-N6	5.40	121.84	118.60
36	5	2512	C	C5-C6-N1	5.40	123.70	121.00
36	1	361	A	N1-C6-N6	-5.40	115.36	118.60
36	1	1820	U	N3-C2-O2	-5.40	118.42	122.20
36	1	2384	A	C5-C6-N6	-5.40	119.38	123.70
36	1	2385	G	C8-N9-C4	5.40	108.56	106.40
1	6	1137	A	N7-C8-N9	-5.40	111.10	113.80
36	5	725	G	O5'-P-OP2	-5.40	100.84	105.70
36	5	2303	A	C2-N3-C4	-5.40	107.90	110.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3109	G	N9-C4-C5	5.40	107.56	105.40
36	5	3134	A	O5'-P-OP2	-5.40	100.84	105.70
38	4	11	C	C4-C5-C6	-5.40	114.70	117.40
38	4	108	C	N3-C2-O2	5.40	125.68	121.90
1	6	53	G	N3-C4-C5	-5.40	125.90	128.60
1	6	317	C	C2-N3-C4	-5.40	117.20	119.90
36	5	705	A	O5'-P-OP1	5.40	117.18	110.70
36	5	2945	G	C6-C5-N7	-5.40	127.16	130.40
36	5	3141	A	C6-N1-C2	-5.40	115.36	118.60
36	1	1431	G	N3-C4-C5	-5.40	125.90	128.60
38	4	22	U	C6-N1-C2	5.40	124.24	121.00
36	1	683	U	N1-C2-O2	-5.40	119.02	122.80
36	5	3028	G	O5'-P-OP1	-5.40	100.84	105.70
36	5	3098	G	O5'-P-OP2	-5.40	100.84	105.70
1	2	1782	A	C8-N9-C4	-5.40	103.64	105.80
36	1	386	A	N1-C6-N6	5.40	121.84	118.60
36	1	1297	C	C6-N1-C2	5.40	122.46	120.30
36	5	993	G	O4'-C1'-N9	5.40	112.52	108.20
36	5	3374	U	N3-C4-C5	5.40	117.84	114.60
36	1	960	U	C2-N1-C1'	-5.39	111.23	117.70
36	1	2859	U	N1-C2-N3	5.39	118.14	114.90
1	6	355	G	C8-N9-C4	-5.39	104.24	106.40
36	5	61	A	N1-C2-N3	5.39	132.00	129.30
36	5	2396	G	N3-C4-C5	-5.39	125.90	128.60
36	5	2661	G	N3-C4-C5	-5.39	125.90	128.60
77	q1	12	ARG	NE-CZ-NH1	-5.39	117.60	120.30
36	1	496	C	O5'-P-OP2	5.39	117.17	110.70
36	1	3111	U	N3-C4-O4	-5.39	115.62	119.40
36	5	414	U	N3-C4-O4	5.39	123.17	119.40
36	5	2350	C	N1-C2-N3	5.39	122.97	119.20
36	5	2878	G	OP1-P-OP2	-5.39	111.51	119.60
64	n8	28	HIS	N-CA-C	5.39	125.56	111.00
36	1	2585	G	N3-C4-C5	-5.39	125.91	128.60
36	1	2651	G	C5-C6-O6	5.39	131.84	128.60
36	1	2865	U	N3-C4-C5	5.39	117.83	114.60
1	2	581	U	C5-C6-N1	5.39	125.39	122.70
36	1	2378	C	C2-N3-C4	-5.39	117.20	119.90
6	s4	38	LEU	CA-CB-CG	5.39	127.70	115.30
36	5	1834	U	OP1-P-O3'	5.39	117.06	105.20
36	5	3133	C	C6-N1-C2	-5.39	118.14	120.30
37	7	1	G	C8-N9-C1'	-5.39	119.99	127.00
40	l3	20	LYS	CD-CE-NZ	-5.39	99.30	111.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2206	G	C5-C6-O6	-5.39	125.37	128.60
1	6	346	G	C8-N9-C4	-5.39	104.25	106.40
36	5	2643	A	N9-C4-C5	-5.39	103.64	105.80
1	2	1014	G	C8-N9-C4	-5.39	104.25	106.40
1	2	1432	U	C6-N1-C2	5.39	124.23	121.00
36	1	788	C	C2-N1-C1'	-5.39	112.87	118.80
36	1	2344	U	C5-C6-N1	-5.39	120.01	122.70
37	3	104	A	N1-C6-N6	-5.39	115.37	118.60
36	5	1841	A	C4-C5-C6	5.39	119.69	117.00
36	5	3214	U	N1-C2-N3	5.39	118.13	114.90
36	1	912	G	N3-C2-N2	-5.38	116.13	119.90
36	1	1112	A	C5-C6-N6	-5.38	119.39	123.70
36	1	1200	A	OP1-P-O3'	5.38	117.04	105.20
36	1	1906	G	OP1-P-O3'	5.38	117.05	105.20
36	1	2278	C	C4-C5-C6	-5.38	114.71	117.40
36	5	1304	A	C6-C5-N7	-5.38	128.53	132.30
36	5	2416	U	N1-C2-N3	5.38	118.13	114.90
36	1	346	C	C5-C6-N1	-5.38	118.31	121.00
36	1	1124	U	N3-C4-C5	5.38	117.83	114.60
36	1	1172	G	N1-C6-O6	5.38	123.13	119.90
36	1	2385	G	N3-C4-N9	-5.38	122.77	126.00
36	5	65	A	O5'-P-OP2	-5.38	100.86	105.70
36	5	2128	C	C2-N3-C4	-5.38	117.21	119.90
36	5	2396	G	N9-C4-C5	5.38	107.55	105.40
36	5	3259	U	C5'-C4'-O4'	-5.38	102.64	109.10
1	2	16	G	C6-C5-N7	-5.38	127.17	130.40
36	1	660	A	N1-C2-N3	-5.38	126.61	129.30
36	1	1160	C	N1-C2-O2	5.38	122.13	118.90
36	1	1294	A	N9-C4-C5	5.38	107.95	105.80
36	1	1300	G	N3-C4-C5	-5.38	125.91	128.60
1	6	1698	G	P-O3'-C3'	5.38	126.16	119.70
36	5	414	U	C5-C4-O4	-5.38	122.67	125.90
36	5	2721	A	O5'-P-OP1	-5.38	100.86	105.70
36	5	3354	U	C6-N1-C2	-5.38	117.77	121.00
36	1	936	A	P-O3'-C3'	5.38	126.15	119.70
36	1	1184	A	OP2-P-O3'	5.38	117.03	105.20
36	5	436	A	C4-N9-C1'	5.38	135.98	126.30
36	5	1430	U	C6-N1-C2	5.38	124.23	121.00
36	5	1846	C	C5-C6-N1	-5.38	118.31	121.00
36	5	2843	U	C2-N1-C1'	5.38	124.15	117.70
36	1	2773	C	O5'-P-OP2	-5.38	100.86	105.70
1	6	782	U	C2-N1-C1'	5.38	124.15	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2606	G	OP1-P-O3'	5.38	117.02	105.20
36	5	2898	G	N7-C8-N9	-5.38	110.41	113.10
36	5	3148	U	C5-C4-O4	-5.38	122.67	125.90
1	2	1773	C	N3-C4-N4	5.37	121.76	118.00
36	1	1655	G	N3-C4-N9	5.37	129.22	126.00
36	1	1834	U	N1-C2-N3	5.37	118.12	114.90
36	1	2646	C	C5-C4-N4	-5.37	116.44	120.20
36	1	2793	G	OP1-P-OP2	-5.37	111.54	119.60
1	6	455	C	N3-C4-N4	5.37	121.76	118.00
1	6	628	G	O5'-P-OP2	-5.37	100.86	105.70
29	d7	29	ARG	NE-CZ-NH1	5.37	122.99	120.30
36	5	853	G	C5-C6-O6	-5.37	125.38	128.60
36	5	2416	U	C6-N1-C2	-5.37	117.78	121.00
36	1	1081	U	C2-N1-C1'	5.37	124.14	117.70
36	1	1345	G	OP2-P-O3'	5.37	117.02	105.20
62	N6	126	LEU	CA-CB-CG	5.37	127.65	115.30
1	6	557	G	N1-C6-O6	-5.37	116.68	119.90
1	6	1675	C	C5-C4-N4	-5.37	116.44	120.20
36	5	1014	U	C2-N1-C1'	5.37	124.15	117.70
36	5	1166	G	C2-N3-C4	-5.37	109.21	111.90
36	5	2362	C	C5-C6-N1	5.37	123.69	121.00
36	1	2800	G	C6-N1-C2	-5.37	121.88	125.10
36	1	3174	A	N7-C8-N9	5.37	116.48	113.80
1	2	1274	C	C4-C5-C6	5.37	120.08	117.40
36	1	2169	G	C2-N3-C4	5.37	114.58	111.90
1	6	549	G	N3-C4-N9	-5.37	122.78	126.00
36	1	907	G	O4'-C1'-N9	5.37	112.49	108.20
1	6	1503	A	O4'-C1'-N9	5.37	112.49	108.20
36	5	3333	G	O5'-P-OP2	-5.37	100.87	105.70
36	1	1376	C	C4-C5-C6	5.37	120.08	117.40
36	5	264	G	N9-C4-C5	-5.37	103.25	105.40
36	5	1146	C	C5-C4-N4	-5.37	116.44	120.20
36	5	1927	G	N1-C6-O6	-5.37	116.68	119.90
36	5	2310	U	N3-C2-O2	-5.37	118.44	122.20
36	1	1004	U	N1-C2-O2	5.36	126.56	122.80
36	5	48	A	O5'-P-OP1	-5.36	100.87	105.70
36	5	436	A	C6-C5-N7	-5.36	128.54	132.30
36	5	1310	G	N1-C6-O6	-5.36	116.68	119.90
37	3	28	C	N3-C4-N4	5.36	121.75	118.00
36	1	361	A	O5'-P-OP1	-5.36	100.88	105.70
36	1	2764	C	C5-C6-N1	5.36	123.68	121.00
36	5	2412	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(°)
37	7	66	A	O5'-P-OP1	-5.36	100.88	105.70
36	1	2325	G	N1-C6-O6	-5.36	116.69	119.90
37	7	47	C	N1-C2-O2	-5.36	115.69	118.90
36	1	1427	U	N1-C2-O2	5.36	126.55	122.80
36	1	2349	U	N3-C4-O4	-5.36	115.65	119.40
37	3	88	G	N3-C4-N9	5.36	129.21	126.00
38	4	32	C	C2-N1-C1'	-5.36	112.91	118.80
38	4	125	U	C6-N1-C1'	-5.36	113.70	121.20
36	5	88	A	C6-N1-C2	5.36	121.81	118.60
36	5	3304	U	N1-C2-O2	-5.36	119.05	122.80
36	5	3369	G	C2-N3-C4	5.36	114.58	111.90
36	1	55	G	N7-C8-N9	-5.36	110.42	113.10
36	1	1115	G	C4-N9-C1'	5.36	133.46	126.50
36	1	2135	U	N3-C4-C5	5.36	117.81	114.60
38	4	90	U	N3-C2-O2	5.36	125.95	122.20
1	6	352	A	N1-C2-N3	-5.36	126.62	129.30
36	5	3146	G	N3-C2-N2	5.36	123.65	119.90
38	8	63	G	N1-C6-O6	-5.36	116.69	119.90
36	1	653	A	N9-C4-C5	-5.35	103.66	105.80
36	1	917	A	C5-C6-N6	5.35	127.98	123.70
36	1	3109	G	O5'-P-OP2	5.35	117.12	110.70
1	6	1614	A	C6-C5-N7	-5.35	128.55	132.30
36	5	1901	A	N3-C4-N9	5.35	131.68	127.40
36	1	1168	U	O5'-P-OP1	5.35	117.12	110.70
36	1	1741	A	C6-C5-N7	-5.35	128.55	132.30
36	1	2383	C	C2-N3-C4	-5.35	117.22	119.90
36	1	2526	C	C2-N1-C1'	5.35	124.69	118.80
36	5	929	A	C8-N9-C4	5.35	107.94	105.80
36	5	2309	A	O5'-P-OP1	-5.35	100.88	105.70
36	5	2653	C	C6-N1-C2	-5.35	118.16	120.30
38	8	103	G	N3-C4-N9	5.35	129.21	126.00
36	1	282	G	N7-C8-N9	5.35	115.78	113.10
36	1	908	G	C8-N9-C4	5.35	108.54	106.40
38	4	52	A	C8-N9-C4	-5.35	103.66	105.80
1	6	1773	C	C5-C6-N1	5.35	123.68	121.00
36	5	998	A	OP1-P-OP2	-5.35	111.57	119.60
36	5	2326	A	OP2-P-O3'	5.35	116.97	105.20
36	5	2373	A	OP1-P-O3'	5.35	116.97	105.20
36	1	200	C	C6-N1-C1'	-5.35	114.38	120.80
36	1	1490	A	N1-C6-N6	5.35	121.81	118.60
36	1	2541	U	P-O3'-C3'	5.35	126.12	119.70
36	5	2211	U	C5-C4-O4	5.35	129.11	125.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	876	A	N1-C6-N6	5.35	121.81	118.60
36	1	1832	C	N3-C2-O2	-5.35	118.16	121.90
36	5	994	G	N3-C4-C5	-5.35	125.93	128.60
36	5	2942	C	C5-C4-N4	-5.35	116.46	120.20
45	18	69	LEU	CA-CB-CG	5.35	127.60	115.30
1	2	858	G	N1-C6-O6	-5.35	116.69	119.90
36	1	859	G	N3-C2-N2	5.35	123.64	119.90
1	6	1640	C	C2-N1-C1'	5.35	124.68	118.80
36	5	2685	C	N1-C2-O2	-5.35	115.69	118.90
36	1	785	G	N1-C6-O6	-5.34	116.69	119.90
36	1	1506	A	N1-C6-N6	-5.34	115.39	118.60
36	5	322	U	C5-C4-O4	-5.34	122.69	125.90
36	5	518	G	O4'-C1'-N9	5.34	112.48	108.20
36	5	1343	A	O5'-P-OP2	-5.34	100.89	105.70
36	5	2392	C	C5-C6-N1	-5.34	118.33	121.00
36	5	2395	G	C5-C6-O6	-5.34	125.39	128.60
1	2	590	C	C2-N1-C1'	5.34	124.68	118.80
36	1	2885	C	N3-C4-C5	5.34	124.04	121.90
36	1	2984	C	C6-N1-C2	-5.34	118.16	120.30
36	1	3057	U	C6-N1-C2	-5.34	117.80	121.00
36	5	813	G	C5-C6-O6	-5.34	125.39	128.60
36	5	915	A	OP1-P-OP2	5.34	127.61	119.60
36	5	1097	G	N9-C4-C5	-5.34	103.26	105.40
75	o9	45	ARG	NE-CZ-NH1	5.34	122.97	120.30
1	2	730	G	C4-N9-C1'	5.34	133.44	126.50
36	1	968	G	C8-N9-C4	-5.34	104.26	106.40
36	5	667	C	C6-N1-C2	5.34	122.44	120.30
36	5	1113	G	C5-C6-N1	-5.34	108.83	111.50
1	2	1024	U	OP2-P-O3'	5.34	116.94	105.20
1	6	1151	A	N1-C6-N6	-5.34	115.40	118.60
36	1	3140	G	N3-C4-N9	5.34	129.20	126.00
1	6	787	G	N3-C4-C5	-5.34	125.93	128.60
21	c9	57	ARG	NE-CZ-NH1	5.34	122.97	120.30
36	5	534	U	N3-C2-O2	-5.34	118.47	122.20
36	5	2372	A	OP1-P-O3'	5.34	116.94	105.20
36	5	2877	G	C8-N9-C4	-5.34	104.27	106.40
36	5	3089	C	C6-N1-C2	-5.34	118.17	120.30
1	6	1012	U	C5-C4-O4	-5.33	122.70	125.90
36	5	3048	A	OP1-P-OP2	5.33	127.60	119.60
36	1	1439	U	OP1-P-O3'	5.33	116.93	105.20
36	1	2320	A	C2-N3-C4	-5.33	107.93	110.60
36	1	2407	C	N1-C2-O2	-5.33	115.70	118.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2977	G	C8-N9-C4	5.33	108.53	106.40
36	1	3036	G	N3-C4-N9	5.33	129.20	126.00
1	6	115	G	C5-C6-O6	-5.33	125.40	128.60
36	5	1110	U	N3-C4-O4	-5.33	115.67	119.40
36	5	2874	G	N9-C4-C5	5.33	107.53	105.40
37	3	95	A	N9-C4-C5	-5.33	103.67	105.80
38	4	151	C	C4-C5-C6	5.33	120.07	117.40
36	5	1521	G	N1-C6-O6	-5.33	116.70	119.90
36	1	275	U	N3-C2-O2	5.33	125.93	122.20
1	6	1014	G	C5-C6-O6	5.33	131.80	128.60
36	1	743	C	C6-N1-C2	5.33	122.43	120.30
36	1	2853	A	C8-N9-C4	-5.33	103.67	105.80
1	6	1777	G	C5-C6-O6	-5.33	125.40	128.60
33	e1	100	LEU	CA-CB-CG	5.33	127.55	115.30
36	5	205	C	N3-C4-C5	5.33	124.03	121.90
36	5	954	U	C2-N3-C4	5.33	130.20	127.00
36	5	2434	U	C5-C6-N1	-5.33	120.03	122.70
36	5	2889	C	N1-C2-N3	5.33	122.93	119.20
36	5	3147	G	N1-C2-N3	5.33	127.10	123.90
36	1	2861	U	N3-C2-O2	-5.33	118.47	122.20
36	1	911	C	N3-C4-C5	5.33	124.03	121.90
36	1	2372	A	O5'-P-OP2	-5.33	100.91	105.70
36	1	2863	G	N1-C6-O6	-5.33	116.70	119.90
36	1	2911	A	C4-C5-C6	-5.33	114.34	117.00
36	5	779	G	C6-C5-N7	-5.33	127.20	130.40
36	5	1177	G	C2-N3-C4	5.33	114.56	111.90
39	l2	190	ARG	NE-CZ-NH2	5.33	122.96	120.30
36	1	1466	G	N3-C4-N9	5.32	129.19	126.00
36	1	2993	G	N3-C4-N9	5.32	129.19	126.00
1	6	577	G	C5-N7-C8	-5.32	101.64	104.30
1	6	581	U	C2-N1-C1'	-5.32	111.31	117.70
36	5	326	U	N3-C2-O2	5.32	125.93	122.20
1	6	678	A	P-O3'-C3'	5.32	126.09	119.70
36	5	219	A	C5-C6-N1	-5.32	115.04	117.70
36	5	1115	G	N1-C6-O6	-5.32	116.71	119.90
36	5	3197	G	C8-N9-C4	-5.32	104.27	106.40
36	5	2134	G	N1-C6-O6	-5.32	116.71	119.90
1	6	826	U	C5-C6-N1	5.32	125.36	122.70
36	5	220	G	N3-C2-N2	5.32	123.62	119.90
1	2	89	G	C8-N9-C4	5.32	108.53	106.40
36	1	34	A	C5-N7-C8	-5.32	101.24	103.90
36	1	2345	A	O5'-P-OP1	5.32	117.08	110.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2859	U	N3-C4-C5	-5.32	111.41	114.60
36	1	2929	C	C6-N1-C2	-5.32	118.17	120.30
1	6	1535	U	N1-C2-O2	5.32	126.52	122.80
36	5	2772	C	OP2-P-O3'	5.32	116.90	105.20
36	5	3343	G	N3-C2-N2	5.32	123.62	119.90
1	2	1572	G	N9-C4-C5	-5.32	103.27	105.40
36	1	382	U	N1-C2-O2	-5.32	119.08	122.80
36	1	633	C	C6-N1-C2	5.32	122.43	120.30
36	1	1483	G	C5-C6-N1	5.32	114.16	111.50
36	1	2836	C	N3-C2-O2	-5.32	118.18	121.90
38	4	151	C	N3-C4-C5	-5.32	119.77	121.90
36	5	1116	G	N9-C4-C5	5.32	107.53	105.40
36	5	1332	A	C6-N1-C2	-5.32	115.41	118.60
36	1	970	A	N7-C8-N9	5.31	116.46	113.80
1	6	1697	G	C2-N3-C4	5.31	114.56	111.90
36	5	1285	G	C8-N9-C4	5.31	108.53	106.40
36	5	2352	A	O5'-P-OP2	-5.31	100.92	105.70
1	2	942	G	N3-C4-C5	-5.31	125.94	128.60
36	1	1127	G	N1-C2-N2	5.31	120.98	116.20
36	1	2394	G	N1-C6-O6	-5.31	116.71	119.90
36	5	288	C	N3-C4-C5	5.31	124.03	121.90
36	5	1376	C	C2-N3-C4	-5.31	117.24	119.90
36	5	2135	U	C5-C4-O4	-5.31	122.71	125.90
40	13	26	ARG	NE-CZ-NH1	-5.31	117.64	120.30
36	5	1886	A	N1-C2-N3	-5.31	126.64	129.30
36	1	2524	A	O4'-C1'-N9	5.31	112.45	108.20
36	5	911	C	C2-N3-C4	-5.31	117.25	119.90
36	5	934	G	N3-C4-C5	-5.31	125.94	128.60
36	5	2351	U	N3-C4-O4	-5.31	115.68	119.40
36	1	1421	G	C5-N7-C8	5.31	106.95	104.30
36	1	1447	G	C6-N1-C2	-5.31	121.92	125.10
38	4	73	U	N3-C4-O4	-5.31	115.69	119.40
36	5	1075	A	O4'-C1'-N9	-5.31	103.95	108.20
36	5	2113	A	O4'-C1'-N9	-5.31	103.95	108.20
37	7	44	C	OP2-P-O3'	5.31	116.88	105.20
55	m9	105	LEU	CA-CB-CG	5.31	127.51	115.30
36	1	1206	G	O5'-P-OP2	-5.31	100.92	105.70
36	1	2846	U	N1-C2-O2	5.31	126.51	122.80
36	1	3181	C	C5-C6-N1	-5.31	118.35	121.00
36	5	1506	A	N9-C4-C5	5.31	107.92	105.80
1	2	610	G	C8-N9-C1'	-5.30	120.10	127.00
36	1	908	G	N3-C2-N2	-5.30	116.19	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1377	G	C4-C5-N7	5.30	112.92	110.80
36	1	2623	G	N3-C2-N2	5.30	123.61	119.90
36	1	2714	G	C4-C5-C6	-5.30	115.62	118.80
36	1	2960	C	N3-C4-C5	5.30	124.02	121.90
1	6	1537	C	C6-N1-C1'	5.30	127.17	120.80
36	5	426	G	OP2-P-O3'	5.30	116.87	105.20
36	5	867	G	N9-C4-C5	-5.30	103.28	105.40
36	5	1056	U	OP2-P-O3'	5.30	116.87	105.20
36	5	1112	A	C8-N9-C1'	-5.30	118.15	127.70
36	5	1238	C	P-O3'-C3'	5.30	126.06	119.70
36	5	2758	A	O4'-C1'-N9	5.30	112.44	108.20
36	5	2909	U	N1-C2-O2	-5.30	119.09	122.80
1	2	1765	A	O5'-P-OP1	-5.30	100.93	105.70
36	1	993	G	O5'-P-OP2	-5.30	100.93	105.70
36	5	1430	U	C5-C6-N1	-5.30	120.05	122.70
36	5	2228	A	C8-N9-C4	-5.30	103.68	105.80
1	2	1600	A	N1-C6-N6	5.30	121.78	118.60
36	1	1110	U	OP2-P-O3'	5.30	116.86	105.20
36	1	1152	G	OP1-P-OP2	5.30	127.55	119.60
36	1	1294	A	N1-C6-N6	-5.30	115.42	118.60
36	1	1415	U	C5-C6-N1	-5.30	120.05	122.70
36	1	1481	A	C8-N9-C1'	-5.30	118.16	127.70
36	1	2953	U	N1-C2-N3	5.30	118.08	114.90
36	1	3139	A	C5'-C4'-O4'	-5.30	102.74	109.10
36	5	2743	A	C8-N9-C4	5.30	107.92	105.80
36	1	421	G	C2-N3-C4	5.30	114.55	111.90
36	1	1447	G	C5-C6-O6	-5.30	125.42	128.60
36	1	2381	G	N1-C6-O6	-5.30	116.72	119.90
36	1	2589	G	C2-N3-C4	-5.30	109.25	111.90
38	4	20	U	C2-N1-C1'	-5.30	111.34	117.70
38	4	95	G	C4-N9-C1'	-5.30	119.61	126.50
1	6	331	A	C2-N3-C4	-5.30	107.95	110.60
36	5	1170	A	N3-C4-N9	5.30	131.64	127.40
36	5	2852	C	C2-N3-C4	-5.30	117.25	119.90
37	7	85	G	OP1-P-OP2	-5.30	111.65	119.60
40	l3	232	ARG	NE-CZ-NH1	5.30	122.95	120.30
36	5	2905	U	N1-C2-N3	5.30	118.08	114.90
36	1	53	G	O5'-P-OP2	-5.30	100.93	105.70
36	1	2618	G	N1-C6-O6	-5.30	116.72	119.90
36	1	2930	A	N9-C4-C5	5.30	107.92	105.80
1	6	1777	G	C4-C5-N7	5.30	112.92	110.80
36	5	1908	A	C2-N3-C4	5.30	113.25	110.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2842	U	C5-C4-O4	-5.30	122.72	125.90
36	5	2870	C	N3-C4-N4	-5.30	114.29	118.00
36	5	2994	A	N1-C6-N6	5.30	121.78	118.60
36	5	3309	G	C8-N9-C4	-5.30	104.28	106.40
36	1	2646	C	C5-C6-N1	-5.29	118.35	121.00
1	6	139	C	C6-N1-C2	-5.29	118.18	120.30
36	5	810	A	N1-C2-N3	-5.29	126.65	129.30
36	5	1710	C	N3-C4-C5	5.29	124.02	121.90
1	2	1448	G	O5'-P-OP1	-5.29	100.94	105.70
36	1	410	U	N1-C2-N3	5.29	118.08	114.90
36	1	609	G	N3-C4-C5	-5.29	125.95	128.60
36	1	776	U	N3-C4-C5	-5.29	111.42	114.60
36	1	949	C	C2-N3-C4	-5.29	117.25	119.90
36	1	2630	C	N3-C4-N4	5.29	121.70	118.00
38	4	15	G	N7-C8-N9	-5.29	110.45	113.10
36	5	637	C	C2-N3-C4	-5.29	117.25	119.90
36	5	1805	C	N3-C4-C5	5.29	124.02	121.90
36	5	2332	A	C8-N9-C4	5.29	107.92	105.80
36	1	644	G	C6-C5-N7	-5.29	127.22	130.40
1	6	1767	G	C8-N9-C4	5.29	108.52	106.40
36	5	636	C	C5-C4-N4	-5.29	116.50	120.20
36	5	2928	C	C4-C5-C6	5.29	120.05	117.40
1	2	543	C	N3-C2-O2	-5.29	118.20	121.90
36	5	1910	A	N1-C2-N3	-5.29	126.66	129.30
1	2	1600	A	N9-C4-C5	-5.29	103.69	105.80
36	5	379	C	N3-C4-C5	-5.29	119.78	121.90
36	5	683	U	O5'-P-OP2	-5.29	100.94	105.70
36	5	2187	G	C6-C5-N7	-5.29	127.23	130.40
36	5	2985	C	C2-N3-C4	5.29	122.55	119.90
36	1	2281	A	C6-N1-C2	5.29	121.77	118.60
36	5	1492	G	N3-C2-N2	5.29	123.60	119.90
1	2	1217	A	O4'-C1'-N9	-5.29	103.97	108.20
36	5	2349	U	N3-C2-O2	-5.29	118.50	122.20
36	5	2351	U	N1-C2-O2	5.29	126.50	122.80
36	5	3049	A	N1-C2-N3	-5.29	126.66	129.30
1	2	629	U	C6-N1-C2	5.28	124.17	121.00
36	1	1741	A	C2-N3-C4	-5.28	107.96	110.60
39	L2	6	ARG	NE-CZ-NH1	-5.28	117.66	120.30
36	5	1201	C	C6-N1-C2	-5.28	118.19	120.30
36	1	843	A	C2-N3-C4	-5.28	107.96	110.60
1	6	337	G	N7-C8-N9	5.28	115.74	113.10
36	5	1124	U	C5-C6-N1	5.28	125.34	122.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	992	A	C5-N7-C8	-5.28	101.26	103.90
36	1	38	U	C5-C6-N1	5.28	125.34	122.70
36	1	1507	G	N1-C6-O6	5.28	123.07	119.90
36	1	2603	G	N3-C2-N2	5.28	123.60	119.90
36	1	1442	U	C5-C4-O4	-5.28	122.73	125.90
36	1	2620	G	C5-C6-O6	-5.28	125.43	128.60
36	1	3303	G	N9-C4-C5	-5.28	103.29	105.40
36	5	1592	G	C4-C5-C6	5.28	121.97	118.80
36	5	3092	C	C6-N1-C2	5.28	122.41	120.30
1	2	527	A	C8-N9-C4	-5.28	103.69	105.80
36	1	641	C	N3-C4-C5	5.28	124.01	121.90
36	1	954	U	C6-N1-C2	-5.28	117.83	121.00
36	1	2371	G	O5'-P-OP2	-5.28	100.95	105.70
1	6	338	C	C6-N1-C2	-5.28	118.19	120.30
53	M7	131	ARG	NE-CZ-NH1	-5.28	117.66	120.30
36	5	1605	A	O4'-C1'-N9	5.28	112.42	108.20
36	5	1846	C	N3-C4-C5	5.28	124.01	121.90
36	5	1906	G	OP1-P-O3'	5.28	116.81	105.20
36	5	2231	C	C6-N1-C1'	-5.28	114.47	120.80
36	5	281	G	C5-C6-O6	-5.27	125.44	128.60
36	5	419	G	N3-C4-C5	-5.27	125.96	128.60
36	1	220	G	N1-C6-O6	5.27	123.06	119.90
36	1	1175	C	N3-C4-C5	5.27	124.01	121.90
36	5	1899	G	C8-N9-C4	-5.27	104.29	106.40
36	5	2401	A	O5'-P-OP2	-5.27	100.96	105.70
36	1	2309	A	OP1-P-OP2	5.27	127.51	119.60
36	1	2827	U	N3-C2-O2	-5.27	118.51	122.20
36	1	3145	C	OP2-P-O3'	5.27	116.80	105.20
38	4	37	A	N7-C8-N9	5.27	116.44	113.80
1	6	355	G	N3-C2-N2	-5.27	116.21	119.90
36	5	1794	G	O4'-C1'-N9	-5.27	103.98	108.20
36	5	2176	U	C2-N1-C1'	5.27	124.03	117.70
37	7	75	G	N1-C6-O6	5.27	123.06	119.90
36	1	1906	G	C4-N9-C1'	5.27	133.35	126.50
1	6	434	G	N7-C8-N9	-5.27	110.47	113.10
1	6	541	A	P-O3'-C3'	-5.27	113.38	119.70
36	5	687	U	C6-N1-C2	5.27	124.16	121.00
36	5	1198	C	C2-N3-C4	-5.27	117.27	119.90
36	5	2991	A	N9-C4-C5	5.27	107.91	105.80
36	5	3101	G	N3-C2-N2	5.27	123.59	119.90
36	5	3186	A	N1-C6-N6	-5.27	115.44	118.60
36	1	1368	U	C2-N3-C4	-5.27	123.84	127.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2927	C	P-O3'-C3'	5.27	126.02	119.70
36	5	107	A	N1-C6-N6	-5.27	115.44	118.60
36	5	1420	C	C2-N1-C1'	-5.27	113.00	118.80
36	5	2407	C	N3-C4-N4	5.27	121.69	118.00
36	5	2978	U	N1-C2-O2	5.27	126.49	122.80
36	1	2169	G	C5-C6-N1	5.26	114.13	111.50
36	1	2417	U	C5-C6-N1	-5.26	120.07	122.70
1	6	52	U	N3-C2-O2	-5.26	118.52	122.20
36	5	889	U	C4-C5-C6	-5.26	116.54	119.70
36	5	1085	A	C2-N3-C4	-5.26	107.97	110.60
36	5	1307	G	C2'-C3'-O3'	5.26	122.12	113.70
36	5	1506	A	C8-N9-C4	-5.26	103.69	105.80
36	5	2181	C	N3-C4-C5	5.26	124.01	121.90
36	5	2684	C	C6-N1-C2	-5.26	118.19	120.30
36	1	1858	A	C4-C5-N7	5.26	113.33	110.70
36	5	88	A	N3-C4-C5	5.26	130.48	126.80
36	5	861	C	N3-C2-O2	5.26	125.58	121.90
36	5	2137	U	OP1-P-OP2	-5.26	111.71	119.60
36	5	3328	G	N1-C6-O6	-5.26	116.74	119.90
36	1	267	G	C2-N3-C4	-5.26	109.27	111.90
36	1	364	G	C5-C6-N1	5.26	114.13	111.50
36	1	782	U	C4-C5-C6	-5.26	116.54	119.70
1	6	1415	U	N1-C2-O2	5.26	126.48	122.80
36	5	2602	G	O5'-P-OP2	-5.26	100.97	105.70
36	5	2880	U	C6-N1-C2	-5.26	117.84	121.00
36	5	3334	U	N1-C2-N3	5.26	118.06	114.90
36	1	876	A	C5-C6-N6	-5.26	119.50	123.70
36	1	3044	G	N1-C2-N2	-5.26	111.47	116.20
36	5	660	A	C5-N7-C8	5.26	106.53	103.90
36	5	1723	A	C5-C6-N1	5.26	120.33	117.70
36	5	2420	C	N3-C4-C5	5.26	124.00	121.90
36	1	648	C	C6-N1-C2	-5.25	118.20	120.30
36	1	651	G	N1-C2-N2	-5.25	111.47	116.20
1	6	123	G	C8-N9-C4	-5.25	104.30	106.40
36	5	516	A	N9-C4-C5	-5.25	103.70	105.80
36	1	583	G	N3-C2-N2	-5.25	116.22	119.90
36	1	1513	G	C6-N1-C2	-5.25	121.95	125.10
36	1	2215	A	N7-C8-N9	-5.25	111.17	113.80
36	5	2127	U	N1-C2-N3	5.25	118.05	114.90
36	5	2202	C	C5-C4-N4	-5.25	116.52	120.20
36	5	2314	U	C5-C4-O4	-5.25	122.75	125.90
1	2	1481	C	C6-N1-C2	-5.25	118.20	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	83	U	C5-C4-O4	-5.25	122.75	125.90
36	1	1791	C	N1-C2-O2	-5.25	115.75	118.90
47	M0	152	LEU	CA-CB-CG	-5.25	103.22	115.30
36	5	2849	C	N3-C2-O2	5.25	125.58	121.90
36	1	958	C	N3-C2-O2	-5.25	118.22	121.90
36	1	1911	A	C4-C5-N7	5.25	113.33	110.70
1	6	1463	C	C6-N1-C2	5.25	122.40	120.30
36	5	2371	G	N3-C2-N2	5.25	123.58	119.90
36	1	1834	U	C4-C5-C6	5.25	122.85	119.70
36	1	1837	U	N1-C2-O2	-5.25	119.13	122.80
36	1	2762	A	N7-C8-N9	-5.25	111.18	113.80
36	1	3044	G	N3-C2-N2	5.25	123.57	119.90
38	4	34	U	C5-C4-O4	-5.25	122.75	125.90
1	6	1114	G	O4'-C1'-N9	5.25	112.40	108.20
36	5	584	G	N9-C4-C5	5.25	107.50	105.40
36	5	1387	G	N3-C2-N2	-5.25	116.23	119.90
36	5	2115	G	O5'-P-OP1	-5.25	100.98	105.70
1	2	1082	C	C2-N1-C1'	5.25	124.57	118.80
36	1	963	G	C5-C6-O6	-5.25	125.45	128.60
36	1	2827	U	C6-N1-C1'	5.25	128.55	121.20
36	1	327	A	C8-N9-C4	5.25	107.90	105.80
57	n1	106	LEU	CA-CB-CG	-5.25	103.24	115.30
36	1	896	A	C5-C6-N1	5.24	120.32	117.70
36	1	1407	A	C8-N9-C4	5.24	107.90	105.80
36	1	1527	C	O5'-P-OP1	-5.24	100.98	105.70
36	1	2273	G	C8-N9-C4	5.24	108.50	106.40
36	1	2306	C	N1-C2-O2	5.24	122.05	118.90
36	1	2632	G	O4'-C1'-N9	5.24	112.39	108.20
1	6	610	G	C8-N9-C4	5.24	108.50	106.40
1	6	1458	G	C4-N9-C1'	5.24	133.32	126.50
36	5	330	G	O5'-P-OP2	-5.24	100.98	105.70
36	5	1096	U	N1-C2-O2	-5.24	119.13	122.80
36	5	3392	U	N3-C4-O4	-5.24	115.73	119.40
1	2	323	A	O5'-P-OP2	-5.24	100.98	105.70
36	1	372	A	O5'-P-OP2	-5.24	100.98	105.70
36	1	677	A	O5'-P-OP2	5.24	116.99	110.70
36	1	1304	A	OP1-P-OP2	5.24	127.46	119.60
1	6	600	U	N3-C4-O4	5.24	123.07	119.40
36	5	2728	G	N9-C4-C5	5.24	107.50	105.40
36	1	2915	U	N1-C2-N3	5.24	118.04	114.90
38	4	107	G	OP1-P-O3'	5.24	116.73	105.20
1	6	512	A	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	5	2273	G	C8-N9-C1'	5.24	133.81	127.00
36	5	2996	U	N1-C2-N3	-5.24	111.76	114.90
36	5	3202	G	C5-C6-O6	5.24	131.75	128.60
36	1	95	A	OP1-P-OP2	-5.24	111.74	119.60
36	1	1025	A	C8-N9-C4	-5.24	103.70	105.80
36	1	2853	A	N9-C4-C5	5.24	107.90	105.80
36	1	3269	U	O5'-P-OP2	-5.24	100.98	105.70
36	5	1879	A	C3'-C2'-C1'	5.24	105.69	101.50
36	5	1882	G	O5'-P-OP2	5.24	116.99	110.70
36	5	2957	G	N9-C4-C5	-5.24	103.31	105.40
36	5	2296	A	C5-N7-C8	-5.24	101.28	103.90
36	1	908	G	N1-C2-N2	5.24	120.91	116.20
1	6	597	G	O5'-P-OP2	-5.24	100.99	105.70
1	6	616	G	N9-C4-C5	5.24	107.50	105.40
36	5	2148	U	C2-N1-C1'	-5.24	111.42	117.70
36	5	2411	U	OP1-P-O3'	5.24	116.72	105.20
1	2	610	G	C5-C6-O6	-5.23	125.46	128.60
36	1	1269	U	N1-C2-O2	5.23	126.46	122.80
36	1	2338	C	OP1-P-O3'	5.23	116.72	105.20
1	6	390	G	C5-C6-O6	-5.23	125.46	128.60
36	5	63	A	N9-C4-C5	-5.23	103.71	105.80
36	5	1178	G	N1-C6-O6	5.23	123.04	119.90
1	2	569	C	O5'-P-OP1	-5.23	100.99	105.70
36	1	212	G	O4'-C1'-N9	5.23	112.39	108.20
36	1	1197	A	C4-C5-N7	5.23	113.32	110.70
36	1	2380	U	N3-C4-C5	5.23	117.74	114.60
36	5	1365	G	O4'-C1'-N9	-5.23	104.01	108.20
36	5	2150	G	C4-C5-N7	-5.23	108.71	110.80
36	5	2945	G	N1-C6-O6	5.23	123.04	119.90
1	6	1389	C	C6-N1-C1'	-5.23	114.52	120.80
36	5	1166	G	N1-C6-O6	5.23	123.04	119.90
36	5	2941	A	C4-C5-N7	-5.23	108.08	110.70
36	5	3096	C	C5-C4-N4	-5.23	116.54	120.20
36	5	3306	U	N3-C2-O2	5.23	125.86	122.20
54	m8	105	ARG	NE-CZ-NH2	5.23	122.92	120.30
1	2	294	C	C6-N1-C2	5.23	122.39	120.30
36	1	730	C	C6-N1-C2	5.23	122.39	120.30
37	3	52	G	N1-C6-O6	-5.23	116.76	119.90
42	15	110	LEU	CA-CB-CG	5.23	127.33	115.30
1	2	1280	C	C6-N1-C2	-5.23	118.21	120.30
36	1	1164	G	C8-N9-C4	-5.23	104.31	106.40
36	1	3044	G	N3-C4-N9	5.23	129.14	126.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	M8	111	ARG	NE-CZ-NH1	-5.23	117.69	120.30
1	6	336	G	C8-N9-C4	5.23	108.49	106.40
36	5	2975	U	N1-C2-O2	5.23	126.46	122.80
36	5	3060	C	C5-C4-N4	-5.23	116.54	120.20
1	2	694	U	N3-C2-O2	-5.23	118.54	122.20
36	1	803	C	C4-C5-C6	5.23	120.01	117.40
36	5	195	U	O5'-P-OP2	-5.23	101.00	105.70
1	6	1600	A	C4-C5-N7	5.22	113.31	110.70
36	5	1660	C	C6-N1-C2	-5.22	118.21	120.30
36	5	1668	G	N3-C4-C5	-5.22	125.99	128.60
36	5	2848	G	C6-C5-N7	-5.22	127.27	130.40
36	5	665	A	N9-C4-C5	-5.22	103.71	105.80
36	5	892	U	N3-C4-C5	5.22	117.73	114.60
1	2	501	U	P-O3'-C3'	5.22	125.96	119.70
36	1	695	C	N3-C4-C5	5.22	123.99	121.90
36	1	702	C	N3-C4-C5	5.22	123.99	121.90
36	1	1517	G	O5'-P-OP1	5.22	116.96	110.70
36	5	771	A	C8-N9-C4	5.22	107.89	105.80
1	2	1132	A	N1-C6-N6	-5.22	115.47	118.60
36	5	424	G	N9-C4-C5	-5.22	103.31	105.40
36	5	1157	G	OP2-P-O3'	5.22	116.68	105.20
36	5	2287	C	N1-C2-O2	-5.22	115.77	118.90
36	5	2648	G	C2-N3-C4	5.22	114.51	111.90
36	5	2704	A	OP2-P-O3'	5.22	116.68	105.20
36	5	3208	G	C6-C5-N7	-5.22	127.27	130.40
36	1	812	G	O5'-P-OP2	-5.22	101.00	105.70
36	1	1711	C	C6-N1-C2	-5.22	118.21	120.30
36	1	2850	G	C8-N9-C1'	-5.22	120.22	127.00
36	1	2857	C	C5-C4-N4	-5.22	116.55	120.20
36	1	3362	A	C4-C5-C6	5.22	119.61	117.00
1	6	858	G	C5-N7-C8	-5.22	101.69	104.30
1	6	937	C	N1-C2-O2	-5.22	115.77	118.90
1	6	1119	G	C8-N9-C4	-5.22	104.31	106.40
36	5	187	A	OP1-P-OP2	-5.22	111.78	119.60
36	5	948	C	C2-N3-C4	-5.22	117.29	119.90
36	5	960	U	N3-C2-O2	-5.22	118.55	122.20
36	5	1738	C	N3-C2-O2	5.22	125.55	121.90
36	5	2273	G	C6-C5-N7	5.22	133.53	130.40
36	1	818	C	C6-N1-C2	-5.21	118.21	120.30
36	1	961	C	C2-N3-C4	-5.21	117.29	119.90
36	1	1864	A	N9-C4-C5	-5.21	103.71	105.80
36	5	412	G	OP1-P-OP2	-5.21	111.78	119.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1487	G	N3-C4-C5	-5.21	125.99	128.60
36	5	2364	G	N9-C4-C5	5.21	107.49	105.40
36	5	2398	A	C8-N9-C4	5.21	107.89	105.80
1	2	90	C	C6-N1-C2	-5.21	118.22	120.30
1	2	934	C	C6-N1-C1'	-5.21	114.54	120.80
36	1	346	C	N1-C2-O2	-5.21	115.77	118.90
38	4	61	A	C5-C6-N1	5.21	120.31	117.70
36	5	2767	U	N3-C4-O4	-5.21	115.75	119.40
1	2	704	C	N3-C2-O2	-5.21	118.25	121.90
36	1	86	G	O5'-P-OP2	-5.21	101.01	105.70
41	L4	98	ARG	NE-CZ-NH2	5.21	122.91	120.30
36	5	716	A	O4'-C1'-N9	-5.21	104.03	108.20
36	5	1329	U	C5-C6-N1	-5.21	120.09	122.70
1	2	1112	G	N1-C6-O6	5.21	123.03	119.90
36	1	2349	U	C2-N3-C4	-5.21	123.87	127.00
36	5	2640	A	C2-N3-C4	-5.21	108.00	110.60
59	n3	42	SER	N-CA-C	5.21	125.07	111.00
37	3	88	G	C5-N7-C8	5.21	106.90	104.30
38	4	60	U	N1-C2-N3	5.21	118.03	114.90
36	5	726	G	N1-C6-O6	5.21	123.03	119.90
36	5	824	C	N3-C2-O2	-5.21	118.25	121.90
36	5	1864	A	C5-C6-N6	-5.21	119.53	123.70
36	5	2280	A	OP2-P-O3'	5.21	116.66	105.20
1	2	1551	U	C5-C4-O4	-5.21	122.78	125.90
36	1	547	G	P-O3'-C3'	5.21	125.95	119.70
36	1	1338	C	N1-C2-O2	-5.21	115.78	118.90
36	1	1365	G	C4-N9-C1'	5.21	133.27	126.50
36	1	3041	U	C6-N1-C2	-5.21	117.88	121.00
36	5	923	C	C6-N1-C2	5.21	122.38	120.30
36	5	2965	U	N3-C2-O2	5.21	125.84	122.20
36	1	92	G	C5-C6-N1	5.21	114.10	111.50
36	5	963	G	C8-N9-C4	5.21	108.48	106.40
36	1	2942	C	N3-C4-C5	5.20	123.98	121.90
1	6	416	A	C2-N3-C4	-5.20	108.00	110.60
1	6	1493	A	C8-N9-C4	-5.20	103.72	105.80
37	7	42	A	C5-C6-N6	-5.20	119.54	123.70
38	8	105	A	C8-N9-C4	5.20	107.88	105.80
36	1	1166	G	N1-C6-O6	5.20	123.02	119.90
1	6	1491	U	P-O3'-C3'	5.20	125.94	119.70
36	5	1313	G	C5-C6-N1	-5.20	108.90	111.50
36	5	2950	G	C5-C6-O6	-5.20	125.48	128.60
36	5	3374	U	N3-C4-O4	-5.20	115.76	119.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	m0	48	LEU	CA-CB-CG	5.20	127.27	115.30
36	1	3303	G	C8-N9-C4	5.20	108.48	106.40
1	6	1777	G	O5'-P-OP1	-5.20	101.02	105.70
36	5	421	G	OP1-P-O3'	5.20	116.64	105.20
36	5	652	G	N3-C4-C5	-5.20	126.00	128.60
36	5	679	U	C5-C4-O4	5.20	129.02	125.90
36	5	812	G	C5-C6-O6	5.20	131.72	128.60
36	5	2630	C	N3-C2-O2	5.20	125.54	121.90
67	o1	90	PHE	CB-CA-C	-5.20	100.00	110.40
1	2	16	G	N3-C2-N2	5.20	123.54	119.90
36	1	950	G	N3-C2-N2	5.20	123.54	119.90
36	1	1466	G	N9-C4-C5	-5.20	103.32	105.40
36	1	2643	A	N1-C6-N6	5.20	121.72	118.60
1	6	337	G	C4-C5-C6	5.20	121.92	118.80
36	1	1406	A	C5-C6-N6	-5.20	119.54	123.70
36	5	875	G	N3-C4-C5	-5.20	126.00	128.60
36	5	2987	A	C8-N9-C4	5.20	107.88	105.80
1	2	192	U	C5-C6-N1	5.20	125.30	122.70
36	1	1137	C	C5-C4-N4	-5.20	116.56	120.20
36	5	1731	A	N1-C2-N3	5.20	131.90	129.30
36	5	2824	G	C5-C6-O6	-5.20	125.48	128.60
36	5	2939	G	N7-C8-N9	-5.20	110.50	113.10
36	1	896	A	C2-N3-C4	5.19	113.20	110.60
36	1	1366	A	C8-N9-C4	-5.19	103.72	105.80
1	6	1000	C	C2-N1-C1'	5.19	124.51	118.80
36	5	1716	U	P-O3'-C3'	5.19	125.93	119.70
36	5	3055	U	N3-C4-O4	5.19	123.04	119.40
36	1	909	G	C5-C6-O6	-5.19	125.48	128.60
36	1	1114	U	N1-C2-O2	5.19	126.44	122.80
36	1	1507	G	C5-C6-O6	-5.19	125.48	128.60
1	6	1663	G	O5'-P-OP1	5.19	116.93	110.70
36	5	2898	G	O4'-C1'-N9	-5.19	104.05	108.20
36	5	3287	U	N1-C2-O2	5.19	126.43	122.80
36	1	1433	A	O4'-C1'-N9	-5.19	104.05	108.20
59	N3	48	ARG	NE-CZ-NH1	5.19	122.89	120.30
64	N8	116	GLY	N-CA-C	5.19	126.08	113.10
36	5	87	U	N3-C4-O4	-5.19	115.77	119.40
36	5	2849	C	N3-C4-N4	5.19	121.63	118.00
36	5	2947	G	C5-C6-O6	-5.19	125.48	128.60
36	1	418	A	C2-N3-C4	-5.19	108.00	110.60
1	2	192	U	N3-C2-O2	-5.19	118.57	122.20
36	1	102	C	N1-C2-O2	-5.19	115.79	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	639	G	N9-C4-C5	-5.19	103.33	105.40
36	5	1075	A	C8-N9-C4	5.19	107.88	105.80
36	5	1297	C	N1-C2-O2	-5.19	115.79	118.90
36	1	898	U	N1-C2-O2	5.19	126.43	122.80
36	1	1780	G	N1-C6-O6	5.19	123.01	119.90
36	1	2731	U	OP2-P-O3'	5.19	116.61	105.20
36	5	567	G	N1-C6-O6	5.19	123.01	119.90
36	5	3050	U	N3-C2-O2	-5.19	118.57	122.20
36	1	2642	A	N3-C4-C5	5.18	130.43	126.80
36	1	2728	G	C5-C6-N1	5.18	114.09	111.50
37	3	95	A	C6-C5-N7	-5.18	128.67	132.30
1	6	433	C	OP2-P-O3'	5.18	116.61	105.20
36	5	956	U	C5-C6-N1	-5.18	120.11	122.70
36	5	2825	C	C6-N1-C2	5.18	122.37	120.30
36	5	3335	A	C5-C6-N6	-5.18	119.55	123.70
36	1	33	G	C6-C5-N7	-5.18	127.29	130.40
36	1	2101	C	P-O3'-C3'	5.18	125.92	119.70
36	1	2819	A	C2-N3-C4	5.18	113.19	110.60
36	1	3227	A	OP2-P-O3'	5.18	116.60	105.20
36	5	45	A	C5-C6-N6	-5.18	119.56	123.70
36	5	1347	U	N1-C2-O2	-5.18	119.17	122.80
36	5	2661	G	N3-C4-N9	5.18	129.11	126.00
37	7	105	C	C5-C4-N4	5.18	123.83	120.20
1	2	469	C	N1-C2-O2	-5.18	115.79	118.90
1	2	620	A	C8-N9-C4	-5.18	103.73	105.80
36	1	2360	C	C6-N1-C2	-5.18	118.23	120.30
38	4	60	U	C2-N3-C4	-5.18	123.89	127.00
36	1	942	U	N3-C4-O4	5.18	123.03	119.40
45	L8	189	LEU	CA-CB-CG	5.18	127.21	115.30
64	N8	29	PRO	C-N-CA	-5.18	111.42	122.30
36	5	1000	C	O4'-C1'-N1	5.18	112.34	108.20
36	5	1371	G	N1-C6-O6	-5.18	116.79	119.90
36	5	1491	A	N1-C6-N6	5.18	121.71	118.60
36	5	2300	G	N3-C2-N2	5.18	123.53	119.90
1	2	499	U	C3'-C2'-C1'	5.18	105.64	101.50
38	4	26	U	N3-C4-O4	-5.18	115.78	119.40
71	O5	36	LEU	CA-CB-CG	5.18	127.21	115.30
36	1	632	G	C5-C6-O6	5.18	131.71	128.60
36	1	2797	C	C5-C4-N4	5.18	123.82	120.20
1	6	1022	C	C2-N3-C4	-5.18	117.31	119.90
1	6	1354	G	C4-N9-C1'	5.18	133.23	126.50
36	5	953	G	N9-C4-C5	5.18	107.47	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2550	U	N3-C2-O2	-5.17	118.58	122.20
36	5	204	A	N1-C6-N6	-5.17	115.50	118.60
36	5	590	G	C4-C5-N7	5.17	112.87	110.80
36	5	936	A	C8-N9-C4	-5.17	103.73	105.80
36	5	1152	G	C8-N9-C4	-5.17	104.33	106.40
36	5	2408	U	O5'-P-OP2	-5.17	101.04	105.70
36	5	2541	U	C2-N1-C1'	5.17	123.91	117.70
36	5	3386	G	O5'-P-OP2	-5.17	101.04	105.70
52	m6	84	LEU	CB-CG-CD1	-5.17	102.20	111.00
1	2	1615	C	N3-C2-O2	-5.17	118.28	121.90
36	1	720	A	C2-N3-C4	5.17	113.19	110.60
36	1	2623	G	N1-C2-N2	-5.17	111.54	116.20
1	6	1607	G	C4-C5-N7	-5.17	108.73	110.80
36	5	662	U	C5-C4-O4	5.17	129.00	125.90
36	5	1406	A	C5-C6-N6	-5.17	119.56	123.70
36	5	1449	A	C4-C5-C6	5.17	119.59	117.00
36	1	2401	A	C4-N9-C1'	-5.17	116.99	126.30
36	1	2723	U	C6-N1-C2	5.17	124.10	121.00
1	6	1332	C	N1-C2-O2	5.17	122.00	118.90
36	5	43	A	N1-C6-N6	5.17	121.70	118.60
36	5	950	G	N1-C6-O6	-5.17	116.80	119.90
36	5	1518	U	N3-C2-O2	-5.17	118.58	122.20
36	5	2388	U	OP2-P-O3'	5.17	116.58	105.20
36	5	2398	A	C5-C6-N6	5.17	127.84	123.70
36	5	2411	U	C5-C6-N1	-5.17	120.11	122.70
36	5	2938	G	C5-C6-N1	5.17	114.09	111.50
37	7	120	C	C6-N1-C2	5.17	122.37	120.30
36	1	1796	G	C8-N9-C4	-5.17	104.33	106.40
36	1	1815	U	P-O3'-C3'	5.17	125.90	119.70
36	1	2343	C	C2-N3-C4	-5.17	117.31	119.90
36	1	2637	A	N1-C6-N6	5.17	121.70	118.60
36	5	2633	U	OP1-P-O3'	5.17	116.58	105.20
36	1	360	G	C8-N9-C4	5.17	108.47	106.40
36	1	907	G	N3-C4-N9	5.17	129.10	126.00
36	1	1442	U	O5'-P-OP2	5.17	116.90	110.70
36	5	1822	C	C6-N1-C2	5.17	122.37	120.30
36	5	2345	A	C6-C5-N7	-5.17	128.68	132.30
36	5	2362	C	C4-C5-C6	-5.17	114.81	117.40
54	m8	127	LEU	CA-CB-CG	5.17	127.19	115.30
36	1	637	C	N3-C4-C5	5.17	123.97	121.90
36	1	833	G	N1-C6-O6	-5.17	116.80	119.90
36	1	889	U	C6-N1-C2	5.17	124.10	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1112	A	C4-C5-N7	5.17	113.28	110.70
36	1	1520	G	N7-C8-N9	-5.17	110.52	113.10
36	1	2349	U	N3-C2-O2	-5.17	118.58	122.20
37	3	85	G	OP2-P-O3'	5.17	116.57	105.20
1	6	1648	A	N1-C6-N6	5.17	121.70	118.60
36	5	248	U	C2-N1-C1'	5.17	123.90	117.70
36	5	1203	A	N1-C6-N6	5.17	121.70	118.60
36	5	2207	A	C6-C5-N7	-5.17	128.68	132.30
36	1	1415	U	N3-C2-O2	-5.17	118.58	122.20
1	6	635	A	OP2-P-O3'	5.17	116.56	105.20
1	2	1102	G	C2-N3-C4	5.16	114.48	111.90
1	2	1431	C	C6-N1-C2	5.16	122.36	120.30
36	1	45	A	N7-C8-N9	-5.16	111.22	113.80
36	1	636	C	O4'-C1'-N1	-5.16	104.07	108.20
36	1	809	G	N9-C4-C5	-5.16	103.33	105.40
36	1	810	A	OP1-P-OP2	-5.16	111.86	119.60
36	1	911	C	O5'-P-OP2	5.16	116.89	110.70
36	1	2923	U	O5'-P-OP2	5.16	116.90	110.70
38	4	97	A	N9-C4-C5	5.16	107.86	105.80
36	5	634	C	N3-C4-C5	5.16	123.97	121.90
36	5	994	G	N1-C2-N2	-5.16	111.55	116.20
37	7	37	G	C4-C5-N7	5.16	112.86	110.80
36	1	847	A	N1-C6-N6	5.16	121.70	118.60
36	1	1781	C	N1-C2-O2	-5.16	115.80	118.90
1	6	356	G	N1-C6-O6	-5.16	116.80	119.90
1	2	1747	G	C8-N9-C4	5.16	108.46	106.40
36	1	31	C	C2-N3-C4	-5.16	117.32	119.90
36	1	37	U	C5-C6-N1	-5.16	120.12	122.70
36	1	878	G	OP1-P-O3'	5.16	116.55	105.20
36	5	97	U	N1-C2-N3	-5.16	111.80	114.90
36	5	437	G	N1-C2-N3	5.16	127.00	123.90
36	5	2623	G	C8-N9-C4	5.16	108.46	106.40
36	5	2937	G	C5-C6-O6	-5.16	125.50	128.60
1	2	779	U	O4'-C1'-N1	5.16	112.33	108.20
36	1	878	G	C5-C6-N1	-5.16	108.92	111.50
36	1	1199	C	C2-N3-C4	-5.16	117.32	119.90
36	1	2374	C	C6-N1-C2	-5.16	118.24	120.30
36	5	796	U	C4-C5-C6	5.16	122.80	119.70
36	5	1435	A	C5-C6-N6	-5.16	119.57	123.70
36	5	2836	C	OP2-P-O3'	5.16	116.55	105.20
36	5	1665	C	N3-C4-C5	5.16	123.96	121.90
36	1	1909	A	N1-C2-N3	5.16	131.88	129.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	392	G	O4'-C1'-N9	5.16	112.33	108.20
36	5	200	C	N3-C4-C5	-5.16	119.84	121.90
36	5	665	A	C5-C6-N6	-5.16	119.58	123.70
36	5	2595	A	C5-C6-N6	5.16	127.82	123.70
36	5	2754	G	N3-C4-N9	5.16	129.09	126.00
25	D3	111	GLY	N-CA-C	-5.15	100.21	113.10
36	1	2787	G	N3-C4-C5	-5.15	126.02	128.60
36	5	216	G	C4-C5-N7	5.15	112.86	110.80
36	5	2140	U	N1-C2-N3	5.15	117.99	114.90
36	5	2941	A	N1-C6-N6	-5.15	115.51	118.60
36	5	3035	A	C8-N9-C4	5.15	107.86	105.80
36	1	66	A	O5'-P-OP2	5.15	116.88	110.70
36	1	2629	U	C5-C6-N1	5.15	125.28	122.70
36	1	2983	C	O4'-C1'-N1	5.15	112.32	108.20
36	1	3213	A	N1-C6-N6	5.15	121.69	118.60
37	3	75	G	N9-C4-C5	5.15	107.46	105.40
36	5	800	G	N3-C4-N9	5.15	129.09	126.00
36	5	963	G	N7-C8-N9	-5.15	110.52	113.10
36	1	1177	G	C5-C6-O6	-5.15	125.51	128.60
36	1	2130	G	C5-C6-O6	5.15	131.69	128.60
36	1	3151	U	O5'-P-OP2	-5.15	101.06	105.70
1	6	765	G	C8-N9-C4	5.15	108.46	106.40
1	6	956	C	C6-N1-C2	5.15	122.36	120.30
1	6	1478	G	C8-N9-C1'	-5.15	120.31	127.00
1	6	1675	C	N3-C4-N4	5.15	121.61	118.00
36	5	1116	G	OP2-P-O3'	5.15	116.53	105.20
36	5	1190	A	C4-N9-C1'	5.15	135.57	126.30
1	2	829	A	P-O3'-C3'	5.15	125.88	119.70
35	SM	134	ASP	CB-CG-OD2	5.15	122.93	118.30
36	1	359	U	C4-C5-C6	5.15	122.79	119.70
36	1	1403	C	C5-C4-N4	-5.15	116.60	120.20
38	4	61	A	N9-C4-C5	-5.15	103.74	105.80
36	5	2908	G	C8-N9-C4	-5.15	104.34	106.40
36	5	3136	G	N1-C2-N2	-5.15	111.57	116.20
36	1	1047	A	C8-N9-C4	5.15	107.86	105.80
36	1	2916	U	OP1-P-O3'	5.15	116.53	105.20
1	6	1473	U	C2-N1-C1'	5.15	123.88	117.70
36	5	1056	U	C5-C6-N1	5.15	125.27	122.70
36	5	1178	G	C6-C5-N7	-5.15	127.31	130.40
36	5	2889	C	N3-C4-C5	5.15	123.96	121.90
36	5	2944	U	N3-C4-C5	5.15	117.69	114.60
1	6	687	G	N3-C4-N9	-5.15	122.91	126.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	35	A	N1-C6-N6	5.15	121.69	118.60
36	5	520	U	N1-C2-O2	-5.15	119.20	122.80
36	1	2915	U	N3-C4-O4	5.14	123.00	119.40
36	5	368	G	C4-C5-N7	-5.14	108.74	110.80
36	5	1131	G	N1-C6-O6	5.14	122.99	119.90
1	2	344	A	N1-C6-N6	-5.14	115.51	118.60
1	2	1258	U	N1-C2-O2	5.14	126.40	122.80
1	2	1268	G	O5'-P-OP2	-5.14	101.07	105.70
36	1	1164	G	C4-N9-C1'	5.14	133.19	126.50
36	1	2696	A	N1-C6-N6	-5.14	115.52	118.60
41	L4	187	LEU	CA-CB-CG	5.14	127.13	115.30
1	6	56	U	C5-C4-O4	-5.14	122.81	125.90
1	6	523	G	N1-C6-O6	-5.14	116.81	119.90
36	5	671	U	C6-N1-C2	5.14	124.09	121.00
36	5	1337	A	C2-N3-C4	5.14	113.17	110.60
36	5	1417	G	N3-C4-C5	-5.14	126.03	128.60
36	5	2433	U	C5-C6-N1	-5.14	120.13	122.70
36	5	2914	G	N3-C4-N9	5.14	129.09	126.00
36	5	3080	G	N9-C4-C5	-5.14	103.34	105.40
36	5	3328	G	N3-C4-C5	-5.14	126.03	128.60
36	1	909	G	O5'-P-OP1	-5.14	101.07	105.70
36	1	2889	C	O5'-P-OP1	-5.14	101.07	105.70
1	6	1410	A	N1-C6-N6	5.14	121.68	118.60
36	5	2399	A	N1-C2-N3	5.14	131.87	129.30
36	1	968	G	C5-C6-N1	5.14	114.07	111.50
36	1	1054	A	O5'-P-OP2	-5.14	101.08	105.70
36	1	3318	G	C6-C5-N7	-5.14	127.32	130.40
39	12	242	ARG	NE-CZ-NH2	-5.14	117.73	120.30
36	1	155	G	C5-C6-N1	5.14	114.07	111.50
36	5	3351	U	N3-C2-O2	-5.14	118.60	122.20
36	1	216	G	C6-C5-N7	-5.14	127.32	130.40
36	1	2640	A	N3-C4-C5	-5.14	123.20	126.80
36	5	374	A	OP1-P-O3'	5.14	116.50	105.20
36	5	1316	C	N1-C2-N3	5.14	122.80	119.20
36	1	751	A	N1-C6-N6	-5.13	115.52	118.60
36	1	1391	C	C2-N3-C4	-5.13	117.33	119.90
36	1	2966	G	C5-C6-N1	5.13	114.07	111.50
36	5	952	A	C4-C5-N7	5.13	113.27	110.70
36	5	3287	U	N3-C2-O2	-5.13	118.61	122.20
36	1	395	A	C8-N9-C4	-5.13	103.75	105.80
36	5	1403	C	C2-N3-C4	-5.13	117.33	119.90
1	2	15	U	C6-N1-C2	-5.13	117.92	121.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2796	G	OP1-P-O3'	5.13	116.49	105.20
36	5	190	U	N3-C2-O2	-5.13	118.61	122.20
36	5	1496	C	OP1-P-OP2	-5.13	111.90	119.60
36	5	2400	G	OP2-P-O3'	5.13	116.49	105.20
36	1	2917	G	C2-N3-C4	5.13	114.47	111.90
36	1	3275	U	C6-N1-C2	-5.13	117.92	121.00
36	5	1868	G	N9-C4-C5	-5.13	103.35	105.40
38	8	126	A	OP1-P-O3'	5.13	116.49	105.20
1	2	553	G	C5-C6-O6	-5.13	125.52	128.60
36	1	1142	G	OP1-P-OP2	5.13	127.29	119.60
36	5	2383	C	N1-C2-O2	-5.13	115.82	118.90
37	7	34	C	C6-N1-C2	-5.13	118.25	120.30
1	2	1176	G	N1-C6-O6	5.13	122.98	119.90
1	2	1302	U	C6-N1-C2	-5.13	117.92	121.00
36	1	798	G	N3-C2-N2	-5.13	116.31	119.90
36	1	1911	A	C5-N7-C8	-5.13	101.34	103.90
36	5	840	C	N3-C2-O2	-5.13	118.31	121.90
36	5	1327	C	N3-C4-N4	-5.13	114.41	118.00
36	5	1465	A	C2-N3-C4	-5.13	108.04	110.60
36	5	1855	U	N1-C2-N3	5.13	117.98	114.90
36	5	2697	A	C4-C5-C6	5.12	119.56	117.00
1	2	944	A	N9-C4-C5	-5.12	103.75	105.80
36	1	678	G	C5-C6-O6	-5.12	125.53	128.60
1	6	914	G	C5-C6-O6	-5.12	125.53	128.60
1	6	1201	G	O5'-P-OP1	-5.12	101.09	105.70
36	5	517	G	N3-C4-N9	5.12	129.07	126.00
36	5	2133	U	OP2-P-O3'	5.12	116.47	105.20
1	2	794	U	OP1-P-O3'	5.12	116.47	105.20
36	1	37	U	N1-C2-N3	5.12	117.97	114.90
36	1	59	G	C6-N1-C2	5.12	128.17	125.10
36	1	2123	G	C5-C6-O6	-5.12	125.53	128.60
36	1	2993	G	N3-C2-N2	5.12	123.48	119.90
36	5	2234	G	C6-N1-C2	-5.12	122.03	125.10
38	8	24	G	N1-C6-O6	-5.12	116.83	119.90
36	5	1213	G	N9-C4-C5	-5.12	103.35	105.40
36	5	1336	U	OP2-P-O3'	5.12	116.46	105.20
37	7	71	G	OP2-P-O3'	5.12	116.47	105.20
1	2	380	U	N1-C2-O2	5.12	126.38	122.80
36	1	2688	U	C5-C4-O4	-5.12	122.83	125.90
36	5	1261	G	O4'-C1'-N9	5.12	112.30	108.20
36	1	1661	G	O5'-P-OP2	-5.12	101.09	105.70
52	m6	58	LEU	CB-CG-CD2	-5.12	102.30	111.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2281	A	P-O3'-C3'	-5.12	113.56	119.70
36	1	2619	G	OP1-P-OP2	5.12	127.27	119.60
1	6	1285	U	N3-C2-O2	-5.12	118.62	122.20
36	5	2283	G	O5'-P-OP2	-5.12	101.09	105.70
1	2	1462	G	C4-C5-N7	5.11	112.84	110.80
36	1	910	G	C4-C5-C6	5.11	121.87	118.80
36	1	3190	C	N3-C4-C5	5.11	123.94	121.90
1	6	1573	A	P-O3'-C3'	5.11	125.83	119.70
1	6	1780	G	C8-N9-C4	5.11	108.45	106.40
36	5	974	G	N3-C4-N9	5.11	129.07	126.00
36	5	1838	G	OP1-P-O3'	5.11	116.45	105.20
36	5	2144	A	O5'-P-OP2	-5.11	101.10	105.70
36	5	2930	A	N3-C4-N9	-5.11	123.31	127.40
36	1	424	G	N1-C2-N2	-5.11	111.60	116.20
36	1	1669	C	C5-C4-N4	-5.11	116.62	120.20
36	1	2879	C	N3-C2-O2	5.11	125.48	121.90
36	1	1385	C	C2-N1-C1'	-5.11	113.18	118.80
36	1	2174	G	N7-C8-N9	5.11	115.66	113.10
36	1	2249	G	N3-C2-N2	5.11	123.48	119.90
36	1	2624	G	C5-C6-O6	-5.11	125.53	128.60
36	1	2698	G	OP1-P-OP2	5.11	127.27	119.60
36	5	974	G	C5-C6-N1	5.11	114.06	111.50
36	5	1493	G	O4'-C1'-N9	5.11	112.29	108.20
36	5	2851	A	C8-N9-C4	5.11	107.84	105.80
36	5	1379	G	C8-N9-C4	5.11	108.44	106.40
36	1	214	G	N1-C6-O6	5.11	122.97	119.90
36	1	1157	G	OP2-P-O3'	5.11	116.44	105.20
36	1	2383	C	C5-C4-N4	-5.11	116.62	120.20
36	1	3302	U	N3-C4-O4	-5.11	115.82	119.40
37	3	88	G	C5-C6-O6	5.11	131.66	128.60
1	6	1200	G	N3-C4-N9	-5.11	122.94	126.00
36	5	1004	U	C5-C6-N1	5.11	125.25	122.70
36	5	3049	A	C5-N7-C8	5.11	106.45	103.90
1	2	186	C	C5-C6-N1	5.11	123.55	121.00
36	1	140	C	OP2-P-O3'	5.11	116.43	105.20
36	1	2215	A	N9-C4-C5	-5.11	103.76	105.80
36	1	2987	A	C5-C6-N6	-5.11	119.61	123.70
36	5	2369	G	C8-N9-C4	5.11	108.44	106.40
36	5	2623	G	N3-C4-N9	5.11	129.06	126.00
36	5	3214	U	N1-C2-O2	5.11	126.37	122.80
1	2	558	U	C2-N1-C1'	5.10	123.83	117.70
1	2	1595	U	O4'-C1'-N1	5.10	112.28	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	609	G	C5-C6-N1	5.10	114.05	111.50
36	5	515	C	C5-C4-N4	-5.10	116.63	120.20
36	5	1319	G	OP2-P-O3'	5.10	116.43	105.20
36	5	2109	U	N1-C2-N3	5.10	117.96	114.90
36	1	709	A	N9-C4-C5	-5.10	103.76	105.80
37	3	58	C	C6-N1-C2	-5.10	118.26	120.30
75	O9	13	MET	CB-CG-SD	-5.10	97.09	112.40
1	6	382	C	C2-N3-C4	-5.10	117.35	119.90
1	6	402	C	C5-C6-N1	-5.10	118.45	121.00
36	5	982	C	C6-N1-C2	-5.10	118.26	120.30
36	5	1112	A	C6-C5-N7	-5.10	128.73	132.30
38	8	77	A	C8-N9-C4	5.10	107.84	105.80
36	1	818	C	N1-C2-O2	5.10	121.96	118.90
36	1	1786	G	N1-C6-O6	-5.10	116.84	119.90
36	5	2280	A	C2-N3-C4	-5.10	108.05	110.60
36	1	880	G	N9-C4-C5	5.10	107.44	105.40
36	1	2817	A	OP2-P-O3'	5.10	116.42	105.20
1	6	1131	A	C6-C5-N7	-5.10	128.73	132.30
10	s8	5	ARG	NE-CZ-NH2	-5.10	117.75	120.30
36	5	1328	C	C6-N1-C2	-5.10	118.26	120.30
36	5	2338	C	N1-C2-O2	-5.10	115.84	118.90
36	5	2888	U	C5-C4-O4	-5.10	122.84	125.90
36	1	658	G	C4-C5-C6	5.10	121.86	118.80
36	1	920	A	OP1-P-O3'	5.10	116.41	105.20
36	1	1466	G	N3-C2-N2	5.10	123.47	119.90
36	5	719	U	N1-C2-O2	5.10	126.37	122.80
36	5	3007	U	C5-C6-N1	-5.10	120.15	122.70
40	l3	19	ARG	NE-CZ-NH1	5.10	122.85	120.30
36	1	1794	G	OP1-P-OP2	5.10	127.24	119.60
1	6	108	A	C6-N1-C2	-5.10	115.54	118.60
1	6	1145	U	N3-C4-C5	-5.10	111.54	114.60
1	2	447	U	C6-N1-C2	-5.09	117.94	121.00
1	2	1600	A	P-O3'-C3'	5.09	125.81	119.70
36	1	1793	C	C2-N3-C4	-5.09	117.35	119.90
36	1	1823	A	C4-C5-C6	5.09	119.55	117.00
36	1	2989	U	N1-C2-N3	5.09	117.96	114.90
1	6	622	A	N1-C6-N6	-5.09	115.54	118.60
1	6	1696	G	C3'-C2'-C1'	5.09	105.58	101.50
36	5	639	G	N1-C6-O6	5.09	122.96	119.90
36	5	779	G	N1-C6-O6	5.09	122.96	119.90
36	5	1192	C	C5-C4-N4	-5.09	116.63	120.20
36	5	2293	C	C4-C5-C6	-5.09	114.85	117.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2572	C	C6-N1-C2	-5.09	118.26	120.30
36	5	3041	U	C6-N1-C2	5.09	124.06	121.00
36	1	403	C	C2-N3-C4	5.09	122.45	119.90
36	1	1123	U	C4-C5-C6	5.09	122.75	119.70
1	6	639	U	N3-C2-O2	-5.09	118.64	122.20
1	6	1119	G	O5'-P-OP2	-5.09	101.12	105.70
36	5	1370	G	C8-N9-C4	5.09	108.44	106.40
36	5	2392	C	C2-N1-C1'	-5.09	113.20	118.80
36	5	2818	U	C5'-C4'-O4'	-5.09	102.99	109.10
36	5	2881	C	N3-C2-O2	5.09	125.46	121.90
36	1	8	C	C6-N1-C2	5.09	122.34	120.30
36	1	346	C	C2-N3-C4	-5.09	117.36	119.90
36	1	2424	A	C5-N7-C8	-5.09	101.36	103.90
1	6	111	U	C6-N1-C2	-5.09	117.95	121.00
1	6	1327	C	N1-C2-O2	5.09	121.95	118.90
36	5	676	G	C8-N9-C4	-5.09	104.36	106.40
1	2	728	U	N3-C2-O2	-5.09	118.64	122.20
1	2	765	G	O4'-C1'-N9	-5.09	104.13	108.20
36	5	358	G	N1-C6-O6	5.09	122.95	119.90
36	5	2329	C	N3-C4-C5	5.09	123.94	121.90
37	7	79	A	C5-N7-C8	-5.09	101.36	103.90
36	1	909	G	C8-N9-C4	5.09	108.44	106.40
36	1	2624	G	N1-C6-O6	5.09	122.95	119.90
41	L4	328	ASN	N-CA-C	5.09	124.73	111.00
1	6	1354	G	C8-N9-C4	-5.09	104.36	106.40
36	5	1216	C	N1-C2-O2	-5.09	115.85	118.90
36	5	1304	A	O5'-P-OP1	-5.09	101.12	105.70
36	5	2704	A	C4-C5-N7	5.09	113.24	110.70
38	8	5	U	N1-C2-O2	-5.09	119.24	122.80
36	1	815	G	N1-C6-O6	5.08	122.95	119.90
36	1	1484	U	C2-N1-C1'	5.08	123.80	117.70
36	1	2582	C	N1-C2-O2	5.08	121.95	118.90
36	5	373	A	C8-N9-C4	5.08	107.83	105.80
36	5	701	G	C5-C6-O6	5.08	131.65	128.60
1	2	610	G	C4-N9-C1'	5.08	133.11	126.50
36	1	805	G	N9-C4-C5	-5.08	103.37	105.40
36	1	2249	G	N3-C4-C5	-5.08	126.06	128.60
36	1	2305	G	N9-C4-C5	-5.08	103.37	105.40
1	6	1300	A	O5'-P-OP1	-5.08	101.12	105.70
36	5	335	G	C5-C6-O6	5.08	131.65	128.60
36	5	907	G	C4-C5-N7	5.08	112.83	110.80
36	5	1617	G	C5-C6-O6	-5.08	125.55	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1868	G	C6-C5-N7	-5.08	127.35	130.40
36	1	859	G	N1-C2-N2	-5.08	111.63	116.20
36	1	1162	U	C2-N1-C1'	5.08	123.80	117.70
36	1	1935	G	N3-C2-N2	5.08	123.46	119.90
1	6	454	U	O5'-P-OP2	-5.08	101.13	105.70
1	6	539	G	C5-C6-O6	-5.08	125.55	128.60
36	5	907	G	C8-N9-C4	5.08	108.43	106.40
36	5	1367	G	C4-C5-C6	5.08	121.85	118.80
37	7	74	C	N3-C2-O2	5.08	125.46	121.90
36	1	1372	C	C5-C6-N1	-5.08	118.46	121.00
36	5	649	A	N1-C6-N6	5.08	121.65	118.60
36	5	1341	U	C5-C4-O4	5.08	128.95	125.90
36	1	262	U	N3-C2-O2	5.08	125.75	122.20
36	1	797	U	O5'-P-OP1	-5.08	101.13	105.70
36	1	893	C	C5-C6-N1	5.08	123.54	121.00
36	1	1664	G	N1-C6-O6	-5.08	116.85	119.90
1	6	90	C	N3-C4-C5	5.08	123.93	121.90
1	6	1208	A	O4'-C1'-N9	5.08	112.26	108.20
36	5	632	G	O5'-P-OP2	-5.08	101.13	105.70
36	5	871	U	OP2-P-O3'	5.08	116.37	105.20
36	5	892	U	C2-N1-C1'	-5.08	111.61	117.70
36	5	1331	U	C6-N1-C2	5.08	124.05	121.00
36	5	2198	A	C5-C6-N6	-5.08	119.64	123.70
36	5	2996	U	C6-N1-C2	5.08	124.05	121.00
36	5	3330	A	C5-C6-N1	5.08	120.24	117.70
36	1	1105	A	C8-N9-C4	5.08	107.83	105.80
41	L4	139	GLY	N-CA-C	-5.08	100.41	113.10
1	6	361	C	C5-C6-N1	5.08	123.54	121.00
1	2	852	C	C5-C6-N1	5.08	123.54	121.00
36	1	2407	C	C5-C4-N4	-5.08	116.65	120.20
36	1	3090	U	N3-C2-O2	5.08	125.75	122.20
1	6	362	G	N3-C4-C5	-5.08	126.06	128.60
36	5	664	U	C6-N1-C2	-5.08	117.95	121.00
36	5	2403	G	OP1-P-O3'	5.08	116.36	105.20
36	1	815	G	C6-C5-N7	-5.07	127.36	130.40
36	1	818	C	C5-C4-N4	5.07	123.75	120.20
36	1	1528	G	OP1-P-OP2	5.07	127.21	119.60
36	1	2406	C	C5-C4-N4	-5.07	116.65	120.20
36	1	3059	G	N1-C6-O6	-5.07	116.86	119.90
38	4	21	C	C2-N1-C1'	-5.07	113.22	118.80
1	6	312	A	N1-C6-N6	-5.07	115.56	118.60
1	6	472	U	N1-C2-N3	5.07	117.94	114.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2395	G	C4-C5-N7	5.07	112.83	110.80
36	5	2524	A	C4-N9-C1'	5.07	135.43	126.30
37	3	84	A	C5-C6-N6	-5.07	119.64	123.70
38	4	113	U	C6-N1-C1'	5.07	128.30	121.20
36	5	659	G	P-O3'-C3'	5.07	125.79	119.70
36	5	2840	C	OP1-P-OP2	-5.07	111.99	119.60
1	2	1659	A	O5'-P-OP1	-5.07	101.14	105.70
36	1	758	C	N3-C4-N4	5.07	121.55	118.00
36	1	1112	A	C6-C5-N7	-5.07	128.75	132.30
36	1	2800	G	O5'-P-OP1	5.07	116.78	110.70
36	1	3057	U	N1-C2-O2	5.07	126.35	122.80
1	6	364	G	N3-C4-C5	-5.07	126.06	128.60
1	6	1649	G	N3-C2-N2	5.07	123.45	119.90
36	5	2631	U	N3-C4-C5	5.07	117.64	114.60
36	5	2940	A	O5'-P-OP2	-5.07	101.14	105.70
36	1	1200	A	C2-N3-C4	5.07	113.13	110.60
36	5	872	U	C5-C6-N1	5.07	125.23	122.70
36	1	2133	U	OP1-P-OP2	-5.07	112.00	119.60
36	5	2880	U	C5-C6-N1	5.07	125.23	122.70
36	5	2938	G	OP2-P-O3'	5.07	116.35	105.20
1	2	1745	G	N1-C6-O6	5.07	122.94	119.90
36	1	1380	G	O5'-P-OP2	-5.07	101.14	105.70
36	1	1492	G	N3-C4-N9	5.07	129.04	126.00
36	1	1800	A	C2-N3-C4	5.07	113.13	110.60
1	6	434	G	C8-N9-C4	5.07	108.43	106.40
36	5	575	G	N3-C4-C5	-5.07	126.07	128.60
36	5	1226	G	N9-C4-C5	-5.07	103.37	105.40
36	5	2725	U	N3-C4-C5	5.07	117.64	114.60
36	5	3143	C	N1-C2-O2	-5.07	115.86	118.90
36	5	3243	A	OP2-P-O3'	5.07	116.34	105.20
40	13	148	LEU	CB-CG-CD2	-5.07	102.39	111.00
36	1	813	G	N3-C4-N9	5.06	129.04	126.00
36	1	2697	A	C2-N3-C4	-5.06	108.07	110.60
1	6	581	U	N1-C2-O2	-5.06	119.25	122.80
36	5	1408	G	N9-C4-C5	5.06	107.42	105.40
36	5	1782	U	N1-C2-O2	-5.06	119.26	122.80
1	2	440	U	O5'-P-OP1	-5.06	101.14	105.70
36	1	515	C	C2-N3-C4	5.06	122.43	119.90
36	1	2943	G	N1-C6-O6	-5.06	116.86	119.90
36	5	812	G	C4-C5-N7	-5.06	108.78	110.80
36	5	971	G	C4-C5-N7	-5.06	108.78	110.80
36	5	2802	A	N1-C2-N3	-5.06	126.77	129.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3047	U	C5-C6-N1	-5.06	120.17	122.70
36	1	574	U	C5-C6-N1	-5.06	120.17	122.70
36	1	911	C	C5-C6-N1	-5.06	118.47	121.00
36	1	930	U	O5'-P-OP2	5.06	116.77	110.70
36	1	2142	A	OP1-P-OP2	-5.06	112.01	119.60
36	1	2407	C	N3-C4-N4	5.06	121.54	118.00
36	5	2978	U	P-O3'-C3'	5.06	125.77	119.70
36	1	430	U	C5-C6-N1	-5.06	120.17	122.70
36	1	972	A	C8-N9-C4	5.06	107.82	105.80
36	1	1368	U	C5-C4-O4	-5.06	122.86	125.90
1	6	959	U	O4'-C1'-N1	-5.06	104.15	108.20
1	6	1020	A	C8-N9-C4	-5.06	103.78	105.80
36	5	1170	A	C8-N9-C4	5.06	107.82	105.80
36	5	1919	G	N1-C6-O6	5.06	122.94	119.90
36	5	2728	G	O4'-C1'-N9	5.06	112.25	108.20
36	5	2994	A	C4-C5-C6	5.06	119.53	117.00
36	1	2273	G	N7-C8-N9	-5.06	110.57	113.10
36	1	2730	G	N3-C4-N9	-5.06	122.97	126.00
1	6	1757	G	C8-N9-C4	5.06	108.42	106.40
36	5	918	C	C5-C6-N1	5.06	123.53	121.00
36	5	3000	A	C8-N9-C4	5.06	107.82	105.80
36	1	1179	A	N1-C2-N3	5.06	131.83	129.30
36	1	1332	A	OP2-P-O3'	5.06	116.32	105.20
36	1	2304	C	C6-N1-C2	-5.06	118.28	120.30
1	6	1498	G	O5'-P-OP2	-5.06	101.15	105.70
13	c1	120	GLY	N-CA-C	-5.06	100.46	113.10
36	5	391	A	C8-N9-C4	5.06	107.82	105.80
36	5	1113	G	N3-C4-N9	-5.06	122.97	126.00
36	5	1209	G	C8-N9-C4	-5.06	104.38	106.40
36	5	2358	A	N3-C4-C5	5.06	130.34	126.80
36	5	2851	A	N7-C8-N9	-5.06	111.27	113.80
36	1	48	A	O4'-C1'-N9	5.05	112.24	108.20
36	1	1151	U	C6-N1-C2	-5.05	117.97	121.00
36	1	2638	C	C6-N1-C2	5.05	122.32	120.30
36	5	3285	C	C6-N1-C2	-5.05	118.28	120.30
38	8	54	A	C5-N7-C8	-5.05	101.37	103.90
36	1	2865	U	OP2-P-O3'	5.05	116.32	105.20
38	4	55	U	C2-N3-C4	-5.05	123.97	127.00
36	5	23	A	C5-C6-N6	-5.05	119.66	123.70
36	5	361	A	C4-C5-N7	-5.05	108.17	110.70
1	2	1560	U	N3-C4-O4	-5.05	115.86	119.40
36	1	802	C	N1-C2-O2	5.05	121.93	118.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1306	G	O5'-P-OP1	-5.05	101.15	105.70
36	1	2787	G	C5-C6-O6	-5.05	125.57	128.60
36	1	3223	A	N1-C6-N6	-5.05	115.57	118.60
1	6	1131	A	N1-C6-N6	5.05	121.63	118.60
1	6	1196	A	C8-N9-C4	5.05	107.82	105.80
36	5	521	A	C8-N9-C4	5.05	107.82	105.80
36	5	1852	G	N9-C4-C5	5.05	107.42	105.40
36	5	2172	A	C2-N3-C4	-5.05	108.07	110.60
1	2	1748	G	C5-C6-O6	5.05	131.63	128.60
36	1	3212	C	C6-N1-C2	5.05	122.32	120.30
1	6	937	C	C6-N1-C2	-5.05	118.28	120.30
36	5	2335	G	C6-N1-C2	-5.05	122.07	125.10
36	5	2409	G	O5'-P-OP2	-5.05	101.16	105.70
36	5	3309	G	C8-N9-C1'	-5.05	120.44	127.00
36	1	3181	C	N1-C2-N3	5.05	122.73	119.20
36	1	627	U	N1-C2-O2	-5.05	119.27	122.80
36	1	1780	G	C5-C6-O6	-5.05	125.57	128.60
36	5	329	U	C5-C6-N1	-5.05	120.18	122.70
36	5	1082	U	C6-N1-C2	-5.05	117.97	121.00
36	5	1112	A	C5-C6-N6	-5.05	119.66	123.70
36	5	1604	G	N3-C4-C5	-5.05	126.08	128.60
36	5	1902	G	N3-C2-N2	-5.05	116.37	119.90
36	5	2823	G	N3-C4-N9	5.05	129.03	126.00
36	5	3014	U	C2-N3-C4	-5.05	123.97	127.00
36	1	2355	G	C6-C5-N7	-5.04	127.37	130.40
38	4	41	A	C4-C5-C6	5.04	119.52	117.00
36	5	722	G	C8-N9-C4	-5.04	104.38	106.40
1	2	1426	C	N3-C4-C5	5.04	123.92	121.90
1	2	1745	G	N3-C4-N9	5.04	129.03	126.00
36	1	281	G	C5-C6-N1	5.04	114.02	111.50
36	1	374	A	C6-N1-C2	5.04	121.63	118.60
36	1	775	A	N1-C6-N6	5.04	121.63	118.60
36	1	934	G	C6-C5-N7	-5.04	127.37	130.40
36	1	2297	U	P-O3'-C3'	5.04	125.75	119.70
36	1	2837	A	N7-C8-N9	-5.04	111.28	113.80
1	6	352	A	C6-C5-N7	5.04	135.83	132.30
1	6	1190	C	C6-N1-C2	5.04	122.32	120.30
36	5	1456	A	C5-C6-N1	-5.04	115.18	117.70
36	5	2895	G	C4-C5-N7	-5.04	108.78	110.80
41	14	327	LEU	CA-CB-CG	5.04	126.90	115.30
1	2	937	C	C6-N1-C2	-5.04	118.28	120.30
36	1	2606	G	N9-C4-C5	-5.04	103.38	105.40

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	706	A	OP2-P-O3'	5.04	116.29	105.20
36	5	1077	U	N3-C4-C5	5.04	117.62	114.60
36	5	2290	C	C5-C4-N4	-5.04	116.67	120.20
36	5	3154	C	C2-N3-C4	5.04	122.42	119.90
36	1	1832	C	N3-C4-N4	-5.04	114.47	118.00
38	8	125	U	C2-N1-C1'	5.04	123.75	117.70
1	2	1199	G	O5'-P-OP2	-5.04	101.17	105.70
36	1	2362	C	N3-C2-O2	-5.04	118.37	121.90
36	1	2621	G	OP1-P-OP2	-5.04	112.04	119.60
36	1	2799	A	OP2-P-O3'	5.04	116.28	105.20
36	1	2846	U	C6-N1-C2	-5.04	117.98	121.00
37	3	111	U	O5'-P-OP1	-5.04	101.17	105.70
1	6	591	A	O5'-P-OP2	-5.04	101.17	105.70
1	6	1595	U	O4'-C1'-N1	5.04	112.23	108.20
36	5	1352	A	P-O3'-C3'	5.04	125.75	119.70
36	5	1487	G	C2-N3-C4	5.04	114.42	111.90
36	5	1671	C	O5'-P-OP1	-5.04	101.17	105.70
36	5	2648	G	N3-C4-C5	-5.04	126.08	128.60
36	5	2892	A	N9-C4-C5	5.04	107.82	105.80
37	7	105	C	N1-C2-O2	5.04	121.92	118.90
36	1	583	G	N9-C4-C5	5.04	107.42	105.40
36	1	2404	A	O5'-P-OP1	5.04	116.74	110.70
36	1	2970	C	C6-N1-C2	5.04	122.31	120.30
36	5	2297	U	OP1-P-OP2	5.04	127.16	119.60
36	5	3377	G	C5-C6-O6	-5.04	125.58	128.60
36	1	51	A	N1-C6-N6	5.04	121.62	118.60
36	1	267	G	O4'-C1'-N9	-5.04	104.17	108.20
1	6	1035	G	C8-N9-C4	5.04	108.41	106.40
1	6	1522	U	O4'-C1'-N1	5.04	112.23	108.20
36	5	875	G	C5-C6-N1	5.04	114.02	111.50
36	5	1048	A	OP1-P-O3'	5.04	116.28	105.20
36	5	1064	A	O4'-C1'-N9	-5.04	104.17	108.20
36	5	1152	G	N9-C4-C5	5.04	107.41	105.40
37	7	79	A	C5-C6-N6	-5.04	119.67	123.70
36	1	649	A	C6-N1-C2	-5.03	115.58	118.60
36	1	1855	U	N1-C2-N3	5.03	117.92	114.90
36	1	2828	G	N3-C4-C5	-5.03	126.08	128.60
36	5	57	A	OP2-P-O3'	5.03	116.27	105.20
36	5	335	G	O5'-P-OP2	5.03	116.74	110.70
36	5	873	C	OP2-P-O3'	5.03	116.27	105.20
36	5	981	U	C5-C6-N1	5.03	125.22	122.70
36	5	1145	G	N9-C4-C5	5.03	107.41	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1369	A	C5-C6-N6	-5.03	119.67	123.70
36	5	3101	G	C8-N9-C1'	-5.03	120.46	127.00
36	1	718	G	N3-C4-C5	5.03	131.12	128.60
36	5	1371	G	OP2-P-O3'	5.03	116.27	105.20
36	5	2754	G	N3-C4-C5	-5.03	126.08	128.60
36	5	3260	G	N9-C4-C5	5.03	107.41	105.40
36	5	3369	G	N1-C6-O6	-5.03	116.88	119.90
37	7	48	U	N1-C2-O2	-5.03	119.28	122.80
36	1	1060	U	N1-C2-O2	-5.03	119.28	122.80
36	1	1360	C	C5-C6-N1	-5.03	118.48	121.00
36	1	2398	A	C4-C5-C6	5.03	119.52	117.00
36	1	3302	U	N3-C4-C5	5.03	117.62	114.60
1	6	1208	A	C8-N9-C4	-5.03	103.79	105.80
36	5	195	U	N1-C2-N3	5.03	117.92	114.90
36	5	1112	A	O5'-P-OP2	5.03	116.74	110.70
36	5	1436	U	C2-N1-C1'	5.03	123.74	117.70
36	5	2938	G	C2-N3-C4	5.03	114.42	111.90
36	1	69	C	N1-C2-O2	-5.03	115.88	118.90
36	1	219	A	N1-C2-N3	5.03	131.81	129.30
36	1	2323	G	N3-C4-N9	5.03	129.02	126.00
36	5	719	U	C5-C6-N1	5.03	125.22	122.70
36	1	218	G	OP1-P-OP2	5.03	127.14	119.60
36	1	2901	G	C5-C6-O6	-5.03	125.58	128.60
1	6	1035	G	N3-C2-N2	5.03	123.42	119.90
36	5	364	G	C4-C5-N7	5.03	112.81	110.80
36	5	1049	C	C4-C5-C6	-5.03	114.89	117.40
36	5	1330	A	C2-N3-C4	5.03	113.11	110.60
36	5	2700	G	C5-C6-N1	5.03	114.01	111.50
1	2	606	A	O4'-C1'-N9	5.03	112.22	108.20
1	2	1741	U	C5-C6-N1	-5.03	120.19	122.70
36	1	345	G	OP1-P-OP2	5.03	127.14	119.60
36	1	350	C	C5-C6-N1	5.03	123.51	121.00
36	1	2883	U	O5'-P-OP1	5.03	116.73	110.70
1	2	1590	G	N1-C6-O6	-5.02	116.89	119.90
36	1	656	A	O5'-P-OP1	-5.02	101.18	105.70
36	1	2356	A	C4-C5-N7	5.02	113.21	110.70
1	6	17	C	N3-C2-O2	-5.02	118.38	121.90
36	5	657	A	N1-C6-N6	5.02	121.61	118.60
36	5	876	A	OP2-P-O3'	5.02	116.25	105.20
36	5	2250	G	C5-C6-O6	5.02	131.62	128.60
38	8	54	A	N1-C6-N6	5.02	121.61	118.60
36	1	18	G	OP2-P-O3'	5.02	116.25	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1313	G	C4-C5-N7	5.02	112.81	110.80
36	1	1404	G	N7-C8-N9	-5.02	110.59	113.10
36	1	1529	A	C2-N3-C4	-5.02	108.09	110.60
36	1	2600	C	N1-C2-O2	5.02	121.91	118.90
36	1	2945	G	N1-C6-O6	5.02	122.91	119.90
45	L8	65	LEU	CA-CB-CG	5.02	126.85	115.30
36	5	407	A	N1-C6-N6	5.02	121.61	118.60
36	5	2361	A	OP2-P-O3'	5.02	116.25	105.20
37	7	92	A	N9-C4-C5	-5.02	103.79	105.80
1	2	1654	G	C6-N1-C2	-5.02	122.09	125.10
36	1	894	G	OP1-P-O3'	5.02	116.25	105.20
36	5	915	A	N3-C4-C5	-5.02	123.28	126.80
36	5	2947	G	N3-C4-N9	5.02	129.01	126.00
36	1	1547	G	C5-N7-C8	5.02	106.81	104.30
36	1	2406	C	O5'-P-OP1	-5.02	101.18	105.70
36	5	146	U	C5-C6-N1	-5.02	120.19	122.70
36	5	2207	A	N7-C8-N9	5.02	116.31	113.80
36	5	3209	A	C8-N9-C4	-5.02	103.79	105.80
36	1	948	C	C5-C6-N1	-5.02	118.49	121.00
36	1	1201	C	N3-C4-N4	5.02	121.51	118.00
36	1	1860	G	N1-C6-O6	-5.02	116.89	119.90
36	1	2367	A	C4-C5-C6	5.02	119.51	117.00
1	6	532	U	OP2-P-O3'	5.02	116.24	105.20
36	5	308	A	O5'-P-OP1	5.02	116.72	110.70
36	5	439	C	N3-C4-C5	-5.02	119.89	121.90
36	5	984	G	C8-N9-C4	-5.02	104.39	106.40
36	5	2315	G	O5'-P-OP1	-5.02	101.18	105.70
36	5	2333	C	C5-C4-N4	-5.02	116.69	120.20
1	2	136	C	C5-C6-N1	5.02	123.51	121.00
1	2	1389	C	C2-N1-C1'	5.02	124.32	118.80
36	1	1351	U	C2-N1-C1'	5.02	123.72	117.70
36	1	2361	A	C6-N1-C2	-5.02	115.59	118.60
36	5	2356	A	C5-C6-N6	5.02	127.71	123.70
1	2	1489	U	C2-N1-C1'	5.01	123.72	117.70
36	1	429	U	N3-C4-C5	5.01	117.61	114.60
36	1	1364	C	C6-N1-C2	5.01	122.31	120.30
36	1	3112	G	C4-C5-N7	5.01	112.81	110.80
36	5	2350	C	C4-C5-C6	5.01	119.91	117.40
36	5	3076	C	N3-C4-C5	5.01	123.91	121.90
36	5	3275	U	C6-N1-C1'	5.01	128.22	121.20
37	7	42	A	C6-N1-C2	-5.01	115.59	118.60
52	m6	117	ARG	CG-CD-NE	-5.01	101.27	111.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1533	U	C5-C4-O4	-5.01	122.89	125.90
36	5	936	A	N1-C6-N6	-5.01	115.59	118.60
1	2	1536	G	C4-N9-C1'	5.01	133.01	126.50
36	1	52	A	OP1-P-O3'	5.01	116.23	105.20
36	1	646	A	C8-N9-C4	-5.01	103.80	105.80
36	1	1120	A	OP2-P-O3'	5.01	116.22	105.20
36	1	1882	G	O5'-P-OP1	-5.01	101.19	105.70
36	1	2137	U	C6-N1-C1'	-5.01	114.19	121.20
36	1	2958	A	OP2-P-O3'	5.01	116.23	105.20
36	1	3036	G	C8-N9-C4	-5.01	104.39	106.40
38	4	73	U	N1-C2-O2	5.01	126.31	122.80
36	5	43	A	O4'-C1'-N9	5.01	112.21	108.20
36	5	353	G	C4-N9-C1'	-5.01	119.98	126.50
36	5	536	U	C5-C6-N1	-5.01	120.19	122.70
36	5	1304	A	C8-N9-C4	5.01	107.80	105.80
36	5	1438	U	N1-C2-N3	5.01	117.91	114.90
36	5	2402	A	C5-C6-N6	5.01	127.71	123.70
36	5	2704	A	OP1-P-OP2	5.01	127.12	119.60
36	1	98	G	OP2-P-O3'	5.01	116.22	105.20
36	1	433	A	N3-C4-C5	-5.01	123.29	126.80
36	1	1831	U	C6-N1-C2	-5.01	118.00	121.00
36	1	2279	A	N9-C4-C5	-5.01	103.80	105.80
36	1	2571	U	N3-C2-O2	-5.01	118.69	122.20
64	N8	66	ALA	N-CA-C	-5.01	97.47	111.00
1	6	1700	C	C5-C6-N1	5.01	123.50	121.00
36	5	645	A	N3-C4-C5	-5.01	123.29	126.80
1	2	73	U	OP1-P-O3'	5.01	116.22	105.20
36	1	3043	C	N3-C4-N4	-5.01	114.49	118.00
1	6	47	A	N1-C2-N3	-5.01	126.80	129.30
36	5	1657	C	O4'-C1'-N1	5.01	112.21	108.20
36	5	1916	U	N3-C2-O2	-5.01	118.69	122.20
36	1	326	U	O5'-P-OP2	-5.01	101.19	105.70
36	1	340	C	C6-N1-C2	-5.01	118.30	120.30
36	1	2305	G	C4-N9-C1'	5.01	133.01	126.50
36	1	2659	G	C5-C6-O6	-5.01	125.60	128.60
36	1	3318	G	N3-C4-C5	-5.01	126.10	128.60
36	5	426	G	C2-N3-C4	5.01	114.40	111.90
36	5	930	U	OP1-P-O3'	5.01	116.21	105.20
36	5	1299	U	O5'-P-OP2	-5.01	101.19	105.70
36	5	2334	U	O5'-P-OP1	5.01	116.71	110.70
36	5	2944	U	OP2-P-O3'	5.01	116.22	105.20
1	2	1033	C	N3-C2-O2	-5.00	118.40	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2968	G	N1-C2-N2	-5.00	111.70	116.20
36	5	420	G	C6-C5-N7	-5.00	127.40	130.40
36	5	2619	G	C4-C5-N7	5.00	112.80	110.80
1	2	1145	U	N3-C4-O4	5.00	122.90	119.40
36	1	66	A	C8-N9-C4	5.00	107.80	105.80
36	1	282	G	N3-C2-N2	5.00	123.40	119.90
36	1	407	A	O5'-P-OP1	5.00	116.70	110.70
36	1	415	G	N1-C6-O6	-5.00	116.90	119.90
36	1	718	G	C5-N7-C8	-5.00	101.80	104.30
36	1	776	U	C6-N1-C2	-5.00	118.00	121.00
36	1	1119	C	C5-C6-N1	-5.00	118.50	121.00
36	1	3275	U	C5-C6-N1	5.00	125.20	122.70
1	6	1114	G	N3-C4-C5	-5.00	126.10	128.60
1	6	1428	G	O5'-P-OP1	-5.00	101.20	105.70
36	5	1931	U	O5'-P-OP2	-5.00	101.20	105.70
1	2	347	G	C8-N9-C4	-5.00	104.40	106.40
1	2	1273	G	N3-C4-C5	-5.00	126.10	128.60
36	1	1315	U	N3-C2-O2	-5.00	118.70	122.20
1	6	322	G	O5'-P-OP1	-5.00	101.20	105.70
36	5	1880	U	O5'-P-OP2	5.00	116.70	110.70
36	5	3186	A	N9-C4-C5	5.00	107.80	105.80

There are no chirality outliers.

All (45) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
16	C4	123	SER	Peptide
19	C7	22	PRO	Peptide
19	C7	85	VAL	Peptide
27	D5	54	VAL	Peptide
27	D5	94	LYS	Peptide
33	E1	105	TYR	Peptide
39	L2	19	HIS	Peptide
43	L6	129	GLU	Peptide
43	L6	51	ARG	Peptide
43	L6	89	THR	Peptide
48	M1	64	LYS	Peptide
52	M6	110	PRO	Peptide
56	N0	12	ARG	Peptide
56	N0	22	PRO	Peptide
65	N9	20	GLY	Peptide
67	O1	5	LYS	Peptide

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
9	S7	131	PHE	Peptide
10	S8	147	ALA	Peptide
17	c5	52	LYS	Peptide
18	c6	40	GLU	Peptide
18	c6	41	PRO	Peptide
22	d0	70	THR	Peptide
25	d3	44	GLY	Peptide
27	d5	85	LYS	Peptide
39	l2	143	GLU	Peptide
39	l2	171	GLY	Peptide
42	l5	270	LYS	Peptide
42	l5	271	LYS	Peptide
43	l6	51	ARG	Peptide
44	l7	192	GLY	Peptide
44	l7	226	GLY	Peptide
45	l8	221	ASN	Peptide
52	m6	110	PRO	Peptide
60	n4	78	ALA	Peptide
62	n6	111	LEU	Peptide
63	n7	5	LEU	Peptide
64	n8	18	GLY	Peptide
64	n8	26	ARG	Peptide
64	n8	66	ALA	Peptide
65	n9	19	ASN	Peptide
67	o1	64	VAL	Peptide
5	s3	203	PRO	Peptide
7	s5	44	ASN	Peptide
7	s5	99	MET	Peptide
11	s9	89	ASP	Peptide

## 5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	2	37283	0	18757	929	0
1	6	38238	0	19240	856	0
2	S0	1577	0	1567	152	0
2	s0	1583	0	1578	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	S1	1709	0	1784	183	0
3	s1	1722	0	1793	0	0
4	S2	1635	0	1723	121	0
4	s2	1635	0	1723	0	0
5	S3	1734	0	1817	117	0
5	s3	1734	0	1817	0	0
6	S4	2068	0	2154	155	0
6	s4	2068	0	2154	0	0
7	S5	1609	0	1675	143	0
7	s5	1609	0	1675	0	0
8	S6	1799	0	1878	128	0
8	s6	1755	0	1846	0	0
9	S7	1481	0	1572	111	0
9	s7	1491	0	1578	0	0
10	S8	1489	0	1525	102	0
10	s8	1489	0	1525	0	0
11	S9	1494	0	1573	116	0
11	s9	1494	0	1573	0	0
12	C0	773	0	729	65	0
12	c0	762	0	699	0	0
13	C1	1214	0	1259	69	0
13	c1	1168	0	1231	0	0
14	C2	892	0	891	50	0
14	c2	892	0	891	0	0
15	C3	1192	0	1255	82	0
15	c3	1192	0	1255	0	0
16	C4	891	0	883	103	0
16	c4	949	0	985	0	0
17	C5	977	0	1002	92	0
17	c5	1039	0	1050	0	0
18	C6	1105	0	1166	100	0
18	c6	1111	0	1171	0	0
19	C7	926	0	930	81	0
19	c7	906	0	909	0	0
20	C8	1192	0	1222	112	0
20	c8	1192	0	1222	0	0
21	C9	1112	0	1124	91	0
21	c9	1112	0	1124	0	0
22	D0	855	0	917	78	0
22	d0	882	0	939	0	0
23	D1	684	0	672	59	0
23	d1	684	0	672	0	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	83	0
24	d2	1021	0	1060	0	0
25	D3	1121	0	1196	84	0
25	d3	1121	0	1196	0	0
26	D4	1073	0	1132	82	0
26	d4	1073	0	1132	0	0
27	D5	563	0	603	61	0
27	d5	558	0	598	0	0
28	D6	769	0	815	93	0
28	d6	769	0	814	0	0
29	D7	610	0	631	52	0
29	d7	610	0	631	0	0
30	D8	497	0	535	46	0
30	d8	497	0	535	0	0
31	D9	442	0	428	41	0
31	d9	442	0	429	0	0
32	E0	475	0	525	40	0
33	E1	566	0	602	57	0
33	e1	608	0	657	0	0
34	SR	2441	0	2397	139	0
34	sR	2442	0	2392	0	0
35	SM	1104	0	996	64	0
35	sM	680	0	607	0	0
36	1	67355	0	33848	1213	0
36	5	67376	0	33860	1225	0
37	3	2579	0	1304	56	0
37	7	2579	0	1303	41	0
38	4	3353	0	1695	62	0
38	8	3353	0	1695	73	0
39	L2	1914	0	1981	158	0
39	l2	1912	0	1976	0	0
40	L3	3075	0	3142	233	0
40	l3	3075	0	3142	0	0
41	L4	2748	0	2859	203	0
41	l4	2748	0	2859	0	0
42	L5	2375	0	2325	203	0
42	l5	2359	0	2311	0	0
43	L6	1239	0	1326	78	0
43	l6	1248	0	1339	0	0
44	L7	1784	0	1862	118	0
44	l7	1791	0	1869	0	0
45	L8	1804	0	1877	126	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	l8	1763	0	1819	0	0
46	L9	1518	0	1587	120	0
46	l9	1518	0	1587	0	0
47	M0	1705	0	1736	135	0
47	m0	1722	0	1755	0	0
48	M1	1353	0	1383	100	0
48	m1	1353	0	1383	0	0
49	M3	1543	0	1608	117	0
49	m3	1548	0	1613	0	0
50	M4	1053	0	1149	74	0
50	m4	1059	0	1154	0	0
51	M5	1720	0	1779	131	0
51	m5	1720	0	1779	0	0
52	M6	1555	0	1659	99	0
52	m6	1555	0	1659	0	0
53	M7	1420	0	1437	97	0
53	m7	1227	0	1236	0	0
54	M8	1441	0	1543	90	0
54	m8	1441	0	1543	0	0
55	M9	1521	0	1617	94	0
55	m9	1521	0	1617	0	0
56	N0	1445	0	1487	99	0
56	n0	1445	0	1487	0	0
57	N1	1276	0	1323	98	0
57	n1	1276	0	1323	0	0
58	N2	796	0	812	41	0
58	n2	778	0	791	0	0
59	N3	1003	0	1048	61	0
59	n3	1003	0	1048	0	0
60	N4	699	0	640	25	0
60	n4	1038	0	1071	0	0
61	N5	964	0	1025	58	0
61	n5	959	0	1023	0	0
62	N6	993	0	1081	64	0
62	n6	993	0	1081	0	0
63	N7	1092	0	1155	93	0
63	n7	1092	0	1155	0	0
64	N8	1173	0	1214	98	0
64	n8	1173	0	1215	0	0
65	N9	462	0	491	35	0
65	n9	462	0	491	0	0
66	O0	743	0	797	54	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
66	o0	767	0	816	0	0
67	O1	876	0	912	49	0
67	o1	883	0	918	0	0
68	O2	1020	0	1090	75	0
68	o2	1020	0	1090	0	0
69	O3	850	0	880	57	0
69	o3	850	0	880	0	0
70	O4	880	0	945	74	0
70	o4	880	0	945	0	0
71	O5	969	0	1078	83	0
71	o5	965	0	1067	0	0
72	O6	771	0	849	66	0
72	o6	770	0	846	0	0
73	O7	681	0	683	49	0
73	o7	681	0	683	0	0
74	O8	612	0	682	44	0
74	o8	608	0	671	0	0
75	O9	436	0	475	41	0
75	o9	436	0	475	0	0
76	Q0	417	0	455	24	0
76	q0	417	0	455	0	0
77	Q1	233	0	284	25	0
77	q1	233	0	284	0	0
78	Q2	847	0	916	57	0
78	q2	847	0	916	0	0
79	Q3	694	0	734	50	0
79	q3	694	0	734	0	0
80	e0	491	0	542	0	0
81	m2	750	0	179	0	0
82	p0	1077	0	1041	0	0
83	p1	235	0	51	0	0
84	p2	230	0	51	0	0
85	1	466	0	0	0	0
85	2	121	0	0	0	0
85	3	13	0	0	0	0
85	4	23	0	0	0	0
85	5	500	0	0	0	0
85	6	147	0	0	0	0
85	7	16	0	0	0	0
85	8	15	0	0	0	0
85	C8	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	2	0	0	0	0
85	L3	3	0	0	0	0
85	L4	1	0	0	0	0
85	L5	1	0	0	0	0
85	L6	1	0	0	0	0
85	L7	4	0	0	0	0
85	L8	1	0	0	0	0
85	M0	3	0	0	0	0
85	M1	2	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	5	0	0	0	0
85	M9	2	0	0	0	0
85	N0	1	0	0	0	0
85	N3	2	0	0	0	0
85	N5	1	0	0	0	0
85	N8	6	0	0	0	0
85	O1	1	0	0	0	0
85	O2	1	0	0	0	0
85	O3	1	0	0	0	0
85	O4	1	0	0	0	0
85	O7	2	0	0	0	0
85	S2	2	0	0	0	0
85	S4	2	0	0	0	0
85	S6	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	c9	2	0	0	0	0
85	d3	2	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	1	0	0	0	0
85	l7	3	0	0	0	0
85	l9	1	0	0	0	0
85	m0	1	0	0	0	0
85	m1	2	0	0	0	0
85	m6	2	0	0	0	0
85	m7	5	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
85	n0	2	0	0	0	0
85	n3	2	0	0	0	0
85	n6	2	0	0	0	0
85	n8	5	0	0	0	0
85	o1	1	0	0	0	0
85	o3	2	0	0	0	0
85	o4	2	0	0	0	0
85	o7	1	0	0	0	0
85	q0	1	0	0	0	0
85	q1	1	0	0	0	0
85	s1	1	0	0	0	0
85	s4	1	0	0	0	0
85	s6	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	2450	0	0	237	0
86	2	1113	0	0	125	0
86	3	77	0	0	5	0
86	4	105	0	0	9	0
86	5	2478	0	0	249	0
86	6	1113	0	0	108	0
86	7	84	0	0	9	0
86	8	105	0	0	22	0
86	C3	7	0	0	2	0
86	C5	7	0	0	6	0
86	C8	7	0	0	0	0
86	D9	7	0	0	0	0
86	L3	14	0	0	2	0
86	L4	7	0	0	1	0
86	M0	7	0	0	1	0
86	M5	7	0	0	1	0
86	M7	14	0	0	2	0
86	M8	7	0	0	0	0
86	M9	7	0	0	1	0
86	N1	7	0	0	1	0
86	N9	7	0	0	1	0
86	O2	7	0	0	0	0
86	O3	7	0	0	1	0
86	O7	14	0	0	5	0
86	O9	7	0	0	1	0
86	Q2	7	0	0	6	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
86	S8	7	0	0	0	0
86	SR	7	0	0	0	0
86	c3	7	0	0	0	0
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	21	0	0	0	0
86	l4	14	0	0	0	0
86	l5	21	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	n9	7	0	0	0	0
86	o2	7	0	0	0	0
86	o3	7	0	0	0	0
86	o7	7	0	0	0	0
86	o9	7	0	0	0	0
86	q2	7	0	0	0	0
86	s1	7	0	0	0	0
86	s4	7	0	0	0	0
86	s8	7	0	0	0	0
86	s9	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	3	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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
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	39	0	39	4	0
88	5	39	0	39	3	0
All	All	411245	0	297375	9722	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 14.

All (9722) 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:CB	78:Q2:17:CYS:SG	2.09	1.40
78:Q2:17:CYS:CB	87:Q2:501:ZN:ZN	0.98	1.40
40:L3:41:VAL:HA	40:L3:185:GLY:HA3	1.41	1.06
36:5:2836:C:H5	36:5:2852:C:H42	1.05	1.02
65:N9:50:THR:HG22	36:5:1073:U:H1'	205.84	1.02
36:1:3182:G:OP1	52:M6:160:ARG:NH2	1.93	1.01
1:6:1011:G:OP2	86:6:2122:OHX:N3	1.93	1.00
40:L3:296:THR:HG22	40:L3:298:PHE:H	3.44	0.99
77:Q1:9:ARG:HG3	77:Q1:9:ARG:HH11	1.43	0.99
41:L4:317:PRO:O	41:L4:319:LYS:N	1.95	0.98
59:N3:81:GLN:O	59:N3:98:ASN:ND2	1.95	0.98
6:S4:49:ARG:NH1	1:6:448:C:OP2	380.25	0.97
36:1:3050:U:OP2	86:1:4185:OHX:N4	1.98	0.97
1:6:1636:C:H4'	1:6:1637:C:H5'	1.46	0.96
36:5:437:G:H22	36:5:622:A:H61	1.01	0.95
69:O3:48:ARG:HH11	69:O3:48:ARG:HG2	1.27	0.95
36:1:2940:A:N7	40:L3:2:SER:N	2.14	0.95
36:5:3274:A:H3'	36:5:3275:U:H5''	1.46	0.95
36:1:3272:C:OP2	43:L6:78:ARG:NH1	2.00	0.94
36:1:979:U:H1'	36:1:980:A:C8	2.02	0.94
75:O9:9:ILE:HG22	75:O9:13:MET:HE2	1.49	0.94
36:1:1639:C:OP2	70:O4:74:ARG:NH2	2.00	0.94
36:5:2273:G:O6	86:5:4201:OHX:N5	2.00	0.94
39:L2:193:ARG:NH2	36:5:2181:C:OP1	197.69	0.93
36:1:1898:G:OP2	86:1:3932:OHX:N4	2.02	0.92
69:O3:75:HIS:HB3	69:O3:80:VAL:HG12	1.52	0.92
50:M4:55:ARG:NH2	50:M4:76:ALA:O	2.13	0.92

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:23:TRP:CH2	55:M9:25:ASP:HB3	2.04	0.92
35:SM:34:LYS:NZ	36:1:2707:C:OP1	2.03	0.92
1:2:471:A:OP2	86:2:2075:OHX:N4	2.02	0.92
57:N1:51:GLY:HA3	57:N1:92:ARG:HG3	2.21	0.91
1:6:755:A:O2'	1:6:756:A:O4'	1.87	0.91
1:2:1564:U:OP1	21:C9:38:LYS:NZ	2.04	0.90
49:M3:46:ILE:HG22	49:M3:49:ARG:HB2	1.99	0.90
64:N8:21:ARG:NH2	36:5:640:U:OP1	181.95	0.90
53:M7:125:GLN:HB2	53:M7:141:SER:HB2	1.51	0.90
36:5:3343:G:H21	36:5:3362:A:H2	1.14	0.90
70:O4:58:ARG:HG3	70:O4:58:ARG:HH11	1.36	0.90
36:5:1239:C:H42	36:5:1249:G:H1	1.18	0.90
51:M5:110:ALA:HB1	51:M5:113:LEU:HD23	1.51	0.90
66:O0:63:SER:HG	66:O0:65:THR:HG1	1.13	0.90
71:O5:85:THR:HG22	71:O5:88:LEU:H	1.50	0.90
36:5:2620:G:O6	86:5:4245:OHX:N4	2.04	0.90
47:M0:174:THR:HG23	47:M0:176:LEU:H	1.37	0.90
36:1:640:U:OP1	64:N8:21:ARG:NH2	2.06	0.89
67:O1:13:THR:HG22	67:O1:72:ARG:HH11	1.38	0.89
36:5:3194:C:O2	36:5:3197:G:N2	2.05	0.89
51:M5:188:ARG:NH2	36:5:31:C:OP2	122.02	0.89
47:M0:76:MET:HE1	47:M0:148:VAL:HA	3.28	0.89
7:S5:64:VAL:HG13	7:S5:89:ILE:HD11	4.05	0.89
78:Q2:17:CYS:SG	87:Q2:501:ZN:ZN	1.59	0.89
24:D2:15:ASN:HD21	24:D2:71:LYS:HA	1.38	0.89
36:1:1222:G:HO2'	36:1:1285:G:H1	1.15	0.89
55:M9:5:ARG:NH2	36:5:1471:U:OP1	123.15	0.89
72:O6:28:TYR:O	86:5:4192:OHX:N2	104.51	0.89
1:2:1429:G:H1'	22:D0:74:GLU:HG2	1.55	0.88
41:L4:16:THR:HG22	41:L4:18:ASN:H	2.06	0.88
21:C9:119:LYS:NZ	1:6:1369:U:OP1	442.62	0.88
36:5:1877:U:H5''	36:5:1878:G:H5'	1.55	0.88
54:M8:158:HIS:H	54:M8:186:VAL:HG12	1.36	0.88
47:M0:36:LEU:HD21	47:M0:69:ARG:HD3	1.55	0.88
50:M4:128:ARG:NH2	36:5:3214:U:OP2	280.58	0.88
38:4:2:A:OP2	86:4:225:OHX:N5	2.06	0.88
1:2:1585:U:H3	1:2:1611:A:H2	1.21	0.88
36:5:3153:U:H4'	36:5:3154:C:H5'	1.56	0.88
51:M5:125:SER:HB3	36:5:2433:U:H1'	161.35	0.88
36:1:2794:G:N7	86:1:3935:OHX:N2	2.22	0.88
46:L9:91:ARG:NH2	46:L9:141:LYS:O	5.63	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:510:G:O6	86:5:4025:OHX:N2	2.07	0.87
52:M6:110:PRO:O	52:M6:113:ASP:N	4.60	0.87
10:S8:8:ARG:NH2	10:S8:19:ALA:O	2.08	0.87
36:5:272:G:OP2	86:5:4076:OHX:N6	2.08	0.86
50:M4:113:THR:HG22	50:M4:116:GLU:H	1.74	0.86
36:1:2854:U:OP2	47:M0:3:ARG:NH2	2.07	0.86
11:S9:108:ARG:HB2	11:S9:111:THR:HG23	2.90	0.86
1:2:452:A:OP2	86:2:2037:OHX:N5	2.08	0.86
36:1:1362:G:H4'	44:L7:159:GLN:O	1.75	0.86
40:L3:3:HIS:O	40:L3:5:LYS:N	2.07	0.86
36:5:2818:U:H6	36:5:2818:U:H5'	1.39	0.86
29:D7:29:ARG:HG3	29:D7:29:ARG:HH11	1.78	0.86
1:2:1202:A:OP1	86:2:2110:OHX:N1	2.08	0.86
18:C6:112:TYR:OH	18:C6:114:ARG:NH1	2.08	0.86
25:D3:64:PRO:O	86:6:2161:OHX:N2	361.04	0.86
36:1:2208:A:N1	86:1:4047:OHX:N2	2.24	0.86
38:4:62:C:O2	86:4:230:OHX:N5	2.09	0.86
10:S8:34:ALA:HB2	10:S8:56:ARG:HD3	2.62	0.86
40:L3:76:VAL:HG21	40:L3:323:MET:HE3	2.67	0.86
36:1:1740:U:H1'	36:1:1741:A:H2	1.40	0.86
86:1:4084:OHX:N1	72:O6:28:TYR:O	2.09	0.85
6:S4:240:LYS:HE2	6:S4:240:LYS:H	1.40	0.85
86:1:3960:OHX:N6	44:L7:217:PRO:O	2.10	0.85
36:5:2444:C:H42	36:5:2503:G:H1	1.25	0.85
44:L7:217:PRO:O	86:5:4004:OHX:N3	259.57	0.85
10:S8:162:ALA:HA	36:1:3353:G:H5'	1.59	0.85
1:6:1595:U:H3	1:6:1600:A:H2	1.21	0.85
19:C7:27:ASP:O	19:C7:31:ASN:ND2	3.55	0.85
1:2:820:U:H2'	1:2:821:U:H4'	1.57	0.85
47:M0:77:THR:HG22	47:M0:82:ARG:HA	2.21	0.85
47:M0:43:VAL:HG21	47:M0:197:VAL:HB	1.66	0.85
41:L4:170:LYS:HG3	41:L4:175:HIS:HB2	2.17	0.85
36:1:2206:G:H1	36:1:2237:C:H42	1.19	0.85
36:1:3275:U:H5'	69:O3:68:TRP:HZ2	1.41	0.85
36:1:31:C:OP2	51:M5:188:ARG:NH2	2.09	0.85
47:M0:140:THR:HG21	47:M0:144:ASN:HD22	1.42	0.85
51:M5:31:ARG:NH1	51:M5:124:ASP:OD1	2.85	0.85
1:2:992:A:OP1	86:2:2034:OHX:N2	2.10	0.85
4:S2:140:ARG:HH22	4:S2:228:ASN:HD21	1.21	0.85
62:N6:38:GLU:HG2	62:N6:39:LEU:HD23	1.57	0.84
15:C3:29:SER:HG	15:C3:32:SER:HG	1.24	0.84

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:33:ARG:NH2	13:C1:51:GLY:O	3.24	0.84
11:S9:109:LEU:HB2	11:S9:146:PHE:HB3	1.59	0.84
1:2:895:G:H1	1:2:917:U:H3	1.23	0.84
1:2:151:G:O6	26:D4:124:ARG:NH2	2.10	0.84
36:5:2977:G:OP1	86:5:4155:OHX:N4	2.10	0.84
1:2:702:G:O6	1:2:736:C:N4	2.08	0.84
78:Q2:50:PHE:O	86:Q2:502:OHX:N2	2.11	0.84
1:2:320:U:H3'	1:2:321:C:H5''	1.60	0.84
67:O1:55:LEU:HB2	67:O1:95:PRO:HD3	1.94	0.83
52:M6:160:ARG:NH2	36:5:3182:G:OP1	280.39	0.83
34:SR:89:LEU:HB2	34:SR:103:PHE:HB2	1.60	0.83
26:D4:14:SER:HB2	26:D4:21:LYS:HE3	1.59	0.83
25:D3:62:LYS:HD2	25:D3:118:PRO:HB3	1.59	0.83
36:1:410:U:O4	86:1:4060:OHX:N5	2.12	0.83
28:D6:10:ARG:HB2	28:D6:34:LYS:HA	2.08	0.83
36:5:863:C:OP1	86:5:3919:OHX:N3	2.10	0.83
36:1:3118:C:H4'	76:Q0:106:ARG:HH22	1.42	0.83
36:1:837:A:OP2	79:Q3:4:ARG:NH1	2.11	0.83
36:5:2255:A:H5'	36:5:2261:G:H22	1.43	0.83
34:SR:64:HIS:ND1	34:SR:86:ASP:OD2	2.11	0.83
46:L9:22:SER:OG	46:L9:23:ARG:N	2.10	0.83
40:L3:169:THR:HG23	40:L3:171:LEU:H	2.10	0.83
6:S4:146:THR:HG21	1:6:123:G:H21	341.57	0.83
36:1:1564:U:H2'	36:1:1565:G:H8	1.42	0.82
6:S4:9:LEU:HB2	6:S4:30:ARG:HB2	2.03	0.82
1:2:523:G:OP2	26:D4:37:LYS:NZ	2.11	0.82
53:M7:25:SER:O	53:M7:29:THR:HG23	1.78	0.82
41:L4:204:GLY:O	41:L4:246:ARG:NH1	2.48	0.82
36:5:2233:A:OP2	86:5:3965:OHX:N5	2.11	0.82
40:L3:266:ARG:NH2	36:5:2392:C:O2'	209.61	0.82
44:L7:158:LYS:HE2	44:L7:159:GLN:H	1.43	0.82
74:O8:5:ILE:HG22	74:O8:54:LEU:HB2	1.75	0.82
22:D0:20:ILE:HD13	22:D0:22:ILE:HD13	1.62	0.82
36:5:343:U:OP2	86:5:3927:OHX:N3	2.12	0.82
38:4:135:G:OP2	61:N5:56:ARG:NH2	2.11	0.82
1:2:1010:C:OP2	86:2:2131:OHX:N6	2.13	0.82
36:5:1329:U:O2'	36:5:1330:A:OP1	1.97	0.82
24:D2:70:ASN:ND2	24:D2:130:TYR:O	2.12	0.82
73:O7:88:ALA:O	86:O7:104:OHX:N1	2.13	0.82
78:Q2:41:ARG:NH1	36:5:284:A:OP2	157.12	0.82
73:O7:2:GLY:N	36:5:2138:A:HO2'	174.02	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:C7:47:ARG:NH1	19:C7:48:ASN:OD1	2.13	0.82
78:Q2:73:GLU:OE1	78:Q2:80:ARG:NH2	2.12	0.81
42:L5:270:LYS:HB3	37:7:1:G:O2'	322.48	0.81
1:2:79:C:H1'	8:S6:174:LYS:HD3	1.61	0.81
36:5:2258:U:OP2	86:5:3951:OHX:N4	2.13	0.81
44:L7:92:ILE:HD11	54:M8:4:ASP:HB2	1.61	0.81
18:C6:95:LYS:O	34:SR:59:ARG:NH2	2.12	0.81
36:5:2975:U:OP1	86:5:4090:OHX:N3	2.13	0.81
36:1:1949:G:OP1	55:M9:104:ARG:NH1	2.13	0.81
36:1:3375:A:O2'	36:1:3378:C:OP2	1.96	0.81
43:L6:31:ARG:NH1	69:O3:107:ILE:O	2.14	0.81
48:M1:94:ARG:O	48:M1:96:PHE:N	2.13	0.81
33:E1:97:LYS:NZ	1:6:1253:U:O4	440.10	0.81
36:1:3276:G:H1	69:O3:60:ARG:HH22	1.27	0.81
44:L7:144:ILE:HD12	44:L7:189:ILE:HD12	1.60	0.81
10:S8:50:GLY:HA2	1:6:397:A:O3'	315.47	0.81
74:O8:44:LYS:HG2	74:O8:53:THR:HB	2.04	0.81
36:1:1951:C:H42	36:1:2095:G:H1	1.28	0.81
36:5:1759:C:N4	36:5:1766:G:O6	2.12	0.81
46:L9:120:ASP:OD1	46:L9:124:ARG:NH2	2.14	0.81
1:2:514:G:H1	1:2:543:C:H5	1.29	0.81
23:D1:62:ARG:HH22	24:D2:20:THR:HG22	2.26	0.81
59:N3:2:SER:HA	59:N3:56:ASP:HA	4.36	0.81
1:6:301:A:OP2	86:6:2095:OHX:N1	2.14	0.81
1:2:1203:A:OP2	86:2:2110:OHX:N5	2.14	0.81
5:S3:164:VAL:HG13	5:S3:168:ILE:HD11	1.61	0.81
40:L3:37:ARG:HG2	40:L3:187:SER:H	1.59	0.80
16:C4:38:THR:HG21	1:6:895:G:H21	263.04	0.80
70:O4:8:ARG:HH21	70:O4:31:ARG:HD2	3.19	0.80
22:D0:27:THR:HB	22:D0:88:LYS:HG2	2.56	0.80
36:1:2233:A:OP2	86:1:4047:OHX:N5	2.15	0.80
36:5:2234:G:O6	86:5:3965:OHX:N1	2.14	0.80
1:2:283:U:H5''	8:S6:188:ARG:HD3	1.62	0.80
18:C6:58:ASP:O	18:C6:60:PHE:N	2.15	0.80
4:S2:116:LYS:HG2	4:S2:127:ALA:HB3	1.63	0.80
20:C8:120:ARG:NH2	35:SM:58:GLU:OE1	2.13	0.80
53:M7:136:ILE:O	53:M7:137:ASN:ND2	2.25	0.80
50:M4:132:LYS:HD3	36:5:3230:G:H4'	286.91	0.80
36:5:1875:G:H2'	36:5:1876:U:H5''	1.61	0.80
11:S9:126:ARG:NH1	1:6:475:A:OP2	424.09	0.80
1:2:140:A:OP2	8:S6:187:LYS:NZ	2.14	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2850:G:O6	86:1:4079:OHX:N6	2.15	0.80
59:N3:10:LYS:NZ	59:N3:56:ASP:OD1	2.60	0.80
36:1:2123:G:N7	86:1:4202:OHX:N2	2.30	0.80
1:6:770:A:OP2	86:6:2140:OHX:N3	2.15	0.80
70:O4:74:ARG:NH2	36:5:1639:C:OP2	200.78	0.79
36:1:2703:A:OP2	42:L5:23:ARG:NH1	2.15	0.79
28:D6:58:VAL:HG22	28:D6:59:TYR:H	3.62	0.79
41:L4:203:ARG:NH1	41:L4:226:GLU:OE2	2.15	0.79
1:6:1579:U:OP1	86:6:2184:OHX:N4	2.15	0.79
36:5:2732:G:OP2	86:5:4221:OHX:N1	2.15	0.79
36:1:300:G:O6	86:1:4154:OHX:N1	2.15	0.79
36:1:3166:C:H42	36:1:3284:G:H1	1.25	0.79
36:5:1015:U:O2'	36:5:1017:C:OP1	2.00	0.79
5:S3:141:LYS:HE3	5:S3:179:GLN:HG3	1.62	0.79
36:1:2818:U:H6	36:1:2818:U:H5'	1.46	0.79
36:1:924:G:OP1	86:1:4147:OHX:N5	2.15	0.79
36:5:2836:C:H5	36:5:2852:C:N4	1.81	0.79
36:1:410:U:O4	86:1:4060:OHX:N2	2.14	0.79
1:2:930:A:OP1	28:D6:32:LYS:NZ	2.15	0.79
48:M1:49:LYS:HB3	48:M1:62:ASN:HA	1.62	0.79
24:D2:82:LYS:O	24:D2:84:GLY:N	2.13	0.79
21:C9:57:ARG:NH1	1:6:1479:A:OP1	392.52	0.79
1:2:1254:U:OP2	14:C2:46:ARG:NH1	2.16	0.79
10:S8:76:THR:HG22	10:S8:105:ASP:HB3	2.42	0.79
41:L4:283:THR:HG22	41:L4:285:ASP:H	1.46	0.79
78:Q2:17:CYS:SG	78:Q2:77:CYS:HB3	2.22	0.79
75:O9:2:ALA:N	36:5:1493:G:O6	122.91	0.79
33:E1:108:VAL:HB	33:E1:114:VAL:HG22	1.65	0.79
36:1:13:A:OP2	86:1:4207:OHX:N5	2.16	0.79
41:L4:143:GLU:O	86:L4:402:OHX:N2	2.16	0.79
41:L4:329:PRO:O	41:L4:331:ALA:N	3.40	0.79
25:D3:92:CYS:HA	25:D3:95:PHE:HD2	1.48	0.79
36:5:3174:A:H2'	36:5:3175:U:H5'	1.65	0.79
44:L7:216:VAL:HG11	44:L7:227:GLY:HA3	4.49	0.79
6:S4:88:ASP:OD1	6:S4:122:LYS:NZ	2.16	0.79
25:D3:73:ARG:HH21	25:D3:84:THR:HG22	1.49	0.79
36:1:2836:C:H5	36:1:2852:C:H42	1.27	0.79
1:6:1699:G:H22	1:6:1701:A:H3'	1.47	0.78
71:O5:78:LYS:HA	71:O5:81:ARG:HD3	2.24	0.78
1:2:1559:A:H5''	20:C8:135:GLY:HA3	1.65	0.78
1:6:1588:G:H1	1:6:1608:U:H3	1.30	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2356:A:H61	36:1:2983:C:H5	1.31	0.78
36:1:283:G:OP1	78:Q2:45:ARG:NH2	2.16	0.78
51:M5:143:ARG:HH21	71:O5:92:LEU:HA	1.99	0.78
25:D3:13:ARG:HA	25:D3:16:ARG:HD3	1.64	0.78
61:N5:105:VAL:HG13	61:N5:130:TYR:CD2	3.16	0.78
1:6:471:A:OP2	86:6:2105:OHX:N5	2.16	0.78
3:S1:125:VAL:HG11	3:S1:173:THR:HG22	3.69	0.78
1:6:235:G:H2'	1:6:236:A:H8	1.49	0.78
45:L8:81:THR:OG1	45:L8:82:LEU:N	2.74	0.78
2:S0:24:LEU:O	2:S0:163:ASN:ND2	2.15	0.78
13:C1:95:PRO:O	13:C1:97:TYR:N	2.17	0.78
47:M0:175:ASN:OD1	47:M0:176:LEU:N	4.54	0.78
7:S5:62:VAL:HG13	7:S5:89:ILE:HG12	1.76	0.78
1:6:230:C:H42	1:6:235:G:H1	1.32	0.78
70:O4:54:ILE:HD11	70:O4:78:GLY:HA2	2.59	0.78
49:M3:165:SER:O	49:M3:167:PHE:N	2.15	0.78
66:O0:99:ASP:O	66:O0:101:LEU:N	2.96	0.78
36:1:687:U:OP2	49:M3:36:ARG:NH2	2.17	0.78
36:1:562:C:H2'	36:1:563:U:H6	1.49	0.78
45:L8:244:ALA:HA	45:L8:247:ASP:HB2	2.27	0.78
36:1:1466:G:O6	86:1:3880:OHX:N4	2.16	0.78
21:C9:16:ASN:OD1	21:C9:56:LYS:NZ	2.17	0.78
68:O2:100:ILE:O	68:O2:105:ARG:NH1	2.17	0.78
36:1:2736:A:OP1	57:N1:92:ARG:NH1	2.17	0.77
51:M5:46:ASP:OD1	51:M5:50:ARG:NH2	2.17	0.77
36:1:1334:U:O2'	44:L7:151:ARG:NH2	2.18	0.77
36:1:371:G:O6	86:1:4184:OHX:N4	2.16	0.77
1:2:1625:C:OP1	4:S2:91:ARG:NH2	2.17	0.77
1:2:823:G:H2'	1:2:824:G:C8	2.20	0.77
36:1:1215:U:H2'	36:1:1216:C:H5''	1.65	0.77
63:N7:135:ARG:HG2	63:N7:135:ARG:HH21	1.47	0.77
36:1:618:C:H5'	53:M7:169:THR:HG22	1.66	0.77
1:2:1796:C:H5	28:D6:6:ALA:H	1.32	0.77
42:L5:23:ARG:NH2	36:5:2703:A:OP2	283.67	0.77
54:M8:157:PRO:HD3	64:N8:47:LYS:HB2	2.07	0.77
1:6:1680:G:O6	86:6:2191:OHX:N4	2.17	0.77
33:E1:144:CYS:HB3	33:E1:147:VAL:HG13	1.67	0.77
78:Q2:45:ARG:NH2	36:5:283:G:OP2	147.21	0.77
69:O3:86:ARG:O	86:O3:202:OHX:N1	2.17	0.77
36:1:1014:U:H2'	36:1:1015:U:H5''	1.66	0.77
36:1:742:G:N7	86:1:3977:OHX:N1	2.33	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1796:C:OP1	28:D6:87:ARG:NH1	2.17	0.77
36:5:2236:G:OP1	86:5:4251:OHX:N3	2.17	0.77
36:1:2573:G:O6	86:1:4001:OHX:N3	2.18	0.77
21:C9:102:ARG:NH2	1:6:1502:G:N7	405.83	0.77
40:L3:81:THR:HB	40:L3:321:PHE:HA	2.35	0.77
56:N0:52:LYS:NZ	37:7:100:C:OP2	281.24	0.77
36:5:2311:G:OP2	86:5:4201:OHX:N1	2.18	0.77
44:L7:134:VAL:O	44:L7:229:PHE:HA	2.72	0.77
3:S1:48:VAL:HG13	3:S1:61:LEU:HD21	1.66	0.77
42:L5:120:LYS:O	42:L5:248:ARG:NH2	2.90	0.76
38:8:16:G:O6	86:8:216:OHX:N6	2.18	0.76
41:L4:192:GLY:HA2	41:L4:195:ARG:HG3	3.44	0.76
68:O2:123:LYS:HA	68:O2:126:LEU:HD12	2.91	0.76
36:1:3087:A:OP1	86:1:4185:OHX:N5	2.18	0.76
36:5:2211:U:O4	86:5:3965:OHX:N4	2.19	0.76
37:3:49:G:N7	42:L5:58:LYS:HG3	2.01	0.76
47:M0:66:GLU:OE1	47:M0:69:ARG:NH2	2.65	0.76
36:1:3275:U:H5'	69:O3:68:TRP:CZ2	2.21	0.76
1:2:1500:C:OP1	21:C9:122:ARG:NH2	2.18	0.76
36:5:1231:A:H5''	36:5:1232:C:H5'	1.68	0.76
41:L4:122:THR:HG22	41:L4:235:LEU:HB2	1.67	0.76
32:E0:26:LYS:NZ	1:6:588:U:OP2	419.07	0.76
36:1:2535:A:H61	36:1:2544:U:H3	1.29	0.76
63:N7:26:VAL:HG21	63:N7:96:VAL:HB	1.68	0.76
36:1:160:G:O6	86:1:4198:OHX:N6	2.18	0.76
46:L9:49:ASN:O	46:L9:51:GLN:N	2.19	0.76
6:S4:141:THR:OG1	6:S4:143:ASP:OD2	2.04	0.76
71:O5:101:THR:HG22	71:O5:104:GLN:H	1.50	0.76
37:7:86:U:O2	86:7:220:OHX:N4	2.18	0.76
11:S9:93:LEU:HA	11:S9:96:VAL:HG13	1.67	0.76
25:D3:6:PRO:HG3	25:D3:14:LYS:HG2	1.68	0.76
1:6:1230:A:H2	1:6:1255:G:H21	1.30	0.76
41:L4:269:SER:O	41:L4:271:LYS:N	2.18	0.76
39:L2:51:ASP:HB3	39:L2:54:ARG:HD2	2.65	0.76
56:N0:91:TYR:OH	56:N0:93:GLU:OE2	2.04	0.76
20:C8:36:LYS:NZ	1:6:1568:C:OP1	335.33	0.76
46:L9:147:SER:HB2	46:L9:187:ILE:HD11	1.68	0.76
18:C6:82:ARG:HH22	18:C6:114:ARG:HG3	3.69	0.76
36:1:1230:G:H1	36:1:1279:C:H42	1.30	0.76
36:1:2525:G:OP2	39:L2:37:ARG:NH1	2.19	0.76
40:L3:56:ILE:HD11	40:L3:359:ILE:HG12	1.88	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2123:G:N7	86:5:4101:OHX:N1	2.34	0.76
1:2:1331:A:OP1	19:C7:45:ARG:NH2	2.18	0.76
17:C5:43:ARG:NH2	1:6:1552:U:OP2	403.69	0.76
66:O0:24:THR:HG22	66:O0:91:SER:HB3	1.66	0.76
36:1:2503:G:H1'	36:1:2504:U:H5	1.51	0.76
3:S1:28:GLU:OE2	3:S1:94:LYS:NZ	2.19	0.76
59:N3:48:ARG:HH11	59:N3:48:ARG:HG3	1.50	0.76
63:N7:83:THR:HG23	63:N7:85:TYR:H	1.51	0.76
1:6:1698:G:N2	1:6:1699:G:N7	2.34	0.75
18:C6:97:VAL:HG12	18:C6:98:ASP:H	1.74	0.75
75:O9:5:LYS:HD3	75:O9:13:MET:HE1	2.64	0.75
36:5:314:U:O4	86:5:4194:OHX:N5	2.18	0.75
71:O5:76:GLN:O	71:O5:81:ARG:NH1	2.23	0.75
8:S6:57:ASP:HA	8:S6:106:LEU:HA	1.68	0.75
1:2:1508:U:O4	86:2:2030:OHX:N5	2.19	0.75
13:C1:132:SER:O	13:C1:134:THR:N	3.27	0.75
48:M1:23:VAL:HG12	48:M1:25:GLU:H	3.56	0.75
1:2:1239:U:O2	1:2:1246:C:N4	2.19	0.75
1:2:1542:G:N2	1:2:1569:A:OP2	2.20	0.75
36:5:3276:G:OP2	36:5:3276:G:H2'	1.87	0.75
1:2:1564:U:H2'	1:2:1565:C:C6	2.22	0.75
1:6:140:A:N6	1:6:281:G:OP1	2.19	0.75
36:1:3074:G:OP1	86:1:4042:OHX:N1	2.18	0.75
1:6:1010:C:OP2	86:6:2173:OHX:N3	2.19	0.75
28:D6:19:LYS:HG3	28:D6:20:PRO:HD2	1.68	0.75
75:O9:23:LEU:HD22	75:O9:24:PRO:HD2	1.66	0.75
1:2:140:A:N6	1:2:281:G:OP1	2.14	0.75
13:C1:95:PRO:O	13:C1:98:ASN:N	2.17	0.75
24:D2:2:THR:N	1:6:1034:C:HO2'	338.79	0.75
16:C4:25:ASP:OD1	16:C4:26:THR:N	2.81	0.75
1:2:7:G:O6	4:S2:205:ARG:NH2	2.19	0.75
40:L3:171:LEU:O	86:L3:404:OHX:N6	2.19	0.75
53:M7:29:THR:HA	53:M7:32:THR:HG23	1.67	0.75
86:5:3945:OHX:N5	86:5:4236:OHX:N6	2.35	0.75
36:1:3344:A:H2	36:1:3361:G:H21	1.34	0.75
36:5:1541:G:OP2	86:5:4095:OHX:N4	2.20	0.75
51:M5:38:ARG:NH2	38:8:143:U:OP1	108.90	0.75
1:6:1130:G:OP2	86:6:2115:OHX:N1	2.20	0.75
36:1:368:G:OP1	86:1:3885:OHX:N1	2.18	0.75
73:O7:87:SER:O	86:O7:104:OHX:N3	2.19	0.75
1:6:1293:U:O4	1:6:1322:A:N6	2.20	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1596:C:H2'	36:1:1597:C:C6	2.21	0.75
62:N6:112:ASP:HB3	62:N6:115:ARG:HB2	4.00	0.75
54:M8:170:ARG:O	54:M8:171:LYS:HB2	4.18	0.75
56:N0:82:ASP:OD1	56:N0:87:THR:HB	1.87	0.75
36:1:2120:A:OP2	86:1:4012:OHX:N2	2.20	0.75
1:2:1537:C:N3	86:2:2154:OHX:N3	2.34	0.75
13:C1:99:ARG:NH1	25:D3:7:ARG:O	2.19	0.75
36:5:1565:G:N1	36:5:1574:C:N3	2.35	0.75
36:1:3308:C:N3	53:M7:69:ARG:NH1	2.35	0.75
36:1:1874:A:H5''	55:M9:18:GLY:HA3	1.68	0.75
67:O1:75:ILE:HG12	67:O1:93:VAL:HG13	2.65	0.75
43:L6:78:ARG:NH1	36:5:3272:C:OP2	246.96	0.74
52:M6:16:VAL:HG21	52:M6:43:ILE:HG12	2.40	0.74
36:1:770:G:N7	86:1:4099:OHX:N6	2.34	0.74
36:1:1103:A:OP2	36:1:1103:A:H4'	1.86	0.74
1:6:918:U:H2'	1:6:919:A:H8	1.52	0.74
10:S8:36:THR:HG21	10:S8:173:PRO:HB2	1.91	0.74
17:C5:69:GLU:OE1	86:C5:201:OHX:N4	2.20	0.74
78:Q2:14:GLY:O	78:Q2:16:THR:N	2.19	0.74
1:2:885:G:H21	16:C4:123:SER:HB2	1.51	0.74
86:5:3945:OHX:N1	86:5:4236:OHX:N4	2.35	0.74
36:1:1149:G:O6	86:1:4170:OHX:N6	2.19	0.74
68:O2:81:ASP:O	68:O2:84:THR:HG23	1.87	0.74
44:L7:121:LYS:HB2	57:N1:133:ALA:HB3	1.70	0.74
36:1:544:C:H1'	36:1:548:G:H22	1.52	0.74
78:Q2:73:GLU:OE1	78:Q2:80:ARG:NH1	3.91	0.74
63:N7:10:VAL:O	63:N7:83:THR:HG22	2.40	0.74
45:L8:33:ASN:ND2	45:L8:33:ASN:O	4.41	0.74
42:L5:95:TRP:CH2	42:L5:181:PRO:HD3	4.79	0.74
1:2:138:A:O2'	8:S6:149:LYS:NZ	2.20	0.74
57:N1:36:VAL:HA	57:N1:64:VAL:HG12	2.42	0.74
18:C6:14:LYS:O	18:C6:123:ARG:NH1	2.21	0.74
5:S3:70:THR:HG23	5:S3:86:LEU:HB2	2.40	0.74
36:5:132:C:H2'	36:5:133:U:H5''	1.69	0.74
36:5:1414:G:O6	86:5:4149:OHX:N1	2.20	0.74
1:2:1382:A:H5''	22:D0:60:THR:HG22	1.69	0.74
73:O7:65:ARG:HG3	73:O7:65:ARG:HH11	1.58	0.74
11:S9:119:ALA:O	11:S9:124:HIS:ND1	4.26	0.74
39:L2:114:SER:HB2	39:L2:169:ILE:HD12	1.69	0.74
77:Q1:6:ARG:NH2	1:6:1112:G:OP1	316.20	0.74
36:1:3319:U:O2'	36:1:3320:A:OP1	2.04	0.74

*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	2.21	0.74
53:M7:62:ARG:O	86:M7:206:OHX:N1	2.21	0.74
1:2:301:A:OP2	86:2:2063:OHX:N2	2.21	0.74
3:S1:103:MET:HB3	3:S1:215:VAL:HG13	2.13	0.74
12:C0:32:HIS:CD2	12:C0:33:GLU:H	4.46	0.74
41:L4:300:ARG:O	54:M8:39:ARG:NH1	2.24	0.74
34:SR:161:LYS:O	34:SR:161:LYS:HG2	1.87	0.74
1:2:900:A:OP1	16:C4:43:THR:OG1	2.05	0.74
24:D2:47:ILE:HG22	24:D2:65:LEU:HB3	1.70	0.74
36:5:155:G:H5'	36:5:156:G:C8	2.23	0.74
8:S6:153:VAL:O	8:S6:155:ASP:N	2.21	0.74
8:S6:98:ARG:NH2	8:S6:101:ILE:O	2.39	0.74
36:5:3364:C:OP1	86:5:3945:OHX:N1	2.20	0.74
86:5:3945:OHX:N1	86:5:4236:OHX:N3	2.35	0.74
36:5:2841:G:OP2	86:5:4140:OHX:N1	2.20	0.74
49:M3:63:VAL:HG22	36:5:72:C:H5'	113.36	0.74
36:1:1564:U:H2'	36:1:1565:G:C8	2.23	0.74
86:5:3945:OHX:N2	86:5:4236:OHX:N4	2.35	0.74
39:L2:70:ARG:NH2	36:5:2522:G:O6	175.70	0.74
47:M0:86:HIS:HB3	47:M0:139:ARG:HG2	1.74	0.74
7:S5:161:ASP:OD2	30:D8:42:ARG:NH1	3.66	0.74
49:M3:59:ARG:NH1	49:M3:66:ASN:O	2.92	0.74
36:1:1145:G:OP1	68:O2:44:ARG:NH1	2.21	0.74
1:6:991:G:OP2	86:6:2173:OHX:N2	2.20	0.74
11:S9:108:ARG:HH21	11:S9:145:SER:HB2	1.53	0.74
42:L5:107:ARG:HH22	42:L5:120:LYS:HA	1.52	0.74
6:S4:191:ARG:HH11	6:S4:245:LYS:HD3	1.53	0.74
36:5:776:U:H5	36:5:2719:U:O2	1.71	0.74
1:6:1595:U:N3	1:6:1600:A:H2	1.85	0.74
18:C6:40:GLU:HA	18:C6:42:GLU:N	2.03	0.74
61:N5:38:LEU:HD11	61:N5:40:LEU:HD13	1.70	0.74
1:2:339:C:OP2	10:S8:10:LYS:NZ	2.20	0.73
1:2:770:A:OP2	86:2:2138:OHX:N6	2.21	0.73
1:2:1041:G:H2'	1:2:1042:G:C8	2.22	0.73
22:D0:95:ALA:HB1	22:D0:99:ILE:HG13	3.35	0.73
36:1:200:C:OP1	62:N6:60:ARG:NH1	2.20	0.73
72:O6:4:LYS:HD2	72:O6:14:GLY:HA3	2.10	0.73
41:L4:144:LYS:HG2	41:L4:145:ILE:H	5.54	0.73
1:6:938:G:N7	86:6:2108:OHX:N3	2.36	0.73
3:S1:168:ILE:HG12	3:S1:197:ILE:HD12	1.70	0.73
25:D3:91:GLY:O	25:D3:93:LEU:N	2.22	0.73

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2207:A:H2'	36:1:2208:A:H8	1.53	0.73
22:D0:27:THR:HG23	22:D0:113:ASP:HB3	1.70	0.73
3:S1:62:LYS:O	3:S1:64:ARG:N	2.20	0.73
1:2:1114:G:O2'	1:2:1130:G:O6	2.04	0.73
20:C8:145:ARG:HG3	35:SM:68:ARG:HH22	3.64	0.73
36:1:3138:U:H2'	36:1:3139:A:H5''	1.68	0.73
1:2:348:U:O4	86:2:2127:OHX:N5	2.21	0.73
67:O1:79:ARG:NE	67:O1:79:ARG:H	1.86	0.73
1:2:818:C:N4	1:2:819:G:O6	2.19	0.73
1:2:142:G:H22	1:2:173:A:H2	1.36	0.73
72:O6:74:LYS:HD2	72:O6:80:PHE:HD2	1.52	0.73
36:1:1723:A:OP2	55:M9:103:ARG:NH2	2.22	0.73
36:1:3353:G:O2'	36:1:3356:G:H5'	1.89	0.73
34:SR:102:ARG:NH2	1:6:1341:A:O2'	459.15	0.73
36:1:1815:U:O2'	36:1:1816:A:OP2	2.05	0.73
1:2:1533:C:H4'	1:2:1539:G:N1	2.04	0.73
22:D0:74:GLU:HG2	1:6:1429:G:H1'	378.53	0.73
11:S9:108:ARG:HB3	11:S9:110:GLN:HB3	3.36	0.73
78:Q2:50:PHE:O	86:Q2:502:OHX:N1	3.72	0.73
1:2:1550:A:OP1	17:C5:42:ARG:NH2	2.22	0.73
38:8:79:A:H3'	38:8:80:A:C8	2.23	0.73
49:M3:47:ALA:HB1	49:M3:48:PRO:HD2	1.81	0.73
1:2:1291:G:N2	1:2:1324:G:H22	1.85	0.73
49:M3:58:VAL:HG13	36:5:75:G:H5''	87.83	0.73
1:6:1159:C:N3	86:6:2139:OHX:N5	2.36	0.73
36:5:2996:U:OP1	36:5:2996:U:H4'	1.88	0.73
1:2:1280:C:H2'	1:2:1281:G:H8	1.54	0.73
26:D4:29:HIS:HB3	26:D4:32:ARG:HB2	5.57	0.73
17:C5:65:LEU:O	86:C5:201:OHX:N1	2.21	0.73
1:2:9:U:O4	86:2:2155:OHX:N6	2.22	0.73
36:1:1233:G:H1	36:1:1255:C:H42	1.35	0.73
79:Q3:73:THR:HG22	79:Q3:75:ALA:H	3.91	0.73
36:1:807:A:H61	36:1:934:G:H22	1.37	0.73
36:1:1355:A:H4'	36:1:1356:U:O5'	1.88	0.73
36:1:1924:U:OP1	77:Q1:25:LYS:NZ	2.22	0.73
49:M3:15:ARG:CZ	36:5:96:G:H5''	151.32	0.73
52:M6:62:THR:H	52:M6:69:GLY:HA3	1.68	0.73
77:Q1:16:LYS:NZ	1:6:1750:A:OP1	287.38	0.73
35:SM:83:LYS:HE2	1:6:1178:G:H4'	338.31	0.73
43:L6:51:ARG:NH1	50:M4:114:ASP:OD2	2.21	0.73
47:M0:63:GLU:HB2	36:5:2853:A:H5'	296.93	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:M7:59:PRO:HG3	53:M7:76:PHE:CD1	2.24	0.72
36:1:2138:A:HO2'	73:O7:2:GLY:N	1.87	0.72
36:1:2108:C:O2'	36:1:3362:A:N6	2.21	0.72
18:C6:122:ARG:HB3	1:6:1584:G:H5''	397.20	0.72
45:L8:156:ASP:OD2	45:L8:156:ASP:N	2.17	0.72
36:1:2924:U:O4	86:1:4021:OHX:N1	2.22	0.72
67:O1:44:MET:HB3	67:O1:77:ARG:NH1	4.02	0.72
65:N9:16:ALA:O	65:N9:20:GLY:HA3	4.45	0.72
36:1:1409:G:N7	86:1:4070:OHX:N3	2.36	0.72
47:M0:98:ARG:HB3	47:M0:120:GLY:HA3	2.00	0.72
47:M0:3:ARG:NH2	36:5:2854:U:OP2	290.58	0.72
36:1:18:G:OP1	71:O5:81:ARG:NH2	2.23	0.72
44:L7:88:ARG:HD2	44:L7:90:LYS:O	1.98	0.72
35:SM:72:ARG:NH1	1:6:1460:A:O2'	323.38	0.72
36:5:1898:G:OP2	86:5:3948:OHX:N5	2.21	0.72
25:D3:130:VAL:O	25:D3:131:SER:HB3	1.87	0.72
56:N0:50:LYS:NZ	37:7:76:A:O2'	301.54	0.72
1:2:1588:G:OP1	86:2:2116:OHX:N3	2.22	0.72
2:S0:184:LEU:O	2:S0:186:GLY:N	2.22	0.72
47:M0:99:ILE:HG13	47:M0:123:HIS:HB2	4.83	0.72
1:6:833:U:O4	86:6:2103:OHX:N2	2.22	0.72
36:1:2548:C:OP2	39:L2:93:LYS:NZ	2.23	0.72
2:S0:163:ASN:O	2:S0:165:ARG:N	2.61	0.72
39:L2:149:ARG:NH2	39:L2:252:THR:O	4.12	0.72
36:1:944:C:H4'	68:O2:33:ARG:NH1	2.04	0.72
48:M1:107:ASP:N	48:M1:107:ASP:OD1	2.23	0.72
69:O3:49:ILE:HG23	69:O3:100:ILE:HG13	1.71	0.72
34:SR:38:ARG:HG2	34:SR:67:ILE:HG23	1.95	0.72
28:D6:10:ARG:NE	1:6:1795:U:O2	328.72	0.72
71:O5:101:THR:HG22	71:O5:104:GLN:HB2	1.86	0.72
63:N7:25:ILE:HG23	63:N7:41:ALA:HB1	3.45	0.72
41:L4:20:LEU:HD11	41:L4:252:GLU:HG3	1.96	0.72
1:2:639:U:OP1	9:S7:117:THR:OG1	2.07	0.72
40:L3:293:ASN:HB2	40:L3:304:THR:HA	1.69	0.72
69:O3:86:ARG:NH2	36:5:497:C:O3'	214.34	0.72
36:1:1015:U:O4	36:1:1035:G:N1	2.15	0.72
36:1:2108:C:H1'	36:1:3344:A:C8	2.25	0.72
7:S5:92:ARG:NH2	7:S5:169:ASN:OD1	2.23	0.72
20:C8:41:ARG:NH2	21:C9:36:ILE:O	3.49	0.72
1:2:397:A:O3'	10:S8:50:GLY:HA2	1.90	0.72
20:C8:143:ARG:NH2	1:6:1462:G:N7	339.27	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:129:GLU:OE2	43:L6:130:ILE:N	2.23	0.72
45:L8:143:ILE:HG23	45:L8:175:VAL:HG21	2.51	0.72
4:S2:106:ASP:OD1	4:S2:108:ASN:N	2.46	0.72
36:5:437:G:H22	36:5:622:A:N6	1.84	0.72
42:L5:270:LYS:HG3	42:L5:273:ARG:HB3	4.96	0.72
17:C5:127:ARG:CZ	35:SM:66:ALA:HB2	4.44	0.72
36:1:1308:A:C8	36:1:1308:A:OP2	2.43	0.72
65:N9:20:GLY:O	65:N9:21:ILE:HB	2.58	0.72
8:S6:87:ARG:NH1	1:6:159:U:O2'	321.37	0.72
15:C3:151:ASN:O	86:C3:201:OHX:N6	2.32	0.72
18:C6:82:ARG:HH22	18:C6:114:ARG:HB3	1.55	0.71
41:L4:226:GLU:OE1	41:L4:237:GLN:NE2	2.25	0.71
71:O5:81:ARG:NH2	36:5:18:G:OP1	77.32	0.71
10:S8:36:THR:HB	10:S8:57:ALA:O	1.90	0.71
41:L4:145:ILE:HD11	41:L4:148:ILE:HG13	1.71	0.71
41:L4:354:VAL:HG11	57:N1:143:THR:HG21	1.72	0.71
57:N1:129:LYS:NZ	36:5:1097:G:OP1	244.42	0.71
40:L3:218:ILE:HG13	40:L3:276:THR:HG23	3.39	0.71
78:Q2:12:CYS:SG	78:Q2:17:CYS:HB2	2.89	0.71
36:5:1170:A:OP2	86:5:4004:OHX:N4	2.22	0.71
1:2:1557:U:OP2	1:2:1559:A:O2'	2.06	0.71
11:S9:60:LEU:HD21	11:S9:93:LEU:HD21	1.71	0.71
2:S0:179:ARG:HD3	2:S0:183:ARG:HH11	1.53	0.71
36:1:1240:A:H61	36:1:1244:A:H5''	1.55	0.71
45:L8:240:ASN:HA	45:L8:243:GLN:HB2	1.72	0.71
8:S6:163:THR:HG22	8:S6:168:THR:HG22	1.72	0.71
4:S2:159:THR:HG21	1:6:1097:U:O3'	384.01	0.71
36:5:2730:G:OP2	86:5:3962:OHX:N4	2.23	0.71
1:6:1041:G:OP1	86:6:2177:OHX:N4	2.22	0.71
39:L2:209:HIS:CD2	39:L2:211:HIS:H	2.07	0.71
39:L2:209:HIS:HD2	39:L2:211:HIS:H	1.38	0.71
5:S3:105:MET:HG2	5:S3:122:VAL:HG21	2.17	0.71
36:5:1025:A:H3'	36:5:1026:A:H4'	1.70	0.71
86:5:3945:OHX:N5	86:5:4236:OHX:N3	2.37	0.71
39:L2:204:MET:HE2	39:L2:209:HIS:HB2	1.72	0.71
1:2:583:C:OP1	86:2:2025:OHX:N3	2.24	0.71
72:O6:25:LYS:HB2	72:O6:28:TYR:HD2	1.55	0.71
70:O4:9:ARG:HH21	70:O4:34:HIS:HB2	3.24	0.71
72:O6:58:ILE:HA	72:O6:61:ILE:HD12	1.72	0.71
39:L2:128:ARG:NH1	36:5:2177:G:OP2	198.08	0.71
3:S1:47:LEU:HD12	3:S1:47:LEU:H	2.69	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:57:SER:O	7:S5:59:VAL:N	2.23	0.71
1:6:486:G:H22	1:6:501:U:H3	1.39	0.71
36:5:1696:A:OP2	86:5:4188:OHX:N6	2.22	0.71
36:1:978:G:O2'	36:1:979:U:O2	2.08	0.71
36:1:3214:U:OP2	50:M4:128:ARG:NH2	2.23	0.71
51:M5:98:LEU:HD23	51:M5:128:LYS:HG3	4.37	0.71
72:O6:63:ASN:O	72:O6:65:GLY:N	4.83	0.71
57:N1:104:GLU:OE1	57:N1:130:ARG:NH1	2.23	0.71
36:1:3259:U:H6	36:1:3259:U:H5'	1.55	0.71
10:S8:8:ARG:HH21	10:S8:22:ARG:HH11	7.95	0.71
33:E1:129:GLY:H	33:E1:130:VAL:HG23	5.94	0.71
36:1:1103:A:O2'	36:1:1104:G:OP1	2.08	0.71
1:2:1588:G:H1	1:2:1608:U:H3	1.38	0.71
40:L3:277:SER:HB3	40:L3:280:HIS:NE2	2.06	0.71
16:C4:11:SER:OG	16:C4:12:GLN:N	4.40	0.71
9:S7:74:GLN:HE22	9:S7:92:PHE:HB2	1.55	0.71
36:5:3165:A:H61	36:5:3285:C:H42	1.38	0.71
86:5:3945:OHX:N2	86:5:4236:OHX:N6	2.39	0.71
36:5:2128:C:OP1	86:5:4091:OHX:N3	2.23	0.71
5:S3:75:LYS:HB3	12:C0:22:VAL:HG22	3.05	0.71
1:2:458:G:OP2	26:D4:105:ARG:NH2	2.22	0.71
1:6:1665:U:O4	86:6:2125:OHX:N6	2.24	0.71
10:S8:11:ARG:O	13:C1:133:LYS:NZ	2.22	0.71
8:S6:120:GLU:HG3	8:S6:125:THR:HB	1.73	0.71
58:N2:42:LYS:HG2	58:N2:46:ALA:HA	3.35	0.71
5:S3:90:ARG:HH12	5:S3:94:ARG:HH11	12.77	0.71
40:L3:139:GLN:O	40:L3:141:GLY:N	2.24	0.71
1:2:565:C:O2	86:2:2038:OHX:N5	2.24	0.71
41:L4:60:THR:HG21	41:L4:77:VAL:HG22	1.73	0.71
2:S0:84:ARG:HH21	2:S0:201:LEU:HD12	4.21	0.71
1:2:1274:C:H5	35:SM:96:ARG:H	1.38	0.71
36:1:3122:A:N1	46:L9:70:THR:HG21	2.04	0.71
42:L5:85:ARG:NH1	42:L5:86:TYR:OH	2.24	0.71
53:M7:67:ILE:HD11	36:5:1447:G:H3'	164.99	0.70
16:C4:85:ALA:H	16:C4:119:THR:HG22	1.56	0.70
29:D7:36:LYS:HG2	29:D7:43:ILE:HG22	1.73	0.70
1:6:383:G:N7	86:6:2151:OHX:N5	2.39	0.70
28:D6:87:ARG:NH1	1:6:1796:C:OP1	345.43	0.70
8:S6:87:ARG:NH2	1:6:161:U:OP2	315.59	0.70
50:M4:24:LYS:HE2	50:M4:25:LYS:HE2	1.73	0.70
42:L5:285:ARG:NH1	37:7:62:U:O3'	340.92	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:O9:45:ARG:NH2	36:5:1841:A:N3	127.99	0.70
36:1:1447:G:H3'	53:M7:67:ILE:HD11	1.74	0.70
1:2:513:U:OP1	11:S9:133:HIS:NE2	2.24	0.70
46:L9:9:GLN:HG2	46:L9:54:LYS:HD3	5.17	0.70
67:O1:41:LYS:HD2	67:O1:47:ASP:HA	2.26	0.70
33:E1:88:PRO:HB2	33:E1:89:LYS:HD3	6.53	0.70
70:O4:52:GLN:HG2	36:5:1639:C:H5'	197.17	0.70
11:S9:163:PRO:O	11:S9:165:GLY:N	2.24	0.70
40:L3:346:THR:O	40:L3:348:ARG:N	2.24	0.70
23:D1:74:GLN:NE2	23:D1:81:ASN:O	2.24	0.70
24:D2:27:ILE:HD11	24:D2:61:ILE:HD12	1.74	0.70
26:D4:104:SER:HB3	26:D4:107:GLN:HG3	1.72	0.70
79:Q3:4:ARG:NH2	36:5:838:G:O6	236.72	0.70
36:5:2820:A:H2	88:5:4255:HMT:H23B	1.56	0.70
36:1:3233:C:H2'	36:1:3234:A:C8	2.27	0.70
36:1:3200:G:O6	86:1:4132:OHX:N4	2.25	0.70
74:O8:46:ARG:NH1	74:O8:47:GLY:O	2.52	0.70
41:L4:47:ARG:NH1	41:L4:109:TRP:O	2.24	0.70
36:1:718:G:C2	36:1:721:G:H1'	2.26	0.70
39:L2:137:ILE:HG12	39:L2:147:ARG:HG3	4.52	0.70
36:5:1878:G:OP1	86:5:3960:OHX:N5	2.25	0.70
18:C6:109:PHE:O	18:C6:113:ASP:N	2.71	0.70
86:2:2038:OHX:N1	25:D3:64:PRO:O	2.24	0.70
23:D1:41:GLU:O	23:D1:44:ARG:NH1	3.44	0.70
57:N1:130:ARG:HD3	36:5:1098:A:OP2	254.75	0.70
1:6:754:A:N6	1:6:793:A:N7	2.32	0.70
63:N7:3:LYS:HE3	63:N7:5:LEU:HD12	7.50	0.70
36:5:742:G:N7	86:5:4005:OHX:N4	2.40	0.70
17:C5:121:ILE:HD13	17:C5:123:TYR:H	2.68	0.70
36:5:129:U:H2'	36:5:130:A:C8	2.26	0.70
36:5:437:G:N2	36:5:622:A:H61	1.85	0.70
28:D6:87:ARG:NH2	28:D6:94:ASN:O	2.25	0.70
36:1:2392:C:O2'	40:L3:266:ARG:NH2	2.25	0.70
49:M3:75:PHE:O	49:M3:79:GLU:HB2	1.90	0.70
36:1:1942:U:HO2'	36:1:3345:G:HO2'	1.40	0.70
19:C7:104:ASN:O	19:C7:106:THR:N	3.92	0.70
36:1:1554:U:HO2'	36:1:1582:C:H5	1.39	0.70
20:C8:30:TYR:O	20:C8:33:THR:OG1	2.33	0.70
40:L3:284:ARG:NH2	40:L3:295:ALA:O	2.24	0.70
9:S7:131:PHE:O	9:S7:133:THR:N	2.25	0.70
1:6:1695:G:H21	1:6:1706:C:H41	1.39	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:66:SER:O	9:S7:68:ALA:N	3.16	0.70
1:6:800:U:H2'	1:6:801:G:H8	1.56	0.70
36:1:439:C:H5'	36:1:440:A:C8	2.27	0.70
36:1:1915:A:H5''	55:M9:84:THR:HG22	1.73	0.70
3:S1:157:GLN:O	3:S1:159:SER:N	2.24	0.70
46:L9:124:ARG:HG2	46:L9:164:ILE:HD12	1.73	0.70
25:D3:17:VAL:HG23	25:D3:20:ARG:NH2	4.16	0.70
36:1:317:A:OP2	72:O6:30:LYS:NZ	2.25	0.70
73:O7:21:ARG:NH2	73:O7:41:ALA:O	2.33	0.70
63:N7:46:ILE:HD13	63:N7:68:ILE:HG23	1.73	0.70
36:5:1530:U:OP1	86:8:217:OHX:N1	2.25	0.70
4:S2:225:LEU:HD13	24:D2:68:ARG:HA	2.19	0.70
40:L3:25:ILE:H	40:L3:25:ILE:HD13	1.55	0.70
36:5:2248:C:OP2	86:5:3981:OHX:N6	2.24	0.69
44:L7:158:LYS:HE2	44:L7:159:GLN:N	2.07	0.69
53:M7:69:ARG:HG2	53:M7:79:THR:HG23	4.72	0.69
20:C8:135:GLY:HA3	1:6:1559:A:H5''	366.48	0.69
42:L5:56:THR:O	42:L5:58:LYS:N	2.21	0.69
1:2:1046:G:OP1	3:S1:157:GLN:NE2	2.25	0.69
12:C0:77:ARG:HD3	12:C0:84:GLU:HA	1.74	0.69
41:L4:326:ARG:O	44:L7:41:ARG:NH2	3.54	0.69
13:C1:133:LYS:NZ	1:6:324:U:OP1	292.60	0.69
17:C5:126:VAL:HG22	17:C5:127:ARG:H	3.03	0.69
55:M9:15:VAL:HG11	55:M9:52:LYS:HG3	1.72	0.69
45:L8:163:VAL:HG22	45:L8:166:LEU:HD12	1.73	0.69
39:L2:132:ASN:HD22	39:L2:151:PRO:HB3	1.57	0.69
22:D0:106:ILE:HG13	22:D0:107:THR:H	1.57	0.69
44:L7:151:ARG:NH1	44:L7:244:ASN:O	2.99	0.69
36:1:1581:C:H2'	36:1:1582:C:H5''	1.72	0.69
35:SM:23:LYS:HD2	35:SM:23:LYS:H	1.57	0.69
10:S8:76:THR:HG22	10:S8:108:PRO:HG2	1.73	0.69
1:2:1370:U:O4	86:2:2120:OHX:N1	2.25	0.69
38:4:136:G:OP1	61:N5:48:SER:HB3	1.93	0.69
36:1:662:U:OP1	64:N8:8:THR:HG21	1.92	0.69
52:M6:121:PRO:HA	52:M6:124:LEU:HD22	2.52	0.69
30:D8:10:ALA:HA	30:D8:32:PHE:HA	1.74	0.69
42:L5:152:ARG:HH11	42:L5:152:ARG:HG3	1.97	0.69
1:2:732:G:O2'	1:2:733:A:O4'	2.09	0.69
40:L3:41:VAL:HA	40:L3:185:GLY:CA	2.29	0.69
36:1:409:A:OP2	86:1:4060:OHX:N6	2.26	0.69
3:S1:129:THR:OG1	3:S1:131:ASP:O	2.97	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:2:2030:OHX:N6	86:2:2146:OHX:N5	2.39	0.69
25:D3:93:LEU:HD21	32:E0:8:LEU:HD13	1.75	0.69
64:N8:96:LYS:O	64:N8:98:THR:N	2.25	0.69
45:L8:90:THR:HA	45:L8:214:LEU:HD21	1.75	0.69
3:S1:190:PRO:HG2	3:S1:192:VAL:HG23	2.24	0.69
63:N7:52:LYS:O	63:N7:65:ARG:NH1	2.26	0.69
29:D7:37:CYS:O	29:D7:39:GLY:N	2.26	0.69
46:L9:90:MET:HB2	46:L9:144:ILE:HG22	1.74	0.69
1:6:453:U:O4	86:6:2064:OHX:N4	2.26	0.69
36:5:2818:U:C6	36:5:2818:U:H5'	2.26	0.69
78:Q2:46:LYS:O	86:Q2:502:OHX:N3	4.58	0.69
1:2:1235:C:H2'	33:E1:138:ARG:HH21	1.58	0.69
74:O8:46:ARG:NH2	36:5:1613:A:OP2	131.44	0.69
63:N7:65:ARG:HH11	63:N7:65:ARG:HG3	2.40	0.69
48:M1:20:ASN:HB3	48:M1:126:ASP:HB2	1.73	0.69
62:N6:5:SER:HB3	62:N6:8:VAL:HG13	3.51	0.69
14:C2:47:GLU:HG3	1:6:1229:G:H1	460.42	0.69
1:6:104:A:H61	1:6:308:C:H5'	1.57	0.69
18:C6:82:ARG:NH1	18:C6:114:ARG:O	3.36	0.69
36:1:73:C:N3	49:M3:59:ARG:NH1	2.40	0.69
9:S7:133:THR:O	9:S7:134:GLU:HB2	1.92	0.69
1:2:656:G:O2'	1:2:657:U:O4'	2.09	0.69
10:S8:52:ASN:OD1	86:6:2138:OHX:N3	310.22	0.69
36:5:1919:G:N7	86:5:4074:OHX:N4	2.40	0.69
34:SR:123:ILE:HG21	34:SR:169:ILE:HD13	2.04	0.69
1:6:987:G:O6	86:6:2121:OHX:N4	2.26	0.69
1:2:1297:G:N2	1:2:1300:A:OP2	2.26	0.69
36:5:3343:G:N2	36:5:3362:A:H2	1.91	0.69
22:D0:48:HIS:O	22:D0:48:HIS:ND1	2.26	0.69
3:S1:77:GLU:OE1	16:C4:114:ARG:NH2	2.24	0.69
1:2:732:G:O6	86:2:2129:OHX:N5	2.25	0.69
55:M9:62:ARG:NH2	36:5:3068:U:OP2	172.80	0.69
36:1:619:A:H5''	36:1:620:U:OP1	1.93	0.69
47:M0:55:ASN:ND2	47:M0:162:GLN:OE1	2.53	0.69
6:S4:246:LEU:HB2	6:S4:251:GLU:HG2	1.74	0.69
36:1:679:U:O4	86:1:3975:OHX:N1	2.25	0.69
63:N7:88:ASP:HB3	63:N7:121:ARG:HH22	1.56	0.69
20:C8:26:ILE:HD11	20:C8:31:ALA:HA	2.96	0.69
18:C6:47:LYS:HZ1	18:C6:114:ARG:NE	1.90	0.69
1:6:578:U:H4'	1:6:579:A:H5'	1.75	0.69
3:S1:70:LEU:O	3:S1:74:GLN:N	2.26	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:111:ARG:HB3	28:D6:68:TYR:CD2	2.28	0.69
6:S4:65:LEU:HD22	6:S4:78:THR:HA	1.74	0.69
52:M6:3:VAL:O	52:M6:4:GLU:HG3	3.13	0.69
78:Q2:17:CYS:HB2	87:Q2:501:ZN:ZN	1.14	0.69
1:6:895:G:H1	1:6:917:U:H3	1.41	0.69
36:1:824:C:H5''	39:L2:21:ARG:HD3	1.74	0.69
7:S5:225:ARG:NH1	30:D8:58:GLU:OE1	5.11	0.69
54:M8:66:ARG:NH2	36:5:744:A:OP1	166.38	0.69
36:5:439:C:H4'	36:5:440:A:H5'	1.74	0.68
7:S5:91:GLU:HA	7:S5:94:THR:HG23	1.82	0.68
21:C9:49:ASP:HB3	21:C9:53:TRP:HB3	1.76	0.68
11:S9:117:GLY:O	11:S9:119:ALA:N	2.59	0.68
6:S4:104:ASP:HB2	6:S4:108:ARG:H	1.56	0.68
19:C7:104:ASN:ND2	19:C7:105:GLN:OE1	5.30	0.68
36:1:3195:U:O2'	36:1:3197:G:N2	2.25	0.68
46:L9:4:ILE:HD11	56:N0:148:LEU:HD11	1.75	0.68
45:L8:144:GLU:OE1	72:O6:36:ARG:NH2	2.26	0.68
1:6:1350:U:H2'	1:6:1351:G:H8	1.57	0.68
48:M1:50:ALA:HB2	48:M1:65:ILE:HD12	1.75	0.68
36:1:1317:A:OP1	86:1:4067:OHX:N2	2.26	0.68
4:S2:140:ARG:NH1	23:D1:10:GLU:OE1	5.81	0.68
1:2:1562:G:OP1	21:C9:89:ARG:NH2	2.26	0.68
34:SR:178:VAL:HB	34:SR:192:PHE:HB2	2.27	0.68
7:S5:162:VAL:HB	30:D8:45:LYS:HB3	1.75	0.68
4:S2:53:ILE:HG12	4:S2:72:LEU:HD23	1.73	0.68
2:S0:70:PRO:HB2	2:S0:94:GLY:HA3	1.74	0.68
71:O5:90:ARG:NH1	36:5:20:A:OP2	86.34	0.68
36:5:3074:G:OP1	86:5:4121:OHX:N4	2.26	0.68
53:M7:88:VAL:O	53:M7:92:GLN:HG2	1.93	0.68
7:S5:42:LEU:HB2	7:S5:46:TRP:O	1.93	0.68
3:S1:137:ILE:HD11	3:S1:172:LEU:HD22	1.73	0.68
9:S7:132:PRO:O	9:S7:133:THR:OG1	4.85	0.68
55:M9:27:ASN:O	86:M9:203:OHX:N6	2.26	0.68
22:D0:53:LYS:HB2	22:D0:92:ASP:HB2	2.44	0.68
1:2:40:A:OP1	11:S9:3:ARG:NH1	2.26	0.68
9:S7:67:LEU:HG	9:S7:94:ALA:HB2	2.62	0.68
51:M5:172:ARG:NH2	36:5:63:A:OP1	103.32	0.68
66:O0:54:SER:HB3	70:O4:94:LEU:HD13	1.75	0.68
1:6:822:U:H2'	1:6:823:G:H5''	1.74	0.68
1:6:697:C:OP2	86:6:2076:OHX:N5	2.27	0.68
36:5:3330:A:H8	36:5:3330:A:H5''	1.58	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:31:ARG:HD2	8:S6:34:GLN:HE21	1.57	0.68
36:1:1010:G:N2	47:M0:193:ASP:OD2	2.26	0.68
36:5:2820:A:C2	88:5:4255:HMT:H23B	2.29	0.68
36:1:2718:U:OP2	86:1:3985:OHX:N3	2.26	0.68
36:5:549:U:O4	86:5:4015:OHX:N4	2.27	0.68
26:D4:112:LYS:NZ	26:D4:113:ASN:OD1	2.85	0.68
1:6:915:A:OP1	86:6:2073:OHX:N6	2.27	0.68
36:5:1940:G:H21	36:5:3362:A:H8	1.41	0.68
22:D0:27:THR:HB	22:D0:88:LYS:HG3	1.76	0.68
2:S0:28:ASN:O	2:S0:150:ASP:HB3	6.29	0.68
79:Q3:73:THR:HG22	79:Q3:76:ALA:H	1.59	0.68
36:5:129:U:O4	86:5:3935:OHX:N4	2.26	0.68
72:O6:76:ARG:HA	72:O6:76:ARG:HE	1.58	0.68
2:S0:83:GLN:HG2	2:S0:99:ALA:HB1	2.31	0.68
57:N1:48:ILE:HG13	57:N1:94:GLU:HG2	2.75	0.68
36:1:1196:C:O2	86:1:3997:OHX:N2	2.27	0.68
14:C2:81:ASP:O	14:C2:83:GLU:N	2.82	0.68
42:L5:75:LEU:HD23	42:L5:112:LYS:HE2	5.08	0.68
42:L5:60:ILE:HB	42:L5:80:SER:HB3	1.76	0.68
6:S4:49:ARG:NH2	6:S4:50:ASN:OD1	4.09	0.68
36:1:1171:G:O6	86:1:3960:OHX:N2	2.27	0.68
1:2:1525:A:OP1	21:C9:93:HIS:ND1	2.27	0.68
45:L8:241:LYS:HB2	36:5:2586:G:N7	184.86	0.68
67:O1:70:ARG:HE	67:O1:102:LYS:HE2	5.13	0.68
36:1:12:A:OP1	86:1:4207:OHX:N6	2.27	0.68
16:C4:29:HIS:ND1	16:C4:29:HIS:O	2.27	0.68
2:S0:27:ARG:HG3	2:S0:44:GLY:O	1.94	0.68
6:S4:126:VAL:HG13	6:S4:158:ASP:O	2.12	0.68
78:Q2:28:TYR:HB3	78:Q2:69:VAL:HB	2.04	0.68
13:C1:5:LEU:O	13:C1:7:VAL:N	2.23	0.68
36:1:2112:U:H4'	36:1:2113:A:H5'	1.74	0.68
56:N0:2:ALA:HB3	56:N0:32:SER:HB3	1.76	0.68
4:S2:60:SER:OG	23:D1:15:ARG:NH2	3.18	0.68
46:L9:28:VAL:HG22	46:L9:33:THR:HB	1.99	0.68
53:M7:29:THR:HG22	53:M7:87:SER:OG	1.94	0.68
74:O8:17:ARG:NH2	36:5:1824:U:O3'	138.15	0.68
1:2:1034:C:HO2'	24:D2:2:THR:N	1.91	0.68
28:D6:12:LYS:HB2	28:D6:33:ASP:OD2	1.93	0.68
36:5:3078:U:O2'	86:5:4198:OHX:N1	2.27	0.68
1:6:1370:U:H4'	1:6:1371:A:H4'	1.76	0.68
1:6:1767:G:OP1	1:6:1770:U:H4'	1.93	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1542:G:H22	1:6:1568:C:H1'	1.58	0.68
36:1:1243:G:N2	36:1:1244:A:N7	2.41	0.68
6:S4:158:ASP:OD2	6:S4:174:LYS:NZ	2.27	0.68
1:6:404:G:H2'	1:6:405:C:C6	2.28	0.68
60:N4:5:ILE:HD12	60:N4:10:GLY:HA2	1.75	0.68
1:6:1649:G:N7	86:6:2112:OHX:N2	2.42	0.68
36:5:2403:G:H5'	36:5:2872:A:C2	2.29	0.68
36:1:2664:C:OP2	48:M1:142:LYS:NZ	2.26	0.68
2:S0:119:ARG:HE	4:S2:240:LEU:HD23	2.30	0.68
18:C6:50:GLU:OE1	18:C6:114:ARG:NH1	2.27	0.67
18:C6:50:GLU:OE1	18:C6:112:TYR:OH	2.11	0.67
17:C5:65:LEU:O	86:C5:201:OHX:N2	4.55	0.67
42:L5:294:ALA:O	42:L5:296:GLN:N	2.23	0.67
41:L4:341:SER:O	41:L4:342:LYS:HB3	4.52	0.67
42:L5:40:HIS:HB3	42:L5:43:LYS:HG3	1.75	0.67
36:1:562:C:H2'	36:1:563:U:C6	2.28	0.67
33:E1:144:CYS:O	33:E1:146:SER:N	2.33	0.67
86:2:2030:OHX:N4	86:2:2146:OHX:N1	2.41	0.67
63:N7:88:ASP:O	63:N7:121:ARG:NH2	2.71	0.67
36:5:419:G:N7	86:5:3907:OHX:N3	2.42	0.67
36:5:2198:A:OP2	86:5:4195:OHX:N4	2.27	0.67
36:1:784:A:C6	54:M8:93:ILE:HG22	2.30	0.67
1:2:1535:U:O2'	1:2:1536:G:N3	2.25	0.67
36:1:2209:U:H6	36:1:2209:U:OP2	1.77	0.67
46:L9:18:VAL:HB	46:L9:27:VAL:HG22	1.77	0.67
18:C6:32:ASN:HD21	18:C6:69:VAL:HG23	2.94	0.67
1:2:734:A:H5''	1:2:735:C:OP1	1.93	0.67
74:O8:24:THR:HG23	74:O8:44:LYS:HB2	1.87	0.67
36:1:2818:U:C6	36:1:2818:U:H5'	2.30	0.67
36:5:3128:G:OP2	86:5:4161:OHX:N3	2.28	0.67
5:S3:34:TYR:HE2	5:S3:37:VAL:HG13	2.42	0.67
36:1:1495:U:H5	36:1:1835:A:N1	1.92	0.67
25:D3:69:ARG:NH2	1:6:568:G:N7	365.85	0.67
36:5:1540:U:OP1	86:5:4095:OHX:N2	2.27	0.67
67:O1:44:MET:O	67:O1:46:THR:N	3.02	0.67
72:O6:33:ALA:O	72:O6:34:SER:HB3	1.95	0.67
46:L9:171:ASP:OD1	46:L9:173:ARG:HD2	1.93	0.67
9:S7:98:ILE:HG13	9:S7:121:VAL:HG21	1.76	0.67
51:M5:35:VAL:HG13	51:M5:65:ARG:HB3	1.77	0.67
19:C7:86:PRO:HG2	19:C7:88:VAL:HA	9.21	0.67
1:6:990:C:OP2	86:6:2122:OHX:N2	2.28	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3276:G:H1	69:O3:60:ARG:NH2	1.92	0.67
53:M7:169:THR:HG23	69:O3:60:ARG:HH11	1.60	0.67
36:5:979:U:H1'	36:5:980:A:C4	2.29	0.67
13:C1:64:VAL:HG11	13:C1:131:ILE:HD11	2.47	0.67
36:5:1236:G:N2	36:5:1244:A:OP1	2.28	0.67
45:L8:130:TYR:CD1	45:L8:202:GLU:HB3	2.29	0.67
66:O0:9:SER:OG	66:O0:10:ILE:N	2.23	0.67
1:2:800:U:H2'	1:2:801:G:H8	1.60	0.67
1:2:591:A:H2'	1:2:592:A:H8	1.59	0.67
41:L4:181:VAL:O	41:L4:182:LEU:HB2	1.94	0.67
17:C5:77:ARG:NH1	1:6:1241:G:OP2	383.51	0.67
36:5:2400:G:H5'	36:5:2401:A:OP2	1.94	0.67
36:5:783:A:OP2	86:5:4196:OHX:N6	2.27	0.67
36:5:1934:G:O6	86:5:3918:OHX:N2	2.28	0.67
50:M4:124:ARG:NH2	36:5:3212:C:OP2	290.05	0.67
86:5:3976:OHX:N3	86:5:4245:OHX:N5	2.43	0.67
1:2:1795:U:O2	28:D6:10:ARG:HD2	1.94	0.67
8:S6:67:VAL:HG21	8:S6:99:GLY:HA2	1.88	0.67
36:1:3134:A:OP1	86:1:3902:OHX:N4	2.28	0.67
14:C2:40:GLY:O	14:C2:124:LYS:N	3.03	0.67
70:O4:67:LYS:HA	70:O4:70:LYS:HE2	1.75	0.67
36:1:86:G:O2'	49:M3:11:LYS:HD3	1.95	0.67
1:2:491:C:H42	1:2:496:G:H1	1.42	0.67
30:D8:22:ARG:NH1	1:6:1619:C:O2	339.80	0.67
20:C8:30:TYR:HE2	20:C8:40:ARG:HH11	1.42	0.67
14:C2:61:VAL:HG13	14:C2:121:VAL:HG23	1.77	0.67
36:1:2355:G:H4'	53:M7:139:TYR:CE2	2.29	0.67
36:1:1320:C:O2	56:N0:115:ARG:NH2	2.28	0.67
39:L2:200:ARG:NH1	36:5:2146:C:OP1	212.90	0.67
14:C2:52:LEU:O	14:C2:85:LYS:NZ	2.28	0.67
4:S2:140:ARG:NH1	23:D1:1:MET:SD	2.67	0.67
8:S6:135:PRO:HB2	8:S6:141:ILE:HG13	1.75	0.67
47:M0:86:HIS:HB3	47:M0:139:ARG:CG	2.58	0.67
36:5:2157:G:N2	36:5:2177:G:O2'	2.28	0.67
8:S6:114:VAL:HG12	8:S6:115:LYS:HD3	1.76	0.67
40:L3:274:SER:OG	36:5:3139:A:OP1	228.22	0.67
36:5:1716:U:H6	36:5:1716:U:H5'	1.60	0.67
65:N9:58:LYS:HA	65:N9:58:LYS:NZ	4.38	0.67
21:C9:117:SER:HB2	21:C9:123:ARG:HB3	1.77	0.67
21:C9:117:SER:HB3	21:C9:123:ARG:HB3	2.76	0.67
52:M6:110:PRO:O	52:M6:112:TYR:N	2.84	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:955:U:H2'	36:5:956:U:C6	2.28	0.67
1:2:1488:G:H3'	1:2:1515:A:H61	1.60	0.67
20:C8:56:LYS:HB3	20:C8:60:GLU:HG3	1.75	0.67
40:L3:296:THR:HG22	40:L3:298:PHE:N	4.15	0.67
1:6:564:G:O6	86:6:2156:OHX:N5	2.27	0.67
42:L5:265:TYR:OH	37:7:121:U:OP2	312.55	0.67
36:1:3165:A:H61	36:1:3285:C:H42	1.41	0.67
34:SR:159:ASN:O	34:SR:161:LYS:N	3.79	0.67
1:6:1350:U:H2'	1:6:1351:G:C8	2.29	0.67
16:C4:81:VAL:HG22	16:C4:115:ILE:HB	1.78	0.67
36:1:1443:G:O6	86:1:3979:OHX:N3	2.27	0.67
61:N5:61:LYS:NZ	38:8:59:A:O2'	70.59	0.67
1:2:237:C:H5''	1:2:238:U:H5'	1.77	0.67
1:2:1520:U:OP2	21:C9:75:LYS:NZ	2.25	0.67
39:L2:213:GLY:HA3	36:5:2967:A:H5''	205.20	0.67
1:6:538:A:H8	1:6:543:C:H41	1.41	0.66
86:2:2030:OHX:N4	86:2:2146:OHX:N2	2.43	0.66
1:2:197:A:H61	10:S8:138:ASN:ND2	1.93	0.66
34:SR:260:ILE:HB	34:SR:274:LEU:HD12	2.41	0.66
20:C8:83:ALA:HA	20:C8:86:LEU:HD22	1.75	0.66
8:S6:137:ARG:HH12	1:6:144:U:H5	312.05	0.66
44:L7:80:GLN:HE21	57:N1:136:ARG:HB2	6.77	0.66
36:5:3195:U:O2'	36:5:3196:U:H5'	1.95	0.66
1:6:213:A:OP2	86:6:2152:OHX:N1	2.28	0.66
67:O1:13:THR:HG22	67:O1:72:ARG:NH1	2.10	0.66
34:SR:161:LYS:HD3	34:SR:164:ASP:HB3	1.77	0.66
86:2:2160:OHX:N5	11:S9:8:TYR:O	2.28	0.66
36:1:3148:U:O4	86:1:4113:OHX:N2	2.29	0.66
30:D8:27:GLN:NE2	30:D8:64:ARG:O	2.28	0.66
36:5:1724:U:H1'	36:5:1725:C:C6	2.30	0.66
44:L7:143:THR:HG22	44:L7:241:LYS:HE3	1.77	0.66
36:1:2376:G:H2'	36:1:2377:G:C8	2.31	0.66
1:2:614:C:OP2	25:D3:5:LYS:NZ	2.20	0.66
36:5:1466:G:O6	86:5:3915:OHX:N5	2.28	0.66
63:N7:15:ARG:NH2	70:O4:83:ASN:OD1	2.27	0.66
47:M0:76:MET:HE3	47:M0:148:VAL:HG13	1.77	0.66
18:C6:115:THR:O	18:C6:117:LEU:N	3.78	0.66
41:L4:3:ARG:HH11	41:L4:22:LEU:HD12	1.61	0.66
6:S4:187:ARG:NH1	1:6:753:A:OP2	377.46	0.66
46:L9:137:SER:HB2	46:L9:143:GLU:HB3	3.38	0.66
36:1:2947:G:H4'	36:1:2947:G:OP2	1.95	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:156:LEU:HD23	41:L4:159:ILE:HD12	2.23	0.66
1:6:1508:U:O4	86:6:2056:OHX:N4	2.29	0.66
36:1:2746:A:C6	42:L5:148:ILE:HD12	2.31	0.66
36:5:3375:A:OP2	86:5:3961:OHX:N3	2.29	0.66
9:S7:50:ASP:HA	9:S7:56:LYS:HA	1.76	0.66
67:O1:25:PHE:HB3	67:O1:65:LYS:HG3	4.52	0.66
36:1:1947:G:H1	36:1:2101:C:N4	1.93	0.66
49:M3:42:ARG:O	49:M3:46:ILE:HG12	2.67	0.66
71:O5:85:THR:HB	71:O5:88:LEU:HD12	1.77	0.66
86:5:4022:OHX:N6	86:5:4219:OHX:N2	2.44	0.66
21:C9:105:LEU:HD13	21:C9:122:ARG:HD3	2.61	0.66
60:N4:6:ASP:HB3	60:N4:10:GLY:H	1.59	0.66
29:D7:62:ILE:HG13	29:D7:63:LEU:H	1.60	0.66
1:6:1202:A:OP1	86:6:2132:OHX:N2	2.28	0.66
1:6:151:G:H1	1:6:163:G:H1	1.43	0.66
40:L3:291:GLU:OE1	40:L3:302:LYS:NZ	4.89	0.66
1:2:759:U:OP1	86:2:2160:OHX:N1	2.29	0.66
1:6:320:U:H2'	1:6:321:C:C2	2.30	0.66
1:2:25:C:H4'	1:2:25:C:OP2	1.96	0.66
46:L9:168:ARG:HD2	36:5:2894:C:OP1	306.17	0.66
36:5:2440:G:H2'	36:5:2441:A:C8	2.30	0.66
36:1:1659:U:H2'	36:1:1660:C:C6	2.30	0.66
1:2:851:U:H2'	1:2:852:C:C6	2.30	0.66
36:5:1875:G:C2'	36:5:1876:U:H5''	2.25	0.66
3:S1:144:ARG:HB3	3:S1:208:GLN:HG2	2.52	0.66
16:C4:50:ALA:O	16:C4:52:ARG:N	2.33	0.66
36:1:1211:U:H2'	36:1:1212:A:C8	2.30	0.66
38:4:106:C:O2'	86:4:234:OHX:N4	2.29	0.66
36:5:3159:C:H2'	36:5:3160:U:C6	2.31	0.66
41:L4:338:LYS:O	41:L4:340:GLY:N	2.25	0.66
48:M1:81:GLU:OE2	48:M1:89:TYR:OH	2.96	0.66
74:O8:65:LEU:HD23	74:O8:68:SER:HB2	2.53	0.66
66:O0:13:LYS:NZ	66:O0:99:ASP:OD2	2.28	0.66
36:1:3329:U:H5''	40:L3:308:MET:HE3	1.78	0.66
66:O0:45:ALA:O	66:O0:48:THR:HG23	3.62	0.66
79:Q3:84:ARG:NH1	79:Q3:88:GLU:OE1	2.29	0.66
36:1:2656:A:H4'	78:Q2:98:LYS:HD2	1.76	0.66
36:5:410:U:O4	86:5:4104:OHX:N1	2.28	0.66
40:L3:41:VAL:CA	40:L3:185:GLY:HA3	2.24	0.66
20:C8:41:ARG:HD3	1:6:1565:C:OP1	369.36	0.66
64:N8:34:MET:HB2	36:5:95:A:H5''	162.83	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:21:ARG:NH2	36:5:3309:G:O6	199.11	0.66
63:N7:5:LEU:HD22	63:N7:77:TYR:CE2	5.98	0.66
15:C3:54:LEU:HB3	15:C3:60:VAL:HG11	3.38	0.66
63:N7:23:VAL:HG12	63:N7:45:GLY:HA3	1.77	0.66
36:1:3174:A:OP1	69:O3:97:SER:OG	2.13	0.66
62:N6:37:LYS:H	62:N6:37:LYS:HE2	2.54	0.66
54:M8:158:HIS:H	54:M8:186:VAL:CG1	2.08	0.66
36:1:2571:U:O2'	36:1:2572:C:O2	2.13	0.66
52:M6:62:THR:HG22	52:M6:65:ASN:H	1.99	0.66
5:S3:7:LYS:NZ	22:D0:115:GLU:OE2	2.25	0.66
38:4:10:A:H2'	38:4:11:C:C6	2.31	0.66
40:L3:259:HIS:CE1	36:5:2366:C:H5'	218.42	0.66
36:1:1310:G:O6	86:1:4031:OHX:N1	2.29	0.66
73:O7:55:ARG:NH1	36:5:353:G:O6	112.77	0.66
1:2:1316:G:HO2'	1:2:1401:A:HO2'	1.40	0.66
1:2:1063:U:OP1	29:D7:72:LYS:NZ	2.29	0.66
1:6:25:C:O2	86:6:2110:OHX:N5	2.29	0.66
53:M7:10:ASN:ND2	53:M7:13:LYS:HG3	3.20	0.66
60:N4:9:SER:HA	60:N4:52:THR:HG22	1.78	0.66
25:D3:30:LYS:HE3	25:D3:34:LEU:HD11	1.77	0.66
49:M3:59:ARG:HD3	36:5:73:C:C2	92.66	0.66
45:L8:101:THR:HG22	45:L8:104:GLU:H	1.61	0.66
41:L4:33:ASP:O	41:L4:37:THR:HG23	1.96	0.66
69:O3:14:LEU:HD11	69:O3:31:LYS:HB2	2.13	0.66
1:2:1339:C:O2'	1:2:1340:U:OP1	2.14	0.66
37:3:17:A:OP1	42:L5:2:ALA:N	2.28	0.66
8:S6:13:GLN:OE1	1:6:151:G:N2	311.61	0.65
72:O6:58:ILE:HG22	72:O6:90:MET:HG3	1.83	0.65
38:8:112:U:O2	86:8:217:OHX:N4	2.28	0.65
1:2:190:C:N4	1:2:196:G:O6	2.29	0.65
41:L4:73:ARG:NH2	36:5:2814:G:OP1	172.13	0.65
19:C7:14:LYS:NZ	19:C7:18:GLU:OE2	2.29	0.65
36:1:2754:G:OP2	86:1:4010:OHX:N6	2.29	0.65
36:5:1345:G:N7	86:5:4068:OHX:N5	2.44	0.65
36:1:3048:A:H5'	40:L3:53:MET:HE1	1.78	0.65
67:O1:13:THR:HG22	67:O1:72:ARG:HH21	5.05	0.65
53:M7:67:ILE:HD12	53:M7:82:ARG:CZ	3.30	0.65
3:S1:40:ASN:ND2	3:S1:42:ASN:O	2.29	0.65
68:O2:40:SER:O	68:O2:44:ARG:HG3	1.96	0.65
9:S7:49:ILE:O	9:S7:57:ALA:N	2.24	0.65
1:2:1000:C:N4	1:2:1003:A:OP2	2.29	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:180:LYS:HA	55:M9:183:ALA:HB3	1.77	0.65
1:2:937:C:N4	28:D6:14:GLY:O	2.28	0.65
17:C5:44:ARG:NH2	17:C5:82:ASN:O	2.63	0.65
5:S3:72:LEU:HD22	12:C0:65:TYR:HD1	1.99	0.65
51:M5:182:ASN:HB2	51:M5:183:THR:HG22	1.79	0.65
10:S8:84:HIS:CE1	10:S8:86:SER:HB2	2.31	0.65
73:O7:69:HIS:O	73:O7:73:ARG:HG3	1.96	0.65
10:S8:31:ARG:NH2	1:6:333:A:OP1	297.96	0.65
36:1:356:C:OP2	86:O9:101:OHX:N1	2.29	0.65
36:5:2509:U:H2'	36:5:2510:U:H5''	1.75	0.65
1:2:475:A:OP2	11:S9:126:ARG:NH1	2.28	0.65
20:C8:123:ARG:HG3	20:C8:133:VAL:HG21	1.77	0.65
1:2:649:U:O2'	1:2:650:U:O5'	2.14	0.65
1:2:1473:U:O2'	7:S5:103:ASN:ND2	2.28	0.65
36:1:1719:G:OP2	55:M9:121:HIS:ND1	2.27	0.65
12:C0:44:LYS:HA	12:C0:47:GLN:HB3	2.34	0.65
34:SR:136:ILE:H	34:SR:136:ILE:HD13	1.61	0.65
7:S5:205:SER:OG	7:S5:207:THR:OG1	3.70	0.65
35:SM:26:VAL:HG11	48:M1:49:LYS:HE3	1.77	0.65
36:1:2676:A:N1	48:M1:22:SER:OG	2.25	0.65
36:5:2401:A:H61	36:5:2404:A:H62	1.41	0.65
3:S1:109:LYS:HG3	3:S1:113:MET:HE3	1.78	0.65
1:2:1173:C:H3'	20:C8:141:THR:HG21	1.77	0.65
36:1:2585:G:N7	45:L8:47:SER:OG	2.29	0.65
1:2:1035:G:OP1	15:C3:2:GLY:N	2.29	0.65
53:M7:31:GLU:HG3	53:M7:60:PHE:HA	3.51	0.65
36:1:1941:C:O2'	36:1:3344:A:N6	2.29	0.65
56:N0:148:LEU:HD12	56:N0:149:LYS:H	1.60	0.65
36:1:1790:G:O6	86:1:4172:OHX:N4	2.28	0.65
36:1:1789:G:N7	86:1:4172:OHX:N2	2.44	0.65
14:C2:103:LEU:HG	14:C2:116:VAL:HG22	1.78	0.65
41:L4:197:ARG:NH1	36:5:1381:A:OP1	108.99	0.65
36:5:566:G:N7	86:5:4133:OHX:N5	2.45	0.65
5:S3:116:ARG:HH11	5:S3:116:ARG:HB2	4.86	0.65
36:1:1429:G:C5	41:L4:99:MET:HE1	2.31	0.65
11:S9:157:ASP:OD1	11:S9:158:PHE:N	4.37	0.65
36:1:2356:A:H5'	53:M7:138:LYS:HE3	1.77	0.65
36:5:980:A:H2'	36:5:981:U:C2	2.32	0.65
65:N9:23:LYS:HB3	65:N9:24:PRO:HD3	2.34	0.65
25:D3:108:GLY:HA2	1:6:600:U:OP2	358.26	0.65
36:1:2318:U:O4	86:1:4043:OHX:N2	2.29	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:114:A:OP1	51:M5:54:LYS:NZ	2.30	0.65
13:C1:69:LYS:HB3	13:C1:71:LEU:HD21	2.83	0.65
36:5:658:G:OP1	86:5:4093:OHX:N5	2.29	0.65
36:5:2211:U:H5	36:5:2234:G:O6	1.79	0.65
1:6:228:G:N2	1:6:237:C:N3	2.45	0.65
1:6:1230:A:H8	1:6:1258:U:C4	2.14	0.65
36:1:1841:A:H2	75:O9:45:ARG:HH22	1.43	0.65
46:L9:171:ASP:OD1	46:L9:173:ARG:HD3	3.18	0.65
36:5:2896:A:H8	36:5:2896:A:H5'	1.61	0.65
40:L3:306:THR:OG1	40:L3:316:GLU:O	2.08	0.65
46:L9:129:ARG:O	46:L9:132:VAL:HG13	2.11	0.65
49:M3:64:LYS:HD2	64:N8:66:ALA:HB1	3.83	0.65
1:2:154:G:OP1	8:S6:2:LYS:NZ	2.26	0.65
34:SR:76:ASP:OD1	34:SR:76:ASP:N	2.30	0.65
22:D0:118:VAL:HG13	22:D0:119:ALA:H	2.52	0.65
36:5:3275:U:H4'	36:5:3276:G:OP2	1.96	0.65
1:6:578:U:O2	86:6:2156:OHX:N3	2.30	0.65
36:5:1171:G:O6	86:5:4004:OHX:N1	2.30	0.65
36:1:917:A:OP2	86:1:4147:OHX:N2	2.29	0.65
56:N0:137:ARG:HG2	56:N0:139:TYR:CE1	2.32	0.65
62:N6:45:ILE:HD11	62:N6:122:LYS:HB2	1.78	0.65
17:C5:122:THR:HG21	1:6:1455:G:OP1	369.66	0.65
42:L5:148:ILE:HG12	42:L5:159:VAL:HG11	1.78	0.65
52:M6:61:ALA:HA	52:M6:70:PRO:HD2	1.78	0.65
1:2:1745:G:O6	86:2:2085:OHX:N6	2.30	0.65
66:O0:16:LEU:HB2	66:O0:98:SER:HB2	3.32	0.65
1:2:484:C:H42	1:2:503:G:H22	1.42	0.65
12:C0:8:ARG:HD2	12:C0:12:HIS:CE1	2.32	0.65
56:N0:84:ARG:HG3	36:5:1295:G:OP1	294.36	0.65
1:2:1151:A:H2'	1:2:1152:A:C8	2.32	0.65
7:S5:40:ILE:HG23	7:S5:42:LEU:HG	4.31	0.65
66:O0:42:ILE:HD11	66:O0:67:VAL:HG22	1.79	0.65
54:M8:170:ARG:HA	54:M8:174:ARG:HD2	2.30	0.65
36:1:2248:C:OP2	86:1:3883:OHX:N3	2.29	0.65
21:C9:68:ARG:NH1	1:6:1521:G:O6	414.91	0.65
21:C9:28:LEU:O	21:C9:29:GLU:HB2	2.64	0.65
1:6:194:U:O2	1:6:195:G:O2'	2.11	0.65
21:C9:97:SER:HB3	21:C9:100:ILE:HG13	3.94	0.65
36:1:3155:U:H3'	36:1:3156:U:H4'	1.77	0.65
47:M0:14:ASN:O	47:M0:128:ARG:NH2	2.32	0.65
36:1:103:G:OP1	49:M3:70:ARG:NH2	2.26	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:5:4022:OHX:N3	86:5:4219:OHX:N1	2.45	0.65
36:5:1765:U:H4'	36:5:1765:U:OP1	1.96	0.65
1:2:823:G:H2'	1:2:824:G:H8	1.62	0.65
52:M6:65:ASN:OD1	52:M6:67:THR:HB	2.04	0.65
63:N7:67:LYS:NZ	36:5:1630:U:OP1	197.40	0.65
1:6:823:G:H2'	1:6:824:G:O4'	1.97	0.65
45:L8:130:TYR:HD1	45:L8:202:GLU:HB3	1.61	0.65
53:M7:129:THR:HG23	53:M7:139:TYR:HB2	1.78	0.65
51:M5:73:ARG:HG2	51:M5:75:VAL:HG22	1.97	0.65
36:1:956:U:OP1	86:1:4129:OHX:N1	2.30	0.65
40:L3:152:LYS:HG3	40:L3:192:VAL:HG11	1.77	0.65
1:2:1600:A:H4'	1:2:1601:G:OP1	1.96	0.65
63:N7:97:SER:HB2	63:N7:99:GLU:HG3	1.79	0.65
23:D1:3:ASN:ND2	23:D1:7:GLN:O	4.93	0.65
1:6:75:U:O2'	1:6:76:A:O5'	2.11	0.65
63:N7:27:LYS:HD2	63:N7:28:PRO:HD2	1.78	0.65
36:5:398:A:O2'	36:5:1416:C:OP1	2.12	0.65
86:5:4022:OHX:N5	86:5:4219:OHX:N1	2.45	0.64
1:2:1550:A:P	17:C5:42:ARG:HH22	2.19	0.64
36:1:944:C:H4'	68:O2:33:ARG:HH11	1.62	0.64
7:S5:61:TYR:OH	30:D8:52:ASP:OD1	3.85	0.64
1:2:491:C:N3	1:2:496:G:N2	2.44	0.64
36:1:1947:G:H1	36:1:2101:C:H42	1.45	0.64
12:C0:15:LEU:HD13	12:C0:21:VAL:HG23	1.79	0.64
12:C0:8:ARG:HD2	12:C0:12:HIS:HE1	1.61	0.64
51:M5:14:LYS:HA	51:M5:19:LEU:HD23	1.78	0.64
39:L2:222:ALA:HB1	39:L2:224:THR:HG22	5.31	0.64
27:D5:74:SER:OG	1:6:1534:G:OP2	345.13	0.64
3:S1:70:LEU:HB3	3:S1:79:HIS:HB3	5.12	0.64
86:2:2030:OHX:N3	86:2:2146:OHX:N5	2.44	0.64
36:1:3343:G:H21	36:1:3362:A:H2	1.45	0.64
6:S4:191:ARG:NH1	6:S4:245:LYS:HD3	2.11	0.64
56:N0:13:ARG:NH2	56:N0:50:LYS:O	2.46	0.64
9:S7:96:ARG:NH1	9:S7:128:ASP:OD2	2.26	0.64
10:S8:2:GLY:HA2	1:6:1729:C:O2'	287.34	0.64
15:C3:94:LYS:HE3	1:6:952:A:H5''	299.92	0.64
71:O5:10:ARG:NH1	71:O5:60:GLU:OE2	2.30	0.64
1:6:1175:U:H2'	1:6:1176:G:C8	2.33	0.64
36:1:291:C:OP1	51:M5:68:ARG:NH1	2.31	0.64
1:2:1067:C:H2'	1:2:1068:C:H6	1.62	0.64
36:1:3276:G:O6	53:M7:171:ARG:NH1	2.31	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
66:O0:30:THR:HB	66:O0:91:SER:HB2	1.80	0.64
63:N7:83:THR:HG23	63:N7:85:TYR:N	2.10	0.64
24:D2:103:ILE:HA	24:D2:112:ASP:HA	1.80	0.64
1:2:1339:C:O2'	1:2:1341:A:N7	2.24	0.64
1:6:417:A:H4'	1:6:418:G:O5'	1.97	0.64
36:1:2766:U:O4	86:1:4041:OHX:N2	2.29	0.64
1:2:1459:C:N4	20:C8:139:LYS:HE2	2.13	0.64
36:5:725:G:H3'	36:5:726:G:H5''	1.79	0.64
33:E1:91:ILE:HG12	33:E1:92:LYS:HG2	6.47	0.64
1:6:69:G:O6	1:6:82:U:N3	2.18	0.64
37:3:13:A:H8	37:3:13:A:H5''	1.62	0.64
36:1:2895:G:O2'	76:Q0:100:TYR:O	2.13	0.64
40:L3:71:GLU:OE1	40:L3:357:LYS:NZ	2.29	0.64
24:D2:76:SER:OG	24:D2:77:PRO:HD3	1.97	0.64
17:C5:129:GLY:HA3	35:SM:74:LYS:HD2	5.92	0.64
20:C8:145:ARG:HB3	35:SM:68:ARG:HH12	4.23	0.64
1:2:1280:C:H2'	1:2:1281:G:C8	2.30	0.64
24:D2:27:ILE:HG12	24:D2:61:ILE:HB	1.79	0.64
48:M1:59:ILE:HG21	48:M1:65:ILE:HD11	1.78	0.64
1:2:25:C:O2	86:2:2083:OHX:N1	2.31	0.64
49:M3:35:ARG:NH1	36:5:685:G:OP2	83.23	0.64
73:O7:5:THR:HA	73:O7:8:PHE:CD2	2.33	0.64
19:C7:71:PHE:HD1	19:C7:73:LEU:HB3	1.62	0.64
2:S0:59:LEU:HD12	23:D1:79:LEU:HD21	3.89	0.64
1:2:1202:A:OP2	86:2:2110:OHX:N2	2.31	0.64
1:6:542:A:O2'	1:6:543:C:O5'	2.14	0.64
11:S9:96:VAL:HA	11:S9:99:LEU:HD22	1.79	0.64
77:Q1:25:LYS:HE2	86:5:4003:OHX:N1	260.85	0.64
53:M7:48:LEU:HB3	53:M7:88:VAL:HG13	1.79	0.64
68:O2:61:LYS:NZ	36:5:1339:C:OP1	193.99	0.64
5:S3:11:LEU:HD12	22:D0:86:ILE:HG12	1.80	0.64
1:2:480:G:H22	1:2:509:G:H1'	1.63	0.64
2:S0:71:GLU:O	2:S0:96:THR:HG22	2.02	0.64
19:C7:5:ARG:NH1	1:6:1402:G:OP2	409.11	0.64
1:6:1324:G:N7	86:6:2106:OHX:N2	2.46	0.64
86:1:3872:OHX:N2	73:O7:46:SER:OG	2.31	0.64
78:Q2:15:LYS:HA	78:Q2:18:ARG:HH21	1.63	0.64
40:L3:188:ILE:HD12	40:L3:189:SER:H	1.63	0.64
36:1:1073:U:H1'	65:N9:50:THR:HG22	1.79	0.64
18:C6:82:ARG:HH12	18:C6:114:ARG:HB2	3.54	0.64
1:6:542:A:H2'	1:6:542:A:OP1	1.97	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1235:U:H4'	36:5:1236:G:H5'	1.78	0.64
38:4:107:G:OP2	86:4:234:OHX:N2	2.31	0.64
51:M5:14:LYS:HZ1	36:5:269:G:H5''	132.26	0.64
1:2:1169:G:N1	1:2:1575:G:OP2	2.26	0.64
86:1:3913:OHX:N6	51:M5:32:GLN:O	2.31	0.64
27:D5:49:ARG:O	27:D5:53:GLU:HB2	2.37	0.64
1:6:1754:A:H4'	1:6:1755:A:O5'	1.97	0.64
5:S3:61:GLU:O	5:S3:63:GLY:N	2.31	0.64
39:L2:181:LYS:NZ	36:5:860:G:O5'	212.70	0.64
10:S8:62:THR:HA	10:S8:76:THR:O	2.45	0.64
66:O0:13:LYS:HB3	66:O0:100:ILE:HG23	1.79	0.64
56:N0:137:ARG:HG2	56:N0:139:TYR:CZ	2.76	0.64
36:1:3281:U:H2'	36:1:3282:U:C6	2.32	0.64
39:L2:207:VAL:HG21	36:5:916:G:C6	186.42	0.64
46:L9:138:THR:O	46:L9:139:ASN:ND2	2.30	0.64
1:2:1428:G:H5'	1:2:1428:G:H8	1.60	0.64
9:S7:154:LEU:HD21	9:S7:183:PHE:HD1	1.63	0.64
45:L8:195:SER:O	45:L8:197:VAL:N	2.30	0.64
86:5:4022:OHX:N5	86:5:4219:OHX:N2	2.46	0.64
5:S3:162:GLN:OE1	5:S3:165:ASN:ND2	2.31	0.64
86:7:219:OHX:N3	86:7:227:OHX:N6	2.46	0.64
46:L9:57:VAL:HG23	46:L9:68:LEU:HG	1.79	0.64
5:S3:195:SER:HB2	5:S3:200:LYS:HG2	5.42	0.64
16:C4:87:GLY:HA3	16:C4:120:PRO:HG2	1.80	0.64
54:M8:153:PHE:O	54:M8:161:LYS:HD2	1.98	0.64
3:S1:110:LEU:HD21	3:S1:213:ARG:HD2	1.80	0.64
36:5:1152:G:H8	36:5:1152:G:OP2	1.81	0.64
1:2:1282:U:OP1	86:2:2114:OHX:N5	2.31	0.64
47:M0:174:THR:OG1	47:M0:175:ASN:N	3.40	0.64
10:S8:57:ALA:HB2	10:S8:177:GLY:HA2	2.09	0.64
39:L2:27:ALA:O	39:L2:128:ARG:NH2	2.30	0.64
21:C9:97:SER:OG	1:6:1504:G:OP1	394.77	0.64
36:1:3155:U:H3'	36:1:3156:U:C4'	2.27	0.64
36:5:2227:C:H2'	36:5:2228:A:H5''	1.78	0.64
56:N0:77:VAL:HG11	56:N0:106:LEU:HD12	1.80	0.64
16:C4:19:ILE:HB	16:C4:83:ILE:HD12	1.79	0.64
19:C7:105:GLN:HA	19:C7:108:ASP:HB2	2.53	0.63
1:2:591:A:H2'	1:2:592:A:C8	2.34	0.63
11:S9:29:LYS:O	11:S9:33:GLU:HG2	3.81	0.63
1:6:1227:A:H4'	1:6:1228:G:H5'	1.80	0.63
42:L5:261:THR:N	42:L5:264:GLN:HG3	2.13	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:M0:161:GLY:O	47:M0:163:GLN:NE2	3.02	0.63
1:6:826:U:O4	86:6:2068:OHX:N3	2.30	0.63
36:5:2249:G:OP1	86:5:4201:OHX:N6	2.31	0.63
36:1:837:A:OP1	79:Q3:5:THR:OG1	2.16	0.63
55:M9:20:ARG:HD2	36:5:1874:A:OP2	141.73	0.63
2:S0:26:ALA:HB3	2:S0:149:LEU:HB2	1.81	0.63
61:N5:38:LEU:O	61:N5:39:LYS:HB2	4.37	0.63
68:O2:19:ARG:HG3	68:O2:33:ARG:HB2	1.80	0.63
40:L3:140:ASP:OD2	40:L3:141:GLY:N	3.93	0.63
56:N0:148:LEU:HD12	56:N0:149:LYS:N	2.13	0.63
1:2:380:U:H5	11:S9:5:PRO:HA	1.63	0.63
36:1:239:G:O2'	36:1:240:U:OP1	2.14	0.63
1:6:1533:C:H4'	1:6:1539:G:N1	2.12	0.63
1:2:1160:A:H2'	1:2:1161:C:C6	2.33	0.63
33:E1:121:CYS:HB3	33:E1:130:VAL:HG11	4.96	0.63
1:2:1479:A:OP1	21:C9:57:ARG:NH1	2.32	0.63
1:2:1529:C:O2'	21:C9:12:GLN:OE1	2.09	0.63
36:1:2107:A:H2	36:1:3344:A:C8	2.16	0.63
5:S3:66:ILE:O	5:S3:70:THR:OG1	2.97	0.63
1:6:218:A:H2'	1:6:219:A:H5''	1.79	0.63
72:O6:45:ARG:NH2	72:O6:54:GLU:OE1	2.31	0.63
36:1:2586:G:N7	45:L8:241:LYS:HB2	2.14	0.63
1:2:1151:A:H2'	1:2:1152:A:H8	1.62	0.63
1:2:741:C:O2	9:S7:107:ARG:NH1	2.23	0.63
70:O4:3:GLN:HB3	70:O4:30:LEU:HD12	1.79	0.63
56:N0:155:ARG:HH21	56:N0:172:TYR:H	4.28	0.63
36:5:1734:G:O6	86:5:3972:OHX:N5	2.32	0.63
49:M3:73:ARG:HH21	36:5:108:A:H2	77.83	0.63
36:1:2185:G:O2'	36:1:2314:U:OP2	2.14	0.63
1:2:1585:U:N3	1:2:1611:A:H2	1.92	0.63
36:5:1595:U:C2	36:5:1596:C:C5	2.87	0.63
9:S7:56:LYS:HB2	9:S7:88:ARG:HH11	2.18	0.63
36:1:3107:U:OP1	76:Q0:114:LYS:NZ	2.32	0.63
38:4:79:A:H5''	71:O5:43:LYS:NZ	2.12	0.63
69:O3:45:LEU:HA	69:O3:71:VAL:HG12	2.01	0.63
4:S2:144:TRP:CE2	4:S2:173:PRO:HG3	2.34	0.63
43:L6:40:LEU:HD13	43:L6:84:VAL:HG11	1.80	0.63
64:N8:104:THR:HG21	64:N8:112:ILE:HD11	2.23	0.63
36:1:1119:C:OP2	86:1:3956:OHX:N1	2.31	0.63
36:5:2514:U:OP1	36:5:2514:U:H6	1.82	0.63
40:L3:239:PRO:O	40:L3:242:THR:HG23	1.98	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:38:LEU:HD23	9:S7:41:LEU:HD12	1.80	0.63
40:L3:183:LEU:O	40:L3:191:LYS:NZ	2.31	0.63
18:C6:55:VAL:HG21	18:C6:105:LEU:HG	1.78	0.63
14:C2:42:ALA:HB2	14:C2:124:LYS:HD2	2.27	0.63
44:L7:140:SER:OG	44:L7:143:THR:HG23	1.98	0.63
64:N8:4:ARG:NH2	36:5:1427:U:OP2	134.83	0.63
1:2:1620:C:OP2	86:2:2166:OHX:N6	2.30	0.63
37:3:112:G:OP2	86:3:219:OHX:N1	2.31	0.63
4:S2:147:ASN:O	23:D1:4:ASP:N	2.32	0.63
1:6:1564:U:H2'	1:6:1565:C:C6	2.34	0.63
11:S9:125:ALA:O	11:S9:129:ILE:HG13	1.99	0.63
44:L7:151:ARG:HD2	44:L7:244:ASN:ND2	2.12	0.63
18:C6:14:LYS:HE2	1:6:1584:G:N7	396.39	0.63
46:L9:70:THR:HG21	36:5:3122:A:N1	324.32	0.63
6:S4:129:VAL:HB	6:S4:139:VAL:HG12	1.80	0.63
1:2:1680:G:O6	86:2:2109:OHX:N5	2.31	0.63
8:S6:94:ARG:HH21	1:6:407:A:H5'	290.09	0.63
62:N6:79:ALA:HB1	62:N6:98:ASN:HB3	1.81	0.63
36:5:385:A:H2'	36:5:386:A:C8	2.34	0.63
29:D7:34:ASP:OD1	29:D7:34:ASP:N	2.31	0.63
11:S9:171:ARG:HE	11:S9:174:ARG:HB2	4.76	0.63
15:C3:148:ALA:O	86:C3:201:OHX:N4	6.00	0.63
74:O8:62:ALA:O	74:O8:66:ILE:HG13	1.99	0.63
1:6:868:G:H1	1:6:960:U:H3	1.45	0.63
10:S8:197:THR:HA	10:S8:200:LYS:HB2	1.81	0.63
34:SR:26:SER:OG	34:SR:75:ALA:O	2.15	0.63
44:L7:176:TYR:CZ	44:L7:197:GLN:HG2	2.33	0.63
1:2:16:G:H2'	1:2:17:C:C6	2.34	0.63
47:M0:170:LYS:HA	47:M0:177:ASP:HA	1.80	0.63
69:O3:59:VAL:HG23	69:O3:60:ARG:H	2.04	0.63
36:1:1369:A:OP1	64:N8:21:ARG:NH1	2.32	0.63
53:M7:79:THR:HG22	53:M7:80:LYS:HG3	6.16	0.63
1:2:901:G:N2	16:C4:54:GLU:OE1	2.32	0.63
53:M7:50:GLN:O	53:M7:53:ASP:N	2.30	0.63
30:D8:26:THR:O	30:D8:44:VAL:HG22	2.77	0.63
67:O1:79:ARG:H	67:O1:79:ARG:HE	1.47	0.63
2:S0:50:VAL:HG23	19:C7:109:LEU:HD21	3.47	0.63
15:C3:94:LYS:NZ	1:6:952:A:OP1	299.38	0.63
34:SR:25:THR:OG1	34:SR:26:SER:N	3.20	0.63
15:C3:67:THR:O	15:C3:69:ASN:N	2.31	0.63
36:1:873:C:H5''	36:1:874:U:O5'	1.99	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:53:ILE:HG13	24:D2:54:ASP:N	2.14	0.63
1:6:1714:A:H2'	1:6:1715:G:O4'	1.99	0.63
36:5:3242:G:H5'	36:5:3245:A:C8	2.34	0.63
49:M3:56:PRO:HG3	49:M3:74:GLY:O	2.24	0.63
46:L9:91:ARG:HG3	46:L9:91:ARG:HH21	1.64	0.63
1:2:1202:A:N6	1:2:1457:C:H5''	2.14	0.63
1:2:1599:C:O2	86:2:2110:OHX:N3	2.31	0.63
1:2:514:G:N1	1:2:543:C:H5	1.96	0.63
41:L4:271:LYS:HB2	41:L4:274:TYR:HB3	2.11	0.63
55:M9:84:THR:O	55:M9:88:ARG:HG2	4.04	0.63
2:S0:63:ILE:HD12	2:S0:158:VAL:HG11	3.64	0.63
1:2:1657:U:H5	36:1:2125:A:O3'	1.81	0.63
46:L9:62:ARG:NH2	36:5:3115:C:OP1	330.20	0.63
40:L3:227:GLU:HG3	40:L3:270:ARG:HD3	3.53	0.63
1:2:75:U:H2'	1:2:76:A:O4'	1.98	0.63
1:2:1592:A:H2'	1:2:1593:A:C8	2.34	0.63
38:8:74:U:O2	86:8:221:OHX:N5	2.32	0.63
45:L8:95:ASN:OD1	45:L8:98:ARG:NH1	4.58	0.63
5:S3:40:ARG:HG2	22:D0:110:PRO:HB3	2.29	0.63
1:2:1726:G:N7	86:2:2098:OHX:N4	2.46	0.63
42:L5:131:LEU:HD22	42:L5:131:LEU:H	1.64	0.63
36:1:2960:C:OP1	86:1:4005:OHX:N4	2.31	0.63
1:2:1564:U:H2'	1:2:1565:C:H6	1.62	0.62
11:S9:118:LEU:HD23	11:S9:158:PHE:CE1	3.71	0.62
86:2:2161:OHX:N4	8:S6:155:ASP:OD1	2.32	0.62
1:6:486:G:O6	1:6:488:G:N2	2.32	0.62
51:M5:149:ASN:OD1	86:M5:303:OHX:N2	2.32	0.62
54:M8:40:THR:O	54:M8:42:ALA:N	2.32	0.62
36:1:2510:U:O2'	36:1:2511:A:H5''	1.98	0.62
1:2:1597:A:OP2	31:D9:32:ARG:NH2	2.32	0.62
58:N2:50:LEU:HB3	58:N2:54:VAL:HG23	1.81	0.62
55:M9:90:PRO:HB2	55:M9:93:VAL:HG23	1.80	0.62
32:E0:59:GLY:O	32:E0:61:SER:N	3.57	0.62
55:M9:5:ARG:HH11	55:M9:5:ARG:HG3	2.90	0.62
1:2:1796:C:OP2	28:D6:5:ARG:NH1	2.32	0.62
36:5:2211:U:OP2	86:5:4225:OHX:N1	2.32	0.62
36:1:1215:U:C2'	36:1:1216:C:H5''	2.30	0.62
34:SR:169:ILE:HG12	34:SR:183:LEU:HD21	3.12	0.62
7:S5:225:ARG:NH2	30:D8:58:GLU:HB2	5.53	0.62
86:7:219:OHX:N1	86:7:227:OHX:N5	2.47	0.62
36:5:1879:A:H2'	36:5:1879:A:N3	2.12	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1794:G:H4'	39:L2:191:LEU:HD13	1.81	0.62
64:N8:42:ARG:NH2	36:5:2799:A:N3	192.19	0.62
36:1:1540:U:OP1	86:1:4023:OHX:N1	2.32	0.62
48:M1:23:VAL:O	48:M1:25:GLU:N	2.25	0.62
18:C6:38:LEU:O	18:C6:40:GLU:N	2.29	0.62
1:6:25:C:OP2	1:6:25:C:H4'	1.99	0.62
50:M4:22:LEU:HD13	50:M4:32:LEU:HD23	1.80	0.62
36:1:708:G:H8	36:1:708:G:H5'	1.64	0.62
30:D8:36:THR:OG1	30:D8:37:SER:N	2.29	0.62
41:L4:232:SER:O	41:L4:233:LEU:HB2	2.17	0.62
13:C1:21:ASN:N	13:C1:21:ASN:OD1	2.51	0.62
45:L8:136:LEU:HD11	45:L8:162:LEU:O	2.00	0.62
36:1:2916:U:H1'	59:N3:44:SER:HB3	1.80	0.62
36:5:3358:U:H2'	36:5:3359:A:C8	2.35	0.62
7:S5:43:PHE:H	7:S5:46:TRP:H	2.24	0.62
11:S9:149:ARG:HG3	1:6:765:G:O6	433.55	0.62
11:S9:149:ARG:O	11:S9:151:ASP:N	2.32	0.62
1:2:991:G:OP2	86:2:2131:OHX:N1	2.32	0.62
1:2:1502:G:O6	21:C9:102:ARG:NH2	2.32	0.62
7:S5:92:ARG:HH11	7:S5:92:ARG:HG2	2.73	0.62
64:N8:10:LYS:HE2	36:5:1374:G:O6	163.58	0.62
57:N1:135:PRO:O	57:N1:136:ARG:HB2	4.66	0.62
36:5:3317:U:O2'	86:5:4142:OHX:N6	2.32	0.62
79:Q3:8:VAL:HB	79:Q3:11:THR:HG22	1.80	0.62
46:L9:150:SER:HB3	46:L9:153:ASP:HB2	2.24	0.62
32:E0:17:GLN:NE2	1:6:563:U:H4'	383.19	0.62
31:D9:5:ASN:OD1	31:D9:7:TRP:NE1	2.31	0.62
46:L9:91:ARG:NH2	46:L9:91:ARG:HG3	2.13	0.62
6:S4:121:TYR:HA	6:S4:164:LEU:HG	2.08	0.62
71:O5:101:THR:HG22	71:O5:104:GLN:N	2.15	0.62
1:2:1101:G:H5''	24:D2:76:SER:HB3	1.81	0.62
65:N9:26:THR:OG1	36:5:1065:A:N1	215.51	0.62
63:N7:22:LYS:NZ	63:N7:132:SER:O	2.27	0.62
36:1:3169:U:H2'	36:1:3170:A:O4'	1.99	0.62
19:C7:20:TYR:CE1	19:C7:38:ILE:HD11	2.34	0.62
21:C9:52:GLY:O	21:C9:54:PHE:N	2.29	0.62
1:6:1535:U:O2'	1:6:1536:G:O5'	2.17	0.62
36:1:715:A:H4'	36:1:716:A:OP1	2.00	0.62
36:1:1615:C:OP1	86:1:4183:OHX:N3	2.32	0.62
1:2:651:G:N7	86:2:2103:OHX:N6	2.48	0.62
36:5:3274:A:H3'	36:5:3275:U:C5'	2.27	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1238:C:O2'	36:5:1239:C:OP1	2.14	0.62
41:L4:144:LYS:CG	41:L4:145:ILE:H	4.81	0.62
38:8:77:A:H2'	38:8:78:G:O4'	1.98	0.62
36:5:2510:U:O2'	36:5:2511:A:H5''	1.98	0.62
47:M0:16:PRO:HG3	47:M0:128:ARG:HH11	2.64	0.62
3:S1:83:LYS:HE3	3:S1:104:ASP:HB3	1.82	0.62
59:N3:87:ARG:HH22	59:N3:137:VAL:CG2	2.12	0.62
54:M8:122:ILE:HG23	54:M8:126:GLN:HB2	1.93	0.62
66:O0:57:GLU:OE1	66:O0:69:TYR:OH	2.29	0.62
9:S7:35:LYS:O	9:S7:37:GLU:N	2.31	0.62
36:1:830:A:OP1	86:1:4014:OHX:N4	2.32	0.62
49:M3:105:ASN:OD1	49:M3:107:GLU:HG2	2.41	0.62
52:M6:12:LYS:O	56:N0:167:ARG:NH2	2.28	0.62
86:5:4022:OHX:N6	86:5:4219:OHX:N4	2.48	0.62
20:C8:145:ARG:HB2	35:SM:68:ARG:NH2	2.15	0.62
25:D3:127:VAL:O	25:D3:130:VAL:HG22	2.00	0.62
16:C4:115:ILE:HG21	28:D6:44:ILE:HG21	6.50	0.62
12:C0:53:GLY:O	12:C0:55:VAL:N	2.31	0.62
1:2:1595:U:N3	1:2:1600:A:H2	1.97	0.62
21:C9:33:TYR:HD1	21:C9:34:VAL:H	2.55	0.62
36:5:23:A:OP1	86:5:3909:OHX:N4	2.33	0.62
37:3:4:U:H2'	37:3:5:G:C8	2.34	0.62
24:D2:6:VAL:HG13	24:D2:29:PRO:HD2	1.81	0.62
36:5:2187:G:OP2	86:5:3975:OHX:N4	2.33	0.62
36:5:2112:U:O2	86:5:3979:OHX:N1	2.33	0.62
36:1:516:A:H2'	36:1:517:G:H5''	1.82	0.62
15:C3:26:PHE:CE2	15:C3:28:LEU:HB2	2.99	0.62
40:L3:35:ASP:OD2	40:L3:37:ARG:NH1	2.31	0.62
36:5:299:G:N7	86:5:4192:OHX:N1	2.47	0.62
75:O9:21:ARG:HD3	75:O9:22:PRO:O	2.00	0.62
17:C5:68:PRO:O	86:C5:201:OHX:N5	7.06	0.62
1:2:143:G:N7	8:S6:177:ARG:NH2	2.48	0.62
1:2:244:A:OP1	6:S4:155:LYS:NZ	2.32	0.62
14:C2:97:LEU:HD11	14:C2:121:VAL:HG22	1.81	0.62
1:2:1595:U:H3	1:2:1600:A:H2	1.47	0.62
1:2:488:G:OP1	1:2:488:G:H4'	1.98	0.62
15:C3:55:ARG:HD2	15:C3:56:ASP:OD1	5.26	0.62
8:S6:39:GLU:HB2	8:S6:46:LYS:HG3	1.80	0.62
1:2:1587:A:O2'	7:S5:104:ASN:OD1	2.15	0.62
13:C1:6:THR:O	13:C1:8:GLN:N	2.29	0.62
36:1:2732:G:OP2	86:1:4208:OHX:N2	2.32	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:222:VAL:HG11	34:SR:229:LYS:HA	2.67	0.62
86:2:2031:OHX:N3	15:C3:12:SER:O	2.32	0.62
36:5:300:G:O6	86:5:4194:OHX:N2	2.33	0.62
3:S1:183:GLN:O	3:S1:187:LYS:N	2.32	0.62
36:1:1235:U:H4'	36:1:1236:G:H5'	1.82	0.62
1:6:1208:A:N1	1:6:1455:G:N2	2.48	0.62
53:M7:105:LYS:HB3	53:M7:107:LEU:HD13	3.16	0.62
36:1:953:G:OP1	65:N9:15:LYS:NZ	2.27	0.62
36:1:1878:G:OP1	86:1:3928:OHX:N4	2.33	0.62
36:1:1413:G:N7	86:1:4126:OHX:N4	2.47	0.62
48:M1:7:ASN:HB3	48:M1:10:ARG:HD2	1.81	0.62
27:D5:88:ILE:HG22	27:D5:89:ILE:HG23	2.73	0.62
1:6:470:A:H8	1:6:470:A:H5''	1.64	0.62
6:S4:93:ASP:O	6:S4:95:THR:N	3.84	0.62
1:2:1367:G:N7	86:2:2108:OHX:N6	2.48	0.62
36:1:367:A:OP1	86:1:3885:OHX:N2	2.33	0.62
1:6:158:U:O2'	1:6:159:U:H3'	1.99	0.62
1:2:866:G:OP1	15:C3:2:GLY:HA3	2.00	0.62
59:N3:80:ARG:NE	59:N3:97:ASP:OD2	2.25	0.62
36:5:2572:C:O2'	36:5:2573:G:OP2	2.17	0.62
36:1:600:G:N7	86:1:4100:OHX:N1	2.48	0.62
50:M4:48:GLY:HA3	50:M4:53:VAL:HG13	1.92	0.62
18:C6:12:LYS:NZ	1:6:1380:U:OP1	424.98	0.62
86:6:2122:OHX:N6	86:6:2173:OHX:N5	2.48	0.61
36:5:3197:G:H2'	36:5:3198:U:H5''	1.82	0.61
11:S9:133:HIS:HD2	11:S9:162:SER:HB2	2.87	0.61
4:S2:108:ASN:O	4:S2:108:ASN:ND2	4.06	0.61
36:1:439:C:H3'	36:1:440:A:C8	2.34	0.61
63:N7:76:ASN:HB3	63:N7:79:HIS:ND1	2.72	0.61
36:1:586:C:OP1	69:O3:70:LYS:HE2	2.01	0.61
43:L6:13:GLU:OE2	68:O2:91:THR:HB	3.52	0.61
36:5:2250:G:O6	86:5:3950:OHX:N6	2.33	0.61
19:C7:8:THR:HG21	1:6:1330:G:H21	419.60	0.61
74:O8:8:ILE:HD12	74:O8:8:ILE:H	1.65	0.61
1:2:775:G:O6	26:D4:11:LYS:NZ	2.27	0.61
78:Q2:17:CYS:SG	78:Q2:77:CYS:CB	2.88	0.61
86:6:2122:OHX:N2	86:6:2173:OHX:N1	2.48	0.61
1:2:337:G:H3'	13:C1:133:LYS:HB2	1.82	0.61
54:M8:176:ARG:NH1	64:N8:46:ASP:OD2	2.33	0.61
75:O9:23:LEU:O	75:O9:25:GLN:NE2	2.50	0.61
47:M0:41:ALA:O	47:M0:139:ARG:NH2	3.00	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:53:MET:HG2	40:L3:77:THR:HG22	2.00	0.61
1:2:1000:C:O2'	1:2:1002:G:N7	2.27	0.61
14:C2:119:SER:OG	1:6:1228:G:OP1	465.03	0.61
26:D4:3:ASP:O	26:D4:5:VAL:N	2.27	0.61
42:L5:21:ARG:O	42:L5:25:GLU:HG3	2.30	0.61
86:1:3940:OHX:N5	86:1:4201:OHX:N6	2.47	0.61
36:5:1110:U:H2'	36:5:1111:U:C6	2.35	0.61
53:M7:27:LYS:NZ	36:5:1447:G:OP2	161.31	0.61
19:C7:82:ASP:O	19:C7:83:GLN:NE2	2.33	0.61
36:1:2899:C:C5	46:L9:171:ASP:HA	2.34	0.61
15:C3:94:LYS:HG2	15:C3:118:ILE:HD13	2.14	0.61
36:5:900:G:H1'	36:5:1589:A:N6	2.15	0.61
31:D9:24:CYS:HB2	1:6:1434:U:H4'	410.78	0.61
42:L5:22:ARG:HG2	42:L5:28:THR:OG1	2.00	0.61
36:5:2771:U:H2'	36:5:2772:C:C6	2.35	0.61
36:5:3279:A:C2'	36:5:3280:U:H5'	2.28	0.61
36:1:1349:G:H5'	41:L4:291:ASN:OD1	2.00	0.61
3:S1:126:THR:HG22	3:S1:136:ARG:HE	1.96	0.61
49:M3:168:ARG:O	49:M3:172:LEU:HG	2.35	0.61
36:1:1014:U:C2'	36:1:1015:U:H5''	2.29	0.61
38:4:85:G:O6	62:N6:112:ASP:HB3	2.01	0.61
1:2:1291:G:H22	1:2:1324:G:H22	1.48	0.61
36:1:2178:A:H3'	39:L2:132:ASN:HD21	1.65	0.61
36:5:679:U:O4	86:5:4017:OHX:N2	2.33	0.61
71:O5:118:ILE:O	71:O5:119:LYS:HB2	2.11	0.61
36:1:1623:G:OP2	86:1:4044:OHX:N1	2.32	0.61
50:M4:77:ARG:NH2	36:5:524:U:OP1	341.10	0.61
68:O2:24:ARG:HD3	68:O2:25:TYR:CZ	2.35	0.61
36:5:213:A:N6	36:5:227:G:O2'	2.31	0.61
11:S9:41:GLU:OE2	11:S9:126:ARG:NH2	2.84	0.61
42:L5:152:ARG:NH1	42:L5:152:ARG:HG3	2.35	0.61
45:L8:137:ASN:OD1	51:M5:3:ALA:N	2.28	0.61
26:D4:10:ARG:HD2	1:6:778:G:O6	430.22	0.61
36:1:3346:U:H3	36:1:3359:A:N6	1.99	0.61
39:L2:20:THR:HA	39:L2:23:ARG:HD2	1.82	0.61
8:S6:78:THR:HG23	8:S6:92:ARG:HG2	1.83	0.61
1:2:652:G:H1	1:2:682:C:H42	1.47	0.61
1:6:1623:C:H2'	1:6:1624:C:H6	1.65	0.61
32:E0:55:ARG:NH2	1:6:558:U:OP2	417.19	0.61
38:4:81:U:O2	38:4:82:U:H3'	2.01	0.61
6:S4:79:ASP:HB3	6:S4:82:TYR:HB2	1.83	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:217:PRO:O	86:5:4004:OHX:N6	259.42	0.61
13:C1:101:GLU:CD	25:D3:16:ARG:HH22	3.10	0.61
36:1:2535:A:N6	36:1:2544:U:H3	1.97	0.61
41:L4:145:ILE:O	41:L4:145:ILE:HG13	2.22	0.61
39:L2:224:THR:HG21	36:5:2201:G:H21	222.93	0.61
31:D9:19:ARG:NH2	1:6:1597:A:OP1	407.33	0.61
72:O6:2:THR:OG1	72:O6:3:VAL:N	2.33	0.61
36:1:1580:A:H5'	36:1:2522:G:C5	2.35	0.61
36:1:3278:C:H2'	36:1:3278:C:O2	1.99	0.61
11:S9:34:PHE:HD1	11:S9:111:THR:HG21	2.48	0.61
13:C1:101:GLU:OE2	25:D3:16:ARG:NH2	2.67	0.61
1:2:1606:C:H2'	1:2:1607:G:C8	2.36	0.61
22:D0:117:VAL:HG22	22:D0:118:VAL:H	1.65	0.61
31:D9:34:TYR:OH	1:6:1487:A:OP1	419.85	0.61
31:D9:6:VAL:O	31:D9:8:PHE:N	4.10	0.61
1:6:1405:G:H2'	1:6:1406:A:C8	2.35	0.61
20:C8:12:GLN:NE2	20:C8:13:HIS:O	5.85	0.61
6:S4:13:ALA:O	6:S4:39:ARG:NH2	2.34	0.61
27:D5:60:VAL:HG13	27:D5:101:TYR:HB2	4.23	0.61
1:2:1358:G:H2'	1:2:1359:C:C6	2.36	0.61
1:6:1280:C:H2'	1:6:1281:G:H8	1.65	0.61
1:6:1765:A:OP1	86:6:2128:OHX:N2	2.34	0.61
54:M8:147:ARG:NH2	36:5:670:C:OP1	162.16	0.61
86:6:2122:OHX:N4	86:6:2173:OHX:N3	2.49	0.61
7:S5:64:VAL:HG22	7:S5:89:ILE:HD11	1.83	0.61
55:M9:105:LEU:HD22	55:M9:138:LEU:HD13	1.83	0.61
3:S1:34:ALA:HB3	3:S1:41:ARG:HA	1.82	0.61
42:L5:86:TYR:CD1	42:L5:247:ILE:HG12	3.20	0.61
63:N7:46:ILE:HG12	63:N7:49:TYR:CE1	2.85	0.61
30:D8:32:PHE:HE2	30:D8:38:ARG:HB3	1.66	0.61
1:6:1623:C:H2'	1:6:1624:C:C6	2.35	0.61
36:5:626:U:O4	86:5:3986:OHX:N4	2.34	0.61
1:2:1504:G:H2'	1:2:1505:A:C8	2.36	0.61
40:L3:115:LYS:HE3	40:L3:129:ALA:HB3	5.27	0.61
1:6:1207:C:H42	1:6:1456:C:H5	1.48	0.61
43:L6:31:ARG:NH2	43:L6:81:ALA:O	2.34	0.61
3:S1:130:SER:OG	3:S1:131:ASP:N	2.30	0.61
11:S9:90:LYS:HG2	11:S9:95:TYR:CD1	3.98	0.61
2:S0:52:LYS:HB3	23:D1:82:VAL:HG22	1.82	0.61
71:O5:59:ASN:O	71:O5:63:ARG:HG2	3.96	0.61
1:2:68:A:OP1	8:S6:160:ARG:NH2	2.29	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:157:ASP:OD2	23:D1:60:ARG:NH2	2.31	0.61
16:C4:131:GLY:O	16:C4:133:ARG:N	2.90	0.61
36:1:242:C:HO2'	36:1:243:G:H8	1.49	0.61
1:6:190:C:N4	1:6:196:G:O6	2.34	0.61
40:L3:151:ILE:O	40:L3:155:ALA:HB3	2.39	0.61
20:C8:88:ARG:NH1	20:C8:112:ASP:OD2	3.00	0.61
4:S2:234:PRO:O	4:S2:235:LEU:HB2	2.01	0.61
1:2:819:G:O2'	1:2:821:U:OP2	2.09	0.61
36:5:408:A:N6	38:8:15:G:H1'	2.15	0.61
12:C0:50:THR:HG22	12:C0:55:VAL:HG22	1.84	0.61
1:2:1067:C:H2'	1:2:1068:C:C6	2.35	0.61
6:S4:139:VAL:HG13	6:S4:150:PRO:HG3	1.83	0.61
36:1:1114:U:H5''	64:N8:22:ILE:HD12	1.83	0.61
26:D4:35:VAL:O	26:D4:36:SER:HB3	2.01	0.61
1:2:959:U:C6	15:C3:61:THR:HB	2.35	0.61
5:S3:137:VAL:HG22	5:S3:151:LYS:HG3	2.52	0.61
36:5:1365:G:OP2	86:5:4031:OHX:N3	2.34	0.61
3:S1:146:GLN:O	3:S1:148:ASN:N	2.87	0.61
36:1:118:U:O2	36:1:121:A:H5'	2.01	0.61
68:O2:67:SER:HB2	68:O2:68:PRO:HD2	1.83	0.61
64:N8:16:SER:HA	36:5:942:U:N3	169.27	0.61
64:N8:21:ARG:NH1	36:5:1369:A:OP1	183.78	0.60
1:6:151:G:N2	1:6:163:G:N2	2.49	0.60
40:L3:167:ARG:O	86:L3:404:OHX:N5	6.11	0.60
59:N3:13:ILE:CD1	59:N3:53:SER:HB2	2.63	0.60
36:1:1412:G:OP1	68:O2:105:ARG:NH2	2.34	0.60
36:5:3316:A:H5''	36:5:3318:G:N2	2.16	0.60
70:O4:99:LYS:O	70:O4:103:LYS:HG2	2.10	0.60
36:5:22:G:H1'	38:8:104:A:N3	2.16	0.60
13:C1:129:ARG:HG3	13:C1:129:ARG:O	2.22	0.60
27:D5:43:ASP:O	27:D5:46:LYS:N	2.25	0.60
19:C7:51:ALA:O	19:C7:55:THR:HG23	5.17	0.60
3:S1:154:SER:OG	3:S1:154:SER:O	2.18	0.60
1:6:660:G:H2'	1:6:661:A:H4'	1.82	0.60
36:5:2225:U:H2'	36:5:2226:U:H6	1.65	0.60
36:1:2298:U:O4	36:1:2923:U:H5	1.84	0.60
36:5:1481:A:O4'	36:5:1481:A:OP1	2.19	0.60
51:M5:102:ALA:O	51:M5:106:VAL:HG13	2.01	0.60
46:L9:70:THR:HB	36:5:3112:G:O2'	329.40	0.60
1:2:1760:G:H2'	1:2:1761:U:H5'	1.82	0.60
1:6:407:A:H2'	1:6:408:C:C6	2.36	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1688:U:H2'	36:1:1689:U:C6	2.36	0.60
36:5:2580:A:O2'	86:5:4132:OHX:N1	2.34	0.60
18:C6:16:ALA:HB2	18:C6:72:GLY:HA3	1.83	0.60
42:L5:83:LEU:HB3	42:L5:88:ILE:HB	1.83	0.60
36:1:1108:U:H2'	36:1:1109:U:C6	2.36	0.60
79:Q3:7:LYS:O	79:Q3:27:LYS:NZ	3.42	0.60
52:M6:110:PRO:O	52:M6:111:PRO:C	3.17	0.60
19:C7:33:ARG:NH2	34:SR:109:ASP:OD1	2.34	0.60
36:1:1278:A:O2'	36:1:1279:C:O5'	2.18	0.60
36:1:547:G:O2'	36:1:548:G:C8	2.51	0.60
20:C8:140:THR:HA	20:C8:143:ARG:NH1	2.55	0.60
39:L2:149:ARG:HH21	39:L2:252:THR:HG23	1.66	0.60
1:2:800:U:O4	86:2:2053:OHX:N5	2.34	0.60
27:D5:49:ARG:NH2	27:D5:53:GLU:OE2	3.86	0.60
27:D5:58:ARG:HA	27:D5:103:ARG:HB2	5.98	0.60
3:S1:117:TRP:HE1	3:S1:152:ARG:CZ	2.14	0.60
1:6:647:G:H22	1:6:687:G:N2	1.98	0.60
36:1:3085:G:OP2	86:1:3888:OHX:N2	2.35	0.60
15:C3:132:VAL:HG23	15:C3:134:VAL:HG13	2.18	0.60
57:N1:40:VAL:HG21	57:N1:96:ILE:HG13	1.84	0.60
32:E0:18:THR:HG21	1:6:584:C:H1'	390.12	0.60
36:5:1847:A:O2'	36:5:1848:G:H5''	2.01	0.60
25:D3:69:ARG:NH1	25:D3:116:ASP:OD1	2.33	0.60
21:C9:57:ARG:NH2	21:C9:80:TYR:HB3	2.15	0.60
1:6:833:U:O4	86:6:2103:OHX:N5	2.34	0.60
1:2:159:U:O2'	8:S6:87:ARG:NH1	2.34	0.60
6:S4:155:LYS:HG3	6:S4:174:LYS:HZ1	1.67	0.60
1:2:386:G:OP2	10:S8:25:ARG:NH2	2.34	0.60
36:5:1438:U:H2'	36:5:1439:U:C6	2.35	0.60
1:2:1381:U:H4'	22:D0:59:PRO:HG3	1.81	0.60
1:2:1039:A:H5''	23:D1:62:ARG:NH2	2.15	0.60
3:S1:181:LEU:HD13	3:S1:181:LEU:H	1.67	0.60
19:C7:29:GLN:HG2	34:SR:67:ILE:HD11	2.12	0.60
7:S5:53:VAL:O	7:S5:55:ASP:N	2.84	0.60
36:1:2663:G:H5'	42:L5:152:ARG:HD3	1.83	0.60
62:N6:3:LYS:NZ	62:N6:5:SER:O	3.39	0.60
1:6:691:C:OP1	1:6:696:C:N4	2.31	0.60
19:C7:88:VAL:HG22	19:C7:89:SER:H	1.65	0.60
36:5:1717:U:H2'	36:5:1718:G:C8	2.36	0.60
16:C4:81:VAL:H	16:C4:115:ILE:HG22	1.65	0.60
40:L3:150:ARG:HD2	36:5:3242:G:N7	252.76	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:2:2035:OHX:N2	10:S8:17:LYS:O	2.34	0.60
19:C7:77:GLU:HG2	19:C7:80:ARG:HH21	7.28	0.60
8:S6:20:ASP:HB3	8:S6:23:ARG:HG3	2.41	0.60
59:N3:74:MET:HG3	59:N3:102:ILE:HG23	5.31	0.60
24:D2:32:LYS:HG3	1:6:637:C:OP1	363.88	0.60
48:M1:132:ASN:HA	48:M1:154:THR:HG21	1.82	0.60
8:S6:186:ARG:O	8:S6:190:GLN:HG2	2.01	0.60
25:D3:102:VAL:HG12	25:D3:127:VAL:HG12	1.84	0.60
17:C5:122:THR:HG22	17:C5:123:TYR:HD1	5.63	0.60
22:D0:106:ILE:HG23	22:D0:107:THR:HG23	1.84	0.60
51:M5:172:ARG:HD2	36:5:30:G:O5'	110.58	0.60
46:L9:162:GLN:HG3	46:L9:163:GLN:N	2.84	0.60
6:S4:151:ASP:HB3	6:S4:154:ILE:HG13	1.84	0.60
1:2:1119:G:O6	86:2:2148:OHX:N1	2.35	0.60
36:1:530:G:N7	86:1:3921:OHX:N6	2.50	0.60
36:5:173:G:HO2'	36:5:174:C:H6	1.49	0.60
71:O5:89:ARG:HD2	38:8:38:U:C4	69.08	0.60
55:M9:76:SER:O	55:M9:81:ARG:NH1	2.35	0.60
36:5:1817:G:OP1	86:5:4183:OHX:N1	2.35	0.60
1:2:1720:G:O6	86:2:2081:OHX:N5	2.34	0.60
20:C8:91:ASP:HB3	20:C8:95:GLY:H	2.16	0.60
40:L3:2:SER:O	40:L3:3:HIS:HB3	2.01	0.60
47:M0:76:MET:CE	47:M0:148:VAL:HA	2.56	0.60
24:D2:71:LYS:NZ	1:6:1099:U:OP1	375.23	0.60
1:6:151:G:H22	1:6:163:G:N2	2.00	0.60
51:M5:138:GLN:HA	51:M5:143:ARG:HH11	1.66	0.60
21:C9:49:ASP:OD1	21:C9:53:TRP:N	2.34	0.60
37:3:62:U:O3'	42:L5:285:ARG:NH1	2.35	0.60
71:O5:86:ARG:HG3	71:O5:90:ARG:NH2	2.52	0.60
36:1:1546:A:N7	51:M5:71:ARG:NH1	2.50	0.60
24:D2:55:ASP:OD2	24:D2:57:ARG:HB2	3.11	0.60
1:2:1240:U:OP2	86:2:2144:OHX:N1	2.35	0.60
36:1:2299:A:OP1	86:1:3948:OHX:N1	2.34	0.60
1:6:992:A:OP1	86:6:2055:OHX:N1	2.34	0.60
36:1:2572:C:O2'	36:1:2573:G:O4'	2.17	0.60
26:D4:29:HIS:O	26:D4:31:ASN:N	3.67	0.60
1:6:217:A:C8	1:6:218:A:C8	2.89	0.60
1:6:800:U:H2'	1:6:801:G:C8	2.36	0.60
46:L9:163:GLN:O	46:L9:166:ARG:HD3	2.02	0.60
76:Q0:78:ILE:HG23	76:Q0:83:LYS:HB2	1.84	0.60
36:1:1033:U:H2'	36:1:1034:U:C6	2.37	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:252:U:H4'	36:5:253:A:C5'	2.31	0.60
2:S0:138:TYR:OH	1:6:1296:A:OP1	398.11	0.60
45:L8:133:LYS:HB2	45:L8:199:ALA:O	3.49	0.60
41:L4:120:TYR:CE2	41:L4:277:PRO:HB3	2.37	0.60
62:N6:83:ASP:O	62:N6:84:LYS:HB2	2.01	0.60
36:1:1674:G:OP2	86:1:3949:OHX:N2	2.34	0.60
48:M1:137:ARG:NH1	37:7:28:C:OP1	301.53	0.60
36:1:2218:G:H2'	36:1:2219:A:H8	1.67	0.60
36:1:1934:G:N7	86:1:3886:OHX:N2	2.50	0.60
36:5:437:G:OP2	36:5:437:G:H8	1.85	0.60
70:O4:8:ARG:HB2	70:O4:34:HIS:CD2	2.36	0.60
46:L9:9:GLN:HG2	46:L9:52:LEU:HD21	1.84	0.60
36:1:1149:G:N7	86:1:4170:OHX:N6	2.50	0.60
39:L2:70:ARG:NH2	39:L2:72:ARG:HH21	7.64	0.60
47:M0:86:HIS:ND1	47:M0:139:ARG:NH1	2.50	0.60
72:O6:4:LYS:HD2	72:O6:13:LYS:O	2.01	0.60
4:S2:99:LYS:HA	4:S2:117:THR:HA	2.35	0.60
1:2:1760:G:C2'	1:2:1761:U:H5'	2.32	0.60
22:D0:118:VAL:HG22	22:D0:119:ALA:H	1.67	0.60
1:2:1600:A:O2'	1:2:1602:C:N4	2.34	0.60
21:C9:39:THR:O	21:C9:96:ALA:HB1	2.54	0.60
25:D3:59:ILE:HG12	32:E0:4:VAL:HG22	4.86	0.60
49:M3:89:TYR:O	49:M3:92:THR:OG1	2.35	0.60
39:L2:105:GLY:HA3	39:L2:160:SER:HB3	2.30	0.60
74:O8:26:LYS:HE2	36:5:1751:G:H5''	128.03	0.60
36:5:3259:U:H5'	36:5:3259:U:C6	2.37	0.60
5:S3:74:GLN:HA	5:S3:79:TYR:HB2	2.49	0.60
51:M5:38:ARG:HD3	51:M5:39:ALA:N	2.17	0.60
36:5:3103:A:OP2	86:5:4161:OHX:N4	2.35	0.60
29:D7:47:PHE:HD1	29:D7:49:HIS:O	1.84	0.60
34:SR:300:THR:HG23	34:SR:314:GLN:HG3	1.84	0.60
62:N6:120:GLN:CD	62:N6:126:LEU:HA	8.37	0.60
36:1:1382:G:OP2	41:L4:188:ARG:NH1	2.35	0.60
39:L2:101:VAL:HB	39:L2:165:VAL:HG12	4.06	0.60
1:2:1325:A:OP2	19:C7:11:ARG:NH1	2.35	0.60
36:5:59:G:H4'	36:5:60:A:H4'	1.83	0.60
1:6:737:A:H2'	1:6:738:G:C8	2.37	0.60
1:6:699:U:H3	1:6:739:G:H1	1.48	0.60
42:L5:54:ARG:NH1	42:L5:147:ASP:O	2.34	0.60
59:N3:33:ASN:HD22	59:N3:63:LYS:HB2	4.02	0.60
1:6:1696:G:H2'	1:6:1698:G:O6	2.02	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:2:2030:OHX:N3	86:2:2146:OHX:N1	2.49	0.59
1:6:219:A:H2'	1:6:831:U:O2	2.02	0.59
36:5:655:C:H2'	36:5:656:A:C8	2.37	0.59
29:D7:54:VAL:O	29:D7:63:LEU:HB2	2.02	0.59
15:C3:22:ALA:HB1	15:C3:23:PRO:HA	2.11	0.59
36:1:670:C:OP1	54:M8:147:ARG:NH2	2.32	0.59
27:D5:43:ASP:O	27:D5:45:GLU:N	2.37	0.59
15:C3:115:LEU:HD22	15:C3:119:GLU:HG3	1.82	0.59
53:M7:116:HIS:HB3	53:M7:149:VAL:HB	1.96	0.59
66:O0:15:ALA:O	66:O0:18:ILE:HG22	2.02	0.59
36:5:1808:G:O6	86:5:4026:OHX:N3	2.35	0.59
3:S1:195:LYS:HA	3:S1:198:GLU:HB3	1.84	0.59
38:8:133:G:O6	86:8:223:OHX:N6	2.35	0.59
72:O6:60:LEU:HD11	72:O6:68:ARG:HE	1.67	0.59
60:N4:23:ARG:NH2	60:N4:25:ASP:OD1	3.92	0.59
42:L5:211:LEU:HD11	42:L5:218:ARG:HG2	5.79	0.59
86:6:2122:OHX:N2	86:6:2173:OHX:N5	2.50	0.59
36:1:2836:C:H5	36:1:2852:C:N4	1.98	0.59
36:1:2983:C:OP1	86:1:4193:OHX:N3	2.35	0.59
16:C4:29:HIS:HB3	16:C4:41:ARG:HG3	1.84	0.59
62:N6:81:GLN:NE2	62:N6:98:ASN:OD1	2.23	0.59
86:1:3940:OHX:N5	86:1:4201:OHX:N2	2.50	0.59
1:6:647:G:N2	1:6:687:G:H22	1.99	0.59
1:6:1688:U:H3	1:6:1713:G:H1	1.50	0.59
14:C2:66:VAL:HG11	14:C2:71:ILE:HD12	1.84	0.59
15:C3:114:ARG:HH11	15:C3:114:ARG:HG2	1.67	0.59
36:1:3094:A:H2'	36:1:3095:U:C6	2.37	0.59
36:5:2927:C:H2'	36:5:2928:C:C6	2.37	0.59
26:D4:51:GLU:O	26:D4:53:ASP:N	3.37	0.59
42:L5:52:VAL:HG21	42:L5:65:ILE:HG13	4.06	0.59
36:1:329:U:OP2	86:1:4046:OHX:N4	2.35	0.59
27:D5:47:TYR:CZ	27:D5:51:LEU:HD11	3.01	0.59
15:C3:138:ASN:O	15:C3:140:LYS:N	3.85	0.59
36:1:2651:G:H4'	36:1:2652:U:OP2	2.02	0.59
36:5:2696:A:H2'	36:5:2697:A:C8	2.37	0.59
9:S7:11:GLN:HG3	9:S7:13:PRO:HD2	1.84	0.59
36:5:1581:C:OP2	36:5:1581:C:H4'	2.01	0.59
36:5:1020:G:H2'	36:5:1021:G:O4'	2.02	0.59
36:1:3224:G:O6	86:1:3894:OHX:N4	2.34	0.59
36:5:1781:C:H2'	36:5:1782:U:C6	2.37	0.59
36:1:223:U:O4	86:1:4199:OHX:N5	2.34	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:49:ARG:HG3	6:S4:50:ASN:N	4.20	0.59
70:O4:88:ARG:NH1	36:5:2556:C:OP1	200.90	0.59
54:M8:170:ARG:NH1	64:N8:56:VAL:O	2.34	0.59
2:S0:52:LYS:HD2	23:D1:82:VAL:HA	1.83	0.59
1:2:1370:U:O4	86:2:2120:OHX:N5	2.35	0.59
36:5:541:U:H2'	36:5:542:G:C8	2.37	0.59
31:D9:24:CYS:O	31:D9:25:SER:OG	2.18	0.59
36:5:1806:A:OP2	86:5:4026:OHX:N5	2.36	0.59
36:1:3186:A:O2'	46:L9:42:ASP:HA	2.02	0.59
36:5:2834:G:OP1	86:5:3946:OHX:N3	2.36	0.59
36:1:1938:U:O4	86:1:3915:OHX:N2	2.36	0.59
42:L5:158:ARG:HB2	37:7:46:A:OP1	278.79	0.59
1:2:1492:A:HO2'	1:2:1493:A:H8	1.50	0.59
37:7:91:G:H2'	37:7:92:A:C8	2.37	0.59
57:N1:56:PHE:CE1	57:N1:78:LYS:HD3	2.37	0.59
62:N6:63:LYS:HE3	62:N6:97:ILE:HD13	1.91	0.59
17:C5:14:THR:HB	17:C5:22:LEU:HB2	1.84	0.59
3:S1:164:ILE:O	3:S1:168:ILE:HG13	2.61	0.59
17:C5:126:VAL:HG13	17:C5:127:ARG:H	1.66	0.59
39:L2:209:HIS:HD2	39:L2:211:HIS:N	2.00	0.59
2:S0:49:ASN:HB3	2:S0:52:LYS:HG3	1.82	0.59
35:SM:23:LYS:HG3	35:SM:24:GLU:N	4.80	0.59
34:SR:197:SER:HB2	34:SR:216:LYS:HB3	2.15	0.59
17:C5:22:LEU:HA	17:C5:25:LEU:HD12	2.53	0.59
36:1:1675:G:H2'	36:1:1676:A:H8	1.68	0.59
1:2:5:U:H2'	1:2:6:G:H8	1.67	0.59
73:O7:29:VAL:O	73:O7:32:LYS:HD3	2.40	0.59
36:1:276:U:O2	51:M5:93:LYS:NZ	2.32	0.59
73:O7:45:ARG:NH2	36:5:361:A:O3'	123.56	0.59
43:L6:170:LYS:O	43:L6:173:MET:N	2.33	0.59
44:L7:40:LYS:HE2	44:L7:170:GLU:OE1	3.49	0.59
60:N4:27:LYS:HD3	60:N4:29:PHE:CZ	3.07	0.59
1:6:1385:G:N7	86:6:2123:OHX:N6	2.50	0.59
86:1:4136:OHX:N5	86:1:4168:OHX:N6	2.50	0.59
36:5:1596:C:H2'	36:5:1597:C:C6	2.37	0.59
8:S6:179:VAL:HG21	1:6:140:A:H1'	328.37	0.59
62:N6:112:ASP:H	62:N6:115:ARG:HB2	1.67	0.59
37:3:64:A:H5''	47:M0:206:LEU:H	1.65	0.59
6:S4:11:ARG:O	6:S4:12:LEU:HB2	2.32	0.59
51:M5:65:ARG:HG2	51:M5:127:TYR:CD1	2.38	0.59
21:C9:117:SER:OG	21:C9:118:PRO:O	2.20	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:144:U:HO2'	1:2:145:A:H8	1.50	0.59
51:M5:44:ARG:NH2	36:5:269:G:OP1	124.63	0.59
1:2:1592:A:H2'	1:2:1593:A:H8	1.66	0.59
48:M1:143:ARG:NH2	37:7:5:G:OP1	291.84	0.59
36:1:516:A:O3'	44:L7:60:ARG:NH2	2.34	0.59
36:5:789:A:H2'	36:5:790:U:C6	2.37	0.59
56:N0:26:ARG:HH11	57:N1:150:THR:HG21	2.29	0.59
6:S4:19:LEU:HD22	1:6:788:A:H2'	390.02	0.59
22:D0:97:VAL:HG13	22:D0:98:GLN:H	2.41	0.59
36:1:2526:C:OP1	39:L2:38:HIS:NE2	2.35	0.59
36:5:1176:C:H2'	36:5:1177:G:N2	2.17	0.59
1:2:808:U:H2'	1:2:809:A:C8	2.38	0.59
44:L7:147:LEU:HD11	44:L7:240:VAL:HG11	2.21	0.59
47:M0:153:ARG:HG3	47:M0:165:ILE:HD12	5.23	0.59
67:O1:19:ARG:HD3	67:O1:35:GLU:HG3	1.84	0.59
36:1:2927:C:H2'	36:1:2928:C:C6	2.38	0.59
6:S4:192:ILE:HG13	6:S4:243:GLY:HA3	1.90	0.59
1:2:717:C:H42	1:2:720:G:H22	1.50	0.59
40:L3:4:ARG:O	40:L3:5:LYS:HB3	2.02	0.59
1:2:701:U:H3	1:2:737:A:H61	1.49	0.59
41:L4:283:THR:HG21	41:L4:288:ARG:HH22	8.02	0.59
53:M7:138:LYS:NZ	36:5:2356:A:OP1	148.04	0.59
42:L5:106:ALA:O	42:L5:110:LEU:HD22	3.54	0.59
36:1:1597:C:H42	36:1:1610:G:H1	1.49	0.59
18:C6:40:GLU:HA	18:C6:42:GLU:H	1.67	0.59
42:L5:85:ARG:HH21	42:L5:254:LYS:HB3	1.68	0.59
15:C3:54:LEU:HB3	15:C3:60:VAL:CG1	3.77	0.59
36:1:266:A:OP1	51:M5:5:LYS:NZ	2.36	0.59
27:D5:61:SER:H	27:D5:64:VAL:HB	1.66	0.59
36:1:1480:G:H4'	36:1:1481:A:OP1	2.03	0.59
39:L2:236:GLY:N	36:5:2183:A:O2'	205.61	0.59
1:6:1050:G:N2	1:6:1068:C:O2	2.36	0.59
36:5:801:A:O2'	86:5:4030:OHX:N1	2.36	0.59
36:5:731:U:H2'	36:5:732:C:H6	1.67	0.59
1:6:1081:A:O2'	1:6:1083:G:N7	2.36	0.59
36:5:878:G:C2	36:5:2980:U:H5'	2.38	0.59
1:2:1336:A:H2'	1:2:1337:A:H5''	1.84	0.59
36:5:2957:G:H8	36:5:2957:G:H5'	1.67	0.59
1:6:1392:U:H2'	1:6:1393:C:C6	2.38	0.59
49:M3:80:VAL:HG12	49:M3:85:LEU:O	2.39	0.59
46:L9:20:ILE:HG12	46:L9:25:VAL:HG22	2.61	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:N2:33:TYR:CE1	58:N2:80:THR:HG23	4.61	0.59
36:1:3066:U:H2'	36:1:3067:C:C6	2.38	0.59
47:M0:84:ALA:O	47:M0:140:THR:HG22	2.02	0.59
1:2:703:G:H2'	1:2:704:C:H5'	1.85	0.59
3:S1:65:VAL:HG12	1:6:920:U:H5''	264.59	0.59
1:2:138:A:N6	1:2:266:A:H61	2.00	0.59
20:C8:145:ARG:HB2	35:SM:68:ARG:HH22	1.68	0.59
42:L5:289:LYS:HD3	47:M0:206:LEU:HD23	1.84	0.59
6:S4:187:ARG:NH2	1:6:753:A:N7	374.36	0.59
72:O6:30:LYS:HE3	36:5:266:A:H2'	102.80	0.59
19:C7:60:ARG:HG3	19:C7:66:VAL:HG21	2.42	0.59
49:M3:94:GLY:HA3	71:O5:116:TYR:OH	2.03	0.59
36:1:3065:G:O6	86:1:4139:OHX:N6	2.35	0.59
39:L2:142:ASP:OD2	39:L2:142:ASP:N	2.35	0.59
52:M6:18:ARG:NH2	36:5:1318:A:OP1	276.99	0.59
41:L4:259:ASP:OD1	41:L4:259:ASP:N	3.59	0.59
36:1:1222:G:N2	36:1:1285:G:O2'	2.34	0.59
42:L5:166:ALA:HB1	42:L5:171:LEU:HD12	1.85	0.59
9:S7:99:LEU:HD12	9:S7:116:ARG:HG2	1.85	0.59
36:1:364:G:OP1	41:L4:60:THR:HG23	2.02	0.59
1:2:1274:C:C5	35:SM:96:ARG:HG2	2.38	0.59
36:1:2734:A:OP1	86:1:4010:OHX:N3	2.36	0.59
36:1:1952:G:H3'	36:1:1953:G:H5''	1.84	0.59
60:N4:25:ASP:OD2	60:N4:25:ASP:N	3.96	0.59
1:2:952:A:O2'	15:C3:114:ARG:HG3	2.03	0.59
9:S7:13:PRO:HB3	9:S7:14:THR:HB	1.83	0.59
46:L9:44:THR:HG22	36:5:3186:A:C2	326.87	0.59
36:1:425:G:O6	86:1:3876:OHX:N6	2.36	0.59
2:S0:175:TYR:HE1	2:S0:197:ILE:HG22	2.28	0.59
36:5:3152:U:O2	86:5:4228:OHX:N5	2.36	0.59
36:5:3155:U:H4'	36:5:3156:U:OP2	2.02	0.59
6:S4:3:ARG:HB3	1:6:93:A:H1'	326.62	0.59
6:S4:49:ARG:HH11	6:S4:50:ASN:HD21	1.49	0.59
28:D6:79:ILE:HA	28:D6:84:VAL:HG11	1.84	0.59
41:L4:237:GLN:O	41:L4:246:ARG:HG3	2.09	0.59
8:S6:141:ILE:HD13	8:S6:153:VAL:HG11	1.85	0.59
11:S9:163:PRO:C	11:S9:165:GLY:H	2.05	0.59
3:S1:34:ALA:N	3:S1:41:ARG:O	2.20	0.59
36:5:3121:U:H1'	36:5:3122:A:H5''	1.83	0.59
9:S7:50:ASP:N	9:S7:50:ASP:OD1	2.35	0.59
1:2:1002:G:N1	1:2:1761:U:OP1	2.30	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:42:ALA:HB2	54:M8:133:LYS:HD3	2.66	0.59
39:L2:65:ASP:HB3	39:L2:68:LYS:O	2.40	0.59
18:C6:28:LEU:HD12	18:C6:65:ILE:H	1.68	0.59
44:L7:233:GLU:OE1	56:N0:38:LYS:NZ	2.95	0.59
17:C5:116:LEU:O	17:C5:118:GLU:N	3.44	0.59
17:C5:81:ARG:HH12	17:C5:120:SER:HB3	1.67	0.59
47:M0:207:GLU:HB3	47:M0:211:ARG:HH12	7.91	0.59
36:5:3055:U:O2'	36:5:3057:U:OP1	2.20	0.59
1:2:780:A:C8	26:D4:8:ARG:HB3	2.36	0.59
36:1:249:U:O2	36:1:250:U:N3	2.30	0.59
36:1:1724:U:H1'	36:1:1725:C:C6	2.38	0.59
63:N7:128:GLN:O	63:N7:130:PHE:N	3.19	0.59
19:C7:63:LYS:HE2	34:SR:284:ALA:HB2	1.85	0.59
36:5:438:A:C8	36:5:439:C:C5	2.90	0.59
36:5:1239:C:N4	36:5:1249:G:H1	1.97	0.59
3:S1:180:THR:HB	3:S1:182:ALA:H	1.68	0.59
20:C8:145:ARG:HG3	35:SM:68:ARG:NH2	4.17	0.59
36:5:980:A:H2'	36:5:981:U:N1	2.18	0.59
68:O2:5:PRO:HD2	68:O2:6:HIS:H	5.40	0.59
86:1:4007:OHX:N3	86:1:4176:OHX:N5	2.51	0.59
1:2:45:U:O2'	1:2:46:A:H2'	2.03	0.59
7:S5:216:GLU:OE2	7:S5:219:ARG:HD2	2.02	0.59
36:5:2533:G:N2	36:5:2546:C:O2	2.32	0.59
36:5:2916:U:H5	36:5:2935:U:HO2'	1.50	0.59
72:O6:66:GLU:OE1	72:O6:70:ARG:NH2	2.36	0.59
47:M0:78:THR:OG1	47:M0:79:VAL:N	3.26	0.59
51:M5:9:GLU:O	51:M5:13:LYS:HE2	2.03	0.59
37:3:10:C:OP2	57:N1:26:HIS:HD2	1.86	0.59
51:M5:104:GLU:O	51:M5:108:ARG:HG3	2.24	0.59
86:1:3960:OHX:N4	44:L7:217:PRO:HA	2.18	0.58
3:S1:180:THR:HG22	3:S1:181:LEU:HD13	1.84	0.58
36:1:3060:C:OP1	86:1:4042:OHX:N4	2.36	0.58
46:L9:67:ALA:O	46:L9:71:VAL:HG23	2.03	0.58
47:M0:210:ILE:HA	47:M0:217:PHE:CE2	2.38	0.58
23:D1:71:ARG:O	23:D1:75:ASN:ND2	2.36	0.58
24:D2:30:SER:OG	24:D2:31:SER:N	2.48	0.58
71:O5:6:ALA:O	71:O5:10:ARG:HG3	2.78	0.58
37:3:44:C:OP2	48:M1:137:ARG:NH2	2.33	0.58
25:D3:43:PHE:CE1	25:D3:49:ALA:HB3	2.46	0.58
48:M1:90:GLN:HB3	48:M1:172:LEU:HD11	1.85	0.58
39:L2:243:THR:OG1	36:5:2244:A:H5''	228.64	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:241:GLY:O	6:S4:244:ILE:HG12	2.02	0.58
30:D8:12:VAL:HG22	30:D8:28:VAL:HG11	1.85	0.58
36:5:374:A:N3	36:5:376:G:H5''	2.18	0.58
34:SR:149:ASP:HB2	34:SR:175:ASP:HB3	1.98	0.58
1:6:751:G:H2'	1:6:752:A:C8	2.38	0.58
37:3:28:C:H1'	37:3:55:A:H61	1.66	0.58
29:D7:41:LEU:H	29:D7:41:LEU:HD23	3.39	0.58
36:5:2434:U:H4'	36:5:2435:G:H5''	1.84	0.58
41:L4:209:TYR:CZ	41:L4:229:ASN:HB2	2.38	0.58
36:5:94:G:H2'	36:5:95:A:C8	2.38	0.58
36:5:304:G:N3	36:5:304:G:H5'	2.19	0.58
66:O0:26:GLY:O	66:O0:30:THR:HG23	2.02	0.58
24:D2:11:LEU:HD12	24:D2:74:VAL:HB	1.84	0.58
8:S6:48:TYR:OH	8:S6:119:GLN:O	2.66	0.58
62:N6:120:GLN:OE1	62:N6:126:LEU:HA	9.46	0.58
55:M9:21:LYS:HE3	55:M9:55:VAL:HA	1.85	0.58
1:2:843:U:H2'	1:2:844:A:C8	2.38	0.58
1:2:1424:A:H1'	4:S2:92:ALA:HB1	1.84	0.58
1:2:868:G:H1	1:2:960:U:H3	1.50	0.58
3:S1:101:HIS:HA	3:S1:217:LEU:HD22	1.83	0.58
36:1:829:U:H3	36:1:895:A:H62	1.49	0.58
1:2:1184:A:HO2'	1:2:1209:C:HO2'	1.51	0.58
1:2:359:A:C2	25:D3:38:PHE:HB3	2.37	0.58
1:2:1647:U:O2	32:E0:2:ALA:HA	2.02	0.58
36:1:2988:C:O2'	40:L3:266:ARG:HD2	2.03	0.58
17:C5:130:ARG:NH1	35:SM:71:ASN:OD1	2.45	0.58
1:2:161:U:OP2	8:S6:87:ARG:NH2	2.36	0.58
38:4:79:A:H2'	38:4:80:A:H1'	1.84	0.58
36:5:3358:U:H2'	36:5:3359:A:H8	1.69	0.58
36:5:1796:G:H5''	36:5:1797:A:OP1	2.03	0.58
76:Q0:127:LEU:HD22	76:Q0:128:LYS:HG3	3.78	0.58
5:S3:175:VAL:HG13	5:S3:182:LEU:HB2	1.85	0.58
42:L5:184:ASP:OD2	42:L5:187:THR:OG1	4.86	0.58
1:2:987:G:C2	39:L2:249:SER:HB2	2.37	0.58
1:2:520:A:H2'	1:2:521:A:C8	2.38	0.58
36:5:3263:G:O6	86:5:4122:OHX:N2	2.37	0.58
16:C4:107:ARG:HB2	16:C4:107:ARG:HH21	3.02	0.58
53:M7:172:GLN:NE2	69:O3:60:ARG:O	2.35	0.58
1:2:513:U:H2'	1:2:514:G:C8	2.38	0.58
2:S0:31:VAL:HG23	2:S0:150:ASP:HA	1.83	0.58
34:SR:164:ASP:O	34:SR:166:SER:N	2.63	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:O6:45:ARG:HH21	72:O6:50:LEU:HA	2.86	0.58
36:1:1789:G:O6	86:1:4172:OHX:N4	2.36	0.58
47:M0:156:ARG:HD3	47:M0:163:GLN:O	2.35	0.58
86:2:2043:OHX:N1	86:2:2098:OHX:N5	2.51	0.58
48:M1:162:TRP:CZ2	48:M1:166:LYS:HD2	2.37	0.58
14:C2:30:VAL:HB	14:C2:132:GLU:HG3	1.85	0.58
1:6:9:U:O4	86:6:2148:OHX:N3	2.37	0.58
36:1:1312:C:O2	52:M6:87:MET:HE3	2.02	0.58
41:L4:152:VAL:HG23	41:L4:172:VAL:HG11	1.85	0.58
86:8:218:OHX:N6	86:8:225:OHX:N3	2.50	0.58
54:M8:165:ILE:HD12	54:M8:167:SER:O	5.07	0.58
36:1:304:G:H5'	36:1:304:G:N3	2.18	0.58
58:N2:103:TYR:OH	36:5:1677:G:OP2	147.54	0.58
51:M5:49:ARG:NH1	36:5:149:U:OP2	101.39	0.58
36:5:438:A:C8	36:5:439:C:H5	2.20	0.58
36:1:156:G:OP2	72:O6:25:LYS:HB3	2.03	0.58
22:D0:104:THR:HG22	22:D0:116:VAL:HG11	3.73	0.58
1:6:1700:C:O2'	1:6:1701:A:OP1	2.18	0.58
8:S6:98:ARG:HD3	8:S6:99:GLY:N	2.39	0.58
41:L4:139:GLY:O	41:L4:140:HIS:HB2	2.04	0.58
65:N9:21:ILE:O	65:N9:22:LYS:HD2	5.37	0.58
16:C4:84:ARG:HG2	16:C4:85:ALA:O	2.24	0.58
16:C4:85:ALA:H	16:C4:119:THR:CG2	2.15	0.58
56:N0:106:LEU:HD23	56:N0:110:MET:HG2	1.83	0.58
27:D5:54:VAL:HG13	27:D5:57:TYR:CD1	2.39	0.58
19:C7:8:THR:HG21	1:6:1330:G:N2	419.59	0.58
86:1:3940:OHX:N1	86:1:4201:OHX:N4	2.51	0.58
1:2:104:A:OP2	1:2:308:C:N4	2.36	0.58
1:6:1239:U:O4	86:6:2099:OHX:N1	2.35	0.58
1:2:1672:G:H2'	1:2:1673:G:C8	2.39	0.58
1:2:782:U:H4'	1:2:783:G:OP2	2.01	0.58
36:1:2683:U:H2'	36:1:2684:C:C6	2.39	0.58
47:M0:141:LYS:O	47:M0:144:ASN:N	2.77	0.58
26:D4:122:GLY:O	26:D4:125:LEU:N	2.41	0.58
22:D0:24:ILE:HG12	22:D0:116:VAL:HG12	4.30	0.58
20:C8:125:ILE:HG12	35:SM:61:ILE:HG23	1.84	0.58
68:O2:124:GLY:O	68:O2:126:LEU:N	2.88	0.58
1:6:832:U:OP2	86:6:2204:OHX:N6	2.36	0.58
51:M5:35:VAL:HG23	36:5:1543:G:OP1	140.88	0.58
24:D2:86:ILE:HD12	24:D2:87:GLU:N	2.17	0.58
1:2:1029:U:O4	86:2:2169:OHX:N3	2.36	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:794:U:O2'	1:2:795:U:O2	2.20	0.58
1:2:1061:A:H2'	1:2:1062:A:H5'	1.85	0.58
50:M4:50:LYS:HD3	50:M4:85:TRP:CD1	2.38	0.58
61:N5:80:ASN:ND2	61:N5:126:LEU:HB2	2.19	0.58
1:2:1235:C:H2'	33:E1:138:ARG:NH2	2.18	0.58
1:6:1542:G:N2	1:6:1568:C:H1'	2.19	0.58
1:2:1542:G:N2	1:2:1568:C:H1'	2.19	0.58
47:M0:4:ARG:NH1	36:5:2828:G:O2'	264.33	0.58
41:L4:337:GLU:O	41:L4:339:LEU:N	2.37	0.58
39:L2:200:ARG:HG3	36:5:2147:A:OP1	208.61	0.58
41:L4:98:ARG:HD2	41:L4:99:MET:O	2.08	0.58
49:M3:64:LYS:HG3	64:N8:69:TRP:CG	2.58	0.58
41:L4:126:ILE:HG13	41:L4:238:LEU:HD13	1.93	0.58
86:8:218:OHX:N2	86:8:225:OHX:N1	2.50	0.58
15:C3:112:LYS:O	15:C3:116:ILE:HD12	3.24	0.58
18:C6:39:VAL:HG12	18:C6:41:PRO:HD2	4.49	0.58
36:5:3228:C:H4'	36:5:3229:G:O5'	2.03	0.58
1:6:363:G:OP1	86:6:2114:OHX:N1	2.37	0.58
36:5:1560:G:O2'	36:5:1561:G:OP1	2.19	0.58
51:M5:184:LYS:H	51:M5:186:GLY:H	1.51	0.58
13:C1:46:LYS:O	13:C1:50:GLU:HG2	3.71	0.58
28:D6:79:ILE:HG23	28:D6:84:VAL:HG21	1.86	0.58
44:L7:150:LYS:HG2	44:L7:151:ARG:HG2	1.85	0.58
53:M7:53:ASP:O	86:M7:206:OHX:N6	27.61	0.58
1:2:915:A:OP1	86:2:2093:OHX:N3	2.36	0.58
4:S2:59:HIS:CE1	4:S2:238:SER:HA	3.70	0.58
2:S0:74:VAL:HG23	2:S0:118:PRO:HB3	2.04	0.58
1:2:115:G:OP1	13:C1:67:ARG:NH1	2.37	0.58
6:S4:100:ARG:O	6:S4:102:VAL:HG12	2.74	0.58
9:S7:73:VAL:O	9:S7:75:THR:N	2.60	0.58
1:6:1314:U:OP2	86:6:2186:OHX:N4	2.37	0.58
79:Q3:56:THR:HB	79:Q3:63:THR:OG1	2.03	0.58
36:1:603:A:H2'	36:1:604:G:O4'	2.03	0.58
41:L4:211:GLU:OE2	41:L4:213:ASN:ND2	2.30	0.58
36:1:277:G:OP1	86:1:3878:OHX:N5	2.35	0.58
36:5:308:A:H5'	36:5:2223:A:O2'	2.02	0.58
1:2:209:U:H5'	10:S8:171:SER:HB3	1.86	0.58
36:1:1844:C:H2'	36:1:1845:G:H5''	1.85	0.58
77:Q1:9:ARG:NH1	77:Q1:9:ARG:HG3	2.17	0.58
55:M9:104:ARG:NH2	55:M9:105:LEU:HB2	2.19	0.58
14:C2:124:LYS:O	14:C2:126:TRP:N	2.31	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D7:61:THR:HG23	29:D7:62:ILE:H	1.69	0.58
15:C3:25:TRP:HA	15:C3:27:LYS:HE2	5.92	0.58
40:L3:92:TYR:O	40:L3:155:ALA:HA	2.04	0.58
36:1:3268:A:OP1	43:L6:46:ARG:NH2	2.36	0.58
9:S7:150:GLN:HB2	9:S7:181:ILE:HD12	1.85	0.58
42:L5:256:THR:HG23	37:7:119:U:OP1	293.50	0.58
36:5:604:G:N7	86:5:4170:OHX:N2	2.51	0.58
20:C8:52:VAL:HG21	20:C8:69:ILE:HD11	2.24	0.58
10:S8:142:LYS:NZ	1:6:187:G:N7	276.76	0.58
36:1:2552:C:C5	66:O0:53:LYS:HE3	2.39	0.58
36:5:2318:U:O4	86:5:3998:OHX:N6	2.36	0.58
40:L3:5:LYS:HG2	40:L3:6:TYR:CE1	3.60	0.58
1:2:324:U:OP1	13:C1:133:LYS:NZ	2.35	0.58
1:6:1680:G:O6	86:6:2191:OHX:N1	2.37	0.58
52:M6:16:VAL:CG2	52:M6:43:ILE:HG12	2.68	0.58
41:L4:178:LEU:O	41:L4:182:LEU:HD23	5.22	0.58
4:S2:90:THR:O	4:S2:92:ALA:N	2.55	0.58
28:D6:37:LYS:O	28:D6:38:ARG:NH1	2.33	0.58
42:L5:34:LYS:O	42:L5:38:THR:HG23	2.03	0.58
36:1:272:G:OP2	86:1:4034:OHX:N3	2.37	0.58
51:M5:12:ARG:HG2	36:5:268:A:C5	128.01	0.58
7:S5:23:VAL:O	7:S5:34:GLN:NE2	2.37	0.58
1:2:623:A:OP1	86:2:2157:OHX:N1	2.37	0.58
36:5:546:C:H4'	36:5:547:G:OP1	2.02	0.58
41:L4:36:HIS:O	41:L4:40:THR:HG23	2.12	0.58
34:SR:238:ASP:N	34:SR:238:ASP:OD1	2.36	0.58
1:6:539:G:OP2	1:6:539:G:H8	1.87	0.58
2:S0:134:LYS:O	2:S0:137:SER:OG	2.16	0.58
62:N6:27:ARG:HA	62:N6:30:LEU:HD12	1.86	0.58
73:O7:88:ALA:O	86:O7:104:OHX:N4	2.36	0.57
8:S6:159:ARG:NH2	1:6:79:C:OP1	349.48	0.57
86:2:2030:OHX:N6	86:2:2146:OHX:N2	2.52	0.57
36:5:3241:G:H2'	36:5:3245:A:C8	2.38	0.57
1:2:1657:U:H4'	1:2:1658:G:O5'	2.03	0.57
34:SR:23:LEU:HG	34:SR:291:SER:HB2	2.51	0.57
36:1:3082:C:H2'	36:1:3083:G:H8	1.69	0.57
43:L6:26:ARG:NH2	36:5:607:A:OP1	250.04	0.57
1:6:1058:U:H4'	1:6:1059:U:OP1	2.03	0.57
86:1:3971:OHX:N1	38:4:31:G:OP2	2.37	0.57
74:O8:32:ASN:HD21	74:O8:34:ALA:HB3	6.52	0.57
16:C4:91:THR:O	16:C4:93:THR:N	2.48	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:155:THR:O	48:M1:159:THR:HG23	5.70	0.57
64:N8:91:LEU:HD12	64:N8:121:VAL:HG21	2.12	0.57
52:M6:46:GLU:OE2	52:M6:134:LYS:HE3	2.03	0.57
44:L7:77:VAL:HG22	57:N1:139:ARG:HG2	1.86	0.57
1:6:489:C:O2'	1:6:490:C:O4'	2.22	0.57
46:L9:17:THR:HG21	50:M4:3:THR:HB	1.85	0.57
7:S5:117:THR:HG21	7:S5:194:LEU:HD12	1.85	0.57
3:S1:169:SER:O	3:S1:173:THR:HG23	2.73	0.57
63:N7:135:ARG:HG2	63:N7:135:ARG:NH2	2.18	0.57
46:L9:13:PRO:HD2	46:L9:16:VAL:HG22	1.86	0.57
6:S4:105:VAL:HG11	6:S4:245:LYS:H	2.52	0.57
36:1:3138:U:C2'	36:1:3139:A:H5''	2.33	0.57
56:N0:79:VAL:HG21	56:N0:106:LEU:HD21	2.09	0.57
1:6:751:G:H2'	1:6:752:A:H8	1.69	0.57
4:S2:90:THR:HG23	4:S2:92:ALA:H	1.70	0.57
19:C7:7:LYS:N	1:6:1316:G:OP1	410.79	0.57
1:6:604:A:OP2	86:6:2153:OHX:N4	2.37	0.57
17:C5:111:MET:HG2	20:C8:119:ILE:HG13	3.78	0.57
53:M7:178:ALA:HA	53:M7:181:ARG:HB3	1.85	0.57
61:N5:57:LEU:HD21	61:N5:90:ALA:HB2	1.84	0.57
36:1:1238:C:N4	36:1:1245:A:OP2	2.35	0.57
36:1:612:U:H2'	36:1:613:G:H8	1.69	0.57
1:2:1248:C:H2'	1:2:1249:U:H6	1.68	0.57
1:6:922:G:H2'	1:6:923:A:H8	1.69	0.57
43:L6:64:LEU:HD22	43:L6:65:ILE:H	2.78	0.57
6:S4:97:GLU:OE1	6:S4:113:ARG:NH2	3.98	0.57
36:1:1029:G:H2'	36:1:1030:A:C8	2.38	0.57
75:O9:27:ILE:HD13	38:8:52:A:H62	77.49	0.57
46:L9:38:LEU:HD13	46:L9:71:VAL:HG22	3.43	0.57
17:C5:22:LEU:HD12	17:C5:26:LEU:HD21	1.86	0.57
36:5:707:U:C2'	36:5:708:G:H5'	2.34	0.57
24:D2:105:THR:HG23	24:D2:110:ILE:HG12	1.85	0.57
1:2:979:A:N3	1:2:1775:U:O2'	2.38	0.57
1:6:667:U:H4'	1:6:668:C:OP1	2.05	0.57
40:L3:120:LYS:NZ	36:5:3001:C:OP1	204.49	0.57
18:C6:115:THR:HB	18:C6:118:ILE:O	2.04	0.57
40:L3:19:ARG:HB3	40:L3:232:ARG:NH1	2.18	0.57
33:E1:126:CYS:HB3	33:E1:130:VAL:HG21	2.67	0.57
36:5:1595:U:H1'	36:5:1596:C:C6	2.39	0.57
36:1:2818:U:C5'	36:1:2818:U:H6	2.15	0.57
6:S4:163:ASP:OD1	6:S4:166:SER:N	2.32	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:70:PRO:O	8:S6:98:ARG:NH1	2.38	0.57
24:D2:104:LEU:HB2	24:D2:125:ILE:HA	1.87	0.57
18:C6:120:ASP:OD1	18:C6:122:ARG:HG3	2.84	0.57
39:L2:201:GLY:HA2	39:L2:204:MET:SD	2.83	0.57
8:S6:48:TYR:CZ	8:S6:121:LEU:HD22	4.97	0.57
56:N0:155:ARG:HD3	56:N0:172:TYR:CG	2.51	0.57
27:D5:55:PRO:HG3	27:D5:88:ILE:HG23	6.43	0.57
23:D1:60:ARG:HA	23:D1:65:SER:HB2	1.91	0.57
7:S5:35:GLN:O	7:S5:37:GLN:N	2.70	0.57
1:2:1385:G:N7	86:2:2132:OHX:N3	2.51	0.57
36:1:1556:C:H2'	36:1:2169:G:N1	2.19	0.57
63:N7:136:PHE:CE1	70:O4:89:ILE:HG12	2.98	0.57
45:L8:74:THR:HB	45:L8:230:LYS:NZ	2.19	0.57
1:2:136:C:H4'	1:2:137:U:OP1	2.04	0.57
79:Q3:74:ALA:O	79:Q3:78:THR:HG23	2.87	0.57
45:L8:41:GLN:HG3	45:L8:42:PRO:HD2	2.03	0.57
34:SR:161:LYS:HD3	34:SR:164:ASP:CB	2.34	0.57
1:2:1290:U:H2'	1:2:1291:G:C8	2.40	0.57
2:S0:189:VAL:HG22	2:S0:190:ASP:H	1.69	0.57
36:1:1433:A:N3	68:O2:27:ARG:NH1	2.52	0.57
1:6:500:C:O2'	1:6:501:U:O4'	2.22	0.57
2:S0:88:LYS:NZ	19:C7:82:ASP:OD1	3.72	0.57
6:S4:10:LYS:HE2	11:S9:2:PRO:HB3	3.25	0.57
16:C4:42:VAL:HG23	16:C4:63:ALA:HB1	1.85	0.57
1:6:404:G:H2'	1:6:405:C:H6	1.69	0.57
40:L3:53:MET:HE2	40:L3:77:THR:HG22	2.60	0.57
71:O5:10:ARG:NH2	38:8:65:A:O3'	33.31	0.57
1:2:209:U:H2'	1:2:210:A:C8	2.40	0.57
39:L2:241:ARG:HG2	36:5:2155:G:OP1	221.55	0.57
53:M7:109:ALA:HA	53:M7:112:LEU:HD22	1.85	0.57
36:5:1070:U:O4	86:5:4113:OHX:N6	2.38	0.57
40:L3:68:HIS:CD2	40:L3:69:LYS:HG3	2.39	0.57
44:L7:26:VAL:HG23	44:L7:27:ALA:H	1.69	0.57
22:D0:72:ASN:OD1	22:D0:72:ASN:N	2.37	0.57
25:D3:27:ASN:OD1	25:D3:31:LYS:NZ	2.25	0.57
66:O0:78:GLY:HA2	66:O0:87:VAL:HG13	1.87	0.57
10:S8:12:SER:O	10:S8:15:GLY:N	2.25	0.57
1:2:704:C:OP2	1:2:704:C:H3'	2.05	0.57
59:N3:13:ILE:HD13	59:N3:53:SER:HB2	2.63	0.57
3:S1:30:PHE:HB3	3:S1:96:LEU:HD22	4.05	0.57
20:C8:142:GLY:O	20:C8:145:ARG:HD2	2.04	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:59:ILE:HD12	48:M1:65:ILE:HD11	2.68	0.57
25:D3:30:LYS:HG2	25:D3:34:LEU:HD11	3.05	0.57
1:6:73:U:H2'	1:6:74:U:C6	2.39	0.57
86:1:3940:OHX:N3	86:1:4201:OHX:N4	2.52	0.57
58:N2:90:ARG:O	58:N2:91:ASP:HB2	2.22	0.57
57:N1:65:TYR:CD2	57:N1:75:ILE:HG22	2.40	0.57
46:L9:103:ILE:HG13	46:L9:136:PHE:HE2	1.70	0.57
37:7:112:G:OP2	86:7:222:OHX:N2	2.38	0.57
46:L9:106:LYS:HG3	46:L9:107:ASP:OD1	3.81	0.57
35:SM:79:SER:O	35:SM:82:THR:OG1	2.23	0.57
60:N4:39:LEU:HD12	60:N4:44:LYS:HG3	2.00	0.57
3:S1:128:LYS:HE3	3:S1:132:ASP:HB3	1.87	0.57
48:M1:82:ARG:CG	48:M1:112:LEU:HB2	2.35	0.57
13:C1:118:GLN:HG2	13:C1:119:VAL:N	2.20	0.57
86:6:2122:OHX:N6	86:6:2173:OHX:N3	2.52	0.57
7:S5:75:GLY:O	7:S5:77:TYR:N	2.36	0.57
10:S8:56:ARG:HH22	1:6:332:U:P	287.86	0.57
61:N5:103:TYR:O	61:N5:138:ARG:NH1	2.89	0.57
3:S1:63:GLY:HA2	3:S1:88:VAL:O	2.04	0.57
63:N7:9:LYS:HD2	63:N7:83:THR:O	2.36	0.57
43:L6:129:GLU:O	43:L6:130:ILE:HG13	4.28	0.57
1:2:584:C:OP2	86:2:2025:OHX:N6	2.38	0.57
1:6:193:U:C2	1:6:195:G:H1'	2.38	0.57
2:S0:122:ILE:HG23	2:S0:144:ILE:HB	2.52	0.57
54:M8:161:LYS:O	54:M8:162:ALA:HB3	2.04	0.57
86:2:2043:OHX:N4	86:2:2098:OHX:N6	2.53	0.57
58:N2:43:VAL:HG23	58:N2:49:ASN:HB3	2.61	0.57
40:L3:257:PRO:HG2	40:L3:261:MET:HE1	1.87	0.57
40:L3:10:ARG:NH2	40:L3:263:SER:O	2.37	0.57
2:S0:41:ARG:HH11	2:S0:45:VAL:HG21	1.69	0.57
36:1:595:G:N1	36:1:609:G:H5"	2.20	0.57
17:C5:52:LYS:HG3	17:C5:53:PRO:HD3	1.87	0.57
36:1:3376:A:OP2	86:1:3907:OHX:N5	2.37	0.57
2:S0:66:ALA:HB2	23:D1:37:ALA:HB2	2.08	0.57
40:L3:105:VAL:HG21	40:L3:148:LEU:HD13	1.86	0.57
36:5:595:G:C8	36:5:609:G:C6	2.92	0.57
1:2:1429:G:C1'	22:D0:74:GLU:HG2	2.32	0.57
47:M0:42:THR:HG23	47:M0:45:GLU:HG3	4.55	0.57
28:D6:84:VAL:O	28:D6:86:VAL:N	2.30	0.57
55:M9:106:LEU:HD13	55:M9:138:LEU:HD11	2.92	0.57
1:6:921:U:O4	86:6:2181:OHX:N3	2.37	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:141:ARG:O	41:L4:144:LYS:NZ	8.06	0.57
3:S1:122:GLU:HG2	3:S1:140:ILE:HG13	1.87	0.57
68:O2:27:ARG:HB3	36:5:655:C:OP1	161.96	0.57
15:C3:93:LYS:HG3	15:C3:150:VAL:HG11	1.87	0.57
6:S4:251:GLU:O	6:S4:255:ARG:HG2	3.95	0.57
1:2:915:A:H5''	1:2:916:U:H5	1.70	0.57
36:5:409:A:OP2	86:5:4104:OHX:N3	2.38	0.57
86:1:4007:OHX:N6	86:1:4176:OHX:N1	2.53	0.57
44:L7:110:ARG:CZ	54:M8:3:ILE:HD12	4.22	0.57
49:M3:157:ARG:HG2	49:M3:158:ALA:N	2.19	0.57
37:3:79:A:C2	37:3:102:A:C4	2.93	0.57
35:SM:29:ASN:OD1	35:SM:30:THR:N	2.36	0.57
44:L7:178:ILE:HA	44:L7:183:ASP:HB3	2.00	0.57
52:M6:89:SER:O	52:M6:89:SER:OG	2.83	0.57
86:5:4022:OHX:N3	86:5:4219:OHX:N4	2.53	0.57
36:5:2209:U:O4	86:5:3965:OHX:N4	2.37	0.57
5:S3:32:GLU:HG2	5:S3:57:ASP:HB2	2.59	0.57
36:1:1662:G:N2	36:1:1788:C:O2	2.38	0.57
68:O2:19:ARG:HD2	68:O2:28:VAL:HG13	2.07	0.57
29:D7:74:SER:O	29:D7:77:THR:OG1	3.82	0.57
28:D6:12:LYS:NZ	1:6:1029:U:OP2	322.34	0.57
15:C3:12:SER:HB3	1:6:956:C:OP2	335.57	0.57
6:S4:79:ASP:OD1	6:S4:82:TYR:N	2.37	0.57
1:6:1280:C:H2'	1:6:1281:G:C8	2.39	0.57
27:D5:43:ASP:HB2	27:D5:46:LYS:HB2	3.33	0.57
1:2:647:G:N2	1:2:687:G:H22	2.02	0.57
17:C5:98:ASN:HD21	17:C5:101:ALA:HB3	4.87	0.57
1:6:845:G:H2'	1:6:846:G:H8	1.69	0.57
65:N9:14:ARG:CZ	65:N9:18:ARG:HH11	3.66	0.57
57:N1:17:ARG:O	57:N1:18:ASP:HB2	2.05	0.57
1:2:399:A:OP1	10:S8:49:ARG:NH2	2.31	0.57
1:2:116:U:H2'	1:2:117:U:C6	2.40	0.57
2:S0:126:PRO:HB2	2:S0:152:PRO:HG2	1.87	0.57
46:L9:75:VAL:HA	46:L9:78:MET:HE2	1.87	0.57
36:1:1051:U:H4'	57:N1:19:PHE:CD2	2.39	0.57
39:L2:116:VAL:HG22	39:L2:126:LEU:HD12	1.87	0.57
1:6:906:A:H2'	1:6:907:A:C8	2.40	0.57
8:S6:164:LYS:HB3	8:S6:167:LYS:HB3	1.85	0.57
40:L3:344:THR:O	40:L3:344:THR:OG1	2.18	0.57
57:N1:83:ARG:NH1	57:N1:85:LEU:HD21	2.20	0.57
36:5:1785:U:H2'	36:5:1786:G:C8	2.40	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:992:A:H2	1:2:1012:U:H3	1.49	0.57
49:M3:3:ILE:HG21	64:N8:45:MET:HE3	5.25	0.57
6:S4:163:ASP:HB3	6:S4:167:GLY:O	4.15	0.57
40:L3:347:SER:HB3	40:L3:350:ALA:H	1.70	0.57
46:L9:90:MET:HG2	46:L9:181:VAL:HA	1.85	0.57
36:5:2895:G:H2'	36:5:2896:A:H5''	1.87	0.57
3:S1:110:LEU:HD11	3:S1:213:ARG:HD2	3.21	0.57
27:D5:55:PRO:C	27:D5:57:TYR:H	2.08	0.57
64:N8:94:ALA:HB1	64:N8:122:PRO:HD2	1.87	0.57
20:C8:18:LEU:HD21	20:C8:70:VAL:HG13	1.86	0.57
86:1:4209:OHX:N4	38:4:16:G:OP1	2.38	0.57
1:2:289:U:H2'	1:2:290:G:O4'	2.04	0.57
4:S2:148:LEU:O	4:S2:174:ARG:NH2	5.36	0.57
41:L4:191:LYS:HG3	41:L4:194:TYR:CZ	3.92	0.57
2:S0:124:THR:HA	2:S0:146:LEU:HB2	1.86	0.57
1:6:1745:G:O6	86:6:2080:OHX:N4	2.37	0.57
15:C3:73:ARG:HD3	1:6:859:A:C5	331.52	0.57
1:6:291:G:H2'	1:6:292:U:C6	2.39	0.57
36:1:3049:A:H5'	36:1:3049:A:H8	1.70	0.56
50:M4:49:PRO:HG3	50:M4:78:THR:HG23	3.33	0.56
1:2:702:G:O2'	1:2:703:G:H8	1.88	0.56
53:M7:25:SER:HB3	53:M7:28:ASN:HB2	2.37	0.56
1:6:119:A:H1'	1:6:397:A:C5	2.40	0.56
3:S1:62:LYS:HD2	3:S1:91:VAL:HB	1.86	0.56
11:S9:92:LYS:NZ	1:6:673:A:OP2	430.51	0.56
4:S2:205:ARG:HD2	1:6:6:G:OP2	379.74	0.56
47:M0:99:ILE:HG22	47:M0:123:HIS:HB2	1.86	0.56
36:1:1064:A:H4'	36:1:1065:A:O5'	2.05	0.56
36:5:1543:G:O6	86:5:4204:OHX:N1	2.38	0.56
19:C7:71:PHE:CE1	19:C7:74:GLN:HB2	5.09	0.56
86:1:3940:OHX:N1	86:1:4201:OHX:N2	2.53	0.56
51:M5:190:THR:O	51:M5:194:GLN:HG2	2.05	0.56
37:7:64:A:H5'	37:7:65:G:H5''	1.86	0.56
7:S5:122:ASN:ND2	7:S5:126:ASP:O	4.23	0.56
46:L9:180:TYR:HB2	76:Q0:85:LEU:HD13	2.10	0.56
7:S5:143:ARG:HD3	30:D8:55:VAL:HG11	1.86	0.56
36:1:155:G:H1'	72:O6:26:ILE:HD13	1.86	0.56
36:1:1362:G:OP1	86:1:4036:OHX:N6	2.39	0.56
3:S1:180:THR:HG22	3:S1:181:LEU:H	1.68	0.56
47:M0:38:LYS:HD3	47:M0:41:ALA:HB2	1.87	0.56
1:6:1695:G:H21	1:6:1706:C:N4	2.04	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:440:A:OP2	36:1:440:A:H8	1.87	0.56
1:2:494:U:O2'	1:2:495:C:O5'	2.20	0.56
41:L4:99:MET:HE3	41:L4:103:THR:H	2.42	0.56
12:C0:14:TYR:HE2	12:C0:21:VAL:HG22	1.69	0.56
31:D9:33:LYS:HE2	31:D9:34:TYR:CZ	3.98	0.56
36:1:2767:U:OP2	86:1:4137:OHX:N2	2.38	0.56
36:5:3241:G:H2'	36:5:3245:A:H8	1.69	0.56
40:L3:153:LYS:HG2	40:L3:154:TYR:CZ	3.73	0.56
7:S5:97:LEU:O	7:S5:99:MET:N	2.60	0.56
1:6:470:A:H5''	1:6:470:A:C8	2.39	0.56
37:3:27:A:OP2	42:L5:57:ASN:HB2	2.04	0.56
36:1:900:G:H1'	36:1:1589:A:N6	2.20	0.56
21:C9:63:ARG:NH1	21:C9:67:MET:SD	2.79	0.56
36:1:3246:G:O6	86:1:4111:OHX:N4	2.37	0.56
4:S2:37:PRO:HA	4:S2:65:GLU:OE1	2.44	0.56
51:M5:58:GLY:HA3	51:M5:142:ILE:HD13	1.88	0.56
36:1:2644:C:O2	47:M0:116:ARG:HD3	2.04	0.56
1:6:138:A:N6	1:6:266:A:H61	2.03	0.56
36:5:2973:G:N7	86:5:4119:OHX:N1	2.53	0.56
26:D4:12:VAL:HG13	26:D4:23:PHE:HB3	1.86	0.56
39:L2:192:LYS:HB3	39:L2:193:ARG:NH2	2.20	0.56
70:O4:58:ARG:HG3	70:O4:58:ARG:NH1	2.09	0.56
18:C6:47:LYS:NZ	18:C6:114:ARG:HD3	4.16	0.56
20:C8:134:ARG:NH1	1:6:1559:A:N1	364.43	0.56
25:D3:12:ALA:O	25:D3:16:ARG:HG3	2.05	0.56
66:O0:40:LYS:HB3	66:O0:101:LEU:HD21	1.87	0.56
68:O2:105:ARG:NH2	36:5:1412:G:OP1	145.93	0.56
59:N3:48:ARG:NH2	36:5:3043:C:OP2	251.68	0.56
36:5:1564:U:H2'	36:5:1565:G:C8	2.41	0.56
7:S5:163:SER:HB2	30:D8:48:VAL:HG22	2.24	0.56
77:Q1:23:ARG:O	86:5:4003:OHX:N2	264.36	0.56
2:S0:179:ARG:HD3	2:S0:183:ARG:NH1	2.19	0.56
34:SR:19:TRP:HB2	34:SR:38:ARG:HG3	2.26	0.56
36:1:655:C:H5''	68:O2:26:HIS:HB2	1.88	0.56
36:1:1095:U:H4'	36:1:1096:U:H5''	1.87	0.56
36:5:1096:U:H4'	36:5:1097:G:O5'	2.05	0.56
42:L5:85:ARG:HD2	42:L5:86:TYR:CE2	2.40	0.56
1:2:499:U:O2'	1:2:500:C:O4'	2.23	0.56
36:5:2960:C:OP1	86:5:3975:OHX:N5	2.39	0.56
38:4:81:U:H1'	38:4:82:U:H5'	1.87	0.56
39:L2:144:ASN:O	39:L2:160:SER:N	2.63	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1750:A:H4'	36:5:1751:G:H5'	1.86	0.56
36:5:1785:U:H2'	36:5:1786:G:H8	1.70	0.56
4:S2:40:LYS:HA	4:S2:43:ARG:NH1	2.20	0.56
49:M3:37:ASN:O	49:M3:41:THR:HG23	5.30	0.56
72:O6:93:ILE:O	72:O6:97:SER:HB3	2.05	0.56
2:S0:14:ALA:HA	2:S0:17:LEU:HD12	2.31	0.56
1:2:1199:G:O6	22:D0:67:THR:HG23	2.05	0.56
9:S7:103:SER:OG	9:S7:104:ARG:N	3.14	0.56
38:8:6:U:H2'	38:8:7:U:C6	2.40	0.56
36:1:3143:C:O2'	86:1:3901:OHX:N2	2.38	0.56
1:2:1006:C:O2	86:2:2145:OHX:N2	2.38	0.56
36:5:1631:C:H5''	36:5:1632:A:H5''	1.88	0.56
1:6:819:G:O2'	1:6:821:U:OP2	2.23	0.56
40:L3:305:ILE:HD11	40:L3:317:ILE:HG21	1.87	0.56
36:5:1199:C:H4'	36:5:1200:A:O5'	2.05	0.56
36:1:2593:A:H4'	36:1:2594:C:O5'	2.05	0.56
6:S4:146:THR:HG21	1:6:123:G:N2	341.01	0.56
14:C2:46:ARG:NH2	1:6:1253:U:OP2	453.95	0.56
3:S1:176:VAL:HG12	3:S1:177:GLN:H	1.71	0.56
49:M3:168:ARG:NH2	36:5:769:G:O2'	146.36	0.56
36:5:279:U:H2'	36:5:280:U:C6	2.40	0.56
1:6:67:A:O2'	1:6:69:G:OP1	2.18	0.56
45:L8:195:SER:O	45:L8:195:SER:OG	2.17	0.56
36:1:2971:A:N3	36:1:2971:A:H3'	2.21	0.56
38:8:106:C:H4'	38:8:107:G:H5''	1.86	0.56
34:SR:205:SER:HB3	34:SR:210:LEU:HB2	1.86	0.56
78:Q2:63:LYS:NZ	36:5:2761:G:N7	211.48	0.56
36:5:739:G:O6	86:5:3969:OHX:N6	2.39	0.56
1:6:1727:G:H2'	1:6:1728:A:C8	2.40	0.56
40:L3:299:ASP:OD1	40:L3:301:THR:HG23	2.44	0.56
1:2:1163:A:N6	1:2:1164:G:C6	2.74	0.56
36:1:2741:C:O2'	78:Q2:20:HIS:ND1	2.24	0.56
36:1:564:G:H2'	36:1:565:U:C6	2.41	0.56
36:5:90:C:H2'	36:5:91:G:H5'	1.88	0.56
36:5:1877:U:OP2	86:5:3960:OHX:N1	2.39	0.56
47:M0:84:ALA:O	47:M0:140:THR:HB	3.92	0.56
66:O0:100:ILE:HG13	66:O0:101:LEU:HD22	5.35	0.56
36:1:1018:G:H2'	36:1:1019:G:O4'	2.04	0.56
46:L9:48:VAL:HG13	46:L9:52:LEU:HB3	1.87	0.56
1:2:7:G:N7	4:S2:205:ARG:NH1	2.53	0.56
37:3:60:G:H2'	37:3:61:G:H8	1.70	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:21:LYS:HD3	63:N7:47:GLU:HA	1.87	0.56
74:O8:15:THR:O	74:O8:70:PRO:HG2	2.82	0.56
1:2:485:A:H2'	1:2:486:G:O4'	2.05	0.56
2:S0:74:VAL:HG22	2:S0:96:THR:HG23	1.87	0.56
11:S9:171:ARG:NH1	11:S9:174:ARG:HD3	3.91	0.56
20:C8:5:VAL:HG23	27:D5:42:LEU:HD23	1.87	0.56
58:N2:74:LYS:HE3	36:5:1677:G:N7	151.15	0.56
65:N9:14:ARG:CZ	65:N9:18:ARG:HD2	2.35	0.56
1:2:1645:G:H22	1:2:1756:A:H2	1.53	0.56
1:2:1480:G:H3'	1:2:1481:C:C6	2.41	0.56
48:M1:54:VAL:O	48:M1:56:THR:N	2.36	0.56
36:1:1752:A:OP2	86:1:4051:OHX:N3	2.38	0.56
12:C0:51:SER:OG	1:6:1219:A:N3	432.49	0.56
4:S2:137:ILE:HG12	4:S2:138:PRO:HD2	1.86	0.56
37:7:3:U:H2'	37:7:4:U:C6	2.40	0.56
58:N2:82:LYS:NZ	36:5:1686:U:O4	163.06	0.56
36:1:109:A:H4'	36:1:110:G:OP1	2.04	0.56
36:5:1249:G:H2'	36:5:1250:G:H8	1.71	0.56
86:5:3976:OHX:N1	86:5:4245:OHX:N2	2.54	0.56
40:L3:21:ARG:HD3	40:L3:269:GLN:OE1	2.36	0.56
38:4:70:G:O6	86:O7:104:OHX:N4	2.39	0.56
1:2:886:U:O2	16:C4:123:SER:N	2.33	0.56
62:N6:45:ILE:HD12	62:N6:119:ILE:HG23	1.95	0.56
18:C6:123:ARG:HG3	18:C6:124:PRO:HD2	1.87	0.56
20:C8:139:LYS:O	20:C8:143:ARG:NH1	2.45	0.56
40:L3:218:ILE:CG1	40:L3:276:THR:HG23	3.16	0.56
19:C7:82:ASP:O	19:C7:83:GLN:HB2	2.06	0.56
41:L4:59:GLN:OE1	73:O7:55:ARG:NH2	2.36	0.56
86:7:219:OHX:N1	86:7:227:OHX:N2	2.54	0.56
68:O2:4:LEU:HB3	68:O2:5:PRO:CD	3.71	0.56
15:C3:136:PRO:O	15:C3:138:ASN:N	2.95	0.56
49:M3:55:ARG:O	49:M3:115:ARG:NH2	2.67	0.56
86:1:3974:OHX:N6	86:1:4160:OHX:N4	2.54	0.56
36:1:970:A:OP2	65:N9:19:ASN:ND2	2.36	0.56
1:6:719:U:C4	1:6:721:U:H5	2.24	0.56
51:M5:16:SER:O	51:M5:20:ARG:HG2	2.06	0.56
4:S2:229:LEU:O	23:D1:16:LYS:NZ	2.39	0.56
1:6:1492:A:O2'	1:6:1493:A:H8	1.89	0.56
1:6:1429:G:H2'	1:6:1430:U:C6	2.41	0.56
1:2:706:A:N1	1:2:734:A:N6	2.54	0.56
12:C0:1:MET:HG3	12:C0:2:LEU:H	3.22	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:39:GLY:HA2	10:S8:61:GLU:HB3	1.88	0.56
1:2:1459:C:OP1	20:C8:126:ARG:NH2	2.39	0.56
36:1:3139:A:H5'	36:1:3139:A:H8	1.70	0.56
2:S0:179:ARG:HD3	2:S0:183:ARG:NE	3.36	0.56
2:S0:103:THR:O	2:S0:106:SER:OG	2.23	0.56
21:C9:86:ARG:NH1	21:C9:90:PRO:O	2.39	0.56
78:Q2:22:GLN:O	78:Q2:75:VAL:HG22	3.33	0.56
40:L3:275:ARG:NH1	36:5:3045:G:O3'	234.50	0.56
12:C0:29:GLN:HB3	12:C0:39:ASN:HB2	1.88	0.56
77:Q1:15:ARG:NH1	1:6:1126:G:OP1	280.62	0.56
22:D0:36:ASN:HA	22:D0:39:SER:HB3	5.19	0.56
50:M4:40:ASP:HA	56:N0:143:PHE:CE1	3.50	0.56
36:5:864:G:OP2	86:5:3919:OHX:N4	2.39	0.56
36:5:419:G:O3'	36:5:420:G:OP2	2.23	0.56
10:S8:138:ASN:N	10:S8:138:ASN:OD1	2.37	0.56
1:2:1226:A:O2'	1:2:1227:A:OP1	2.20	0.56
32:E0:13:LYS:O	32:E0:17:GLN:HG2	2.47	0.56
34:SR:216:LYS:HA	34:SR:239:GLU:HG3	1.88	0.56
27:D5:55:PRO:O	27:D5:57:TYR:N	2.36	0.56
36:1:3358:U:H2'	36:1:3359:A:O4'	2.06	0.56
27:D5:51:LEU:HD12	27:D5:51:LEU:H	2.79	0.56
17:C5:15:HIS:O	17:C5:21:ASP:HA	2.06	0.56
47:M0:74:LYS:O	47:M0:78:THR:HG23	2.06	0.56
51:M5:12:ARG:HG2	36:5:268:A:C4	128.28	0.56
49:M3:157:ARG:HG2	49:M3:158:ALA:H	1.71	0.56
1:2:286:C:H2'	1:2:287:G:H5'	1.88	0.56
34:SR:52:GLN:HG2	34:SR:53:LYS:HG3	3.66	0.56
1:2:517:U:H3	1:2:535:A:H61	1.54	0.56
2:S0:78:SER:OG	2:S0:129:ASP:OD1	3.44	0.56
1:6:454:U:H5''	1:6:455:C:C5	2.41	0.56
1:6:827:C:H2'	1:6:828:U:H6	1.70	0.56
36:5:1103:A:H3'	36:5:1104:G:H5'	1.86	0.56
86:1:4103:OHX:N2	40:L3:30:LYS:O	2.39	0.56
1:2:539:G:OP2	1:2:539:G:H8	1.89	0.56
36:1:1634:G:N7	63:N7:17:ARG:NH2	2.52	0.56
42:L5:68:THR:HG22	42:L5:70:THR:H	1.82	0.56
36:5:3377:G:O6	86:5:4089:OHX:N2	2.38	0.56
68:O2:89:THR:HG22	68:O2:117:ILE:HA	1.88	0.56
46:L9:47:LYS:HB2	50:M4:7:VAL:HB	1.87	0.56
36:1:3049:A:OP2	86:1:4185:OHX:N3	2.38	0.56
36:1:263:C:H2'	36:1:264:G:O4'	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Q2:46:LYS:O	86:Q2:502:OHX:N6	2.38	0.56
26:D4:60:PHE:O	1:6:523:G:H5'	413.36	0.56
22:D0:58:LEU:HD13	22:D0:88:LYS:HE3	2.66	0.56
41:L4:205:PRO:HB3	41:L4:247:PHE:CD2	2.48	0.56
17:C5:127:ARG:O	17:C5:129:GLY:N	4.19	0.56
41:L4:77:VAL:HG11	41:L4:84:ARG:HG2	1.87	0.56
17:C5:122:THR:CG2	1:6:1558:U:H3	366.91	0.56
6:S4:11:ARG:NH2	6:S4:27:TYR:O	2.39	0.56
8:S6:49:VAL:HB	8:S6:115:LYS:HG2	4.69	0.56
5:S3:29:LEU:HD21	5:S3:69:LEU:HD21	3.81	0.56
86:1:3940:OHX:N3	86:1:4201:OHX:N6	2.53	0.56
68:O2:21:HIS:CE1	68:O2:24:ARG:HD2	2.68	0.56
3:S1:146:GLN:H	3:S1:149:GLN:NE2	2.04	0.56
28:D6:35:ALA:HB3	28:D6:37:LYS:HE2	1.88	0.56
57:N1:88:ARG:HH21	65:N9:33:LYS:HB3	1.71	0.56
24:D2:18:GLU:HG3	24:D2:69:LEU:HD23	2.83	0.56
39:L2:30:ARG:HB2	39:L2:36:GLU:OE2	2.06	0.56
17:C5:108:ARG:HG2	17:C5:109:PRO:HD2	1.88	0.56
67:O1:24:SER:HB2	67:O1:27:LYS:HE3	1.88	0.56
36:1:422:A:C2	36:1:2363:A:H4'	2.41	0.56
34:SR:90:ARG:NH1	34:SR:99:THR:OG1	2.38	0.56
78:Q2:89:LYS:HB2	36:5:2653:C:OP1	236.77	0.56
36:1:3027:A:H2'	36:1:3028:G:O4'	2.06	0.56
1:6:1660:A:H2'	1:6:1661:U:C6	2.41	0.56
48:M1:73:GLY:O	48:M1:75:LYS:N	2.39	0.56
64:N8:118:ILE:HD13	64:N8:118:ILE:H	1.70	0.56
22:D0:57:ARG:HG3	22:D0:89:ARG:CZ	2.35	0.56
52:M6:10:ASP:CG	52:M6:37:ARG:HH21	3.15	0.56
1:2:1533:C:H5	27:D5:77:ARG:NH2	2.04	0.56
36:1:299:G:N7	86:1:4084:OHX:N2	2.54	0.56
61:N5:105:VAL:HG11	61:N5:126:LEU:HD22	1.88	0.56
36:5:1586:G:OP1	86:8:217:OHX:N3	2.38	0.56
36:5:173:G:H1'	36:5:174:C:H5'	1.88	0.56
36:1:3082:C:H2'	36:1:3083:G:C8	2.41	0.56
49:M3:153:ASP:OD1	49:M3:157:ARG:NH2	2.39	0.56
36:5:90:C:C2'	36:5:91:G:H5'	2.35	0.56
36:5:1066:G:OP1	86:5:4230:OHX:N2	2.38	0.56
86:5:4057:OHX:N3	86:5:4202:OHX:N6	2.53	0.56
28:D6:23:CYS:SG	28:D6:74:CYS:HB3	2.46	0.56
63:N7:54:THR:H	63:N7:57:HIS:CD2	2.67	0.56
39:L2:40:TYR:HA	39:L2:91:GLY:HA3	1.88	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1776:A:H2'	1:2:1777:G:C8	2.41	0.56
38:8:83:C:H4'	38:8:85:G:N3	2.21	0.56
36:5:181:U:H1'	36:5:236:G:N2	2.21	0.56
46:L9:76:ASP:O	46:L9:80:THR:HG22	4.57	0.56
71:O5:14:LYS:HB3	71:O5:15:GLU:OE2	7.05	0.56
38:4:103:G:O6	86:4:227:OHX:N4	2.39	0.56
36:1:3218:A:H4'	36:1:3219:G:O5'	2.05	0.56
36:5:1688:U:H2'	36:5:1689:U:C6	2.41	0.56
36:1:2264:U:OP2	86:1:3988:OHX:N5	2.39	0.56
25:D3:23:ARG:HD2	25:D3:26:GLU:OE1	2.05	0.56
20:C8:94:ASP:OD1	20:C8:98:TYR:OH	2.25	0.56
36:1:1447:G:H3'	53:M7:67:ILE:CD1	2.35	0.55
36:1:2443:A:O2'	36:1:2444:C:OP2	2.21	0.55
8:S6:67:VAL:HG23	8:S6:68:LEU:O	2.32	0.55
36:5:2549:G:C8	36:5:2549:G:H5'	2.41	0.55
46:L9:171:ASP:OD2	46:L9:173:ARG:NH1	2.82	0.55
5:S3:115:ILE:HG21	35:SM:110:TRP:HA	1.89	0.55
38:4:63:G:O2'	71:O5:49:LYS:HE2	2.05	0.55
17:C5:111:MET:HG2	20:C8:119:ILE:CG1	4.46	0.55
57:N1:79:MET:HB3	57:N1:84:TYR:CE2	2.40	0.55
1:2:61:A:H8	1:2:269:G:HO2'	1.50	0.55
36:5:1387:G:OP1	86:5:4203:OHX:N3	2.39	0.55
36:1:776:U:C5	36:1:2719:U:O2	2.59	0.55
56:N0:104:GLU:O	56:N0:108:GLN:HG2	2.06	0.55
67:O1:84:ASP:OD1	67:O1:84:ASP:N	2.53	0.55
36:5:1093:A:OP1	36:5:1093:A:H4'	2.05	0.55
1:2:274:G:H3'	1:2:275:C:C6	2.41	0.55
1:6:1213:G:H1	1:6:1450:U:H3	1.54	0.55
29:D7:26:GLN:NE2	1:6:864:U:OP2	353.62	0.55
40:L3:188:ILE:HA	40:L3:191:LYS:HD2	1.89	0.55
36:1:3276:G:O6	69:O3:60:ARG:NH1	2.37	0.55
36:1:155:G:H5''	36:1:156:G:C8	2.41	0.55
25:D3:92:CYS:HA	25:D3:95:PHE:CD2	2.35	0.55
61:N5:103:TYR:HB3	61:N5:135:ILE:HD11	3.27	0.55
13:C1:77:SER:HB3	13:C1:85:VAL:HB	2.02	0.55
39:L2:204:MET:HG3	36:5:914:A:C2	195.77	0.55
34:SR:171:SER:N	34:SR:179:LYS:O	2.39	0.55
36:5:1715:A:H4'	36:5:1716:U:OP1	2.05	0.55
15:C3:33:VAL:HG21	15:C3:66:ILE:HD11	2.44	0.55
1:2:780:A:H8	26:D4:8:ARG:HB3	1.71	0.55
24:D2:5:SER:HB3	24:D2:8:ALA:HB3	2.77	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:749:U:H2'	1:2:750:U:C6	2.41	0.55
8:S6:214:LYS:HB3	8:S6:218:GLU:OE1	6.21	0.55
36:1:1781:C:H2'	36:1:1782:U:C6	2.41	0.55
1:2:448:C:OP1	6:S4:29:PRO:HD3	2.05	0.55
34:SR:61:PHE:HD1	34:SR:92:TRP:CE3	2.44	0.55
35:SM:102:THR:HG23	35:SM:105:LYS:HB2	1.86	0.55
11:S9:78:ARG:HH12	11:S9:82:ARG:NH2	2.04	0.55
38:4:126:A:O2'	38:4:128:U:OP1	2.25	0.55
36:1:818:C:N3	36:1:920:A:H5'	2.21	0.55
38:4:22:U:OP1	62:N6:12:ARG:NH2	2.39	0.55
36:1:2778:G:H2'	36:1:2779:A:H5'	1.87	0.55
1:2:702:G:HO2'	1:2:703:G:H8	1.53	0.55
1:6:235:G:H2'	1:6:236:A:C8	2.36	0.55
71:O5:101:THR:HG23	71:O5:103:LYS:H	1.70	0.55
24:D2:37:PHE:CE2	24:D2:103:ILE:HD12	2.41	0.55
5:S3:64:ARG:O	5:S3:66:ILE:N	2.38	0.55
18:C6:18:ALA:HB2	18:C6:69:VAL:HG13	2.14	0.55
1:2:693:U:H5'	1:2:694:U:H5'	1.88	0.55
14:C2:103:LEU:HG	14:C2:116:VAL:HG13	3.93	0.55
52:M6:61:ALA:HB1	52:M6:66:LYS:HG3	2.03	0.55
12:C0:15:LEU:HD22	12:C0:46:LEU:HD11	1.88	0.55
37:3:13:A:H5''	37:3:13:A:C8	2.41	0.55
36:5:1152:G:OP2	36:5:1152:G:C8	2.59	0.55
36:5:1151:U:OP1	86:5:4213:OHX:N1	2.40	0.55
36:1:2728:G:O6	57:N1:78:LYS:HE3	2.05	0.55
36:1:900:G:H1'	36:1:1589:A:H61	1.71	0.55
21:C9:63:ARG:HG2	21:C9:67:MET:HE2	4.78	0.55
36:1:3136:G:OP2	86:1:4103:OHX:N6	2.39	0.55
36:1:2778:G:C2'	36:1:2779:A:H5'	2.37	0.55
62:N6:50:ILE:HD13	62:N6:51:ARG:H	1.72	0.55
64:N8:28:HIS:CD2	64:N8:32:ARG:HG2	2.41	0.55
1:6:1237:G:H2'	1:6:1238:A:C8	2.41	0.55
1:2:1485:C:OP1	86:2:2099:OHX:N6	2.40	0.55
36:5:1355:A:H1'	36:5:1356:U:OP2	2.05	0.55
1:2:958:U:OP2	29:D7:20:LYS:HE3	2.06	0.55
36:1:1522:U:H4'	36:1:1523:U:OP2	2.06	0.55
18:C6:26:LYS:NZ	1:6:1364:G:O3'	436.54	0.55
58:N2:104:ARG:NH2	36:5:1758:G:H5'	120.16	0.55
36:1:722:G:O6	86:1:4019:OHX:N6	2.39	0.55
56:N0:96:ASP:OD1	56:N0:97:VAL:N	2.39	0.55
11:S9:167:ALA:O	11:S9:168:ARG:HB2	2.04	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:873:C:H5''	36:5:874:U:O5'	2.07	0.55
43:L6:68:PRO:HG2	43:L6:71:VAL:CG2	3.57	0.55
36:5:2309:A:H4'	86:5:4201:OHX:N4	2.21	0.55
18:C6:95:LYS:HE3	18:C6:96:TYR:CZ	2.98	0.55
36:5:283:G:O6	36:5:304:G:H1'	2.06	0.55
46:L9:49:ASN:O	46:L9:52:LEU:N	2.37	0.55
8:S6:67:VAL:O	8:S6:68:LEU:HB2	2.35	0.55
42:L5:59:ASP:OD2	42:L5:60:ILE:N	3.14	0.55
36:5:1716:U:HO2'	36:5:1717:U:P	2.28	0.55
5:S3:116:ARG:HB2	5:S3:116:ARG:NH1	5.44	0.55
1:6:272:U:O2'	1:6:273:G:OP2	2.18	0.55
51:M5:11:GLN:HG2	51:M5:44:ARG:HH21	1.71	0.55
79:Q3:17:ARG:NH1	36:5:860:G:OP1	219.73	0.55
36:5:2573:G:H3'	36:5:2574:G:H5''	1.89	0.55
36:5:3259:U:H6	36:5:3259:U:H5'	1.70	0.55
72:O6:60:LEU:HD13	72:O6:64:SER:HB3	1.87	0.55
36:1:361:A:O3'	73:O7:45:ARG:NH2	2.39	0.55
86:8:218:OHX:N6	86:8:225:OHX:N4	2.55	0.55
24:D2:67:GLY:O	24:D2:69:LEU:N	3.15	0.55
79:Q3:49:ARG:HB2	79:Q3:55:TRP:CZ3	3.05	0.55
1:2:434:G:H5'	25:D3:78:LYS:HB3	1.88	0.55
64:N8:18:GLY:O	36:5:1370:G:H5''	174.59	0.55
57:N1:101:CYS:HB3	36:5:990:U:H1'	251.35	0.55
37:3:80:G:OP2	86:3:223:OHX:N6	2.40	0.55
59:N3:39:VAL:O	59:N3:42:SER:OG	3.17	0.55
25:D3:65:ASN:ND2	1:6:574:G:O6	364.97	0.55
39:L2:214:GLY:O	39:L2:215:ASN:HB2	4.58	0.55
86:5:3981:OHX:N2	86:5:4201:OHX:N1	2.55	0.55
1:2:885:G:OP1	3:S1:136:ARG:NH1	2.39	0.55
1:2:1114:G:O6	86:2:2073:OHX:N5	2.40	0.55
36:1:664:U:H5'	41:L4:107:ARG:HA	1.89	0.55
4:S2:41:LEU:HD13	4:S2:68:ILE:HD13	2.54	0.55
4:S2:56:ILE:HG23	4:S2:61:LEU:HB2	1.88	0.55
36:5:1556:C:H5''	36:5:2169:G:H22	1.71	0.55
3:S1:104:ASP:HA	3:S1:214:LYS:HE2	1.87	0.55
86:2:2043:OHX:N1	86:2:2098:OHX:N3	2.54	0.55
86:1:4007:OHX:N6	86:1:4176:OHX:N5	2.53	0.55
36:1:595:G:H1	36:1:609:G:H5''	1.70	0.55
36:5:322:U:H5''	36:5:323:A:OP1	2.07	0.55
3:S1:175:GLU:HG2	3:S1:193:ILE:HD13	4.46	0.55
51:M5:80:THR:HG21	51:M5:87:GLN:HA	1.89	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:79:ILE:HG21	52:M6:138:LEU:HD11	2.28	0.55
1:6:1417:A:OP1	86:6:2089:OHX:N4	2.39	0.55
36:5:1815:U:O2'	36:5:1816:A:OP2	2.24	0.55
1:2:319:U:H1'	1:2:323:A:C4	2.42	0.55
45:L8:161:GLU:OE1	51:M5:26:ARG:NH1	2.80	0.55
42:L5:265:TYR:HE1	37:7:121:U:H5"	316.51	0.55
1:6:542:A:H1'	1:6:543:C:OP1	2.07	0.55
20:C8:134:ARG:O	20:C8:136:GLN:HG2	4.79	0.55
6:S4:141:THR:HG21	6:S4:162:ILE:HD11	2.63	0.55
7:S5:166:ARG:HA	7:S5:169:ASN:HB2	2.56	0.55
3:S1:120:LEU:HD21	3:S1:122:GLU:HG3	1.87	0.55
15:C3:93:LYS:HA	15:C3:150:VAL:HG21	2.53	0.55
34:SR:123:ILE:HD11	34:SR:156:VAL:HG23	2.11	0.55
66:O0:45:ALA:O	66:O0:48:THR:HG22	2.07	0.55
5:S3:40:ARG:HB2	5:S3:47:GLU:HB2	1.88	0.55
36:1:3066:U:O4	86:1:4139:OHX:N5	2.40	0.55
2:S0:126:PRO:HG2	2:S0:151:SER:HB2	3.64	0.55
36:1:2834:G:N7	86:1:3903:OHX:N3	2.54	0.55
46:L9:29:GLY:HA3	46:L9:82:VAL:HG13	1.95	0.55
1:6:1268:G:H1'	1:6:1448:G:H5"	1.88	0.55
60:N4:13:ILE:HG12	60:N4:32:GLN:HB2	2.74	0.55
70:O4:10:ARG:HD2	75:O9:4:GLN:HE22	2.70	0.55
6:S4:71:LYS:HA	6:S4:76:VAL:O	2.06	0.55
67:O1:80:ASN:HA	67:O1:90:PHE:CE2	5.58	0.55
22:D0:24:ILE:HG12	22:D0:116:VAL:HG22	1.88	0.55
3:S1:39:GLU:HB3	3:S1:73:LEU:O	2.07	0.55
66:O0:95:ALA:HB2	66:O0:101:LEU:HD23	2.61	0.55
36:1:1334:U:H1'	44:L7:208:SER:HB2	1.87	0.55
36:5:3195:U:H1'	36:5:3196:U:OP1	2.06	0.55
19:C7:20:TYR:CD1	19:C7:38:ILE:HD11	2.42	0.55
49:M3:138:VAL:HB	71:O5:118:ILE:HB	1.89	0.55
39:L2:140:ASN:OD1	39:L2:142:ASP:HB3	4.99	0.55
86:1:4007:OHX:N3	86:1:4176:OHX:N3	2.54	0.55
2:S0:146:LEU:HB3	2:S0:162:CYS:SG	3.41	0.55
7:S5:25:LEU:HD22	7:S5:25:LEU:H	1.71	0.55
77:Q1:21:ARG:HD2	1:6:1653:C:O3'	284.71	0.55
1:2:1665:U:O4	86:2:2136:OHX:N4	2.40	0.55
51:M5:121:VAL:HG11	51:M5:131:GLU:HG3	2.89	0.55
16:C4:66:ASP:O	16:C4:69:ALA:N	3.72	0.55
45:L8:79:GLN:HG2	45:L8:80:TYR:N	2.28	0.55
74:O8:31:LEU:HA	74:O8:37:PRO:HA	1.87	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:80:LEU:O	12:C0:82:LEU:N	2.40	0.55
50:M4:113:THR:H	50:M4:116:GLU:HB2	1.88	0.55
86:1:4036:OHX:N4	86:1:4048:OHX:N3	2.55	0.55
36:1:314:U:O4	86:1:4154:OHX:N4	2.40	0.55
41:L4:138:ARG:NH2	41:L4:240:PRO:HB2	2.31	0.55
36:1:20:A:OP2	71:O5:90:ARG:NH1	2.39	0.55
6:S4:156:VAL:O	6:S4:157:ASN:HB2	2.07	0.55
9:S7:118:LEU:N	1:6:639:U:OP1	367.00	0.55
8:S6:137:ARG:NH1	1:6:144:U:H5	312.26	0.55
37:3:7:G:H5'	42:L5:22:ARG:HD3	1.89	0.55
1:6:1688:U:H2'	1:6:1689:A:C8	2.42	0.55
1:6:1081:A:H1'	1:6:1082:C:H5	1.72	0.55
86:8:218:OHX:N5	86:8:225:OHX:N1	2.55	0.55
65:N9:14:ARG:NH2	65:N9:18:ARG:HH11	3.46	0.55
36:5:874:U:H5'	36:5:2950:G:OP1	2.07	0.55
10:S8:54:LYS:HD3	10:S8:175:GLN:OE1	2.05	0.55
36:5:2734:A:OP1	86:5:4048:OHX:N6	2.40	0.55
71:O5:24:LEU:HB3	71:O5:51:ILE:HG12	2.57	0.55
36:5:1615:C:H2'	36:5:1616:U:C6	2.42	0.55
49:M3:166:ALA:HB1	64:N8:147:LEU:HD21	2.26	0.55
64:N8:36:GLY:HA3	64:N8:40:HIS:CE1	2.66	0.55
42:L5:258:LYS:O	42:L5:258:LYS:HG2	4.63	0.55
45:L8:238:LEU:HB3	45:L8:242:ALA:HB3	3.60	0.55
38:8:149:A:H2'	38:8:150:G:C8	2.42	0.55
4:S2:139:ILE:HD11	4:S2:218:ILE:HG21	2.71	0.55
36:1:2689:A:H2'	36:1:2689:A:N3	2.22	0.55
5:S3:93:ASP:N	5:S3:93:ASP:OD2	2.39	0.55
43:L6:69:PHE:CZ	36:5:3267:A:H2'	259.06	0.55
63:N7:4:PHE:CZ	66:O0:35:ARG:HA	2.42	0.55
50:M4:121:MET:HG3	36:5:3214:U:C4	282.15	0.55
20:C8:125:ILE:HD11	35:SM:57:ASN:HB3	1.87	0.55
3:S1:141:ALA:HB1	3:S1:207:LEU:HD22	3.92	0.55
43:L6:176:PHE:HA	50:M4:114:ASP:HB2	2.66	0.55
29:D7:36:LYS:HD3	29:D7:43:ILE:HG23	3.83	0.55
23:D1:81:ASN:N	23:D1:81:ASN:OD1	2.77	0.55
40:L3:25:ILE:HD13	40:L3:25:ILE:N	2.22	0.55
36:5:664:U:H2'	36:5:665:A:C8	2.42	0.55
36:5:1716:U:H5'	36:5:1716:U:C6	2.42	0.55
36:5:2568:C:N4	36:5:2574:G:O6	2.39	0.55
68:O2:91:THR:HG22	68:O2:92:TYR:HD2	2.41	0.55
36:1:1675:G:H2'	36:1:1676:A:C8	2.42	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:612:U:OP1	43:L6:21:THR:HB	2.07	0.55
1:2:1769:U:OP2	86:2:2145:OHX:N1	2.40	0.55
34:SR:79:TYR:HE1	34:SR:100:TYR:HE1	2.28	0.55
36:5:1409:G:O6	86:5:4164:OHX:N6	2.40	0.55
71:O5:67:ARG:HG3	71:O5:80:LEU:HD22	2.82	0.55
36:1:2561:A:N1	45:L8:32:LYS:HB2	2.22	0.55
73:O7:84:SER:O	73:O7:85:LYS:HB3	3.89	0.55
41:L4:208:VAL:O	41:L4:251:THR:HG23	2.07	0.55
5:S3:158:ILE:H	5:S3:158:ILE:HD13	1.72	0.55
3:S1:124:ASN:N	3:S1:124:ASN:OD1	2.39	0.55
44:L7:179:LEU:HD22	44:L7:179:LEU:H	2.40	0.55
68:O2:43:ARG:NH1	36:5:1368:U:H5'	193.63	0.55
1:2:826:U:H2'	1:2:827:C:C6	2.42	0.55
32:E0:50:VAL:HA	32:E0:54:ARG:HA	3.22	0.55
36:1:408:A:OP1	86:1:4060:OHX:N3	2.40	0.55
33:E1:127:GLY:O	33:E1:129:GLY:N	2.40	0.55
63:N7:135:ARG:O	36:5:2555:G:N2	210.73	0.55
41:L4:5:GLN:HA	41:L4:20:LEU:O	2.07	0.55
41:L4:22:LEU:HD22	41:L4:23:PRO:HD2	1.89	0.55
38:4:137:C:OP2	86:4:234:OHX:N5	2.39	0.55
12:C0:55:VAL:HA	12:C0:69:THR:HG23	1.88	0.55
31:D9:21:CYS:HB2	31:D9:39:CYS:HB3	2.84	0.55
15:C3:11:ILE:HD11	1:6:1072:C:H4'	349.86	0.55
1:6:191:C:O2'	1:6:192:U:O5'	2.22	0.55
71:O5:83:LYS:HA	38:8:38:U:H5	65.77	0.55
26:D4:12:VAL:HG22	26:D4:23:PHE:HB3	2.47	0.55
39:L2:30:ARG:NH2	39:L2:33:ASP:OD2	2.40	0.55
68:O2:71:HIS:CE1	68:O2:118:LYS:HD3	2.41	0.55
16:C4:122:PRO:O	16:C4:124:ASP:N	2.40	0.55
64:N8:90:TYR:CG	64:N8:100:PRO:HG3	2.42	0.55
16:C4:71:CYS:O	16:C4:75:GLY:N	3.41	0.55
36:1:3316:A:OP1	36:1:3318:G:N2	2.37	0.55
36:1:792:G:H2'	36:1:793:C:C6	2.41	0.55
38:8:43:A:OP1	86:8:226:OHX:N3	2.40	0.55
1:2:1138:A:H2'	1:2:1139:A:H8	1.71	0.55
36:5:1661:G:H2'	36:5:1662:G:C8	2.42	0.55
36:1:1507:G:N3	36:1:1507:G:H5'	2.22	0.55
61:N5:44:PRO:O	61:N5:45:LYS:HB2	2.93	0.55
36:5:621:A:H2'	36:5:622:A:C8	2.42	0.54
47:M0:80:SER:HB3	47:M0:147:VAL:HG11	1.87	0.54
36:1:561:C:H2'	36:1:562:C:H6	1.70	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2544:U:H2'	36:1:2545:C:C6	2.43	0.54
56:N0:139:TYR:CD2	56:N0:140:VAL:HG23	2.55	0.54
36:1:2107:A:C2	36:1:3344:A:C8	2.95	0.54
5:S3:57:ASP:O	5:S3:65:ARG:HG2	4.98	0.54
18:C6:34:SER:HB3	18:C6:38:LEU:HD12	1.88	0.54
41:L4:148:ILE:HA	41:L4:149:PRO:C	2.45	0.54
57:N1:127:GLN:HG3	36:5:1095:U:H3	262.15	0.54
46:L9:4:ILE:HG22	56:N0:142:GLN:CD	2.28	0.54
1:6:72:A:H5'	1:6:73:U:OP2	2.07	0.54
36:5:917:A:OP2	86:5:4226:OHX:N3	2.40	0.54
1:2:17:C:H2'	1:2:18:C:C6	2.42	0.54
48:M1:9:MET:O	48:M1:11:ASP:N	3.73	0.54
13:C1:128:CYS:O	13:C1:129:ARG:HB3	4.32	0.54
46:L9:189:GLU:C	46:L9:191:LEU:H	2.09	0.54
6:S4:90:ILE:HD12	6:S4:101:LEU:HD21	1.89	0.54
36:1:541:U:O4	86:1:4196:OHX:N2	2.40	0.54
1:2:855:A:C2	1:2:857:U:H1'	2.42	0.54
39:L2:45:VAL:HG22	39:L2:84:THR:HA	1.92	0.54
35:SM:51:ARG:HB2	35:SM:52:PRO:HD2	1.90	0.54
1:6:722:G:HO2'	1:6:723:G:H8	1.53	0.54
1:6:58:U:O2'	1:6:451:A:N3	2.37	0.54
8:S6:10:ASN:HB3	8:S6:128:THR:HA	2.18	0.54
29:D7:50:ALA:O	29:D7:52:THR:N	2.39	0.54
50:M4:17:VAL:HG12	50:M4:72:LEU:HB3	1.88	0.54
86:5:3981:OHX:N2	86:5:4201:OHX:N5	2.55	0.54
1:6:280:U:O2'	1:6:281:G:OP2	2.24	0.54
36:5:655:C:H2'	36:5:656:A:H8	1.72	0.54
68:O2:22:SER:HA	68:O2:28:VAL:HG12	2.16	0.54
1:6:484:C:N4	1:6:503:G:H1	2.05	0.54
62:N6:120:GLN:NE2	62:N6:126:LEU:HA	7.95	0.54
39:L2:215:ASN:HB2	36:5:2968:G:N7	217.01	0.54
15:C3:127:ARG:HH11	15:C3:127:ARG:HG2	2.10	0.54
36:1:668:G:OP1	86:1:4124:OHX:N2	2.41	0.54
1:2:1031:U:H4'	1:2:1032:G:OP2	2.07	0.54
58:N2:21:SER:HA	58:N2:24:GLU:OE2	2.07	0.54
36:1:1608:C:H2'	36:1:1609:C:H6	1.73	0.54
2:S0:90:ALA:HA	2:S0:95:ALA:HB3	2.17	0.54
52:M6:42:ASN:OD1	52:M6:125:ARG:HD3	2.07	0.54
10:S8:166:TYR:O	10:S8:183:ILE:HD12	6.55	0.54
1:2:1479:A:P	21:C9:57:ARG:HH12	2.30	0.54
71:O5:78:LYS:HA	71:O5:81:ARG:HD2	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1339:C:O2'	1:6:1341:A:N7	2.37	0.54
44:L7:73:GLY:O	57:N1:143:THR:HB	2.44	0.54
39:L2:5:ILE:HG22	39:L2:208:ASP:O	2.07	0.54
72:O6:62:ARG:O	72:O6:63:ASN:ND2	5.69	0.54
41:L4:84:ARG:O	41:L4:87:GLN:HG3	2.12	0.54
52:M6:127:LEU:HD11	56:N0:168:PRO:HG3	2.09	0.54
36:5:1554:U:H4'	36:5:1555:U:OP1	2.06	0.54
40:L3:159:ARG:HG2	40:L3:182:GLN:HA	2.05	0.54
3:S1:134:VAL:HB	3:S1:219:LYS:HB2	1.89	0.54
36:5:1348:U:O4'	36:5:1355:A:N6	2.41	0.54
44:L7:219:LYS:O	44:L7:228:SER:HB2	2.95	0.54
34:SR:267:PRO:HD2	34:SR:269:TYR:HE1	2.77	0.54
1:6:513:U:H2'	1:6:514:G:C8	2.42	0.54
36:1:1227:C:H5'	36:1:1228:C:OP2	2.06	0.54
26:D4:50:ALA:HB1	26:D4:54:ALA:HB3	3.02	0.54
11:S9:59:LEU:HD22	11:S9:69:ARG:HA	1.88	0.54
29:D7:56:CYS:SG	29:D7:57:GLU:N	2.80	0.54
3:S1:84:ILE:HG22	3:S1:86:LEU:HD22	1.88	0.54
45:L8:26:LEU:HD12	45:L8:26:LEU:H	1.73	0.54
36:1:1547:G:OP2	51:M5:105:ARG:NH1	2.40	0.54
9:S7:44:LYS:NZ	9:S7:95:GLU:HG2	2.21	0.54
36:1:1846:C:OP1	36:1:1849:C:N4	2.37	0.54
44:L7:142:SER:O	44:L7:146:GLN:HG3	2.18	0.54
36:5:437:G:OP2	36:5:437:G:C8	2.60	0.54
20:C8:24:GLY:O	20:C8:26:ILE:N	2.32	0.54
70:O4:58:ARG:HG3	70:O4:59:PRO:HD2	2.48	0.54
36:1:1740:U:H1'	36:1:1741:A:C2	2.31	0.54
70:O4:46:ASP:CG	70:O4:80:ARG:HD2	2.30	0.54
39:L2:114:SER:HB2	39:L2:169:ILE:CD1	2.37	0.54
53:M7:50:GLN:OE1	53:M7:56:ARG:HD3	2.08	0.54
41:L4:299:ILE:HG22	41:L4:300:ARG:O	2.08	0.54
7:S5:57:SER:OG	7:S5:58:LEU:N	2.98	0.54
36:1:3121:U:H1'	36:1:3122:A:H5''	1.89	0.54
45:L8:153:ILE:HD13	45:L8:166:LEU:HB3	2.72	0.54
14:C2:47:GLU:N	1:6:1229:G:O6	462.62	0.54
21:C9:89:ARG:NH2	1:6:1562:G:OP1	377.25	0.54
36:5:549:U:H2'	36:5:550:A:C8	2.43	0.54
57:N1:30:TYR:OH	57:N1:94:GLU:OE2	2.54	0.54
1:2:916:U:H3	16:C4:41:ARG:NH2	2.05	0.54
36:5:1715:A:C8	36:5:1717:U:H5''	2.42	0.54
66:O0:16:LEU:HD11	66:O0:97:ASP:HB3	1.87	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2295:A:OP1	59:N3:63:LYS:NZ	2.41	0.54
86:1:3974:OHX:N3	86:1:4160:OHX:N1	2.56	0.54
46:L9:77:ASN:HA	46:L9:80:THR:CG2	4.24	0.54
1:2:322:G:OP1	86:2:2090:OHX:N4	2.40	0.54
26:D4:54:ALA:HB2	26:D4:79:VAL:HG22	1.89	0.54
47:M0:24:ARG:HG3	47:M0:24:ARG:HH11	1.73	0.54
1:6:1691:A:H2'	1:6:1692:G:C8	2.42	0.54
43:L6:131:LYS:HB2	43:L6:134:ARG:HG2	6.44	0.54
55:M9:173:ARG:HH21	55:M9:177:VAL:HG21	9.54	0.54
36:1:1796:G:H5''	36:1:1797:A:OP1	2.08	0.54
18:C6:139:GLN:NE2	1:6:1465:C:OP1	353.78	0.54
5:S3:215:GLU:O	5:S3:215:GLU:HG2	2.08	0.54
1:2:1450:U:H2'	1:2:1451:C:C6	2.42	0.54
1:6:1726:G:N7	86:6:2149:OHX:N5	2.56	0.54
54:M8:23:ASN:OD1	54:M8:25:TYR:N	2.40	0.54
17:C5:19:GLY:N	20:C8:93:THR:O	2.37	0.54
1:6:542:A:C8	1:6:543:C:H5'	2.42	0.54
16:C4:25:ASP:HA	16:C4:54:GLU:O	2.07	0.54
36:1:72:C:H5'	49:M3:63:VAL:HG22	1.89	0.54
75:O9:44:TRP:CZ3	75:O9:45:ARG:HG3	2.41	0.54
55:M9:88:ARG:HG3	55:M9:88:ARG:HH11	3.41	0.54
16:C4:50:ALA:C	16:C4:52:ARG:H	2.49	0.54
38:4:79:A:O3'	38:4:80:A:H4'	2.08	0.54
59:N3:87:ARG:HH22	59:N3:137:VAL:HG22	1.71	0.54
48:M1:8:PRO:CG	48:M1:9:MET:H	2.88	0.54
14:C2:67:THR:O	14:C2:69:ALA:N	2.40	0.54
74:O8:32:ASN:ND2	74:O8:32:ASN:O	2.40	0.54
46:L9:103:ILE:HD11	46:L9:134:ILE:HG21	2.74	0.54
86:1:3974:OHX:N5	86:1:4160:OHX:N1	2.56	0.54
86:5:4057:OHX:N5	86:5:4202:OHX:N6	2.56	0.54
73:O7:85:LYS:HB2	38:8:67:U:H5''	20.36	0.54
36:1:2842:U:OP1	36:1:2844:C:N4	2.40	0.54
36:1:1577:G:H2'	36:1:1578:C:O4'	2.07	0.54
36:1:938:C:OP2	64:N8:26:ARG:NH1	2.41	0.54
18:C6:99:GLU:O	18:C6:102:LYS:N	3.12	0.54
1:6:221:A:C2'	1:6:222:A:H5'	2.38	0.54
67:O1:98:VAL:HG22	67:O1:100:SER:H	1.73	0.54
36:5:247:C:C2	36:5:248:U:H1'	2.42	0.54
29:D7:14:SER:O	29:D7:18:LYS:HG3	2.07	0.54
1:2:1120:U:H2'	1:2:1121:C:C6	2.43	0.54
36:1:2310:U:OP1	86:1:4143:OHX:N1	2.40	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1631:A:OP2	86:6:2170:OHX:N3	2.41	0.54
27:D5:71:ILE:HG21	27:D5:76:ALA:HB2	3.56	0.54
36:5:847:A:H2'	36:5:848:A:C8	2.43	0.54
36:1:2704:A:OP2	86:1:3871:OHX:N4	2.41	0.54
1:6:829:A:OP1	1:6:829:A:H4'	2.07	0.54
12:C0:87:VAL:O	12:C0:89:ALA:N	4.79	0.54
86:5:3976:OHX:N4	86:5:4245:OHX:N2	2.56	0.54
18:C6:50:GLU:OE2	18:C6:82:ARG:NH2	2.56	0.54
1:6:152:U:C2	1:6:163:G:N2	2.76	0.54
13:C1:93:TYR:HB2	13:C1:100:TYR:CE1	2.83	0.54
36:1:1940:G:H21	36:1:3362:A:H8	1.54	0.54
41:L4:141:ARG:NH1	41:L4:180:LYS:HD3	2.49	0.54
41:L4:107:ARG:HD2	41:L4:109:TRP:CZ2	2.42	0.54
7:S5:222:LYS:HA	7:S5:225:ARG:HH11	4.21	0.54
45:L8:48:ARG:NH2	36:5:2588:U:OP1	183.82	0.54
1:6:1370:U:O4	86:6:2145:OHX:N6	2.40	0.54
17:C5:77:ARG:HH12	1:6:1241:G:P	383.52	0.54
28:D6:44:ILE:H	28:D6:44:ILE:HD12	1.72	0.54
1:2:68:A:O2'	1:2:69:G:OP2	2.23	0.54
42:L5:187:THR:O	42:L5:189:GLU:N	2.41	0.54
86:8:218:OHX:N2	86:8:225:OHX:N4	2.55	0.54
36:5:124:U:O2	36:5:149:U:O2'	2.21	0.54
5:S3:93:ASP:N	5:S3:93:ASP:OD1	3.74	0.54
15:C3:70:LYS:NZ	1:6:963:A:OP2	332.09	0.54
1:6:1427:A:O2'	1:6:1428:G:OP1	2.20	0.54
1:2:711:U:H1'	1:2:712:G:H5'	1.89	0.54
36:1:2560:C:O2	86:1:3927:OHX:N1	2.41	0.54
63:N7:84:ARG:HD3	70:O4:97:GLU:OE2	2.07	0.54
36:5:830:A:O2'	36:5:1866:C:H2'	2.07	0.54
1:6:1273:G:H4'	1:6:1274:C:H5''	1.88	0.54
1:2:603:U:H2'	1:2:604:A:H8	1.72	0.54
49:M3:39:ARG:NH1	36:5:107:A:OP1	74.03	0.54
52:M6:171:LYS:O	52:M6:175:THR:HG22	2.07	0.54
4:S2:245:ASP:N	4:S2:245:ASP:OD1	2.40	0.54
9:S7:30:SER:HB2	9:S7:34:LEU:HB2	2.43	0.54
68:O2:103:LYS:O	68:O2:106:VAL:HG22	4.53	0.54
40:L3:332:ARG:O	40:L3:333:LYS:HB2	2.28	0.54
36:1:608:A:O4'	41:L4:322:GLN:HG3	2.08	0.54
20:C8:120:ARG:HD2	35:SM:58:GLU:OE1	2.36	0.54
3:S1:173:THR:O	3:S1:177:GLN:HB2	6.27	0.54
41:L4:141:ARG:CZ	41:L4:180:LYS:HD3	2.37	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:662:U:H2'	36:5:663:C:C6	2.42	0.54
4:S2:59:HIS:C	23:D1:15:ARG:HH21	2.70	0.54
40:L3:250:ALA:HB1	36:5:2947:G:N3	218.93	0.54
64:N8:73:LEU:HD23	64:N8:109:TYR:CZ	5.93	0.54
68:O2:20:HIS:O	68:O2:21:HIS:HB2	2.08	0.54
1:2:778:G:H22	26:D4:10:ARG:NH2	2.05	0.54
1:6:558:U:H2'	1:6:558:U:O2	2.07	0.54
36:1:2552:C:H5	66:O0:53:LYS:HE3	1.72	0.54
1:2:1449:U:H2'	1:2:1450:U:C6	2.42	0.54
9:S7:51:VAL:HG22	9:S7:55:LYS:O	2.52	0.54
52:M6:73:PHE:CD1	52:M6:78:ARG:HD3	2.43	0.54
25:D3:109:ARG:O	25:D3:112:LYS:HE3	5.14	0.54
1:2:1649:G:N7	86:2:2050:OHX:N1	2.55	0.54
86:1:4088:OHX:N4	55:M9:14:VAL:O	2.40	0.54
40:L3:106:TRP:HB2	40:L3:133:TYR:CE2	2.42	0.54
49:M3:189:GLU:O	49:M3:192:GLU:HG2	2.08	0.54
1:6:180:A:H2'	1:6:181:A:O4'	2.07	0.54
64:N8:128:ARG:HB3	72:O6:8:ALA:CB	3.56	0.54
36:1:3039:C:OP1	40:L3:65:SER:OG	2.15	0.54
40:L3:206:ASP:OD1	40:L3:206:ASP:N	2.39	0.54
44:L7:52:GLN:O	44:L7:56:GLU:HG2	2.08	0.54
64:N8:13:GLY:HA2	36:5:943:U:H3'	163.80	0.54
49:M3:28:GLN:HB3	51:M5:201:ARG:HD2	2.54	0.54
28:D6:87:ARG:HD3	1:6:1796:C:OP1	345.84	0.54
40:L3:232:ARG:NH1	40:L3:269:GLN:O	2.55	0.54
74:O8:3:ARG:NH2	36:5:1824:U:OP1	149.26	0.54
36:5:2207:A:H62	36:5:2236:G:H1	1.56	0.54
8:S6:55:GLY:O	8:S6:63:MET:HG3	2.07	0.54
45:L8:156:ASP:OD1	45:L8:183:LYS:HG2	2.63	0.54
36:1:1553:U:H4'	36:1:1554:U:H5'	1.89	0.54
42:L5:105:ILE:O	42:L5:109:THR:HG23	2.08	0.54
36:1:911:C:H42	39:L2:3:ARG:HD3	1.73	0.54
39:L2:90:ALA:HB2	39:L2:101:VAL:HG13	2.15	0.54
57:N1:84:TYR:O	57:N1:85:LEU:HD23	2.07	0.54
70:O4:60:ARG:HH21	36:5:1616:U:H5''	142.96	0.54
1:6:961:U:H2'	1:6:962:C:C6	2.43	0.54
41:L4:71:VAL:HG13	41:L4:76:ARG:NH1	2.22	0.54
36:5:3192:U:O4	86:5:4146:OHX:N6	2.40	0.54
33:E1:102:VAL:O	33:E1:104:SER:N	2.39	0.54
36:5:2279:A:O5'	36:5:2280:A:H5'	2.07	0.54
44:L7:84:VAL:HG22	44:L7:117:VAL:HB	2.33	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:143:LEU:HB2	9:S7:147:ASN:O	2.67	0.54
1:2:1642:G:O3'	77:Q1:9:ARG:NH2	2.40	0.54
1:2:320:U:H3'	1:2:321:C:C5'	2.34	0.54
1:6:1696:G:H5''	1:6:1696:G:H8	1.71	0.54
20:C8:134:ARG:HG3	1:6:1545:A:OP2	356.70	0.54
36:1:2107:A:C2	36:1:3344:A:H8	2.26	0.54
36:5:1567:U:H2'	36:5:1568:U:H4'	1.88	0.54
52:M6:68:ARG:NH1	36:5:2988:C:P	216.53	0.54
64:N8:6:THR:HG23	64:N8:8:THR:HG23	1.99	0.54
51:M5:172:ARG:HH11	36:5:30:G:P	107.49	0.54
36:1:3107:U:P	76:Q0:112:LYS:HE2	2.47	0.54
40:L3:227:GLU:HG3	40:L3:270:ARG:HB3	4.72	0.54
41:L4:298:ALA:HB1	54:M8:133:LYS:HZ2	1.73	0.54
1:2:1503:A:H5'	21:C9:33:TYR:CE2	2.42	0.54
51:M5:49:ARG:NH2	36:5:115:A:OP1	101.52	0.54
1:2:795:U:C5	1:2:796:A:C8	2.96	0.54
36:1:3279:A:N6	36:1:3280:U:O4	2.41	0.54
66:O0:27:TYR:O	66:O0:31:VAL:HG23	2.08	0.54
51:M5:158:HIS:ND1	51:M5:160:GLU:OE2	2.31	0.54
36:1:1919:G:N7	86:1:4017:OHX:N5	2.56	0.54
4:S2:101:VAL:HG22	4:S2:115:ILE:HG12	2.22	0.54
8:S6:24:ILE:O	8:S6:26:VAL:N	2.41	0.54
28:D6:41:ILE:H	28:D6:41:ILE:HD13	1.73	0.54
71:O5:30:GLU:O	71:O5:34:GLN:HG3	2.68	0.54
36:1:3087:A:P	86:1:4185:OHX:N5	2.80	0.54
36:5:3341:U:H5''	36:5:3342:A:OP2	2.08	0.54
7:S5:64:VAL:HG12	7:S5:65:ARG:HD3	1.89	0.54
36:1:155:G:O2'	72:O6:27:SER:HB3	2.08	0.54
1:6:476:U:OP1	1:6:477:A:O2'	2.22	0.54
11:S9:113:VAL:HG21	11:S9:134:ILE:HG21	3.18	0.54
1:2:1253:U:H5''	33:E1:130:VAL:HB	1.90	0.54
61:N5:135:ILE:O	61:N5:139:ILE:HG22	2.08	0.54
3:S1:129:THR:HA	3:S1:177:GLN:HA	1.90	0.54
41:L4:144:LYS:NZ	41:L4:144:LYS:H	5.84	0.54
73:O7:21:ARG:HD2	73:O7:37:CYS:SG	2.74	0.54
36:5:726:G:H1'	36:5:744:A:H61	1.73	0.54
1:2:169:A:OP1	8:S6:137:ARG:HG3	2.07	0.54
1:2:1002:G:N2	1:2:1760:G:O3'	2.41	0.54
36:1:3346:U:H3	36:1:3359:A:H61	1.55	0.54
17:C5:25:LEU:HA	17:C5:28:MET:HE2	1.90	0.54
47:M0:208:ASN:O	47:M0:212:GLU:HB2	3.21	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1246:G:H8	36:1:1246:G:OP1	1.91	0.54
56:N0:73:LYS:NZ	56:N0:97:VAL:O	3.04	0.54
36:5:3027:A:H2'	36:5:3028:G:O4'	2.07	0.54
54:M8:30:VAL:O	54:M8:34:THR:HG23	2.07	0.54
45:L8:165:PHE:HA	72:O6:47:ILE:HD13	2.36	0.54
47:M0:9:TYR:CG	47:M0:97:LEU:HD13	2.43	0.54
6:S4:18:TRP:O	6:S4:51:ARG:NH1	2.82	0.54
36:1:230:U:H2'	36:1:231:G:O4'	2.08	0.54
1:6:1160:A:H2'	1:6:1161:C:C6	2.42	0.54
39:L2:96:LEU:HD21	39:L2:107:VAL:HG12	3.52	0.54
40:L3:111:SER:O	40:L3:114:VAL:HG23	2.08	0.54
62:N6:2:ALA:N	36:5:212:G:OP2	77.03	0.54
37:3:19:C:H2'	37:3:20:A:H8	1.73	0.54
86:5:3981:OHX:N4	86:5:4201:OHX:N3	2.57	0.53
11:S9:149:ARG:CG	11:S9:149:ARG:HH11	3.98	0.53
11:S9:134:ILE:HA	11:S9:158:PHE:HA	1.90	0.53
26:D4:20:ARG:HE	26:D4:22:GLN:NE2	4.26	0.53
1:2:1253:U:H2'	1:2:1254:U:C6	2.42	0.53
13:C1:102:LYS:HE3	1:6:351:C:N4	323.55	0.53
16:C4:121:VAL:O	1:6:886:U:O2'	287.49	0.53
70:O4:71:THR:HG22	70:O4:78:GLY:H	1.74	0.53
8:S6:139:ASN:ND2	1:6:143:G:OP2	312.57	0.53
3:S1:120:LEU:HG	3:S1:142:PHE:CE1	2.93	0.53
68:O2:32:TRP:HB3	36:5:1407:A:H5'	171.14	0.53
5:S3:90:ARG:HH22	5:S3:94:ARG:HE	9.29	0.53
1:6:1695:G:N2	1:6:1706:C:H41	2.06	0.53
63:N7:46:ILE:HD11	63:N7:49:TYR:HA	1.89	0.53
50:M4:15:VAL:HG13	56:N0:150:PHE:O	2.09	0.53
36:5:2401:A:H61	36:5:2404:A:N6	2.06	0.53
1:6:496:G:O6	1:6:497:G:N2	2.40	0.53
48:M1:137:ARG:HG2	37:7:28:C:H5''	306.95	0.53
17:C5:22:LEU:HA	17:C5:25:LEU:HB2	3.15	0.53
36:5:612:U:H2'	36:5:613:G:C8	2.43	0.53
36:5:2298:U:O4	36:5:2923:U:H5	1.91	0.53
36:1:1798:A:H2'	36:1:1799:A:C8	2.43	0.53
75:O9:30:ARG:HG2	38:8:75:G:C8	64.36	0.53
34:SR:133:VAL:O	34:SR:141:LEU:N	2.81	0.53
36:5:2951:G:O2'	36:5:2952:G:H5'	2.08	0.53
36:5:920:A:OP1	36:5:922:U:H5	1.90	0.53
9:S7:16:LEU:HD11	9:S7:48:GLU:HG3	3.69	0.53
42:L5:234:ASP:N	42:L5:234:ASP:OD2	2.41	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3111:U:H2'	36:1:3112:G:O4'	2.09	0.53
32:E0:46:ASN:OD1	32:E0:47:VAL:N	2.93	0.53
53:M7:29:THR:HA	53:M7:32:THR:CG2	2.37	0.53
1:2:66:U:O4	8:S6:134:GLY:N	2.35	0.53
1:2:1332:C:O2'	5:S3:162:GLN:HB3	2.09	0.53
1:2:1238:A:H2'	1:2:1239:U:O4'	2.07	0.53
1:6:938:G:N2	1:6:941:A:OP2	2.40	0.53
22:D0:69:LYS:HE3	22:D0:80:GLU:HG3	4.12	0.53
36:5:3165:A:H61	36:5:3285:C:N4	2.04	0.53
6:S4:26:CYS:HB2	6:S4:27:TYR:CE2	5.28	0.53
5:S3:37:VAL:HG12	5:S3:50:ILE:HA	2.66	0.53
1:2:187:G:H4'	1:2:188:A:OP1	2.08	0.53
40:L3:153:LYS:HG2	40:L3:154:TYR:CE2	3.79	0.53
5:S3:204:ASP:OD1	1:6:1330:G:N2	420.44	0.53
1:6:197:A:H2'	1:6:198:A:C8	2.43	0.53
51:M5:84:PRO:HA	51:M5:87:GLN:OE1	3.14	0.53
16:C4:124:ASP:O	16:C4:125:SER:HB2	2.08	0.53
6:S4:125:LYS:HB2	6:S4:226:PHE:CE2	3.48	0.53
48:M1:28:ASP:OD2	48:M1:32:ARG:NH2	6.72	0.53
1:2:753:A:H5'	6:S4:221:ARG:HG3	1.90	0.53
36:5:1621:A:H2'	36:5:1622:U:C6	2.43	0.53
1:6:521:A:H2'	1:6:522:U:O4'	2.08	0.53
1:2:1789:G:N7	16:C4:132:ARG:NH2	2.55	0.53
1:2:881:A:H2'	1:2:882:U:O4'	2.09	0.53
20:C8:84:TRP:HA	20:C8:89:GLN:NE2	2.24	0.53
71:O5:95:PHE:CD2	36:5:136:G:H5'	63.52	0.53
36:1:2405:C:O2	36:1:2819:A:N1	2.41	0.53
1:2:730:G:O6	86:2:2156:OHX:N4	2.41	0.53
11:S9:122:VAL:O	11:S9:125:ALA:HB3	2.09	0.53
1:2:1207:C:H42	1:2:1456:C:H5	1.55	0.53
36:1:409:A:OP2	86:1:4060:OHX:N5	2.42	0.53
55:M9:46:LYS:HZ1	36:5:1766:G:H8	100.92	0.53
1:6:538:A:C8	1:6:543:C:N4	2.77	0.53
20:C8:134:ARG:O	20:C8:136:GLN:N	3.52	0.53
1:2:1555:A:OP1	17:C5:47:ARG:HD3	2.07	0.53
1:2:1460:A:O2'	35:SM:72:ARG:NH2	2.41	0.53
36:1:1723:A:N1	36:1:1788:C:O2'	2.37	0.53
36:1:1308:A:H8	36:1:1308:A:OP2	1.90	0.53
2:S0:180:GLU:O	2:S0:184:LEU:HD23	2.08	0.53
47:M0:210:ILE:HG12	47:M0:217:PHE:CZ	2.44	0.53
24:D2:10:ALA:HB1	24:D2:27:ILE:HD13	2.91	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:53:ILE:HG12	4:S2:73:LEU:HD22	3.69	0.53
16:C4:17:ALA:HB3	16:C4:81:VAL:HA	1.90	0.53
36:1:1719:G:N7	55:M9:121:HIS:HE1	2.06	0.53
71:O5:43:LYS:O	71:O5:46:THR:HG23	2.07	0.53
34:SR:238:ASP:OD2	34:SR:258:THR:OG1	2.32	0.53
36:1:2155:G:O2'	39:L2:227:ARG:NH2	2.40	0.53
1:2:274:G:C2	1:2:275:C:H1'	2.44	0.53
4:S2:188:LEU:HD13	4:S2:196:VAL:HG11	1.89	0.53
50:M4:17:VAL:HG11	50:M4:74:ARG:HA	1.89	0.53
59:N3:83:LYS:HE2	59:N3:84:SER:O	2.09	0.53
51:M5:122:ASN:OD1	51:M5:123:GLN:N	2.40	0.53
42:L5:235:SER:O	42:L5:239:ILE:HG13	2.08	0.53
36:1:2383:C:H5'	52:M6:71:PHE:CE2	2.44	0.53
59:N3:86:ARG:HG3	59:N3:92:PHE:CE2	3.09	0.53
73:O7:28:HIS:ND1	73:O7:31:LYS:HB2	2.62	0.53
57:N1:13:TYR:O	86:5:3913:OHX:N4	261.17	0.53
1:6:1697:G:H8	1:6:1705:C:N3	2.07	0.53
1:6:85:A:OP1	86:6:2190:OHX:N4	2.41	0.53
36:5:1915:A:H2'	36:5:1916:U:C6	2.43	0.53
68:O2:16:LYS:O	68:O2:17:PHE:HB2	4.59	0.53
55:M9:129:GLY:C	55:M9:130:ASN:HD22	2.11	0.53
40:L3:349:LYS:NZ	36:5:3097:C:OP1	265.42	0.53
36:1:3243:A:H4'	40:L3:95:THR:HG22	1.89	0.53
1:2:463:U:H2'	1:2:464:A:C8	2.43	0.53
36:5:2310:U:OP1	86:5:4201:OHX:N2	2.41	0.53
44:L7:160:ARG:HG3	44:L7:203:TRP:CG	2.91	0.53
16:C4:37:GLU:HA	1:6:895:G:O2'	259.22	0.53
70:O4:8:ARG:HH11	70:O4:8:ARG:HG2	1.72	0.53
36:1:1492:G:N7	75:O9:2:ALA:CB	2.71	0.53
6:S4:114:ILE:HB	6:S4:118:GLU:OE2	2.09	0.53
36:5:2207:A:H2'	36:5:2208:A:O4'	2.09	0.53
66:O0:34:LEU:HD21	66:O0:42:ILE:HG21	3.63	0.53
67:O1:46:THR:HG23	67:O1:47:ASP:H	4.14	0.53
36:5:1064:A:N6	36:5:1096:U:H3	2.06	0.53
57:N1:130:ARG:O	36:5:1098:A:O2'	256.43	0.53
63:N7:46:ILE:HD11	63:N7:49:TYR:N	2.23	0.53
36:5:1151:U:H3'	36:5:1152:G:C8	2.44	0.53
40:L3:238:LEU:HB3	40:L3:242:THR:HG21	2.38	0.53
49:M3:76:THR:HG22	49:M3:101:ARG:HB3	1.91	0.53
48:M1:9:MET:HG3	48:M1:9:MET:O	2.07	0.53
27:D5:59:TYR:HD2	27:D5:60:VAL:N	2.07	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:C7:50:ILE:O	19:C7:54:THR:HG23	2.51	0.53
36:5:1506:A:H1'	36:5:1848:G:O6	2.07	0.53
86:8:218:OHX:N5	86:8:225:OHX:N3	2.57	0.53
75:O9:4:GLN:HG2	36:5:1588:A:N1	125.52	0.53
42:L5:134:ALA:HB2	42:L5:141:PRO:HD3	2.65	0.53
58:N2:13:LYS:NZ	36:5:1676:A:OP1	159.05	0.53
13:C1:80:MET:HB3	13:C1:83:THR:HG23	1.90	0.53
61:N5:58:ASP:O	61:N5:62:VAL:HG23	2.37	0.53
1:2:1015:U:OP1	86:2:2044:OHX:N3	2.41	0.53
1:2:1754:A:O2'	86:2:2057:OHX:N5	2.41	0.53
36:5:1081:U:HO2'	36:5:1082:U:C5'	2.21	0.53
32:E0:42:ARG:HB3	32:E0:42:ARG:HH11	1.74	0.53
36:5:3089:C:H2'	36:5:3090:U:O4'	2.08	0.53
27:D5:38:HIS:HA	27:D5:70:LYS:HD3	6.89	0.53
36:1:3035:A:OP2	86:1:4078:OHX:N4	2.41	0.53
36:1:743:C:N3	54:M8:141:ARG:NH1	2.57	0.53
50:M4:31:LYS:HG2	50:M4:51:ALA:HB1	1.90	0.53
47:M0:168:SER:HB2	57:N1:160:ILE:O	3.15	0.53
31:D9:47:ALA:HA	31:D9:50:ILE:HD12	3.56	0.53
69:O3:60:ARG:HD2	36:5:3275:U:C4	214.21	0.53
70:O4:8:ARG:NH2	70:O4:31:ARG:HD2	3.69	0.53
72:O6:33:ALA:HB1	72:O6:38:LYS:HD2	4.33	0.53
36:1:1821:U:C4	70:O4:67:LYS:HD2	2.44	0.53
36:1:2947:G:C2	40:L3:250:ALA:HB1	2.43	0.53
36:1:2101:C:O2'	36:1:2102:U:O5'	2.15	0.53
1:2:740:A:H2'	1:2:741:C:H5''	1.91	0.53
36:5:2225:U:H2'	36:5:2226:U:C6	2.43	0.53
67:O1:19:ARG:HD3	67:O1:35:GLU:CG	2.38	0.53
48:M1:90:GLN:HG2	48:M1:170:ASP:HB2	1.91	0.53
36:1:1752:A:OP2	86:1:4051:OHX:N5	2.41	0.53
86:6:2062:OHX:N2	86:6:2149:OHX:N6	2.56	0.53
68:O2:41:VAL:HG12	68:O2:46:PHE:CD2	2.83	0.53
1:2:1670:G:N7	86:2:2122:OHX:N5	2.56	0.53
68:O2:83:GLU:OE2	68:O2:111:ARG:NE	2.38	0.53
6:S4:160:VAL:HG13	6:S4:169:ILE:HG23	3.51	0.53
54:M8:115:VAL:O	54:M8:118:GLY:N	2.71	0.53
40:L3:380:MET:HE3	36:5:3369:G:C6	225.58	0.53
73:O7:60:GLY:O	86:O7:105:OHX:N6	2.42	0.53
25:D3:137:LYS:O	25:D3:139:LYS:N	4.64	0.53
6:S4:184:THR:C	6:S4:189:LEU:HD13	3.01	0.53
59:N3:24:ASN:CG	59:N3:32:ARG:HH12	11.11	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:224:C:O2	62:N6:103:LYS:NZ	2.42	0.53
36:5:501:A:H2'	36:5:502:U:C6	2.44	0.53
40:L3:116:ARG:NH2	40:L3:174:LYS:HD2	2.23	0.53
55:M9:106:LEU:HB3	55:M9:120:TYR:CE1	2.44	0.53
3:S1:36:SER:HA	3:S1:41:ARG:HE	2.83	0.53
3:S1:70:LEU:HD21	3:S1:79:HIS:CD2	2.43	0.53
21:C9:57:ARG:HH21	21:C9:80:TYR:HB3	1.74	0.53
1:6:1699:G:N1	1:6:1701:A:H5''	2.23	0.53
40:L3:286:GLY:HA3	40:L3:321:PHE:CZ	2.57	0.53
10:S8:36:THR:HG23	10:S8:96:LEU:O	2.14	0.53
3:S1:206:PRO:O	3:S1:207:LEU:HB2	2.07	0.53
86:5:4003:OHX:N4	86:5:4091:OHX:N2	2.57	0.53
2:S0:168:HIS:HB3	2:S0:203:PHE:CZ	2.44	0.53
36:1:1581:C:C2	36:1:1582:C:H5'	2.43	0.53
36:1:317:A:C2	36:1:318:A:C4	2.97	0.53
46:L9:163:GLN:HG2	46:L9:166:ARG:HD2	1.89	0.53
9:S7:173:TYR:CE1	9:S7:181:ILE:HD13	2.44	0.53
64:N8:94:ALA:HB1	64:N8:121:VAL:HA	1.90	0.53
46:L9:103:ILE:HG13	46:L9:136:PHE:CE2	2.44	0.53
1:2:1759:C:O2'	36:1:2263:C:H4'	2.09	0.53
36:1:2255:A:OP1	86:1:3934:OHX:N3	2.42	0.53
34:SR:214:ALA:HB2	34:SR:220:ILE:HA	1.90	0.53
42:L5:140:ARG:HD3	36:5:1080:A:OP1	226.50	0.53
18:C6:9:THR:HG21	18:C6:88:GLY:HA2	1.91	0.53
9:S7:142:TYR:HE1	24:D2:39:GLN:HE21	1.57	0.53
32:E0:37:ARG:NH1	1:6:478:A:OP1	440.76	0.53
49:M3:186:ARG:O	49:M3:190:LYS:HB3	2.09	0.53
54:M8:64:VAL:HG22	54:M8:96:PHE:CE2	2.43	0.53
1:2:1098:U:OP2	4:S2:168:ARG:NH2	2.41	0.53
10:S8:152:ILE:HD13	10:S8:157:GLU:OE1	2.08	0.53
15:C3:20:ARG:NE	1:6:862:A:OP1	356.83	0.53
20:C8:35:ILE:HB	20:C8:38:VAL:HG13	4.25	0.53
18:C6:44:LEU:O	18:C6:47:LYS:HB2	2.30	0.53
36:5:1171:G:N7	86:5:4004:OHX:N1	2.56	0.53
4:S2:158:THR:HG21	4:S2:221:THR:HG23	1.90	0.53
40:L3:252:ILE:HG12	40:L3:266:ARG:HH21	1.74	0.53
42:L5:270:LYS:HE2	42:L5:273:ARG:HA	8.97	0.53
6:S4:121:TYR:HA	6:S4:163:ASP:O	2.19	0.53
63:N7:135:ARG:NH2	36:5:2556:C:O2'	200.57	0.53
36:5:1565:G:N2	36:5:1566:A:H1'	2.24	0.53
67:O1:43:HIS:O	67:O1:44:MET:HE2	4.77	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:77:THR:HG23	40:L3:326:GLY:O	2.21	0.53
9:S7:154:LEU:HD11	9:S7:183:PHE:CD1	4.64	0.53
27:D5:54:VAL:HG13	27:D5:57:TYR:HD1	1.74	0.53
1:2:924:A:O2'	1:2:987:G:OP1	2.26	0.53
36:1:818:C:C2	36:1:920:A:H5'	2.44	0.53
36:1:1368:U:H5'	68:O2:43:ARG:NH1	2.23	0.53
36:5:1081:U:O2'	36:5:1082:U:O5'	2.23	0.53
43:L6:3:ALA:HB2	68:O2:77:ALA:HB2	1.95	0.53
36:1:671:U:OP2	54:M8:57:ILE:HD12	2.08	0.53
36:5:2877:G:OP1	86:5:4056:OHX:N4	2.41	0.53
36:1:520:U:O4	41:L4:349:THR:HG23	2.09	0.53
36:5:3035:A:OP2	86:5:4053:OHX:N5	2.42	0.53
36:5:2659:G:H4'	36:5:2751:G:O2'	2.09	0.53
69:O3:90:PRO:O	69:O3:91:ALA:HB3	2.09	0.53
36:1:1338:C:OP2	86:1:4200:OHX:N2	2.42	0.53
1:2:715:U:H3	1:2:723:G:H1	1.55	0.53
41:L4:311:HIS:NE2	41:L4:314:LYS:HA	2.61	0.53
36:1:980:A:H2'	36:1:981:U:N1	2.24	0.53
3:S1:181:LEU:HA	3:S1:184:LEU:HB3	1.91	0.53
40:L3:81:THR:O	40:L3:81:THR:HG22	2.20	0.53
11:S9:96:VAL:O	11:S9:99:LEU:HB2	2.30	0.53
18:C6:93:HIS:HA	18:C6:97:VAL:HG23	2.05	0.53
45:L8:33:ASN:O	45:L8:35:GLY:N	3.47	0.53
36:5:132:C:C2'	36:5:133:U:H5''	2.39	0.53
51:M5:168:GLY:O	51:M5:172:ARG:HB2	2.74	0.53
1:6:1518:C:OP2	86:6:2145:OHX:N1	2.42	0.53
44:L7:80:GLN:HG3	57:N1:136:ARG:CB	3.97	0.53
45:L8:101:THR:CG2	45:L8:104:GLU:H	2.22	0.53
12:C0:45:ALA:O	12:C0:49:LEU:HD23	2.39	0.53
1:2:1066:C:H4'	3:S1:149:GLN:NE2	2.23	0.53
5:S3:167:PHE:CE1	5:S3:192:PRO:HB3	2.99	0.53
1:2:1308:G:C2	1:2:1309:C:C2	2.97	0.53
36:5:2767:U:H2'	36:5:2768:U:C6	2.44	0.53
41:L4:219:LEU:HD13	41:L4:225:VAL:HG11	1.91	0.53
41:L4:6:VAL:HG21	41:L4:255:PHE:CZ	2.44	0.53
36:1:1532:C:H2'	36:1:1533:U:C6	2.44	0.53
1:6:848:C:H2'	1:6:849:C:C6	2.44	0.53
36:1:2771:U:O2'	36:1:2772:C:O4'	2.26	0.53
50:M4:121:MET:O	50:M4:125:LYS:HG2	2.09	0.53
11:S9:142:ASN:ND2	11:S9:143:ILE:HD12	5.70	0.53
1:2:1498:G:C2'	1:2:1499:G:H5'	2.38	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:901:G:H22	16:C4:54:GLU:CD	2.12	0.53
51:M5:38:ARG:HH11	51:M5:38:ARG:HG3	1.73	0.53
30:D8:42:ARG:NH1	30:D8:56:LEU:HD22	2.24	0.53
36:1:73:C:O2	49:M3:59:ARG:HD3	2.08	0.53
17:C5:42:ARG:NH2	1:6:1550:A:OP2	393.96	0.53
36:1:2128:C:OP1	86:1:3959:OHX:N4	2.42	0.53
2:S0:182:LEU:C	2:S0:184:LEU:H	2.12	0.53
7:S5:59:VAL:HG12	7:S5:60:ASP:H	2.04	0.53
36:1:1686:U:OP1	58:N2:42:LYS:NZ	2.41	0.53
24:D2:27:ILE:HB	24:D2:61:ILE:HB	4.51	0.53
19:C7:105:GLN:O	19:C7:109:LEU:N	2.55	0.53
1:2:1483:A:OP2	1:2:1521:G:N2	2.29	0.53
86:2:2043:OHX:N2	86:2:2098:OHX:N5	2.57	0.53
21:C9:30:VAL:HG12	21:C9:54:PHE:CD2	2.44	0.53
21:C9:33:TYR:HH	21:C9:99:SER:HG	1.57	0.53
15:C3:24:ALA:O	15:C3:27:LYS:HE2	6.46	0.53
36:1:1108:U:H2'	36:1:1109:U:H6	1.73	0.53
36:5:3057:U:O2'	36:5:3059:G:OP1	2.26	0.53
1:2:622:A:H4'	1:2:623:A:OP1	2.08	0.53
36:5:1614:C:H2'	36:5:1615:C:H6	1.73	0.53
4:S2:188:LEU:HD22	4:S2:193:VAL:HG21	1.91	0.53
1:6:356:G:OP2	86:6:2077:OHX:N5	2.42	0.53
10:S8:163:GLY:HA3	36:1:3354:U:H1'	1.91	0.53
53:M7:127:ARG:NH2	36:5:1508:C:OP1	138.27	0.53
7:S5:178:GLY:HA3	7:S5:209:TYR:CG	2.43	0.53
70:O4:38:LEU:H	70:O4:38:LEU:HD12	2.95	0.53
36:1:1352:A:H4'	36:1:1353:U:OP1	2.09	0.53
28:D6:90:GLU:CD	28:D6:90:GLU:H	4.24	0.53
18:C6:57:LEU:H	18:C6:57:LEU:HD12	4.09	0.53
71:O5:21:LEU:HD22	71:O5:25:LYS:HE2	1.90	0.53
54:M8:185:LYS:HD3	54:M8:186:VAL:HG23	1.90	0.53
22:D0:51:VAL:HG13	22:D0:94:GLU:HB2	1.91	0.53
16:C4:31:THR:OG1	16:C4:32:ASP:O	2.66	0.53
3:S1:129:THR:HB	3:S1:180:THR:HA	1.90	0.53
3:S1:27:LYS:NZ	3:S1:48:VAL:O	2.26	0.53
17:C5:68:PRO:HG2	17:C5:71:GLU:OE2	2.38	0.53
1:6:1458:G:H5''	1:6:1459:C:OP2	2.08	0.53
86:5:4003:OHX:N3	86:5:4091:OHX:N5	2.57	0.53
50:M4:24:LYS:NZ	50:M4:61:GLY:O	2.26	0.53
42:L5:40:HIS:CE1	57:N1:69:LYS:HA	2.72	0.53
25:D3:24:TRP:HE3	25:D3:30:LYS:HD2	1.74	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:N9:23:LYS:HB3	65:N9:24:PRO:CD	2.62	0.53
27:D5:53:GLU:O	27:D5:56:THR:N	5.76	0.53
1:2:74:U:O2'	1:2:75:U:OP2	2.23	0.53
36:1:517:G:H5''	36:1:517:G:H8	1.73	0.53
1:6:1151:A:O2'	1:6:1766:A:N7	2.36	0.53
14:C2:67:THR:C	14:C2:69:ALA:H	2.11	0.53
73:O7:24:ARG:NH1	36:5:361:A:OP1	120.73	0.53
36:5:3227:A:H2'	36:5:3228:C:H5'	1.91	0.53
34:SR:63:GLY:HA3	34:SR:90:ARG:NH1	3.30	0.53
86:5:4057:OHX:N5	86:5:4202:OHX:N2	2.56	0.53
33:E1:100:LEU:HD12	33:E1:102:VAL:HA	6.36	0.53
45:L8:168:ALA:HB3	72:O6:47:ILE:HD11	2.33	0.53
45:L8:109:LEU:O	45:L8:113:ALA:N	2.26	0.53
78:Q2:47:GLN:NE2	78:Q2:53:GLN:OE1	4.81	0.53
1:6:1336:A:OP1	86:6:2180:OHX:N1	2.42	0.53
36:1:148:G:OP2	51:M5:4:TYR:OH	2.22	0.53
4:S2:130:ILE:O	4:S2:134:LEU:HD22	2.09	0.53
19:C7:99:VAL:CB	19:C7:118:PRO:HB2	2.38	0.53
36:1:712:G:H2'	36:1:713:U:C6	2.44	0.53
43:L6:56:LYS:HG2	43:L6:58:LEU:HD23	3.91	0.52
20:C8:42:TYR:HE2	20:C8:73:MET:HG3	3.96	0.52
63:N7:4:PHE:CE2	66:O0:63:SER:HB3	3.00	0.52
11:S9:38:ASN:ND2	1:6:594:A:OP2	410.45	0.52
86:1:4036:OHX:N2	86:1:4048:OHX:N1	2.58	0.52
8:S6:153:VAL:O	8:S6:156:PHE:N	2.29	0.52
44:L7:189:ILE:HG23	44:L7:190:THR:HG23	1.91	0.52
1:2:280:U:O2'	1:2:281:G:OP2	2.21	0.52
41:L4:288:ARG:O	41:L4:291:ASN:N	3.45	0.52
30:D8:21:SER:HB3	30:D8:67:ARG:HB3	4.31	0.52
47:M0:16:PRO:HG3	47:M0:128:ARG:NH1	2.73	0.52
38:4:154:C:H2'	38:4:155:A:O4'	2.10	0.52
1:6:196:G:N3	1:6:197:A:H1'	2.24	0.52
27:D5:43:ASP:HB2	27:D5:46:LYS:HE3	2.29	0.52
36:5:252:U:H4'	36:5:253:A:H5''	1.91	0.52
36:1:2218:G:H2'	36:1:2219:A:C8	2.44	0.52
44:L7:233:GLU:CD	56:N0:35:VAL:HG22	2.68	0.52
63:N7:54:THR:OG1	63:N7:55:LYS:N	2.41	0.52
63:N7:54:THR:HG22	63:N7:57:HIS:CE1	2.99	0.52
70:O4:10:ARG:HD2	75:O9:4:GLN:NE2	2.99	0.52
1:2:603:U:H2'	1:2:604:A:C8	2.44	0.52
42:L5:119:TYR:OH	42:L5:139:PRO:O	2.82	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:64:TYR:HB3	12:C0:66:TYR:CE2	2.44	0.52
7:S5:145:ASP:OD2	7:S5:146:THR:N	2.34	0.52
36:1:437:G:H2'	36:1:438:A:C8	2.43	0.52
45:L8:172:LYS:HA	45:L8:172:LYS:HE3	4.58	0.52
1:2:28:A:H2'	1:2:29:U:C6	2.44	0.52
5:S3:134:CYS:N	5:S3:157:LEU:HD11	2.25	0.52
69:O3:65:ARG:NH1	36:5:431:U:OP1	208.57	0.52
50:M4:128:ARG:HG2	50:M4:132:LYS:HG3	1.90	0.52
36:1:284:A:OP2	78:Q2:41:ARG:NH1	2.38	0.52
37:7:2:G:O2'	37:7:23:A:N1	2.34	0.52
1:2:66:U:C5	8:S6:173:PRO:HG3	2.44	0.52
36:1:621:A:O2'	86:1:4168:OHX:N1	2.42	0.52
3:S1:61:LEU:HD23	3:S1:62:LYS:H	1.74	0.52
36:1:2503:G:H1'	36:1:2504:U:C5	2.38	0.52
12:C0:32:HIS:HD2	12:C0:33:GLU:H	5.03	0.52
1:2:1460:A:C8	17:C5:128:HIS:HB3	2.44	0.52
68:O2:26:HIS:O	68:O2:28:VAL:N	2.68	0.52
1:2:495:C:H3'	1:2:496:G:O4'	2.09	0.52
36:5:2569:A:H4'	36:5:2570:U:H5'	1.90	0.52
36:1:2435:G:N7	36:1:2593:A:H2'	2.24	0.52
86:5:4013:OHX:N6	86:5:4203:OHX:N2	2.56	0.52
86:5:4013:OHX:N3	86:5:4203:OHX:N1	2.57	0.52
36:5:990:U:O4	86:5:4187:OHX:N6	2.43	0.52
51:M5:23:GLN:HG2	51:M5:122:ASN:ND2	2.24	0.52
54:M8:96:PHE:CD2	54:M8:97:PRO:HD2	2.64	0.52
36:1:211:A:OP1	41:L4:220:ARG:NH1	2.41	0.52
36:5:3054:U:OP2	86:5:3908:OHX:N6	2.43	0.52
36:5:3052:G:N7	86:5:4175:OHX:N3	2.57	0.52
1:2:883:C:H2'	1:2:884:A:H8	1.74	0.52
36:1:1186:G:N3	56:N0:112:ALA:HB1	2.24	0.52
75:O9:50:ASN:O	75:O9:51:ILE:HB	2.13	0.52
40:L3:4:ARG:O	40:L3:6:TYR:N	2.41	0.52
34:SR:85:TRP:HA	34:SR:109:ASP:HA	1.91	0.52
36:1:838:G:O6	79:Q3:4:ARG:NH2	2.43	0.52
73:O7:4:GLY:O	73:O7:7:SER:N	2.98	0.52
70:O4:47:CYS:HB3	70:O4:84:CYS:SG	2.50	0.52
1:6:1244:A:H3'	1:6:1244:A:N3	2.24	0.52
46:L9:12:VAL:HG13	46:L9:16:VAL:HG22	2.18	0.52
8:S6:57:ASP:OD1	8:S6:72:ARG:NH1	3.15	0.52
8:S6:67:VAL:CG2	8:S6:99:GLY:HA2	2.64	0.52
39:L2:204:MET:CE	39:L2:209:HIS:HB2	2.39	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:88:LYS:HB3	2:S0:202:TYR:CZ	2.75	0.52
42:L5:86:TYR:CE1	42:L5:247:ILE:HA	2.54	0.52
30:D8:32:PHE:O	30:D8:34:GLU:N	3.87	0.52
1:2:1561:U:H2'	1:2:1562:G:H8	1.73	0.52
36:1:2532:U:H3	36:1:2547:A:H61	1.56	0.52
42:L5:148:ILE:HG23	42:L5:151:GLN:HB2	1.90	0.52
25:D3:24:TRP:CE3	25:D3:30:LYS:HD2	2.44	0.52
36:1:1719:G:H5''	55:M9:110:ARG:HH22	1.74	0.52
36:5:2960:C:H2'	36:5:2961:G:C8	2.44	0.52
27:D5:60:VAL:HG22	27:D5:101:TYR:HB2	1.91	0.52
26:D4:34:ASN:HD21	26:D4:62:THR:HG21	5.00	0.52
20:C8:91:ASP:O	20:C8:92:ILE:HB	2.16	0.52
1:6:737:A:H2'	1:6:738:G:H8	1.73	0.52
50:M4:72:LEU:HD22	50:M4:73:PRO:HD2	1.92	0.52
36:1:2973:G:N7	86:1:4102:OHX:N2	2.56	0.52
4:S2:161:LYS:HE3	4:S2:164:SER:H	5.66	0.52
1:2:936:G:N7	28:D6:15:ARG:NH1	2.57	0.52
36:1:1448:U:H5''	53:M7:66:SER:HB2	1.91	0.52
45:L8:122:LYS:C	45:L8:124:ASP:H	2.52	0.52
71:O5:62:GLN:O	71:O5:66:VAL:HG23	2.09	0.52
67:O1:23:VAL:O	67:O1:28:ARG:NH1	2.42	0.52
6:S4:45:ILE:HG13	6:S4:61:VAL:HG21	3.79	0.52
11:S9:88:GLU:O	11:S9:91:LYS:HD2	4.14	0.52
36:1:627:U:H2'	36:1:628:A:C8	2.44	0.52
5:S3:31:GLU:HA	5:S3:107:PHE:HE2	1.73	0.52
6:S4:132:GLY:N	6:S4:136:VAL:O	2.63	0.52
43:L6:78:ARG:HG3	43:L6:78:ARG:HH11	2.43	0.52
69:O3:75:HIS:HB3	69:O3:80:VAL:CG1	2.33	0.52
42:L5:270:LYS:HG3	42:L5:273:ARG:CB	5.67	0.52
10:S8:105:ASP:OD1	10:S8:108:PRO:HD3	2.10	0.52
1:6:1679:G:O6	86:6:2191:OHX:N3	2.43	0.52
42:L5:106:ALA:HB2	42:L5:166:ALA:HA	1.90	0.52
72:O6:54:GLU:HB3	72:O6:90:MET:HE3	1.91	0.52
9:S7:131:PHE:HB3	9:S7:132:PRO:HD3	1.92	0.52
42:L5:85:ARG:HH12	42:L5:254:LYS:H	4.77	0.52
62:N6:37:LYS:H	62:N6:37:LYS:CE	2.91	0.52
1:2:407:A:H2'	1:2:408:C:C6	2.45	0.52
38:4:155:A:H5'	45:L8:185:ARG:CZ	2.40	0.52
13:C1:29:LYS:O	13:C1:31:THR:N	2.42	0.52
1:2:533:U:H4'	26:D4:33:ALA:HB2	1.90	0.52
74:O8:26:LYS:NZ	74:O8:28:ASN:OD1	2.41	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:65:ILE:HD13	42:L5:74:VAL:HB	6.71	0.52
36:1:1481:A:OP1	36:1:1481:A:O4'	2.27	0.52
17:C5:79:HIS:O	17:C5:81:ARG:N	2.42	0.52
54:M8:165:ILE:HG23	54:M8:167:SER:H	4.65	0.52
7:S5:30:PRO:HB2	7:S5:33:VAL:HB	1.90	0.52
62:N6:32:SER:HA	62:N6:49:PRO:HA	2.09	0.52
1:2:1752:U:OP2	86:2:2057:OHX:N2	2.42	0.52
8:S6:131:LYS:O	60:N4:82:ILE:HA	2.09	0.52
55:M9:128:LYS:HE3	36:5:1721:U:O4	234.70	0.52
55:M9:96:ILE:O	55:M9:100:ARG:HG3	2.10	0.52
45:L8:179:ILE:HB	45:L8:222:PHE:CZ	3.49	0.52
36:1:1478:C:H2'	36:1:1479:U:C6	2.45	0.52
1:2:1610:G:OP1	7:S5:72:HIS:NE2	2.39	0.52
55:M9:20:ARG:HG2	36:5:1875:G:OP2	137.40	0.52
24:D2:104:LEU:HB2	24:D2:124:LYS:O	2.10	0.52
36:1:1148:G:N7	86:1:4170:OHX:N4	2.58	0.52
2:S0:179:ARG:HD3	2:S0:183:ARG:CZ	3.10	0.52
36:5:1024:G:N2	36:5:1026:A:OP2	2.43	0.52
48:M1:53:THR:HG23	48:M1:59:ILE:O	2.10	0.52
42:L5:146:LEU:HD13	42:L5:148:ILE:HD13	5.18	0.52
3:S1:138:PHE:CD2	3:S1:214:LYS:HB3	2.67	0.52
22:D0:109:GLU:HG3	22:D0:110:PRO:HD2	2.92	0.52
58:N2:43:VAL:C	58:N2:45:GLY:H	2.60	0.52
19:C7:22:PRO:HA	34:SR:216:LYS:NZ	2.25	0.52
36:1:1110:U:H2'	36:1:1111:U:C6	2.44	0.52
18:C6:28:LEU:HG	18:C6:64:ASP:OD2	2.10	0.52
36:5:1786:G:H2'	36:5:1787:A:C8	2.45	0.52
1:2:1472:C:OP1	7:S5:102:ARG:NH2	2.34	0.52
36:1:2617:U:H3'	65:N9:3:LYS:HD3	1.92	0.52
34:SR:20:VAL:HG11	34:SR:310:ILE:HG12	1.92	0.52
63:N7:95:VAL:HG21	63:N7:113:VAL:HG11	1.92	0.52
36:5:690:A:H4'	36:5:691:A:OP1	2.10	0.52
36:1:3:U:H2'	36:1:4:U:O4'	2.10	0.52
36:5:622:A:H2'	36:5:623:U:O4'	2.10	0.52
10:S8:11:ARG:HD3	10:S8:15:GLY:O	2.35	0.52
47:M0:3:ARG:HH22	36:5:2854:U:P	291.30	0.52
40:L3:76:VAL:HG11	40:L3:323:MET:HE3	1.92	0.52
6:S4:36:HIS:NE2	6:S4:88:ASP:OD2	2.42	0.52
7:S5:84:LYS:HG3	7:S5:92:ARG:CZ	3.89	0.52
56:N0:12:ARG:HG3	56:N0:13:ARG:O	4.61	0.52
1:6:1041:G:H2'	1:6:1042:G:C8	2.44	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:50:PRO:HD3	63:N7:68:ILE:HG12	2.09	0.52
1:2:25:C:O2	86:2:2083:OHX:N3	2.42	0.52
86:7:219:OHX:N3	86:7:227:OHX:N5	2.58	0.52
86:7:219:OHX:N4	86:7:227:OHX:N2	2.58	0.52
1:6:922:G:H2'	1:6:923:A:C8	2.44	0.52
86:1:3974:OHX:N6	86:1:4160:OHX:N2	2.57	0.52
46:L9:188:THR:HG22	46:L9:189:GLU:H	4.70	0.52
36:1:2273:G:N2	36:1:2311:G:H2'	2.24	0.52
36:1:407:A:O2'	36:1:1397:C:OP1	2.28	0.52
36:1:3364:C:H2'	36:1:3365:U:C6	2.45	0.52
19:C7:26:LEU:HD22	19:C7:59:LYS:HA	1.90	0.52
36:5:495:G:H2'	36:5:496:C:O4'	2.10	0.52
1:2:755:A:O2'	1:2:756:A:OP1	2.28	0.52
53:M7:33:ALA:HB1	53:M7:117:ILE:HG12	1.98	0.52
16:C4:89:THR:O	16:C4:128:LYS:HE2	2.47	0.52
50:M4:21:VAL:HB	50:M4:63:VAL:HG13	1.91	0.52
1:2:607:G:H5'	1:2:613:G:N2	2.24	0.52
40:L3:320:ASP:N	40:L3:320:ASP:OD2	2.41	0.52
45:L8:50:VAL:HG22	45:L8:52:TRP:CE2	2.53	0.52
78:Q2:77:CYS:O	78:Q2:78:LYS:HD3	2.39	0.52
72:O6:25:LYS:O	72:O6:28:TYR:HB2	2.10	0.52
47:M0:61:SER:HB2	47:M0:63:GLU:HG2	2.15	0.52
1:6:475:A:H2'	1:6:476:U:O4'	2.10	0.52
2:S0:33:GLN:HG3	2:S0:149:LEU:O	7.59	0.52
36:1:2444:C:H3'	36:1:2445:A:H5''	1.91	0.52
1:2:1537:C:O2'	1:2:1540:G:O6	2.23	0.52
3:S1:141:ALA:HA	3:S1:209:ASN:O	5.47	0.52
1:6:1458:G:C2	1:6:1459:C:C4	2.98	0.52
36:1:2278:C:OP1	86:1:3959:OHX:N3	2.43	0.52
2:S0:185:ARG:H	23:D1:45:ALA:H	2.15	0.52
4:S2:230:TRP:CD2	24:D2:68:ARG:HD3	2.45	0.52
2:S0:80:THR:O	2:S0:82:GLY:N	3.07	0.52
29:D7:59:CYS:O	29:D7:61:THR:N	2.79	0.52
40:L3:77:THR:HG23	40:L3:327:CYS:HA	1.92	0.52
37:3:3:U:H2'	37:3:4:U:C6	2.44	0.52
1:6:1405:G:H2'	1:6:1406:A:H8	1.73	0.52
27:D5:41:ILE:HG13	27:D5:42:LEU:HG	1.92	0.52
1:2:637:C:OP1	24:D2:32:LYS:HG3	2.10	0.52
27:D5:47:TYR:CE2	27:D5:51:LEU:HD11	3.01	0.52
2:S0:193:GLN:O	2:S0:195:TRP:N	2.43	0.52
45:L8:74:THR:HB	45:L8:230:LYS:HZ1	1.74	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:C9:86:ARG:HG3	21:C9:86:ARG:HH11	1.75	0.52
36:1:2424:A:H8	36:1:2424:A:O5'	1.92	0.52
79:Q3:38:ASP:OD1	79:Q3:45:LYS:HB3	2.09	0.52
14:C2:60:VAL:HG23	14:C2:87:PRO:HG2	2.15	0.52
42:L5:15:ARG:CZ	36:5:1003:A:H1'	290.25	0.52
42:L5:182:GLY:N	42:L5:194:LEU:HD12	4.73	0.52
36:1:1260:A:H1'	36:1:1280:C:H1'	1.92	0.52
36:5:770:G:N7	86:5:4098:OHX:N6	2.57	0.52
86:1:4036:OHX:N2	86:1:4048:OHX:N5	2.58	0.52
36:5:2209:U:H4'	36:5:2210:G:OP1	2.09	0.52
1:2:542:A:H5''	1:2:544:A:C8	2.44	0.52
36:1:561:C:H2'	36:1:562:C:C6	2.45	0.52
1:2:1235:C:O2	33:E1:138:ARG:NE	2.43	0.52
66:O0:34:LEU:HD23	66:O0:59:TYR:HB3	1.91	0.52
75:O9:27:ILE:HD13	38:8:52:A:N6	78.23	0.52
1:2:1101:G:O3'	24:D2:76:SER:HB2	2.10	0.52
17:C5:128:HIS:O	17:C5:130:ARG:HG2	2.10	0.52
72:O6:74:LYS:HG2	72:O6:74:LYS:O	2.09	0.52
79:Q3:73:THR:HG22	79:Q3:75:ALA:N	3.75	0.52
43:L6:175:LYS:O	50:M4:117:ARG:NH2	2.43	0.52
8:S6:116:LYS:HD2	8:S6:125:THR:HG21	1.90	0.52
36:5:726:G:H5'	36:5:726:G:H8	1.75	0.52
1:2:1483:A:H2'	1:2:1484:G:C8	2.45	0.52
31:D9:33:LYS:O	31:D9:36:LEU:HD23	2.08	0.52
1:2:480:G:N2	1:2:509:G:H1'	2.25	0.52
26:D4:10:ARG:HB3	1:6:778:G:O6	428.58	0.52
40:L3:129:ALA:O	36:5:3150:A:H5'	211.64	0.52
20:C8:88:ARG:NH1	20:C8:112:ASP:OD1	2.42	0.52
49:M3:144:THR:O	49:M3:146:PRO:HD3	2.89	0.52
38:4:104:A:C8	38:4:105:A:C8	2.98	0.52
1:6:595:G:H2'	1:6:596:C:C6	2.45	0.52
50:M4:134:ALA:O	50:M4:136:ALA:N	2.65	0.52
36:1:309:U:OP1	72:O6:84:LYS:NZ	2.25	0.52
42:L5:164:LYS:HG2	42:L5:180:PHE:CZ	2.45	0.52
57:N1:120:LYS:C	57:N1:122:GLN:H	2.46	0.52
16:C4:111:ARG:NH2	28:D6:57:SER:O	2.43	0.52
5:S3:178:ARG:H	5:S3:178:ARG:HE	1.58	0.52
1:2:1175:U:H3	1:2:1464:G:H1	1.58	0.52
11:S9:38:ASN:HB2	11:S9:41:GLU:HG3	1.91	0.52
47:M0:45:GLU:HG2	47:M0:46:PHE:CE1	2.45	0.52
78:Q2:55:LYS:HD2	36:5:92:G:O2'	175.18	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D6:5:ARG:NH1	1:6:1796:C:OP2	341.22	0.52
36:5:1765:U:H2'	36:5:1766:G:O4'	2.10	0.52
1:6:542:A:H1'	1:6:543:C:P	2.50	0.52
1:2:273:G:H1	1:2:283:U:H3	1.57	0.52
28:D6:62:TYR:CG	28:D6:63:ALA:N	2.90	0.52
36:1:2544:U:H2'	36:1:2545:C:H6	1.75	0.52
39:L2:206:PRO:HG3	39:L2:213:GLY:HA2	3.68	0.52
86:5:4068:OHX:N1	86:5:4145:OHX:N2	2.58	0.52
12:C0:14:TYR:CE2	12:C0:21:VAL:HG22	2.45	0.52
36:1:860:G:OP1	79:Q3:17:ARG:NH1	2.43	0.52
54:M8:150:VAL:HA	54:M8:153:PHE:CD1	2.44	0.52
36:1:239:G:O6	86:1:4038:OHX:N3	2.43	0.52
36:1:22:G:H1'	38:4:104:A:N3	2.25	0.52
44:L7:110:ARG:NH2	54:M8:3:ILE:HD11	2.24	0.52
1:6:1492:A:HO2'	1:6:1493:A:H8	1.55	0.52
40:L3:30:LYS:O	86:5:4108:OHX:N1	250.18	0.52
73:O7:31:LYS:O	73:O7:33:THR:HG22	2.48	0.52
62:N6:103:LYS:NZ	36:5:217:U:O2	78.43	0.52
78:Q2:43:TYR:CZ	78:Q2:47:GLN:NE2	2.77	0.52
1:6:315:A:O2'	86:6:2162:OHX:N1	2.43	0.52
62:N6:33:ALA:HB2	62:N6:101:PRO:HB2	2.77	0.52
42:L5:242:SER:O	42:L5:245:GLU:HB2	2.61	0.52
36:5:2717:U:OP1	86:5:4070:OHX:N3	2.43	0.52
35:SM:50:ASN:N	35:SM:50:ASN:OD1	3.88	0.52
36:5:2971:A:N3	36:5:2971:A:H3'	2.25	0.52
36:1:3116:G:N2	36:1:3116:G:OP1	2.43	0.52
36:5:2897:A:H2'	36:5:2899:C:C5'	2.40	0.52
68:O2:55:ILE:HB	36:5:947:G:H5''	187.81	0.52
11:S9:110:GLN:HA	11:S9:110:GLN:HE21	3.04	0.52
86:1:4036:OHX:N6	86:1:4048:OHX:N3	2.58	0.52
18:C6:94:GLN:HG3	18:C6:95:LYS:N	2.52	0.52
53:M7:128:ARG:HD2	53:M7:136:ILE:HG21	1.91	0.52
1:6:228:G:H1	1:6:236:A:H61	1.58	0.52
1:6:1230:A:H2	1:6:1255:G:N2	2.06	0.52
68:O2:33:ARG:NH1	36:5:944:C:H4'	161.61	0.52
1:2:158:U:O2'	1:2:159:U:H3'	2.10	0.52
36:1:1240:A:H3'	36:1:1241:U:H5'	1.92	0.52
50:M4:24:LYS:HG2	50:M4:62:GLN:O	2.10	0.52
19:C7:106:THR:O	19:C7:110:VAL:HG23	2.10	0.52
7:S5:162:VAL:HG22	7:S5:167:ARG:HG2	2.74	0.52
44:L7:143:THR:HG21	44:L7:237:ASN:HB3	1.91	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:89:TYR:HB3	48:M1:169:ALA:CB	2.39	0.52
59:N3:120:LYS:H	59:N3:137:VAL:HG23	1.74	0.52
6:S4:179:LYS:N	6:S4:194:THR:O	2.43	0.52
1:2:558:U:H2'	1:2:558:U:O2	2.09	0.52
71:O5:13:SER:O	71:O5:15:GLU:N	3.18	0.52
36:1:2273:G:N7	86:1:4143:OHX:N5	2.58	0.52
3:S1:171:ILE:HA	3:S1:174:LYS:HE3	1.91	0.52
25:D3:51:GLY:HA2	25:D3:77:ILE:HG13	1.91	0.52
1:6:1143:A:O2'	1:6:1144:U:H5'	2.09	0.52
36:5:1253:U:O2	36:5:1263:A:H5'	2.10	0.52
63:N7:111:LYS:HE2	36:5:1629:U:O4	206.15	0.52
24:D2:41:MET:HG2	24:D2:129:VAL:HG21	2.90	0.52
1:2:1171:A:H2'	1:2:1172:G:C8	2.45	0.52
54:M8:58:ASN:HB3	54:M8:144:ARG:NH2	2.57	0.52
13:C1:17:PRO:HG3	13:C1:63:LEU:HD11	1.91	0.52
56:N0:80:ARG:HB3	56:N0:122:HIS:HB2	1.92	0.52
48:M1:148:VAL:HG12	48:M1:153:LYS:HG3	1.92	0.52
1:2:919:A:H5'	16:C4:18:ARG:HH12	1.73	0.52
6:S4:212:ASP:C	6:S4:214:LEU:H	2.42	0.52
54:M8:178:ARG:HE	54:M8:186:VAL:HG22	3.19	0.51
10:S8:8:ARG:NH2	10:S8:22:ARG:HE	7.07	0.51
47:M0:3:ARG:HH21	36:5:2853:A:H5''	293.20	0.51
6:S4:240:LYS:HE2	6:S4:240:LYS:N	2.19	0.51
1:6:894:U:H2'	1:6:895:G:C8	2.45	0.51
10:S8:39:GLY:O	10:S8:59:ARG:HB3	2.10	0.51
3:S1:184:LEU:HA	3:S1:187:LYS:HB2	1.92	0.51
42:L5:107:ARG:HH21	42:L5:110:LEU:HD23	1.74	0.51
36:1:1148:G:O6	86:1:4170:OHX:N6	2.43	0.51
1:2:1460:A:OP2	35:SM:68:ARG:HD3	2.09	0.51
1:2:1291:G:H2'	1:2:1292:G:H8	1.75	0.51
39:L2:80:GLU:HG2	79:Q3:76:ALA:HB1	2.78	0.51
52:M6:56:ASP:O	52:M6:59:ARG:HG3	2.91	0.51
36:1:2680:A:C2	48:M1:57:PHE:HB3	2.45	0.51
1:2:328:A:N3	10:S8:86:SER:OG	2.33	0.51
1:6:76:A:H3'	86:6:2194:OHX:N1	2.25	0.51
50:M4:32:LEU:HD11	50:M4:94:TRP:CG	2.45	0.51
5:S3:202:LEU:O	5:S3:204:ASP:N	3.01	0.51
8:S6:20:ASP:OD2	8:S6:22:HIS:HB2	5.57	0.51
52:M6:18:ARG:O	52:M6:22:VAL:HG13	2.10	0.51
38:4:16:G:O6	86:4:224:OHX:N3	2.43	0.51
46:L9:86:TYR:CE2	46:L9:151:VAL:HG22	2.46	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1355:A:H4'	36:5:1356:U:O5'	2.09	0.51
36:1:1523:U:OP2	36:1:1604:G:O2'	2.28	0.51
51:M5:27:VAL:HB	51:M5:122:ASN:ND2	2.25	0.51
36:5:145:G:O6	86:5:4020:OHX:N5	2.44	0.51
1:2:1783:C:H2'	1:2:1784:C:H6	1.74	0.51
45:L8:68:ARG:O	45:L8:69:LEU:HB2	4.54	0.51
36:5:3305:A:H2'	36:5:3306:U:C6	2.45	0.51
40:L3:290:ASP:OD2	40:L3:292:ALA:N	4.70	0.51
40:L3:7:GLU:HG2	36:5:2915:U:C5	258.18	0.51
1:2:422:G:OP1	86:2:2041:OHX:N6	2.43	0.51
22:D0:55:PRO:HA	22:D0:91:ILE:HG12	1.92	0.51
5:S3:124:ARG:HH21	35:SM:128:ALA:HB2	9.55	0.51
36:1:1273:A:O2'	36:1:1274:A:OP1	2.26	0.51
45:L8:24:ASN:N	45:L8:25:PRO:HD2	2.25	0.51
36:1:3272:C:O2	43:L6:80:ASN:HB2	2.09	0.51
47:M0:72:ALA:O	47:M0:76:MET:HG3	2.10	0.51
50:M4:121:MET:HE1	36:5:3214:U:H2'	275.58	0.51
40:L3:21:ARG:HG2	40:L3:269:GLN:HG2	1.92	0.51
20:C8:113:LEU:HD21	20:C8:127:HIS:CE1	2.45	0.51
3:S1:172:LEU:O	3:S1:176:VAL:HG23	2.10	0.51
1:2:1291:G:H22	1:2:1324:G:N2	2.08	0.51
52:M6:59:ARG:HD3	36:5:1307:G:OP1	255.81	0.51
56:N0:23:LYS:O	56:N0:24:LEU:HB2	2.08	0.51
2:S0:92:HIS:HB3	2:S0:182:LEU:HD11	2.52	0.51
24:D2:31:SER:O	24:D2:34:ILE:N	2.90	0.51
63:N7:64:LYS:O	63:N7:67:LYS:HG2	2.10	0.51
36:5:2964:G:N7	86:5:3985:OHX:N6	2.58	0.51
74:O8:61:LYS:O	74:O8:65:LEU:HB2	2.11	0.51
45:L8:45:ASN:HD21	45:L8:47:SER:HB3	1.75	0.51
1:6:74:U:H3'	1:6:75:U:H3'	1.91	0.51
3:S1:105:PHE:H	3:S1:214:LYS:HZ3	1.56	0.51
8:S6:9:VAL:HG12	8:S6:10:ASN:OD1	2.25	0.51
13:C1:83:THR:HG21	1:6:325:G:H4'	289.75	0.51
45:L8:179:ILE:HB	45:L8:222:PHE:HZ	3.28	0.51
36:1:3351:U:O2'	36:1:3352:U:OP1	2.26	0.51
28:D6:11:ASN:HB3	1:6:934:C:H6	332.43	0.51
78:Q2:100:LYS:HE2	36:5:2657:A:OP2	259.71	0.51
12:C0:88:PRO:O	12:C0:90:THR:N	2.42	0.51
36:1:3004:C:O2'	36:1:3005:A:H5'	2.10	0.51
1:2:1681:A:H2'	1:2:1682:U:H5'	1.91	0.51
36:5:2372:A:H4'	36:5:2373:A:OP2	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:33:ALA:O	1:6:121:U:O2'	353.60	0.51
20:C8:8:GLN:C	20:C8:10:SER:H	2.47	0.51
40:L3:236:LYS:HG3	40:L3:237:LYS:N	2.24	0.51
72:O6:26:ILE:HD13	36:5:155:G:H1'	87.66	0.51
44:L7:160:ARG:HG3	44:L7:203:TRP:CD2	2.94	0.51
18:C6:114:ARG:O	18:C6:115:THR:HB	3.90	0.51
26:D4:15:ASN:OD1	26:D4:17:LEU:HB2	4.57	0.51
6:S4:54:TYR:OH	6:S4:97:GLU:OE2	2.16	0.51
36:1:1565:G:N2	36:1:1574:C:C2	2.78	0.51
48:M1:92:ARG:NH2	48:M1:94:ARG:HD2	7.02	0.51
12:C0:1:MET:HG2	12:C0:2:LEU:H	1.75	0.51
20:C8:120:ARG:HD3	35:SM:61:ILE:HG21	3.64	0.51
8:S6:102:VAL:HG13	8:S6:106:LEU:HD12	1.91	0.51
46:L9:67:ALA:HA	46:L9:70:THR:HG23	1.91	0.51
63:N7:16:GLY:O	63:N7:18:TYR:N	2.58	0.51
46:L9:90:MET:O	46:L9:143:GLU:O	4.72	0.51
16:C4:102:LEU:HD22	16:C4:105:LEU:HD11	1.91	0.51
36:5:409:A:OP2	86:5:4104:OHX:N5	2.43	0.51
86:5:4068:OHX:N5	86:5:4145:OHX:N2	2.58	0.51
86:7:219:OHX:N4	86:7:227:OHX:N6	2.59	0.51
42:L5:63:GLN:HB3	42:L5:65:ILE:HD11	3.18	0.51
37:7:91:G:H2'	37:7:92:A:H8	1.76	0.51
75:O9:4:GLN:HG2	36:5:1588:A:C2	126.57	0.51
38:4:67:U:H5''	73:O7:84:SER:O	2.10	0.51
61:N5:100:LYS:HE3	61:N5:106:ASP:HA	1.91	0.51
41:L4:35:VAL:HG21	41:L4:244:LEU:HD21	1.91	0.51
7:S5:105:GLY:O	1:6:1609:U:O2'	376.81	0.51
36:5:1487:G:H1	36:5:1855:U:H3	1.58	0.51
4:S2:67:GLN:HA	4:S2:70:ASP:HB2	1.92	0.51
16:C4:20:TYR:HB3	16:C4:27:PHE:HB2	1.91	0.51
36:5:270:U:O2'	36:5:318:A:H1'	2.11	0.51
37:3:22:A:H2'	37:3:23:A:C8	2.46	0.51
1:2:1796:C:C6	28:D6:5:ARG:HG2	2.45	0.51
41:L4:3:ARG:O	41:L4:5:GLN:NE2	2.44	0.51
36:1:1240:A:H2	36:1:1248:C:H41	1.56	0.51
1:6:485:A:N6	1:6:486:G:N3	2.58	0.51
40:L3:250:ALA:HB1	36:5:2947:G:C2	220.14	0.51
56:N0:155:ARG:NH2	56:N0:171:PHE:O	2.44	0.51
1:2:1657:U:C4	86:2:2088:OHX:N2	2.79	0.51
1:2:74:U:H1'	1:2:75:U:H5''	1.93	0.51
15:C3:55:ARG:HD3	29:D7:47:PHE:CD1	2.95	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D4:10:ARG:NH1	1:6:778:G:O6	430.34	0.51
71:O5:82:ALA:O	38:8:38:U:C5	65.85	0.51
9:S7:126:LEU:HD22	9:S7:173:TYR:CE2	2.88	0.51
86:1:3974:OHX:N5	86:1:4160:OHX:N2	2.58	0.51
46:L9:77:ASN:HB3	46:L9:151:VAL:HG21	1.93	0.51
36:5:1348:U:H5''	36:5:1355:A:H61	1.75	0.51
59:N3:24:ASN:OD1	59:N3:32:ARG:NH1	9.56	0.51
14:C2:88:LEU:O	14:C2:89:ILE:HB	2.36	0.51
36:1:2798:C:H5''	36:1:2799:A:OP1	2.09	0.51
61:N5:92:LYS:HD2	61:N5:112:THR:HG23	1.92	0.51
36:1:1605:A:O2'	36:1:1607:U:OP2	2.16	0.51
25:D3:88:PRO:O	25:D3:89:ASN:HB2	2.10	0.51
17:C5:87:PRO:HA	17:C5:90:ILE:HG13	1.91	0.51
36:1:799:G:O6	86:1:3983:OHX:N5	2.43	0.51
42:L5:115:LEU:HD22	42:L5:115:LEU:H	1.76	0.51
1:6:782:U:H5''	1:6:782:U:O2	2.10	0.51
36:1:2373:A:H3'	36:1:2373:A:OP2	2.10	0.51
35:SM:134:ASP:C	35:SM:134:ASP:OD1	2.48	0.51
36:1:83:U:OP1	86:1:4188:OHX:N3	2.43	0.51
40:L3:185:GLY:O	40:L3:191:LYS:HE2	2.51	0.51
86:5:3976:OHX:N1	86:5:4245:OHX:N1	2.57	0.51
10:S8:34:ALA:HB2	10:S8:56:ARG:HG3	1.92	0.51
40:L3:166:ILE:O	40:L3:169:THR:HG22	2.85	0.51
3:S1:131:ASP:N	3:S1:131:ASP:OD1	4.31	0.51
21:C9:105:LEU:HD13	21:C9:122:ARG:NE	2.26	0.51
1:6:1230:A:C8	1:6:1258:U:C4	2.98	0.51
24:D2:23:ARG:HD2	24:D2:65:LEU:O	2.10	0.51
35:SM:65:THR:OG1	35:SM:66:ALA:N	3.76	0.51
22:D0:106:ILE:C	22:D0:108:ILE:H	2.13	0.51
9:S7:94:ALA:HB3	9:S7:96:ARG:NH1	2.26	0.51
45:L8:101:THR:OG1	45:L8:104:GLU:HG3	5.37	0.51
1:2:1226:A:HO2'	1:2:1227:A:P	2.32	0.51
36:5:3245:A:H2	36:5:3246:G:N1	2.08	0.51
27:D5:55:PRO:HG3	27:D5:88:ILE:HD12	7.40	0.51
1:2:796:A:OP2	86:2:2056:OHX:N6	2.44	0.51
1:2:1138:A:H2'	1:2:1139:A:C8	2.46	0.51
36:5:3255:U:H2'	36:5:3256:G:C8	2.45	0.51
1:6:694:U:H3'	1:6:695:U:O2	2.10	0.51
1:2:1738:U:H2'	1:2:1739:C:C6	2.46	0.51
54:M8:86:THR:HG22	54:M8:105:ARG:HB2	2.03	0.51
36:5:3041:U:H2'	36:5:3042:U:C6	2.45	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:263:GLU:O	42:L5:266:ALA:HB3	2.10	0.51
1:6:1354:G:H5'	1:6:1355:C:OP2	2.10	0.51
1:2:1320:U:O2	1:2:1322:A:H5'	2.11	0.51
66:O0:75:ASN:HA	66:O0:86:ARG:HB2	3.21	0.51
1:2:1057:U:H1'	1:2:1058:U:H2'	1.93	0.51
26:D4:91:LEU:HA	26:D4:96:LEU:HD12	1.92	0.51
36:5:112:U:O2'	36:5:113:C:OP2	2.24	0.51
8:S6:3:LEU:HD22	8:S6:109:LEU:HB2	1.92	0.51
36:1:3078:U:H4'	36:1:3079:U:O5'	2.11	0.51
36:1:3165:A:H2'	36:1:3166:C:C6	2.46	0.51
33:E1:135:HIS:HB2	33:E1:138:ARG:HB2	1.93	0.51
11:S9:92:LYS:O	11:S9:93:LEU:HD23	2.09	0.51
1:2:142:G:N2	1:2:173:A:H2	2.06	0.51
5:S3:64:ARG:NH1	5:S3:68:GLU:OE1	3.18	0.51
7:S5:87:CYS:HB3	7:S5:92:ARG:HD2	2.81	0.51
30:D8:38:ARG:NH1	30:D8:40:ILE:HD11	2.25	0.51
41:L4:337:GLU:O	41:L4:339:LEU:HD23	2.11	0.51
86:5:4068:OHX:N3	86:5:4145:OHX:N4	2.58	0.51
14:C2:119:SER:OG	14:C2:120:VAL:N	2.44	0.51
64:N8:76:ASP:HB2	64:N8:115:LYS:O	5.16	0.51
1:6:647:G:H1	1:6:687:G:H1	1.59	0.51
49:M3:94:GLY:HA3	49:M3:119:TYR:OH	3.20	0.51
18:C6:22:VAL:HG22	18:C6:65:ILE:HD13	1.91	0.51
38:8:6:U:H2'	38:8:7:U:H6	1.74	0.51
1:6:86:A:OP2	86:6:2190:OHX:N1	2.43	0.51
16:C4:103:ARG:HH12	28:D6:48:ALA:CB	3.46	0.51
1:2:393:C:H2'	1:2:394:C:C6	2.45	0.51
24:D2:89:TRP:O	24:D2:93:LEU:HD23	2.67	0.51
36:5:1192:C:C5	86:5:4092:OHX:N6	2.79	0.51
40:L3:123:TYR:CD1	36:5:3315:G:H2'	181.72	0.51
14:C2:33:ARG:O	14:C2:37:VAL:HG23	2.11	0.51
6:S4:242:LYS:HE3	6:S4:242:LYS:N	2.26	0.51
40:L3:339:ARG:HG2	40:L3:340:LYS:O	2.26	0.51
52:M6:102:LEU:HD12	52:M6:103:LYS:H	1.76	0.51
86:5:3981:OHX:N6	86:5:4201:OHX:N3	2.58	0.51
1:6:1600:A:H4'	1:6:1601:G:OP1	2.11	0.51
55:M9:101:VAL:HG13	55:M9:104:ARG:HH12	1.76	0.51
25:D3:97:ASP:O	25:D3:100:ASP:HB2	2.47	0.51
33:E1:146:SER:HB3	1:6:1234:A:H4'	434.53	0.51
46:L9:13:PRO:HG2	46:L9:16:VAL:HG11	2.87	0.51
17:C5:128:HIS:HA	1:6:1180:C:O2'	334.73	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:3165:A:N6	36:5:3285:C:H42	2.07	0.51
36:1:3192:U:O4	86:1:4132:OHX:N1	2.44	0.51
5:S3:195:SER:OG	5:S3:200:LYS:HA	4.10	0.51
5:S3:74:GLN:HE22	5:S3:81:PRO:HG3	1.75	0.51
36:5:731:U:H2'	36:5:732:C:C6	2.46	0.51
36:1:3295:A:OP2	40:L3:126:LYS:N	2.40	0.51
45:L8:41:GLN:HG3	45:L8:44:ARG:HH12	1.74	0.51
34:SR:74:THR:HG23	34:SR:79:TYR:HB2	1.92	0.51
46:L9:87:LYS:NZ	46:L9:191:LEU:HD21	16.67	0.51
54:M8:34:THR:HG22	54:M8:49:LEU:HD21	1.92	0.51
57:N1:122:GLN:HB3	57:N1:124:VAL:HG23	6.88	0.51
52:M6:84:LEU:HD13	52:M6:102:LEU:HD21	1.93	0.51
12:C0:27:PHE:HB3	12:C0:40:LEU:HD23	1.93	0.51
61:N5:137:ASN:OD1	61:N5:137:ASN:N	2.31	0.51
10:S8:81:VAL:HA	10:S8:102:VAL:HG12	2.78	0.51
57:N1:42:ILE:HG12	57:N1:91:LEU:CD1	3.21	0.51
4:S2:98:PHE:CZ	35:SM:116:GLU:HG3	2.46	0.51
36:5:701:G:H2'	36:5:702:C:C6	2.45	0.51
36:5:2537:U:HO2'	36:5:2538:U:C4'	2.24	0.51
1:2:1532:U:O3'	20:C8:27:LYS:NZ	2.44	0.51
36:1:3215:A:H8	50:M4:121:MET:HE2	1.75	0.51
28:D6:88:SER:O	28:D6:92:ARG:HG3	2.60	0.51
46:L9:22:SER:HB2	46:L9:39:LYS:NZ	2.81	0.51
5:S3:162:GLN:O	5:S3:164:VAL:N	2.82	0.51
51:M5:136:ASP:OD2	51:M5:138:GLN:HG2	2.31	0.51
1:2:1498:G:H5''	21:C9:72:GLY:HA3	1.93	0.51
42:L5:58:LYS:HD2	42:L5:93:THR:OG1	2.11	0.51
20:C8:139:LYS:HE2	1:6:1459:C:N4	351.25	0.51
67:O1:10:ARG:HH12	67:O1:44:MET:HG2	5.68	0.51
54:M8:65:SER:HA	54:M8:93:ILE:HD13	1.92	0.51
36:1:114:A:N1	36:1:266:A:O2'	2.43	0.51
1:6:1228:G:H2'	1:6:1228:G:N3	2.25	0.51
38:4:79:A:H5''	71:O5:43:LYS:HZ2	1.73	0.51
14:C2:62:LEU:HB3	14:C2:75:VAL:HG11	1.93	0.51
49:M3:166:ALA:N	64:N8:135:GLU:OE1	3.67	0.51
64:N8:25:HIS:HD2	64:N8:26:ARG:O	2.37	0.51
61:N5:137:ASN:HB3	61:N5:142:ILE:HG13	2.92	0.51
47:M0:48:LEU:HB2	47:M0:142:ASP:OD1	2.98	0.51
36:5:3131:U:H2'	36:5:3132:C:C6	2.46	0.51
36:1:1350:A:OP1	41:L4:287:THR:HG21	2.11	0.51
72:O6:79:SER:OG	72:O6:82:ARG:HG3	4.96	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:191:U:H2'	36:5:192:C:C6	2.45	0.51
36:5:2442:G:H22	36:5:2506:U:H3	1.58	0.51
50:M4:19:ARG:NH2	50:M4:66:THR:O	2.43	0.51
49:M3:87:ALA:O	49:M3:91:ARG:HG3	2.11	0.51
40:L3:5:LYS:HG3	40:L3:6:TYR:CD1	2.46	0.51
47:M0:47:PRO:HB3	47:M0:171:TRP:CZ2	2.51	0.51
36:1:3215:A:C8	50:M4:121:MET:HE2	2.46	0.51
18:C6:79:TYR:HA	18:C6:82:ARG:HD3	1.93	0.51
47:M0:77:THR:O	47:M0:81:GLY:N	2.33	0.51
74:O8:14:LEU:O	74:O8:17:ARG:HB2	2.11	0.51
1:2:1253:U:H4'	33:E1:143:LYS:N	2.26	0.51
6:S4:163:ASP:O	6:S4:164:LEU:HB2	2.09	0.51
3:S1:176:VAL:O	3:S1:178:GLY:N	2.44	0.51
16:C4:54:GLU:CD	1:6:901:G:H22	282.52	0.51
2:S0:184:LEU:C	2:S0:186:GLY:H	2.12	0.51
1:2:1274:C:C5	35:SM:95:SER:HA	2.45	0.51
36:1:439:C:H5'	36:1:440:A:N7	2.25	0.51
30:D8:32:PHE:CE2	30:D8:38:ARG:HB3	2.44	0.51
7:S5:144:GLU:OE1	7:S5:225:ARG:NH2	2.44	0.51
36:5:3330:A:C5'	36:5:3330:A:H8	2.23	0.51
36:1:25:U:O4	86:1:3872:OHX:N4	2.43	0.51
1:2:387:A:H5''	1:2:389:G:OP2	2.10	0.51
30:D8:12:VAL:HA	30:D8:30:VAL:HG12	1.92	0.51
4:S2:40:LYS:HA	4:S2:43:ARG:HH12	1.74	0.51
36:1:2513:U:H2'	36:1:2592:G:H1	1.76	0.51
86:5:4013:OHX:N3	86:5:4203:OHX:N5	2.59	0.51
36:1:3316:A:H2	36:1:3389:U:H5'	1.75	0.51
41:L4:6:VAL:HG21	41:L4:255:PHE:CE1	2.45	0.51
16:C4:112:ILE:HB	28:D6:57:SER:OG	2.11	0.51
35:SM:134:ASP:OD1	35:SM:135:ALA:N	2.44	0.51
36:5:1192:C:H41	36:5:1302:A:P	2.34	0.51
36:1:398:A:C8	53:M7:3:ARG:NH2	2.78	0.51
1:6:149:C:H2'	1:6:150:U:H6	1.75	0.51
1:6:1166:A:H2'	1:6:1167:G:O4'	2.11	0.51
39:L2:172:GLY:HA3	79:Q3:68:ALA:H	4.24	0.51
1:2:1629:G:H2'	1:2:1630:U:H6	1.76	0.51
22:D0:15:GLN:O	22:D0:16:GLN:HB2	4.28	0.51
54:M8:88:THR:HG22	54:M8:107:THR:HG21	1.92	0.51
36:1:898:U:H2'	36:1:899:U:O4'	2.11	0.51
1:6:880:C:OP2	86:6:2111:OHX:N2	2.44	0.51
1:2:1511:U:H2'	1:2:1512:G:C8	2.45	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1902:G:C6	36:1:1903:U:C2	2.99	0.51
48:M1:141:ARG:O	48:M1:145:LYS:HE2	2.31	0.51
57:N1:23:GLY:N	36:5:2701:U:OP1	269.29	0.51
36:1:3159:C:OP1	86:1:4153:OHX:N1	2.44	0.51
3:S1:151:LYS:NZ	1:6:1066:C:OP1	337.37	0.51
57:N1:92:ARG:NH1	36:5:2736:A:OP1	235.54	0.51
11:S9:37:LYS:HB2	32:E0:33:ARG:H	1.76	0.51
3:S1:126:THR:CG2	3:S1:136:ARG:HE	2.55	0.51
41:L4:140:HIS:H	41:L4:180:LYS:HE2	1.75	0.51
56:N0:12:ARG:HB3	56:N0:24:LEU:HD23	2.08	0.51
1:6:830:U:H2'	1:6:831:U:H5'	1.93	0.51
1:6:639:U:H1'	1:6:640:U:C6	2.46	0.51
68:O2:5:PRO:CD	68:O2:6:HIS:H	5.01	0.51
42:L5:21:ARG:HB2	42:L5:24:ARG:NH2	2.26	0.51
7:S5:120:ILE:O	7:S5:124:LEU:HD13	3.03	0.51
2:S0:109:ASN:O	2:S0:112:THR:HG22	2.11	0.51
36:5:789:A:H2'	36:5:790:U:H6	1.76	0.51
9:S7:170:GLN:HA	9:S7:181:ILE:HG22	1.93	0.51
16:C4:23:PHE:HE2	16:C4:91:THR:HG21	1.75	0.51
1:2:1166:A:H5''	7:S5:101:GLY:H	1.75	0.51
1:6:1450:U:OP2	86:6:2130:OHX:N4	2.44	0.51
36:1:1204:A:H2	36:1:2834:G:N3	2.09	0.51
1:2:108:A:H2'	1:2:109:G:C8	2.46	0.51
18:C6:140:LYS:NZ	1:6:1192:C:O3'	364.29	0.51
1:2:1490:C:H4'	1:2:1491:U:OP1	2.09	0.51
1:6:1621:U:H2'	1:6:1622:G:H8	1.76	0.51
36:1:994:G:N2	36:1:1053:A:H2'	2.26	0.51
36:1:1207:G:N7	86:1:4066:OHX:N2	2.59	0.51
38:8:155:A:H2'	38:8:156:U:O4'	2.11	0.51
49:M3:46:ILE:CG2	49:M3:49:ARG:HB2	2.41	0.50
26:D4:37:LYS:HE3	1:6:523:G:OP2	414.05	0.50
6:S4:121:TYR:CD2	6:S4:161:LYS:HE3	2.46	0.50
56:N0:91:TYR:O	56:N0:137:ARG:NH1	2.44	0.50
1:2:1572:G:H1'	7:S5:185:ARG:HH22	1.76	0.50
1:6:831:U:O2'	1:6:832:U:H5'	2.10	0.50
44:L7:80:GLN:NE2	57:N1:136:ARG:HB2	6.31	0.50
36:5:279:U:H2'	36:5:280:U:H6	1.74	0.50
1:6:329:G:H2'	1:6:330:G:H8	1.76	0.50
48:M1:82:ARG:HB3	48:M1:112:LEU:HB2	4.06	0.50
44:L7:173:LEU:O	44:L7:178:ILE:HB	2.53	0.50
36:1:2592:G:H4'	36:1:2594:C:C2	2.46	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:454:U:OP1	1:6:455:C:N4	2.44	0.50
28:D6:23:CYS:HB2	28:D6:74:CYS:HB3	1.93	0.50
29:D7:19:HIS:CE1	29:D7:20:LYS:HB3	4.43	0.50
36:5:1409:G:N7	86:5:4164:OHX:N6	2.59	0.50
36:1:578:A:H5''	36:1:579:G:O5'	2.11	0.50
37:3:45:A:H2'	37:3:46:A:C8	2.46	0.50
36:1:1770:G:H5'	36:1:1771:C:OP2	2.12	0.50
1:6:602:U:H2'	1:6:603:U:C6	2.46	0.50
4:S2:178:ILE:HD12	4:S2:178:ILE:H	4.48	0.50
10:S8:18:ARG:NH1	1:6:105:A:OP1	305.51	0.50
58:N2:29:ASP:OD1	58:N2:31:ALA:HB3	2.11	0.50
3:S1:121:ILE:HG12	3:S1:161:ILE:HG23	1.92	0.50
36:1:1237:G:N3	36:1:1237:G:H2'	2.25	0.50
6:S4:206:ASP:HB2	6:S4:222:LEU:HD12	1.92	0.50
36:1:1454:A:H5''	36:1:1455:U:H5'	1.92	0.50
18:C6:47:LYS:HZ1	18:C6:114:ARG:CZ	2.23	0.50
40:L3:266:ARG:HH22	36:5:2392:C:HO2'	209.05	0.50
3:S1:70:LEU:HA	3:S1:73:LEU:HD23	1.92	0.50
25:D3:14:LYS:HA	25:D3:17:VAL:HG12	5.27	0.50
1:2:1214:U:OP1	1:2:1246:C:H1'	2.12	0.50
62:N6:115:ARG:O	62:N6:119:ILE:HG13	2.11	0.50
45:L8:163:VAL:O	45:L8:166:LEU:HB2	2.50	0.50
7:S5:123:VAL:O	27:D5:58:ARG:HD2	2.12	0.50
54:M8:123:THR:OG1	54:M8:125:ASP:OD2	2.20	0.50
36:1:2727:A:H4'	36:1:2728:G:OP2	2.11	0.50
1:2:1301:U:H2'	1:2:1302:U:O4'	2.11	0.50
36:1:1556:C:H5''	36:1:2169:G:H22	1.75	0.50
2:S0:58:VAL:O	2:S0:62:ARG:HB2	2.11	0.50
86:1:3974:OHX:N3	86:1:4160:OHX:N4	2.59	0.50
86:5:4057:OHX:N1	86:5:4202:OHX:N4	2.59	0.50
41:L4:193:LYS:HA	41:L4:198:ARG:HA	1.93	0.50
46:L9:190:ASP:OD1	46:L9:191:LEU:HD12	2.12	0.50
15:C3:127:ARG:NH2	1:6:629:U:OP1	308.43	0.50
36:1:208:C:C2'	36:1:209:A:H5'	2.40	0.50
1:2:1017:U:H2'	1:2:1018:U:C6	2.47	0.50
1:2:1573:A:H4'	1:2:1574:G:H5'	1.94	0.50
41:L4:264:SER:OG	41:L4:267:VAL:HG13	2.11	0.50
36:5:2101:C:O2'	36:5:2102:U:OP1	2.28	0.50
36:1:1887:A:OP2	86:1:3893:OHX:N4	2.44	0.50
1:2:81:G:OP2	86:2:2140:OHX:N5	2.45	0.50
1:2:1178:G:H2'	1:2:1179:G:O4'	2.10	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D7:28:PRO:HB3	1:6:959:U:H5''	351.96	0.50
36:5:438:A:N7	36:5:439:C:H5	2.10	0.50
20:C8:26:ILE:HD11	20:C8:30:TYR:HB2	1.92	0.50
50:M4:125:LYS:NZ	36:5:3215:A:N7	281.40	0.50
1:2:767:U:H6	11:S9:141:VAL:HA	1.76	0.50
1:2:538:A:H8	1:2:543:C:N4	2.08	0.50
1:2:542:A:H2'	1:2:543:C:H3'	1.93	0.50
6:S4:118:GLU:HA	6:S4:121:TYR:CE1	3.04	0.50
16:C4:51:ASP:O	16:C4:54:GLU:HB2	2.11	0.50
10:S8:96:LEU:HD13	10:S8:179:CYS:SG	2.52	0.50
49:M3:58:VAL:CG1	36:5:75:G:H5''	87.38	0.50
5:S3:52:ALA:O	5:S3:90:ARG:HA	2.12	0.50
9:S7:96:ARG:HB3	1:6:856:A:N6	365.93	0.50
36:1:2897:A:H2'	36:1:2899:C:H5''	1.94	0.50
60:N4:52:THR:O	60:N4:56:ARG:HG3	2.18	0.50
46:L9:132:VAL:HB	46:L9:154:VAL:HG23	2.57	0.50
19:C7:23:LYS:O	19:C7:24:LEU:HB2	2.11	0.50
19:C7:35:CYS:HA	19:C7:38:ILE:HG22	1.93	0.50
45:L8:129:PRO:HB3	36:5:121:A:C2	101.72	0.50
1:6:1049:U:H2'	1:6:1050:G:C8	2.47	0.50
21:C9:3:GLY:HA3	1:6:1364:G:N2	431.06	0.50
36:5:1815:U:O2'	36:5:1816:A:P	2.69	0.50
86:6:2062:OHX:N1	86:6:2149:OHX:N4	2.59	0.50
30:D8:18:ARG:NH1	1:6:1616:G:H4'	363.90	0.50
16:C4:132:ARG:HB3	1:6:1787:C:OP2	293.12	0.50
1:2:1762:A:H1'	1:2:1783:C:H5'	1.94	0.50
36:1:1668:G:C6	36:1:1669:C:C4	2.99	0.50
78:Q2:35:LEU:O	78:Q2:36:PHE:HB2	2.12	0.50
36:5:1528:G:H2'	36:5:1529:A:O4'	2.11	0.50
1:2:811:A:H5'	1:2:816:G:O2'	2.10	0.50
39:L2:225:ILE:O	39:L2:238:ILE:O	4.95	0.50
42:L5:251:PRO:O	42:L5:253:PHE:N	2.45	0.50
44:L7:96:PRO:O	44:L7:99:PRO:HD2	2.11	0.50
36:1:3103:A:OP2	86:1:4171:OHX:N1	2.44	0.50
38:8:157:U:O2'	38:8:158:U:H5'	2.10	0.50
29:D7:7:LEU:O	29:D7:10:PRO:HD3	3.14	0.50
29:D7:67:THR:OG1	29:D7:70:LYS:O	2.30	0.50
35:SM:75:ASP:OD1	35:SM:75:ASP:N	4.00	0.50
57:N1:28:SER:OG	37:7:9:C:OP1	267.16	0.50
69:O3:6:ARG:HG3	69:O3:8:TYR:CD1	3.08	0.50
10:S8:184:LEU:HB3	10:S8:189:LEU:HD13	2.24	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1191:U:H4'	18:C6:143:ARG:HB3	1.93	0.50
20:C8:27:LYS:O	20:C8:31:ALA:N	3.20	0.50
47:M0:174:THR:HG23	47:M0:176:LEU:N	2.15	0.50
26:D4:57:VAL:HB	26:D4:60:PHE:HE2	3.96	0.50
10:S8:105:ASP:OD1	10:S8:106:ALA:N	4.22	0.50
1:6:658:C:H5'	1:6:659:C:OP2	2.12	0.50
5:S3:65:ARG:HA	5:S3:68:GLU:HG3	1.94	0.50
20:C8:143:ARG:C	20:C8:145:ARG:H	3.85	0.50
50:M4:114:ASP:HA	50:M4:117:ARG:NH1	2.26	0.50
1:2:1370:U:H4'	1:2:1371:A:C5'	2.42	0.50
36:5:1716:U:O2'	36:5:1717:U:O5'	2.26	0.50
36:1:345:G:OP1	36:1:1429:G:N2	2.44	0.50
47:M0:16:PRO:C	47:M0:18:PRO:HD3	2.31	0.50
70:O4:3:GLN:HG2	70:O4:4:ARG:N	3.31	0.50
36:5:2568:C:O2'	36:5:2569:A:O5'	2.22	0.50
1:6:1765:A:OP2	86:6:2128:OHX:N4	2.44	0.50
70:O4:99:LYS:HG2	70:O4:103:LYS:NZ	2.26	0.50
1:2:93:A:O2'	6:S4:4:GLY:HA3	2.11	0.50
1:2:1182:U:O2	1:2:1184:A:H8	1.95	0.50
65:N9:14:ARG:NH1	65:N9:18:ARG:HH11	3.15	0.50
42:L5:257:GLU:C	42:L5:258:LYS:HD3	4.87	0.50
1:2:1629:G:H2'	1:2:1630:U:C6	2.47	0.50
36:5:528:U:H2'	36:5:529:A:C8	2.46	0.50
40:L3:303:LYS:HD2	40:L3:361:THR:HG21	1.92	0.50
9:S7:129:LEU:HD21	9:S7:172:VAL:HG11	1.92	0.50
36:1:1155:C:OP1	44:L7:94:LYS:NZ	2.44	0.50
55:M9:4:LEU:HD13	55:M9:32:ILE:HG21	1.94	0.50
1:6:702:G:N7	86:6:2101:OHX:N4	2.60	0.50
35:SM:48:ARG:HA	36:5:1019:G:OP1	334.35	0.50
41:L4:212:ASP:OD1	41:L4:216:VAL:HG22	2.12	0.50
60:N4:14:TYR:O	60:N4:17:ARG:HB3	2.11	0.50
44:L7:168:ILE:O	44:L7:172:ASN:ND2	2.92	0.50
70:O4:16:ARG:HH11	70:O4:16:ARG:HG3	4.55	0.50
50:M4:108:ARG:NH2	52:M6:196:ALA:O	2.43	0.50
43:L6:60:ASP:OD1	43:L6:62:THR:OG1	2.21	0.50
36:5:438:A:H2'	36:5:494:G:H21	1.75	0.50
69:O3:48:ARG:HH11	69:O3:48:ARG:CG	2.13	0.50
1:2:1539:G:H5'	1:2:1539:G:C8	2.47	0.50
41:L4:16:THR:HG22	41:L4:18:ASN:N	2.62	0.50
36:1:1951:C:N4	36:1:2095:G:H1	2.03	0.50
11:S9:133:HIS:CD2	11:S9:162:SER:HB2	2.86	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D3:96:VAL:O	25:D3:142:LYS:NZ	2.44	0.50
3:S1:59:ASP:HA	3:S1:62:LYS:HZ1	1.76	0.50
42:L5:114:GLY:O	42:L5:116:ASP:N	2.40	0.50
36:5:1573:G:C5	36:5:1574:C:H1'	2.46	0.50
79:Q3:75:ALA:O	79:Q3:79:VAL:HG23	2.47	0.50
42:L5:279:LYS:HG2	42:L5:282:ARG:NH1	2.27	0.50
63:N7:88:ASP:OD1	63:N7:89:VAL:N	2.43	0.50
56:N0:1:MET:N	56:N0:32:SER:OG	7.22	0.50
12:C0:46:LEU:O	12:C0:50:THR:HG23	2.13	0.50
45:L8:100:GLU:OE2	45:L8:108:ARG:NH1	3.13	0.50
76:Q0:83:LYS:O	76:Q0:87:SER:OG	2.28	0.50
37:7:3:U:H2'	37:7:4:U:H6	1.75	0.50
41:L4:193:LYS:NZ	38:8:21:C:OP1	108.45	0.50
5:S3:124:ARG:NH2	35:SM:128:ALA:HB2	9.73	0.50
73:O7:18:LEU:HA	73:O7:25:ARG:H	1.76	0.50
67:O1:11:GLU:OE2	67:O1:74:ARG:NE	2.43	0.50
49:M3:9:ILE:HD13	64:N8:52:TYR:CE1	2.47	0.50
33:E1:134:ASN:H	1:6:1251:U:H4'	442.64	0.50
33:E1:90:LYS:HB2	33:E1:93:HIS:CE1	10.52	0.50
42:L5:45:ASN:O	42:L5:47:PRO:HD3	2.47	0.50
48:M1:104:PHE:O	48:M1:127:PHE:HB2	2.52	0.50
36:5:937:G:N3	36:5:963:G:H1'	2.26	0.50
1:2:1433:G:H2'	1:2:1434:U:C6	2.46	0.50
6:S4:170:THR:O	6:S4:170:THR:OG1	3.39	0.50
11:S9:28:LEU:HB3	32:E0:44:PHE:HZ	4.17	0.50
47:M0:19:LYS:HG3	47:M0:26:VAL:HG22	3.15	0.50
44:L7:108:LEU:HD21	44:L7:115:THR:HG23	1.94	0.50
1:6:1776:A:H2'	1:6:1777:G:C8	2.46	0.50
18:C6:115:THR:O	18:C6:115:THR:OG1	2.26	0.50
49:M3:3:ILE:HG12	64:N8:34:MET:HE3	1.94	0.50
36:1:92:G:O5'	78:Q2:46:LYS:NZ	2.45	0.50
40:L3:49:TYR:OH	40:L3:166:ILE:HD12	2.11	0.50
1:2:896:U:O4'	16:C4:38:THR:HG21	2.12	0.50
16:C4:35:GLY:HA3	1:6:919:A:H5'	269.95	0.50
1:6:1588:G:OP1	86:6:2126:OHX:N2	2.44	0.50
2:S0:163:ASN:C	2:S0:165:ARG:H	2.17	0.50
36:1:3139:A:C8	36:1:3139:A:H5'	2.46	0.50
36:1:316:U:O2'	72:O6:30:LYS:HD2	2.11	0.50
39:L2:213:GLY:CA	36:5:2967:A:H5''	205.65	0.50
1:2:330:G:H2'	1:2:331:A:C8	2.47	0.50
1:6:333:A:C6	1:6:334:G:C6	2.99	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:31:LYS:O	49:M3:35:ARG:HB2	2.12	0.50
23:D1:36:VAL:HG11	23:D1:78:LEU:HD13	1.93	0.50
43:L6:40:LEU:HB3	43:L6:84:VAL:HG13	2.08	0.50
11:S9:171:ARG:HH11	11:S9:174:ARG:HB3	4.56	0.50
6:S4:77:ARG:HD2	6:S4:82:TYR:CE1	5.02	0.50
36:5:169:U:H4'	36:5:170:G:OP1	2.11	0.50
14:C2:132:GLU:O	14:C2:136:ILE:HG12	2.11	0.50
1:6:489:C:O2'	1:6:490:C:O5'	2.30	0.50
1:6:1236:A:H2'	1:6:1237:G:C8	2.47	0.50
52:M6:42:ASN:OD1	52:M6:125:ARG:NH1	3.25	0.50
69:O3:16:TYR:OH	69:O3:91:ALA:HB2	2.10	0.50
3:S1:119:THR:HB	3:S1:143:THR:CG2	2.42	0.50
69:O3:35:VAL:HG13	69:O3:40:ASP:HB2	2.53	0.50
23:D1:68:SER:O	23:D1:72:LEU:HG	2.12	0.50
36:1:880:G:H8	36:1:882:A:OP2	1.95	0.50
12:C0:23:ALA:O	12:C0:24:LYS:HB3	4.62	0.50
1:6:914:G:H5'	1:6:914:G:C8	2.46	0.50
59:N3:38:ALA:HB3	59:N3:59:MET:HB2	2.32	0.50
45:L8:148:ALA:HA	45:L8:201:THR:HG22	1.94	0.50
10:S8:16:ALA:HB2	1:6:354:C:H5''	298.37	0.50
34:SR:112:SER:HB2	34:SR:153:GLN:HA	2.08	0.50
40:L3:107:ALA:HA	40:L3:199:PHE:CD2	2.63	0.50
1:2:1338:C:H1'	1:2:1410:A:C4	2.47	0.50
68:O2:121:ASN:OD1	68:O2:121:ASN:N	2.44	0.50
6:S4:115:THR:OG1	6:S4:117:GLU:O	5.22	0.50
36:1:1650:G:O6	86:1:4142:OHX:N2	2.44	0.50
36:5:223:U:O4	86:5:4246:OHX:N4	2.44	0.50
36:5:138:U:H2'	36:5:139:G:C8	2.47	0.50
34:SR:16:HIS:CE1	34:SR:43:ILE:HG12	2.45	0.50
27:D5:74:SER:HA	27:D5:77:ARG:HH12	1.76	0.50
7:S5:43:PHE:HB3	7:S5:46:TRP:HD1	6.03	0.50
22:D0:50:LEU:HD21	22:D0:95:ALA:HB2	1.94	0.50
8:S6:141:ILE:HG21	8:S6:153:VAL:HG13	1.93	0.50
25:D3:53:VAL:HG23	25:D3:100:ASP:O	2.12	0.50
3:S1:135:LEU:HD11	3:S1:176:VAL:HG11	1.94	0.50
47:M0:4:ARG:CZ	47:M0:99:ILE:HD12	2.41	0.50
36:5:726:G:H8	36:5:726:G:C5'	2.24	0.50
9:S7:64:VAL:HG22	9:S7:94:ALA:HB1	2.93	0.50
41:L4:334:PHE:CD1	41:L4:339:LEU:HD11	4.83	0.50
36:5:955:U:H2'	36:5:956:U:H6	1.73	0.50
76:Q0:94:SER:HB2	76:Q0:122:ARG:O	2.12	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:916:G:H5'	36:5:917:A:OP1	2.12	0.50
1:2:76:A:H5'	1:2:77:U:OP2	2.12	0.50
36:1:707:U:C2'	36:1:708:G:H5''	2.41	0.50
48:M1:12:LEU:HD12	48:M1:131:MET:HE3	1.93	0.50
26:D4:36:SER:O	26:D4:40:LEU:HG	2.11	0.50
51:M5:91:GLU:O	51:M5:93:LYS:HE3	2.12	0.50
86:1:4007:OHX:N3	86:1:4176:OHX:N1	2.60	0.50
41:L4:209:TYR:OH	36:5:689:U:O4	86.31	0.50
1:2:219:A:H5'	1:2:831:U:O2'	2.11	0.50
1:2:1301:U:H5'	4:S2:88:LYS:HD2	1.94	0.50
36:1:612:U:H2'	36:1:613:G:C8	2.46	0.50
39:L2:96:LEU:O	79:Q3:87:ARG:HD3	2.27	0.50
45:L8:122:LYS:O	45:L8:124:ASP:N	3.13	0.50
36:1:801:A:O2'	86:1:3983:OHX:N2	2.45	0.50
8:S6:109:LEU:HD13	8:S6:111:LEU:HD21	1.93	0.50
45:L8:63:LYS:O	45:L8:67:ILE:HG12	3.69	0.50
45:L8:71:VAL:CG2	45:L8:76:ALA:HB2	2.42	0.50
79:Q3:50:GLY:O	79:Q3:51:ALA:HB3	2.12	0.50
62:N6:73:VAL:HA	62:N6:80:VAL:HG23	1.93	0.50
75:O9:26:TRP:HA	75:O9:29:LEU:HD22	2.59	0.50
1:2:1530:C:C2	1:2:1531:G:C8	3.00	0.50
56:N0:42:TRP:CZ2	56:N0:58:ILE:HD12	2.60	0.50
1:6:626:U:H2'	1:6:627:C:H6	1.76	0.50
73:O7:76:ASN:O	73:O7:79:GLN:HG3	2.21	0.50
38:4:93:U:H2'	38:4:94:C:O4'	2.12	0.50
42:L5:4:GLN:H	42:L5:4:GLN:CD	2.15	0.50
10:S8:3:ILE:O	10:S8:30:GLY:N	2.44	0.50
75:O9:9:ILE:O	75:O9:13:MET:HG3	2.11	0.50
7:S5:71:ALA:O	7:S5:91:GLU:HG3	2.12	0.50
28:D6:87:ARG:HB3	28:D6:91:ASP:HB2	1.94	0.50
40:L3:173:GLN:O	40:L3:173:GLN:HG3	2.11	0.50
36:5:1876:U:H6	36:5:1876:U:H5''	1.75	0.50
57:N1:143:THR:O	57:N1:146:ASN:N	2.40	0.50
39:L2:149:ARG:HH21	39:L2:252:THR:CG2	2.25	0.50
7:S5:57:SER:HB2	30:D8:53:ILE:HB	2.56	0.50
2:S0:167:LYS:HD3	2:S0:168:HIS:HD2	1.76	0.50
23:D1:71:ARG:HG3	23:D1:83:TRP:CH2	2.46	0.50
49:M3:75:PHE:H	49:M3:97:VAL:HA	1.81	0.50
63:N7:61:LYS:O	63:N7:65:ARG:HG2	2.26	0.50
6:S4:246:LEU:HD21	6:S4:254:ARG:NH1	2.26	0.50
86:5:4068:OHX:N3	86:5:4145:OHX:N6	2.60	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:7:95:A:OP2	86:7:227:OHX:N1	2.45	0.50
5:S3:195:SER:HG	5:S3:200:LYS:HA	3.82	0.50
38:4:155:A:H5'	45:L8:185:ARG:NH2	2.27	0.50
26:D4:34:ASN:ND2	26:D4:62:THR:HG21	4.24	0.50
45:L8:108:ARG:HA	45:L8:111:LYS:HD2	3.62	0.50
1:6:647:G:H22	1:6:687:G:H22	1.58	0.50
36:1:2726:C:O2'	36:1:2727:A:H2'	2.12	0.50
2:S0:175:TYR:OH	2:S0:195:TRP:HB3	3.06	0.50
36:1:2242:A:H5'	39:L2:243:THR:HG23	1.94	0.50
58:N2:36:TYR:OH	58:N2:82:LYS:HG2	2.12	0.50
36:1:2969:A:N7	39:L2:215:ASN:ND2	2.60	0.50
45:L8:78:PHE:O	45:L8:80:TYR:N	2.43	0.50
36:1:768:C:OP1	49:M3:186:ARG:NH2	2.36	0.50
10:S8:153:GLU:HG2	10:S8:155:SER:OG	3.92	0.50
61:N5:92:LYS:HE3	61:N5:110:VAL:O	2.12	0.50
36:5:113:C:C2	36:5:319:A:C2	3.00	0.50
52:M6:23:VAL:HG12	52:M6:84:LEU:HD21	1.94	0.50
36:1:994:G:N2	36:1:995:U:O4	2.44	0.50
3:S1:119:THR:HB	3:S1:143:THR:HG23	1.93	0.50
74:O8:18:ALA:O	74:O8:20:VAL:N	3.17	0.50
61:N5:63:ILE:HD11	61:N5:84:PHE:CD1	2.47	0.50
1:6:711:U:H5'	1:6:712:G:OP2	2.12	0.50
36:1:510:G:O6	86:1:4011:OHX:N1	2.44	0.50
1:6:717:C:H42	1:6:720:G:H1	1.58	0.50
36:5:2426:U:H2'	36:5:2427:U:C6	2.47	0.50
2:S0:130:ALA:HA	2:S0:133:ILE:HD13	1.94	0.50
4:S2:237:VAL:HB	4:S2:242:ILE:HD11	2.67	0.50
51:M5:125:SER:HB3	36:5:2433:U:C1'	161.72	0.50
36:5:2211:U:H2'	36:5:2212:C:O4'	2.11	0.50
59:N3:53:SER:N	59:N3:56:ASP:OD2	2.45	0.50
16:C4:31:THR:OG1	16:C4:35:GLY:HA2	2.43	0.50
44:L7:223:PHE:HA	44:L7:227:GLY:O	2.12	0.50
56:N0:71:LYS:NZ	36:5:563:U:OP1	341.02	0.50
44:L7:151:ARG:HD2	44:L7:244:ASN:OD1	3.94	0.50
36:1:1216:C:H6	36:1:1216:C:H5'	1.75	0.50
3:S1:48:VAL:HG21	3:S1:61:LEU:HD22	4.72	0.50
36:1:2108:C:H1'	36:1:3344:A:H8	1.74	0.50
36:1:1095:U:N3	57:N1:127:GLN:OE1	2.35	0.50
72:O6:54:GLU:HG2	72:O6:90:MET:HE1	3.14	0.50
39:L2:77:ILE:HD13	39:L2:128:ARG:HB3	1.93	0.50
71:O5:86:ARG:O	71:O5:90:ARG:HG2	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:N3:87:ARG:HG3	59:N3:93:LEU:HD21	3.05	0.50
15:C3:55:ARG:NH1	15:C3:56:ASP:OD2	2.45	0.50
36:1:2228:A:H2'	36:1:2229:A:C8	2.47	0.50
46:L9:106:LYS:HE3	46:L9:107:ASP:H	5.25	0.50
41:L4:191:LYS:HG2	41:L4:194:TYR:CZ	2.47	0.50
47:M0:48:LEU:HD22	47:M0:49:CYS:N	2.27	0.50
67:O1:11:GLU:OE2	67:O1:74:ARG:NH2	2.44	0.50
79:Q3:37:TYR:HB2	79:Q3:47:VAL:HB	1.94	0.50
36:5:2641:U:H5''	36:5:2642:A:OP1	2.12	0.50
2:S0:7:PHE:HZ	23:D1:43:GLY:HA2	2.83	0.50
56:N0:135:VAL:HG12	56:N0:141:LYS:HG3	1.94	0.50
36:1:2236:G:OP1	86:1:4122:OHX:N6	2.44	0.50
37:3:113:C:H2'	37:3:114:U:O4'	2.11	0.50
36:5:1650:G:N7	86:5:4184:OHX:N3	2.60	0.50
56:N0:67:ALA:O	56:N0:69:PRO:HD3	2.42	0.50
40:L3:219:ALA:HB2	40:L3:336:VAL:HG13	2.93	0.50
57:N1:111:ALA:O	57:N1:115:LYS:HG3	2.63	0.50
79:Q3:14:TYR:HB2	79:Q3:23:ARG:HD3	1.94	0.50
16:C4:14:PHE:HA	16:C4:78:ALA:O	2.42	0.50
10:S8:185:GLU:HG2	13:C1:23:PRO:HG2	1.94	0.50
59:N3:81:GLN:O	59:N3:82:ALA:HB3	2.12	0.49
20:C8:41:ARG:NE	21:C9:46:PRO:HD3	2.27	0.49
36:1:419:G:O6	86:4:225:OHX:N6	2.45	0.49
36:1:1362:G:H2'	36:1:1363:A:C8	2.47	0.49
4:S2:140:ARG:NH2	4:S2:228:ASN:HD21	2.02	0.49
86:2:2089:OHX:N1	86:2:2131:OHX:N2	2.60	0.49
1:2:1253:U:H2'	1:2:1254:U:H6	1.76	0.49
1:6:919:A:H2'	1:6:920:U:C6	2.47	0.49
1:2:1559:A:C6	20:C8:134:ARG:HD2	2.47	0.49
6:S4:141:THR:OG1	6:S4:145:ARG:HB2	2.66	0.49
2:S0:179:ARG:O	2:S0:183:ARG:HD3	3.35	0.49
49:M3:159:VAL:HB	64:N8:96:LYS:HG2	1.94	0.49
4:S2:53:ILE:HG23	4:S2:56:ILE:HD12	1.94	0.49
1:2:238:U:O2'	1:2:239:C:H5'	2.12	0.49
36:1:685:G:OP1	49:M3:35:ARG:NH1	2.45	0.49
58:N2:43:VAL:O	58:N2:45:GLY:N	2.61	0.49
1:2:1358:G:H2'	1:2:1359:C:H6	1.75	0.49
40:L3:92:TYR:HE1	40:L3:159:ARG:HD2	1.77	0.49
4:S2:67:GLN:O	4:S2:71:THR:HG23	2.39	0.49
1:2:1019:A:OP2	15:C3:107:LYS:HE3	2.12	0.49
9:S7:25:VAL:HA	9:S7:28:GLU:HB2	1.92	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
76:Q0:118:THR:OG1	76:Q0:120:GLN:HG3	2.94	0.49
36:5:2664:C:O2'	36:5:2665:U:H5'	2.12	0.49
15:C3:92:ILE:O	15:C3:96:VAL:HG23	2.12	0.49
17:C5:75:PRO:HA	17:C5:93:VAL:HG12	1.94	0.49
36:1:3395:G:N2	36:1:3396:U:O4	2.41	0.49
36:1:3317:U:H1'	86:1:4027:OHX:N6	2.27	0.49
54:M8:69:ARG:HG3	54:M8:69:ARG:HH11	2.63	0.49
3:S1:89:ASP:OD1	3:S1:89:ASP:N	2.45	0.49
70:O4:37:LYS:HZ3	36:5:1591:G:H5''	161.22	0.49
1:2:540:G:O3'	1:2:541:A:H3'	2.12	0.49
36:5:1317:A:C4	36:5:1319:G:C8	3.00	0.49
36:1:1471:U:H2'	36:1:1472:U:C6	2.47	0.49
36:1:2878:G:H5''	40:L3:5:LYS:HE2	1.93	0.49
36:1:1363:A:OP2	86:1:4048:OHX:N6	2.45	0.49
1:2:992:A:C2	1:2:1012:U:N3	2.69	0.49
67:O1:55:LEU:HD22	67:O1:55:LEU:O	2.24	0.49
42:L5:269:SER:HB2	37:7:1:G:H21	316.94	0.49
28:D6:60:PRO:O	28:D6:61:GLU:HB3	3.02	0.49
25:D3:13:ARG:NH1	1:6:351:C:O4'	321.88	0.49
70:O4:44:CYS:N	70:O4:49:SER:O	2.79	0.49
59:N3:48:ARG:HG2	36:5:2339:C:OP2	247.14	0.49
7:S5:166:ARG:HB2	30:D8:46:GLY:HA3	1.93	0.49
41:L4:354:VAL:O	41:L4:358:THR:HG23	2.60	0.49
42:L5:290:ILE:HG22	47:M0:210:ILE:HD11	1.93	0.49
37:3:64:A:H3'	47:M0:204:GLY:O	2.11	0.49
24:D2:30:SER:HB2	24:D2:61:ILE:HG13	1.94	0.49
19:C7:109:LEU:O	19:C7:113:LEU:HB2	4.86	0.49
36:5:2964:G:N2	36:5:2967:A:OP2	2.36	0.49
5:S3:202:LEU:HD22	5:S3:202:LEU:H	1.76	0.49
36:1:670:C:P	54:M8:147:ARG:HH22	2.35	0.49
5:S3:142:LEU:HD13	5:S3:182:LEU:HD21	1.93	0.49
36:5:235:A:H2'	36:5:236:G:O4'	2.12	0.49
68:O2:46:PHE:CE1	36:5:1145:G:H5'	210.89	0.49
36:1:2617:U:H5	36:1:2621:G:OP2	1.95	0.49
36:5:2897:A:H2'	36:5:2899:C:H5'	1.94	0.49
2:S0:7:PHE:CZ	23:D1:43:GLY:HA2	3.43	0.49
36:5:1241:U:O2'	36:5:1242:G:O5'	2.24	0.49
49:M3:174:ARG:HB2	72:O6:9:ILE:HD12	1.94	0.49
1:6:1524:A:H2'	1:6:1525:A:C8	2.47	0.49
61:N5:46:TYR:HD2	71:O5:75:TYR:HB3	2.23	0.49
36:1:168:U:H2'	36:1:169:U:C6	2.47	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:515:A:OP2	86:2:2069:OHX:N3	2.45	0.49
36:1:1530:U:H5''	36:1:1531:C:OP2	2.12	0.49
1:6:1645:G:OP2	86:6:2185:OHX:N3	2.45	0.49
1:2:1528:U:OP1	7:S5:109:LYS:HG2	2.12	0.49
36:1:1818:U:H2'	36:1:1819:U:O4'	2.12	0.49
30:D8:50:GLU:O	30:D8:51:ASN:HB2	2.24	0.49
67:O1:54:GLU:OE2	67:O1:54:GLU:N	2.46	0.49
36:1:3217:C:H2'	36:1:3217:C:O2	2.12	0.49
37:7:55:A:H2'	37:7:56:A:O4'	2.11	0.49
36:5:1470:U:OP1	86:5:3960:OHX:N6	2.46	0.49
52:M6:34:VAL:HG11	52:M6:112:TYR:CE1	2.68	0.49
37:3:85:G:O6	86:3:215:OHX:N4	2.45	0.49
47:M0:80:SER:O	47:M0:84:ALA:HB2	2.12	0.49
28:D6:84:VAL:HG13	28:D6:85:ARG:N	2.28	0.49
40:L3:117:ARG:NH2	40:L3:175:LYS:HG2	3.09	0.49
40:L3:166:ILE:HD13	40:L3:173:GLN:HG2	1.96	0.49
40:L3:19:ARG:HB3	40:L3:232:ARG:HH12	1.76	0.49
40:L3:221:THR:HB	40:L3:273:HIS:O	2.40	0.49
36:5:687:U:O2'	36:5:688:G:H5'	2.11	0.49
70:O4:47:CYS:SG	70:O4:48:GLY:N	2.85	0.49
3:S1:62:LYS:HD3	3:S1:91:VAL:HG23	4.61	0.49
49:M3:59:ARG:HD3	36:5:73:C:O2	91.61	0.49
36:1:781:G:OP1	54:M8:151:ARG:HD2	2.12	0.49
1:2:489:C:H42	1:2:497:G:H22	1.60	0.49
72:O6:60:LEU:HD11	72:O6:68:ARG:NE	2.27	0.49
51:M5:153:ASP:OD2	51:M5:155:VAL:HG22	2.12	0.49
78:Q2:8:ARG:H	78:Q2:22:GLN:HE21	1.59	0.49
36:1:2834:G:OP1	86:1:4192:OHX:N3	2.45	0.49
86:6:2062:OHX:N1	86:6:2149:OHX:N3	2.60	0.49
36:1:2307:G:O2'	36:1:2310:U:OP2	2.30	0.49
36:1:210:U:C2	36:1:230:U:H4'	2.47	0.49
36:5:192:C:H2'	36:5:193:C:C6	2.47	0.49
37:3:45:A:H2'	37:3:46:A:H8	1.76	0.49
36:1:1669:C:OP1	70:O4:24:LYS:HE2	2.12	0.49
1:2:1410:A:H2'	1:2:1411:A:O4'	2.12	0.49
55:M9:8:LYS:NZ	36:5:1473:G:OP2	124.61	0.49
69:O3:69:GLY:HA3	69:O3:85:PHE:HA	1.97	0.49
1:6:1603:U:H2'	1:6:1604:U:H6	1.76	0.49
36:5:36:C:H2'	36:5:37:U:H5'	1.94	0.49
1:2:872:G:O6	86:2:2126:OHX:N3	2.45	0.49
1:2:1351:G:C2	1:2:1375:A:C2	3.00	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:138:LEU:HD13	54:M8:140:LEU:HD21	2.83	0.49
1:2:10:G:OP1	1:2:1633:A:O2'	2.13	0.49
2:S0:89:PHE:O	2:S0:93:THR:HG23	2.54	0.49
2:S0:169:SER:O	2:S0:173:ILE:HG12	2.12	0.49
34:SR:198:ASN:O	34:SR:215:GLY:HA3	2.24	0.49
78:Q2:15:LYS:HA	78:Q2:18:ARG:NH2	2.28	0.49
86:5:3981:OHX:N4	86:5:4201:OHX:N1	2.60	0.49
36:1:157:A:C8	72:O6:26:ILE:HG12	2.47	0.49
11:S9:149:ARG:HD2	1:6:765:G:N7	429.01	0.49
3:S1:70:LEU:HB3	3:S1:79:HIS:CB	6.02	0.49
54:M8:176:ARG:HA	54:M8:182:LYS:O	2.13	0.49
44:L7:229:PHE:CD1	44:L7:229:PHE:C	3.08	0.49
1:6:1255:G:H4'	1:6:1256:A:OP1	2.11	0.49
6:S4:106:LYS:HG3	6:S4:108:ARG:NH1	2.47	0.49
1:2:1130:G:OP2	86:2:2073:OHX:N2	2.46	0.49
63:N7:61:LYS:O	63:N7:64:LYS:N	2.90	0.49
36:5:2401:A:N6	36:5:2404:A:H62	2.09	0.49
36:1:955:U:H2'	36:1:956:U:C6	2.47	0.49
1:6:546:U:H2'	1:6:547:U:C6	2.47	0.49
86:2:2043:OHX:N2	86:2:2098:OHX:N6	2.60	0.49
42:L5:24:ARG:NH2	37:7:13:A:N3	292.99	0.49
19:C7:51:ALA:HA	19:C7:54:THR:HG23	1.95	0.49
51:M5:49:ARG:HH21	36:5:115:A:P	100.00	0.49
9:S7:167:GLU:O	9:S7:170:GLN:HB2	2.11	0.49
9:S7:173:TYR:HE1	9:S7:179:LYS:HB2	1.77	0.49
1:6:187:G:H8	1:6:187:G:O5'	1.95	0.49
36:1:1488:G:C2	36:1:1489:A:C8	3.01	0.49
6:S4:127:LYS:N	6:S4:140:VAL:O	2.55	0.49
8:S6:12:SER:HB3	8:S6:124:LEU:HD12	3.05	0.49
79:Q3:36:ARG:NH1	79:Q3:48:LYS:HE3	6.21	0.49
34:SR:307:ASP:OD1	34:SR:309:VAL:HG23	2.86	0.49
11:S9:65:LYS:HA	11:S9:70:LEU:HD11	1.94	0.49
36:1:2633:U:H2'	36:1:2634:U:O4'	2.12	0.49
48:M1:26:SER:HB3	48:M1:64:LYS:O	2.12	0.49
36:1:3033:A:H2'	36:1:3034:C:H6	1.77	0.49
36:1:1176:C:H2'	36:1:1177:G:N2	2.27	0.49
36:1:2883:U:H2'	36:1:2884:C:H6	1.77	0.49
17:C5:18:ARG:HH21	17:C5:38:PRO:HG3	1.78	0.49
71:O5:44:ILE:O	71:O5:48:ARG:HG3	4.70	0.49
53:M7:141:SER:O	53:M7:143:PRO:HD3	2.43	0.49
86:5:3976:OHX:N3	86:5:4245:OHX:N2	2.60	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:S9:37:LYS:HB2	32:E0:33:ARG:N	2.28	0.49
44:L7:207:LEU:O	36:5:1334:U:H5'	240.50	0.49
1:2:1236:A:O4'	33:E1:138:ARG:NH2	2.45	0.49
33:E1:135:HIS:ND1	33:E1:138:ARG:HD2	2.28	0.49
30:D8:8:THR:HB	30:D8:56:LEU:HB2	2.26	0.49
49:M3:48:PRO:HB2	71:O5:117:ALA:HB2	2.45	0.49
45:L8:156:ASP:O	45:L8:157:VAL:HB	2.12	0.49
40:L3:350:ALA:O	40:L3:351:LEU:HB2	2.12	0.49
7:S5:222:LYS:HG3	7:S5:225:ARG:CZ	2.43	0.49
36:1:2717:U:OP1	86:1:3985:OHX:N6	2.46	0.49
3:S1:212:VAL:O	3:S1:214:LYS:N	2.46	0.49
36:1:242:C:O2'	36:1:243:G:H8	1.95	0.49
36:5:119:U:H4'	36:5:120:G:H3'	1.93	0.49
2:S0:14:ALA:O	2:S0:18:LEU:HG	2.13	0.49
1:6:827:C:H2'	1:6:828:U:C6	2.47	0.49
11:S9:78:ARG:HG3	11:S9:79:ARG:N	2.56	0.49
36:1:816:A:H5''	36:1:920:A:H62	1.77	0.49
1:2:1057:U:O2'	1:2:1058:U:OP2	2.26	0.49
39:L2:50:HIS:CD2	36:5:1795:U:H2'	198.80	0.49
56:N0:42:TRP:O	56:N0:46:GLN:HG3	2.13	0.49
1:2:833:U:H5'	1:2:834:G:H5''	1.94	0.49
14:C2:91:VAL:HG22	14:C2:92:ALA:H	4.46	0.49
12:C0:10:LYS:NZ	12:C0:36:ASP:O	3.50	0.49
33:E1:82:LYS:O	33:E1:83:LYS:HG3	2.13	0.49
9:S7:164:TYR:CE1	9:S7:165:LYS:HG2	2.61	0.49
36:1:1744:G:O6	86:1:4098:OHX:N2	2.45	0.49
1:2:181:A:H2'	1:2:182:A:C8	2.47	0.49
1:2:1014:G:OP1	86:2:2023:OHX:N5	2.46	0.49
1:6:918:U:H2'	1:6:919:A:C8	2.41	0.49
41:L4:269:SER:O	41:L4:269:SER:OG	2.27	0.49
12:C0:32:HIS:CD2	12:C0:35:ILE:HB	2.47	0.49
1:2:1291:G:H1	1:2:1324:G:H1	1.60	0.49
52:M6:65:ASN:O	52:M6:68:ARG:HG2	2.18	0.49
56:N0:13:ARG:O	56:N0:22:PRO:HG2	2.12	0.49
9:S7:117:THR:HG23	9:S7:120:ALA:H	1.78	0.49
72:O6:61:ILE:HD11	72:O6:87:VAL:HG13	2.80	0.49
8:S6:121:LEU:H	8:S6:125:THR:HB	3.04	0.49
1:6:1371:A:H5'	1:6:1372:U:OP2	2.12	0.49
19:C7:71:PHE:C	19:C7:73:LEU:H	2.16	0.49
86:5:4216:OHX:N4	86:5:4226:OHX:N3	2.60	0.49
41:L4:232:SER:OG	41:L4:233:LEU:N	2.41	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:92:TYR:HB2	40:L3:157:VAL:HG22	1.94	0.49
1:6:647:G:N2	1:6:687:G:N2	2.59	0.49
56:N0:26:ARG:NH1	57:N1:150:THR:HG21	2.85	0.49
46:L9:47:LYS:HZ2	50:M4:5:SER:H	1.60	0.49
25:D3:23:ARG:HB3	25:D3:29:TYR:CE1	2.78	0.49
86:5:4013:OHX:N6	86:5:4203:OHX:N5	2.60	0.49
86:6:2062:OHX:N2	86:6:2149:OHX:N4	2.60	0.49
9:S7:16:LEU:HA	9:S7:19:GLN:HG3	1.94	0.49
6:S4:159:THR:HG21	6:S4:227:VAL:O	2.41	0.49
86:1:4145:OHX:N1	86:1:4188:OHX:N5	2.61	0.49
23:D1:87:ARG:O	29:D7:11:THR:HG23	3.02	0.49
71:O5:68:GLN:O	71:O5:71:LYS:N	2.42	0.49
36:5:2842:U:C4	36:5:2843:U:C5	3.00	0.49
36:1:1063:G:C6	36:1:1097:G:C5	3.01	0.49
36:5:2595:A:H2'	36:5:2596:U:O4'	2.13	0.49
36:1:3024:A:C6	36:1:3032:A:C8	3.01	0.49
28:D6:36:ILE:HG21	28:D6:78:ALA:HB2	1.95	0.49
41:L4:118:LYS:O	41:L4:121:ALA:HB3	2.58	0.49
36:1:2528:G:N7	86:1:4187:OHX:N3	2.61	0.49
36:5:1853:U:OP2	86:5:4058:OHX:N6	2.46	0.49
36:1:750:G:P	65:N9:40:ARG:HH21	2.35	0.49
86:5:3981:OHX:N6	86:5:4201:OHX:N5	2.61	0.49
67:O1:13:THR:HG22	67:O1:72:ARG:NH2	4.32	0.49
1:2:1235:C:C2	33:E1:138:ARG:NH2	2.81	0.49
17:C5:69:GLU:OE1	86:C5:201:OHX:N6	2.46	0.49
41:L4:145:ILE:HD12	41:L4:150:LEU:HG	1.93	0.49
2:S0:183:ARG:HA	2:S0:188:LEU:HB2	2.59	0.49
42:L5:279:LYS:HG2	42:L5:282:ARG:CZ	2.42	0.49
63:N7:46:ILE:HD12	63:N7:47:GLU:N	2.39	0.49
1:2:1132:A:OP1	25:D3:30:LYS:HE2	2.12	0.49
25:D3:30:LYS:O	25:D3:34:LEU:HG	2.12	0.49
54:M8:122:ILE:HG22	54:M8:123:THR:O	2.76	0.49
15:C3:26:PHE:CE2	15:C3:66:ILE:HD13	2.48	0.49
42:L5:22:ARG:HG2	42:L5:28:THR:CB	2.42	0.49
8:S6:79:LYS:HG2	8:S6:80:ASN:HB2	1.94	0.49
1:2:67:A:C2	1:2:69:G:H1'	2.48	0.49
48:M1:15:GLU:HB3	48:M1:130:VAL:HG22	2.11	0.49
4:S2:94:GLN:HG2	4:S2:95:ARG:H	2.13	0.49
36:1:829:U:H3	36:1:895:A:N6	2.11	0.49
1:2:782:U:O4	26:D4:48:TYR:HA	2.13	0.49
26:D4:52:LYS:O	26:D4:54:ALA:N	2.72	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:996:U:H5''	1:2:996:U:H6	1.78	0.49
9:S7:168:SER:O	9:S7:172:VAL:HG23	2.48	0.49
1:6:976:G:O6	86:6:2082:OHX:N6	2.46	0.49
75:O9:37:TYR:O	36:5:351:A:N6	93.68	0.49
31:D9:10:HIS:CG	31:D9:11:PRO:HD2	2.47	0.49
1:2:760:A:H2'	1:2:761:G:O4'	2.12	0.49
86:1:3962:OHX:N1	86:1:4144:OHX:N4	2.61	0.49
2:S0:32:HIS:ND1	2:S0:32:HIS:O	2.43	0.49
79:Q3:91:GLU:OE2	79:Q3:91:GLU:N	2.45	0.49
1:6:761:G:O6	86:6:2086:OHX:N1	2.46	0.49
36:1:2597:U:H2'	36:1:2598:G:H8	1.78	0.49
5:S3:127:MET:HE1	5:S3:133:GLY:HA2	1.95	0.49
1:2:372:G:H1'	1:2:612:U:O2	2.12	0.49
53:M7:168:LEU:HB2	53:M7:172:GLN:HB3	1.94	0.49
69:O3:58:GLU:OE2	69:O3:61:GLY:HA2	3.03	0.49
86:5:3976:OHX:N1	86:5:4245:OHX:N5	2.60	0.49
47:M0:174:THR:OG1	47:M0:175:ASN:O	6.30	0.49
36:1:1741:A:C2	36:1:1742:U:C4	3.00	0.49
53:M7:60:PHE:CE2	53:M7:82:ARG:HB2	2.47	0.49
53:M7:67:ILE:HD12	53:M7:82:ARG:NH1	3.37	0.49
10:S8:76:THR:HG21	10:S8:105:ASP:O	5.31	0.49
42:L5:56:THR:C	42:L5:58:LYS:H	2.14	0.49
1:2:142:G:C5	1:2:266:A:C6	3.00	0.49
77:Q1:16:LYS:O	77:Q1:20:VAL:HG23	3.15	0.49
68:O2:19:ARG:HG3	68:O2:33:ARG:CB	2.42	0.49
36:1:1613:A:OP2	74:O8:46:ARG:NH2	2.46	0.49
6:S4:187:ARG:NH2	1:6:754:A:C8	374.92	0.49
30:D8:22:ARG:HD2	1:6:1619:C:C2	343.45	0.49
10:S8:84:HIS:HE1	10:S8:86:SER:HB2	1.77	0.49
1:6:825:U:O2'	1:6:826:U:H6	1.95	0.49
1:2:487:G:H3'	1:2:488:G:H5''	1.94	0.49
45:L8:91:PHE:CE2	45:L8:185:ARG:HD3	5.03	0.49
36:1:2916:U:C1'	59:N3:44:SER:HB3	2.42	0.49
36:1:715:A:H5''	64:N8:114:GLY:O	2.12	0.49
36:1:3084:C:H2'	36:1:3085:G:O4'	2.12	0.49
49:M3:92:THR:HB	71:O5:114:ARG:HG2	1.95	0.49
1:2:1492:A:O2'	1:2:1493:A:H8	1.95	0.49
57:N1:139:ARG:NH2	57:N1:139:ARG:HG2	4.72	0.49
6:S4:15:PRO:HG2	6:S4:18:TRP:CE2	2.48	0.49
7:S5:178:GLY:HA3	7:S5:209:TYR:CD2	2.48	0.49
36:1:1722:U:OP1	55:M9:100:ARG:HD3	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3364:C:H2'	36:1:3365:U:H6	1.78	0.49
36:5:644:G:H2'	36:5:2372:A:N7	2.27	0.49
42:L5:4:GLN:O	42:L5:6:ASP:N	3.26	0.49
36:5:434:U:H2'	36:5:435:C:C6	2.48	0.49
55:M9:24:LEU:HD22	55:M9:50:ILE:HG12	5.74	0.49
7:S5:152:GLY:O	7:S5:154:ALA:N	2.45	0.49
1:2:1051:G:HO2'	1:2:1052:U:P	2.34	0.49
53:M7:108:ASP:N	53:M7:152:GLU:OE2	2.60	0.49
1:2:1603:U:H2'	1:2:1604:U:C6	2.48	0.49
45:L8:160:ILE:HG23	45:L8:164:VAL:HG13	3.91	0.49
2:S0:79:ARG:NH1	2:S0:164:ASN:O	2.94	0.49
36:1:650:C:H2'	36:1:651:G:C8	2.47	0.49
6:S4:86:PHE:O	6:S4:87:MET:HB2	2.13	0.49
6:S4:86:PHE:CD1	6:S4:87:MET:HG2	2.48	0.49
6:S4:6:LYS:C	6:S4:7:LYS:HD2	2.73	0.49
55:M9:43:LYS:N	55:M9:43:LYS:HD2	4.78	0.49
1:2:543:C:O2	1:2:543:C:H5'	2.13	0.49
35:SM:58:GLU:O	35:SM:62:ARG:HB2	2.70	0.49
6:S4:167:GLY:O	6:S4:168:LYS:HB2	4.77	0.49
56:N0:139:TYR:HD2	56:N0:140:VAL:HG23	2.18	0.49
1:6:1540:G:C6	1:6:1541:G:C4	3.01	0.49
5:S3:59:LEU:HA	5:S3:66:ILE:HG13	1.94	0.49
22:D0:69:LYS:HG2	31:D9:44:ARG:NH1	3.23	0.49
36:5:1899:G:N7	86:5:3948:OHX:N6	2.60	0.49
36:5:1495:U:H2'	36:5:1842:A:C2	2.48	0.49
42:L5:76:ALA:HB3	42:L5:109:THR:HG22	1.95	0.49
64:N8:66:ALA:HA	64:N8:69:TRP:N	4.00	0.49
36:1:1109:U:H2'	36:1:1110:U:C6	2.48	0.49
36:5:1805:C:H2'	36:5:1806:A:H8	1.78	0.49
53:M7:178:ALA:O	53:M7:182:ILE:HB	2.13	0.49
2:S0:9:LEU:HD11	2:S0:14:ALA:HB2	2.19	0.49
6:S4:66:MET:HB3	1:6:454:U:C4	376.77	0.49
34:SR:220:ILE:HB	34:SR:234:LEU:HB2	2.20	0.49
55:M9:96:ILE:HG12	36:5:1722:U:O4'	218.61	0.49
1:2:833:U:OP2	86:2:2141:OHX:N4	2.46	0.49
41:L4:39:PHE:CD2	41:L4:242:ALA:HB2	2.86	0.49
46:L9:93:VAL:HG22	76:Q0:82:LEU:HD13	2.66	0.49
36:1:3006:A:C2	36:1:3141:A:C4	3.00	0.49
1:2:1215:C:OP1	86:2:2152:OHX:N4	2.46	0.49
68:O2:45:ARG:NH2	36:5:1367:G:OP1	197.97	0.49
36:5:2801:A:O2'	36:5:2802:A:H2'	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1147:A:H2'	1:2:1148:C:C6	2.48	0.49
1:2:505:A:N3	1:2:505:A:H2'	2.26	0.49
50:M4:13:ARG:NH1	50:M4:65:LEU:O	2.63	0.49
45:L8:134:TYR:CD2	45:L8:190:VAL:HG11	4.89	0.49
6:S4:32:SER:HB2	6:S4:83:PRO:HD3	1.95	0.49
36:1:2707:C:H2'	36:1:2708:C:H6	1.78	0.49
4:S2:228:ASN:ND2	23:D1:1:MET:HB3	2.28	0.49
28:D6:60:PRO:C	28:D6:62:TYR:H	2.16	0.49
3:S1:70:LEU:HB2	3:S1:82:ARG:O	5.05	0.49
14:C2:73:LYS:NZ	33:E1:108:VAL:HG13	2.28	0.49
36:1:2835:U:C2'	36:1:2836:C:H5'	2.42	0.49
36:5:1449:A:C2	36:5:2356:A:C4	3.01	0.49
44:L7:208:SER:HB2	36:5:1334:U:H1'	241.42	0.49
44:L7:125:GLU:HA	44:L7:128:LYS:HG3	1.94	0.49
1:6:1458:G:N2	1:6:1459:C:C2	2.81	0.49
1:2:328:A:H2'	1:2:329:G:O4'	2.12	0.49
66:O0:16:LEU:HB3	66:O0:98:SER:HB2	1.95	0.49
56:N0:155:ARG:NH2	56:N0:172:TYR:H	4.71	0.49
42:L5:88:ILE:HD12	42:L5:240:TYR:CE1	4.28	0.49
15:C3:114:ARG:NH1	15:C3:114:ARG:HG2	2.28	0.49
1:2:5:U:H2'	1:2:6:G:C8	2.46	0.49
36:1:2926:A:C2'	36:1:2927:C:H5'	2.43	0.49
18:C6:49:TYR:HB3	18:C6:53:LEU:HD11	1.95	0.49
1:6:1491:U:H4'	1:6:1492:A:H5''	1.94	0.49
58:N2:20:SER:O	58:N2:23:THR:N	2.45	0.49
36:1:208:C:O2'	36:1:209:A:H5'	2.13	0.49
39:L2:83:HIS:CE1	39:L2:86:GLN:HB2	2.50	0.49
36:5:1246:G:O2'	36:5:1264:G:OP2	2.26	0.49
36:5:1754:G:OP1	86:5:4078:OHX:N1	2.45	0.49
36:1:3056:U:OP2	86:1:3937:OHX:N3	2.46	0.49
1:2:1566:U:H5''	20:C8:39:GLY:H	1.78	0.49
53:M7:41:LEU:O	53:M7:41:LEU:HD22	2.13	0.49
36:5:2676:A:H4'	36:5:2677:G:O5'	2.13	0.49
36:1:1340:G:H2'	36:1:1341:U:H6	1.78	0.49
36:1:2748:A:O2'	42:L5:48:LYS:HE2	2.12	0.49
44:L7:25:GLN:O	44:L7:28:ALA:HB3	3.63	0.49
1:2:527:A:OP2	86:2:2052:OHX:N4	2.46	0.49
4:S2:183:ALA:HB1	4:S2:211:LEU:HD21	2.11	0.49
59:N3:89:ASP:OD1	59:N3:89:ASP:N	2.69	0.49
36:5:1659:U:H2'	36:5:1660:C:C6	2.47	0.49
65:N9:46:ALA:O	65:N9:50:THR:HG23	2.64	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:23:TRP:CE3	55:M9:51:VAL:HG13	2.48	0.48
47:M0:76:MET:CE	47:M0:138:VAL:HG11	2.43	0.48
53:M7:75:GLU:HG2	53:M7:76:PHE:CE2	2.48	0.48
86:2:2089:OHX:N5	86:2:2131:OHX:N2	2.60	0.48
25:D3:95:PHE:O	25:D3:142:LYS:NZ	2.39	0.48
51:M5:7:LEU:HD12	51:M5:7:LEU:HA	3.15	0.48
33:E1:135:HIS:HB2	33:E1:138:ARG:CB	2.42	0.48
36:1:2534:G:H2'	36:1:2535:A:H8	1.78	0.48
41:L4:271:LYS:HB2	41:L4:274:TYR:CB	2.82	0.48
16:C4:24:ASN:O	16:C4:25:ASP:HB2	2.13	0.48
2:S0:13:ASP:OD1	2:S0:179:ARG:NH2	2.61	0.48
7:S5:53:VAL:C	7:S5:55:ASP:H	2.53	0.48
1:6:488:G:N2	1:6:499:U:H3	2.10	0.48
37:3:60:G:H2'	37:3:61:G:C8	2.48	0.48
64:N8:114:GLY:O	64:N8:137:LYS:NZ	2.89	0.48
8:S6:160:ARG:NH2	1:6:68:A:OP1	345.84	0.48
36:1:119:U:C2	45:L8:138:HIS:CE1	3.01	0.48
49:M3:120:GLN:O	49:M3:122:LYS:N	3.32	0.48
1:6:820:U:O2'	1:6:821:U:H5''	2.12	0.48
34:SR:42:LEU:HD21	34:SR:82:SER:HB3	1.93	0.48
16:C4:80:HIS:ND1	16:C4:113:GLY:O	3.69	0.48
34:SR:134:TRP:CZ3	34:SR:140:CYS:HB2	2.90	0.48
36:1:1509:A:H2'	36:1:1510:G:C8	2.48	0.48
55:M9:94:VAL:O	55:M9:97:ARG:HB2	2.48	0.48
2:S0:120:LEU:HD12	2:S0:121:VAL:H	1.78	0.48
60:N4:4:GLU:HG2	60:N4:30:ARG:CD	2.43	0.48
43:L6:18:LEU:N	43:L6:18:LEU:HD22	2.28	0.48
68:O2:64:LYS:HE2	68:O2:65:PHE:CZ	3.25	0.48
78:Q2:14:GLY:O	78:Q2:18:ARG:HG3	4.50	0.48
47:M0:174:THR:HG1	47:M0:175:ASN:N	4.03	0.48
36:5:314:U:H2'	36:5:315:C:C6	2.49	0.48
36:5:1329:U:HO2'	36:5:1330:A:P	2.33	0.48
1:2:79:C:H4'	8:S6:173:PRO:O	2.14	0.48
23:D1:64:GLU:OE1	29:D7:3:LEU:HB2	2.13	0.48
5:S3:162:GLN:NE2	5:S3:165:ASN:HB2	2.28	0.48
3:S1:36:SER:HB3	3:S1:231:LEU:O	4.07	0.48
10:S8:61:GLU:HG3	10:S8:62:THR:HG23	2.86	0.48
1:6:140:A:H4'	1:6:140:A:OP2	2.13	0.48
42:L5:95:TRP:CH2	42:L5:161:GLY:HA2	2.48	0.48
1:2:330:G:OP2	10:S8:172:ARG:HG2	2.13	0.48
40:L3:227:GLU:HG3	40:L3:270:ARG:CD	4.40	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1597:A:H2'	1:2:1598:U:H6	1.78	0.48
19:C7:19:ARG:HG3	19:C7:20:TYR:CD1	2.48	0.48
27:D5:59:TYR:HE2	27:D5:61:SER:HB3	1.78	0.48
49:M3:93:ILE:HG22	49:M3:94:GLY:H	4.34	0.48
36:1:829:U:H2'	36:1:894:G:O6	2.13	0.48
29:D7:19:HIS:HE1	29:D7:21:LEU:HG	2.36	0.48
16:C4:112:ILE:O	28:D6:57:SER:HA	2.78	0.48
3:S1:93:GLY:C	3:S1:95:ASN:H	2.95	0.48
1:2:296:U:H2'	1:2:297:U:C6	2.48	0.48
61:N5:115:ARG:NH1	61:N5:119:THR:OG1	2.63	0.48
36:1:2427:U:H2'	36:1:2428:U:C6	2.48	0.48
58:N2:58:GLU:C	58:N2:60:GLY:H	2.15	0.48
36:1:2812:C:H2'	36:1:2813:A:H8	1.78	0.48
1:2:1788:G:P	16:C4:127:ARG:HH12	2.36	0.48
1:2:97:C:H2'	1:2:98:U:C6	2.49	0.48
38:8:145:U:H2'	38:8:146:U:C6	2.48	0.48
36:5:3065:G:O6	86:5:4107:OHX:N6	2.46	0.48
36:5:1204:A:H2'	36:5:1205:A:H5'	1.95	0.48
1:6:709:C:O2	1:6:730:G:N2	2.45	0.48
36:5:106:A:N3	36:5:325:A:O2'	2.40	0.48
45:L8:245:LYS:HG2	45:L8:245:LYS:O	2.75	0.48
36:1:929:A:H5''	41:L4:61:SER:HB3	1.95	0.48
43:L6:72:ASN:HB3	43:L6:160:SER:HA	1.94	0.48
55:M9:23:TRP:CZ2	55:M9:25:ASP:HB3	2.46	0.48
18:C6:110:THR:HA	18:C6:113:ASP:HB2	2.72	0.48
24:D2:22:LYS:HG3	29:D7:3:LEU:HA	1.94	0.48
16:C4:31:THR:OG1	16:C4:32:ASP:N	2.79	0.48
3:S1:87:ARG:NH1	3:S1:133:TYR:OH	2.42	0.48
2:S0:35:PRO:C	2:S0:37:VAL:H	2.17	0.48
20:C8:36:LYS:O	20:C8:102:ALA:N	2.51	0.48
20:C8:140:THR:HA	20:C8:143:ARG:HH11	2.94	0.48
35:SM:68:ARG:HD3	1:6:1460:A:P	335.76	0.48
36:1:1306:G:C6	52:M6:62:THR:HA	2.47	0.48
56:N0:21:GLU:N	56:N0:22:PRO:HD3	2.26	0.48
9:S7:99:LEU:HD23	9:S7:100:PRO:HD2	1.95	0.48
36:5:1064:A:H4'	36:5:1065:A:O5'	2.12	0.48
72:O6:55:ARG:O	72:O6:58:ILE:HD13	2.13	0.48
36:5:3120:C:HO2'	36:5:3121:U:H6	1.60	0.48
19:C7:107:SER:O	19:C7:110:VAL:HG23	3.33	0.48
51:M5:169:LYS:HE3	36:5:63:A:OP1	100.94	0.48
1:2:169:A:H5''	8:S6:176:GLN:HG2	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:491:C:H42	1:6:497:G:H21	1.61	0.48
1:2:72:A:C2	1:2:73:U:C4	3.01	0.48
7:S5:124:LEU:O	7:S5:125:THR:OG1	2.29	0.48
76:Q0:78:ILE:HD11	76:Q0:83:LYS:HA	6.87	0.48
2:S0:104:PRO:HA	2:S0:135:GLU:OE2	2.63	0.48
57:N1:83:ARG:HD2	57:N1:85:LEU:HD21	2.07	0.48
51:M5:150:TRP:CH2	51:M5:151:ILE:HG12	2.48	0.48
1:2:1164:G:H2'	1:2:1165:G:C8	2.48	0.48
52:M6:15:LEU:HD21	52:M6:125:ARG:HG3	1.95	0.48
51:M5:120:TRP:CZ2	51:M5:122:ASN:HA	2.48	0.48
51:M5:4:TYR:OH	36:5:148:G:OP2	110.27	0.48
50:M4:19:ARG:HA	50:M4:69:THR:HG22	3.03	0.48
67:O1:11:GLU:HG2	67:O1:74:ARG:HB2	1.94	0.48
9:S7:21:ALA:O	9:S7:24:PHE:HB2	2.31	0.48
37:3:74:C:H1'	37:3:106:U:O2	2.14	0.48
44:L7:145:ARG:HA	44:L7:185:ILE:HD13	3.07	0.48
36:1:2553:U:H4'	36:1:2554:A:OP2	2.14	0.48
1:6:1184:A:HO2'	1:6:1209:C:HO2'	1.58	0.48
36:1:1456:A:N1	36:1:1476:G:O2'	2.34	0.48
50:M4:92:GLU:N	50:M4:92:GLU:OE2	2.41	0.48
1:2:1277:G:H2'	1:2:1278:G:O4'	2.13	0.48
1:2:912:U:H4'	1:2:913:G:H2'	1.95	0.48
36:5:3389:U:O4	86:5:4253:OHX:N4	2.47	0.48
38:8:44:A:H2'	38:8:45:C:C6	2.47	0.48
36:5:2267:C:H2'	36:5:2268:U:H6	1.77	0.48
67:O1:12:TYR:O	67:O1:72:ARG:HD2	2.12	0.48
18:C6:50:GLU:O	18:C6:54:LEU:HD22	3.85	0.48
53:M7:69:ARG:NH1	36:5:3308:C:N3	190.07	0.48
36:5:284:A:H4'	36:5:285:A:C2	2.48	0.48
1:2:542:A:HO2'	1:2:542:A:H8	1.61	0.48
22:D0:27:THR:O	22:D0:113:ASP:HB3	2.92	0.48
77:Q1:6:ARG:O	77:Q1:10:THR:HG23	2.13	0.48
39:L2:70:ARG:CZ	39:L2:72:ARG:HE	4.92	0.48
36:5:741:U:H2'	36:5:742:G:O4'	2.14	0.48
36:1:2677:G:OP2	86:1:4052:OHX:N4	2.47	0.48
1:2:190:C:N4	1:2:196:G:C6	2.81	0.48
36:5:2896:A:H5'	36:5:2896:A:C8	2.46	0.48
36:5:3279:A:H2'	36:5:3280:U:H5'	1.96	0.48
36:1:1245:A:H3'	36:1:1246:G:H5''	1.95	0.48
22:D0:39:SER:HA	22:D0:42:VAL:HG12	1.94	0.48
22:D0:89:ARG:NH2	1:6:1383:G:OP1	446.46	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:65:A:H2	1:6:84:A:H62	1.61	0.48
1:2:1683:C:O2'	1:2:1684:U:O5'	2.26	0.48
47:M0:19:LYS:HG3	47:M0:26:VAL:CG2	3.53	0.48
36:1:3033:A:H2'	36:1:3034:C:C6	2.48	0.48
34:SR:255:ALA:HB2	34:SR:292:LEU:HD22	1.94	0.48
36:1:2419:A:H2'	36:1:2420:C:C6	2.48	0.48
9:S7:111:LYS:O	9:S7:112:ARG:HB2	2.12	0.48
36:1:696:C:HO2'	36:1:697:A:H8	1.58	0.48
53:M7:86:LYS:HB2	36:5:2353:G:H5''	141.15	0.48
63:N7:110:ALA:O	63:N7:114:VAL:HG23	2.13	0.48
57:N1:8:ARG:O	57:N1:11:THR:OG1	2.28	0.48
23:D1:85:TYR:CD1	29:D7:6:ASP:HB2	2.81	0.48
64:N8:85:ASP:OD1	64:N8:86:LYS:HG2	2.13	0.48
66:O0:19:LYS:HG2	66:O0:19:LYS:H	2.70	0.48
36:5:953:G:H2'	36:5:1117:G:H5''	1.95	0.48
36:1:1567:U:H5	36:1:1568:U:C2	2.31	0.48
52:M6:10:ASP:OD2	52:M6:37:ARG:NH2	3.29	0.48
39:L2:192:LYS:HB3	39:L2:193:ARG:NH1	2.97	0.48
62:N6:39:LEU:CD1	62:N6:43:TYR:HE2	3.08	0.48
26:D4:124:ARG:O	26:D4:127:LYS:HB3	4.43	0.48
36:5:92:G:H5'	36:5:93:C:H5''	1.95	0.48
35:SM:61:ILE:HD12	35:SM:62:ARG:HG2	1.95	0.48
64:N8:46:ASP:N	64:N8:46:ASP:OD1	2.50	0.48
1:6:1235:C:OP2	1:6:1245:G:H8	1.96	0.48
42:L5:106:ALA:O	42:L5:110:LEU:HB2	2.14	0.48
9:S7:71:HIS:CG	9:S7:131:PHE:HZ	2.31	0.48
36:1:2178:A:H3'	39:L2:132:ASN:ND2	2.27	0.48
36:5:3330:A:C8	36:5:3330:A:H5''	2.45	0.48
9:S7:50:ASP:HB3	9:S7:56:LYS:HG2	1.95	0.48
1:2:1000:C:H5	1:2:1002:G:H3'	1.79	0.48
40:L3:154:TYR:CD1	36:5:3242:G:H2'	261.04	0.48
49:M3:74:GLY:HA3	49:M3:98:ASP:HB2	2.52	0.48
1:2:498:G:C4	1:2:499:U:N3	2.82	0.48
19:C7:23:LYS:H	34:SR:216:LYS:HE2	1.79	0.48
54:M8:122:ILE:HD11	54:M8:130:ARG:NH2	2.28	0.48
36:1:517:G:C5'	36:1:517:G:H8	2.26	0.48
1:2:867:G:O6	86:2:2031:OHX:N2	2.46	0.48
36:5:2772:C:H1'	36:5:2773:C:OP2	2.13	0.48
36:5:1806:A:H2'	36:5:1807:G:O4'	2.13	0.48
6:S4:195:ILE:HG22	6:S4:196:VAL:N	2.83	0.48
6:S4:3:ARG:HG2	1:6:399:A:H4'	321.04	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:N8:87:ARG:O	64:N8:91:LEU:HD22	2.13	0.48
64:N8:27:LYS:O	64:N8:28:HIS:HB2	4.31	0.48
50:M4:17:VAL:HG21	50:M4:74:ARG:HB2	1.96	0.48
62:N6:103:LYS:HE3	36:5:217:U:O2'	77.73	0.48
19:C7:17:ILE:HG23	19:C7:58:MET:HE2	1.95	0.48
12:C0:16:PHE:O	12:C0:88:PRO:HA	2.14	0.48
12:C0:24:LYS:HD2	12:C0:63:TYR:CZ	4.53	0.48
39:L2:79:ASN:O	39:L2:82:VAL:HG22	2.13	0.48
6:S4:180:LEU:N	6:S4:229:GLY:O	2.42	0.48
1:2:4:C:OP2	4:S2:200:SER:OG	2.31	0.48
68:O2:87:MET:O	68:O2:88:HIS:ND1	2.46	0.48
13:C1:122:ILE:H	13:C1:144:ALA:HB2	1.78	0.48
34:SR:22:SER:OG	34:SR:70:ASP:HA	2.96	0.48
1:6:700:C:H2'	1:6:701:U:C6	2.49	0.48
1:6:432:G:H2'	1:6:433:C:O4'	2.13	0.48
4:S2:186:LYS:O	4:S2:190:LEU:HD12	3.50	0.48
1:6:282:C:H2'	1:6:283:U:O4'	2.13	0.48
69:O3:56:SER:OG	36:5:3170:A:OP2	203.20	0.48
22:D0:63:LEU:N	22:D0:63:LEU:HD23	3.24	0.48
1:6:1031:U:H4'	1:6:1032:G:OP2	2.14	0.48
11:S9:129:ILE:HA	11:S9:134:ILE:CG1	4.33	0.48
18:C6:82:ARG:HH22	18:C6:114:ARG:CB	2.23	0.48
5:S3:144:ALA:HB2	1:6:579:A:N1	392.33	0.48
47:M0:77:THR:HG23	47:M0:85:PHE:CZ	3.06	0.48
61:N5:105:VAL:HA	61:N5:130:TYR:CE2	2.49	0.48
1:2:1553:G:O6	17:C5:43:ARG:HD3	2.12	0.48
1:2:1537:C:N4	1:2:1572:G:H1	2.12	0.48
8:S6:177:ARG:NH2	1:6:143:G:N7	311.91	0.48
39:L2:130:SER:HA	39:L2:169:ILE:HG22	1.95	0.48
86:5:4003:OHX:N4	86:5:4091:OHX:N1	2.62	0.48
40:L3:25:ILE:H	40:L3:25:ILE:CD1	2.26	0.48
1:2:144:U:O2'	1:2:145:A:H8	1.96	0.48
1:6:416:A:H4'	1:6:417:A:OP2	2.12	0.48
27:D5:56:THR:HA	27:D5:103:ARG:HH11	1.77	0.48
46:L9:57:VAL:HG13	46:L9:64:HIS:CE1	2.52	0.48
86:2:2043:OHX:N4	86:2:2098:OHX:N3	2.61	0.48
27:D5:42:LEU:O	27:D5:46:LYS:HB2	2.14	0.48
3:S1:116:LYS:HD3	3:S1:117:TRP:CZ3	2.48	0.48
36:5:174:C:H2'	36:5:175:C:O4'	2.13	0.48
4:S2:57:PHE:CZ	4:S2:138:PRO:HD3	2.76	0.48
1:6:1491:U:H5'	1:6:1492:A:OP1	2.13	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:17:ARG:C	63:N7:19:ALA:H	2.16	0.48
36:5:1363:A:OP2	86:5:4202:OHX:N3	2.47	0.48
38:8:83:C:H4'	38:8:85:G:C2	2.49	0.48
1:2:322:G:O4'	1:2:323:A:H8	1.97	0.48
36:1:3279:A:C6	69:O3:54:ARG:NE	2.81	0.48
54:M8:49:LEU:HD22	54:M8:53:PHE:CZ	2.48	0.48
36:5:612:U:H2'	36:5:613:G:H8	1.77	0.48
27:D5:38:HIS:ND1	27:D5:70:LYS:HG2	6.83	0.48
1:6:1609:U:H2'	1:6:1610:G:O4'	2.13	0.48
49:M3:174:ARG:HB2	72:O6:9:ILE:HD11	3.12	0.48
8:S6:126:ASP:OD2	8:S6:127:THR:HG22	2.14	0.48
36:1:1680:G:H2'	36:1:1681:U:H6	1.78	0.48
58:N2:19:VAL:O	58:N2:22:PRO:HD2	2.14	0.48
76:Q0:93:LYS:HB3	76:Q0:103:LEU:O	2.14	0.48
1:6:703:G:H2'	1:6:704:C:C6	2.49	0.48
36:5:275:U:H2'	36:5:276:U:C6	2.49	0.48
36:1:2539:C:H5'	36:1:2541:U:O4	2.13	0.48
24:D2:90:THR:HB	24:D2:94:LEU:HD12	1.96	0.48
73:O7:48:ASN:OD1	73:O7:54:LYS:NZ	3.25	0.48
44:L7:152:GLY:O	44:L7:163:LEU:HG	2.12	0.48
36:1:1807:G:C6	36:1:1808:G:N1	2.81	0.48
36:5:3094:A:H2'	36:5:3095:U:C6	2.49	0.48
39:L2:104:LEU:O	39:L2:139:HIS:HE1	2.10	0.48
28:D6:73:TYR:CZ	28:D6:82:ARG:HD2	2.49	0.48
3:S1:55:LYS:HD3	3:S1:55:LYS:HA	1.91	0.48
24:D2:36:LYS:O	24:D2:40:VAL:HG23	2.14	0.48
1:6:811:A:C2	1:6:858:G:H1'	2.49	0.48
47:M0:171:TRP:O	47:M0:174:THR:HB	2.13	0.48
36:1:1221:A:H3'	36:1:1222:G:H5''	1.94	0.48
28:D6:85:ARG:HD3	28:D6:85:ARG:HA	1.48	0.48
86:2:2089:OHX:N3	86:2:2131:OHX:N6	2.62	0.48
51:M5:114:ARG:HG2	51:M5:137:PRO:HG3	2.50	0.48
42:L5:244:HIS:O	42:L5:248:ARG:HG3	2.12	0.48
38:4:85:G:C8	38:4:85:G:H3'	2.49	0.48
9:S7:114:ARG:O	9:S7:116:ARG:N	2.46	0.48
64:N8:6:THR:HG22	64:N8:9:ARG:HG2	2.34	0.48
6:S4:246:LEU:HD21	6:S4:254:ARG:CZ	2.43	0.48
41:L4:93:MET:HB2	36:5:658:G:N2	145.55	0.48
39:L2:3:ARG:HB3	39:L2:207:VAL:HG12	4.61	0.48
46:L9:8:GLN:NE2	46:L9:69:ARG:HG2	4.38	0.48
56:N0:155:ARG:NH1	36:5:3206:C:O2	310.31	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2645:G:OP2	47:M0:117:GLY:HA2	2.13	0.48
15:C3:23:PRO:HD2	15:C3:26:PHE:HB3	1.95	0.48
1:6:1151:A:O3'	1:6:1766:A:N6	2.47	0.48
70:O4:98:GLN:O	70:O4:102:LYS:HD3	2.14	0.48
36:1:1845:G:C5'	36:1:1845:G:H8	2.26	0.48
1:2:434:G:N7	86:2:2047:OHX:N4	2.60	0.48
4:S2:139:ILE:CD1	4:S2:191:ALA:HB1	2.43	0.48
1:2:755:A:HO2'	1:2:756:A:P	2.36	0.48
36:5:2537:U:O2	36:5:2543:U:N3	2.47	0.48
41:L4:264:SER:OG	41:L4:267:VAL:HG12	3.14	0.48
63:N7:38:PHE:O	63:N7:40:HIS:ND1	2.43	0.48
79:Q3:29:LEU:O	79:Q3:33:GLN:HG2	3.50	0.48
52:M6:116:LYS:HG3	52:M6:117:ARG:N	2.32	0.48
59:N3:127:PRO:O	59:N3:130:ALA:HB3	2.13	0.48
33:E1:106:TYR:HE2	33:E1:116:LYS:HG2	1.96	0.48
34:SR:202:LEU:HA	34:SR:212:ALA:O	2.14	0.48
50:M4:20:VAL:HG13	50:M4:68:LEU:O	2.44	0.48
1:6:1358:G:H2'	1:6:1359:C:H6	1.77	0.48
23:D1:56:SER:OG	23:D1:59:VAL:HG23	2.13	0.48
21:C9:42:GLY:HA2	21:C9:84:LYS:HB2	1.94	0.48
67:O1:61:LYS:HB3	67:O1:61:LYS:HE2	4.76	0.48
43:L6:102:ASN:OD1	43:L6:102:ASN:N	3.36	0.48
45:L8:149:LYS:O	45:L8:176:PRO:HG2	2.14	0.48
36:1:566:G:N7	86:1:4006:OHX:N4	2.61	0.48
34:SR:33:LEU:O	34:SR:45:TRP:HD1	1.96	0.48
52:M6:10:ASP:HA	52:M6:36:VAL:HG23	1.96	0.48
47:M0:174:THR:O	47:M0:175:ASN:HB2	4.16	0.48
36:1:2206:G:OP2	36:1:2206:G:H8	1.96	0.48
28:D6:75:VAL:O	28:D6:79:ILE:N	2.36	0.48
22:D0:96:PRO:O	22:D0:99:ILE:HG12	5.16	0.48
1:2:990:C:H2'	1:2:991:G:O4'	2.13	0.48
1:6:1579:U:H2'	1:6:1580:C:C6	2.49	0.48
70:O4:84:CYS:O	70:O4:88:ARG:HB2	4.73	0.48
46:L9:12:VAL:HB	46:L9:51:GLN:HA	1.96	0.48
1:2:1459:C:H4'	17:C5:126:VAL:HG11	1.95	0.48
36:5:1307:G:C2	36:5:1308:A:C2	3.01	0.48
19:C7:81:LYS:O	19:C7:83:GLN:N	3.70	0.48
64:N8:3:SER:O	64:N8:6:THR:HG22	2.14	0.48
4:S2:45:VAL:HG21	4:S2:68:ILE:HG23	2.34	0.48
36:5:3047:U:O2'	36:5:3048:A:H5'	2.14	0.48
40:L3:53:MET:CG	40:L3:77:THR:HG22	2.77	0.48

*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	2.48	0.48
48:M1:8:PRO:HG2	48:M1:9:MET:H	2.53	0.48
1:2:1718:G:OP2	86:2:2081:OHX:N1	2.46	0.48
36:1:1551:C:HO2'	36:1:2170:U:HO2'	1.62	0.48
28:D6:37:LYS:HA	28:D6:71:LEU:O	2.14	0.48
7:S5:29:ILE:O	7:S5:34:GLN:HG3	2.14	0.48
51:M5:101:THR:O	51:M5:105:ARG:HG3	2.18	0.48
1:2:710:U:H2'	1:2:711:U:H5'	1.96	0.48
44:L7:83:LEU:HD22	44:L7:84:VAL:N	2.29	0.48
1:2:325:G:H4'	13:C1:83:THR:HG21	1.95	0.48
45:L8:50:VAL:HG11	61:N5:27:ARG:HG3	1.95	0.48
36:5:2971:A:H5''	36:5:2972:G:C5'	2.43	0.48
1:2:393:C:H2'	1:2:394:C:H6	1.78	0.48
1:6:880:C:H2'	1:6:881:A:O4'	2.14	0.48
1:6:373:G:N2	1:6:603:U:O3'	2.47	0.48
73:O7:39:TYR:CD2	73:O7:40:PRO:HA	2.49	0.48
36:1:1504:A:C5	36:1:1505:C:C5	3.02	0.48
54:M8:43:PRO:HB2	36:5:728:G:H5''	190.39	0.48
69:O3:13:HIS:O	69:O3:95:GLY:N	2.41	0.48
18:C6:127:LYS:HA	18:C6:134:ALA:HA	1.96	0.48
34:SR:160:GLU:O	34:SR:162:ALA:N	2.45	0.48
55:M9:167:ARG:NH1	55:M9:167:ARG:HB3	5.16	0.48
53:M7:30:ARG:HA	53:M7:119:VAL:HG11	2.27	0.48
39:L2:193:ARG:HH21	36:5:2181:C:H5''	196.40	0.48
34:SR:89:LEU:HD11	34:SR:124:SER:HB3	1.95	0.48
36:1:2407:C:H1'	36:1:2818:U:O2	2.14	0.48
1:6:230:C:N3	1:6:235:G:N2	2.53	0.48
49:M3:59:ARG:O	49:M3:60:ALA:HB3	4.62	0.48
20:C8:138:THR:OG1	1:6:1459:C:OP2	350.87	0.48
2:S0:185:ARG:HA	23:D1:44:ARG:HA	1.95	0.48
9:S7:71:HIS:CG	9:S7:131:PHE:CZ	3.01	0.48
1:2:1722:A:H5''	8:S6:75:LEU:HD22	1.95	0.48
1:2:327:U:O2'	13:C1:10:GLU:HG2	2.14	0.48
36:1:1720:U:P	55:M9:110:ARG:HH12	2.35	0.48
31:D9:21:CYS:HB2	31:D9:39:CYS:CB	3.78	0.48
1:2:687:G:H5'	24:D2:119:LYS:HG2	1.95	0.48
62:N6:71:SER:HB3	62:N6:83:ASP:HB2	1.94	0.48
36:1:330:G:OP2	86:1:4046:OHX:N2	2.47	0.48
86:1:4007:OHX:N5	86:1:4176:OHX:N5	2.62	0.48
47:M0:75:TYR:CE2	47:M0:79:VAL:HG21	3.24	0.48
1:2:1164:G:H2'	1:2:1165:G:H8	1.78	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:53:VAL:HA	63:N7:57:HIS:HD2	1.77	0.48
2:S0:73:VAL:O	2:S0:95:ALA:HA	2.14	0.48
36:1:1577:G:H2'	36:1:1578:C:C1'	2.44	0.48
36:5:2970:C:H4'	36:5:2971:A:N1	2.28	0.48
17:C5:87:PRO:HD3	17:C5:112:LEU:HD22	1.96	0.48
36:5:3013:U:H2'	36:5:3014:U:C6	2.49	0.48
2:S0:177:LEU:O	2:S0:181:VAL:HG13	2.30	0.48
52:M6:182:ASN:OD1	52:M6:186:ALA:HB2	5.15	0.48
36:1:2986:U:H2'	36:1:2987:A:C8	2.49	0.48
36:1:2986:U:H2'	36:1:2987:A:H8	1.77	0.48
3:S1:32:ILE:HB	3:S1:43:VAL:HB	2.90	0.48
1:6:145:A:O2'	1:6:146:U:OP1	2.30	0.48
78:Q2:105:GLN:HB2	78:Q2:106:PHE:CD1	2.85	0.48
36:5:712:G:H2'	36:5:713:U:C6	2.49	0.48
41:L4:361:HIS:CG	41:L4:362:ASP:H	2.31	0.48
1:6:1638:G:C2	1:6:1639:C:H1'	2.49	0.48
45:L8:146:LYS:HD3	45:L8:173:MET:O	3.48	0.48
14:C2:50:LYS:O	14:C2:54:ARG:HG2	2.40	0.48
86:5:3976:OHX:N5	86:5:4245:OHX:N5	2.61	0.48
47:M0:3:ARG:CZ	47:M0:63:GLU:HG3	2.43	0.48
19:C7:27:ASP:OD2	19:C7:30:THR:HG22	2.14	0.48
36:1:3275:U:O4'	69:O3:66:VAL:HG21	2.14	0.48
42:L5:270:LYS:O	42:L5:273:ARG:HD2	3.70	0.48
48:M1:96:PHE:CD1	48:M1:102:PHE:HB3	2.49	0.48
3:S1:39:GLU:O	3:S1:41:ARG:HG3	3.50	0.48
3:S1:185:THR:HG22	3:S1:189:ILE:HD11	2.30	0.48
1:6:658:C:N4	1:6:673:A:N1	2.62	0.48
1:2:1553:G:N2	1:2:1555:A:H3'	2.29	0.48
36:1:1595:U:OP2	70:O4:36:LYS:NZ	2.43	0.48
24:D2:77:PRO:O	24:D2:79:PHE:N	2.67	0.48
34:SR:192:PHE:HD1	34:SR:223:TRP:CE3	2.31	0.48
9:S7:98:ILE:HG12	9:S7:118:LEU:HA	1.95	0.48
1:2:239:C:H2'	1:2:240:U:C6	2.49	0.48
1:2:189:C:H2'	1:2:190:C:H5'	1.96	0.48
25:D3:24:TRP:CE3	25:D3:30:LYS:HG3	4.06	0.48
36:1:3047:U:O2'	40:L3:53:MET:HE1	2.13	0.48
1:2:652:G:H1	1:2:682:C:N4	2.12	0.48
8:S6:160:ARG:HH12	1:6:68:A:H5'	347.44	0.48
36:5:118:U:O2	36:5:121:A:H5'	2.13	0.48
1:2:647:G:N2	1:2:687:G:N2	2.61	0.48
2:S0:195:TRP:CE2	2:S0:197:ILE:HB	2.92	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:123:A:C6	36:5:150:A:C5	3.02	0.48
1:2:623:A:OP2	86:2:2157:OHX:N4	2.47	0.48
1:2:1248:C:H2'	1:2:1249:U:C6	2.48	0.48
1:2:978:A:H2'	1:2:979:A:O4'	2.13	0.48
7:S5:25:LEU:HB2	18:C6:27:GLY:O	2.44	0.48
86:6:2062:OHX:N5	86:6:2149:OHX:N3	2.62	0.48
44:L7:96:PRO:HB2	44:L7:99:PRO:HD2	2.37	0.48
34:SR:115:ILE:HG13	34:SR:122:ILE:HG12	2.57	0.48
15:C3:128:TYR:CE1	1:6:964:U:H5''	323.23	0.48
44:L7:123:THR:O	44:L7:126:LEU:HB2	2.28	0.48
37:3:40:C:O2'	48:M1:72:ARG:HD2	2.14	0.48
51:M5:56:LYS:NZ	51:M5:145:ASP:OD2	2.40	0.48
40:L3:108:GLU:HG2	40:L3:109:HIS:CD2	3.64	0.48
57:N1:57:TYR:CD1	57:N1:89:LEU:HD21	2.49	0.48
64:N8:132:LYS:O	64:N8:136:GLU:HG3	2.75	0.48
1:6:1573:A:H4'	1:6:1574:G:H5'	1.95	0.48
22:D0:33:GLN:OE1	22:D0:33:GLN:N	2.68	0.48
36:1:1191:U:C2	52:M6:48:PHE:CE1	3.02	0.48
50:M4:120:VAL:HA	50:M4:123:LEU:HD12	1.95	0.48
52:M6:108:ILE:HD12	52:M6:160:ARG:CZ	2.44	0.47
49:M3:46:ILE:HG23	49:M3:49:ARG:CZ	3.07	0.47
1:2:702:G:O6	1:2:737:A:N6	2.47	0.47
36:1:1565:G:N2	36:1:1574:C:O2	2.47	0.47
23:D1:64:GLU:HG3	29:D7:3:LEU:HG	1.96	0.47
53:M7:136:ILE:HG13	36:5:1846:C:C4	145.10	0.47
36:5:1876:U:H6	36:5:1876:U:C5'	2.27	0.47
20:C8:127:HIS:CD2	20:C8:133:VAL:HG11	3.42	0.47
36:1:563:U:OP1	56:N0:71:LYS:NZ	2.33	0.47
64:N8:46:ASP:O	64:N8:47:LYS:HB3	2.49	0.47
41:L4:269:SER:C	41:L4:271:LYS:H	2.11	0.47
8:S6:63:MET:HE1	8:S6:106:LEU:HD13	1.95	0.47
5:S3:64:ARG:HG2	5:S3:65:ARG:H	2.50	0.47
26:D4:29:HIS:N	26:D4:29:HIS:CD2	4.12	0.47
63:N7:41:ALA:O	63:N7:43:VAL:HG13	3.34	0.47
47:M0:210:ILE:HG23	47:M0:217:PHE:CD2	3.60	0.47
38:4:151:C:C5	61:N5:24:LEU:HD11	2.49	0.47
49:M3:64:LYS:HG3	64:N8:69:TRP:CD2	2.49	0.47
43:L6:63:LEU:HB2	43:L6:79:VAL:HG12	1.95	0.47
27:D5:54:VAL:HA	27:D5:57:TYR:CE1	2.88	0.47
36:1:1579:C:N4	36:1:1580:A:H62	2.12	0.47
17:C5:51:SER:C	17:C5:53:PRO:HD2	4.12	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3199:G:H5''	50:M4:6:ILE:HG21	1.95	0.47
39:L2:30:ARG:NH2	39:L2:33:ASP:OD1	2.98	0.47
86:5:4057:OHX:N1	86:5:4202:OHX:N2	2.62	0.47
71:O5:27:GLU:O	71:O5:31:LEU:HD12	2.13	0.47
69:O3:8:TYR:CE2	69:O3:99:ARG:HG2	2.48	0.47
36:5:2425:G:H2'	36:5:2426:U:O4'	2.14	0.47
36:1:523:A:O2'	56:N0:69:PRO:HD2	2.14	0.47
17:C5:18:ARG:NH1	20:C8:90:ASN:O	2.46	0.47
36:1:2320:A:C2	79:Q3:16:VAL:HG13	2.49	0.47
15:C3:124:ARG:NH2	1:6:967:A:OP2	319.80	0.47
47:M0:191:LYS:HG2	47:M0:198:LYS:HB2	1.96	0.47
20:C8:17:LEU:O	20:C8:20:THR:N	2.88	0.47
36:1:2257:C:H2'	36:1:2258:U:O4'	2.14	0.47
6:S4:31:PRO:HD2	6:S4:38:LEU:HD13	2.95	0.47
4:S2:166:THR:HG23	4:S2:201:ASN:HB3	1.96	0.47
58:N2:59:ASP:HB3	58:N2:62:VAL:HB	1.96	0.47
15:C3:46:THR:HG23	15:C3:49:GLN:OE1	2.33	0.47
40:L3:229:VAL:HG11	40:L3:249:VAL:HG12	5.76	0.47
36:5:2962:U:OP1	86:5:3981:OHX:N4	2.47	0.47
7:S5:41:LYS:O	7:S5:67:PRO:HB2	2.14	0.47
26:D4:15:ASN:HD22	26:D4:22:GLN:HE22	2.74	0.47
61:N5:56:ARG:HG2	38:8:134:G:OP1	78.74	0.47
1:2:542:A:N1	32:E0:28:LYS:HD2	2.29	0.47
70:O4:8:ARG:CG	70:O4:8:ARG:HH11	2.27	0.47
36:1:73:C:C4	72:O6:15:LYS:HD3	2.50	0.47
49:M3:126:PHE:HD2	71:O5:115:LYS:HG2	2.10	0.47
2:S0:182:LEU:HB3	2:S0:188:LEU:HD23	1.95	0.47
42:L5:85:ARG:HD2	42:L5:86:TYR:CZ	2.49	0.47
36:1:2662:G:H2'	36:1:2663:G:H8	1.79	0.47
36:5:979:U:H4'	36:5:980:A:H5'	1.96	0.47
30:D8:21:SER:HB2	1:6:1619:C:H5'	341.63	0.47
28:D6:44:ILE:HD13	28:D6:65:PRO:HG2	4.01	0.47
42:L5:146:LEU:HB3	36:5:2746:A:H2	259.51	0.47
9:S7:49:ILE:HG13	9:S7:57:ALA:HB3	2.47	0.47
1:6:76:A:H2'	1:6:76:A:N3	2.29	0.47
1:2:72:A:C2	1:2:73:U:N3	2.81	0.47
41:L4:126:ILE:HD11	41:L4:233:LEU:HD13	1.96	0.47
24:D2:55:ASP:C	24:D2:57:ARG:H	2.16	0.47
36:5:1805:C:H2'	36:5:1806:A:C8	2.48	0.47
1:6:1050:G:O6	86:6:2197:OHX:N4	2.47	0.47
3:S1:128:LYS:HG3	3:S1:134:VAL:HG22	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:D1:16:LYS:HG2	23:D1:21:ASN:HA	1.95	0.47
86:5:4057:OHX:N3	86:5:4202:OHX:N4	2.61	0.47
47:M0:24:ARG:CG	47:M0:24:ARG:HH11	2.28	0.47
36:5:1863:G:N1	36:5:1866:C:OP2	2.36	0.47
36:1:3088:G:H2'	36:1:3089:C:O4'	2.13	0.47
48:M1:21:ILE:HG21	48:M1:33:ALA:HB1	1.96	0.47
2:S0:147:THR:O	2:S0:161:PRO:HA	2.40	0.47
1:6:165:G:H2'	1:6:166:C:H5''	1.96	0.47
39:L2:59:ALA:HB3	39:L2:76:PHE:HB2	2.55	0.47
39:L2:220:GLY:O	39:L2:221:LYS:HG3	2.14	0.47
39:L2:113:VAL:HG12	39:L2:166:ILE:HD13	1.95	0.47
8:S6:193:LEU:HA	8:S6:193:LEU:HD23	1.75	0.47
47:M0:22:TYR:CZ	36:5:1048:A:H2'	267.80	0.47
41:L4:316:ASN:OD1	41:L4:318:LEU:HB2	2.13	0.47
69:O3:58:GLU:HG2	69:O3:62:SER:O	3.15	0.47
47:M0:76:MET:HE1	47:M0:138:VAL:HG11	1.96	0.47
40:L3:284:ARG:HB3	40:L3:323:MET:HB3	2.06	0.47
47:M0:81:GLY:O	47:M0:83:ASP:N	3.38	0.47
28:D6:6:ALA:H	1:6:1796:C:H5	345.39	0.47
86:2:2089:OHX:N1	86:2:2131:OHX:N4	2.63	0.47
3:S1:139:ALA:HB2	3:S1:172:LEU:HD11	2.54	0.47
36:1:1019:G:H2'	36:1:1020:G:O4'	2.14	0.47
31:D9:14:TYR:OH	1:6:1553:G:O2'	403.46	0.47
36:1:1814:A:H4'	36:1:1815:U:H5'	1.95	0.47
1:6:485:A:C5	1:6:486:G:H1'	2.48	0.47
2:S0:202:TYR:O	2:S0:203:PHE:CG	2.67	0.47
36:5:725:G:C3'	36:5:726:G:H5''	2.44	0.47
36:1:3048:A:C5'	40:L3:53:MET:HE1	2.45	0.47
16:C4:87:GLY:HA2	16:C4:92:LYS:HD3	7.51	0.47
36:5:3316:A:H5''	36:5:3318:G:H22	1.78	0.47
36:1:600:G:H5''	36:1:600:G:H8	1.78	0.47
3:S1:153:HIS:CD2	3:S1:154:SER:H	4.17	0.47
43:L6:170:LYS:HB3	43:L6:172:HIS:CE1	2.50	0.47
2:S0:76:ILE:O	2:S0:124:THR:HG23	2.14	0.47
1:2:61:A:H8	1:2:269:G:O2'	1.96	0.47
39:L2:31:THR:O	39:L2:33:ASP:N	2.47	0.47
41:L4:193:LYS:HE3	41:L4:193:LYS:HB3	1.68	0.47
1:6:84:A:H2'	1:6:85:A:O4'	2.15	0.47
55:M9:130:ASN:C	55:M9:132:PHE:H	2.17	0.47
61:N5:25:LYS:HD3	61:N5:27:ARG:NH1	2.29	0.47
36:1:398:A:C4	53:M7:3:ARG:NH2	2.82	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1048:A:H2'	47:M0:22:TYR:CZ	2.49	0.47
36:5:2859:U:O2'	86:5:3903:OHX:N2	2.47	0.47
1:6:784:C:H2'	1:6:785:U:H6	1.79	0.47
36:1:36:C:OP2	51:M5:83:LYS:NZ	2.32	0.47
1:6:1154:G:N7	86:6:2137:OHX:N2	2.62	0.47
1:2:1073:G:H2'	1:2:1074:G:H5''	1.96	0.47
1:6:1045:C:C2	1:6:1074:G:C2	3.03	0.47
36:5:3063:C:H2'	36:5:3064:U:C6	2.49	0.47
2:S0:110:TYR:CE2	4:S2:64:LYS:HG2	2.49	0.47
44:L7:29:GLU:O	44:L7:32:ALA:HB3	3.65	0.47
1:2:1085:G:N2	1:2:1088:A:OP2	2.39	0.47
4:S2:96:THR:OG1	4:S2:97:ARG:N	3.78	0.47
50:M4:115:PHE:O	50:M4:119:GLN:HG3	2.14	0.47
42:L5:78:ALA:HB1	42:L5:104:LEU:HD23	1.96	0.47
1:2:276:C:O2'	1:2:277:U:H5''	2.14	0.47
62:N6:4:GLN:HB2	36:5:229:G:H5''	69.21	0.47
6:S4:46:VAL:O	6:S4:50:ASN:HB2	2.19	0.47
1:2:1533:C:H5	27:D5:77:ARG:HH21	1.61	0.47
7:S5:43:PHE:N	7:S5:46:TRP:H	2.79	0.47
36:5:583:G:O6	86:5:4022:OHX:N1	2.47	0.47
18:C6:46:PHE:O	18:C6:50:GLU:HG3	2.14	0.47
36:5:1013:G:H2'	36:5:1014:U:O4'	2.14	0.47
36:5:1014:U:C3'	36:5:1015:U:H5'	2.45	0.47
3:S1:179:SER:HB3	3:S1:183:GLN:HB2	1.96	0.47
1:2:1499:G:C2	1:2:1500:C:C2	3.02	0.47
48:M1:23:VAL:HG11	48:M1:29:ARG:HG2	1.96	0.47
36:1:1595:U:C2	36:1:1596:C:C5	3.03	0.47
36:1:1597:C:N4	36:1:1610:G:H1	2.12	0.47
34:SR:21:THR:OG1	34:SR:69:GLN:O	3.60	0.47
39:L2:201:GLY:O	39:L2:204:MET:HG3	2.15	0.47
14:C2:81:ASP:HA	14:C2:82:PRO:HD2	2.45	0.47
19:C7:71:PHE:CD1	19:C7:73:LEU:HB3	2.45	0.47
1:2:74:U:H1'	1:2:75:U:C5'	2.44	0.47
1:6:1535:U:H1'	1:6:1536:G:C2	2.50	0.47
59:N3:120:LYS:HB3	59:N3:137:VAL:HG21	1.95	0.47
48:M1:101:ASN:HB3	48:M1:130:VAL:HA	1.96	0.47
9:S7:14:THR:OG1	9:S7:15:GLU:N	2.38	0.47
1:2:779:U:OP2	1:2:780:A:H2	1.97	0.47
40:L3:261:MET:HE2	52:M6:63:ALA:C	2.35	0.47
36:5:1502:C:N3	36:5:1513:G:O6	2.48	0.47
51:M5:135:VAL:HG11	51:M5:151:ILE:HG21	2.69	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:N8:128:ARG:HB3	72:O6:8:ALA:HB3	3.02	0.47
7:S5:98:MET:HB2	7:S5:105:GLY:O	2.15	0.47
36:1:729:C:H2'	36:1:730:C:H6	1.80	0.47
36:1:2989:U:O2'	40:L3:267:ALA:O	2.28	0.47
21:C9:65:ILE:HG12	21:C9:71:VAL:HG22	2.66	0.47
41:L4:78:GLY:O	41:L4:85:SER:HB3	2.55	0.47
52:M6:85:ARG:HD3	52:M6:90:HIS:CG	2.80	0.47
1:2:1437:U:H5'	5:S3:176:LEU:HD23	1.95	0.47
36:1:412:G:C6	36:1:413:U:C4	3.02	0.47
10:S8:78:ILE:HA	10:S8:104:ILE:HG22	2.80	0.47
36:1:2674:A:H5''	48:M1:105:GLY:HA3	1.96	0.47
73:O7:63:ARG:O	73:O7:68:LYS:HE3	3.64	0.47
36:1:3228:C:H4'	36:1:3229:G:O5'	2.14	0.47
36:5:1507:G:N3	36:5:1507:G:H5'	2.28	0.47
62:N6:108:LYS:HA	62:N6:108:LYS:HD3	2.63	0.47
28:D6:97:PRO:HA	28:D6:98:PRO:HD2	3.71	0.47
36:5:507:U:H2'	36:5:508:U:C6	2.50	0.47
40:L3:5:LYS:HG2	40:L3:6:TYR:CD1	3.50	0.47
29:D7:29:ARG:NH1	29:D7:29:ARG:HG3	2.29	0.47
61:N5:56:ARG:NH2	38:8:135:G:OP2	83.21	0.47
36:5:284:A:H4'	36:5:285:A:N3	2.29	0.47
36:1:3375:A:O2'	36:1:3378:C:H5'	2.15	0.47
36:1:3041:U:OP1	59:N3:12:ARG:NH1	2.48	0.47
1:2:1330:G:H2'	1:2:1331:A:O4'	2.14	0.47
1:2:1607:G:H2'	1:2:1608:U:H6	1.79	0.47
47:M0:99:ILE:CG2	47:M0:123:HIS:HB2	2.43	0.47
47:M0:7:ARG:NH1	36:5:2828:G:OP2	270.11	0.47
72:O6:57:LEU:O	72:O6:61:ILE:HG12	4.12	0.47
46:L9:3:TYR:HA	56:N0:142:GLN:OE1	2.18	0.47
71:O5:86:ARG:HG3	71:O5:90:ARG:HH21	2.70	0.47
42:L5:148:ILE:HG23	42:L5:151:GLN:CB	2.44	0.47
74:O8:64:LYS:HG3	74:O8:65:LEU:N	4.56	0.47
36:1:2655:U:H4'	36:1:2656:A:O4'	2.13	0.47
3:S1:83:LYS:NZ	16:C4:116:GLU:OE2	2.33	0.47
37:3:4:U:H2'	37:3:5:G:H8	1.78	0.47
8:S6:46:LYS:HD2	8:S6:118:GLU:OE2	4.27	0.47
26:D4:33:ALA:O	26:D4:34:ASN:ND2	4.61	0.47
20:C8:5:VAL:O	27:D5:42:LEU:HB2	3.47	0.47
36:5:1481:A:H2'	36:5:1481:A:N3	2.30	0.47
24:D2:86:ILE:HD12	24:D2:87:GLU:H	1.77	0.47
50:M4:50:LYS:HD3	50:M4:91:CYS:SG	5.76	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:109:HIS:CD2	48:M1:114:ILE:HG21	2.75	0.47
48:M1:109:HIS:O	48:M1:112:LEU:HD23	2.40	0.47
1:6:263:C:H4'	1:6:292:U:H5'	1.96	0.47
51:M5:155:VAL:HG23	51:M5:156:HIS:ND1	2.30	0.47
1:6:454:U:H5''	1:6:455:C:H5	1.78	0.47
6:S4:51:ARG:O	6:S4:53:LYS:HG2	2.15	0.47
62:N6:101:PRO:HA	62:N6:104:LEU:HD12	1.95	0.47
36:1:995:U:C2	36:1:2637:A:C8	3.02	0.47
17:C5:18:ARG:NH2	17:C5:38:PRO:HG3	2.32	0.47
36:5:415:G:OP2	86:5:4223:OHX:N4	2.48	0.47
1:2:335:U:O2'	13:C1:130:PRO:O	2.31	0.47
36:1:402:A:OP1	75:O9:36:ARG:NH2	2.47	0.47
36:1:2944:U:H5''	36:1:2945:G:OP2	2.15	0.47
47:M0:205:SER:O	47:M0:209:ASN:HB2	2.14	0.47
36:1:912:G:OP2	39:L2:9:ARG:NH1	2.39	0.47
10:S8:89:GLU:OE1	10:S8:92:ARG:NH2	2.28	0.47
58:N2:37:LEU:O	58:N2:41:ILE:HG13	2.15	0.47
43:L6:29:LYS:O	86:5:3905:OHX:N2	265.60	0.47
46:L9:96:HIS:O	46:L9:98:PRO:HD3	2.15	0.47
30:D8:11:LYS:O	30:D8:31:GLU:N	2.45	0.47
55:M9:151:ARG:O	55:M9:155:LEU:HG	4.63	0.47
28:D6:40:ALA:HB3	28:D6:69:ASN:HB3	4.04	0.47
36:5:3167:A:H2'	36:5:3168:A:O4'	2.14	0.47
36:5:1397:C:O2'	36:5:1398:U:H5'	2.14	0.47
49:M3:67:ARG:HG3	49:M3:67:ARG:H	1.34	0.47
51:M5:96:ARG:HG2	51:M5:96:ARG:HH11	1.80	0.47
38:4:143:U:H2'	38:4:144:G:O4'	2.15	0.47
1:6:1769:U:OP2	86:6:2146:OHX:N2	2.47	0.47
36:1:2223:A:H8	36:1:2223:A:OP2	1.96	0.47
26:D4:37:LYS:O	26:D4:41:ARG:HG3	2.15	0.47
8:S6:173:PRO:HG3	1:6:66:U:C5	334.18	0.47
24:D2:22:LYS:HA	29:D7:3:LEU:HD22	1.96	0.47
5:S3:162:GLN:HE22	5:S3:165:ASN:HB2	1.78	0.47
1:6:230:C:N4	1:6:235:G:H1	2.07	0.47
1:2:1235:C:C2	33:E1:138:ARG:CZ	2.97	0.47
1:2:1553:G:O2'	31:D9:14:TYR:OH	2.31	0.47
38:8:79:A:H2'	38:8:80:A:O4'	2.15	0.47
36:1:1062:A:N3	57:N1:130:ARG:NH2	2.60	0.47
9:S7:92:PHE:O	9:S7:93:LEU:HD23	2.79	0.47
1:2:694:U:H3	9:S7:98:ILE:HD12	1.79	0.47
1:2:144:U:H5	8:S6:137:ARG:NH1	2.13	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:6:2127:OHX:N6	86:6:2152:OHX:N3	2.63	0.47
48:M1:81:GLU:HA	48:M1:84:LEU:HB2	1.96	0.47
1:2:1000:C:C5	1:2:1002:G:H3'	2.49	0.47
41:L4:91:GLY:HA3	41:L4:93:MET:HE2	1.97	0.47
71:O5:10:ARG:NH1	71:O5:60:GLU:OE1	3.20	0.47
15:C3:27:LYS:HB2	15:C3:28:LEU:H	1.52	0.47
36:1:2727:A:O3'	36:1:2728:G:H4'	2.14	0.47
34:SR:282:SER:N	1:6:1394:G:OP1	417.50	0.47
28:D6:24:VAL:HG11	28:D6:71:LEU:HD12	1.97	0.47
38:4:104:A:H3'	38:4:105:A:C5'	2.44	0.47
4:S2:36:VAL:HA	4:S2:37:PRO:HD2	2.46	0.47
46:L9:77:ASN:HA	46:L9:80:THR:HG22	5.18	0.47
1:6:570:A:H5''	1:6:571:G:OP2	2.14	0.47
61:N5:93:TYR:CE2	38:8:131:A:H5''	105.99	0.47
36:5:2767:U:H2'	36:5:2768:U:H6	1.79	0.47
36:1:1397:C:C2'	36:1:1398:U:H5'	2.45	0.47
78:Q2:100:LYS:HE3	78:Q2:100:LYS:H	1.77	0.47
1:6:1592:A:C2	1:6:1605:G:C2	3.02	0.47
1:2:1393:C:H2'	1:2:1394:G:O4'	2.14	0.47
1:6:8:U:O2'	86:6:2074:OHX:N2	2.47	0.47
55:M9:44:LEU:HD12	55:M9:49:THR:HB	1.96	0.47
1:2:876:G:H1'	1:2:944:A:O4'	2.14	0.47
36:5:1354:G:C6	36:5:1358:C:H5'	2.50	0.47
1:6:613:G:H4'	1:6:614:C:OP1	2.15	0.47
36:5:2308:C:O2	86:5:4242:OHX:N1	2.48	0.47
1:6:1017:U:H2'	1:6:1018:U:C6	2.49	0.47
86:1:4059:OHX:N4	86:1:4167:OHX:N1	2.63	0.47
36:1:1078:U:O4	86:1:3968:OHX:N2	2.48	0.47
52:M6:38:ALA:O	52:M6:41:LEU:HB2	2.15	0.47
36:5:83:U:OP2	86:5:4210:OHX:N4	2.47	0.47
1:2:1186:U:O4	1:2:1200:G:N2	2.46	0.47
8:S6:58:LYS:H	8:S6:58:LYS:HG2	1.44	0.47
40:L3:187:SER:HB3	40:L3:190:GLU:OE1	2.15	0.47
52:M6:12:LYS:HG2	52:M6:40:GLU:HB3	4.29	0.47
54:M8:178:ARG:HD3	54:M8:178:ARG:HA	1.68	0.47
36:1:2794:G:H1'	36:1:2795:U:C6	2.50	0.47
36:5:273:A:N7	86:5:4067:OHX:N3	2.62	0.47
7:S5:94:THR:HG22	7:S5:114:ILE:HG13	1.97	0.47
1:2:852:C:N4	1:2:853:G:C6	2.83	0.47
25:D3:61:SER:HB2	25:D3:116:ASP:HB2	1.97	0.47
28:D6:4:LYS:HE2	28:D6:5:ARG:NH2	2.89	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:173:GLN:O	40:L3:175:LYS:N	2.47	0.47
40:L3:252:ILE:HD12	40:L3:252:ILE:HA	1.59	0.47
1:2:1009:U:H2'	1:2:1010:C:H6	1.80	0.47
34:SR:44:SER:OG	34:SR:59:ARG:HB2	2.15	0.47
1:6:1347:U:O2	1:6:1516:A:H5'	2.15	0.47
36:1:3166:C:N4	36:1:3284:G:H1	2.03	0.47
2:S0:148:ASP:OD1	2:S0:149:LEU:N	2.77	0.47
1:6:139:C:H4'	1:6:140:A:O5'	2.14	0.47
36:1:3362:A:H2'	36:1:3363:U:O4'	2.15	0.47
5:S3:64:ARG:O	5:S3:67:ASN:N	2.37	0.47
7:S5:163:SER:HB2	30:D8:48:VAL:CG2	2.83	0.47
36:5:3022:G:O2'	36:5:3031:G:O6	2.19	0.47
52:M6:62:THR:HA	36:5:1306:G:C6	233.31	0.47
9:S7:116:ARG:HE	9:S7:116:ARG:HB2	1.96	0.47
29:D7:36:LYS:O	29:D7:77:THR:HG22	2.60	0.47
50:M4:59:ASN:HB2	50:M4:62:GLN:HE21	1.79	0.47
7:S5:222:LYS:HG3	7:S5:225:ARG:NH2	2.30	0.47
4:S2:56:ILE:HA	4:S2:61:LEU:HD12	3.07	0.47
28:D6:12:LYS:HB3	28:D6:12:LYS:HE2	4.41	0.47
14:C2:123:VAL:CG1	14:C2:126:TRP:HB3	2.44	0.47
36:5:3238:G:H5''	36:5:3238:G:H8	1.80	0.47
86:5:4068:OHX:N5	86:5:4145:OHX:N6	2.61	0.47
40:L3:53:MET:HE2	40:L3:77:THR:CG2	3.08	0.47
1:2:327:U:H2'	1:2:328:A:C8	2.49	0.47
38:4:151:C:C4	61:N5:24:LEU:HD11	2.50	0.47
1:6:1175:U:H2'	1:6:1176:G:H8	1.78	0.47
36:1:781:G:N7	86:1:3942:OHX:N5	2.61	0.47
1:6:546:U:H2'	1:6:547:U:H6	1.79	0.47
36:5:1710:C:H2'	36:5:1711:C:H6	1.80	0.47
1:2:15:U:H2'	1:2:16:G:O4'	2.15	0.47
36:5:3242:G:C5'	36:5:3245:A:C8	2.98	0.47
45:L8:91:PHE:O	45:L8:95:ASN:HB2	2.36	0.47
58:N2:49:ASN:C	58:N2:51:GLY:H	2.17	0.47
36:1:1544:G:O6	86:1:4061:OHX:N4	2.47	0.47
21:C9:52:GLY:HA2	21:C9:55:TYR:CE2	2.50	0.47
54:M8:122:ILE:HG23	54:M8:126:GLN:CB	2.86	0.47
15:C3:27:LYS:HE2	15:C3:27:LYS:H	1.79	0.47
68:O2:4:LEU:HD12	68:O2:90:LYS:HB3	3.74	0.47
45:L8:112:GLU:O	45:L8:116:VAL:HB	2.13	0.47
13:C1:67:ARG:NH2	13:C1:128:CYS:O	2.48	0.47
37:3:31:U:H4'	42:L5:218:ARG:NH2	2.29	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:158:ARG:HD2	37:7:47:C:OP2	284.17	0.47
6:S4:194:THR:O	6:S4:195:ILE:HB	2.15	0.47
9:S7:140:VAL:HG22	9:S7:150:GLN:HG2	1.96	0.47
40:L3:256:HIS:HA	40:L3:257:PRO:C	2.39	0.47
51:M5:135:VAL:CG1	51:M5:142:ILE:HG12	2.44	0.47
1:2:1481:C:O2'	1:2:1482:C:O5'	2.24	0.47
29:D7:19:HIS:CE1	29:D7:21:LEU:H	3.19	0.47
71:O5:4:VAL:HG13	71:O5:50:SER:OG	2.15	0.47
36:1:1608:C:H2'	36:1:1609:C:C6	2.50	0.47
41:L4:311:HIS:CE1	41:L4:314:LYS:HA	2.49	0.47
36:1:1478:C:H2'	36:1:1479:U:H6	1.79	0.47
36:5:856:G:OP1	36:5:1722:U:O2'	2.30	0.47
19:C7:21:TYR:HA	19:C7:58:MET:HE1	1.96	0.47
16:C4:16:VAL:HG21	16:C4:18:ARG:NH2	2.37	0.47
6:S4:212:ASP:OD2	6:S4:216:ASN:HB2	2.14	0.47
15:C3:107:LYS:HE3	1:6:880:C:OP1	271.81	0.47
36:5:51:A:H2'	36:5:52:A:O4'	2.14	0.47
1:6:1271:G:H2'	1:6:1272:U:O4'	2.15	0.47
53:M7:41:LEU:O	53:M7:45:GLN:HG3	2.14	0.47
34:SR:132:LYS:HD3	34:SR:140:CYS:SG	2.55	0.47
2:S0:142:PRO:HB3	23:D1:34:ILE:HD13	1.96	0.47
1:6:729:G:O2'	1:6:730:G:O5'	2.30	0.47
50:M4:20:VAL:HG13	50:M4:68:LEU:HB2	1.97	0.47
52:M6:77:SER:OG	52:M6:106:GLU:OE2	2.30	0.47
61:N5:50:ALA:HB2	71:O5:79:ASP:HB3	5.76	0.47
36:5:2371:G:O6	86:5:3911:OHX:N4	2.47	0.47
36:1:3010:U:OP2	86:1:4204:OHX:N5	2.48	0.47
34:SR:305:TYR:CD2	34:SR:311:ARG:HD2	2.54	0.47
13:C1:79:LYS:HB3	1:6:346:G:H5'	281.91	0.47
35:SM:41:SER:O	35:SM:43:ASP:N	2.43	0.47
1:6:1102:G:H2'	1:6:1103:U:O4'	2.14	0.47
59:N3:90:GLY:O	60:N4:16:GLY:HA2	2.25	0.47
36:1:590:G:C2	36:1:610:G:H2'	2.50	0.47
7:S5:93:LEU:HD23	7:S5:172:ILE:HG12	1.96	0.47
1:2:1266:U:H2'	1:2:1267:G:C8	2.50	0.47
36:5:570:A:H2'	36:5:571:U:O4'	2.15	0.47
36:1:2756:C:O4'	57:N1:49:GLN:HG2	2.15	0.47
36:5:2419:A:H1'	36:5:2804:A:O4'	2.15	0.47
36:1:2887:A:N3	36:1:2887:A:H2'	2.30	0.47
2:S0:172:LEU:HD13	2:S0:176:LEU:HD11	2.60	0.47
57:N1:62:GLY:HA3	57:N1:76:ILE:HD13	2.22	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:249:U:OP2	36:5:249:U:H2'	2.15	0.47
1:2:570:A:H5''	1:2:571:G:OP2	2.14	0.47
11:S9:11:THR:HG23	1:6:472:U:H5''	398.29	0.47
36:5:1536:G:N7	86:5:3925:OHX:N2	2.63	0.47
36:1:1069:C:H2'	36:1:1070:U:C6	2.50	0.47
20:C8:48:LYS:HD3	21:C9:35:ASP:OD2	2.14	0.47
14:C2:45:LEU:O	14:C2:49:THR:HG23	2.34	0.47
1:2:635:A:H2'	1:2:636:A:H8	1.80	0.47
1:2:1365:C:N4	1:2:1366:U:O4	2.48	0.47
78:Q2:33:ALA:O	78:Q2:34:SER:HB3	2.14	0.47
36:5:879:U:O2	36:5:2357:A:H1'	2.14	0.47
70:O4:74:ARG:HG2	70:O4:75:ALA:N	2.75	0.47
7:S5:43:PHE:HB3	7:S5:46:TRP:CD1	5.57	0.47
1:2:768:C:N1	11:S9:143:ILE:HD13	2.30	0.47
67:O1:94:GLU:HB2	67:O1:95:PRO:HD2	3.79	0.47
28:D6:87:ARG:HD2	1:6:1797:A:C6	344.57	0.47
53:M7:59:PRO:HB3	53:M7:78:VAL:HG11	1.96	0.47
41:L4:283:THR:HG21	41:L4:288:ARG:NH2	7.20	0.47
1:6:1699:G:C2'	1:6:1700:C:H5'	2.45	0.47
7:S5:112:ARG:HD3	27:D5:95:HIS:NE2	2.30	0.47
35:SM:46:LYS:HD3	36:1:1018:G:H5''	1.97	0.47
66:O0:30:THR:O	66:O0:34:LEU:N	2.77	0.47
1:6:1321:A:H4'	1:6:1322:A:O5'	2.14	0.47
1:2:142:G:P	8:S6:139:ASN:HD21	2.37	0.47
25:D3:56:LYS:HG2	25:D3:93:LEU:HD11	2.29	0.47
49:M3:124:ILE:O	49:M3:124:ILE:HG12	2.14	0.47
36:1:2278:C:OP2	77:Q1:23:ARG:NH1	2.48	0.47
1:6:219:A:N6	1:6:843:U:C2	2.82	0.47
2:S0:167:LYS:HE3	2:S0:168:HIS:NE2	2.98	0.47
63:N7:5:LEU:HD13	63:N7:30:ASP:OD2	7.68	0.47
53:M7:88:VAL:O	53:M7:92:GLN:HG3	3.27	0.47
72:O6:53:TYR:CD1	72:O6:76:ARG:HG2	2.50	0.47
36:5:2526:C:H1'	36:5:2588:U:H5''	1.97	0.47
25:D3:30:LYS:HG2	25:D3:34:LEU:CD1	3.64	0.47
40:L3:53:MET:HE2	40:L3:327:CYS:HB3	1.97	0.47
22:D0:65:ILE:HD11	31:D9:36:LEU:HD21	1.97	0.47
56:N0:77:VAL:HG11	56:N0:106:LEU:CD1	2.44	0.47
31:D9:19:ARG:HD3	31:D9:32:ARG:HD2	2.35	0.47
34:SR:283:LYS:HG3	34:SR:284:ALA:N	4.92	0.47
7:S5:37:GLN:HG2	18:C6:53:LEU:HD13	1.97	0.47
48:M1:133:ARG:NH2	48:M1:158:ASP:OD2	2.48	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:776:U:H5	36:1:2719:U:O2	1.98	0.47
36:1:437:G:H2'	36:1:438:A:O4'	2.15	0.47
42:L5:160:PHE:O	42:L5:180:PHE:HE1	1.98	0.47
1:6:1783:C:H2'	1:6:1784:C:C6	2.50	0.47
1:6:1586:A:H2'	1:6:1587:A:O4'	2.15	0.47
36:5:787:G:H2'	36:5:788:C:C6	2.50	0.47
36:1:3128:G:OP2	86:1:4171:OHX:N6	2.48	0.47
36:1:2883:U:H2'	36:1:2884:C:C6	2.49	0.47
6:S4:182:TYR:HB2	6:S4:228:ILE:HD13	1.97	0.47
24:D2:90:THR:O	24:D2:94:LEU:HB2	2.29	0.47
26:D4:47:VAL:O	26:D4:49:LYS:NZ	2.34	0.47
34:SR:201:THR:CB	34:SR:242:SER:HA	2.45	0.47
38:8:71:A:H4'	38:8:72:A:O5'	2.15	0.47
59:N3:18:PRO:HA	59:N3:51:ALA:HA	1.96	0.47
1:2:1792:G:O5'	28:D6:3:LYS:HA	2.14	0.47
1:6:548:G:H2'	1:6:549:G:O4'	2.15	0.47
4:S2:206:THR:HG21	1:6:14:C:OP2	376.23	0.47
61:N5:108:LEU:HD23	61:N5:108:LEU:HA	1.82	0.47
40:L3:102:LEU:HD23	40:L3:102:LEU:H	1.80	0.47
36:5:2430:A:H2'	36:5:2431:C:C6	2.49	0.47
40:L3:160:VAL:HG22	40:L3:183:LEU:HD13	3.59	0.47
20:C8:45:LEU:O	20:C8:49:LYS:HG2	2.14	0.47
20:C8:82:PRO:HG3	21:C9:36:ILE:HD12	2.66	0.47
36:1:2207:A:H2'	36:1:2208:A:C8	2.42	0.47
1:2:704:C:N4	1:2:734:A:N3	2.61	0.47
26:D4:60:PHE:CD1	26:D4:71:GLY:HA3	2.68	0.47
36:5:3174:A:H2'	36:5:3175:U:C5'	2.42	0.47
1:6:1699:G:H2'	1:6:1700:C:H5'	1.96	0.47
61:N5:80:ASN:HD21	61:N5:126:LEU:HB2	1.80	0.47
3:S1:129:THR:OG1	3:S1:131:ASP:OD1	6.50	0.47
3:S1:176:VAL:C	3:S1:178:GLY:H	2.19	0.47
70:O4:47:CYS:SG	70:O4:49:SER:HB2	4.18	0.47
3:S1:62:LYS:C	3:S1:64:ARG:H	2.13	0.47
36:1:1230:G:OP2	86:1:4089:OHX:N2	2.48	0.47
8:S6:68:LEU:HD13	8:S6:68:LEU:HA	2.29	0.47
77:Q1:16:LYS:HZ1	1:6:1750:A:P	287.63	0.47
1:6:837:G:O6	86:6:2103:OHX:N1	2.47	0.47
36:1:1433:A:P	68:O2:19:ARG:HH22	2.38	0.47
41:L4:108:LYS:HB3	41:L4:108:LYS:HE2	1.66	0.47
36:1:2662:G:H2'	36:1:2663:G:C8	2.50	0.47
14:C2:57:ALA:O	14:C2:85:LYS:HE3	3.31	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:82:U:H2'	1:6:83:G:O4'	2.14	0.47
1:2:682:C:H2'	1:2:683:C:O4'	2.15	0.47
34:SR:129:LYS:HG2	34:SR:149:ASP:O	2.41	0.47
34:SR:237:GLN:HB2	34:SR:238:ASP:OD1	2.15	0.47
36:5:1728:G:H5''	36:5:1730:G:O4'	2.15	0.47
40:L3:299:ASP:O	40:L3:300:ARG:HB2	2.14	0.47
58:N2:79:LEU:HA	58:N2:79:LEU:HD23	1.64	0.47
36:1:692:A:OP1	51:M5:201:ARG:NH2	2.43	0.47
36:1:3119:U:OP2	86:1:3892:OHX:N3	2.47	0.47
36:1:3112:G:N7	86:1:3892:OHX:N1	2.62	0.47
36:5:2537:U:O2'	36:5:2538:U:O4'	2.31	0.47
55:M9:7:GLN:N	55:M9:7:GLN:OE1	2.47	0.47
36:1:2320:A:H2	79:Q3:16:VAL:HG13	1.80	0.47
1:2:1266:U:H2'	1:2:1267:G:H8	1.80	0.47
42:L5:144:VAL:HG12	42:L5:173:VAL:HG22	2.00	0.47
21:C9:6:VAL:HG13	21:C9:66:TYR:CZ	3.03	0.47
17:C5:105:VAL:HG12	17:C5:106:GLU:O	2.52	0.47
36:1:699:A:H2'	36:1:700:C:O4'	2.15	0.47
36:1:1146:C:H4'	36:1:1331:U:C5	2.50	0.47
56:N0:7:TYR:CE1	56:N0:34:GLU:HG2	2.53	0.47
36:5:1190:A:C8	36:5:1193:A:H1'	2.49	0.47
1:2:1096:C:H2'	1:2:1096:C:O2	2.15	0.47
11:S9:6:ARG:HA	11:S9:6:ARG:HD2	1.76	0.47
63:N7:80:LEU:HD23	63:N7:80:LEU:HA	2.52	0.47
20:C8:108:LYS:HA	20:C8:108:LYS:HD2	1.73	0.47
36:5:1128:U:H2'	36:5:1129:A:O4'	2.15	0.47
1:2:454:U:H3'	1:2:455:C:C6	2.50	0.47
36:5:3288:G:C4	36:5:3289:G:C8	3.03	0.47
36:1:1560:G:N1	36:1:1561:G:C5	2.83	0.47
8:S6:33:GLY:HA2	8:S6:51:LYS:HE2	1.97	0.47
36:5:1856:C:H2'	36:5:1857:C:C6	2.50	0.47
21:C9:4:VAL:HG11	21:C9:137:ALA:HB2	1.97	0.47
36:5:3153:U:H1'	36:5:3154:C:C6	2.50	0.47
8:S6:172:ALA:O	1:6:66:U:H5'	343.76	0.47
33:E1:126:CYS:O	33:E1:128:ALA:N	2.45	0.47
36:1:1765:U:H5''	55:M9:43:LYS:HE2	1.97	0.47
61:N5:132:ALA:HA	61:N5:135:ILE:HG22	2.54	0.47
34:SR:164:ASP:C	34:SR:166:SER:H	2.18	0.47
1:6:1459:C:OP2	1:6:1459:C:H6	1.98	0.47
17:C5:34:VAL:O	17:C5:42:ARG:HG2	2.15	0.47
36:1:440:A:OP1	36:1:494:G:H1'	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2897:A:H2'	36:1:2899:C:C5'	2.44	0.47
1:2:1489:U:H5'	1:2:1494:C:H1'	1.97	0.47
74:O8:66:ILE:HG21	74:O8:77:ARG:NH2	2.30	0.47
36:1:517:G:P	44:L7:60:ARG:HH22	2.37	0.47
7:S5:99:MET:HA	7:S5:104:ASN:ND2	2.54	0.47
27:D5:60:VAL:CG2	27:D5:101:TYR:HB2	2.45	0.47
27:D5:41:ILE:HG23	27:D5:42:LEU:H	1.78	0.47
59:N3:74:MET:HE2	59:N3:74:MET:HB3	4.40	0.47
49:M3:119:TYR:O	49:M3:123:ILE:HG23	2.15	0.47
6:S4:4:GLY:HA3	1:6:93:A:O2'	330.36	0.47
14:C2:132:GLU:O	14:C2:136:ILE:HD13	3.67	0.47
36:1:1175:C:H1'	52:M6:87:MET:HG2	1.97	0.47
36:1:149:U:P	51:M5:49:ARG:HH22	2.38	0.47
51:M5:49:ARG:HH11	51:M5:49:ARG:HB2	1.79	0.47
64:N8:126:LYS:HB3	64:N8:148:ILE:HD13	2.41	0.47
36:1:3389:U:O2'	36:1:3390:G:OP2	2.30	0.47
32:E0:39:LEU:HG	32:E0:43:ARG:NH2	4.47	0.47
1:2:226:A:H2'	1:2:227:U:H5'	1.97	0.47
42:L5:272:TYR:CZ	37:7:22:A:H1'	333.49	0.47
40:L3:339:ARG:NH1	40:L3:342:LEU:HD11	2.30	0.47
11:S9:64:GLU:O	11:S9:65:LYS:HB2	2.21	0.47
36:1:1560:G:H2'	36:1:1561:G:H5'	1.96	0.47
7:S5:188:LYS:HE2	7:S5:196:GLU:OE2	2.15	0.47
1:2:1222:C:H2'	1:2:1223:A:O4'	2.15	0.47
1:2:1141:G:H2'	1:2:1142:A:C8	2.49	0.47
36:1:1528:G:N3	36:1:1588:A:H2	2.13	0.47
15:C3:83:GLU:HG2	15:C3:83:GLU:H	1.47	0.47
5:S3:211:PRO:O	5:S3:212:LYS:HB2	2.15	0.47
36:5:1903:U:O5'	36:5:1903:U:H6	1.98	0.47
23:D1:11:LEU:HG	23:D1:11:LEU:H	1.35	0.47
36:5:2689:A:H2'	36:5:2689:A:N3	2.30	0.47
7:S5:63:GLN:HB3	7:S5:64:VAL:H	1.59	0.46
47:M0:36:LEU:HD12	47:M0:87:LEU:HB3	1.97	0.46
11:S9:142:ASN:HD22	11:S9:142:ASN:C	4.74	0.46
47:M0:140:THR:OG1	47:M0:141:LYS:N	3.39	0.46
36:1:93:C:O2'	64:N8:55:LYS:HE3	2.16	0.46
70:O4:71:THR:CG2	70:O4:78:GLY:H	2.28	0.46
66:O0:99:ASP:O	66:O0:103:THR:HG23	2.15	0.46
1:2:1235:C:H5'	33:E1:146:SER:HB2	1.97	0.46
1:2:1236:A:C1'	33:E1:138:ARG:HH22	2.28	0.46
3:S1:61:LEU:HG	3:S1:64:ARG:HH21	1.80	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:O9:21:ARG:CZ	75:O9:24:PRO:HG3	2.45	0.46
36:5:1566:A:H2'	36:5:1567:U:H5'	1.97	0.46
2:S0:185:ARG:HB2	23:D1:45:ALA:HB3	1.97	0.46
1:6:219:A:C6	1:6:843:U:H1'	2.50	0.46
41:L4:23:PRO:O	41:L4:25:VAL:N	2.50	0.46
36:1:1093:A:N3	36:1:1096:U:N3	2.63	0.46
57:N1:129:LYS:HD3	36:5:1095:U:H1'	251.48	0.46
42:L5:282:ARG:O	42:L5:286:VAL:HG23	2.99	0.46
30:D8:19:THR:HG21	30:D8:65:ARG:HA	2.51	0.46
10:S8:98:LYS:HB3	1:6:329:G:H5''	275.38	0.46
41:L4:93:MET:H	41:L4:93:MET:HE2	2.39	0.46
41:L4:191:LYS:HG3	41:L4:194:TYR:CE2	4.21	0.46
61:N5:113:LEU:HD22	36:5:1522:U:H3'	101.82	0.46
36:5:1662:G:N2	36:5:1788:C:O2	2.48	0.46
28:D6:11:ASN:HB3	1:6:934:C:C6	333.28	0.46
1:2:1682:U:O2'	1:2:1683:C:H5'	2.16	0.46
36:5:703:G:O2'	36:5:787:G:H4'	2.15	0.46
2:S0:133:ILE:H	2:S0:133:ILE:HD12	1.81	0.46
36:1:2554:A:N7	79:Q3:62:LYS:NZ	2.59	0.46
37:3:39:C:N3	48:M1:70:THR:HG23	2.30	0.46
1:2:653:C:H2'	1:2:654:C:O4'	2.15	0.46
36:5:2369:G:H2'	36:5:2370:G:O4'	2.15	0.46
2:S0:55:GLU:OE2	23:D1:80:LYS:N	2.57	0.46
36:1:2873:U:H2'	88:1:4217:HMT:H1	1.98	0.46
40:L3:205:VAL:HA	40:L3:208:VAL:HG23	2.38	0.46
36:1:2827:U:O4	86:1:3869:OHX:N4	2.47	0.46
12:C0:72:GLY:O	12:C0:76:LEU:HD22	2.14	0.46
36:5:3295:A:H2'	36:5:3296:A:C8	2.50	0.46
36:1:979:U:C2	36:1:980:A:C4	3.04	0.46
20:C8:38:VAL:HG12	20:C8:42:TYR:CD2	2.51	0.46
51:M5:31:ARG:HG3	51:M5:129:TYR:OH	3.01	0.46
1:2:1796:C:N1	28:D6:5:ARG:HG2	2.30	0.46
36:1:1565:G:N2	36:1:1574:C:N3	2.63	0.46
40:L3:233:TRP:CD1	40:L3:265:ALA:HB1	2.59	0.46
42:L5:269:SER:O	42:L5:270:LYS:HB2	4.59	0.46
18:C6:55:VAL:HG21	18:C6:89:LEU:HD21	3.94	0.46
11:S9:92:LYS:HB2	11:S9:95:TYR:HD2	9.25	0.46
36:1:1213:G:OP1	56:N0:137:ARG:HD3	2.15	0.46
35:SM:64:LYS:O	35:SM:66:ALA:N	2.94	0.46
36:1:1817:G:OP1	86:1:4094:OHX:N1	2.49	0.46
1:6:484:C:H42	1:6:503:G:H1	1.60	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:N6:3:LYS:HG3	62:N6:8:VAL:HG13	1.98	0.46
34:SR:123:ILE:HD13	34:SR:169:ILE:HG21	1.96	0.46
1:6:169:A:C4	1:6:171:A:C8	3.04	0.46
1:6:1508:U:H2'	1:6:1509:C:C6	2.50	0.46
39:L2:181:LYS:HB2	36:5:860:G:C6	212.76	0.46
76:Q0:110:CYS:SG	76:Q0:112:LYS:HB2	2.55	0.46
47:M0:177:ASP:O	47:M0:180:GLU:N	3.14	0.46
19:C7:20:TYR:O	19:C7:24:LEU:HD12	2.14	0.46
21:C9:23:GLN:HG2	21:C9:55:TYR:CD1	2.49	0.46
36:5:25:U:O4	86:5:3909:OHX:N6	2.48	0.46
8:S6:20:ASP:O	8:S6:23:ARG:N	2.74	0.46
2:S0:105:GLY:N	2:S0:135:GLU:OE2	2.37	0.46
51:M5:49:ARG:HD3	36:5:115:A:OP1	104.10	0.46
36:1:1488:G:O2'	70:O4:10:ARG:O	2.33	0.46
41:L4:110:ASN:HD22	51:M5:201:ARG:HB3	1.79	0.46
1:2:381:C:O2'	1:2:755:A:N1	2.44	0.46
57:N1:124:VAL:HG12	57:N1:125:ALA:H	2.00	0.46
78:Q2:35:LEU:HA	78:Q2:40:LYS:HG2	1.97	0.46
40:L3:361:THR:HG22	40:L3:371:GLN:HB3	2.28	0.46
36:5:2204:C:H4'	36:5:2205:U:OP1	2.15	0.46
41:L4:351:PRO:HB3	44:L7:70:LYS:HB3	1.97	0.46
36:5:999:G:C6	36:5:1000:C:N4	2.83	0.46
13:C1:53:TYR:CD1	13:C1:113:PRO:HG2	2.50	0.46
37:3:97:A:OP1	56:N0:40:ARG:NH1	2.48	0.46
68:O2:12:LYS:HD3	68:O2:57:TYR:O	2.15	0.46
67:O1:29:ALA:HB3	67:O1:30:PRO:HD3	1.97	0.46
36:1:1166:G:N7	86:1:3867:OHX:N4	2.63	0.46
1:6:649:U:H2'	1:6:650:U:H5	1.80	0.46
36:1:3110:C:O3'	46:L9:155:SER:HB2	2.16	0.46
36:5:578:A:H5''	36:5:579:G:O5'	2.15	0.46
36:5:3084:C:H2'	36:5:3085:G:O4'	2.14	0.46
41:L4:290:ILE:HG23	54:M8:35:PHE:CE2	2.50	0.46
86:1:4036:OHX:N4	86:1:4048:OHX:N1	2.64	0.46
46:L9:37:ASN:OD1	46:L9:39:LYS:HB2	2.65	0.46
1:2:886:U:O2'	16:C4:121:VAL:O	2.27	0.46
16:C4:25:ASP:N	16:C4:55:SER:HB3	2.30	0.46
30:D8:44:VAL:HG11	30:D8:48:VAL:HG21	2.21	0.46
79:Q3:73:THR:HB	79:Q3:76:ALA:CB	3.91	0.46
79:Q3:73:THR:CG2	79:Q3:76:ALA:H	2.26	0.46
41:L4:26:PHE:HA	41:L4:127:ALA:HA	2.12	0.46
36:1:1240:A:H3'	36:1:1241:U:C5'	2.45	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:18:TYR:HA	63:N7:21:LYS:HD2	2.76	0.46
11:S9:3:ARG:HG2	11:S9:3:ARG:HH21	3.99	0.46
36:1:2355:G:H4'	53:M7:139:TYR:CZ	2.50	0.46
1:2:1488:G:H5'	1:2:1489:U:P	2.55	0.46
1:2:1521:G:O6	21:C9:68:ARG:NH1	2.47	0.46
47:M0:12:GLN:HG2	47:M0:128:ARG:CZ	2.45	0.46
21:C9:52:GLY:HA2	21:C9:55:TYR:CD2	2.50	0.46
32:E0:14:VAL:O	32:E0:18:THR:HG23	2.39	0.46
72:O6:68:ARG:O	72:O6:72:VAL:HG23	3.30	0.46
36:1:1245:A:N6	36:1:1272:C:O2'	2.48	0.46
72:O6:89:GLU:O	72:O6:93:ILE:HG12	2.14	0.46
36:1:213:A:H5''	62:N6:2:ALA:HA	1.97	0.46
10:S8:152:ILE:O	10:S8:153:GLU:HB2	2.14	0.46
36:1:1352:A:H1'	36:1:1353:U:O5'	2.15	0.46
42:L5:108:ARG:CZ	42:L5:253:PHE:HB2	2.45	0.46
1:2:1409:G:N2	1:2:1411:A:H3'	2.30	0.46
76:Q0:97:ARG:HG3	76:Q0:120:GLN:O	2.15	0.46
58:N2:92:TRP:O	58:N2:108:TYR:N	3.99	0.46
41:L4:330:TYR:CZ	44:L7:49:ALA:HA	2.50	0.46
1:2:560:U:H2'	1:2:561:G:H8	1.79	0.46
36:5:2192:C:O2'	36:5:2312:A:N1	2.46	0.46
52:M6:35:VAL:HG21	52:M6:80:PHE:HE2	1.79	0.46
36:5:630:A:H2'	36:5:631:U:C6	2.50	0.46
36:1:502:U:C4	36:1:503:C:C5	3.04	0.46
36:1:975:C:H2'	36:1:976:U:C6	2.50	0.46
21:C9:27:LYS:HB3	21:C9:111:ILE:HD11	1.96	0.46
36:1:3026:G:O6	86:1:3941:OHX:N4	2.48	0.46
1:2:86:A:O2'	1:2:147:A:N3	2.39	0.46
35:SM:99:LYS:O	35:SM:100:THR:HB	2.16	0.46
51:M5:176:LYS:HE2	36:5:66:A:N3	96.96	0.46
1:2:1157:A:C8	1:2:1157:A:H3'	2.50	0.46
47:M0:194:GLY:H	36:5:1010:G:H21	337.07	0.46
72:O6:95:ALA:O	72:O6:99:ARG:HB2	2.15	0.46
67:O1:86:LYS:H	67:O1:86:LYS:HD2	1.80	0.46
10:S8:47:ARG:O	10:S8:47:ARG:HD3	3.13	0.46
19:C7:96:SER:HA	19:C7:97:ASN:HA	1.58	0.46
62:N6:23:PRO:HD2	62:N6:26:GLN:OE1	2.15	0.46
36:5:2993:G:H2'	36:5:3142:A:N6	2.29	0.46
36:1:3341:U:O2'	36:1:3342:A:O5'	2.33	0.46
52:M6:36:VAL:CG2	52:M6:108:ILE:HB	5.85	0.46
7:S5:40:ILE:HG12	7:S5:41:LYS:N	2.39	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3215:A:O5'	50:M4:121:MET:HE1	2.14	0.46
18:C6:54:LEU:HD12	18:C6:54:LEU:HA	3.29	0.46
22:D0:22:ILE:HG22	22:D0:93:LEU:HB2	1.98	0.46
55:M9:43:LYS:NZ	36:5:1765:U:H5'	93.95	0.46
86:1:4136:OHX:N1	86:1:4168:OHX:N4	2.64	0.46
36:1:1017:C:O2'	36:1:1018:G:OP2	2.33	0.46
59:N3:48:ARG:HH22	36:5:3043:C:P	250.75	0.46
1:2:1541:G:C6	1:2:1542:G:N1	2.83	0.46
52:M6:68:ARG:HH11	36:5:2988:C:P	217.06	0.46
43:L6:129:GLU:HG2	43:L6:130:ILE:H	3.37	0.46
64:N8:3:SER:O	64:N8:6:THR:HB	3.34	0.46
51:M5:68:ARG:HB3	51:M5:68:ARG:HH11	1.80	0.46
36:1:911:C:N4	39:L2:3:ARG:HD3	2.30	0.46
47:M0:117:GLY:O	86:M0:304:OHX:N3	2.48	0.46
36:5:678:G:H2'	36:5:679:U:O4'	2.15	0.46
36:1:524:U:OP1	50:M4:77:ARG:NH2	2.48	0.46
1:2:356:G:OP2	86:2:2035:OHX:N6	2.48	0.46
49:M3:89:TYR:CE1	49:M3:93:ILE:HD11	4.21	0.46
36:5:59:G:H2'	38:8:33:A:O2'	2.16	0.46
14:C2:66:VAL:HG11	14:C2:71:ILE:HG21	1.98	0.46
4:S2:89:GLN:HG3	4:S2:93:GLY:O	4.74	0.46
48:M1:155:THR:OG1	48:M1:158:ASP:HB2	2.69	0.46
7:S5:190:ILE:O	7:S5:194:LEU:HB2	2.47	0.46
43:L6:64:LEU:HD22	43:L6:65:ILE:N	2.99	0.46
45:L8:41:GLN:HG3	45:L8:44:ARG:NH1	2.30	0.46
46:L9:86:TYR:CD1	46:L9:151:VAL:HG13	2.60	0.46
67:O1:50:ARG:CZ	67:O1:90:PHE:CZ	4.10	0.46
14:C2:60:VAL:O	14:C2:89:ILE:HG22	2.16	0.46
1:2:1049:U:H5''	29:D7:70:LYS:HG3	1.98	0.46
44:L7:25:GLN:H	44:L7:28:ALA:HB3	1.79	0.46
86:1:4059:OHX:N6	86:1:4167:OHX:N5	2.63	0.46
13:C1:79:LYS:CB	1:6:346:G:H5'	282.83	0.46
1:6:683:C:OP2	1:6:683:C:H6	1.97	0.46
36:1:665:A:OP1	51:M5:203:ARG:NH1	2.46	0.46
10:S8:194:ARG:HD2	10:S8:195:ARG:HH12	3.20	0.46
36:1:2416:U:H2'	36:1:2417:U:C6	2.50	0.46
70:O4:56:THR:OG1	70:O4:56:THR:O	2.32	0.46
4:S2:157:LYS:HG2	4:S2:170:ILE:HG23	2.69	0.46
5:S3:10:LYS:O	5:S3:13:ALA:N	2.48	0.46
5:S3:21:LEU:HD22	5:S3:25:PHE:CE2	2.51	0.46
36:1:1159:A:O2'	36:1:1160:C:H5''	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:3236:U:H1'	36:5:3252:G:N2	2.30	0.46
36:5:2983:C:OP1	86:5:4231:OHX:N6	2.49	0.46
36:1:532:A:H2	36:1:560:G:H22	1.62	0.46
38:4:121:U:H2'	38:4:122:U:C6	2.51	0.46
3:S1:222:LYS:HD3	3:S1:223:PHE:H	1.80	0.46
11:S9:97:LEU:HD23	11:S9:97:LEU:HA	1.67	0.46
36:1:1748:G:C6	36:1:1749:A:C6	3.04	0.46
71:O5:88:LEU:HA	71:O5:88:LEU:HD23	2.00	0.46
50:M4:118:PHE:O	50:M4:122:VAL:HG23	2.15	0.46
25:D3:73:ARG:NH2	25:D3:84:THR:HG22	2.28	0.46
1:2:632:U:OP2	13:C1:102:LYS:NZ	2.43	0.46
1:2:1496:U:HO2'	1:2:1497:U:H6	1.64	0.46
43:L6:2:SER:HA	68:O2:81:ASP:OD2	2.15	0.46
38:8:102:U:H2'	38:8:103:G:C8	2.50	0.46
36:5:72:C:C2	36:5:74:G:H1'	2.51	0.46
39:L2:70:ARG:NH2	36:5:2522:G:C6	174.78	0.46
32:E0:7:SER:O	32:E0:8:LEU:HD23	2.16	0.46
56:N0:13:ARG:NH1	56:N0:13:ARG:HG3	4.56	0.46
1:6:220:A:H3'	1:6:832:U:H1'	1.98	0.46
36:1:1915:A:H2'	36:1:1916:U:C6	2.51	0.46
36:1:3046:A:H2'	36:1:3047:U:O4'	2.15	0.46
33:E1:91:ILE:HB	1:6:1445:G:C6	387.14	0.46
46:L9:8:GLN:HG2	46:L9:68:LEU:HD13	1.98	0.46
11:S9:171:ARG:HE	11:S9:174:ARG:CB	5.45	0.46
6:S4:95:THR:HG22	26:D4:16:PRO:HG2	1.97	0.46
6:S4:43:PRO:HA	6:S4:82:TYR:O	2.43	0.46
20:C8:3:LEU:HD23	20:C8:5:VAL:HG23	4.93	0.46
48:M1:42:GLY:HA3	48:M1:75:LYS:NZ	2.30	0.46
79:Q3:55:TRP:CE3	79:Q3:71:VAL:HG22	2.82	0.46
1:2:840:U:O2'	1:2:841:U:H5''	2.15	0.46
86:6:2062:OHX:N5	86:6:2149:OHX:N6	2.64	0.46
52:M6:78:ARG:HG3	52:M6:78:ARG:NH1	2.94	0.46
36:5:591:G:N2	36:5:612:U:OP1	2.37	0.46
3:S1:143:THR:HB	3:S1:205:PHE:HE1	1.80	0.46
18:C6:143:ARG:HB2	18:C6:143:ARG:HE	1.35	0.46
36:5:43:A:N6	36:5:2802:A:C4	2.84	0.46
34:SR:122:ILE:HB	34:SR:134:TRP:HB2	2.50	0.46
42:L5:51:LEU:HB2	42:L5:144:VAL:HG13	2.74	0.46
12:C0:59:PHE:CZ	12:C0:62:GLN:HA	2.51	0.46
49:M3:57:VAL:N	49:M3:112:ASN:OD1	2.44	0.46
57:N1:105:PHE:O	57:N1:109:VAL:HG23	2.50	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:132:VAL:HG13	7:S5:202:ALA:HB2	1.98	0.46
34:SR:206:PRO:HG2	34:SR:247:PRO:HA	2.84	0.46
42:L5:14:SER:OG	37:7:68:C:OP1	300.59	0.46
11:S9:150:LEU:HD12	11:S9:150:LEU:HA	2.14	0.46
32:E0:31:LYS:HE3	1:6:545:A:OP1	420.43	0.46
1:2:95:G:N2	1:2:96:G:H1'	2.31	0.46
48:M1:16:LYS:NZ	36:5:2684:C:OP1	308.66	0.46
36:5:650:C:H2'	36:5:651:G:C8	2.51	0.46
1:6:1091:A:H4'	1:6:1092:A:O5'	2.15	0.46
4:S2:69:ILE:HG12	4:S2:133:LYS:HB3	1.98	0.46
1:2:609:U:H4'	1:2:610:G:O5'	2.15	0.46
36:5:2439:A:H62	36:5:2508:U:H3	1.64	0.46
61:N5:31:THR:HG22	61:N5:33:ARG:HD2	1.96	0.46
52:M6:129:LEU:HA	52:M6:129:LEU:HD12	1.96	0.46
43:L6:143:LYS:HE3	43:L6:143:LYS:HB2	4.37	0.46
36:1:2562:A:H2	45:L8:31:PRO:HD3	1.79	0.46
1:6:60:U:H6	1:6:60:U:H5''	1.81	0.46
36:5:1940:G:H2'	36:5:1941:C:O4'	2.15	0.46
36:1:92:G:OP2	36:1:93:C:H5''	2.16	0.46
6:S4:97:GLU:HG2	6:S4:97:GLU:H	3.33	0.46
40:L3:221:THR:HG22	40:L3:272:TYR:N	2.88	0.46
10:S8:35:ASN:O	10:S8:37:LYS:HD3	2.16	0.46
7:S5:112:ARG:HD3	1:6:1529:C:OP1	374.08	0.46
24:D2:37:PHE:CD2	24:D2:103:ILE:HD12	2.50	0.46
42:L5:95:TRP:HZ3	42:L5:156:GLY:O	8.20	0.46
34:SR:161:LYS:HB3	34:SR:164:ASP:HB3	1.96	0.46
9:S7:133:THR:HG22	9:S7:157:LYS:O	3.67	0.46
42:L5:294:ALA:HB1	47:M0:217:PHE:HB3	1.98	0.46
60:N4:49:ILE:O	60:N4:52:THR:OG1	2.34	0.46
3:S1:105:PHE:CE2	3:S1:213:ARG:HA	2.50	0.46
9:S7:139:ARG:HD3	24:D2:53:ILE:HA	1.98	0.46
1:2:498:G:O2'	1:2:499:U:O5'	2.22	0.46
1:2:71:A:H2'	1:2:72:A:O4'	2.16	0.46
64:N8:75:LEU:O	64:N8:77:LYS:N	2.60	0.46
1:2:778:G:H22	26:D4:10:ARG:HH22	1.63	0.46
40:L3:92:TYR:CE1	40:L3:159:ARG:HD2	2.51	0.46
45:L8:100:GLU:OE1	45:L8:108:ARG:HD3	2.14	0.46
15:C3:132:VAL:HG23	15:C3:134:VAL:CG1	2.57	0.46
49:M3:85:LEU:HD22	49:M3:120:GLN:HE22	1.79	0.46
36:5:1560:G:HO2'	36:5:1561:G:P	2.38	0.46
7:S5:69:PHE:CE2	18:C6:53:LEU:HD12	2.50	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:62:ARG:O	40:L3:68:HIS:HB2	2.59	0.46
46:L9:47:LYS:NZ	50:M4:5:SER:H	2.13	0.46
62:N6:12:ARG:HG3	36:5:215:G:OP1	86.81	0.46
1:6:149:C:H2'	1:6:150:U:C6	2.50	0.46
38:8:72:A:C5	38:8:73:U:C5	3.03	0.46
42:L5:224:LYS:O	42:L5:227:LEU:HB2	2.16	0.46
36:1:881:C:H1'	36:1:1850:A:C8	2.50	0.46
59:N3:11:PHE:CD1	59:N3:88:ARG:HD2	2.51	0.46
1:2:1475:A:H2'	1:2:1476:C:O4'	2.16	0.46
9:S7:39:ARG:HH22	55:M9:185:LEU:HA	1.80	0.46
42:L5:143:LYS:HE3	42:L5:145:PHE:HZ	2.64	0.46
36:5:985:U:H2'	36:5:986:U:H6	1.81	0.46
36:1:861:C:H2'	36:1:862:U:C6	2.51	0.46
69:O3:2:ALA:HB2	36:5:3216:G:OP2	265.76	0.46
1:6:517:U:H2'	1:6:518:A:O4'	2.15	0.46
36:1:2163:C:H4'	39:L2:7:ASN:O	2.15	0.46
45:L8:73:PRO:HD3	45:L8:233:TRP:CD2	2.51	0.46
34:SR:93:ASP:HB3	34:SR:96:THR:HG22	1.96	0.46
63:N7:126:LYS:HZ2	63:N7:126:LYS:HA	5.17	0.46
38:4:26:U:H5'	41:L4:53:SER:HB2	1.97	0.46
36:5:752:C:H2'	36:5:753:C:H6	1.81	0.46
36:5:1604:G:H3'	36:5:1604:G:N3	2.30	0.46
74:O8:33:LYS:HA	74:O8:33:LYS:HD3	1.69	0.46
36:5:1378:U:OP1	86:5:4029:OHX:N3	2.49	0.46
1:2:38:C:C2'	1:2:39:A:H5'	2.46	0.46
36:5:2787:G:OP2	86:5:4036:OHX:N6	2.48	0.46
40:L3:247:ARG:NH2	36:5:2341:A:OP2	219.24	0.46
36:5:437:G:H5''	36:5:438:A:OP2	2.16	0.46
40:L3:2:SER:N	36:5:2940:A:N7	238.09	0.46
18:C6:79:TYR:O	18:C6:82:ARG:HG2	2.22	0.46
1:2:1795:U:H3'	28:D6:5:ARG:HH12	1.80	0.46
53:M7:69:ARG:NH2	36:5:2991:A:N3	194.71	0.46
53:M7:60:PHE:O	53:M7:64:ASN:ND2	2.66	0.46
55:M9:105:LEU:HA	55:M9:108:LYS:HE3	1.97	0.46
6:S4:7:LYS:HB2	1:6:94:U:O2'	346.04	0.46
42:L5:23:ARG:O	42:L5:26:GLY:N	3.06	0.46
5:S3:141:LYS:HG2	5:S3:147:ALA:HB2	4.52	0.46
1:6:1557:U:OP2	1:6:1559:A:O2'	2.28	0.46
68:O2:126:LEU:HD23	68:O2:126:LEU:HA	1.67	0.46
11:S9:92:LYS:HA	11:S9:92:LYS:HE3	1.98	0.46
36:1:1815:U:H1'	36:1:1816:A:O5'	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:5:4003:OHX:N6	86:5:4091:OHX:N5	2.64	0.46
40:L3:302:LYS:HB3	40:L3:302:LYS:HE3	1.65	0.46
19:C7:83:GLN:O	19:C7:85:VAL:HG22	6.76	0.46
23:D1:74:GLN:OE1	23:D1:83:TRP:N	3.50	0.46
55:M9:15:VAL:CG1	55:M9:52:LYS:HG3	2.43	0.46
36:5:420:G:O5'	36:5:420:G:OP2	2.31	0.46
16:C4:81:VAL:HG13	16:C4:115:ILE:HG21	1.97	0.46
1:6:1482:C:OP2	1:6:1521:G:N1	2.48	0.46
39:L2:207:VAL:CG2	36:5:916:G:C6	187.04	0.46
4:S2:173:PRO:HG2	11:S9:57:ARG:HD2	3.18	0.46
40:L3:227:GLU:HG2	40:L3:270:ARG:HD3	1.98	0.46
36:1:1878:G:C3'	36:1:1879:A:H5'	2.46	0.46
1:2:887:A:H1'	16:C4:122:PRO:HB3	1.96	0.46
50:M4:14:LEU:H	50:M4:19:ARG:NH1	2.61	0.46
36:5:2101:C:HO2'	36:5:2102:U:P	2.37	0.46
42:L5:108:ARG:O	42:L5:111:GLN:HB3	2.26	0.46
86:1:3962:OHX:N5	86:1:4144:OHX:N6	2.64	0.46
18:C6:128:LYS:HE2	18:C6:134:ALA:O	4.21	0.46
36:1:111:C:O2'	36:1:112:U:H5'	2.16	0.46
1:2:1623:C:H2'	1:2:1624:C:C6	2.51	0.46
38:8:82:U:O2	38:8:87:G:H4'	2.16	0.46
1:6:1690:G:H1	1:6:1711:C:H42	1.64	0.46
55:M9:70:LYS:O	55:M9:73:GLY:N	2.40	0.46
36:5:1196:C:OP1	86:5:4239:OHX:N6	2.49	0.46
1:6:463:U:OP1	86:6:2206:OHX:N1	2.48	0.46
36:1:1621:A:H2'	36:1:1622:U:C6	2.51	0.46
36:5:2409:G:H4'	36:5:2410:U:OP2	2.16	0.46
1:2:1345:A:H2'	1:2:1348:A:H62	1.80	0.46
1:2:256:A:H2'	1:2:257:A:O4'	2.15	0.46
36:1:2697:A:H2'	36:1:2698:G:C8	2.51	0.46
20:C8:31:ALA:O	20:C8:34:THR:HG22	4.39	0.46
27:D5:72:GLY:O	1:6:1534:G:O2'	339.03	0.46
72:O6:25:LYS:HB3	36:5:156:G:OP2	88.57	0.46
1:6:577:G:N1	86:6:2161:OHX:N4	2.64	0.46
21:C9:88:VAL:CG2	1:6:1172:G:H21	356.48	0.46
40:L3:166:ILE:CD1	40:L3:173:GLN:HG2	2.46	0.46
16:C4:31:THR:HA	16:C4:38:THR:HA	2.88	0.46
51:M5:143:ARG:NH2	71:O5:92:LEU:HD23	2.49	0.46
71:O5:92:LEU:HB3	71:O5:96:GLU:O	2.16	0.46
33:E1:144:CYS:C	33:E1:146:SER:H	2.34	0.46
44:L7:88:ARG:HA	44:L7:134:VAL:HG12	1.96	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:C8:36:LYS:HA	20:C8:36:LYS:HD3	1.69	0.46
55:M9:99:LEU:O	55:M9:103:ARG:HG3	5.02	0.46
1:6:833:U:OP2	86:6:2204:OHX:N5	2.49	0.46
39:L2:204:MET:HG2	39:L2:208:ASP:HB2	4.60	0.46
2:S0:49:ASN:HB3	2:S0:52:LYS:CG	2.45	0.46
36:5:3330:A:C8	36:5:3330:A:C5'	2.99	0.46
51:M5:183:THR:OG1	51:M5:183:THR:O	2.31	0.46
41:L4:197:ARG:NH2	36:5:339:C:OP2	107.55	0.46
41:L4:99:MET:CE	41:L4:103:THR:H	3.12	0.46
86:1:3953:OHX:N2	86:1:4041:OHX:N6	2.63	0.46
58:N2:43:VAL:HB	58:N2:49:ASN:HB3	1.98	0.46
54:M8:123:THR:OG1	54:M8:126:GLN:HG3	2.16	0.46
42:L5:150:LEU:HD12	48:M1:143:ARG:HG3	2.55	0.46
26:D4:35:VAL:HG13	26:D4:36:SER:H	1.80	0.46
1:2:355:G:OP2	86:2:2035:OHX:N4	2.48	0.46
76:Q0:77:ILE:HD12	76:Q0:78:ILE:H	4.61	0.46
2:S0:103:THR:HA	2:S0:104:PRO:HD3	1.72	0.46
36:1:2217:U:H2'	36:1:2218:G:H8	1.80	0.46
49:M3:144:THR:HB	49:M3:145:PHE:CD2	2.51	0.46
36:1:250:U:C5	36:1:251:G:N7	2.84	0.46
34:SR:90:ARG:HG2	34:SR:99:THR:HG21	1.98	0.46
25:D3:44:GLY:H	25:D3:78:LYS:HZ1	1.63	0.46
67:O1:78:LYS:HB2	67:O1:90:PHE:HB2	5.68	0.46
86:5:4206:OHX:N4	86:8:226:OHX:N1	2.63	0.46
1:2:1579:U:O2'	18:C6:139:GLN:HG3	2.16	0.46
42:L5:119:TYR:CZ	42:L5:135:VAL:HG23	3.01	0.46
1:2:812:A:OP1	1:2:858:G:N2	2.48	0.46
1:6:1645:G:H22	1:6:1756:A:H2	1.64	0.46
48:M1:47:GLN:OE1	48:M1:64:LYS:HD3	3.52	0.46
1:2:912:U:H5'	1:2:913:G:H8	1.80	0.46
15:C3:5:HIS:CG	15:C3:117:LEU:HD22	2.90	0.46
18:C6:21:HIS:HB2	18:C6:66:ARG:HB3	3.89	0.46
5:S3:27:ARG:HD2	12:C0:60:SER:HB2	1.97	0.46
36:5:600:G:H5'	36:5:601:U:OP2	2.15	0.46
42:L5:200:PHE:HB3	42:L5:237:GLU:HG3	2.26	0.46
33:E1:109:ASP:HB2	33:E1:113:LYS:HG2	1.98	0.46
45:L8:118:GLU:C	45:L8:120:LYS:H	2.19	0.46
49:M3:16:LYS:O	49:M3:17:HIS:HB2	4.57	0.46
40:L3:222:LYS:HG2	40:L3:223:GLY:N	2.48	0.46
36:1:2995:A:C3'	36:1:2996:U:H5''	2.46	0.46
15:C3:85:PRO:HG2	15:C3:129:TYR:CE2	2.81	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:C9:15:ILE:HD13	21:C9:60:SER:HA	2.50	0.46
58:N2:27:VAL:HG21	58:N2:107:PHE:HE1	1.81	0.46
36:5:2765:C:H2'	36:5:2766:U:H6	1.80	0.46
1:2:699:U:H2'	1:2:700:C:C6	2.51	0.46
36:1:714:G:N7	64:N8:111:LYS:NZ	2.50	0.46
38:4:95:G:OP2	73:O7:72:ARG:NH1	2.48	0.46
36:1:2692:A:O5'	36:1:2692:A:H8	1.99	0.46
68:O2:15:LYS:HB3	68:O2:15:LYS:HE3	4.40	0.46
1:6:1489:U:H5'	1:6:1494:C:H1'	1.98	0.46
1:6:12:U:H1'	1:6:1300:A:N3	2.31	0.46
7:S5:63:GLN:OE1	7:S5:65:ARG:N	3.65	0.46
34:SR:84:SER:OG	34:SR:85:TRP:N	2.66	0.46
79:Q3:4:ARG:HD2	36:5:837:A:OP2	239.18	0.46
55:M9:20:ARG:NH1	36:5:1873:U:OP2	148.07	0.46
36:5:3174:A:C2'	36:5:3175:U:H5'	2.42	0.46
3:S1:178:GLY:HA3	3:S1:187:LYS:HZ2	1.81	0.46
40:L3:81:THR:HG21	40:L3:322:ILE:HD13	4.62	0.46
44:L7:130:ILE:O	44:L7:134:VAL:HG22	2.16	0.46
3:S1:61:LEU:H	3:S1:61:LEU:HD22	1.81	0.46
36:1:1306:G:O2'	36:1:1307:G:H5'	2.16	0.46
45:L8:170:CYS:HB3	45:L8:175:VAL:O	2.16	0.46
7:S5:59:VAL:O	7:S5:60:ASP:HB2	2.16	0.46
63:N7:46:ILE:HD11	63:N7:49:TYR:CA	2.46	0.46
42:L5:39:GLN:OE1	42:L5:40:HIS:N	2.67	0.46
1:2:1535:U:H6	1:2:1535:U:H2'	1.52	0.46
53:M7:139:TYR:CE2	36:5:2355:G:H4'	147.60	0.46
86:6:2127:OHX:N2	86:6:2152:OHX:N4	2.63	0.46
23:D1:78:LEU:O	23:D1:79:LEU:HG	2.16	0.46
3:S1:83:LYS:HE3	3:S1:106:THR:HA	4.40	0.46
69:O3:71:VAL:HG13	69:O3:81:VAL:HG21	3.50	0.46
58:N2:54:VAL:HG13	58:N2:67:SER:HB2	3.64	0.46
48:M1:8:PRO:HD2	48:M1:10:ARG:HG3	2.21	0.46
2:S0:102:PHE:O	2:S0:103:THR:HB	2.14	0.46
1:2:720:G:H1'	1:2:721:U:H5''	1.98	0.46
36:1:249:U:H1'	36:1:250:U:C2	2.51	0.46
1:2:795:U:H5	1:2:796:A:C5	2.34	0.46
45:L8:41:GLN:CG	45:L8:44:ARG:HH12	2.43	0.46
2:S0:66:ALA:HB1	23:D1:50:TYR:CD1	3.23	0.46
49:M3:153:ASP:OD2	49:M3:154:VAL:N	2.44	0.46
57:N1:17:ARG:HG3	57:N1:17:ARG:O	2.16	0.46
41:L4:191:LYS:HG2	41:L4:194:TYR:OH	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:714:G:N2	1:6:724:C:O2	2.46	0.46
38:4:131:A:H2'	38:4:132:G:H8	1.80	0.46
11:S9:123:HIS:CD2	32:E0:37:ARG:HD2	3.95	0.46
35:SM:49:LYS:HG3	35:SM:50:ASN:OD1	6.31	0.46
16:C4:30:VAL:HG13	16:C4:39:ILE:O	2.16	0.46
37:3:22:A:H1'	42:L5:272:TYR:CZ	2.51	0.46
44:L7:96:PRO:HB2	44:L7:99:PRO:CD	2.89	0.46
74:O8:16:ARG:O	74:O8:18:ALA:N	3.11	0.46
60:N4:4:GLU:HG2	60:N4:30:ARG:NE	2.31	0.46
52:M6:183:ALA:O	52:M6:186:ALA:HB3	2.48	0.46
36:1:2984:C:H2'	36:1:2985:C:H6	1.81	0.46
36:1:863:C:H2'	36:1:864:G:O4'	2.16	0.46
36:5:2378:C:H2'	36:5:2379:U:C6	2.51	0.46
36:5:258:G:H2'	36:5:259:C:C6	2.51	0.46
36:5:996:A:C2	36:5:1054:A:C4	3.04	0.46
44:L7:239:LEU:O	44:L7:242:SER:OG	2.32	0.46
46:L9:122:LYS:HG2	46:L9:123:ILE:N	2.86	0.46
36:1:1497:C:O2'	36:1:1602:A:N3	2.40	0.46
55:M9:13:SER:OG	55:M9:38:ARG:NH2	2.49	0.46
36:1:1611:G:H2'	36:1:1612:A:O4'	2.15	0.46
36:1:2191:U:H2'	36:1:2192:C:O4'	2.16	0.46
8:S6:25:ARG:HA	8:S6:28:PHE:CD2	3.57	0.46
36:1:388:G:H4'	53:M7:18:ARG:O	2.15	0.46
1:6:1499:G:H2'	1:6:1500:C:O4'	2.15	0.46
56:N0:151:PRO:C	56:N0:153:PRO:HD3	2.52	0.46
34:SR:278:PHE:CE1	34:SR:287:PRO:HD2	2.50	0.46
21:C9:9:VAL:HG22	21:C9:140:LEU:HD22	4.19	0.46
1:6:1039:A:O2'	1:6:1040:G:P	2.74	0.46
1:2:1369:U:OP1	21:C9:119:LYS:NZ	2.48	0.46
11:S9:109:LEU:HD22	11:S9:113:VAL:HG23	1.97	0.46
18:C6:113:ASP:CG	18:C6:115:THR:H	2.19	0.46
34:SR:110:VAL:HA	34:SR:126:SER:HB2	1.98	0.46
1:2:1244:A:O2'	1:2:1245:G:OP1	2.32	0.46
1:2:142:G:O6	8:S6:177:ARG:NH1	2.49	0.46
17:C5:34:VAL:HG21	17:C5:45:PHE:HB2	1.97	0.46
36:1:1307:G:H1'	36:1:1308:A:C8	2.51	0.46
9:S7:60:ILE:HD12	9:S7:92:PHE:CZ	2.51	0.46
1:2:443:C:OP2	26:D4:105:ARG:HB3	2.16	0.46
36:1:3192:U:H2'	36:1:3193:C:C6	2.51	0.46
36:5:1549:U:O4	86:5:4204:OHX:N2	2.49	0.46
16:C4:81:VAL:HG11	16:C4:102:LEU:HD21	1.98	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:137:ARG:NH2	1:6:169:A:OP2	319.00	0.46
25:D3:24:TRP:CZ3	25:D3:30:LYS:HG3	3.97	0.46
19:C7:5:ARG:O	19:C7:10:LYS:HE2	2.16	0.46
21:C9:23:GLN:HG2	21:C9:55:TYR:CG	2.51	0.46
3:S1:147:ALA:O	3:S1:148:ASN:HB3	2.15	0.46
19:C7:66:VAL:O	19:C7:69:ILE:HG12	2.16	0.46
1:6:686:C:H2'	1:6:687:G:C8	2.51	0.46
36:1:3084:C:OP2	86:1:3888:OHX:N5	2.49	0.46
59:N3:74:MET:HG3	59:N3:102:ILE:HD13	1.98	0.46
15:C3:114:ARG:HA	15:C3:114:ARG:HD3	1.72	0.46
36:1:2514:U:H6	36:1:2514:U:OP1	1.98	0.46
12:C0:48:SER:HA	1:6:1219:A:O2'	435.75	0.46
63:N7:58:GLY:O	63:N7:62:VAL:HG23	2.77	0.46
36:5:3255:U:H2'	36:5:3256:G:H8	1.81	0.46
36:1:2771:U:H2'	36:1:2772:C:O2	2.16	0.46
19:C7:26:LEU:HD23	19:C7:58:MET:HB3	3.55	0.46
1:6:105:A:H2'	1:6:106:U:O4'	2.16	0.46
1:6:717:C:O2'	1:6:718:U:OP1	2.30	0.46
1:2:516:G:OP2	86:2:2069:OHX:N6	2.48	0.46
36:1:1063:G:N7	36:1:1097:G:H2'	2.31	0.46
53:M7:30:ARG:HD3	53:M7:30:ARG:C	2.36	0.46
1:2:1157:A:HO2'	1:2:1158:C:P	2.39	0.46
36:1:1695:U:O2'	36:1:1749:A:N1	2.41	0.46
34:SR:264:SER:HB2	34:SR:271:VAL:CG2	2.46	0.46
51:M5:15:GLN:HB3	72:O6:52:PRO:HD2	2.40	0.46
40:L3:211:GLN:NE2	40:L3:283:TYR:O	3.18	0.46
25:D3:83:VAL:HG21	25:D3:122:PHE:CE2	3.48	0.46
14:C2:41:LEU:O	14:C2:43:ARG:HD2	2.16	0.46
46:L9:92:TYR:N	46:L9:92:TYR:CD2	4.11	0.46
1:6:246:G:C6	1:6:247:A:C6	3.04	0.46
13:C1:54:ILE:HD13	13:C1:54:ILE:HA	3.41	0.46
52:M6:156:LEU:HD23	52:M6:156:LEU:HA	2.07	0.46
1:6:1110:G:N2	1:6:1136:U:H1'	2.31	0.46
36:1:1925:U:O2	79:Q3:19:GLY:HA2	2.15	0.46
14:C2:29:LYS:HG3	14:C2:100:TRP:CD1	2.51	0.46
39:L2:180:LEU:HG	79:Q3:26:VAL:HG21	2.15	0.46
36:5:622:A:H8	36:5:622:A:O5'	2.00	0.45
7:S5:73:THR:O	7:S5:75:GLY:N	2.45	0.45
40:L3:116:ARG:HG2	40:L3:175:LYS:HA	2.38	0.45
26:D4:60:PHE:HA	26:D4:70:VAL:O	2.42	0.45
74:O8:19:ASP:N	74:O8:19:ASP:OD2	3.04	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:D0:51:VAL:HB	22:D0:52:LYS:H	3.88	0.45
73:O7:2:GLY:N	36:5:2138:A:O2'	174.06	0.45
36:5:1526:U:O2	36:5:1595:U:H5'	2.16	0.45
36:1:915:A:H8	36:1:2136:C:O2'	1.99	0.45
44:L7:229:PHE:HD1	44:L7:229:PHE:C	2.57	0.45
55:M9:99:LEU:HD22	55:M9:99:LEU:O	2.17	0.45
36:1:1916:U:H2'	36:1:1917:C:C6	2.51	0.45
4:S2:230:TRP:NE1	24:D2:68:ARG:HB2	4.04	0.45
51:M5:165:THR:O	51:M5:169:LYS:HG3	2.17	0.45
36:5:2586:G:O2'	36:5:2588:U:OP1	2.32	0.45
5:S3:72:LEU:HG	12:C0:20:VAL:HG21	2.49	0.45
49:M3:73:ARG:HH21	49:M3:73:ARG:HG3	1.81	0.45
1:2:388:G:OP1	1:2:402:C:H5	1.99	0.45
1:2:47:A:N1	1:2:386:G:H1'	2.31	0.45
36:1:2244:A:H5''	39:L2:243:THR:OG1	2.15	0.45
9:S7:140:VAL:HB	24:D2:52:TYR:HB3	2.07	0.45
57:N1:18:ASP:OD2	86:N1:201:OHX:N3	2.49	0.45
51:M5:20:ARG:O	51:M5:24:ARG:HB2	2.67	0.45
38:8:67:U:O4	86:8:227:OHX:N3	2.49	0.45
36:1:2261:G:O6	86:1:3934:OHX:N4	2.49	0.45
42:L5:15:ARG:NH2	36:5:1003:A:H1'	289.25	0.45
1:2:811:A:C2	1:2:858:G:H1'	2.51	0.45
39:L2:113:VAL:HG23	39:L2:134:VAL:HG22	2.84	0.45
47:M0:22:TYR:CE1	36:5:1048:A:H2'	268.56	0.45
22:D0:70:THR:O	31:D9:40:ARG:NH1	2.45	0.45
1:2:576:G:H4'	1:2:580:A:C4	2.52	0.45
1:2:1765:A:H5'	1:2:1767:G:N7	2.31	0.45
26:D4:58:PHE:CE2	26:D4:72:PHE:HB3	2.78	0.45
48:M1:38:GLU:C	48:M1:40:LEU:H	2.50	0.45
75:O9:31:THR:O	75:O9:32:ASN:HB2	2.17	0.45
43:L6:47:PHE:CD1	43:L6:74:VAL:HG22	2.75	0.45
1:6:1079:U:H2'	1:6:1080:U:H6	1.81	0.45
5:S3:42:THR:OG1	5:S3:44:THR:O	5.84	0.45
25:D3:90:ASP:OD2	32:E0:12:GLY:HA2	2.42	0.45
38:4:77:A:OP2	86:4:228:OHX:N2	2.49	0.45
42:L5:122:VAL:HG23	42:L5:123:GLU:N	3.15	0.45
13:C1:75:VAL:HG22	13:C1:84:ILE:HD12	1.96	0.45
77:Q1:9:ARG:HH11	77:Q1:9:ARG:CG	2.24	0.45
43:L6:58:LEU:HD12	43:L6:78:ARG:HD3	2.09	0.45
75:O9:5:LYS:HD3	75:O9:13:MET:CE	2.95	0.45
7:S5:89:ILE:HD12	7:S5:90:ILE:H	1.81	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:156:G:OP2	72:O6:27:SER:OG	2.33	0.45
36:5:407:A:C2	38:8:17:A:H1'	2.51	0.45
70:O4:88:ARG:HG3	36:5:2555:G:O2'	209.24	0.45
1:6:1244:A:O2'	1:6:1245:G:O5'	2.26	0.45
40:L3:81:THR:CG2	40:L3:81:THR:O	2.86	0.45
63:N7:10:VAL:HG11	63:N7:129:TRP:HZ3	2.17	0.45
4:S2:106:ASP:OD1	4:S2:107:SER:N	2.59	0.45
9:S7:157:LYS:HB2	9:S7:157:LYS:HE3	4.39	0.45
2:S0:200:ASP:HB2	19:C7:85:VAL:HG22	1.98	0.45
36:5:1494:U:H4'	36:5:1495:U:O5'	2.17	0.45
63:N7:46:ILE:HD11	63:N7:49:TYR:CD2	3.33	0.45
64:N8:8:THR:HG21	36:5:662:U:OP1	149.49	0.45
9:S7:63:PRO:O	9:S7:64:VAL:HB	2.30	0.45
36:5:1554:U:C4	36:5:1555:U:C4	3.05	0.45
42:L5:81:HIS:O	42:L5:84:PRO:HD2	2.16	0.45
36:5:2239:G:N7	86:5:4195:OHX:N5	2.63	0.45
70:O4:65:VAL:HG12	70:O4:70:LYS:HE2	3.57	0.45
1:2:1515:A:OP2	5:S3:7:LYS:HB2	2.16	0.45
36:1:2880:U:H1'	40:L3:250:ALA:HB3	1.98	0.45
29:D7:44:THR:HB	29:D7:63:LEU:HD11	3.81	0.45
51:M5:75:VAL:O	51:M5:75:VAL:HG23	2.16	0.45
19:C7:71:PHE:HE1	19:C7:73:LEU:HD22	1.81	0.45
1:6:591:A:H2'	1:6:592:A:C8	2.51	0.45
36:1:705:A:C4	36:1:715:A:N6	2.84	0.45
36:1:716:A:C6	64:N8:117:ARG:HD2	2.52	0.45
38:8:104:A:C8	38:8:105:A:C8	3.04	0.45
46:L9:161:LEU:CD1	46:L9:179:ILE:HG21	3.35	0.45
36:5:1807:G:C6	36:5:1808:G:N1	2.84	0.45
1:2:93:A:H4'	1:2:94:U:OP2	2.16	0.45
48:M1:77:GLU:OE2	48:M1:166:LYS:NZ	4.18	0.45
36:1:2513:U:H4'	36:1:2514:U:OP1	2.15	0.45
1:2:534:A:H5'	1:2:535:A:OP2	2.16	0.45
43:L6:68:PRO:HG2	43:L6:71:VAL:HG21	3.05	0.45
45:L8:161:GLU:OE2	51:M5:26:ARG:NH2	2.88	0.45
75:O9:30:ARG:HE	75:O9:30:ARG:HB2	1.48	0.45
52:M6:193:GLN:O	52:M6:196:ALA:HB3	2.29	0.45
36:5:1221:A:H3'	36:5:1222:G:H5'	1.97	0.45
69:O3:13:HIS:HB3	69:O3:93:THR:O	2.17	0.45
36:1:2320:A:OP2	86:1:4213:OHX:N5	2.49	0.45
73:O7:64:MET:O	73:O7:68:LYS:HD2	3.35	0.45
16:C4:136:ARG:HD2	1:6:1769:U:O2	303.91	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:996:A:H2'	36:5:997:A:O4'	2.17	0.45
17:C5:33:PHE:O	17:C5:36:LEU:HD22	4.29	0.45
1:6:90:C:H2'	1:6:91:G:H8	1.82	0.45
36:5:2563:G:H2'	36:5:2564:G:O4'	2.17	0.45
36:5:2109:U:O2'	36:5:2110:G:H5'	2.16	0.45
1:2:51:A:OP2	86:2:2071:OHX:N3	2.49	0.45
1:2:131:C:O2'	1:2:132:U:OP1	2.33	0.45
33:E1:98:VAL:HG22	33:E1:99:LYS:H	1.81	0.45
18:C6:11:GLY:HA2	18:C6:83:GLN:HE21	1.81	0.45
55:M9:143:ILE:HG12	36:5:2093:A:P	253.23	0.45
3:S1:92:GLN:HG3	3:S1:92:GLN:O	2.39	0.45
45:L8:200:LEU:HA	45:L8:200:LEU:HD23	1.78	0.45
36:5:1772:U:H5''	36:5:1773:C:H5'	1.97	0.45
34:SR:109:ASP:HB2	34:SR:127:ARG:HD2	3.46	0.45
22:D0:96:PRO:O	22:D0:100:VAL:HG23	2.25	0.45
36:1:915:A:C5	36:1:917:A:H1'	2.52	0.45
36:1:1449:A:C2	36:1:2356:A:C4	3.04	0.45
21:C9:12:GLN:O	21:C9:16:ASN:HB2	2.93	0.45
1:2:1542:G:H22	1:2:1568:C:H1'	1.81	0.45
36:1:1103:A:N3	36:1:1103:A:H2'	2.30	0.45
72:O6:74:LYS:HD2	72:O6:80:PHE:CD2	2.41	0.45
43:L6:130:ILE:HG12	36:5:3269:U:C5	248.83	0.45
39:L2:201:GLY:HA2	39:L2:204:MET:HG3	1.98	0.45
63:N7:89:VAL:HG13	63:N7:93:LYS:HG2	2.46	0.45
4:S2:68:ILE:O	4:S2:72:LEU:HB2	2.16	0.45
70:O4:94:LEU:HA	70:O4:94:LEU:HD23	2.18	0.45
36:5:1235:U:C4'	36:5:1236:G:H5'	2.44	0.45
70:O4:65:VAL:HG13	70:O4:69:HIS:HB2	1.98	0.45
65:N9:58:LYS:HA	65:N9:58:LYS:HD2	1.82	0.45
36:5:2947:G:N2	36:5:2948:C:C2	2.84	0.45
29:D7:61:THR:OG1	29:D7:62:ILE:N	3.11	0.45
1:2:1056:U:O2'	3:S1:202:LYS:HE2	2.17	0.45
1:6:328:A:H2'	1:6:329:G:C8	2.51	0.45
36:1:1720:U:C4	55:M9:124:TYR:CE2	3.04	0.45
76:Q0:122:ARG:NH2	36:5:2896:A:O2'	319.03	0.45
31:D9:22:ARG:HG2	31:D9:38:ILE:HD13	4.27	0.45
59:N3:93:LEU:H	59:N3:93:LEU:HD23	2.09	0.45
71:O5:119:LYS:HD2	71:O5:119:LYS:HA	2.63	0.45
26:D4:33:ALA:C	26:D4:34:ASN:HD22	5.32	0.45
3:S1:117:TRP:HB3	3:S1:153:HIS:HA	3.11	0.45
36:5:1070:U:C4	36:5:1071:U:C4	3.04	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:269:G:C6	1:2:287:G:C6	3.04	0.45
32:E0:46:ASN:O	32:E0:47:VAL:HG12	2.17	0.45
49:M3:190:LYS:HE2	49:M3:190:LYS:HB2	1.53	0.45
36:5:1192:C:H5	86:5:4092:OHX:N4	2.13	0.45
3:S1:119:THR:HG21	3:S1:161:ILE:HD11	2.82	0.45
36:1:1668:G:C5	36:1:1669:C:C5	3.04	0.45
12:C0:24:LYS:HB2	12:C0:63:TYR:CE1	2.70	0.45
36:5:953:G:O2'	36:5:1116:G:H5'	2.16	0.45
4:S2:186:LYS:O	4:S2:190:LEU:HG	2.15	0.45
52:M6:182:ASN:HD21	52:M6:186:ALA:HB2	7.53	0.45
36:1:519:A:OP2	44:L7:70:LYS:NZ	2.49	0.45
1:2:38:C:H2'	1:2:39:A:H5'	1.98	0.45
11:S9:13:SER:O	11:S9:43:TYR:HB3	2.17	0.45
36:1:2948:C:H2'	36:1:2949:U:O4'	2.16	0.45
33:E1:119:ARG:O	33:E1:132:LEU:HG	2.33	0.45
40:L3:130:PHE:CE1	36:5:3149:G:H4'	221.48	0.45
1:2:420:A:OP1	8:S6:96:SER:OG	2.15	0.45
36:1:1445:U:H5''	36:1:1446:A:OP2	2.16	0.45
1:6:1572:G:H2'	1:6:1572:G:N3	2.30	0.45
59:N3:69:LEU:HD12	59:N3:69:LEU:HA	1.94	0.45
36:5:1770:G:H5'	36:5:1771:C:OP2	2.16	0.45
36:5:1039:U:H2'	36:5:1040:A:C8	2.52	0.45
78:Q2:16:THR:OG1	78:Q2:17:CYS:N	2.71	0.45
1:2:1533:C:P	20:C8:27:LYS:HZ1	2.39	0.45
20:C8:33:THR:HA	20:C8:38:VAL:HG22	3.85	0.45
36:5:1940:G:N2	36:5:3362:A:H8	2.11	0.45
28:D6:84:VAL:HG13	28:D6:85:ARG:H	1.82	0.45
28:D6:95:ARG:HG2	1:6:1797:A:H5'	344.35	0.45
22:D0:20:ILE:HG13	22:D0:95:ALA:O	2.17	0.45
37:7:23:A:H2'	37:7:24:A:C8	2.52	0.45
18:C6:95:LYS:HE3	18:C6:96:TYR:CE1	3.13	0.45
48:M1:95:ASN:OD1	48:M1:95:ASN:N	2.50	0.45
22:D0:26:LEU:O	22:D0:88:LYS:HA	2.16	0.45
61:N5:82:LEU:HD11	61:N5:135:ILE:HG21	1.97	0.45
42:L5:114:GLY:C	42:L5:116:ASP:H	2.19	0.45
24:D2:7:LEU:HD22	24:D2:11:LEU:HG	2.16	0.45
49:M3:124:ILE:HD13	49:M3:126:PHE:CE1	4.51	0.45
23:D1:74:GLN:HB2	23:D1:74:GLN:HE21	1.62	0.45
6:S4:187:ARG:NH2	1:6:753:A:H62	374.97	0.45
34:SR:123:ILE:H	34:SR:123:ILE:HG13	2.29	0.45
20:C8:86:LEU:HG	20:C8:99:HIS:HB2	2.57	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:265:A:H5'	36:1:266:A:OP2	2.16	0.45
51:M5:69:GLY:O	36:5:290:G:H4'	145.84	0.45
38:4:79:A:O5'	38:4:79:A:H8	1.99	0.45
40:L3:150:ARG:HG2	40:L3:150:ARG:HH11	1.81	0.45
1:2:77:U:H4'	1:2:78:A:O5'	2.17	0.45
1:2:1486:G:H1'	1:2:1592:A:O2'	2.15	0.45
54:M8:122:ILE:HD11	54:M8:130:ARG:NH1	3.61	0.45
42:L5:22:ARG:HD3	42:L5:28:THR:OG1	3.04	0.45
2:S0:135:GLU:O	2:S0:138:TYR:HB2	2.44	0.45
62:N6:87:LYS:HB2	62:N6:97:ILE:HD11	3.85	0.45
12:C0:29:GLN:NE2	12:C0:31:LYS:O	4.96	0.45
71:O5:13:SER:O	71:O5:16:GLN:N	2.91	0.45
36:1:2310:U:OP1	86:1:4143:OHX:N2	2.50	0.45
1:2:711:U:H4'	1:2:712:G:OP1	2.16	0.45
41:L4:63:GLU:O	41:L4:76:ARG:N	2.44	0.45
11:S9:123:HIS:CG	32:E0:37:ARG:HD2	4.02	0.45
36:5:702:C:O2	36:5:788:C:H4'	2.17	0.45
79:Q3:53:GLY:H	79:Q3:68:ALA:HA	2.90	0.45
36:1:181:U:H4'	73:O7:75:LYS:HG2	1.98	0.45
36:5:1317:A:C4	36:5:1319:G:N7	2.84	0.45
71:O5:28:LEU:O	71:O5:32:LYS:HG3	2.16	0.45
68:O2:64:LYS:O	68:O2:65:PHE:HB2	2.35	0.45
42:L5:97:ALA:O	42:L5:101:THR:OG1	2.34	0.45
36:5:602:A:H2'	36:5:603:A:C8	2.52	0.45
75:O9:41:ARG:NH1	36:5:1517:G:OP1	97.65	0.45
79:Q3:44:LYS:HD2	79:Q3:59:CYS:SG	3.50	0.45
34:SR:116:ASP:HB2	34:SR:117:LYS:HD2	1.97	0.45
13:C1:55:ASP:OD2	13:C1:110:HIS:HE1	2.00	0.45
1:6:745:U:C2	1:6:807:A:C2	3.04	0.45
11:S9:10:LYS:NZ	1:6:24:U:OP1	385.86	0.45
48:M1:60:ARG:O	48:M1:63:GLU:HB3	3.28	0.45
36:5:929:A:H2'	36:5:930:U:C6	2.51	0.45
1:2:1517:U:OP2	1:2:1518:C:N4	2.49	0.45
36:5:2407:C:H2'	36:5:2408:U:H6	1.81	0.45
36:5:1752:A:OP2	86:5:4082:OHX:N3	2.49	0.45
1:6:853:G:H2'	1:6:854:U:C6	2.52	0.45
48:M1:150:ASN:C	48:M1:152:HIS:H	2.19	0.45
36:5:1138:U:H2'	36:5:1139:G:O4'	2.17	0.45
6:S4:123:LEU:HD22	6:S4:236:ILE:HG23	1.97	0.45
36:1:1180:A:H2'	36:1:1182:A:H5'	1.97	0.45
1:2:377:G:O6	86:2:2077:OHX:N5	2.50	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:316:ASN:O	41:L4:319:LYS:O	4.21	0.45
11:S9:132:ARG:O	11:S9:134:ILE:HD12	7.31	0.45
11:S9:38:ASN:HB3	11:S9:40:LYS:H	1.80	0.45
1:2:1202:A:H1'	1:2:1207:C:N4	2.31	0.45
26:D4:20:ARG:C	26:D4:21:LYS:HD2	2.36	0.45
24:D2:20:THR:OG1	24:D2:22:LYS:HD3	2.62	0.45
36:1:1492:G:O2'	75:O9:48:LYS:NZ	2.48	0.45
3:S1:185:THR:O	3:S1:189:ILE:HG13	2.16	0.45
1:2:1529:C:OP1	7:S5:112:ARG:NH1	2.43	0.45
70:O4:80:ARG:HG3	70:O4:88:ARG:HH21	3.86	0.45
36:5:1564:U:H2'	36:5:1565:G:H8	1.81	0.45
12:C0:32:HIS:CE1	12:C0:42:VAL:HG11	4.15	0.45
12:C0:34:GLU:O	12:C0:35:ILE:HB	4.59	0.45
36:1:1816:A:O2'	36:1:1817:G:OP1	2.34	0.45
22:D0:69:LYS:HG2	31:D9:44:ARG:HH12	3.13	0.45
39:L2:202:VAL:HG23	39:L2:211:HIS:HB3	1.99	0.45
7:S5:144:GLU:HB2	7:S5:160:VAL:O	2.17	0.45
41:L4:340:GLY:HA3	36:5:577:C:O2'	283.80	0.45
36:5:2437:G:H1	36:5:2510:U:H3	1.63	0.45
1:2:73:U:H4'	1:2:74:U:OP1	2.16	0.45
1:2:74:U:HO2'	1:2:75:U:P	2.37	0.45
64:N8:74:ASN:HB3	64:N8:115:LYS:HB2	1.99	0.45
1:6:680:U:C2	1:6:682:C:N4	2.85	0.45
36:5:1438:U:H2'	36:5:1439:U:H6	1.78	0.45
46:L9:99:ILE:HG21	46:L9:179:ILE:HD11	2.65	0.45
36:5:1817:G:H5''	86:5:4183:OHX:N5	2.31	0.45
36:1:2217:U:H2'	36:1:2218:G:C8	2.51	0.45
49:M3:123:ILE:HD11	49:M3:125:VAL:HG23	3.02	0.45
17:C5:85:ILE:HG13	17:C5:114:HIS:O	3.09	0.45
25:D3:38:PHE:HB3	1:6:359:A:C2	325.84	0.45
14:C2:131:ASP:OD1	14:C2:132:GLU:N	2.47	0.45
36:1:3061:G:N1	36:1:3083:G:C6	2.84	0.45
6:S4:185:GLY:N	6:S4:189:LEU:HD13	2.31	0.45
36:5:1794:G:O2'	36:5:1795:U:H5'	2.17	0.45
1:2:526:A:H2'	1:2:527:A:O4'	2.16	0.45
36:1:929:A:H2'	36:1:930:U:C6	2.52	0.45
1:2:571:G:H5''	1:2:572:C:OP2	2.17	0.45
6:S4:248:ILE:HG13	6:S4:249:ALA:N	2.86	0.45
79:Q3:24:ARG:NH1	1:6:982:U:H4'	251.82	0.45
1:2:373:G:N7	86:2:2159:OHX:N6	2.65	0.45
3:S1:51:SER:HA	3:S1:57:ALA:H	1.80	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:8:91:C:H2'	38:8:92:A:C8	2.51	0.45
36:5:2513:U:C2'	36:5:2592:G:H1	2.29	0.45
60:N4:8:PHE:CD2	60:N4:46:PRO:HG3	2.52	0.45
6:S4:199:GLU:OE2	6:S4:209:HIS:NE2	2.49	0.45
26:D4:86:GLU:OE1	26:D4:90:ARG:HD2	2.30	0.45
34:SR:157:VAL:HB	34:SR:168:THR:HG22	3.26	0.45
39:L2:71:LEU:HD22	36:5:1651:U:H5''	188.71	0.45
49:M3:129:ASN:OD1	49:M3:130:GLY:N	4.83	0.45
36:5:2529:A:H2'	36:5:2530:G:O4'	2.16	0.45
77:Q1:11:ARG:NH2	1:6:1127:G:OP1	294.57	0.45
49:M3:46:ILE:HG23	49:M3:49:ARG:NH1	3.51	0.45
36:1:3356:G:H2'	36:1:3357:U:C6	2.52	0.45
28:D6:5:ARG:NH1	1:6:1795:U:H3'	339.03	0.45
46:L9:22:SER:HB2	46:L9:39:LYS:HZ3	3.40	0.45
55:M9:138:LEU:HD22	55:M9:142:ILE:HD11	1.98	0.45
36:1:435:C:H2'	36:1:436:A:C8	2.51	0.45
42:L5:107:ARG:NH2	42:L5:120:LYS:HA	2.27	0.45
3:S1:28:GLU:HB3	3:S1:49:ASN:H	1.82	0.45
36:1:368:G:C2	36:1:369:A:N7	2.84	0.45
1:2:1102:G:P	24:D2:76:SER:HB2	2.57	0.45
24:D2:11:LEU:HD21	24:D2:37:PHE:CE1	2.51	0.45
5:S3:57:ASP:N	5:S3:57:ASP:OD1	2.47	0.45
73:O7:65:ARG:HG3	73:O7:65:ARG:NH1	2.32	0.45
49:M3:48:PRO:HG3	49:M3:126:PHE:HE2	2.64	0.45
65:N9:21:ILE:HG22	65:N9:22:LYS:N	3.56	0.45
2:S0:12:GLU:HG2	2:S0:13:ASP:N	2.32	0.45
2:S0:13:ASP:O	2:S0:16:LEU:N	3.09	0.45
8:S6:163:THR:HA	8:S6:168:THR:HA	1.98	0.45
36:1:1942:U:O2'	36:1:3345:G:O2'	2.16	0.45
45:L8:214:LEU:HA	45:L8:214:LEU:HD12	1.72	0.45
9:S7:62:VAL:HG11	9:S7:67:LEU:HD23	1.99	0.45
57:N1:25:VAL:HG22	57:N1:30:TYR:HE2	1.82	0.45
19:C7:88:VAL:HG22	19:C7:89:SER:O	4.81	0.45
8:S6:176:GLN:HG2	1:6:169:A:H5'	329.13	0.45
40:L3:259:HIS:NE2	36:5:2366:C:H5'	217.25	0.45
1:2:380:U:H5	11:S9:5:PRO:CA	2.29	0.45
48:M1:11:ASP:HB3	48:M1:12:LEU:H	1.50	0.45
36:5:3279:A:O2'	36:5:3280:U:H5'	2.15	0.45
45:L8:108:ARG:O	45:L8:112:GLU:N	2.79	0.45
48:M1:132:ASN:HA	48:M1:154:THR:CG2	2.47	0.45
44:L7:147:LEU:HA	44:L7:147:LEU:HD23	1.47	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1183:A:C4	17:C5:100:LYS:HD3	2.52	0.45
7:S5:121:ILE:HG13	7:S5:195:ALA:HB1	2.64	0.45
36:5:595:G:H1	36:5:609:G:H5''	1.82	0.45
7:S5:126:ASP:HB3	7:S5:127:GLN:H	1.44	0.45
86:5:4013:OHX:N4	86:5:4203:OHX:N1	2.63	0.45
86:5:4013:OHX:N4	86:5:4203:OHX:N2	2.65	0.45
36:5:2949:U:C5	36:5:2950:G:C6	3.05	0.45
15:C3:70:LYS:HE2	15:C3:70:LYS:HB3	4.43	0.45
36:5:1262:G:H5''	36:5:1263:A:OP2	2.17	0.45
56:N0:138:GLN:HA	56:N0:141:LYS:HB2	2.16	0.45
36:5:1317:A:OP1	86:5:4099:OHX:N1	2.50	0.45
36:1:1340:G:H2'	36:1:1341:U:C6	2.51	0.45
53:M7:24:VAL:HG12	53:M7:86:LYS:HG2	1.99	0.45
52:M6:182:ASN:O	52:M6:184:THR:N	3.46	0.45
26:D4:44:LEU:O	26:D4:47:VAL:HG23	2.16	0.45
36:1:1651:U:H5'	39:L2:71:LEU:HD13	1.99	0.45
63:N7:34:LYS:HA	63:N7:34:LYS:HD2	2.25	0.45
9:S7:42:GLN:HG2	9:S7:42:GLN:H	4.34	0.45
16:C4:47:LYS:HE2	16:C4:62:LEU:O	4.98	0.45
49:M3:6:ASN:HB2	64:N8:48:TYR:CE2	2.51	0.45
36:1:3383:G:H2'	36:1:3384:U:H6	1.80	0.45
36:1:2395:G:H5'	40:L3:255:TRP:CD1	2.52	0.45
4:S2:121:VAL:O	4:S2:125:ILE:HG13	2.16	0.45
64:N8:7:LYS:HA	64:N8:7:LYS:HD3	1.75	0.45
40:L3:214:MET:H	40:L3:214:MET:HG2	2.11	0.45
1:6:550:A:OP2	86:6:2051:OHX:N2	2.50	0.45
1:6:1671:A:H2'	1:6:1672:G:O4'	2.17	0.45
36:5:1049:C:H2'	36:5:1050:U:C6	2.51	0.45
36:5:3197:G:C2'	36:5:3198:U:H5''	2.45	0.45
7:S5:40:ILE:HG23	7:S5:42:LEU:HD22	1.98	0.45
21:C9:88:VAL:HG13	1:6:1601:G:C2	362.80	0.45
1:2:734:A:O2'	1:2:735:C:H5'	2.16	0.45
36:5:93:C:OP2	36:5:2764:C:O2'	2.26	0.45
25:D3:62:LYS:H	25:D3:116:ASP:HB2	1.82	0.45
22:D0:48:HIS:O	22:D0:48:HIS:CG	2.69	0.45
42:L5:270:LYS:HD3	37:7:2:G:H4'	320.91	0.45
59:N3:12:ARG:HG3	59:N3:13:ILE:N	3.71	0.45
2:S0:31:VAL:HG12	2:S0:33:GLN:H	1.81	0.45
36:5:2555:G:H5'	36:5:2556:C:OP2	2.17	0.45
1:2:1584:G:C8	18:C6:122:ARG:HB3	2.51	0.45
26:D4:2:SER:N	26:D4:32:ARG:HG3	2.31	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:200:ASP:HA	2:S0:203:PHE:CE1	2.51	0.45
2:S0:88:LYS:HD2	2:S0:88:LYS:HA	2.53	0.45
45:L8:241:LYS:HB2	36:5:2586:G:C5	184.40	0.45
16:C4:41:ARG:O	16:C4:42:VAL:HG22	2.17	0.45
1:2:190:C:O2'	1:2:191:C:OP2	2.29	0.45
1:2:195:G:H2'	1:2:196:G:H5'	1.98	0.45
38:4:10:A:H2'	38:4:11:C:H6	1.81	0.45
1:2:327:U:H2'	1:2:328:A:H8	1.81	0.45
1:2:497:G:O2'	1:2:498:G:O4'	2.34	0.45
59:N3:87:ARG:HH22	59:N3:137:VAL:HG21	1.81	0.45
68:O2:2:ALA:O	68:O2:90:LYS:HG2	2.74	0.45
36:5:900:G:H1'	36:5:1589:A:H61	1.79	0.45
2:S0:112:THR:HG23	2:S0:115:PHE:HB2	2.06	0.45
37:7:27:A:H2'	37:7:28:C:C6	2.51	0.45
49:M3:54:LEU:HG	49:M3:119:TYR:CD1	2.51	0.45
1:2:809:A:C6	1:2:810:G:C6	3.04	0.45
58:N2:17:VAL:HG22	58:N2:103:TYR:HB2	1.99	0.45
42:L5:38:THR:HG22	42:L5:38:THR:O	4.93	0.45
7:S5:24:VAL:C	7:S5:25:LEU:HD13	2.61	0.45
36:5:1662:G:H2'	36:5:1663:C:C6	2.51	0.45
36:5:172:G:N3	36:5:172:G:H2'	2.31	0.45
36:5:992:A:O2'	36:5:993:G:H5'	2.16	0.45
45:L8:181:LYS:HD3	38:8:154:C:H5"	150.35	0.45
12:C0:10:LYS:HZ3	12:C0:36:ASP:C	4.08	0.45
1:6:1358:G:H2'	1:6:1359:C:C6	2.52	0.45
55:M9:44:LEU:HD13	55:M9:44:LEU:HA	1.74	0.45
36:5:140:C:H2'	36:5:141:C:H6	1.82	0.45
36:1:191:U:H2'	36:1:192:C:C6	2.52	0.45
3:S1:232:HIS:HB3	3:S1:233:GLY:H	2.96	0.45
38:4:19:C:H2'	38:4:20:U:O4'	2.16	0.45
1:2:358:U:O2'	1:2:360:A:OP1	2.34	0.45
1:6:1054:U:H2'	1:6:1055:U:O4'	2.16	0.45
39:L2:143:GLU:O	39:L2:145:LYS:N	2.60	0.45
36:1:2438:A:H2'	36:1:2439:A:C8	2.52	0.45
36:1:2518:C:OP1	86:1:4210:OHX:N5	2.50	0.45
43:L6:149:ILE:HG23	43:L6:155:LEU:HD13	2.36	0.45
17:C5:63:ALA:HA	17:C5:66:ALA:HB3	2.43	0.45
36:1:2367:A:H2'	36:1:2368:A:C8	2.51	0.45
1:2:326:G:OP1	13:C1:57:LYS:NZ	2.43	0.45
48:M1:117:ASP:O	48:M1:119:SER:N	3.10	0.45
7:S5:27:THR:HA	7:S5:28:PRO:HD2	2.44	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:C8:4:VAL:HG21	27:D5:82:HIS:CG	3.17	0.45
1:2:479:C:O2	1:2:510:G:N2	2.49	0.45
36:5:2257:C:H6	36:5:2257:C:O5'	1.99	0.45
42:L5:177:GLU:H	42:L5:177:GLU:HG3	1.34	0.45
36:1:197:G:N2	36:1:372:A:C8	2.84	0.45
5:S3:106:LYS:HG2	5:S3:110:LEU:HD12	1.98	0.45
46:L9:88:TYR:CZ	46:L9:184:LYS:HD2	5.00	0.45
11:S9:142:ASN:OD1	26:D4:64:PHE:HZ	3.76	0.45
36:1:3308:C:O2	53:M7:69:ARG:HD3	2.16	0.45
86:5:3927:OHX:N5	38:8:17:A:OP1	2.49	0.45
1:2:1013:A:P	39:L2:248:GLY:HA2	2.57	0.45
42:L5:270:LYS:HG2	37:7:2:G:H5'	319.50	0.45
8:S6:175:ILE:HG12	1:6:78:A:H1'	338.58	0.45
48:M1:94:ARG:HB2	48:M1:95:ASN:H	1.69	0.45
1:2:119:A:N1	6:S4:7:LYS:NZ	2.61	0.45
18:C6:52:LEU:HA	18:C6:60:PHE:CE1	2.93	0.45
21:C9:79:LEU:HD23	21:C9:80:TYR:CE2	3.06	0.45
36:5:303:G:H5''	36:5:304:G:H5''	1.98	0.45
61:N5:105:VAL:CG1	61:N5:126:LEU:HD22	2.47	0.45
75:O9:23:LEU:HD22	75:O9:24:PRO:CD	2.41	0.45
1:2:1570:A:OP1	86:2:2154:OHX:N5	2.49	0.45
12:C0:56:LYS:N	12:C0:67:THR:O	2.82	0.45
5:S3:58:VAL:O	5:S3:60:GLY:N	3.97	0.45
41:L4:4:PRO:HG2	41:L4:22:LEU:HD12	3.65	0.45
72:O6:58:ILE:O	72:O6:61:ILE:HB	2.45	0.45
6:S4:187:ARG:NH2	1:6:754:A:N7	375.59	0.45
63:N7:46:ILE:HG12	63:N7:49:TYR:CZ	3.19	0.45
42:L5:40:HIS:CD2	57:N1:69:LYS:HG3	3.60	0.45
10:S8:138:ASN:HA	10:S8:141:ARG:CD	3.45	0.45
36:1:2376:G:C6	36:1:2377:G:O6	2.70	0.45
1:6:1203:A:OP2	86:6:2132:OHX:N4	2.49	0.45
40:L3:53:MET:HE1	36:5:3047:U:O2'	235.09	0.45
41:L4:91:GLY:O	41:L4:94:CYS:HB2	2.72	0.45
1:2:484:C:N4	1:2:503:G:H22	2.12	0.45
1:2:407:A:H5'	8:S6:94:ARG:NH2	2.32	0.45
22:D0:109:GLU:HB3	22:D0:112:VAL:HB	2.38	0.45
36:5:2573:G:O6	86:5:4197:OHX:N6	2.50	0.45
36:1:670:C:P	54:M8:147:ARG:NH2	2.90	0.45
45:L8:108:ARG:NH1	36:5:121:A:C4	95.82	0.45
36:1:121:A:C2	45:L8:129:PRO:HB3	2.52	0.45
1:2:647:G:H22	1:2:687:G:N2	2.15	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:119:TYR:HD1	49:M3:145:PHE:CE2	2.89	0.45
59:N3:33:ASN:ND2	59:N3:63:LYS:HB2	3.30	0.45
36:5:374:A:H4'	36:5:375:A:OP1	2.17	0.45
1:6:539:G:O2'	1:6:540:G:OP2	2.27	0.45
36:1:1556:C:H2'	36:1:2169:G:H1	1.80	0.45
46:L9:109:ALA:O	46:L9:110:LYS:HB2	2.21	0.45
41:L4:198:ARG:NH1	62:N6:12:ARG:NH2	3.79	0.45
1:2:927:C:H1'	16:C4:125:SER:HB2	1.98	0.45
86:5:4206:OHX:N6	86:8:226:OHX:N5	2.64	0.45
36:1:2842:U:C5	36:1:2843:U:C4	3.05	0.45
47:M0:23:ASN:O	47:M0:24:ARG:HB2	2.17	0.45
36:1:2282:U:O2	36:1:2310:U:H4'	2.16	0.45
36:1:684:G:OP2	49:M3:28:GLN:NE2	2.42	0.45
4:S2:168:ARG:NE	1:6:1098:U:OP2	384.93	0.45
1:2:883:C:H2'	1:2:884:A:C8	2.51	0.45
1:6:1783:C:H2'	1:6:1784:C:H6	1.80	0.45
20:C8:7:GLU:HB3	20:C8:10:SER:OG	2.93	0.45
37:3:106:U:H2'	37:3:107:C:C6	2.51	0.45
2:S0:177:LEU:HD23	2:S0:177:LEU:HA	1.75	0.45
57:N1:105:PHE:CE2	36:5:1062:A:H4'	244.26	0.45
86:5:4036:OHX:N5	86:5:4120:OHX:N6	2.65	0.45
48:M1:150:ASN:O	48:M1:152:HIS:N	2.44	0.45
1:6:1594:G:H1	1:6:1602:C:H42	1.63	0.45
24:D2:24:GLN:OE1	29:D7:4:VAL:HA	2.15	0.45
36:1:964:G:OP1	86:1:3966:OHX:N2	2.50	0.45
36:1:2159:U:H4'	36:1:2160:G:OP2	2.16	0.45
37:3:57:G:H3'	37:3:58:C:H6	1.82	0.45
36:5:909:G:O2'	86:5:4080:OHX:N2	2.50	0.45
50:M4:23:ILE:HD11	50:M4:46:ILE:HD12	1.98	0.45
36:1:428:A:H2'	36:1:429:U:C6	2.52	0.45
36:5:1149:G:N2	36:5:1198:C:N3	2.46	0.45
36:1:2992:U:H5'	36:1:3310:A:O2'	2.16	0.45
1:6:480:G:H1	1:6:508:U:H3	1.65	0.45
49:M3:7:LEU:HA	49:M3:7:LEU:HD23	1.78	0.45
9:S7:166:LEU:HA	9:S7:166:LEU:HD12	2.07	0.45
52:M6:188:SER:O	52:M6:192:LYS:HG2	2.21	0.45
5:S3:223:LYS:HD3	34:SR:193:ILE:HD11	1.99	0.45
56:N0:166:LYS:O	56:N0:167:ARG:HB2	2.17	0.45
20:C8:82:PRO:HG2	20:C8:85:PHE:HB2	3.24	0.45
63:N7:4:PHE:CE1	66:O0:35:ARG:HG2	2.52	0.45
7:S5:41:LYS:HB3	7:S5:41:LYS:HE2	2.74	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:162:ALA:HA	36:1:3353:G:C5'	2.39	0.45
26:D4:20:ARG:HE	26:D4:22:GLN:HE21	4.94	0.45
53:M7:31:GLU:CG	53:M7:60:PHE:HA	3.61	0.45
53:M7:136:ILE:HG13	36:5:1846:C:N4	145.94	0.45
36:5:1017:C:H42	36:5:2671:A:P	2.40	0.45
1:6:1699:G:H22	1:6:1702:A:H5''	1.82	0.45
33:E1:136:LYS:O	33:E1:138:ARG:N	2.47	0.45
36:5:1232:C:C5	36:5:1261:G:H2'	2.52	0.45
36:1:1307:G:C5	52:M6:60:LYS:HD3	2.52	0.45
7:S5:59:VAL:C	7:S5:61:TYR:H	2.50	0.45
46:L9:38:LEU:HA	46:L9:38:LEU:HD23	1.93	0.45
1:2:40:A:H2'	1:2:41:A:O4'	2.17	0.45
56:N0:1:MET:HB2	56:N0:118:PHE:CD1	2.51	0.45
40:L3:77:THR:CG2	40:L3:327:CYS:HA	2.57	0.45
10:S8:29:LEU:HD12	1:6:400:A:H61	297.05	0.45
12:C0:50:THR:HG21	12:C0:57:THR:OG1	2.16	0.45
5:S3:194:LYS:O	5:S3:196:ARG:N	2.50	0.45
43:L6:54:TYR:CE2	43:L6:63:LEU:HD22	2.52	0.45
1:2:74:U:H1'	1:2:75:U:O5'	2.16	0.45
36:1:1403:C:H5'	68:O2:67:SER:HB3	1.99	0.45
36:1:1933:A:OP2	86:1:3886:OHX:N6	2.50	0.45
1:2:808:U:O4	1:2:809:A:N6	2.50	0.45
58:N2:76:LEU:O	58:N2:80:THR:HG23	2.17	0.45
36:1:2683:U:H2'	36:1:2684:C:H6	1.81	0.45
1:2:623:A:OP1	86:2:2157:OHX:N2	2.50	0.45
25:D3:44:GLY:HA3	25:D3:78:LYS:HZ2	1.82	0.45
36:5:247:C:N3	36:5:248:U:H1'	2.31	0.45
42:L5:182:GLY:CA	42:L5:194:LEU:HD12	3.90	0.45
6:S4:211:LYS:HA	6:S4:216:ASN:O	2.17	0.45
52:M6:23:VAL:O	52:M6:27:LEU:HG	2.17	0.45
1:6:1621:U:H2'	1:6:1622:G:C8	2.51	0.45
55:M9:4:LEU:O	55:M9:7:GLN:HG2	5.18	0.45
35:SM:47:ALA:O	35:SM:48:ARG:HD2	6.59	0.45
36:5:999:G:H2'	36:5:1000:C:C6	2.52	0.45
40:L3:247:ARG:HD3	36:5:1888:U:OP1	210.28	0.45
63:N7:36:HIS:N	63:N7:37:PRO:HD3	2.66	0.45
19:C7:52:GLY:HA3	1:6:1389:C:O2'	423.52	0.45
36:1:3008:A:OP2	52:M6:74:ARG:NH1	2.42	0.45
61:N5:131:ASP:HB3	61:N5:134:ASP:HB2	1.98	0.45
1:6:445:A:H1'	1:6:525:A:H5'	1.98	0.45
75:O9:28:ARG:HA	75:O9:33:ASN:ND2	2.32	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:477:A:OP1	32:E0:30:PRO:HA	2.17	0.45
34:SR:248:ASN:OD1	34:SR:249:ARG:HG3	3.81	0.45
1:2:1335:U:H3	1:2:1416:G:H1	1.65	0.45
39:L2:133:TYR:CD2	39:L2:168:VAL:HG12	2.52	0.45
36:5:209:A:H4'	36:5:211:A:C8	2.52	0.45
55:M9:176:ARG:HD3	55:M9:176:ARG:HA	1.90	0.45
15:C3:102:LEU:HD23	15:C3:102:LEU:HA	1.99	0.45
54:M8:111:ARG:HD2	54:M8:111:ARG:HH11	1.59	0.45
86:6:2122:OHX:N4	86:6:2173:OHX:N1	2.65	0.45
19:C7:33:ARG:HH22	34:SR:85:TRP:HB3	2.13	0.45
40:L3:19:ARG:HG3	40:L3:273:HIS:NE2	2.32	0.45
23:D1:64:GLU:OE2	29:D7:2:VAL:HG13	2.85	0.45
3:S1:69:CYS:CB	16:C4:114:ARG:HD3	2.91	0.45
20:C8:133:VAL:O	20:C8:135:GLY:N	2.50	0.45
70:O4:71:THR:HG22	70:O4:77:GLY:HA3	1.99	0.45
40:L3:286:GLY:HA3	40:L3:321:PHE:CE1	2.78	0.45
3:S1:48:VAL:HG22	3:S1:64:ARG:NH2	3.59	0.45
66:O0:34:LEU:HA	66:O0:34:LEU:HD13	2.76	0.45
8:S6:64:LYS:O	8:S6:67:VAL:HG22	2.17	0.45
2:S0:188:LEU:HB3	2:S0:189:VAL:H	1.61	0.45
39:L2:77:ILE:HD12	39:L2:128:ARG:HB3	2.64	0.45
2:S0:202:TYR:HD2	2:S0:202:TYR:H	1.65	0.45
47:M0:210:ILE:HA	47:M0:217:PHE:HE2	1.99	0.45
45:L8:202:GLU:O	45:L8:203:VAL:HB	2.16	0.45
36:1:2746:A:H2'	36:1:2747:A:O4'	2.16	0.45
86:5:4068:OHX:N1	86:5:4145:OHX:N4	2.64	0.45
36:1:2767:U:H2'	36:1:2768:U:C6	2.51	0.45
8:S6:94:ARG:NH2	1:6:407:A:H5'	289.45	0.45
58:N2:54:VAL:HG12	58:N2:67:SER:HA	1.99	0.45
36:5:3278:C:O2'	36:5:3279:A:OP2	2.28	0.45
20:C8:13:HIS:O	20:C8:14:ILE:HG22	3.96	0.45
26:D4:51:GLU:O	26:D4:51:GLU:HG2	3.61	0.45
47:M0:153:ARG:HB3	47:M0:153:ARG:CZ	4.10	0.45
49:M3:120:GLN:C	49:M3:122:LYS:H	2.88	0.45
44:L7:27:ALA:O	44:L7:31:ALA:N	2.47	0.45
7:S5:143:ARG:NH1	7:S5:218:GLU:OE1	2.50	0.45
36:1:844:G:O6	86:1:3923:OHX:N5	2.50	0.45
4:S2:169:LEU:HB3	4:S2:196:VAL:HG21	2.69	0.45
1:2:995:A:H2'	1:2:996:U:O4'	2.17	0.45
1:2:422:G:N7	86:2:2107:OHX:N5	2.64	0.45
36:5:528:U:H2'	36:5:529:A:H8	1.82	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
86:1:3962:OHX:N5	86:1:4144:OHX:N3	2.65	0.45
53:M7:119:VAL:HA	53:M7:145:HIS:O	2.55	0.45
36:5:523:A:N6	36:5:570:A:C2	2.85	0.45
42:L5:14:SER:HG	37:7:68:C:P	301.90	0.45
4:S2:129:ILE:O	4:S2:133:LYS:HG2	2.17	0.45
42:L5:143:LYS:HE3	42:L5:145:PHE:CZ	3.47	0.45
36:5:2093:A:H3'	36:5:2093:A:N3	2.32	0.45
46:L9:88:TYR:CE2	46:L9:184:LYS:HG2	2.52	0.45
1:2:192:U:H2'	1:2:192:U:O2	2.16	0.45
36:5:1584:U:H2'	36:5:1585:C:H6	1.82	0.45
44:L7:222:HIS:CE1	44:L7:224:ILE:HG13	2.51	0.45
4:S2:38:VAL:O	4:S2:39:THR:OG1	2.21	0.45
74:O8:30:LYS:HD2	74:O8:40:GLN:NE2	2.83	0.45
38:4:6:U:H2'	38:4:7:U:C6	2.52	0.45
41:L4:289:ILE:O	41:L4:292:SER:HB3	2.17	0.45
1:6:909:U:H2'	1:6:910:C:C6	2.52	0.45
36:5:2405:C:O2	36:5:2819:A:N1	2.49	0.45
49:M3:109:PHE:O	49:M3:113:VAL:HG23	2.17	0.45
36:1:3015:G:N2	36:1:3040:A:H1'	2.32	0.45
56:N0:78:TRP:HB2	56:N0:125:LYS:H	2.74	0.45
21:C9:126:GLU:H	21:C9:126:GLU:CD	2.39	0.45
41:L4:14:GLU:HG3	41:L4:14:GLU:O	4.40	0.45
36:1:1286:A:N3	36:1:1287:A:H1'	2.31	0.45
2:S0:11:PRO:O	2:S0:15:GLN:HG3	2.17	0.45
73:O7:70:VAL:HG11	38:8:35:C:H5'	71.47	0.45
36:1:59:G:H2'	38:4:33:A:O2'	2.17	0.45
1:6:1211:A:H61	1:6:1452:U:H3	1.65	0.45
6:S4:21:ASP:HB2	1:6:773:C:OP1	388.58	0.45
40:L3:186:GLY:O	40:L3:190:GLU:HB2	2.59	0.44
69:O3:48:ARG:NH1	69:O3:48:ARG:HG2	2.05	0.44
54:M8:178:ARG:HD2	64:N8:50:PRO:HB2	4.09	0.44
7:S5:73:THR:HG22	7:S5:74:ALA:N	3.06	0.44
22:D0:20:ILE:O	22:D0:94:GLU:HA	5.83	0.44
22:D0:18:GLN:O	22:D0:96:PRO:HA	2.17	0.44
70:O4:8:ARG:HD2	70:O4:32:ALA:O	2.17	0.44
18:C6:55:VAL:O	18:C6:59:LYS:HD3	5.16	0.44
1:2:631:G:H2'	1:2:632:U:C6	2.52	0.44
46:L9:13:PRO:HG2	46:L9:16:VAL:HG13	1.99	0.44
39:L2:32:LEU:HD22	39:L2:37:ARG:HD3	1.99	0.44
17:C5:67:ALA:O	86:C5:201:OHX:N2	2.49	0.44
11:S9:114:TYR:HA	11:S9:119:ALA:HB3	2.34	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1607:G:H2'	1:2:1608:U:C6	2.53	0.44
41:L4:23:PRO:HD2	41:L4:26:PHE:CD2	3.06	0.44
63:N7:3:LYS:HE3	66:O0:36:GLN:HA	1.99	0.44
46:L9:143:GLU:O	46:L9:144:ILE:O	4.30	0.44
6:S4:26:CYS:SG	11:S9:3:ARG:HG3	4.22	0.44
8:S6:49:VAL:HB	8:S6:115:LYS:CG	4.27	0.44
36:1:2946:A:H5''	36:1:2947:G:H5'	1.98	0.44
12:C0:14:TYR:CE1	12:C0:18:GLU:HG3	2.52	0.44
51:M5:73:ARG:NH1	51:M5:88:GLY:O	2.48	0.44
1:2:1594:G:H5'	31:D9:33:LYS:HE3	1.98	0.44
49:M3:27:ASP:OD1	49:M3:31:LYS:HD2	4.51	0.44
2:S0:63:ILE:HG23	23:D1:35:ASN:O	2.16	0.44
1:6:189:C:H2'	1:6:190:C:H5'	1.99	0.44
68:O2:67:SER:O	68:O2:69:SER:N	2.51	0.44
70:O4:96:GLU:O	70:O4:99:LYS:HB2	2.92	0.44
36:5:1818:U:H2'	36:5:1819:U:C6	2.52	0.44
44:L7:47:ARG:NH1	44:L7:183:ASP:OD2	2.49	0.44
51:M5:155:VAL:O	51:M5:162:ARG:NH2	2.46	0.44
36:1:1753:G:O6	86:1:4051:OHX:N6	2.49	0.44
34:SR:50:ASP:O	34:SR:52:GLN:N	2.50	0.44
63:N7:53:VAL:HA	63:N7:57:HIS:CD2	2.51	0.44
1:6:1212:G:C2	1:6:1213:G:C8	3.05	0.44
1:2:604:A:OP2	86:2:2168:OHX:N5	2.50	0.44
45:L8:68:ARG:HG2	45:L8:68:ARG:H	2.01	0.44
40:L3:123:TYR:CE2	40:L3:124:LYS:HG3	2.51	0.44
37:3:36:C:O2	37:3:45:A:H1'	2.17	0.44
86:1:4059:OHX:N6	86:1:4167:OHX:N3	2.65	0.44
68:O2:57:TYR:CE1	36:5:1162:U:H4'	198.06	0.44
36:1:191:U:H2'	36:1:192:C:H6	1.81	0.44
36:1:1664:G:H2'	36:1:1665:C:C6	2.52	0.44
41:L4:210:ALA:HB3	41:L4:253:ALA:HB1	2.65	0.44
20:C8:15:LEU:H	20:C8:15:LEU:HD22	3.50	0.44
1:6:1248:C:H2'	1:6:1249:U:C6	2.52	0.44
36:1:2714:G:H4'	36:1:2715:A:H5''	1.98	0.44
66:O0:20:SER:OG	66:O0:96:GLY:HA3	2.17	0.44
1:6:15:U:O5'	1:6:15:U:H6	2.00	0.44
18:C6:73:GLY:H	18:C6:76:SER:HB3	1.82	0.44
9:S7:155:ASP:OD2	9:S7:156:SER:N	2.90	0.44
39:L2:44:ILE:HG23	39:L2:87:PHE:CD1	2.51	0.44
36:1:261:U:H2'	36:1:262:U:C6	2.52	0.44
6:S4:62:LYS:NZ	6:S4:62:LYS:HB2	2.32	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:186:LEU:HA	45:L8:186:LEU:HD23	1.73	0.44
78:Q2:104:LEU:HA	78:Q2:104:LEU:HD12	1.81	0.44
36:1:1842:A:H4'	36:1:1843:C:OP2	2.17	0.44
40:L3:3:HIS:CD2	40:L3:3:HIS:O	2.71	0.44
75:O9:9:ILE:HG22	75:O9:13:MET:CE	2.34	0.44
1:6:755:A:H2'	1:6:756:A:H8	1.82	0.44
70:O4:58:ARG:NH1	36:5:1592:G:OP1	161.08	0.44
10:S8:9:HIS:CD2	10:S8:10:LYS:HB2	2.53	0.44
11:S9:134:ILE:HD13	11:S9:141:VAL:O	3.54	0.44
28:D6:87:ARG:NH1	28:D6:92:ARG:HA	2.68	0.44
40:L3:116:ARG:HH22	40:L3:174:LYS:HD2	1.83	0.44
36:1:3166:C:H2'	36:1:3167:A:O4'	2.18	0.44
3:S1:181:LEU:O	3:S1:185:THR:N	2.20	0.44
1:2:1244:A:HO2'	1:2:1245:G:P	2.39	0.44
3:S1:59:ASP:C	3:S1:61:LEU:H	3.99	0.44
3:S1:61:LEU:O	3:S1:63:GLY:N	2.50	0.44
41:L4:269:SER:O	41:L4:270:SER:OG	2.85	0.44
8:S6:63:MET:HE1	8:S6:106:LEU:CD1	2.48	0.44
5:S3:60:GLY:HA3	5:S3:65:ARG:HB3	4.17	0.44
41:L4:180:LYS:HE3	41:L4:180:LYS:HB3	2.33	0.44
1:2:1291:G:H5'	4:S2:119:LYS:CE	2.47	0.44
2:S0:198:MET:SD	19:C7:85:VAL:HG11	2.57	0.44
40:L3:347:SER:O	40:L3:348:ARG:HB3	2.41	0.44
66:O0:36:GLN:HB3	66:O0:38:LYS:HE3	4.08	0.44
42:L5:105:ILE:HD13	42:L5:105:ILE:HA	1.82	0.44
54:M8:93:ILE:H	54:M8:93:ILE:HG13	3.06	0.44
36:5:2746:A:H2'	36:5:2747:A:O4'	2.18	0.44
73:O7:66:TYR:OH	73:O7:73:ARG:NH2	3.10	0.44
10:S8:172:ARG:NH1	1:6:330:G:OP2	281.02	0.44
1:6:417:A:O5'	1:6:417:A:H8	2.00	0.44
36:1:715:A:H8	64:N8:115:LYS:HG2	1.82	0.44
17:C5:85:ILE:HA	17:C5:89:MET:SD	2.56	0.44
36:5:268:A:N1	36:5:295:A:H5'	2.33	0.44
36:5:3001:C:O2'	36:5:3002:C:H5'	2.17	0.44
64:N8:59:ARG:NH1	36:5:90:C:OP1	152.14	0.44
39:L2:215:ASN:OD1	86:5:3914:OHX:N3	212.92	0.44
1:2:825:U:H2'	1:2:826:U:H6	1.82	0.44
39:L2:96:LEU:HA	39:L2:96:LEU:HD23	2.34	0.44
36:1:520:U:N3	41:L4:347:THR:O	2.50	0.44
71:O5:21:LEU:HD11	71:O5:55:LEU:HD21	2.00	0.44
36:5:3041:U:H2'	36:5:3042:U:H6	1.82	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:M7:2:ALA:O	53:M7:3:ARG:HB2	2.40	0.44
8:S6:132:ARG:HD2	1:6:150:U:H1'	327.03	0.44
3:S1:93:GLY:O	3:S1:95:ASN:N	3.28	0.44
39:L2:113:VAL:HG12	39:L2:166:ILE:HA	2.01	0.44
1:2:1142:A:H2'	1:2:1143:A:C8	2.52	0.44
36:1:975:C:H2'	36:1:976:U:H6	1.81	0.44
15:C3:117:LEU:HA	15:C3:117:LEU:HD23	2.00	0.44
54:M8:89:ASP:HB3	36:5:677:A:OP1	133.89	0.44
36:5:242:C:H2'	36:5:243:G:H8	1.82	0.44
71:O5:105:ARG:O	71:O5:109:ILE:HG13	2.44	0.44
34:SR:303:ALA:HB3	34:SR:313:TRP:HZ3	2.11	0.44
1:2:530:C:O2	26:D4:61:ARG:NH2	2.51	0.44
49:M3:8:PRO:HA	54:M8:164:ARG:O	2.34	0.44
18:C6:131:GLY:HA3	18:C6:136:SER:O	2.47	0.44
50:M4:135:LEU:HD21	52:M6:174:PHE:CE2	2.53	0.44
64:N8:125:VAL:HG21	64:N8:138:ILE:HD13	1.99	0.44
36:1:764:U:O4	86:1:3964:OHX:N5	2.50	0.44
36:1:2840:C:N4	36:1:2845:A:O2'	2.49	0.44
7:S5:189:THR:HG23	7:S5:192:GLU:OE1	3.36	0.44
51:M5:197:LEU:HA	51:M5:197:LEU:HD12	2.19	0.44
42:L5:204:VAL:O	42:L5:208:MET:HG3	2.40	0.44
36:5:3362:A:C2	36:5:3363:U:C2	3.05	0.44
22:D0:74:GLU:HG2	1:6:1429:G:C1'	378.11	0.44
1:2:768:C:O2	11:S9:143:ILE:HG21	2.17	0.44
36:1:3355:U:H3'	36:1:3356:G:H5''	1.99	0.44
1:2:735:C:OP2	1:2:735:C:H2'	2.17	0.44
28:D6:95:ARG:HA	1:6:1797:A:O4'	344.35	0.44
24:D2:95:PRO:HD3	24:D2:130:TYR:CD1	3.09	0.44
42:L5:273:ARG:O	42:L5:273:ARG:HG2	3.04	0.44
36:5:2258:U:H5''	36:5:2259:A:OP2	2.17	0.44
55:M9:18:GLY:HA3	36:5:1874:A:H5''	136.60	0.44
3:S1:77:GLU:C	3:S1:79:HIS:H	2.20	0.44
67:O1:77:ARG:HD2	67:O1:89:LEU:HD23	1.98	0.44
36:1:1094:U:O2'	36:1:1095:U:O5'	2.28	0.44
37:3:60:G:OP2	86:3:224:OHX:N3	2.50	0.44
9:S7:64:VAL:O	9:S7:67:LEU:HB2	2.62	0.44
42:L5:60:ILE:HG13	42:L5:80:SER:HB3	2.55	0.44
36:5:3160:U:H2'	36:5:3161:C:C6	2.53	0.44
10:S8:29:LEU:HD21	10:S8:31:ARG:HG3	1.99	0.44
5:S3:195:SER:O	5:S3:197:THR:N	2.46	0.44
40:L3:238:LEU:HD12	40:L3:238:LEU:HA	1.87	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D5:50:ILE:O	27:D5:54:VAL:HG23	2.16	0.44
9:S7:173:TYR:CE1	9:S7:179:LYS:HB2	2.52	0.44
55:M9:61:SER:HB3	36:5:1689:U:H5''	171.68	0.44
34:SR:42:LEU:HB2	34:SR:61:PHE:HB2	2.08	0.44
12:C0:80:LEU:C	12:C0:82:LEU:H	2.20	0.44
52:M6:136:THR:HG22	52:M6:137:THR:N	2.46	0.44
42:L5:119:TYR:OH	42:L5:134:ALA:HA	2.18	0.44
36:1:1353:U:O2'	43:L6:8:LYS:O	2.35	0.44
1:6:871:G:H2'	1:6:872:G:C8	2.53	0.44
21:C9:42:GLY:CA	21:C9:84:LYS:HB2	2.48	0.44
36:5:727:G:H2'	36:5:728:G:O4'	2.17	0.44
36:1:2723:U:OP1	57:N1:87:LYS:HD3	2.17	0.44
36:1:3227:A:H2'	36:1:3228:C:H5'	2.00	0.44
21:C9:35:ASP:N	21:C9:35:ASP:OD2	4.38	0.44
36:5:2726:C:O2'	36:5:2727:A:H2'	2.18	0.44
36:1:1126:G:H5''	47:M0:119:TRP:HZ3	1.82	0.44
15:C3:75:LEU:H	15:C3:75:LEU:HD12	3.04	0.44
36:1:2611:U:H2'	36:1:2612:U:C6	2.53	0.44
11:S9:7:THR:HG21	1:6:758:U:OP1	384.34	0.44
42:L5:183:TRP:CZ3	42:L5:185:PHE:HA	7.18	0.44
31:D9:15:GLY:O	31:D9:17:GLY:N	3.31	0.44
1:2:229:U:H3	1:2:236:A:H61	1.65	0.44
23:D1:13:VAL:HA	23:D1:14:PRO:HD3	1.87	0.44
18:C6:78:VAL:O	18:C6:81:ILE:HG12	2.37	0.44
56:N0:45:LEU:HD22	56:N0:45:LEU:HA	1.75	0.44
42:L5:20:PHE:HA	42:L5:20:PHE:HD2	1.62	0.44
39:L2:64:ARG:HH22	45:L8:38:GLN:HA	2.17	0.44
7:S5:45:LYS:HD3	7:S5:45:LYS:HA	1.63	0.44
11:S9:129:ILE:HG22	11:S9:142:ASN:HA	1.99	0.44
78:Q2:48:SER:O	86:Q2:502:OHX:N1	5.08	0.44
36:1:1565:G:H1'	36:1:1575:A:C2	2.53	0.44
59:N3:2:SER:N	59:N3:56:ASP:OD1	4.89	0.44
6:S4:122:LYS:HB3	6:S4:164:LEU:HD21	2.00	0.44
36:1:2571:U:H1'	36:1:2572:C:H5'	1.99	0.44
36:1:1230:G:O6	36:1:1231:A:N6	2.51	0.44
36:1:3139:A:H8	36:1:3139:A:C5'	2.28	0.44
25:D3:125:VAL:HG12	25:D3:126:LYS:HG3	2.03	0.44
36:1:1095:U:O2	57:N1:128:LEU:N	2.50	0.44
5:S3:104:SER:OG	5:S3:105:MET:N	2.50	0.44
46:L9:55:VAL:HG11	46:L9:71:VAL:HG11	2.87	0.44
48:M1:22:SER:HA	48:M1:66:ALA:CB	2.91	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:45:ASN:ND2	45:L8:47:SER:HB3	2.32	0.44
36:5:290:G:H2'	36:5:291:C:C6	2.52	0.44
37:3:11:A:O2'	37:3:13:A:OP2	2.36	0.44
21:C9:30:VAL:HA	21:C9:31:PRO:HD2	1.83	0.44
21:C9:33:TYR:CD1	21:C9:34:VAL:N	3.36	0.44
47:M0:75:TYR:HE1	47:M0:150:GLU:HB3	2.69	0.44
1:2:218:A:N1	1:2:843:U:O2'	2.44	0.44
1:6:604:A:OP1	86:6:2153:OHX:N2	2.50	0.44
43:L6:36:PRO:HB3	43:L6:55:LEU:O	2.83	0.44
62:N6:32:SER:HA	62:N6:50:ILE:H	2.49	0.44
58:N2:20:SER:O	58:N2:24:GLU:HG2	2.21	0.44
36:5:172:G:C6	36:5:247:C:N4	2.85	0.44
1:6:478:A:C2	1:6:511:A:C2	3.05	0.44
70:O4:38:LEU:HD23	36:5:1741:A:H4'	174.42	0.44
8:S6:4:ASN:HA	8:S6:15:THR:HG22	1.98	0.44
36:1:1743:G:H2'	36:1:1744:G:H8	1.82	0.44
86:1:3962:OHX:N1	86:1:4144:OHX:N3	2.66	0.44
1:6:1591:C:H2'	1:6:1592:A:C8	2.52	0.44
34:SR:278:PHE:CE2	34:SR:287:PRO:HG2	2.53	0.44
1:2:130:C:O2'	1:2:131:C:OP1	2.32	0.44
15:C3:72:MET:HA	15:C3:75:LEU:HD13	3.47	0.44
5:S3:208:ILE:HD12	19:C7:16:LEU:HD21	1.99	0.44
17:C5:41:VAL:HG22	17:C5:84:ILE:HD12	1.99	0.44
39:L2:185:ALA:O	39:L2:188:LYS:HB3	2.17	0.44
51:M5:53:TYR:HB2	51:M5:133:ILE:HD13	2.95	0.44
54:M8:51:ALA:HA	54:M8:54:LEU:HD12	1.99	0.44
36:5:255:A:H2'	36:5:256:G:H8	1.82	0.44
61:N5:114:VAL:HB	75:O9:10:LYS:NZ	2.32	0.44
1:2:938:G:N2	1:2:941:A:OP2	2.45	0.44
24:D2:107:SER:HA	1:6:804:A:C8	367.59	0.44
36:1:2357:A:O2'	36:1:2358:A:H5'	2.18	0.44
1:6:615:A:O2'	1:6:621:A:N1	2.42	0.44
36:1:2098:C:H2'	36:1:2099:A:H8	1.83	0.44
65:N9:9:ALA:O	65:N9:12:GLN:HG2	2.18	0.44
1:6:1643:U:O2	1:6:1780:G:N2	2.50	0.44
36:1:2660:G:O3'	36:1:2749:G:N2	2.50	0.44
56:N0:14:LEU:HD23	56:N0:14:LEU:HA	2.24	0.44
34:SR:272:ASP:OD1	34:SR:273:ASP:N	2.45	0.44
47:M0:63:GLU:H	47:M0:63:GLU:HG2	1.83	0.44
1:6:1595:U:N3	1:6:1600:A:C2	2.72	0.44
78:Q2:73:GLU:HG3	78:Q2:80:ARG:HG2	2.62	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:23:VAL:HG13	48:M1:29:ARG:HH11	1.83	0.44
36:5:776:U:C5	36:5:2719:U:O2	2.62	0.44
20:C8:146:ALA:H	35:SM:68:ARG:NH2	2.16	0.44
23:D1:42:GLU:O	23:D1:44:ARG:HD3	3.00	0.44
15:C3:150:VAL:HG12	15:C3:151:ASN:CG	2.37	0.44
17:C5:121:ILE:HD11	17:C5:123:TYR:CZ	2.53	0.44
36:1:662:U:H2'	36:1:663:C:C6	2.53	0.44
60:N4:6:ASP:HB3	60:N4:11:ALA:H	2.06	0.44
1:2:694:U:O2	1:2:694:U:H2'	2.18	0.44
36:5:2805:G:N3	36:5:2967:A:H2	2.15	0.44
1:2:197:A:H61	10:S8:138:ASN:HD22	1.64	0.44
13:C1:18:HIS:O	86:6:2127:OHX:N3	294.25	0.44
1:2:331:A:H5'	10:S8:33:PRO:HA	2.00	0.44
55:M9:124:TYR:CE2	36:5:1720:U:C4	236.53	0.44
36:1:1381:A:OP1	41:L4:197:ARG:NH1	2.49	0.44
1:2:503:G:O2'	1:2:504:U:OP1	2.35	0.44
36:5:3317:U:H4'	36:5:3318:G:O5'	2.18	0.44
19:C7:57:LEU:HA	19:C7:60:ARG:HG2	2.99	0.44
36:5:1480:G:H4'	36:5:1481:A:OP1	2.17	0.44
46:L9:162:GLN:HB2	46:L9:179:ILE:O	2.47	0.44
8:S6:211:LEU:O	8:S6:215:ARG:HB2	2.17	0.44
36:5:374:A:HO2'	36:5:376:G:H8	1.65	0.44
1:2:830:U:C2	1:2:831:U:H5	2.36	0.44
46:L9:106:LYS:O	46:L9:109:ALA:HB2	2.17	0.44
47:M0:116:ARG:HE	47:M0:116:ARG:HB2	1.49	0.44
48:M1:149:GLY:O	48:M1:153:LYS:HD2	4.67	0.44
1:2:1681:A:H1'	8:S6:66:GLY:HA3	2.00	0.44
1:2:1662:G:O2'	1:2:1663:G:H5'	2.18	0.44
36:1:2881:C:H2'	36:1:2882:U:C6	2.52	0.44
41:L4:39:PHE:CG	41:L4:242:ALA:HB2	2.53	0.44
29:D7:6:ASP:OD1	29:D7:9:HIS:HB2	2.43	0.44
1:2:1357:A:H61	1:2:1366:U:H3	1.64	0.44
20:C8:108:LYS:HD3	20:C8:108:LYS:HA	2.89	0.44
38:8:91:C:H2'	38:8:92:A:H8	1.82	0.44
1:6:387:A:H5''	1:6:389:G:OP2	2.17	0.44
25:D3:48:HIS:CD2	25:D3:105:ALA:HB2	2.53	0.44
1:2:757:A:H4'	6:S4:22:LYS:HD3	1.99	0.44
1:2:482:U:H2'	1:2:483:A:H8	1.82	0.44
5:S3:166:ASP:O	5:S3:190:ARG:NH2	3.33	0.44
56:N0:131:LYS:HG3	56:N0:134:ASP:OD2	2.16	0.44
36:1:1786:G:H2'	36:1:1787:A:C8	2.53	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:C6:6:SER:OG	18:C6:7:VAL:N	3.84	0.44
1:6:17:C:H2'	1:6:18:C:C6	2.52	0.44
61:N5:86:VAL:HG11	61:N5:95:ILE:HD11	2.00	0.44
1:6:1628:U:H2'	1:6:1629:G:C8	2.51	0.44
36:5:1641:U:O2'	36:5:1642:A:H3'	2.18	0.44
1:2:230:C:H2'	1:2:231:U:H5''	2.00	0.44
1:2:1287:A:N6	1:2:1329:A:H5'	2.32	0.44
36:1:1071:U:O2'	36:1:1072:G:OP2	2.30	0.44
47:M0:89:VAL:HG22	47:M0:136:PHE:CE1	2.53	0.44
37:3:92:A:C5	37:3:93:C:H1'	2.53	0.44
39:L2:15:ILE:HD12	39:L2:15:ILE:HA	4.75	0.44
41:L4:325:LEU:HD23	41:L4:325:LEU:HA	1.68	0.44
41:L4:346:LYS:HA	41:L4:346:LYS:HD2	4.68	0.44
36:5:1124:U:O4	86:5:4130:OHX:N3	2.50	0.44
53:M7:94:LEU:HA	53:M7:94:LEU:HD12	2.40	0.44
36:5:1226:G:H2'	36:5:1227:C:C6	2.52	0.44
8:S6:108:VAL:HG22	1:6:154:G:H4'	303.73	0.44
41:L4:319:LYS:O	41:L4:319:LYS:HG3	2.17	0.44
55:M9:25:ASP:HA	55:M9:26:PRO:HD2	1.62	0.44
7:S5:43:PHE:CG	7:S5:44:ASN:N	2.92	0.44
7:S5:63:GLN:NE2	7:S5:66:GLN:HB2	4.58	0.44
36:1:1221:A:H3'	36:1:1222:G:C5'	2.47	0.44
10:S8:8:ARG:CZ	10:S8:21:PHE:HB3	2.48	0.44
1:2:1202:A:H62	1:2:1457:C:H5''	1.81	0.44
1:6:565:C:C2	86:6:2161:OHX:N4	2.86	0.44
1:2:992:A:N3	1:2:992:A:O4'	2.48	0.44
62:N6:39:LEU:HD13	62:N6:43:TYR:HE2	2.12	0.44
1:2:706:A:C6	1:2:734:A:N6	2.86	0.44
26:D4:20:ARG:HB3	26:D4:76:TYR:CD2	2.82	0.44
36:1:2988:C:O2	40:L3:266:ARG:NH1	2.50	0.44
40:L3:17:LEU:HD11	40:L3:233:TRP:HH2	2.18	0.44
22:D0:48:HIS:CE1	22:D0:50:LEU:HD11	2.52	0.44
3:S1:133:TYR:CD2	3:S1:181:LEU:HD11	2.53	0.44
1:2:1250:U:O2'	1:2:1251:U:OP1	2.32	0.44
68:O2:123:LYS:HA	68:O2:126:LEU:CD1	3.56	0.44
66:O0:24:THR:CG2	66:O0:91:SER:HB3	2.58	0.44
39:L2:77:ILE:CD1	39:L2:128:ARG:HB3	2.48	0.44
1:6:486:G:H4'	1:6:486:G:OP1	2.18	0.44
8:S6:48:TYR:CD2	8:S6:117:GLY:HA3	2.70	0.44
2:S0:167:LYS:HB3	2:S0:168:HIS:H	1.34	0.44
2:S0:202:TYR:O	2:S0:203:PHE:CD2	2.87	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:200:ASP:HA	2:S0:203:PHE:CD1	2.53	0.44
22:D0:103:ILE:HD13	22:D0:107:THR:HG21	1.99	0.44
4:S2:53:ILE:O	4:S2:56:ILE:N	2.51	0.44
36:1:353:G:N7	73:O7:55:ARG:HD3	2.32	0.44
12:C0:14:TYR:CZ	12:C0:18:GLU:HG3	2.64	0.44
23:D1:51:VAL:HG11	23:D1:78:LEU:HD21	3.04	0.44
1:6:825:U:O2'	1:6:826:U:OP2	2.29	0.44
54:M8:40:THR:C	54:M8:42:ALA:H	2.21	0.44
41:L4:233:LEU:HD23	41:L4:233:LEU:HA	2.00	0.44
64:N8:116:GLY:HA2	64:N8:137:LYS:HZ3	1.83	0.44
1:2:1118:G:O6	86:2:2148:OHX:N1	2.50	0.44
36:1:2652:U:C5	36:1:2653:C:C5	3.06	0.44
9:S7:12:ALA:HB3	9:S7:13:PRO:HD3	1.98	0.44
6:S4:193:GLY:C	6:S4:194:THR:HG1	2.20	0.44
6:S4:179:LYS:HD3	6:S4:230:GLU:OE2	2.17	0.44
37:3:28:C:H2'	37:3:29:C:H5'	2.00	0.44
1:2:218:A:O2'	1:2:219:A:OP1	2.23	0.44
13:C1:46:LYS:HE2	1:6:846:G:N2	310.71	0.44
7:S5:68:ILE:HD13	7:S5:69:PHE:H	5.40	0.44
64:N8:121:VAL:HA	64:N8:122:PRO:HD3	2.27	0.44
66:O0:78:GLY:CA	66:O0:87:VAL:HG13	2.48	0.44
1:2:1166:A:H2'	1:2:1167:G:O4'	2.17	0.44
4:S2:137:ILE:HD12	4:S2:215:PHE:CZ	5.17	0.44
48:M1:41:SER:O	48:M1:75:LYS:NZ	2.34	0.44
10:S8:67:TRP:HA	10:S8:183:ILE:HG23	5.29	0.44
36:1:692:A:H2'	36:1:693:A:H8	1.82	0.44
69:O3:53:TYR:CZ	69:O3:65:ARG:HB2	2.52	0.44
10:S8:81:VAL:HG21	10:S8:95:THR:O	2.82	0.44
36:5:138:U:H2'	36:5:139:G:H8	1.82	0.44
45:L8:75:ILE:HG22	45:L8:76:ALA:N	2.33	0.44
10:S8:161:SER:OG	36:5:3353:G:OP1	233.49	0.44
34:SR:13:LEU:HD22	34:SR:45:TRP:CE3	2.53	0.44
41:L4:361:HIS:O	56:N0:28:ARG:NH2	2.92	0.44
45:L8:72:PRO:HA	45:L8:73:PRO:HD3	1.79	0.44
1:6:1039:A:HO2'	1:6:1040:G:P	2.40	0.44
1:2:199:G:HO2'	1:2:200:A:H8	1.63	0.44
36:1:80:G:H2'	36:1:81:C:H6	1.82	0.44
25:D3:68:ILE:HB	25:D3:70:LYS:NZ	3.17	0.44
36:5:1352:A:H1'	36:5:1353:U:H5'	2.00	0.44
36:5:1084:A:C6	36:5:1085:A:C6	3.06	0.44
9:S7:27:LEU:HD22	9:S7:80:GLU:HG2	2.00	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:45:U:O2	1:6:434:G:H1'	2.17	0.44
1:6:808:U:H2'	1:6:809:A:C8	2.52	0.44
68:O2:11:LYS:NZ	36:5:1404:G:OP2	182.14	0.44
36:5:2523:A:O2'	36:5:2587:U:H1'	2.18	0.44
36:5:7:C:H2'	36:5:8:C:C6	2.53	0.44
36:1:2379:U:H2'	36:1:2380:U:C6	2.51	0.44
56:N0:90:MET:HG2	36:5:1213:G:H4'	318.33	0.44
36:1:1631:C:H5"	36:1:1632:A:H5"	1.98	0.44
49:M3:180:ARG:NH1	49:M3:180:ARG:HB3	4.96	0.44
66:O0:51:LEU:HA	66:O0:51:LEU:HD12	1.83	0.44
45:L8:169:LEU:HD23	45:L8:169:LEU:HA	1.91	0.44
36:5:1849:C:H5'	36:5:1849:C:H6	1.82	0.44
1:2:545:A:H4'	1:2:546:U:OP1	2.17	0.44
36:1:384:A:H2'	36:1:385:A:O4'	2.18	0.44
11:S9:126:ARG:O	11:S9:129:ILE:N	2.73	0.44
36:5:92:G:H5"	36:5:94:G:N7	2.33	0.44
6:S4:54:TYR:O	26:D4:15:ASN:ND2	2.66	0.44
28:D6:86:VAL:HG12	1:6:1795:U:OP1	344.56	0.44
28:D6:7:SER:O	28:D6:9:GLY:N	3.34	0.44
59:N3:12:ARG:NH2	36:5:3092:C:H2'	254.02	0.44
3:S1:36:SER:HB3	3:S1:231:LEU:HD13	1.98	0.44
36:5:1015:U:O3'	36:5:1016:C:H2'	2.18	0.44
36:1:1216:C:H6	36:1:1216:C:C5'	2.31	0.44
11:S9:87:SER:OG	11:S9:90:LYS:HD3	4.81	0.44
1:6:1568:C:H2'	1:6:1568:C:H6	1.55	0.44
36:1:1024:G:N7	86:1:4169:OHX:N6	2.66	0.44
75:O9:24:PRO:HB2	75:O9:27:ILE:HD12	3.20	0.44
7:S5:185:ARG:NH1	1:6:1471:A:OP1	334.10	0.44
7:S5:161:ASP:O	30:D8:44:VAL:HA	2.16	0.44
2:S0:167:LYS:HB3	2:S0:168:HIS:CD2	2.90	0.44
26:D4:104:SER:HB3	26:D4:107:GLN:CG	2.46	0.44
45:L8:166:LEU:HA	45:L8:166:LEU:HD23	1.74	0.44
36:1:1821:U:C2	70:O4:67:LYS:HB2	2.52	0.44
74:O8:69:LEU:HA	74:O8:69:LEU:HD13	1.75	0.44
1:2:1316:G:H2'	1:2:1317:C:C6	2.53	0.44
31:D9:36:LEU:O	31:D9:38:ILE:HG12	2.17	0.44
23:D1:3:ASN:HD21	23:D1:7:GLN:CB	4.66	0.44
2:S0:69:ASN:HB3	2:S0:71:GLU:OE2	2.17	0.44
43:L6:40:LEU:HD11	43:L6:54:TYR:HB2	2.40	0.44
36:5:1577:G:H2'	36:5:1578:C:C6	2.52	0.44
45:L8:95:ASN:CG	45:L8:98:ARG:HH12	5.20	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1580:A:OP1	39:L2:68:LYS:NZ	2.51	0.44
13:C1:67:ARG:N	13:C1:67:ARG:HD3	2.33	0.44
19:C7:53:TYR:CE1	19:C7:57:LEU:HG	2.53	0.44
19:C7:60:ARG:NH2	1:6:1400:A:H4'	410.14	0.44
67:O1:31:ARG:O	67:O1:35:GLU:HB2	2.34	0.44
1:6:1049:U:H2'	1:6:1050:G:H8	1.82	0.44
53:M7:112:LEU:HA	53:M7:112:LEU:HD12	1.72	0.44
48:M1:82:ARG:HG3	48:M1:112:LEU:HB2	1.99	0.44
51:M5:58:GLY:HA3	51:M5:142:ILE:CD1	2.47	0.44
86:1:4088:OHX:N2	86:1:4158:OHX:N4	2.65	0.44
30:D8:18:ARG:HH11	1:6:1616:G:H4'	363.34	0.44
14:C2:89:ILE:HG12	14:C2:90:LYS:H	1.82	0.44
16:C4:16:VAL:O	16:C4:30:VAL:HA	2.18	0.44
6:S4:242:LYS:HE3	6:S4:242:LYS:H	1.82	0.44
1:2:1019:A:H2'	1:2:1020:A:O4'	2.18	0.44
38:8:154:C:H2'	38:8:155:A:O4'	2.18	0.44
61:N5:46:TYR:CD2	71:O5:75:TYR:HB3	2.91	0.44
36:1:1680:G:H2'	36:1:1681:U:C6	2.52	0.44
55:M9:143:ILE:CD1	36:5:2093:A:H5''	250.17	0.44
1:2:1347:U:P	22:D0:23:ARG:HH22	2.40	0.44
24:D2:17:ALA:HB2	24:D2:25:VAL:HG13	1.99	0.44
1:6:791:A:H2'	1:6:792:U:O4'	2.18	0.44
1:6:792:U:OP1	86:6:2195:OHX:N4	2.50	0.44
36:1:1144:U:OP1	36:1:1367:G:O2'	2.28	0.44
38:4:52:A:H4'	75:O9:19:GLN:HA	1.99	0.44
1:2:1081:A:H4'	1:2:1082:C:O5'	2.17	0.44
39:L2:219:ILE:HD13	39:L2:223:SER:HB3	3.83	0.44
37:3:43:U:H4'	48:M1:140:ARG:O	2.17	0.44
1:6:398:G:O5'	1:6:398:G:H8	2.01	0.44
36:1:3335:A:H2'	36:1:3336:A:C8	2.52	0.44
1:6:1561:U:H4'	1:6:1599:C:H4'	1.99	0.44
1:6:946:U:H2'	1:6:947:U:C6	2.53	0.44
65:N9:7:HIS:O	36:5:1135:A:H5'	226.90	0.44
7:S5:51:VAL:O	7:S5:65:ARG:NH1	3.97	0.44
1:2:766:U:H3'	1:2:768:C:OP2	2.18	0.44
1:2:1207:C:N4	1:2:1456:C:H5	2.14	0.44
1:6:564:G:O2'	1:6:577:G:H4'	2.18	0.44
36:1:1170:A:OP2	86:1:3960:OHX:N5	2.50	0.44
36:5:1948:G:C2	36:5:1949:G:C8	3.06	0.44
70:O4:8:ARG:NH1	36:5:1606:U:C2	134.99	0.44
28:D6:58:VAL:HG22	28:D6:59:TYR:N	3.52	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
66:O0:13:LYS:O	66:O0:17:VAL:HG23	2.18	0.44
36:1:529:A:H61	36:1:563:U:H3	1.65	0.44
16:C4:54:GLU:OE1	1:6:901:G:N2	282.40	0.44
36:1:2115:G:H22	36:1:2120:A:H1'	1.82	0.44
24:D2:79:PHE:O	24:D2:125:ILE:HG22	2.18	0.44
1:2:1459:C:OP1	20:C8:126:ARG:NH1	2.51	0.44
1:6:1283:U:OP1	86:6:2139:OHX:N1	2.51	0.44
86:5:4003:OHX:N6	86:5:4091:OHX:N2	2.66	0.44
6:S4:187:ARG:O	6:S4:187:ARG:HD3	2.18	0.44
1:6:696:C:H4'	1:6:697:C:C6	2.52	0.44
36:5:956:U:OP1	86:5:4156:OHX:N2	2.51	0.44
1:2:169:A:OP1	8:S6:137:ARG:NH2	2.51	0.44
86:6:2127:OHX:N5	86:6:2152:OHX:N3	2.65	0.44
41:L4:338:LYS:HA	41:L4:338:LYS:HD3	1.83	0.44
10:S8:5:ARG:HD3	10:S8:29:LEU:O	2.28	0.44
36:1:2585:G:N3	38:4:151:C:H5	2.16	0.44
1:6:75:U:O2'	1:6:76:A:O4'	2.35	0.44
1:2:1168:U:H2'	1:2:1169:G:H5'	1.99	0.44
31:D9:24:CYS:HB2	1:6:1434:U:C4'	410.08	0.44
36:5:3279:A:C6	36:5:3280:U:C4	3.06	0.44
36:1:1580:A:H5'	36:1:2522:G:C6	2.53	0.44
20:C8:5:VAL:HG12	20:C8:6:GLN:H	3.32	0.44
36:5:170:G:H2'	36:5:170:G:N3	2.33	0.44
62:N6:63:LYS:HA	62:N6:63:LYS:HD3	1.84	0.44
42:L5:188:GLU:O	42:L5:188:GLU:HG3	2.18	0.44
1:2:933:A:OP2	28:D6:37:LYS:NZ	2.39	0.44
20:C8:119:ILE:HA	20:C8:119:ILE:HD12	2.32	0.44
39:L2:126:LEU:HD13	39:L2:150:LEU:HD21	1.99	0.44
57:N1:79:MET:HA	57:N1:84:TYR:HA	1.99	0.44
47:M0:116:ARG:HH21	36:5:2618:G:H5'	229.38	0.44
78:Q2:10:THR:HA	78:Q2:20:HIS:CD2	2.53	0.44
36:5:1614:C:H2'	36:5:1615:C:C6	2.53	0.44
71:O5:77:PRO:HD2	71:O5:80:LEU:HD12	2.40	0.44
36:1:3318:G:H2'	36:1:3318:G:OP2	2.17	0.44
69:O3:15:SER:HB3	69:O3:16:TYR:O	2.18	0.44
36:1:2340:U:OP2	40:L3:237:LYS:HB2	2.18	0.44
29:D7:67:THR:O	1:6:871:G:O2'	328.49	0.44
36:5:1155:C:H2'	36:5:1156:C:H6	1.83	0.44
1:6:913:G:N7	36:5:2205:U:C2	2.86	0.44
36:1:3006:A:H2'	36:1:3007:U:O4'	2.18	0.44
53:M7:41:LEU:HD23	53:M7:95:LEU:HD22	2.00	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:930:U:H2'	36:1:931:C:C6	2.53	0.44
5:S3:27:ARG:O	12:C0:58:GLN:NE2	3.53	0.44
73:O7:72:ARG:HB3	73:O7:72:ARG:HH11	4.16	0.44
36:5:1049:C:H2'	36:5:1050:U:H6	1.82	0.44
42:L5:208:MET:HE1	42:L5:226:TYR:CD1	4.59	0.44
36:1:1635:G:N2	36:1:1638:A:OP2	2.40	0.44
3:S1:22:ASP:O	3:S1:24:PHE:N	2.50	0.44
36:5:3010:U:OP2	86:5:4249:OHX:N4	2.50	0.44
36:1:2529:A:C2	36:1:2582:C:C2	3.06	0.44
86:2:2095:OHX:N6	13:C1:19:ILE:HD13	2.33	0.44
1:6:108:A:H2'	1:6:109:G:C8	2.53	0.44
49:M3:2:ALA:HB3	64:N8:33:GLY:O	2.18	0.44
9:S7:9:LEU:O	9:S7:9:LEU:HD23	2.18	0.44
50:M4:42:LYS:HE2	50:M4:42:LYS:HB3	4.07	0.44
21:C9:77:ASN:OD1	21:C9:101:ASN:ND2	2.50	0.44
36:1:979:U:H1'	36:1:980:A:N7	2.29	0.44
43:L6:85:ILE:HG23	69:O3:107:ILE:HG21	3.86	0.44
16:C4:114:ARG:HA	28:D6:62:TYR:CZ	2.52	0.44
34:SR:161:LYS:CD	34:SR:164:ASP:HB3	2.47	0.44
61:N5:40:LEU:HA	61:N5:40:LEU:HD12	1.86	0.44
38:8:78:G:H2'	38:8:79:A:O4'	2.17	0.44
57:N1:82:ASN:HA	65:N9:21:ILE:HD13	2.00	0.44
2:S0:183:ARG:NH2	2:S0:191:ARG:O	2.82	0.44
39:L2:201:GLY:O	39:L2:204:MET:HB2	3.26	0.44
1:2:445:A:H1'	1:2:525:A:OP1	2.18	0.44
24:D2:30:SER:HA	24:D2:34:ILE:HD12	2.00	0.44
50:M4:38:ILE:HD11	56:N0:150:PHE:CE2	2.53	0.44
74:O8:61:LYS:H	74:O8:61:LYS:HG2	3.21	0.44
62:N6:37:LYS:H	62:N6:37:LYS:CD	2.34	0.44
51:M5:14:LYS:NZ	36:5:269:G:H5"	132.98	0.44
2:S0:63:ILE:HG12	23:D1:36:VAL:HG22	2.15	0.44
36:1:3113:A:H4'	46:L9:69:ARG:HB3	2.00	0.44
1:2:1657:U:C2	86:2:2088:OHX:N1	2.86	0.44
50:M4:22:LEU:HD22	50:M4:94:TRP:CH2	2.53	0.44
68:O2:91:THR:HG22	68:O2:92:TYR:CD2	2.52	0.44
6:S4:44:LEU:HD12	6:S4:82:TYR:HB3	1.99	0.44
3:S1:153:HIS:HD2	3:S1:154:SER:H	4.95	0.44
2:S0:105:GLY:O	2:S0:109:ASN:HB3	2.35	0.44
47:M0:207:GLU:HB3	47:M0:211:ARG:NH1	7.38	0.44
1:6:1237:G:H2'	1:6:1238:A:H8	1.83	0.44
18:C6:27:GLY:HA2	18:C6:63:ILE:O	2.18	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1735:U:O4	86:2:2136:OHX:N2	2.51	0.44
34:SR:100:TYR:HA	34:SR:100:TYR:HD2	2.06	0.44
62:N6:103:LYS:HD3	62:N6:103:LYS:HA	1.86	0.44
1:2:252:U:H4'	6:S4:132:GLY:O	2.18	0.44
52:M6:102:LEU:HD12	52:M6:103:LYS:N	2.33	0.44
49:M3:174:ARG:NH1	72:O6:9:ILE:HG21	2.33	0.44
7:S5:109:LYS:O	7:S5:113:ILE:HG13	2.26	0.44
36:1:2812:C:H2'	36:1:2813:A:C8	2.53	0.44
41:L4:361:HIS:CG	41:L4:362:ASP:N	2.85	0.44
36:5:629:U:H2'	36:5:630:A:C8	2.53	0.44
72:O6:98:ARG:HB3	72:O6:99:ARG:H	4.28	0.44
11:S9:150:LEU:C	11:S9:152:SER:H	2.29	0.44
5:S3:45:LYS:HE2	5:S3:45:LYS:HB2	1.78	0.44
39:L2:44:ILE:HG23	39:L2:87:PHE:CE1	2.57	0.44
1:2:1651:A:N1	1:2:1749:A:H2	2.16	0.44
6:S4:99:PHE:HE1	6:S4:111:VAL:HG13	1.83	0.44
1:2:763:G:C6	1:2:764:U:C4	3.06	0.44
63:N7:104:PRO:O	63:N7:108:GLU:HG3	2.41	0.44
47:M0:56:GLU:HB2	47:M0:58:GLU:HG2	2.85	0.44
45:L8:94:PHE:HB3	45:L8:189:LEU:HD11	4.12	0.44
1:2:312:A:C2	1:2:314:C:H2'	2.53	0.44
54:M8:80:THR:HG22	54:M8:100:THR:HB	2.00	0.44
66:O0:14:LEU:HD21	66:O0:43:ILE:CD1	3.34	0.44
1:2:1144:U:H2'	1:2:1145:U:C6	2.53	0.44
8:S6:162:VAL:O	8:S6:169:TYR:N	2.42	0.44
1:6:277:U:O2'	1:6:278:U:OP1	2.34	0.44
36:1:1801:U:H2'	36:1:1802:C:C6	2.52	0.44
36:1:2630:C:H1'	36:1:2758:A:N3	2.33	0.44
36:5:2417:U:O2'	36:5:2418:G:H5'	2.17	0.44
36:1:1636:U:H5''	63:N7:73:LYS:HZ2	1.82	0.44
55:M9:164:LEU:HD22	55:M9:164:LEU:HA	2.15	0.44
9:S7:70:PHE:HD1	9:S7:70:PHE:HA	1.69	0.44
43:L6:154:LEU:HD23	43:L6:154:LEU:HA	1.70	0.44
64:N8:113:LEU:HA	64:N8:113:LEU:HD23	2.05	0.44
36:1:1194:G:OP1	86:1:3965:OHX:N1	2.51	0.44
40:L3:35:ASP:OD2	40:L3:191:LYS:NZ	2.82	0.43
52:M6:39:GLU:HG2	52:M6:40:GLU:HG2	1.99	0.43
50:M4:47:ASP:C	50:M4:49:PRO:HD3	3.18	0.43
36:5:1238:C:H2'	36:5:1239:C:O4'	2.18	0.43
44:L7:158:LYS:HG2	44:L7:203:TRP:HH2	1.83	0.43
7:S5:114:ILE:HA	7:S5:114:ILE:HD13	2.28	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:702:G:O2'	1:2:703:G:O4'	2.35	0.43
78:Q2:46:LYS:HD3	78:Q2:54:THR:OG1	3.19	0.43
36:1:855:U:H2'	36:1:856:G:O4'	2.18	0.43
40:L3:265:ALA:C	40:L3:266:ARG:HG2	2.56	0.43
86:2:2089:OHX:N5	86:2:2131:OHX:N6	2.66	0.43
25:D3:95:PHE:CE1	25:D3:135:LEU:HB3	2.53	0.43
49:M3:32:LYS:O	49:M3:36:ARG:HG3	2.17	0.43
36:1:1149:G:C6	86:1:4170:OHX:N6	2.86	0.43
1:2:142:G:O5'	1:2:142:G:C8	2.71	0.43
41:L4:295:ILE:O	41:L4:299:ILE:HG12	2.18	0.43
25:D3:102:VAL:HG12	25:D3:127:VAL:HG23	5.35	0.43
36:1:655:C:H2'	36:1:656:A:C8	2.53	0.43
34:SR:38:ARG:HG2	34:SR:67:ILE:CG2	2.47	0.43
48:M1:65:ILE:HG22	48:M1:66:ALA:HB2	3.51	0.43
9:S7:119:THR:HG23	1:6:639:U:OP2	369.52	0.43
9:S7:97:ARG:HA	9:S7:97:ARG:HD3	3.54	0.43
36:5:979:U:H1'	36:5:980:A:N9	2.32	0.43
51:M5:183:THR:O	51:M5:183:THR:HG23	2.79	0.43
41:L4:99:MET:CE	41:L4:102:PRO:HA	3.54	0.43
1:2:1196:A:C8	1:2:1602:C:H4'	2.53	0.43
43:L6:54:TYR:OH	43:L6:57:HIS:HB2	2.43	0.43
59:N3:87:ARG:HH12	59:N3:137:VAL:HG11	2.69	0.43
37:3:5:G:OP1	48:M1:143:ARG:NH2	2.50	0.43
36:1:1879:A:H4'	36:1:1880:U:OP2	2.17	0.43
36:1:3294:A:H5''	36:1:3294:A:H8	1.82	0.43
1:2:829:A:O2'	1:2:830:U:OP2	2.23	0.43
48:M1:166:LYS:O	48:M1:167:TYR:HB2	2.21	0.43
51:M5:180:PHE:O	51:M5:184:LYS:HB3	2.46	0.43
13:C1:46:LYS:HA	13:C1:46:LYS:HD2	2.48	0.43
1:6:1155:G:O2'	86:6:2186:OHX:N3	2.51	0.43
36:1:1245:A:C3'	36:1:1246:G:H5''	2.48	0.43
43:L6:55:LEU:HA	43:L6:55:LEU:HD23	1.61	0.43
39:L2:227:ARG:HG2	39:L2:239:ALA:HB2	2.00	0.43
31:D9:31:ILE:HA	31:D9:31:ILE:HD13	2.07	0.43
32:E0:39:LEU:O	32:E0:43:ARG:HB2	2.64	0.43
36:5:2768:U:H2'	36:5:2769:A:C8	2.54	0.43
22:D0:16:GLN:HG3	22:D0:17:GLN:H	4.04	0.43
4:S2:49:LYS:HA	4:S2:49:LYS:HD3	2.15	0.43
34:SR:132:LYS:HE2	34:SR:143:THR:HG23	3.38	0.43
75:O9:36:ARG:HG2	75:O9:36:ARG:HH11	1.83	0.43
36:1:2949:U:C5	36:1:2950:G:C6	3.06	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2379:U:H2'	36:1:2380:U:H6	1.83	0.43
36:5:238:A:H2'	36:5:239:G:C8	2.53	0.43
56:N0:16:THR:OG1	56:N0:19:VAL:N	2.51	0.43
58:N2:14:THR:HG23	58:N2:66:VAL:HG13	3.11	0.43
1:6:1436:A:H4'	1:6:1436:A:OP2	2.18	0.43
36:1:888:A:H2'	36:1:889:U:O4'	2.18	0.43
41:L4:30:ILE:O	41:L4:32:PRO:HD3	2.59	0.43
29:D7:30:SER:HB2	29:D7:48:SER:OG	2.49	0.43
36:1:3020:U:OP2	36:1:3021:A:O2'	2.32	0.43
54:M8:124:LEU:HD23	54:M8:124:LEU:HA	2.25	0.43
74:O8:72:THR:OG1	74:O8:72:THR:O	2.97	0.43
1:2:814:A:H5'	55:M9:170:ARG:HH22	1.83	0.43
34:SR:29:GLN:HA	34:SR:30:PRO:HD2	2.17	0.43
36:5:1313:G:H2'	36:5:1314:C:C6	2.53	0.43
36:1:2578:U:H2'	36:1:2579:G:O4'	2.18	0.43
39:L2:14:SER:C	39:L2:16:PHE:H	2.21	0.43
36:5:2836:C:C5	36:5:2852:C:N4	2.70	0.43
43:L6:56:LYS:NZ	43:L6:101:PHE:O	2.46	0.43
20:C8:41:ARG:NH1	21:C9:38:LYS:HG3	2.32	0.43
36:5:1470:U:H2'	36:5:1471:U:C6	2.54	0.43
54:M8:178:ARG:HE	64:N8:50:PRO:HG2	1.83	0.43
86:5:4025:OHX:N2	86:5:4219:OHX:N5	2.67	0.43
11:S9:37:LYS:HE2	1:6:594:A:OP2	413.03	0.43
44:L7:159:GLN:O	44:L7:160:ARG:C	2.53	0.43
36:1:1740:U:H4'	36:1:1741:A:H5'	2.00	0.43
53:M7:78:VAL:HG13	53:M7:79:THR:N	2.98	0.43
20:C8:133:VAL:C	20:C8:135:GLY:H	2.21	0.43
71:O5:93:THR:OG1	71:O5:96:GLU:HG3	2.17	0.43
3:S1:127:VAL:HG11	3:S1:176:VAL:HG21	2.01	0.43
3:S1:131:ASP:OD2	3:S1:180:THR:HB	4.87	0.43
33:E1:144:CYS:C	33:E1:146:SER:N	2.71	0.43
3:S1:58:SER:HA	3:S1:62:LYS:HD3	2.00	0.43
1:6:1541:G:C6	1:6:1542:G:N1	2.86	0.43
59:N3:48:ARG:NH1	59:N3:48:ARG:HG3	2.26	0.43
49:M3:124:ILE:HD13	49:M3:126:PHE:HE1	4.56	0.43
1:2:1280:C:H5''	22:D0:69:LYS:HB3	1.99	0.43
36:1:2177:G:OP2	39:L2:128:ARG:NH1	2.40	0.43
24:D2:10:ALA:HB1	24:D2:27:ILE:HD12	2.00	0.43
36:1:718:G:N1	36:1:721:G:H1'	2.33	0.43
19:C7:104:ASN:O	19:C7:106:THR:HG22	6.65	0.43
5:S3:115:ILE:HD12	5:S3:116:ARG:H	4.62	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1175:U:H4'	1:6:1196:A:C6	2.53	0.43
1:2:1575:G:H2'	1:2:1576:A:C8	2.52	0.43
36:1:13106:A:H2'	36:1:13107:U:O4'	2.18	0.43
36:1:1615:C:H2'	36:1:1616:U:C6	2.53	0.43
49:M3:107:GLU:OE2	72:O6:18:THR:HG23	2.19	0.43
29:D7:47:PHE:CE1	29:D7:49:HIS:HB2	2.66	0.43
20:C8:13:HIS:CD2	20:C8:13:HIS:H	2.70	0.43
1:6:196:G:O2'	1:6:197:A:OP2	2.31	0.43
27:D5:41:ILE:HG23	27:D5:42:LEU:N	2.33	0.43
57:N1:40:VAL:HG21	57:N1:96:ILE:CG1	2.48	0.43
36:5:244:G:C6	36:5:245:U:C4	3.05	0.43
5:S3:46:THR:HB	5:S3:84:ILE:HG12	1.99	0.43
9:S7:11:GLN:HG3	9:S7:12:ALA:H	1.83	0.43
36:5:1781:C:H2'	36:5:1782:U:H6	1.81	0.43
4:S2:88:LYS:HG2	4:S2:89:GLN:H	3.40	0.43
1:2:793:A:H5''	1:2:794:U:C6	2.53	0.43
36:5:707:U:H2'	36:5:708:G:H5'	1.99	0.43
47:M0:24:ARG:O	47:M0:25:ALA:HB3	4.62	0.43
1:2:1450:U:OP2	86:2:2061:OHX:N5	2.51	0.43
9:S7:30:SER:HB2	9:S7:34:LEU:HD12	3.45	0.43
1:2:463:U:H2'	1:2:464:A:H8	1.81	0.43
13:C1:80:MET:HB3	13:C1:83:THR:O	3.00	0.43
3:S1:171:ILE:HD13	3:S1:196:GLU:HG2	2.00	0.43
77:Q1:1:MET:HE2	77:Q1:5:TRP:HB2	2.38	0.43
42:L5:113:LEU:HD23	42:L5:115:LEU:HD23	2.00	0.43
36:5:3132:C:H2'	36:5:3133:C:C6	2.53	0.43
79:Q3:51:ALA:HA	36:5:1795:U:C4	208.50	0.43
2:S0:136:ALA:HB1	2:S0:141:ILE:HB	2.00	0.43
4:S2:186:LYS:O	4:S2:189:GLN:HB2	3.14	0.43
1:6:811:A:N3	1:6:858:G:H1'	2.32	0.43
1:6:1357:A:H2'	1:6:1358:G:H8	1.83	0.43
40:L3:223:GLY:HA2	40:L3:271:GLY:HA3	2.85	0.43
36:1:1602:A:H5''	55:M9:38:ARG:HG3	2.00	0.43
14:C2:36:LEU:HG	14:C2:41:LEU:HD12	2.57	0.43
36:5:140:C:H2'	36:5:141:C:C6	2.53	0.43
48:M1:164:LYS:HE3	48:M1:171:VAL:HB	2.00	0.43
36:5:792:G:H2'	36:5:793:C:C6	2.53	0.43
44:L7:107:ARG:NH2	44:L7:200:ASN:HA	2.82	0.43
36:5:1340:G:H2'	36:5:1341:U:H6	1.84	0.43
1:6:1334:U:H2'	1:6:1335:U:O4'	2.18	0.43
11:S9:102:GLU:HA	11:S9:105:LEU:HB2	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3291:G:O2'	36:1:3292:A:H5'	2.18	0.43
36:5:637:C:C2	36:5:638:C:C5	3.06	0.43
1:2:625:C:H2'	1:2:626:U:C6	2.53	0.43
1:6:532:U:H2'	1:6:533:U:O4'	2.17	0.43
36:5:2882:U:H2'	36:5:2883:U:C6	2.53	0.43
36:5:2584:G:H5'	36:5:2585:G:OP2	2.17	0.43
36:5:306:A:C2	36:5:2784:G:H1'	2.53	0.43
12:C0:52:LYS:HE2	1:6:1220:C:H5'	444.80	0.43
36:5:370:U:H1'	36:5:403:C:C2	2.53	0.43
38:8:23:U:O5'	38:8:23:U:H6	2.01	0.43
44:L7:103:LEU:HA	44:L7:103:LEU:HD23	1.88	0.43
65:N9:54:LEU:HD23	65:N9:54:LEU:HA	1.81	0.43
36:1:378:A:H3'	36:1:379:C:C6	2.53	0.43
32:E0:48:THR:OG1	32:E0:49:LEU:N	2.71	0.43
36:1:3271:G:OP1	53:M7:171:ARG:HG2	2.19	0.43
63:N7:78:ASN:OD1	66:O0:35:ARG:NH2	2.50	0.43
1:2:701:U:H3	1:2:737:A:N6	2.15	0.43
36:5:1329:U:O2'	36:5:1330:A:P	2.76	0.43
1:2:1332:C:O5'	1:2:1332:C:H6	2.01	0.43
36:1:2406:C:H2'	36:1:2407:C:C6	2.53	0.43
1:6:1700:C:O2	1:6:1700:C:H2'	2.17	0.43
3:S1:131:ASP:HB3	3:S1:180:THR:HG23	2.00	0.43
49:M3:36:ARG:NH1	36:5:687:U:H5	75.63	0.43
41:L4:119:ARG:HA	41:L4:122:THR:HG23	3.43	0.43
36:1:3343:G:N2	36:1:3362:A:H2	2.14	0.43
1:6:1734:U:O4	86:6:2125:OHX:N1	2.52	0.43
16:C4:117:ASP:OD2	16:C4:119:THR:OG1	2.33	0.43
63:N7:46:ILE:HD11	63:N7:48:ARG:C	2.39	0.43
45:L8:141:ALA:HA	45:L8:144:GLU:OE2	2.18	0.43
13:C1:4:GLU:HG3	13:C1:5:LEU:HG	2.01	0.43
41:L4:178:LEU:O	41:L4:182:LEU:HD13	2.19	0.43
55:M9:121:HIS:HE1	36:5:1719:G:N7	240.89	0.43
22:D0:117:VAL:HG13	22:D0:118:VAL:N	2.33	0.43
1:6:194:U:H2'	1:6:194:U:O2	2.17	0.43
31:D9:38:ILE:HG22	31:D9:39:CYS:O	2.18	0.43
51:M5:68:ARG:HG3	36:5:291:C:OP1	145.04	0.43
54:M8:41:ASP:HB2	54:M8:42:ALA:H	4.52	0.43
13:C1:6:THR:HB	13:C1:9:SER:HB3	1.99	0.43
36:1:953:G:N2	36:1:1116:G:H2'	2.32	0.43
45:L8:138:HIS:CE1	36:5:119:U:C2	104.54	0.43
36:1:170:G:C4	36:1:250:U:O2	2.70	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1426:C:H4'	41:L4:40:THR:HB	2.01	0.43
57:N1:17:ARG:HB3	57:N1:22:HIS:CE1	2.53	0.43
7:S5:143:ARG:HB2	7:S5:218:GLU:OE2	3.00	0.43
1:2:1163:A:C6	1:2:1164:G:C5	3.06	0.43
71:O5:24:LEU:HA	71:O5:24:LEU:HD23	2.42	0.43
71:O5:50:SER:O	71:O5:54:VAL:HG23	2.18	0.43
36:5:1594:A:H1'	36:5:1615:C:H1'	2.00	0.43
36:1:1918:C:OP2	86:1:4017:OHX:N2	2.51	0.43
6:S4:51:ARG:HA	6:S4:51:ARG:HE	2.04	0.43
28:D6:15:ARG:NH1	1:6:936:G:N7	320.28	0.43
20:C8:8:GLN:HB3	20:C8:9:GLY:H	3.01	0.43
64:N8:85:ASP:O	64:N8:89:GLN:HG3	2.19	0.43
2:S0:53:THR:OG1	2:S0:161:PRO:HG2	2.18	0.43
51:M5:96:ARG:HG2	51:M5:96:ARG:NH1	2.33	0.43
26:D4:49:LYS:HD3	26:D4:49:LYS:N	2.82	0.43
5:S3:21:LEU:HD22	5:S3:25:PHE:HE2	1.83	0.43
9:S7:39:ARG:HH12	55:M9:188:ASP:HB2	1.84	0.43
36:5:2406:C:H2'	36:5:2407:C:C6	2.53	0.43
1:6:982:U:OP1	86:6:2078:OHX:N2	2.51	0.43
34:SR:273:ASP:O	34:SR:275:ARG:HG2	5.98	0.43
36:5:2585:G:N3	36:5:2585:G:H2'	2.34	0.43
53:M7:54:HIS:HA	53:M7:83:TRP:CD1	2.54	0.43
17:C5:50:THR:O	17:C5:50:THR:OG1	2.32	0.43
1:6:424:C:O2'	1:6:426:G:OP1	2.25	0.43
1:6:926:A:H1'	1:6:988:A:C2	2.53	0.43
36:5:3224:G:C2	36:5:3225:C:C6	3.06	0.43
71:O5:7:TYR:CE2	38:8:86:U:H2'	20.12	0.43
61:N5:91:ASN:OD1	61:N5:94:GLN:HG3	2.18	0.43
57:N1:14:MET:HE1	57:N1:55:LYS:HA	2.33	0.43
39:L2:121:GLY:C	39:L2:123:ARG:H	2.21	0.43
7:S5:81:ARG:HG2	7:S5:82:PHE:CD2	4.10	0.43
1:6:439:U:C6	1:6:465:G:N2	2.87	0.43
33:E1:103:LEU:HA	33:E1:103:LEU:HD23	1.85	0.43
76:Q0:89:TYR:CD2	76:Q0:89:TYR:N	3.14	0.43
13:C1:44:THR:OG1	13:C1:44:THR:O	2.36	0.43
54:M8:159:LYS:HE2	54:M8:159:LYS:HB3	1.53	0.43
36:5:1944:U:H2'	36:5:1945:A:H8	1.84	0.43
52:M6:45:GLY:O	52:M6:135:TYR:HA	2.72	0.43
37:7:107:C:H2'	37:7:108:A:C8	2.53	0.43
21:C9:18:TYR:HB3	21:C9:59:ALA:HB1	2.00	0.43
7:S5:44:ASN:O	7:S5:45:LYS:HE3	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:178:ARG:CD	64:N8:50:PRO:HB2	3.17	0.43
43:L6:166:LYS:NZ	36:5:3214:U:H6	274.28	0.43
36:1:3348:G:H1	36:1:3357:U:H3	1.66	0.43
47:M0:140:THR:HB	47:M0:141:LYS:H	1.63	0.43
1:2:1498:G:H2'	1:2:1499:G:H5'	2.00	0.43
57:N1:129:LYS:HD3	36:5:1095:U:C1'	251.18	0.43
63:N7:46:ILE:HD13	63:N7:49:TYR:HA	2.51	0.43
42:L5:59:ASP:OD1	42:L5:81:HIS:HD2	2.01	0.43
21:C9:92:LYS:HG3	21:C9:93:HIS:O	2.18	0.43
9:S7:50:ASP:OD2	9:S7:56:LYS:HE2	2.18	0.43
21:C9:64:HIS:CE1	21:C9:68:ARG:NH2	3.32	0.43
49:M3:61:PRO:HD2	49:M3:70:ARG:HH21	2.48	0.43
36:1:872:U:H2'	36:1:873:C:C6	2.53	0.43
1:2:1592:A:C6	1:2:1593:A:C6	3.07	0.43
36:5:1879:A:H4'	36:5:1880:U:OP2	2.18	0.43
48:M1:101:ASN:HB3	48:M1:129:VAL:O	2.18	0.43
46:L9:166:ARG:O	46:L9:167:VAL:HB	4.48	0.43
4:S2:89:GLN:OE1	4:S2:94:GLN:HG3	2.18	0.43
36:1:829:U:C2	36:1:894:G:C6	3.07	0.43
28:D6:38:ARG:NH2	28:D6:83:ILE:HG21	2.34	0.43
19:C7:6:THR:OG1	19:C7:7:LYS:N	2.51	0.43
78:Q2:9:LYS:HE2	78:Q2:22:GLN:OE1	2.19	0.43
71:O5:47:VAL:O	71:O5:51:ILE:HG13	2.28	0.43
16:C4:125:SER:OG	16:C4:126:THR:N	2.49	0.43
42:L5:140:ARG:HH21	36:5:1080:A:P	229.01	0.43
36:1:2424:A:H5'	51:M5:89:VAL:HG11	2.01	0.43
36:1:2162:U:OP1	39:L2:234:LYS:NZ	2.49	0.43
4:S2:237:VAL:HB	4:S2:242:ILE:CD1	2.89	0.43
36:5:1317:A:C5	36:5:1319:G:C8	3.07	0.43
44:L7:25:GLN:N	44:L7:28:ALA:HB3	2.33	0.43
36:1:1166:G:OP1	69:O3:73:ARG:NH1	2.51	0.43
1:6:1711:C:H2'	1:6:1712:A:H5''	1.99	0.43
36:5:1944:U:H2'	36:5:1945:A:C8	2.53	0.43
34:SR:54:PHE:CE2	34:SR:312:VAL:HG11	3.82	0.43
40:L3:84:VAL:HG13	40:L3:162:VAL:HB	2.01	0.43
54:M8:44:PHE:O	54:M8:48:VAL:HG23	2.18	0.43
36:1:3286:G:H5'	36:1:3287:U:OP2	2.18	0.43
9:S7:122:HIS:HA	9:S7:125:ILE:HD12	2.55	0.43
11:S9:9:SER:OG	1:6:771:A:OP1	390.56	0.43
10:S8:87:ASN:ND2	1:6:341:A:H4'	257.50	0.43
36:5:1645:U:H2'	36:5:1646:G:H5'	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:8:27:U:O2'	38:8:28:C:H5'	2.18	0.43
1:2:248:U:H4'	13:C1:36:LYS:HD3	2.00	0.43
36:5:915:A:H8	36:5:2136:C:O2'	2.01	0.43
1:6:1650:U:H2'	1:6:1651:A:C8	2.52	0.43
11:S9:154:LYS:HB2	11:S9:154:LYS:HE3	1.78	0.43
1:2:1217:A:H8	1:2:1217:A:H5'	1.82	0.43
1:2:596:C:H6	1:2:596:C:O5'	2.01	0.43
78:Q2:25:VAL:HG22	78:Q2:72:LEU:HD23	1.99	0.43
5:S3:138:VAL:HA	5:S3:183:GLY:O	2.49	0.43
11:S9:176:ASN:HA	11:S9:179:ARG:HG2	4.71	0.43
1:6:950:C:H2'	1:6:951:A:C8	2.53	0.43
7:S5:94:THR:OG1	7:S5:95:ASN:N	2.52	0.43
4:S2:150:GLN:HA	4:S2:151:PRO:HD3	1.91	0.43
33:E1:97:LYS:HE2	1:6:1231:U:C4	439.03	0.43
3:S1:131:ASP:HB3	3:S1:180:THR:CG2	2.49	0.43
13:C1:95:PRO:O	13:C1:96:LYS:C	2.55	0.43
66:O0:100:ILE:H	66:O0:100:ILE:HG13	1.52	0.43
70:O4:44:CYS:SG	70:O4:81:CYS:HB3	2.74	0.43
62:N6:112:ASP:HB2	62:N6:115:ARG:H	1.83	0.43
41:L4:139:GLY:O	41:L4:141:ARG:NH1	4.67	0.43
86:5:4003:OHX:N3	86:5:4091:OHX:N1	2.66	0.43
67:O1:46:THR:HG21	67:O1:91:SER:OG	2.31	0.43
36:1:3121:U:H4'	36:1:3122:A:OP1	2.19	0.43
42:L5:281:GLU:O	42:L5:285:ARG:HG3	2.19	0.43
36:1:619:A:H4'	36:1:620:U:O4'	2.18	0.43
21:C9:28:LEU:CD1	21:C9:29:GLU:H	2.30	0.43
1:6:1754:A:OP1	1:6:1754:A:H8	2.01	0.43
86:5:4216:OHX:N2	86:5:4226:OHX:N5	2.67	0.43
24:D2:53:ILE:HD11	29:D7:25:VAL:HG23	2.01	0.43
59:N3:93:LEU:HD23	59:N3:93:LEU:N	2.58	0.43
67:O1:14:ILE:HG13	67:O1:19:ARG:NH1	2.33	0.43
36:1:3294:A:H2'	36:1:3295:A:O4'	2.19	0.43
30:D8:15:VAL:HA	30:D8:28:VAL:HG22	2.00	0.43
1:2:830:U:C2	1:2:831:U:C5	3.06	0.43
41:L4:157:GLU:HB3	41:L4:211:GLU:O	2.19	0.43
7:S5:37:GLN:OE1	18:C6:53:LEU:HD22	2.22	0.43
1:6:1198:G:OP1	1:6:1199:G:H1'	2.18	0.43
1:2:928:U:H4'	16:C4:124:ASP:OD1	2.17	0.43
42:L5:233:ALA:O	42:L5:235:SER:N	2.51	0.43
1:2:1174:C:H2'	1:2:1175:U:O4'	2.17	0.43
1:6:913:G:O4'	1:6:913:G:N3	2.51	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1366:A:C2	36:5:1367:G:C4	3.06	0.43
36:1:1188:U:OP1	36:1:1210:U:O2'	2.29	0.43
1:6:1592:A:H2'	1:6:1593:A:C8	2.52	0.43
36:5:752:C:H2'	36:5:753:C:C6	2.53	0.43
5:S3:42:THR:OG1	5:S3:45:LYS:O	3.05	0.43
36:5:370:U:H5''	36:5:371:G:OP2	2.19	0.43
18:C6:31:VAL:HA	18:C6:67:VAL:O	2.70	0.43
78:Q2:2:VAL:N	78:Q2:90:HIS:O	2.57	0.43
40:L3:24:SER:O	40:L3:220:VAL:HG21	2.28	0.43
61:N5:79:GLY:O	61:N5:81:ILE:HD12	4.57	0.43
36:1:370:U:H4'	36:1:404:G:H5'	2.00	0.43
1:6:897:C:HO2'	1:6:898:A:H8	1.66	0.43
34:SR:128:ASP:OD1	34:SR:130:THR:OG1	3.12	0.43
1:6:21:U:H2'	1:6:22:A:C8	2.53	0.43
36:5:2274:U:OP2	86:5:3987:OHX:N6	2.52	0.43
48:M1:116:TYR:CE1	48:M1:118:PRO:HB3	2.84	0.43
70:O4:11:ASN:HA	70:O4:12:PRO:HD3	1.60	0.43
51:M5:144:ARG:HG3	51:M5:144:ARG:H	1.59	0.43
8:S6:195:VAL:HG13	1:6:127:G:C6	332.08	0.43
67:O1:72:ARG:O	67:O1:96:VAL:HG13	2.18	0.43
11:S9:126:ARG:O	11:S9:130:THR:HG22	2.19	0.43
36:1:1170:A:H2'	36:1:1171:G:O4'	2.18	0.43
36:1:1171:G:OP2	44:L7:218:ARG:HD2	2.18	0.43
34:SR:109:ASP:O	34:SR:126:SER:OG	2.28	0.43
47:M0:77:THR:HG23	47:M0:85:PHE:HZ	2.22	0.43
29:D7:2:VAL:O	29:D7:3:LEU:HB2	2.38	0.43
35:SM:61:ILE:HG13	35:SM:61:ILE:H	1.69	0.43
36:1:562:C:O2'	36:1:563:U:H5'	2.17	0.43
11:S9:89:ASP:HB2	11:S9:90:LYS:HE2	2.01	0.43
66:O0:30:THR:O	66:O0:34:LEU:HB2	2.19	0.43
36:1:2443:A:N6	36:1:2504:U:C4	2.81	0.43
1:2:1239:U:O4	86:2:2046:OHX:N2	2.52	0.43
1:2:138:A:HO2'	8:S6:149:LYS:NZ	2.17	0.43
24:D2:47:ILE:HG22	24:D2:65:LEU:HD12	3.39	0.43
6:S4:104:ASP:HB3	6:S4:105:VAL:H	1.46	0.43
6:S4:108:ARG:NH2	1:6:789:A:OP1	391.35	0.43
3:S1:164:ILE:HD13	3:S1:207:LEU:HD21	2.01	0.43
43:L6:175:LYS:O	43:L6:176:PHE:HB2	4.57	0.43
41:L4:354:VAL:CG1	57:N1:143:THR:HG21	2.47	0.43
34:SR:21:THR:HG23	34:SR:37:SER:HA	3.03	0.43
36:1:1064:A:H5''	36:1:1066:G:O4'	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:132:ASN:HD22	39:L2:151:PRO:CB	2.28	0.43
6:S4:246:LEU:HB2	6:S4:251:GLU:HG3	2.54	0.43
36:5:726:G:H1'	36:5:744:A:N6	2.33	0.43
6:S4:26:CYS:HB2	6:S4:27:TYR:CD2	5.23	0.43
1:2:501:U:HO2'	1:2:502:U:H6	1.66	0.43
5:S3:115:ILE:HG13	5:S3:115:ILE:H	4.13	0.43
51:M5:5:LYS:HA	51:M5:5:LYS:HD3	2.99	0.43
1:2:1595:U:H5	1:2:1596:C:C5	2.37	0.43
11:S9:53:ARG:O	11:S9:57:ARG:HG3	2.53	0.43
79:Q3:6:LYS:HG2	79:Q3:7:LYS:HG3	4.36	0.43
59:N3:74:MET:HE3	59:N3:102:ILE:HD13	1.99	0.43
49:M3:116:LEU:O	49:M3:120:GLN:HB2	2.45	0.43
14:C2:130:THR:HB	14:C2:131:ASP:H	1.64	0.43
48:M1:82:ARG:NH1	48:M1:112:LEU:O	3.69	0.43
20:C8:70:VAL:HG12	20:C8:74:GLN:OE1	2.18	0.43
2:S0:9:LEU:HD13	2:S0:10:THR:O	2.72	0.43
56:N0:108:GLN:NE2	36:5:1322:U:O2	292.67	0.43
2:S0:64:ILE:HG23	2:S0:73:VAL:HG11	2.21	0.43
36:1:938:C:OP1	36:1:963:G:H5'	2.19	0.43
6:S4:159:THR:OG1	6:S4:160:VAL:N	2.52	0.43
36:1:1080:A:OP1	42:L5:140:ARG:HB2	2.18	0.43
63:N7:95:VAL:O	63:N7:100:THR:HG21	2.70	0.43
45:L8:27:THR:O	45:L8:28:HIS:ND1	3.08	0.43
29:D7:66:PRO:O	29:D7:67:THR:HG23	2.55	0.43
33:E1:90:LYS:HB2	33:E1:93:HIS:HE1	10.56	0.43
40:L3:199:PHE:C	40:L3:201:LYS:H	2.22	0.43
4:S2:49:LYS:HD2	4:S2:243:TYR:CE1	2.76	0.43
6:S4:180:LEU:HD13	6:S4:228:ILE:HD11	3.33	0.43
52:M6:48:PHE:HE1	52:M6:52:LEU:HD11	3.13	0.43
2:S0:110:TYR:HE2	4:S2:64:LYS:HG2	1.82	0.43
36:5:2689:A:C8	36:5:2702:A:C6	3.07	0.43
39:L2:180:LEU:HA	39:L2:180:LEU:HD23	2.05	0.43
36:5:2530:G:H2'	36:5:2531:C:H5'	2.01	0.43
51:M5:133:ILE:HD12	51:M5:134:LEU:N	2.33	0.43
36:1:2358:A:H2'	36:1:2359:C:O4'	2.19	0.43
21:C9:83:ALA:HB1	21:C9:91:TYR:HD2	1.83	0.43
36:1:584:G:H2'	36:1:585:A:C8	2.54	0.43
38:8:62:C:O2	86:8:222:OHX:N1	2.51	0.43
33:E1:86:THR:O	33:E1:87:THR:OG1	2.71	0.43
36:5:1828:A:O2'	36:5:1829:G:H5'	2.19	0.43
36:5:535:G:C2	36:5:555:U:C2	3.05	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:537:A:C2	36:1:557:A:C4	3.06	0.43
36:1:1908:A:H2'	36:1:1909:A:O4'	2.19	0.43
26:D4:13:ILE:HA	26:D4:13:ILE:HD13	3.97	0.43
41:L4:136:LEU:HA	41:L4:136:LEU:HD23	1.58	0.43
2:S0:111:ILE:HA	2:S0:111:ILE:HD12	1.71	0.43
36:5:1130:A:C5	36:5:1132:C:H1'	2.53	0.43
36:5:1858:A:O2'	36:5:1859:A:OP2	2.36	0.43
77:Q1:2:ARG:HD2	1:6:1773:C:OP2	310.63	0.43
36:1:2174:G:OP2	39:L2:193:ARG:NH1	2.38	0.43
21:C9:45:MET:HE3	21:C9:46:PRO:HD2	2.42	0.43
27:D5:74:SER:HA	27:D5:77:ARG:NH1	2.33	0.43
1:2:819:G:O6	1:2:853:G:C6	2.72	0.43
1:2:992:A:H2	1:2:1012:U:O4	2.02	0.43
22:D0:50:LEU:CD2	22:D0:95:ALA:HB2	2.49	0.43
36:5:368:G:OP1	86:5:3927:OHX:N4	2.52	0.43
1:6:1347:U:O2	1:6:1516:A:H2'	2.18	0.43
3:S1:39:GLU:HG3	3:S1:40:ASN:N	2.32	0.43
10:S8:37:LYS:H	10:S8:59:ARG:H	1.66	0.43
10:S8:40:ALA:O	10:S8:59:ARG:HB3	2.85	0.43
10:S8:76:THR:HG23	10:S8:108:PRO:HG2	2.73	0.43
3:S1:144:ARG:NH2	3:S1:207:LEU:O	2.62	0.43
1:2:1459:C:H42	20:C8:139:LYS:HE2	1.83	0.43
38:8:79:A:C6	38:8:80:A:C2	3.07	0.43
63:N7:25:ILE:HA	63:N7:43:VAL:HG12	2.16	0.43
57:N1:129:LYS:H	57:N1:129:LYS:HG2	3.69	0.43
7:S5:59:VAL:O	7:S5:61:TYR:N	3.01	0.43
1:6:486:G:N2	1:6:487:G:N7	2.67	0.43
9:S7:133:THR:HG22	9:S7:159:VAL:HG12	2.01	0.43
2:S0:84:ARG:HD3	2:S0:203:PHE:O	3.69	0.43
12:C0:73:VAL:O	12:C0:77:ARG:HG3	4.91	0.43
55:M9:59:SER:N	36:5:3068:U:OP1	165.01	0.43
46:L9:4:ILE:HG22	56:N0:142:GLN:OE1	2.19	0.43
44:L7:80:GLN:HG3	57:N1:136:ARG:HB3	4.77	0.43
43:L6:13:GLU:OE2	68:O2:90:LYS:HB2	2.19	0.43
8:S6:78:THR:HG22	8:S6:79:LYS:H	1.99	0.43
36:1:839:C:H4'	36:1:1724:U:H2'	2.01	0.43
30:D8:14:LYS:HG3	30:D8:15:VAL:N	3.44	0.43
16:C4:107:ARG:NH2	16:C4:107:ARG:HB2	3.80	0.43
1:6:846:G:C2	1:6:847:A:C4	3.07	0.43
36:1:607:A:OP1	43:L6:26:ARG:NH2	2.51	0.43
2:S0:126:PRO:CG	2:S0:151:SER:HB2	4.39	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:301:THR:OG1	40:L3:301:THR:O	2.36	0.43
78:Q2:9:LYS:O	36:5:2713:U:H3'	223.76	0.43
7:S5:25:LEU:HB2	7:S5:26:ALA:H	1.60	0.43
1:6:723:G:H5'	1:6:724:C:OP2	2.18	0.43
36:5:1252:A:H2'	36:5:1253:U:H5'	2.00	0.43
11:S9:28:LEU:HD13	32:E0:40:TYR:HA	3.22	0.43
79:Q3:36:ARG:HH11	79:Q3:48:LYS:HE3	5.67	0.43
71:O5:68:GLN:HA	71:O5:71:LYS:HB2	2.00	0.43
38:8:145:U:H2'	38:8:146:U:O4'	2.18	0.43
73:O7:58:THR:O	73:O7:61:THR:HG23	2.25	0.43
3:S1:32:ILE:HG22	3:S1:43:VAL:HB	2.01	0.43
36:1:2869:U:H1'	36:1:2873:U:H5	1.83	0.43
40:L3:205:VAL:O	40:L3:208:VAL:HG23	2.19	0.43
86:5:4036:OHX:N1	86:5:4120:OHX:N4	2.67	0.43
3:S1:51:SER:HB3	3:S1:57:ALA:H	2.86	0.43
60:N4:8:PHE:CE2	60:N4:46:PRO:HG3	2.54	0.43
20:C8:4:VAL:HG11	27:D5:82:HIS:ND1	3.83	0.43
1:2:1389:C:H4'	19:C7:49:LYS:HA	2.01	0.43
36:5:395:A:H5''	36:5:396:A:OP2	2.19	0.43
38:8:27:U:O5'	38:8:27:U:H6	2.02	0.43
24:D2:83:ILE:HG13	24:D2:117:ARG:HH12	1.83	0.43
36:1:596:C:H2'	36:1:597:G:O4'	2.18	0.43
30:D8:13:ILE:HG13	30:D8:29:ARG:O	2.18	0.43
1:2:1773:C:H2'	1:2:1774:G:C8	2.53	0.43
36:1:795:G:O6	86:1:3895:OHX:N3	2.52	0.43
36:5:1270:A:C6	36:5:1271:A:C6	3.06	0.43
36:1:3392:U:H2'	36:1:3393:U:H6	1.84	0.43
36:1:820:A:OP1	86:1:3943:OHX:N5	2.52	0.43
10:S8:136:SER:HB3	10:S8:139:ALA:HB3	2.01	0.43
36:1:1256:G:O6	36:1:1261:G:N2	2.51	0.43
34:SR:256:THR:HG21	34:SR:261:LYS:NZ	3.04	0.43
59:N3:45:ARG:HD2	59:N3:45:ARG:HH11	2.21	0.43
36:5:3354:U:H4'	36:5:3355:U:H5''	2.00	0.43
58:N2:10:LYS:HA	58:N2:10:LYS:HE2	1.99	0.43
53:M7:155:GLU:H	53:M7:155:GLU:HG2	3.32	0.43
68:O2:104:ASN:O	68:O2:108:ILE:HG13	2.19	0.43
36:1:658:G:OP1	86:1:4049:OHX:N4	2.52	0.43
45:L8:142:LEU:HD23	36:5:117:U:C4	106.67	0.43
34:SR:40:LYS:HD3	34:SR:65:SER:O	2.19	0.43
1:6:1119:G:H2'	1:6:1120:U:O4'	2.19	0.43
36:5:3384:U:H2'	36:5:3385:U:C6	2.54	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:990:C:H2'	1:6:991:G:O4'	2.18	0.43
20:C8:45:LEU:HD11	21:C9:36:ILE:HG22	2.36	0.43
7:S5:63:GLN:CB	7:S5:88:PRO:HA	2.49	0.43
1:2:1367:G:C2	1:2:1368:G:C8	3.07	0.43
1:2:1202:A:H2'	1:2:1203:A:H5''	2.01	0.43
37:3:85:G:O2'	44:L7:218:ARG:NH2	2.51	0.43
8:S6:13:GLN:CD	1:6:151:G:H21	312.13	0.43
1:6:151:G:N2	1:6:163:G:H22	2.16	0.43
36:5:2209:U:C2	36:5:2210:G:C8	3.07	0.43
40:L3:232:ARG:NH2	36:5:2989:U:O2'	215.23	0.43
22:D0:100:VAL:O	22:D0:104:THR:HG23	2.37	0.43
46:L9:124:ARG:HD3	46:L9:164:ILE:O	2.18	0.43
32:E0:28:LYS:HD3	1:6:542:A:N1	430.22	0.43
36:1:624:G:OP2	86:1:4136:OHX:N3	2.52	0.43
68:O2:105:ARG:O	68:O2:109:LEU:HB2	3.16	0.43
70:O4:81:CYS:SG	70:O4:81:CYS:O	2.77	0.43
1:2:1180:C:O2	17:C5:128:HIS:HE1	2.02	0.43
36:5:3165:A:H2'	36:5:3166:C:H6	1.83	0.43
1:6:383:G:C6	1:6:384:G:C5	3.06	0.43
42:L5:290:ILE:H	42:L5:290:ILE:HG12	1.58	0.43
13:C1:131:ILE:HA	13:C1:131:ILE:HD13	1.67	0.43
53:M7:139:TYR:CZ	36:5:2355:G:H4'	146.79	0.43
21:C9:118:PRO:HD2	21:C9:123:ARG:HH21	1.84	0.43
1:6:1753:A:H3'	1:6:1754:A:H2'	1.99	0.43
56:N0:171:PHE:O	56:N0:172:TYR:C	4.21	0.43
21:C9:52:GLY:C	21:C9:54:PHE:H	2.18	0.43
31:D9:20:GLN:HB2	31:D9:25:SER:HA	2.01	0.43
70:O4:102:LYS:HB3	70:O4:103:LYS:HE3	3.22	0.43
49:M3:143:ALA:O	49:M3:146:PRO:HD3	2.18	0.43
1:6:1392:U:H2'	1:6:1393:C:H6	1.82	0.43
36:1:22:G:OP1	73:O7:43:LYS:HE2	2.19	0.43
57:N1:88:ARG:NH2	65:N9:33:LYS:HB3	2.32	0.43
40:L3:261:MET:HG2	52:M6:64:PHE:CB	3.48	0.43
51:M5:150:TRP:HZ3	51:M5:156:HIS:CD2	2.37	0.43
2:S0:62:ARG:HH21	23:D1:39:VAL:HG22	1.84	0.43
1:2:839:U:C2'	1:2:840:U:H5'	2.49	0.43
42:L5:160:PHE:HA	42:L5:163:LEU:HB3	2.56	0.43
17:C5:86:VAL:HB	17:C5:87:PRO:HD2	3.18	0.43
54:M8:86:THR:CG2	54:M8:105:ARG:HB2	2.68	0.43
54:M8:87:VAL:O	54:M8:107:THR:HG23	2.18	0.43
36:5:223:U:HO2'	36:5:224:C:P	2.42	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1680:G:C4	36:1:1681:U:C5	3.07	0.43
39:L2:148:VAL:HG22	39:L2:156:LYS:O	3.20	0.43
46:L9:94:TYR:CE2	46:L9:98:PRO:HA	2.54	0.43
46:L9:92:TYR:CD2	46:L9:142:ASP:HB3	2.54	0.43
49:M3:128:ARG:NH2	36:5:168:U:O2'	39.40	0.43
10:S8:135:LYS:HB2	10:S8:136:SER:H	4.35	0.43
77:Q1:4:LYS:O	77:Q1:7:LYS:HB3	2.58	0.43
1:2:564:G:N2	1:2:577:G:OP1	2.46	0.43
42:L5:155:THR:HG22	42:L5:179:ARG:NH1	2.34	0.43
44:L7:137:GLY:HA3	44:L7:236:ILE:HB	2.00	0.43
46:L9:117:PHE:CE1	46:L9:165:CYS:HB3	2.87	0.43
36:5:182:U:H2'	36:5:183:G:C8	2.53	0.43
86:5:4109:OHX:N5	38:8:139:U:O4	2.52	0.43
27:D5:92:ILE:HG12	27:D5:100:ILE:HG22	2.00	0.43
18:C6:30:LYS:HD3	1:6:1366:U:OP1	425.87	0.43
36:5:2148:U:H2'	36:5:2149:A:C4	2.53	0.43
36:1:841:A:OP2	86:1:4179:OHX:N2	2.52	0.43
68:O2:38:ILE:N	36:5:640:U:OP2	187.02	0.43
86:5:4025:OHX:N4	86:5:4219:OHX:N3	2.66	0.43
36:1:2206:G:H2'	36:1:2206:G:N3	2.33	0.43
36:1:2208:A:N1	86:1:4047:OHX:N4	2.67	0.43
62:N6:36:SER:OG	62:N6:39:LEU:HD23	3.38	0.43
70:O4:8:ARG:NH1	70:O4:8:ARG:HG2	2.33	0.43
71:O5:78:LYS:HA	71:O5:81:ARG:CD	2.48	0.43
1:6:886:U:H2'	1:6:887:A:C8	2.53	0.43
3:S1:135:LEU:HA	3:S1:216:LYS:O	2.79	0.43
63:N7:134:LEU:HD22	63:N7:135:ARG:N	2.33	0.43
1:2:1541:G:C5	1:2:1542:G:C6	3.07	0.43
16:C4:24:ASN:O	16:C4:54:GLU:HB3	2.19	0.43
5:S3:60:GLY:O	5:S3:62:ASN:N	3.52	0.43
34:SR:161:LYS:O	34:SR:161:LYS:CG	2.62	0.43
40:L3:345:ASN:OD1	40:L3:346:THR:N	2.70	0.43
74:O8:46:ARG:HH11	74:O8:46:ARG:HG3	1.84	0.43
6:S4:12:LEU:HD22	6:S4:12:LEU:HA	1.82	0.43
36:1:1323:G:O3'	56:N0:2:ALA:HA	2.18	0.43
51:M5:182:ASN:ND2	36:5:280:U:H4'	128.81	0.43
38:4:79:A:H5''	71:O5:43:LYS:HZ1	1.82	0.43
47:M0:169:LYS:O	47:M0:170:LYS:HB2	4.75	0.43
64:N8:77:LYS:O	64:N8:79:TRP:N	2.57	0.43
40:L3:92:TYR:CE2	40:L3:101:SER:HB3	2.53	0.43
1:2:646:C:H2'	1:2:647:G:C8	2.53	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:93:LYS:HG3	36:5:289:A:C2	146.55	0.43
6:S4:19:LEU:HD13	1:6:788:A:C4	394.16	0.43
1:2:887:A:C1'	16:C4:122:PRO:HB3	2.49	0.43
36:5:3232:G:H2'	36:5:3233:C:O4'	2.18	0.43
36:1:209:A:H4'	36:1:211:A:C8	2.54	0.43
14:C2:76:GLU:OE2	14:C2:90:LYS:NZ	2.51	0.43
20:C8:8:GLN:HB2	20:C8:9:GLY:H	1.54	0.43
36:5:3:U:H3	38:8:156:U:H3	1.67	0.43
69:O3:6:ARG:HD2	69:O3:8:TYR:O	3.34	0.43
71:O5:64:GLU:O	71:O5:68:GLN:N	3.62	0.43
2:S0:172:LEU:O	2:S0:176:LEU:HG	2.22	0.43
68:O2:12:LYS:HD3	68:O2:57:TYR:HA	2.18	0.43
41:L4:328:ASN:OD1	41:L4:330:TYR:HB3	2.39	0.43
36:1:964:G:O2'	64:N8:41:HIS:NE2	2.40	0.43
34:SR:248:ASN:OD1	34:SR:248:ASN:N	2.49	0.43
36:1:1785:U:H2'	36:1:1786:G:C8	2.54	0.43
42:L5:10:SER:HB2	37:7:66:A:O2'	314.06	0.43
37:7:110:G:C6	37:7:111:U:C4	3.07	0.43
36:5:428:A:H2'	36:5:429:U:C6	2.53	0.43
8:S6:219:ARG:O	8:S6:223:LYS:HB2	2.18	0.43
36:1:132:C:H2'	36:1:133:U:H5''	2.00	0.43
15:C3:87:ASP:OD2	15:C3:88:LEU:N	2.52	0.43
36:5:2107:A:C2	36:5:2108:C:C2	3.07	0.43
1:6:528:U:H2'	1:6:529:A:H8	1.84	0.43
1:2:1407:U:H2'	1:2:1408:G:O4'	2.19	0.43
18:C6:129:PHE:CE1	22:D0:78:THR:HA	2.68	0.43
36:5:3163:A:O2'	36:5:3164:C:H5'	2.19	0.43
7:S5:177:ILE:HA	7:S5:180:ARG:NH1	2.34	0.43
36:5:160:G:O5'	36:5:160:G:H8	2.00	0.43
42:L5:259:LYS:HE2	42:L5:259:LYS:HB3	1.90	0.43
13:C1:73:GLY:HA3	13:C1:86:ILE:HG23	5.63	0.43
1:2:1556:A:C5	1:2:1560:U:C2	3.07	0.43
36:5:3182:G:H2'	36:5:3183:A:O4'	2.18	0.43
36:5:3342:A:N6	36:5:3343:G:C6	2.87	0.43
28:D6:6:ALA:C	28:D6:8:ASN:H	2.22	0.43
22:D0:20:ILE:HD12	22:D0:100:VAL:HG21	4.31	0.43
8:S6:136:LYS:HG3	8:S6:173:PRO:HB3	2.14	0.43
5:S3:162:GLN:HG3	1:6:1333:C:H4'	428.59	0.43
2:S0:37:VAL:HG12	2:S0:38:PHE:H	1.83	0.43
44:L7:151:ARG:HD2	44:L7:244:ASN:HD22	1.82	0.43
36:1:2572:C:OP2	36:1:2572:C:H3'	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:M0:38:LYS:CG	47:M0:41:ALA:HB2	3.21	0.43
22:D0:80:GLU:HG3	31:D9:54:LYS:NZ	2.34	0.43
56:N0:23:LYS:O	57:N1:146:ASN:ND2	2.37	0.43
16:C4:84:ARG:HB2	16:C4:118:VAL:HG23	2.01	0.43
36:1:21:G:C8	38:4:37:A:C6	3.06	0.43
18:C6:18:ALA:HB3	18:C6:80:ALA:O	2.74	0.43
28:D6:64:LEU:HA	28:D6:65:PRO:HD3	1.81	0.43
1:2:145:A:O2'	1:2:146:U:O5'	2.32	0.43
74:O8:59:ALA:O	74:O8:62:ALA:HB3	2.18	0.43
31:D9:22:ARG:HG3	31:D9:37:ASN:O	2.19	0.43
2:S0:69:ASN:HB3	2:S0:71:GLU:OE1	2.19	0.43
2:S0:71:GLU:OE2	2:S0:71:GLU:N	2.42	0.43
71:O5:45:LYS:HD2	71:O5:49:LYS:HD3	5.34	0.43
1:2:53:G:H2'	1:2:54:C:O4'	2.19	0.43
48:M1:15:GLU:HB2	48:M1:132:ASN:ND2	2.33	0.43
49:M3:123:ILE:HD11	49:M3:125:VAL:CG2	3.39	0.43
1:2:868:G:C2	1:2:869:A:C8	3.07	0.43
40:L3:261:MET:HG2	52:M6:64:PHE:HA	3.13	0.43
51:M5:150:TRP:CZ2	51:M5:151:ILE:HG12	2.54	0.43
1:2:1756:A:H8	1:2:1756:A:OP2	2.02	0.43
36:5:993:G:OP1	86:5:3913:OHX:N6	2.52	0.43
8:S6:3:LEU:HD22	8:S6:111:LEU:HD11	3.36	0.43
70:O4:24:LYS:HE2	36:5:1669:C:OP1	156.63	0.43
44:L7:94:LYS:NZ	36:5:1155:C:OP1	233.68	0.43
1:6:913:G:H3'	1:6:914:G:C5'	2.48	0.43
1:6:1603:U:H2'	1:6:1604:U:C6	2.53	0.43
1:2:912:U:H4'	1:2:913:G:O5'	2.18	0.43
28:D6:96:ALA:HA	28:D6:97:PRO:HD3	1.75	0.43
36:5:1000:C:C2	36:5:1045:C:N4	2.87	0.43
15:C3:4:MET:HG2	15:C3:5:HIS:CD2	2.54	0.43
50:M4:46:ILE:HD13	50:M4:58:ILE:HG21	2.00	0.43
36:5:231:G:O6	86:5:4135:OHX:N4	2.52	0.43
49:M3:140:SER:OG	49:M3:141:ALA:N	3.02	0.43
39:L2:230:VAL:O	39:L2:233:GLN:HB2	2.19	0.43
1:2:1107:G:C6	1:2:1108:G:C6	3.06	0.43
34:SR:294:TRP:CZ3	34:SR:301:LEU:HB2	2.53	0.43
54:M8:67:ILE:HG23	54:M8:81:VAL:HG11	2.98	0.43
10:S8:72:ILE:HD13	10:S8:112:TRP:CD2	2.54	0.43
15:C3:125:LEU:HD23	15:C3:125:LEU:HA	1.95	0.43
62:N6:95:VAL:HA	62:N6:96:PRO:HD3	1.91	0.43
2:S0:139:VAL:HG23	4:S2:62:PRO:HG3	2.16	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2220:A:N6	36:5:2221:G:C6	2.87	0.43
36:1:2567:C:C2'	36:1:2568:C:H5'	2.49	0.43
36:5:2694:A:C6	36:5:2695:A:C6	3.06	0.43
36:5:1118:C:H6	36:5:1118:C:O5'	2.02	0.43
28:D6:22:ARG:HD2	28:D6:22:ARG:HA	1.88	0.43
11:S9:115:LYS:HD2	11:S9:115:LYS:HA	1.76	0.43
1:2:365:G:N7	86:2:2105:OHX:N5	2.67	0.43
59:N3:82:ALA:HA	59:N3:95:PHE:O	2.19	0.42
28:D6:4:LYS:HG3	28:D6:4:LYS:O	2.19	0.42
1:2:1796:C:O4'	28:D6:5:ARG:HD3	2.19	0.42
53:M7:25:SER:OG	36:5:1447:G:N7	150.40	0.42
70:O4:8:ARG:C	70:O4:9:ARG:HG2	3.40	0.42
41:L4:195:ARG:O	41:L4:196:ASN:HB2	2.26	0.42
40:L3:56:ILE:HD12	40:L3:56:ILE:HA	1.99	0.42
1:2:1570:A:H2'	1:2:1571:C:O4'	2.19	0.42
1:2:1101:G:O2'	24:D2:4:SER:HB2	2.19	0.42
36:1:770:G:OP1	49:M3:171:ARG:HD3	2.19	0.42
10:S8:57:ALA:CB	10:S8:177:GLY:HA2	3.00	0.42
39:L2:130:SER:HA	39:L2:169:ILE:CG2	2.47	0.42
1:2:1041:G:H2'	1:2:1042:G:H8	1.80	0.42
36:1:1815:U:HO2'	36:1:1816:A:P	2.41	0.42
68:O2:32:TRP:CG	68:O2:33:ARG:N	2.87	0.42
41:L4:23:PRO:HD2	41:L4:26:PHE:HD2	2.58	0.42
7:S5:53:VAL:CG2	7:S5:59:VAL:HG22	2.49	0.42
16:C4:12:GLN:HB3	16:C4:77:THR:OG1	2.19	0.42
67:O1:70:ARG:O	67:O1:71:LEU:HD23	2.77	0.42
1:2:1519:U:H3'	1:2:1520:U:H2'	2.01	0.42
30:D8:64:ARG:HB3	30:D8:65:ARG:H	1.76	0.42
36:1:2746:A:C5	42:L5:148:ILE:HD12	2.53	0.42
1:6:330:G:C6	1:6:331:A:C5	3.07	0.42
40:L3:152:LYS:CG	40:L3:192:VAL:HG11	2.46	0.42
1:6:1402:G:C6	1:6:1403:C:C4	3.07	0.42
1:6:825:U:O2'	1:6:826:U:P	2.77	0.42
31:D9:6:VAL:HB	31:D9:7:TRP:H	4.28	0.42
36:1:2732:G:H2'	36:1:2733:A:O4'	2.19	0.42
64:N8:22:ILE:HD12	36:5:1114:U:H5''	191.25	0.42
1:6:648:G:C2	1:6:687:G:C2	3.07	0.42
1:6:648:G:C4	1:6:687:G:N2	2.87	0.42
48:M1:137:ARG:HD3	37:7:28:C:OP1	303.73	0.42
46:L9:25:VAL:O	46:L9:35:THR:HA	2.18	0.42
55:M9:19:LYS:C	55:M9:21:LYS:H	2.21	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1556:C:H5''	36:1:2169:G:N2	2.34	0.42
1:2:825:U:H2'	1:2:826:U:C6	2.54	0.42
36:5:501:A:H2'	36:5:502:U:H6	1.83	0.42
54:M8:96:PHE:CG	54:M8:97:PRO:HD2	2.62	0.42
69:O3:89:LEU:HA	69:O3:90:PRO:HD3	1.93	0.42
1:2:1175:U:H2'	1:2:1176:G:C8	2.54	0.42
36:1:2340:U:OP1	40:L3:236:LYS:HE3	2.19	0.42
36:1:1667:A:H2'	36:1:1668:G:C8	2.55	0.42
31:D9:41:GLN:HB3	1:6:1433:G:C4	403.59	0.42
40:L3:336:VAL:HG12	40:L3:337:THR:N	2.58	0.42
45:L8:134:TYR:CG	45:L8:190:VAL:HG11	4.21	0.42
15:C3:46:THR:O	15:C3:50:ILE:HD12	2.19	0.42
8:S6:58:LYS:O	8:S6:59:GLN:HB2	2.19	0.42
4:S2:157:LYS:HG2	4:S2:170:ILE:HG12	2.00	0.42
1:6:518:A:O2'	1:6:534:A:N6	2.50	0.42
42:L5:196:ARG:HA	42:L5:199:ILE:HD12	2.78	0.42
36:5:258:G:H2'	36:5:259:C:H6	1.84	0.42
36:5:242:C:H2'	36:5:243:G:C8	2.54	0.42
42:L5:259:LYS:H	42:L5:259:LYS:HG2	4.07	0.42
6:S4:37:LYS:HG2	1:6:297:U:H5''	351.96	0.42
36:5:2541:U:H4'	36:5:2542:U:OP1	2.19	0.42
34:SR:7:LEU:HG	34:SR:315:VAL:HG22	2.01	0.42
1:6:223:U:H2'	1:6:224:C:C6	2.54	0.42
9:S7:102:PRO:HA	9:S7:106:SER:O	6.69	0.42
36:1:1767:C:H2'	36:1:1768:U:H6	1.84	0.42
86:1:3978:OHX:N1	86:1:4159:OHX:N4	2.67	0.42
9:S7:83:LYS:C	9:S7:85:PHE:H	2.23	0.42
1:6:1708:U:H2'	1:6:1709:C:C6	2.54	0.42
1:2:685:A:HO2'	1:2:686:C:P	2.41	0.42
1:6:170:U:H6	1:6:267:U:HO2'	1.64	0.42
12:C0:30:ALA:O	12:C0:38:LYS:HA	2.19	0.42
36:5:199:A:C4	36:5:201:A:C8	3.07	0.42
1:2:1426:C:H5''	35:SM:93:ARG:HH12	1.82	0.42
1:2:346:G:O6	86:2:2125:OHX:N5	2.52	0.42
70:O4:100:ILE:H	70:O4:100:ILE:HG13	3.60	0.42
24:D2:75:ILE:HA	24:D2:75:ILE:HD13	1.74	0.42
36:1:2093:A:N3	36:1:2093:A:H3'	2.34	0.42
5:S3:217:ILE:HG22	5:S3:219:ALA:H	3.74	0.42
36:5:589:A:N6	36:5:610:G:H1'	2.34	0.42
5:S3:216:PRO:HB2	34:SR:196:ASN:OD1	2.18	0.42
72:O6:25:LYS:HB2	72:O6:28:TYR:CD2	2.45	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:140:ARG:HH21	4:S2:226:THR:HG21	2.00	0.42
1:6:163:G:H8	1:6:163:G:O5'	2.02	0.42
6:S4:92:LEU:HG	26:D4:17:LEU:CD2	2.49	0.42
76:Q0:106:ARG:NH1	76:Q0:106:ARG:HB2	3.12	0.42
1:2:1232:U:H4'	12:C0:2:LEU:HD21	2.01	0.42
23:D1:64:GLU:OE1	29:D7:2:VAL:HG13	2.19	0.42
1:2:932:U:O2	28:D6:32:LYS:HE2	2.19	0.42
36:1:1231:A:OP2	86:1:4089:OHX:N6	2.52	0.42
24:D2:103:ILE:HG12	24:D2:104:LEU:N	2.61	0.42
36:5:1567:U:H2'	36:5:1568:U:C4'	2.48	0.42
38:8:41:A:H61	38:8:103:G:C2'	2.32	0.42
1:2:348:U:OP1	13:C1:85:VAL:HG11	2.19	0.42
36:1:1813:A:OP1	36:1:1817:G:O2'	2.35	0.42
1:6:1282:U:OP1	86:6:2139:OHX:N4	2.52	0.42
45:L8:156:ASP:HB2	45:L8:157:VAL:H	1.57	0.42
22:D0:105:GLN:HG3	22:D0:106:ILE:H	1.84	0.42
65:N9:58:LYS:HZ2	65:N9:58:LYS:HA	4.08	0.42
86:6:2127:OHX:N2	86:6:2152:OHX:N1	2.67	0.42
3:S1:112:SER:OG	3:S1:113:MET:N	2.52	0.42
39:L2:3:ARG:HH11	39:L2:3:ARG:HG3	2.19	0.42
49:M3:74:GLY:O	49:M3:101:ARG:NH1	2.52	0.42
27:D5:88:ILE:O	27:D5:104:ALA:HA	3.14	0.42
68:O2:6:HIS:HA	68:O2:7:PRO:HD2	3.06	0.42
27:D5:61:SER:H	27:D5:64:VAL:CG2	2.97	0.42
1:6:196:G:C2	1:6:197:A:H1'	2.54	0.42
6:S4:151:ASP:HB3	6:S4:154:ILE:HD11	3.04	0.42
71:O5:89:ARG:HD2	38:8:38:U:O4	68.68	0.42
2:S0:106:SER:O	2:S0:115:PHE:HA	2.72	0.42
36:5:123:A:H5'	36:5:124:U:OP2	2.18	0.42
25:D3:31:LYS:HA	25:D3:31:LYS:HD3	1.68	0.42
66:O0:25:LEU:HD13	66:O0:87:VAL:HG11	2.02	0.42
38:8:83:C:C4'	38:8:85:G:H21	2.32	0.42
25:D3:114:LYS:HE2	1:6:571:G:H5'	364.29	0.42
1:6:722:G:O2'	1:6:723:G:H5''	2.20	0.42
50:M4:17:VAL:HG22	50:M4:36:VAL:O	2.19	0.42
42:L5:134:ALA:HB2	42:L5:141:PRO:CD	3.09	0.42
73:O7:17:THR:HG22	73:O7:18:LEU:H	1.84	0.42
1:2:1433:G:C8	31:D9:41:GLN:HG2	2.54	0.42
6:S4:127:LYS:HG3	6:S4:142:HIS:HA	2.13	0.42
39:L2:82:VAL:HA	39:L2:86:GLN:OE1	2.19	0.42
1:2:635:A:H2'	1:2:636:A:C8	2.55	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1560:G:C2'	36:1:1561:G:H5'	2.49	0.42
36:1:2873:U:O2'	88:1:4217:HMT:H10A	2.19	0.42
45:L8:118:GLU:C	45:L8:120:LYS:N	2.72	0.42
48:M1:60:ARG:HH21	48:M1:60:ARG:HG3	4.96	0.42
1:6:386:G:H2'	1:6:387:A:C8	2.54	0.42
21:C9:18:TYR:HB2	21:C9:135:ILE:HD11	3.61	0.42
36:5:196:G:C2	36:5:199:A:C8	3.08	0.42
36:5:201:A:OP2	86:5:3990:OHX:N1	2.52	0.42
36:1:2501:U:H4'	36:1:2502:A:OP1	2.20	0.42
36:1:199:A:C4	36:1:201:A:C8	3.08	0.42
1:6:1317:C:H2'	1:6:1318:G:O4'	2.19	0.42
44:L7:65:ALA:HB1	44:L7:76:TYR:CD1	2.72	0.42
36:5:668:G:OP1	86:5:4143:OHX:N1	2.52	0.42
4:S2:84:LYS:HA	4:S2:85:PRO:HD3	1.76	0.42
36:5:69:C:H2'	36:5:70:A:O4'	2.20	0.42
36:5:2660:G:H4'	36:5:2750:U:O2	2.19	0.42
36:5:2398:A:O2'	36:5:2399:A:H5'	2.18	0.42
45:L8:97:TYR:O	45:L8:132:VAL:HG13	2.74	0.42
36:5:3006:A:C2	36:5:3141:A:C4	3.06	0.42
38:4:113:U:H5''	75:O9:7:PHE:HB3	2.01	0.42
15:C3:18:TYR:O	15:C3:19:SER:HB2	4.67	0.42
47:M0:52:LEU:HA	47:M0:52:LEU:HD23	1.84	0.42
52:M6:99:LEU:HD23	52:M6:99:LEU:HA	2.34	0.42
40:L3:142:ALA:O	40:L3:146:ARG:N	3.24	0.42
57:N1:32:LYS:HZ3	57:N1:98:HIS:H	2.90	0.42
40:L3:79:VAL:HG21	40:L3:338:LEU:HD21	2.01	0.42
1:2:460:A:H5'	1:2:461:G:OP2	2.19	0.42
40:L3:188:ILE:HD12	40:L3:188:ILE:H	2.64	0.42
40:L3:86:VAL:HG13	40:L3:160:VAL:CG1	2.49	0.42
1:2:1368:G:C6	1:2:1369:U:C4	3.07	0.42
47:M0:36:LEU:CD1	47:M0:87:LEU:HB3	2.49	0.42
11:S9:149:ARG:HH11	11:S9:149:ARG:HG3	4.38	0.42
73:O7:2:GLY:O	73:O7:7:SER:HB3	2.34	0.42
48:M1:96:PHE:CD1	48:M1:160:VAL:HG22	3.23	0.42
74:O8:43:PHE:O	74:O8:53:THR:HA	2.36	0.42
1:6:543:C:O4'	1:6:543:C:O2	2.37	0.42
3:S1:35:PRO:HB3	3:S1:231:LEU:HD21	6.00	0.42
53:M7:138:LYS:HD2	53:M7:140:GLU:CD	2.39	0.42
3:S1:178:GLY:HA3	3:S1:187:LYS:NZ	2.34	0.42
70:O4:71:THR:HG22	70:O4:78:GLY:N	2.34	0.42
36:1:371:G:H4'	36:1:396:A:N1	2.34	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:8:15:G:C6	38:8:16:G:N1	2.87	0.42
1:2:1497:U:OP2	86:2:2030:OHX:N1	2.52	0.42
18:C6:38:LEU:O	18:C6:45:ARG:NE	2.52	0.42
34:SR:37:SER:OG	34:SR:38:ARG:N	2.75	0.42
1:2:158:U:H5'	1:2:158:U:H6	1.84	0.42
36:5:1025:A:H5'	36:5:1026:A:OP2	2.19	0.42
36:1:2177:G:O6	86:1:3925:OHX:N2	2.52	0.42
49:M3:159:VAL:HG13	64:N8:144:VAL:HG13	2.00	0.42
63:N7:63:ALA:O	63:N7:67:LYS:HD3	2.19	0.42
1:6:453:U:O2	1:6:453:U:H3'	2.20	0.42
1:2:1300:A:OP1	4:S2:99:LYS:NZ	2.52	0.42
6:S4:128:LYS:HA	6:S4:156:VAL:HG22	2.01	0.42
9:S7:58:LEU:HG	9:S7:88:ARG:HD2	2.01	0.42
74:O8:65:LEU:O	74:O8:69:LEU:HD22	2.20	0.42
1:2:1226:A:C2	14:C2:116:VAL:HG11	2.54	0.42
59:N3:120:LYS:N	59:N3:137:VAL:HG23	2.34	0.42
36:5:3279:A:N6	36:5:3280:U:O4	2.53	0.42
1:2:778:G:H22	26:D4:10:ARG:CZ	2.33	0.42
24:D2:119:LYS:HG2	1:6:687:G:H5''	393.86	0.42
46:L9:118:LEU:HD12	46:L9:167:VAL:HG22	3.85	0.42
72:O6:56:ARG:O	72:O6:60:LEU:HD22	4.65	0.42
36:1:2724:U:OP1	57:N1:78:LYS:HE2	2.20	0.42
17:C5:15:HIS:H	17:C5:22:LEU:HD22	3.25	0.42
17:C5:25:LEU:O	17:C5:28:MET:HB2	3.58	0.42
34:SR:281:TYR:HB3	34:SR:282:SER:H	1.58	0.42
22:D0:73:GLY:HA3	1:6:1198:G:O4'	381.21	0.42
64:N8:126:LYS:HA	64:N8:146:GLU:O	2.19	0.42
44:L7:173:LEU:HA	44:L7:173:LEU:HD12	1.67	0.42
15:C3:73:ARG:HD3	1:6:859:A:C6	330.25	0.42
4:S2:111:VAL:HG13	4:S2:191:ALA:HA	2.01	0.42
1:2:927:C:H1'	16:C4:125:SER:CB	2.49	0.42
45:L8:75:ILE:HG22	45:L8:76:ALA:H	1.84	0.42
1:6:625:C:H2'	1:6:626:U:C6	2.54	0.42
36:1:3317:U:O2'	86:1:4027:OHX:N3	2.52	0.42
36:1:324:A:H2'	36:1:325:A:C8	2.55	0.42
36:1:2884:C:H1'	36:1:2939:G:N2	2.35	0.42
62:N6:42:GLN:O	71:O5:68:GLN:HG2	52.59	0.42
36:1:1476:G:O3'	67:O1:63:GLY:HA2	2.19	0.42
48:M1:18:VAL:HG22	48:M1:70:THR:HG23	3.95	0.42
36:1:2820:A:C2	88:1:4217:HMT:H23B	2.54	0.42
21:C9:25:GLN:HG2	21:C9:27:LYS:H	1.84	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:683:C:H3'	1:6:684:A:H5''	2.01	0.42
34:SR:286:GLU:HA	34:SR:287:PRO:HD3	1.77	0.42
9:S7:43:PHE:HB2	9:S7:61:PHE:O	2.19	0.42
3:S1:97:LEU:HG	3:S1:232:HIS:CE1	2.55	0.42
36:1:1125:U:O2'	36:1:1126:G:H5'	2.20	0.42
3:S1:24:PHE:C	3:S1:26:ARG:H	2.23	0.42
36:1:279:U:H2'	36:1:280:U:H6	1.84	0.42
25:D3:41:SER:HA	25:D3:42:PRO:HD3	1.82	0.42
36:1:1584:U:H2'	36:1:1585:C:C6	2.54	0.42
86:5:4096:OHX:N5	86:5:4238:OHX:N6	2.67	0.42
36:1:2516:U:O2'	36:1:2595:A:N6	2.47	0.42
1:6:1413:U:O2'	1:6:1416:G:OP1	2.28	0.42
36:1:772:U:H2'	36:1:773:G:C8	2.54	0.42
8:S6:147:LEU:O	8:S6:148:SER:OG	2.26	0.42
75:O9:35:ILE:HD11	38:8:53:A:C2	83.20	0.42
1:6:622:A:H4'	1:6:623:A:OP1	2.18	0.42
36:1:733:G:O2'	36:1:735:A:N6	2.46	0.42
60:N4:54:LEU:HA	60:N4:54:LEU:HD12	1.70	0.42
26:D4:18:LEU:HA	26:D4:18:LEU:HD23	1.86	0.42
55:M9:165:LYS:HB3	55:M9:165:LYS:HE3	1.83	0.42
61:N5:109:LYS:HE3	61:N5:109:LYS:HB2	1.61	0.42
36:5:619:A:H8	36:5:619:A:OP2	2.02	0.42
65:N9:38:LYS:HG3	65:N9:38:LYS:O	4.44	0.42
33:E1:151:ASN:O	33:E1:151:ASN:ND2	2.51	0.42
68:O2:59:SER:OG	36:5:1405:U:OP2	184.58	0.42
36:5:381:U:H2'	36:5:382:U:C6	2.55	0.42
1:2:1465:C:C4	1:2:1466:G:C8	3.07	0.42
41:L4:317:PRO:HB3	41:L4:324:LEU:HA	2.35	0.42
20:C8:42:TYR:HA	20:C8:85:PHE:HE1	1.83	0.42
63:N7:4:PHE:HE2	66:O0:63:SER:HB3	2.23	0.42
7:S5:43:PHE:CZ	7:S5:90:ILE:HG21	2.60	0.42
40:L3:252:ILE:HG12	40:L3:266:ARG:NH2	2.34	0.42
3:S1:38:PHE:HB3	3:S1:74:GLN:OE1	2.18	0.42
75:O9:48:LYS:HD2	75:O9:48:LYS:HA	2.39	0.42
44:L7:88:ARG:NH1	44:L7:91:GLY:O	2.98	0.42
24:D2:77:PRO:HD3	25:D3:7:ARG:O	4.41	0.42
73:O7:65:ARG:NH2	38:8:102:U:O4	84.72	0.42
39:L2:112:ILE:HD12	79:Q3:79:VAL:HG22	2.01	0.42
36:1:147:U:O4	45:L8:157:VAL:HA	2.19	0.42
67:O1:88:PRO:HG2	67:O1:89:LEU:HD13	2.01	0.42
36:1:1236:G:N2	36:1:1244:A:H4'	2.35	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:O6:45:ARG:NH2	72:O6:50:LEU:HA	3.52	0.42
6:S4:220:THR:HG22	1:6:753:A:OP1	370.99	0.42
17:C5:122:THR:HG22	1:6:1558:U:H3	367.22	0.42
34:SR:179:LYS:HD2	34:SR:181:TRP:CZ2	3.90	0.42
56:N0:32:SER:OG	56:N0:36:ILE:HD12	2.20	0.42
38:4:59:A:H1'	61:N5:61:LYS:HE2	2.01	0.42
3:S1:81:PHE:HA	3:S1:106:THR:HG21	2.45	0.42
40:L3:153:LYS:HD3	40:L3:154:TYR:CE2	2.54	0.42
1:2:71:A:N1	1:2:72:A:C6	2.88	0.42
36:1:2180:G:H2'	36:1:2181:C:C6	2.54	0.42
49:M3:144:THR:C	49:M3:146:PRO:HD3	2.92	0.42
1:6:1393:C:H2'	1:6:1394:G:H8	1.84	0.42
63:N7:24:VAL:HG11	63:N7:87:LEU:HB3	2.45	0.42
19:C7:61:ILE:C	19:C7:63:LYS:H	2.50	0.42
36:5:2533:G:H2'	36:5:2534:G:C8	2.54	0.42
41:L4:40:THR:O	41:L4:44:LYS:HE3	4.34	0.42
66:O0:77:LEU:HG	66:O0:87:VAL:HG22	2.02	0.42
36:1:595:G:C8	36:1:609:G:C6	3.08	0.42
36:5:595:G:N1	36:5:609:G:H5''	2.34	0.42
4:S2:148:LEU:HD22	4:S2:148:LEU:HA	1.88	0.42
1:2:586:G:H4'	32:E0:21:VAL:HG22	2.00	0.42
36:1:1634:G:OP1	63:N7:107:ARG:NH1	2.52	0.42
18:C6:26:LYS:HE3	18:C6:26:LYS:HB2	2.69	0.42
18:C6:99:GLU:HG2	34:SR:57:PRO:HB2	2.37	0.42
41:L4:72:ALA:O	41:L4:76:ARG:NH1	2.72	0.42
36:1:2972:G:H2'	36:1:2973:G:H8	1.84	0.42
1:2:1783:C:OP2	77:Q1:1:MET:HB2	2.19	0.42
39:L2:225:ILE:HG21	39:L2:234:LYS:HA	2.00	0.42
34:SR:33:LEU:HB3	34:SR:45:TRP:HB2	2.01	0.42
36:1:729:C:H2'	36:1:730:C:C6	2.54	0.42
21:C9:61:VAL:O	21:C9:65:ILE:HG13	2.19	0.42
36:1:2873:U:C6	88:1:4217:HMT:H11A	2.55	0.42
37:3:97:A:H2'	37:3:98:C:C6	2.54	0.42
49:M3:17:HIS:O	49:M3:20:GLU:HB2	2.19	0.42
1:6:1079:U:H2'	1:6:1080:U:C6	2.54	0.42
36:1:385:A:H2'	36:1:386:A:C8	2.54	0.42
15:C3:64:ARG:O	15:C3:68:GLY:HA2	2.34	0.42
40:L3:358:TRP:CH2	60:N4:15:PRO:HD2	2.54	0.42
52:M6:31:GLN:HG3	52:M6:33:ILE:HD12	2.02	0.42
38:8:68:G:C6	38:8:69:U:C4	3.08	0.42
5:S3:18:TYR:CD2	31:D9:49:ASP:HB3	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:207:U:O2	10:S8:178:ARG:NH1	2.44	0.42
65:N9:32:LEU:O	65:N9:35:VAL:HB	2.20	0.42
36:1:1696:A:OP2	86:1:4162:OHX:N3	2.53	0.42
19:C7:41:ILE:HG22	19:C7:43:SER:H	1.84	0.42
1:6:526:A:N6	1:6:527:A:C6	2.88	0.42
64:N8:67:HIS:NE2	36:5:71:A:OP2	118.89	0.42
36:5:1276:U:OP2	86:5:4009:OHX:N1	2.52	0.42
34:SR:81:LEU:HD23	34:SR:91:LEU:HA	3.19	0.42
36:5:1195:A:H2'	36:5:1309:U:O2	2.20	0.42
47:M0:96:VAL:HG22	47:M0:125:LEU:HD21	2.00	0.42
57:N1:6:GLY:O	57:N1:9:SER:HB3	2.19	0.42
20:C8:65:GLU:HG2	20:C8:68:ARG:NH2	3.21	0.42
41:L4:200:THR:HG23	41:L4:201:GLN:N	2.33	0.42
36:1:3382:U:O2	36:1:3382:U:H2'	2.18	0.42
1:2:705:U:H4'	1:2:705:U:OP1	2.17	0.42
10:S8:23:LYS:NZ	1:6:391:A:OP2	305.09	0.42
5:S3:80:ALA:O	5:S3:83:THR:HG23	2.19	0.42
1:6:1564:U:H2'	1:6:1565:C:H6	1.80	0.42
1:2:337:G:H1'	10:S8:10:LYS:HZ1	1.83	0.42
11:S9:146:PHE:HZ	1:6:765:G:N1	431.85	0.42
47:M0:42:THR:CG2	47:M0:45:GLU:HG3	5.50	0.42
26:D4:124:ARG:NH2	1:6:151:G:N7	322.01	0.42
1:2:139:C:H4'	1:2:140:A:O5'	2.18	0.42
75:O9:2:ALA:N	36:5:1493:G:C6	122.30	0.42
25:D3:96:VAL:HG23	25:D3:97:ASP:H	1.84	0.42
6:S4:118:GLU:HG2	6:S4:118:GLU:O	2.19	0.42
44:L7:130:ILE:HG21	44:L7:130:ILE:HD13	2.01	0.42
3:S1:48:VAL:HG21	3:S1:61:LEU:HD13	6.39	0.42
1:2:1553:G:HO2'	31:D9:14:TYR:HH	1.60	0.42
59:N3:48:ARG:HG2	36:5:2339:C:P	247.05	0.42
38:4:85:G:H3'	38:4:85:G:H8	1.83	0.42
36:5:1566:A:C2'	36:5:1567:U:H5'	2.48	0.42
36:5:1573:G:C6	36:5:1574:C:H1'	2.54	0.42
1:6:789:A:H3'	1:6:790:U:H6	1.84	0.42
18:C6:37:THR:O	18:C6:45:ARG:NH1	2.87	0.42
15:C3:150:VAL:HG12	15:C3:151:ASN:ND2	2.35	0.42
42:L5:278:SER:OG	42:L5:281:GLU:HG3	2.19	0.42
23:D1:81:ASN:O	23:D1:82:VAL:HB	2.19	0.42
1:2:1371:A:H8	1:2:1371:A:P	2.42	0.42
36:1:2680:A:C2	48:M1:24:GLY:HA3	2.55	0.42
36:1:20:A:P	71:O5:90:ARG:HH11	2.43	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:4:9:A:H2'	38:4:10:A:C8	2.55	0.42
1:2:1003:A:H1'	1:2:1005:A:N7	2.34	0.42
36:5:1152:G:H8	36:5:1152:G:P	2.43	0.42
21:C9:31:PRO:HG2	21:C9:34:VAL:HG23	5.99	0.42
48:M1:131:MET:HB3	48:M1:131:MET:HE3	2.00	0.42
57:N1:96:ILE:HA	57:N1:96:ILE:HD13	2.90	0.42
76:Q0:78:ILE:HG21	76:Q0:78:ILE:HD13	2.58	0.42
47:M0:208:ASN:HA	47:M0:211:ARG:HD2	2.11	0.42
37:3:28:C:OP2	42:L5:57:ASN:ND2	2.40	0.42
36:1:149:U:OP2	51:M5:49:ARG:NH2	2.52	0.42
36:5:3227:A:H2'	36:5:3228:C:C5'	2.49	0.42
64:N8:122:PRO:HB3	64:N8:142:GLY:O	2.83	0.42
36:1:1246:G:N2	36:1:1264:G:HO2'	2.16	0.42
61:N5:113:LEU:HD12	61:N5:113:LEU:C	2.39	0.42
58:N2:104:ARG:NH1	58:N2:106:ALA:HB2	3.65	0.42
36:1:1204:A:N6	36:1:1300:G:O2'	2.47	0.42
86:5:4206:OHX:N2	86:8:226:OHX:N1	2.66	0.42
9:S7:143:LEU:HB2	9:S7:147:ASN:HB2	2.00	0.42
12:C0:25:LYS:HD2	12:C0:64:TYR:OH	2.20	0.42
17:C5:30:THR:HG23	17:C5:86:VAL:HG21	2.01	0.42
29:D7:11:THR:O	29:D7:15:GLU:HB2	2.88	0.42
36:5:1659:U:O4	86:5:4200:OHX:N4	2.53	0.42
38:8:44:A:H2'	38:8:45:C:H6	1.83	0.42
36:1:861:C:H2'	36:1:862:U:H6	1.84	0.42
14:C2:41:LEU:HA	14:C2:41:LEU:HD23	1.77	0.42
11:S9:27:GLU:HB3	11:S9:39:LYS:HD2	2.01	0.42
1:2:358:U:O2'	1:2:360:A:H5''	2.19	0.42
1:2:192:U:O2'	1:2:193:U:O4'	2.36	0.42
42:L5:178:ASN:HA	42:L5:183:TRP:CG	2.86	0.42
57:N1:54:HIS:CD2	36:5:2724:U:H4'	229.13	0.42
61:N5:74:LYS:O	61:N5:78:ASP:HB2	2.69	0.42
36:5:1185:C:H2'	36:5:1186:G:O4'	2.19	0.42
86:2:2074:OHX:N3	86:2:2162:OHX:N1	2.68	0.42
10:S8:196:LEU:HA	10:S8:196:LEU:HD12	1.82	0.42
1:2:260:U:H3'	1:2:261:U:C5'	2.49	0.42
36:1:256:G:H4'	71:O5:111:PHE:HZ	1.84	0.42
3:S1:76:SER:OG	3:S1:78:ASP:OD1	2.30	0.42
86:1:4065:OHX:N3	86:1:4178:OHX:N1	2.67	0.42
61:N5:34:LEU:HB2	36:5:1558:A:O2'	140.13	0.42
36:5:1930:A:OP1	36:5:1930:A:H8	2.02	0.42
41:L4:202:ARG:HA	41:L4:202:ARG:NE	2.55	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:638:C:H2'	36:1:639:G:C8	2.54	0.42
51:M5:6:TYR:O	51:M5:10:LEU:HB2	2.44	0.42
39:L2:152:SER:HB2	36:5:2178:A:C2	217.21	0.42
46:L9:89:LYS:HB2	46:L9:183:HIS:HB3	2.02	0.42
46:L9:89:LYS:HG2	46:L9:145:VAL:HG22	2.38	0.42
36:5:438:A:H2'	36:5:494:G:N2	2.34	0.42
7:S5:40:ILE:HG12	7:S5:41:LYS:H	1.84	0.42
44:L7:160:ARG:HD2	44:L7:203:TRP:NE1	2.35	0.42
1:6:1171:A:H2'	1:6:1172:G:C8	2.55	0.42
19:C7:30:THR:HG22	34:SR:127:ARG:HH22	4.85	0.42
23:D1:1:MET:HG2	23:D1:9:VAL:CG1	6.06	0.42
53:M7:67:ILE:N	53:M7:67:ILE:HD13	2.81	0.42
33:E1:96:LYS:O	33:E1:97:LYS:HB3	2.36	0.42
46:L9:114:VAL:HB	46:L9:124:ARG:HB2	2.19	0.42
3:S1:133:TYR:CE2	3:S1:181:LEU:HD12	4.41	0.42
17:C5:126:VAL:O	17:C5:127:ARG:HB2	2.43	0.42
17:C5:129:GLY:O	17:C5:130:ARG:HB2	2.57	0.42
36:5:945:C:H2'	36:5:946:U:C6	2.53	0.42
7:S5:53:VAL:HG21	7:S5:59:VAL:HG13	2.93	0.42
9:S7:74:GLN:HG2	9:S7:131:PHE:CD2	4.45	0.42
11:S9:2:PRO:HD2	1:6:461:G:OP1	359.77	0.42
36:1:270:U:O2'	36:1:318:A:H1'	2.20	0.42
36:5:663:C:H2'	36:5:664:U:H6	1.84	0.42
42:L5:79:TYR:HB2	42:L5:81:HIS:CE1	2.54	0.42
42:L5:40:HIS:CE1	42:L5:42:ALA:HB3	2.55	0.42
40:L3:250:ALA:HB3	36:5:2880:U:H1'	224.31	0.42
74:O8:69:LEU:HD12	74:O8:70:PRO:HD2	2.00	0.42
1:2:1317:C:H2'	1:2:1318:G:O4'	2.19	0.42
1:6:599:A:H2'	1:6:600:U:C6	2.55	0.42
2:S0:69:ASN:HB3	2:S0:71:GLU:CD	2.44	0.42
1:2:1390:U:OP1	19:C7:5:ARG:HD2	2.20	0.42
71:O5:45:LYS:HG3	71:O5:46:THR:N	3.67	0.42
36:1:3242:G:H21	36:1:3245:A:H5''	1.84	0.42
58:N2:12:ALA:HA	58:N2:67:SER:O	2.19	0.42
19:C7:9:VAL:HG13	19:C7:50:ILE:HA	2.00	0.42
1:6:1082:C:OP2	1:6:1083:G:OP2	2.37	0.42
36:5:2434:U:C4'	36:5:2435:G:H5''	2.47	0.42
4:S2:88:LYS:HG2	4:S2:89:GLN:N	3.06	0.42
57:N1:65:TYR:CZ	57:N1:88:ARG:HD2	2.55	0.42
57:N1:75:ILE:O	57:N1:75:ILE:HG12	2.19	0.42
11:S9:79:ARG:O	11:S9:83:VAL:HG22	2.44	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:83:THR:HA	13:C1:111:VAL:HG12	2.02	0.42
36:5:191:U:H2'	36:5:192:C:H6	1.84	0.42
36:1:994:G:H22	36:1:1053:A:H2'	1.84	0.42
1:2:180:A:H2'	1:2:181:A:O4'	2.20	0.42
39:L2:83:HIS:CD2	79:Q3:41:PHE:HZ	3.74	0.42
36:1:1405:U:OP1	68:O2:64:LYS:HE3	2.20	0.42
36:1:1566:A:H2'	36:1:1567:U:H5''	2.02	0.42
2:S0:48:ILE:HG21	2:S0:161:PRO:HB2	2.42	0.42
36:5:209:A:H4'	36:5:211:A:N7	2.34	0.42
36:5:1584:U:H2'	36:5:1585:C:C6	2.54	0.42
1:2:802:G:H21	24:D2:107:SER:HB3	1.85	0.42
36:5:1340:G:H2'	36:5:1341:U:C6	2.54	0.42
34:SR:107:LYS:N	34:SR:128:ASP:OD2	3.41	0.42
69:O3:88:ASN:HB2	36:5:429:U:H4'	215.36	0.42
36:1:256:G:H2'	36:1:257:U:C6	2.54	0.42
44:L7:62:ILE:O	44:L7:66:LYS:HG3	2.80	0.42
36:1:2415:C:OP1	39:L2:2:GLY:HA2	2.19	0.42
36:1:76:G:O2'	49:M3:100:ARG:NH1	2.51	0.42
36:5:2551:U:H4'	36:5:2552:C:OP1	2.20	0.42
2:S0:65:ALA:C	2:S0:67:ILE:H	3.17	0.42
14:C2:44:GLY:O	14:C2:48:SER:N	2.52	0.42
36:5:3284:G:OP1	86:5:4185:OHX:N3	2.53	0.42
1:2:894:U:H3	1:2:918:U:H3	1.67	0.42
36:1:2929:C:H2'	36:1:2930:A:O4'	2.20	0.42
44:L7:149:TYR:OH	44:L7:182:ASP:OD1	2.33	0.42
44:L7:101:LYS:HD3	44:L7:101:LYS:HA	1.90	0.42
11:S9:45:ILE:HD13	11:S9:45:ILE:HA	1.83	0.42
34:SR:222:LEU:HD13	34:SR:222:LEU:HA	1.83	0.42
36:1:2550:U:C6	45:L8:37:GLY:HA3	2.55	0.42
36:1:2400:G:OP1	86:1:4092:OHX:N2	2.52	0.42
1:2:1271:G:C6	1:2:1272:U:C4	3.07	0.42
37:7:49:G:H4'	37:7:50:U:O5'	2.20	0.42
36:1:1899:G:N7	86:1:3932:OHX:N3	2.67	0.42
7:S5:89:ILE:HG13	7:S5:89:ILE:H	1.53	0.42
47:M0:3:ARG:NH2	36:5:2853:A:H5''	292.94	0.42
11:S9:110:GLN:HE22	11:S9:126:ARG:HG2	1.85	0.42
18:C6:82:ARG:NH1	18:C6:114:ARG:HB2	4.12	0.42
1:6:162:A:H2'	1:6:163:G:C8	2.55	0.42
78:Q2:54:THR:O	78:Q2:55:LYS:HG2	2.35	0.42
1:2:279:G:N7	1:2:281:G:C8	2.88	0.42
41:L4:283:THR:HG22	41:L4:285:ASP:N	2.24	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:N5:103:TYR:O	61:N5:105:VAL:HG23	2.19	0.42
35:SM:46:LYS:HA	36:5:1018:G:H4'	325.14	0.42
44:L7:132:PRO:HA	44:L7:229:PHE:CD2	2.75	0.42
8:S6:72:ARG:HG2	8:S6:98:ARG:HA	2.00	0.42
3:S1:142:PHE:O	3:S1:207:LEU:HA	2.24	0.42
36:5:96:G:H2'	36:5:97:U:O4'	2.20	0.42
35:SM:83:LYS:HB3	35:SM:84:LYS:H	1.97	0.42
47:M0:99:ILE:O	47:M0:99:ILE:HD12	4.71	0.42
36:5:945:C:O2'	36:5:1406:A:H1'	2.19	0.42
42:L5:282:ARG:O	42:L5:285:ARG:HB2	2.84	0.42
9:S7:97:ARG:O	9:S7:98:ILE:HB	2.20	0.42
10:S8:99:ALA:HB3	1:6:329:G:H5'	270.99	0.42
1:2:154:G:O6	26:D4:128:LYS:NZ	2.41	0.42
47:M0:12:GLN:HB3	47:M0:128:ARG:NH2	3.61	0.42
37:3:11:A:H4'	37:3:13:A:C8	2.54	0.42
36:5:916:G:N7	36:5:924:G:C5	2.88	0.42
36:1:706:A:H4'	36:1:781:G:O2'	2.20	0.42
64:N8:73:LEU:HD23	64:N8:112:ILE:HD12	2.02	0.42
3:S1:149:GLN:HE21	3:S1:149:GLN:HB2	1.74	0.42
13:C1:127:GLN:HG2	13:C1:128:CYS:H	1.84	0.42
27:D5:46:LYS:HB2	27:D5:46:LYS:HE3	4.25	0.42
36:5:253:A:HO2'	36:5:254:A:P	2.43	0.42
36:1:271:C:H2'	36:1:272:G:O4'	2.19	0.42
46:L9:17:THR:HB	50:M4:4:ASP:O	2.20	0.42
24:D2:105:THR:HG21	1:6:805:U:O4'	365.16	0.42
57:N1:65:TYR:HD2	57:N1:75:ILE:HG22	1.82	0.42
36:1:108:A:O2'	36:1:109:A:H2'	2.20	0.42
34:SR:52:GLN:HG2	34:SR:53:LYS:H	2.06	0.42
28:D6:74:CYS:SG	28:D6:77:CYS:HB2	2.59	0.42
38:8:83:C:H4'	38:8:85:G:N2	2.35	0.42
1:2:839:U:H2'	1:2:840:U:H5'	2.02	0.42
71:O5:24:LEU:HA	71:O5:27:GLU:HB2	2.01	0.42
45:L8:238:LEU:HD12	45:L8:238:LEU:HA	1.77	0.42
4:S2:139:ILE:HD11	4:S2:218:ILE:CG2	3.28	0.42
36:1:2273:G:O2'	36:1:2274:U:OP2	2.33	0.42
4:S2:101:VAL:HG22	4:S2:115:ILE:HG23	2.02	0.42
36:5:3096:C:H2'	36:5:3097:C:C6	2.55	0.42
71:O5:55:LEU:HA	71:O5:55:LEU:HD23	1.99	0.42
40:L3:303:LYS:HZ1	40:L3:361:THR:HB	2.48	0.42
36:1:2881:C:H2'	36:1:2882:U:H6	1.84	0.42
36:1:2541:U:H1'	36:1:2542:U:OP2	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:O7:54:LYS:O	73:O7:58:THR:HG23	3.36	0.42
47:M0:191:LYS:HB3	47:M0:213:PHE:CE2	2.54	0.42
36:1:2943:G:H2'	36:1:2944:U:O4'	2.19	0.42
8:S6:58:LYS:HG3	8:S6:105:ASP:O	3.13	0.42
56:N0:40:ARG:O	56:N0:43:TYR:HB3	2.19	0.42
1:2:102:U:O4	1:2:360:A:H2'	2.20	0.42
36:1:2714:G:H4'	36:1:2715:A:C5'	2.50	0.42
45:L8:57:ARG:O	45:L8:61:GLN:HG3	3.17	0.42
1:2:934:C:N3	1:2:1077:C:H4'	2.35	0.42
1:6:970:A:C6	1:6:971:A:H1'	2.55	0.42
60:N4:86:SER:C	60:N4:88:ASP:H	2.23	0.42
36:5:2651:G:H4'	36:5:2652:U:OP2	2.20	0.42
36:1:2712:U:H2'	36:1:2713:U:C6	2.55	0.42
1:2:1219:A:H3'	1:2:1220:C:C6	2.55	0.42
1:2:245:U:O4	86:2:2092:OHX:N5	2.52	0.42
36:1:3312:U:H2'	36:1:3313:U:H5''	2.01	0.42
39:L2:240:ALA:HA	36:5:2154:U:O3'	218.67	0.42
27:D5:85:LYS:HG3	27:D5:86:GLU:H	2.44	0.42
1:2:352:A:OP2	1:2:352:A:H8	2.02	0.42
56:N0:157:GLN:H	56:N0:157:GLN:HG2	1.73	0.42
42:L5:222:LEU:HG	42:L5:222:LEU:H	1.47	0.42
36:5:3337:G:H8	36:5:3337:G:O5'	2.02	0.42
1:2:1078:C:H2'	1:2:1079:U:C6	2.54	0.42
40:L3:103:THR:HG21	40:L3:147:GLU:OE2	2.20	0.42
36:1:2401:A:H61	36:1:2404:A:H62	1.67	0.42
41:L4:318:LEU:HD11	44:L7:146:GLN:HB3	2.21	0.42
86:1:4185:OHX:N1	40:L3:364:LYS:O	2.53	0.42
36:1:979:U:H4'	36:1:980:A:O5'	2.20	0.42
57:N1:50:LYS:HB3	57:N1:92:ARG:NH1	2.35	0.42
44:L7:223:PHE:HA	44:L7:227:GLY:HA2	4.62	0.42
3:S1:59:ASP:HA	3:S1:62:LYS:NZ	2.34	0.42
36:1:1103:A:HO2'	36:1:1104:G:P	2.38	0.42
1:2:1382:A:H5''	22:D0:60:THR:H	1.84	0.42
41:L4:138:ARG:NH1	41:L4:140:HIS:NE2	2.91	0.42
41:L4:144:LYS:HD2	41:L4:145:ILE:CG2	6.82	0.42
39:L2:209:HIS:ND1	39:L2:210:PRO:HD2	3.34	0.42
42:L5:243:ALA:O	42:L5:247:ILE:HG13	2.60	0.42
41:L4:107:ARG:HG2	41:L4:108:LYS:N	2.34	0.42
6:S4:11:ARG:O	6:S4:12:LEU:CB	2.80	0.42
2:S0:80:THR:HA	2:S0:83:GLN:OE1	2.45	0.42
42:L5:109:THR:HA	42:L5:112:LYS:HG2	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:C4:81:VAL:HG22	16:C4:115:ILE:HG23	3.69	0.42
1:2:240:U:OP1	1:2:240:U:H4'	2.19	0.42
12:C0:44:LYS:HA	12:C0:44:LYS:HD3	1.85	0.42
1:6:1715:G:N1	1:6:1716:C:C4	2.88	0.42
64:N8:78:LEU:HB3	64:N8:79:TRP:H	1.70	0.42
26:D4:11:LYS:HB2	26:D4:24:VAL:HG23	2.38	0.42
1:6:1279:C:H2'	1:6:1280:C:O4'	2.20	0.42
6:S4:151:ASP:OD1	8:S6:215:ARG:NH1	3.53	0.42
14:C2:71:ILE:O	14:C2:75:VAL:HG23	2.20	0.42
15:C3:113:PHE:HD1	15:C3:114:ARG:HH11	2.37	0.42
17:C5:15:HIS:O	17:C5:22:LEU:N	2.53	0.42
43:L6:173:MET:HB3	43:L6:173:MET:HE3	2.41	0.42
1:2:717:C:H2'	1:2:718:U:H5''	2.02	0.42
36:1:1845:G:H5'	36:1:1845:G:H8	1.84	0.42
42:L5:34:LYS:HA	57:N1:27:LEU:HD21	2.01	0.42
22:D0:72:ASN:ND2	22:D0:73:GLY:N	4.01	0.42
2:S0:66:ALA:HB1	23:D1:50:TYR:HD1	2.69	0.42
2:S0:76:ILE:HB	2:S0:123:VAL:HG22	2.01	0.42
4:S2:35:TRP:CD1	4:S2:36:VAL:N	3.44	0.42
36:5:873:C:H5''	36:5:874:U:H4'	2.02	0.42
36:1:40:A:C2	64:N8:40:HIS:CE1	3.07	0.42
42:L5:134:ALA:CB	42:L5:141:PRO:HD3	3.04	0.42
1:2:1176:G:C5	1:2:1177:C:C5	3.07	0.42
36:5:144:A:N6	36:5:145:G:C2	2.88	0.42
77:Q1:1:MET:HB2	1:6:1783:C:OP2	310.02	0.42
86:1:4145:OHX:N3	86:1:4188:OHX:N6	2.68	0.42
8:S6:109:LEU:HA	8:S6:109:LEU:HD23	1.90	0.42
52:M6:27:LEU:O	52:M6:30:GLY:N	2.73	0.42
1:6:1065:A:C6	1:6:1066:C:C4	3.08	0.42
78:Q2:40:LYS:HE3	78:Q2:44:ASP:OD2	2.23	0.42
29:D7:67:THR:HB	29:D7:68:GLY:H	1.60	0.42
45:L8:75:ILE:O	45:L8:76:ALA:HB3	2.19	0.42
36:5:1222:G:O6	86:5:4131:OHX:N1	2.52	0.42
34:SR:244:ALA:HB2	34:SR:292:LEU:HB3	5.94	0.42
28:D6:73:TYR:CE2	28:D6:82:ARG:HD2	2.54	0.42
36:1:308:A:H5'	36:1:2223:A:O2'	2.19	0.42
11:S9:11:THR:O	11:S9:44:ARG:HG3	2.20	0.42
36:5:2192:C:H2'	36:5:2193:U:O4'	2.20	0.42
55:M9:143:ILE:HG12	36:5:2093:A:H5''	250.79	0.42
1:2:1334:U:H2'	1:2:1335:U:H6	1.85	0.42
20:C8:15:LEU:HD22	20:C8:22:VAL:O	3.73	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:15:U:C4	1:6:16:G:C5	3.08	0.42
18:C6:81:ILE:O	18:C6:85:ILE:HG13	2.19	0.42
37:3:93:C:O2'	37:3:94:C:H5'	2.19	0.42
1:6:348:U:O4	86:6:2165:OHX:N4	2.52	0.42
36:1:1591:G:OP2	70:O4:17:SER:HB3	2.20	0.42
36:1:401:U:H4'	36:1:403:C:C2	2.55	0.42
10:S8:100:ALA:HB3	10:S8:169:ILE:HG12	3.05	0.42
47:M0:65:LEU:HA	47:M0:65:LEU:HD23	1.89	0.42
1:2:1229:G:O2'	1:2:1255:G:N2	2.53	0.42
1:2:412:A:H2'	1:2:413:U:H6	1.84	0.42
4:S2:76:LEU:HD21	4:S2:104:VAL:HB	3.37	0.42
45:L8:158:ASP:HB3	45:L8:159:PRO:HD3	2.02	0.42
1:2:1438:G:H2'	1:2:1439:C:O4'	2.20	0.42
59:N3:128:ARG:HB3	59:N3:128:ARG:CZ	3.26	0.42
36:1:2606:G:H2'	36:1:2606:G:N3	2.34	0.42
45:L8:231:LYS:HB2	45:L8:231:LYS:HE3	4.24	0.42
67:O1:20:LEU:HA	67:O1:20:LEU:HD23	1.88	0.42
70:O4:90:ILE:H	70:O4:90:ILE:HG12	1.59	0.42
36:1:2861:U:H2'	36:1:2862:U:O4'	2.19	0.42
53:M7:36:ILE:HD11	53:M7:44:ALA:HB1	2.02	0.42
32:E0:41:THR:HA	32:E0:45:VAL:HB	2.01	0.42
36:5:1881:A:OP2	86:5:4032:OHX:N6	2.53	0.42
10:S8:38:ILE:HA	10:S8:60:ILE:O	2.27	0.42
35:SM:25:ILE:HG12	37:7:39:C:H5'	290.87	0.42
36:5:2264:U:OP2	86:5:3959:OHX:N4	2.52	0.42
55:M9:23:TRP:CZ2	55:M9:26:PRO:HD2	3.65	0.42
7:S5:44:ASN:OD1	7:S5:70:VAL:HG12	2.19	0.42
55:M9:3:ASN:OD1	36:5:1471:U:H4'	113.52	0.42
36:1:2853:A:O3'	47:M0:64:ALA:HB2	2.20	0.42
18:C6:47:LYS:HZ1	18:C6:114:ARG:HD3	3.41	0.42
47:M0:46:PHE:CD1	47:M0:140:THR:HA	2.85	0.42
36:5:2254:U:H2'	36:5:2261:G:N2	2.35	0.42
25:D3:100:ASP:O	25:D3:101:GLU:HB3	4.83	0.42
51:M5:137:PRO:HG2	51:M5:138:GLN:NE2	2.82	0.42
25:D3:13:ARG:O	25:D3:17:VAL:HG23	2.19	0.42
1:6:884:A:H2'	1:6:885:G:C8	2.55	0.42
3:S1:87:ARG:HE	3:S1:87:ARG:HB3	1.74	0.42
1:2:1245:G:N2	33:E1:95:HIS:HE2	2.18	0.42
39:L2:32:LEU:HD23	39:L2:32:LEU:HA	2.44	0.42
1:6:502:U:H3'	1:6:503:G:H8	1.85	0.42
1:6:793:A:H3'	1:6:794:U:H5'	2.00	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:127:LEU:HD22	56:N0:156:VAL:HG13	3.90	0.42
46:L9:4:ILE:HD11	56:N0:150:PHE:CD2	2.90	0.42
56:N0:1:MET:O	56:N0:2:ALA:HB2	2.20	0.42
1:2:1003:A:H4'	1:2:1004:U:O5'	2.20	0.42
1:2:1594:G:OP2	1:2:1596:C:N4	2.53	0.42
1:2:391:A:C2	1:2:407:A:C2	3.08	0.42
34:SR:25:THR:HG21	34:SR:295:SER:HA	2.80	0.42
36:1:3242:G:N2	36:1:3245:A:H5''	2.35	0.42
37:3:3:U:H2'	37:3:4:U:H6	1.83	0.42
26:D4:10:ARG:NH1	1:6:778:G:N7	432.45	0.42
1:2:533:U:C4'	26:D4:33:ALA:HB2	2.50	0.42
3:S1:146:GLN:O	3:S1:149:GLN:HB2	2.20	0.42
62:N6:82:VAL:O	62:N6:84:LYS:N	3.07	0.42
36:1:814:U:H5'	73:O7:45:ARG:NH1	2.35	0.42
17:C5:85:ILE:HD11	17:C5:116:LEU:HD23	2.02	0.42
36:5:2916:U:H5	36:5:2935:U:O2'	2.03	0.42
4:S2:90:THR:HG22	4:S2:93:GLY:O	2.19	0.42
48:M1:82:ARG:HG2	48:M1:112:LEU:HB2	2.01	0.42
2:S0:125:ASP:HA	2:S0:126:PRO:HD2	1.84	0.42
46:L9:47:LYS:HZ2	50:M4:6:ILE:H	1.67	0.42
51:M5:22:LEU:O	51:M5:26:ARG:HG3	2.19	0.42
39:L2:47:GLN:HA	39:L2:84:THR:CG2	3.22	0.42
15:C3:127:ARG:NH1	15:C3:127:ARG:HG2	2.59	0.42
62:N6:59:VAL:HG22	62:N6:103:LYS:O	5.86	0.42
50:M4:134:ALA:C	50:M4:136:ALA:H	2.29	0.42
6:S4:206:ASP:O	6:S4:222:LEU:N	2.69	0.42
74:O8:18:ALA:C	74:O8:20:VAL:H	2.59	0.42
36:1:2257:C:H2'	36:1:2258:U:C6	2.55	0.42
36:5:948:C:H2'	36:5:949:C:H6	1.84	0.42
36:1:378:A:H3'	36:1:379:C:H6	1.85	0.42
36:1:537:A:H2'	36:1:538:G:O4'	2.19	0.42
1:6:1225:U:H2'	1:6:1226:A:H8	1.84	0.42
36:1:1944:U:H2'	36:1:1945:A:C8	2.54	0.42
56:N0:89:ASN:HD21	57:N1:156:TYR:H	1.67	0.42
36:5:1610:G:C6	36:5:1611:G:C6	3.08	0.42
76:Q0:124:LYS:O	76:Q0:126:LYS:NZ	2.41	0.42
36:5:498:A:H2'	36:5:499:G:C8	2.55	0.42
36:5:2745:G:N2	36:5:2748:A:OP2	2.51	0.42
36:1:140:C:O2'	36:1:141:C:H5'	2.19	0.42
1:2:89:G:C6	1:2:90:C:C4	3.07	0.42
36:1:2890:A:N1	36:1:2913:C:N3	2.67	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2816:G:C8	36:5:2869:U:H3'	2.55	0.42
1:2:889:U:H2'	1:2:890:C:O4'	2.20	0.42
36:1:2932:U:OP1	59:N3:41:GLY:N	2.34	0.42
1:2:1230:A:H2'	1:2:1258:U:H5	1.84	0.42
60:N4:58:HIS:CG	60:N4:58:HIS:O	3.02	0.42
36:1:942:U:O5'	36:1:942:U:H6	2.02	0.42
43:L6:159:LEU:HD23	43:L6:159:LEU:HA	1.75	0.42
36:1:1922:A:H2'	36:1:1923:C:O4'	2.19	0.42
36:1:1003:A:C5	36:1:1004:U:C5	3.08	0.42
49:M3:133:PRO:O	49:M3:135:ALA:N	3.32	0.42
52:M6:54:TYR:HE2	52:M6:58:LEU:HD13	2.45	0.42
36:1:2317:A:OP2	86:1:4073:OHX:N6	2.53	0.42
36:5:2267:C:H2'	36:5:2268:U:C6	2.53	0.42
36:5:2180:G:H2'	36:5:2181:C:C6	2.55	0.42
20:C8:24:GLY:C	20:C8:26:ILE:H	2.22	0.42
1:2:1456:C:H3'	1:2:1457:C:H5'	2.01	0.42
8:S6:174:LYS:O	8:S6:175:ILE:C	2.89	0.42
1:2:1232:U:O4	33:E1:97:LYS:HD3	2.19	0.42
18:C6:58:ASP:OD2	18:C6:59:LYS:HD2	5.36	0.42
1:6:37:U:O2'	1:6:770:A:N1	2.42	0.42
3:S1:72:ASP:OD1	16:C4:114:ARG:NH1	3.90	0.42
20:C8:136:GLN:H	20:C8:136:GLN:HG2	1.73	0.42
44:L7:131:GLU:HB3	44:L7:132:PRO:HD3	3.31	0.42
36:5:406:G:H1'	38:8:16:G:N2	2.35	0.42
46:L9:52:LEU:HA	46:L9:52:LEU:HD23	1.87	0.42
11:S9:85:VAL:HG12	11:S9:99:LEU:HD11	2.02	0.42
17:C5:69:GLU:HG2	17:C5:70:ASN:ND2	7.57	0.42
65:N9:22:LYS:H	65:N9:22:LYS:HG2	1.47	0.42
34:SR:169:ILE:HG13	34:SR:181:TRP:HB2	2.16	0.42
9:S7:96:ARG:CZ	9:S7:124:LYS:HB3	2.50	0.42
36:5:541:U:O4	86:5:4015:OHX:N3	2.52	0.42
36:5:420:G:OP1	36:5:420:G:OP2	2.38	0.42
41:L4:181:VAL:HG21	41:L4:224:GLY:HA3	2.02	0.42
86:6:2127:OHX:N6	86:6:2152:OHX:N4	2.67	0.42
1:2:649:U:HO2'	1:2:650:U:P	2.41	0.42
15:C3:2:GLY:O	15:C3:3:ARG:HB3	2.20	0.42
1:6:271:A:H5'	1:6:272:U:P	2.60	0.42
53:M7:105:LYS:HB2	53:M7:107:LEU:HD22	2.02	0.42
6:S4:77:ARG:HG3	6:S4:77:ARG:HH11	4.20	0.42
26:D4:34:ASN:O	26:D4:35:VAL:HB	4.32	0.42
72:O6:56:ARG:O	72:O6:60:LEU:HB2	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:N1:26:HIS:ND1	37:7:10:C:OP2	269.55	0.42
64:N8:94:ALA:HB1	64:N8:122:PRO:CD	2.50	0.42
36:1:1246:G:H2'	36:1:1247:U:O4'	2.20	0.42
36:1:2155:G:OP1	39:L2:241:ARG:HG2	2.19	0.42
36:1:847:A:H2'	36:1:848:A:C8	2.54	0.42
36:1:1522:U:H3'	61:N5:113:LEU:HD22	2.01	0.42
1:6:20:G:H5'	1:6:571:G:C5	2.55	0.42
36:1:40:A:N7	64:N8:29:PRO:O	2.53	0.42
3:S1:86:LEU:HB3	3:S1:98:THR:OG1	2.19	0.42
16:C4:89:THR:O	16:C4:128:LYS:HG3	2.20	0.42
5:S3:178:ARG:NE	5:S3:178:ARG:H	2.16	0.42
36:5:1263:A:N3	36:5:1263:A:H2'	2.35	0.42
36:1:1818:U:H3'	36:1:1819:U:H5''	2.01	0.42
36:1:1509:A:O2'	36:1:1510:G:H5'	2.20	0.42
86:1:4059:OHX:N2	86:1:4167:OHX:N1	2.68	0.42
36:1:1717:U:H2'	36:1:1718:G:C8	2.55	0.42
40:L3:102:LEU:HD23	40:L3:102:LEU:N	2.35	0.42
36:1:1165:A:H2'	36:1:1166:G:O4'	2.20	0.42
36:1:1603:A:OP1	55:M9:38:ARG:NH1	2.53	0.42
49:M3:128:ARG:NH2	71:O5:109:ILE:O	2.52	0.42
17:C5:49:MET:HB3	17:C5:50:THR:H	4.04	0.42
9:S7:81:LEU:O	9:S7:85:PHE:HB3	2.19	0.42
36:5:975:C:H2'	36:5:976:U:H6	1.84	0.42
61:N5:67:ILE:HB	61:N5:83:VAL:HG12	2.44	0.42
36:5:330:G:OP2	86:5:4051:OHX:N1	2.53	0.42
36:5:2911:A:H4'	36:5:2912:G:C8	2.55	0.42
36:5:1349:G:H2'	36:5:1350:A:C8	2.54	0.42
38:8:120:C:H2'	38:8:121:U:O4'	2.20	0.42
25:D3:75:GLN:HG3	25:D3:80:GLY:O	2.20	0.42
36:1:237:G:H2'	36:1:238:A:O4'	2.20	0.42
36:1:568:G:N7	86:1:3945:OHX:N4	2.68	0.42
21:C9:108:LEU:HB3	21:C9:114:VAL:HG22	5.92	0.42
70:O4:43:LYS:O	36:5:1653:G:H4'	186.28	0.42
57:N1:106:LEU:HA	57:N1:106:LEU:HD23	4.34	0.42
44:L7:39:GLU:O	44:L7:42:ALA:HB3	2.19	0.42
6:S4:233:LYS:HZ2	6:S4:233:LYS:HB3	5.57	0.42
34:SR:184:ASN:OD1	34:SR:185:GLN:N	4.89	0.42
36:1:709:A:P	54:M8:179:ARG:HH22	2.42	0.42
1:6:289:U:N3	1:6:290:G:C8	2.88	0.42
36:1:104:G:H2'	36:1:105:C:O4'	2.19	0.42
36:1:661:G:N7	64:N8:19:LYS:HE3	2.34	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:12:LYS:HD3	52:M6:37:ARG:NH2	2.35	0.41
44:L7:217:PRO:HA	86:5:4004:OHX:N5	262.17	0.41
34:SR:108:SER:OG	34:SR:109:ASP:N	2.52	0.41
26:D4:122:GLY:C	26:D4:124:ARG:N	2.94	0.41
53:M7:67:ILE:HG22	53:M7:80:LYS:HB3	2.02	0.41
74:O8:11:PHE:O	74:O8:14:LEU:HB2	2.32	0.41
86:2:2089:OHX:N3	86:2:2131:OHX:N4	2.67	0.41
48:M1:95:ASN:HD22	48:M1:95:ASN:N	4.67	0.41
1:6:1381:U:H1'	1:6:1516:A:N6	2.34	0.41
36:1:19:U:H4'	51:M5:138:GLN:OE1	2.20	0.41
33:E1:138:ARG:HD2	33:E1:149:LYS:HD2	6.55	0.41
39:L2:32:LEU:HD21	39:L2:37:ARG:HB3	2.01	0.41
41:L4:140:HIS:CG	41:L4:247:PHE:HB2	3.01	0.41
79:Q3:73:THR:HG22	79:Q3:76:ALA:CB	2.50	0.41
36:1:2278:C:P	77:Q1:23:ARG:HH12	2.43	0.41
35:SM:84:LYS:H	35:SM:84:LYS:HD2	1.85	0.41
68:O2:33:ARG:HG3	36:5:945:C:OP1	170.07	0.41
9:S7:46:ILE:HG12	9:S7:60:ILE:HG23	2.00	0.41
52:M6:124:LEU:HD12	52:M6:124:LEU:HA	1.82	0.41
34:SR:171:SER:OG	34:SR:179:LYS:HB2	2.20	0.41
48:M1:22:SER:HA	48:M1:66:ALA:HB1	2.64	0.41
41:L4:339:LEU:C	41:L4:339:LEU:HD12	4.74	0.41
28:D6:44:ILE:CD1	28:D6:44:ILE:H	2.27	0.41
36:5:1724:U:H4'	36:5:1725:C:OP1	2.20	0.41
74:O8:70:PRO:O	74:O8:73:LEU:HB3	2.85	0.41
66:O0:12:GLN:O	66:O0:16:LEU:HG	4.89	0.41
12:C0:49:LEU:HB3	12:C0:55:VAL:CG1	2.54	0.41
49:M3:61:PRO:C	49:M3:62:THR:HG23	2.39	0.41
19:C7:4:VAL:HA	1:6:1402:G:OP1	405.44	0.41
1:2:407:A:H5'	8:S6:94:ARG:HH21	1.84	0.41
36:1:2960:C:H2'	36:1:2961:G:C8	2.55	0.41
1:2:1505:A:H5''	1:2:1506:G:OP2	2.19	0.41
1:6:190:C:H1'	1:6:191:C:H5'	2.01	0.41
1:6:739:G:H2'	1:6:740:A:C8	2.55	0.41
67:O1:19:ARG:HB3	67:O1:35:GLU:HG2	2.02	0.41
36:1:1481:A:H2'	36:1:1858:A:N3	2.35	0.41
36:1:3295:A:H2'	36:1:3296:A:C8	2.54	0.41
62:N6:114:ASP:OD1	86:8:225:OHX:N2	21.35	0.41
7:S5:117:THR:HG22	7:S5:121:ILE:HD12	2.83	0.41
1:2:1480:G:H4'	21:C9:11:ALA:HB1	2.02	0.41
1:6:569:C:H2'	1:6:570:A:O4'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:O5:9:LEU:HD13	71:O5:54:VAL:HA	2.01	0.41
4:S2:169:LEU:CD1	4:S2:218:ILE:HG23	2.63	0.41
36:1:2273:G:O2'	36:1:2274:U:P	2.77	0.41
36:5:817:A:H2'	36:5:920:A:C2	2.55	0.41
16:C4:132:ARG:HH11	16:C4:132:ARG:HG3	1.85	0.41
1:2:755:A:H2'	1:2:756:A:O4'	2.19	0.41
42:L5:194:LEU:O	42:L5:197:SER:HB3	2.20	0.41
16:C4:103:ARG:NH2	28:D6:52:ASP:OD1	2.52	0.41
78:Q2:35:LEU:O	78:Q2:36:PHE:CB	2.68	0.41
1:6:711:U:C2	1:6:728:U:C2	3.08	0.41
36:5:2427:U:H2'	36:5:2428:U:C6	2.54	0.41
4:S2:242:ILE:HG22	4:S2:243:TYR:CD2	2.60	0.41
71:O5:32:LYS:HG2	71:O5:44:ILE:HD11	2.01	0.41
57:N1:57:TYR:OH	57:N1:87:LYS:HD2	2.20	0.41
1:6:1153:G:H2'	1:6:1154:G:O4'	2.20	0.41
58:N2:37:LEU:HA	58:N2:37:LEU:HD13	3.92	0.41
14:C2:29:LYS:HE2	14:C2:100:TRP:CD1	2.55	0.41
51:M5:48:ALA:C	51:M5:53:TYR:HB3	2.51	0.41
1:2:1194:A:H2'	1:2:1195:C:H5'	2.01	0.41
47:M0:184:LYS:HG3	47:M0:189:GLU:CD	2.41	0.41
43:L6:91:VAL:HG23	43:L6:92:SER:O	3.32	0.41
36:5:2291:A:H2'	36:5:2292:U:O4'	2.20	0.41
41:L4:80:GLY:O	36:5:357:A:H1'	130.19	0.41
1:2:1305:U:O4'	1:2:1314:U:N3	2.52	0.41
1:6:1703:C:H2'	1:6:1704:U:H6	1.85	0.41
63:N7:115:LYS:O	63:N7:119:GLU:HB2	2.76	0.41
63:N7:122:HIS:O	63:N7:125:GLY:HA2	2.20	0.41
36:5:2213:A:H2'	36:5:2214:A:C8	2.55	0.41
1:6:358:U:O2'	1:6:360:A:H5''	2.20	0.41
3:S1:123:ALA:HB2	3:S1:165:ARG:HG2	2.11	0.41
44:L7:44:ILE:HD13	44:L7:180:SER:HB3	2.02	0.41
36:5:1483:G:C8	36:5:1485:G:C8	3.08	0.41
36:5:2985:C:H2'	36:5:2986:U:C6	2.55	0.41
68:O2:128:LEU:HD22	68:O2:128:LEU:HA	1.87	0.41
43:L6:93:VAL:HG13	43:L6:93:VAL:O	2.20	0.41
1:2:1086:A:C6	1:2:1087:A:C6	3.08	0.41
17:C5:107:ILE:HG12	17:C5:107:ILE:H	2.58	0.41
59:N3:40:LYS:HD2	59:N3:40:LYS:HA	1.83	0.41
24:D2:9:ASP:OD1	1:6:1036:A:H1'	358.79	0.41
52:M6:36:VAL:HG21	52:M6:108:ILE:HB	5.19	0.41
40:L3:2:SER:O	40:L3:3:HIS:CB	2.68	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1795:U:O4	28:D6:9:GLY:HA2	2.20	0.41
36:5:863:C:H2'	36:5:864:G:O4'	2.20	0.41
53:M7:67:ILE:HG13	53:M7:82:ARG:CZ	2.50	0.41
36:1:916:G:H5'	36:1:917:A:OP1	2.19	0.41
36:5:303:G:H5''	36:5:304:G:C5'	2.50	0.41
1:2:1234:A:O2'	33:E1:146:SER:HB3	2.20	0.41
3:S1:62:LYS:O	3:S1:88:VAL:HB	2.20	0.41
39:L2:32:LEU:CD2	39:L2:37:ARG:HB3	2.50	0.41
13:C1:99:ARG:HD3	25:D3:8:GLY:O	2.60	0.41
4:S2:106:ASP:O	4:S2:107:SER:OG	2.28	0.41
8:S6:121:LEU:HD12	8:S6:121:LEU:HA	4.61	0.41
42:L5:85:ARG:HG2	42:L5:86:TYR:CD2	4.67	0.41
42:L5:286:VAL:O	42:L5:289:LYS:N	2.53	0.41
88:5:4255:HMT:H25A	88:5:4255:HMT:H28B	1.75	0.41
64:N8:9:ARG:NH2	36:5:1431:G:N7	148.63	0.41
39:L2:21:ARG:HD3	36:5:824:C:H5''	170.63	0.41
16:C4:28:VAL:HG23	16:C4:42:VAL:O	5.44	0.41
13:C1:4:GLU:OE1	13:C1:82:ARG:NE	10.83	0.41
74:O8:66:ILE:HA	74:O8:69:LEU:HD23	2.03	0.41
31:D9:22:ARG:HD2	31:D9:36:LEU:O	2.20	0.41
36:5:2227:C:C2'	36:5:2228:A:H5''	2.49	0.41
36:1:1733:G:OP2	86:1:3916:OHX:N6	2.53	0.41
86:1:4023:OHX:N4	86:1:4061:OHX:N2	2.68	0.41
1:6:1535:U:H4'	1:6:1535:U:OP1	2.20	0.41
24:D2:28:ARG:HA	24:D2:29:PRO:HA	1.84	0.41
6:S4:151:ASP:HA	6:S4:152:PRO:HD3	2.21	0.41
36:1:3094:A:H2'	36:1:3095:U:H6	1.84	0.41
56:N0:26:ARG:HB3	57:N1:150:THR:HB	4.29	0.41
46:L9:44:THR:HG22	36:5:3186:A:H2	327.77	0.41
36:5:3227:A:C2'	36:5:3228:C:H5'	2.50	0.41
1:6:377:G:O6	86:6:2114:OHX:N4	2.53	0.41
63:N7:107:ARG:NH1	36:5:1634:G:H5''	206.18	0.41
1:2:926:A:OP1	1:2:1016:C:O2'	2.37	0.41
1:6:221:A:H2'	1:6:222:A:H5'	2.01	0.41
1:2:709:C:C4	1:2:710:U:H1'	2.55	0.41
16:C4:132:ARG:NH1	16:C4:132:ARG:HG3	2.35	0.41
1:2:730:G:H21	1:2:731:C:H5''	1.85	0.41
59:N3:86:ARG:HB2	59:N3:92:PHE:CE1	2.55	0.41
38:4:131:A:H5''	61:N5:93:TYR:CE2	2.55	0.41
10:S8:153:GLU:HB3	10:S8:156:VAL:HG23	3.26	0.41
41:L4:349:THR:O	41:L4:349:THR:OG1	2.96	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:4:PRO:HB2	9:S7:25:VAL:HG11	2.02	0.41
36:1:1680:G:C5	36:1:1681:U:C5	3.09	0.41
39:L2:134:VAL:HG23	39:L2:148:VAL:HB	2.01	0.41
34:SR:201:THR:HB	34:SR:242:SER:HA	2.03	0.41
36:1:1602:A:C6	36:1:1603:A:C6	3.09	0.41
77:Q1:11:ARG:HH11	77:Q1:11:ARG:HG2	1.85	0.41
1:2:1334:U:H2'	1:2:1335:U:C6	2.55	0.41
1:6:909:U:H2'	1:6:910:C:H6	1.85	0.41
42:L5:226:TYR:HE1	42:L5:236:LEU:HD11	6.09	0.41
15:C3:91:LEU:HD12	15:C3:125:LEU:HD12	2.60	0.41
86:2:2074:OHX:N6	86:2:2162:OHX:N2	2.68	0.41
56:N0:89:ASN:HD21	57:N1:156:TYR:N	2.19	0.41
36:5:1840:U:OP2	86:5:4041:OHX:N4	2.53	0.41
36:5:423:A:C6	36:5:424:G:C6	3.08	0.41
53:M7:101:ASN:OD1	36:5:388:G:N2	114.45	0.41
1:6:978:A:H2'	1:6:979:A:O4'	2.20	0.41
35:SM:31:SER:OG	36:5:2667:A:OP1	288.60	0.41
36:5:34:A:C6	36:5:35:A:C6	3.08	0.41
17:C5:115:TYR:CZ	1:6:1556:A:H5''	385.19	0.41
1:6:425:A:H8	1:6:425:A:H5'	1.84	0.41
36:5:32:U:H6	36:5:32:U:O5'	2.02	0.41
36:1:3251:U:H2'	36:1:3252:G:C8	2.56	0.41
1:6:755:A:H2'	1:6:756:A:C8	2.55	0.41
36:1:2761:G:C4	36:1:2795:U:C5	3.08	0.41
72:O6:78:GLY:O	36:5:273:A:H4'	146.50	0.41
11:S9:108:ARG:HH11	11:S9:110:GLN:HG2	2.08	0.41
7:S5:72:HIS:ND1	18:C6:79:TYR:OH	2.73	0.41
36:5:1171:G:C6	86:5:4004:OHX:N1	2.88	0.41
8:S6:173:PRO:HG3	1:6:66:U:H5	333.74	0.41
36:5:1947:G:H5''	36:5:1948:G:OP2	2.19	0.41
1:6:920:U:H2'	1:6:921:U:O4'	2.19	0.41
36:5:1596:C:H1'	36:5:1697:A:H1'	2.03	0.41
20:C8:122:HIS:HA	20:C8:125:ILE:HD12	2.00	0.41
3:S1:70:LEU:HD21	3:S1:79:HIS:CG	2.55	0.41
2:S0:23:HIS:CE1	2:S0:24:LEU:HD13	2.55	0.41
1:6:1541:G:C5	1:6:1542:G:C6	3.09	0.41
8:S6:30:LYS:HE3	8:S6:30:LYS:HB3	2.43	0.41
1:6:902:G:H2'	1:6:903:U:C6	2.55	0.41
5:S3:68:GLU:OE2	12:C0:67:THR:OG1	3.12	0.41
62:N6:60:ARG:NH1	36:5:200:C:OP2	87.04	0.41
41:L4:177:ASP:OD1	41:L4:180:LYS:HE3	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:219:A:HO2'	1:6:220:A:P	2.43	0.41
1:6:485:A:C6	1:6:486:G:H1'	2.55	0.41
41:L4:60:THR:HG23	36:5:364:G:OP1	128.97	0.41
56:N0:1:MET:HA	56:N0:4:PHE:CE1	5.98	0.41
36:5:3078:U:H4'	36:5:3079:U:O5'	2.20	0.41
5:S3:69:LEU:O	5:S3:72:LEU:HB2	2.20	0.41
12:C0:41:TYR:O	12:C0:45:ALA:N	3.04	0.41
1:2:1151:A:O2'	1:2:1152:A:H5'	2.20	0.41
47:M0:16:PRO:O	47:M0:18:PRO:HD3	2.20	0.41
31:D9:33:LYS:HE2	31:D9:34:TYR:CE2	4.82	0.41
51:M5:67:ARG:O	51:M5:68:ARG:HB3	4.66	0.41
27:D5:49:ARG:HD2	27:D5:53:GLU:OE1	2.76	0.41
9:S7:154:LEU:CD2	9:S7:183:PHE:HD1	2.32	0.41
3:S1:104:ASP:OD1	3:S1:214:LYS:HD3	2.19	0.41
43:L6:42:LEU:HD23	43:L6:84:VAL:HG22	2.44	0.41
1:6:1685:G:H1	1:6:1716:C:H42	1.68	0.41
36:1:2960:C:H2'	36:1:2961:G:H8	1.84	0.41
54:M8:122:ILE:HD12	54:M8:122:ILE:HA	1.79	0.41
15:C3:55:ARG:HD2	29:D7:47:PHE:CD1	2.54	0.41
19:C7:46:LEU:O	19:C7:50:ILE:HG13	2.20	0.41
51:M5:106:VAL:O	51:M5:109:ARG:N	2.51	0.41
57:N1:96:ILE:HA	57:N1:96:ILE:HD12	1.84	0.41
47:M0:149:VAL:O	47:M0:153:ARG:HB2	2.88	0.41
17:C5:80:MET:O	17:C5:116:LEU:HD12	3.03	0.41
46:L9:112:ILE:HD11	46:L9:134:ILE:HD13	2.03	0.41
65:N9:18:ARG:O	86:N9:101:OHX:N4	5.58	0.41
2:S0:9:LEU:HD23	2:S0:54:TRP:CG	2.56	0.41
21:C9:86:ARG:HG3	21:C9:90:PRO:O	3.42	0.41
71:O5:47:VAL:HA	71:O5:50:SER:HB2	2.78	0.41
36:1:3267:A:H2'	43:L6:69:PHE:CZ	2.55	0.41
50:M4:17:VAL:HG13	50:M4:36:VAL:O	2.20	0.41
86:1:4088:OHX:N6	86:1:4158:OHX:N3	2.68	0.41
17:C5:90:ILE:HD11	17:C5:112:LEU:HD21	2.01	0.41
36:1:1769:G:H5'	36:1:1770:G:P	2.59	0.41
36:5:1155:C:H2'	36:5:1156:C:C6	2.56	0.41
1:6:626:U:H2'	1:6:627:C:C6	2.55	0.41
1:6:784:C:H2'	1:6:785:U:C6	2.55	0.41
36:1:2941:A:N7	40:L3:255:TRP:CE2	2.88	0.41
19:C7:49:LYS:HA	1:6:1389:C:H4'	422.82	0.41
36:5:255:A:H2'	36:5:256:G:C8	2.54	0.41
37:7:106:U:H2'	37:7:107:C:O4'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:340:U:H2'	1:6:341:A:C8	2.56	0.41
36:5:1858:A:O2'	36:5:1859:A:P	2.78	0.41
41:L4:309:ARG:NH2	41:L4:312:VAL:HB	2.35	0.41
52:M6:55:HIS:HA	52:M6:58:LEU:HB2	2.02	0.41
55:M9:175:GLN:O	55:M9:179:GLU:N	2.49	0.41
36:1:1763:U:H5'	36:1:1764:U:OP2	2.19	0.41
39:L2:183:GLY:O	39:L2:186:PHE:HB3	2.20	0.41
10:S8:65:PHE:HA	10:S8:181:GLY:O	2.45	0.41
36:1:1506:A:H1'	36:1:1848:G:O6	2.20	0.41
1:2:1128:C:H2'	1:2:1129:U:O4'	2.19	0.41
13:C1:13:PHE:CE2	13:C1:15:LYS:HB3	2.55	0.41
1:6:1089:U:O2'	1:6:1090:C:H5'	2.19	0.41
4:S2:102:VAL:N	4:S2:114:GLY:O	2.68	0.41
5:S3:113:LEU:HA	5:S3:113:LEU:HD23	1.86	0.41
53:M7:118:GLN:HE22	38:8:12:A:H1'	139.27	0.41
36:1:3269:U:H5'	36:1:3269:U:O2	2.20	0.41
36:1:196:G:N2	36:1:198:A:H3'	2.36	0.41
36:5:2793:G:N7	86:5:3992:OHX:N1	2.68	0.41
36:5:1690:C:C4	36:5:1691:U:C4	3.09	0.41
36:1:3182:G:H2'	36:1:3183:A:O4'	2.20	0.41
40:L3:296:THR:HG21	40:L3:357:LYS:HA	3.03	0.41
7:S5:89:ILE:HD12	7:S5:90:ILE:N	2.46	0.41
36:5:3214:U:O2	36:5:3214:U:O4'	2.37	0.41
47:M0:64:ALA:HB2	36:5:2853:A:O3'	296.29	0.41
44:L7:158:LYS:HG2	44:L7:203:TRP:CH2	2.55	0.41
36:1:2206:G:N2	36:1:2207:A:C8	2.88	0.41
23:D1:9:VAL:HG22	23:D1:10:GLU:H	1.97	0.41
74:O8:17:ARG:HG2	74:O8:19:ASP:OD2	4.57	0.41
22:D0:93:LEU:HD23	22:D0:93:LEU:HA	1.86	0.41
1:2:542:A:O2'	1:2:543:C:P	2.77	0.41
16:C4:123:SER:OG	1:6:885:G:N3	285.76	0.41
3:S1:126:THR:HA	3:S1:136:ARG:HA	2.66	0.41
13:C1:93:TYR:O	13:C1:95:PRO:HD3	2.52	0.41
66:O0:40:LYS:HD2	66:O0:40:LYS:N	2.54	0.41
3:S1:48:VAL:CG1	3:S1:61:LEU:HD21	2.43	0.41
42:L5:114:GLY:C	42:L5:116:ASP:N	2.74	0.41
46:L9:12:VAL:CG1	46:L9:16:VAL:HG22	2.95	0.41
36:1:1940:G:H2'	36:1:1941:C:O4'	2.20	0.41
51:M5:38:ARG:HD3	51:M5:39:ALA:H	1.84	0.41
30:D8:44:VAL:HG21	30:D8:48:VAL:CG2	3.40	0.41
36:1:200:C:P	62:N6:60:ARG:NH1	2.94	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:836:U:H2'	1:6:837:G:C8	2.54	0.41
41:L4:22:LEU:HD23	41:L4:22:LEU:HA	2.38	0.41
1:2:549:G:OP2	86:2:2025:OHX:N2	2.53	0.41
86:3:218:OHX:N1	86:3:224:OHX:N5	2.69	0.41
2:S0:39:ASN:HD22	19:C7:105:GLN:HG2	6.29	0.41
46:L9:137:SER:HB3	46:L9:143:GLU:HB3	2.02	0.41
4:S2:53:ILE:HD12	4:S2:53:ILE:H	4.41	0.41
51:M5:172:ARG:HH22	36:5:63:A:P	101.15	0.41
36:1:2111:G:H4'	36:1:2112:U:OP2	2.20	0.41
28:D6:12:LYS:HB3	28:D6:13:LYS:H	4.48	0.41
28:D6:18:VAL:HG11	28:D6:33:ASP:HB3	2.02	0.41
1:2:197:A:H2'	1:2:198:A:C8	2.55	0.41
36:5:1724:U:O2	36:5:1725:C:C2	2.74	0.41
36:1:2947:G:N3	40:L3:250:ALA:HB1	2.35	0.41
36:5:2799:A:H5''	36:5:2800:G:O5'	2.20	0.41
13:C1:21:ASN:ND2	13:C1:31:THR:HA	2.65	0.41
1:2:774:A:H2'	1:2:775:G:O4'	2.20	0.41
39:L2:68:LYS:HG3	39:L2:69:TYR:N	3.25	0.41
1:2:1547:A:H5'	20:C8:112:ASP:OD2	2.20	0.41
36:1:118:U:C5	36:1:119:U:C4	3.08	0.41
1:6:647:G:O5'	1:6:647:G:H8	2.04	0.41
57:N1:40:VAL:CG2	57:N1:96:ILE:HG13	2.50	0.41
24:D2:55:ASP:O	24:D2:57:ARG:N	2.78	0.41
39:L2:101:VAL:HA	39:L2:165:VAL:HA	2.48	0.41
42:L5:54:ARG:CZ	42:L5:149:GLY:HA3	2.50	0.41
1:2:720:G:H2'	1:2:720:G:N3	2.35	0.41
14:C2:131:ASP:HB2	14:C2:132:GLU:CD	2.41	0.41
36:1:613:G:C6	36:1:614:C:C4	3.08	0.41
22:D0:72:ASN:HD22	22:D0:73:GLY:H	3.24	0.41
65:N9:14:ARG:NH2	65:N9:18:ARG:HD2	2.35	0.41
44:L7:83:LEU:HD21	44:L7:116:PHE:HD1	1.84	0.41
36:5:135:C:H4'	36:5:136:G:OP2	2.18	0.41
4:S2:156:THR:HG21	4:S2:224:PHE:CD1	3.21	0.41
79:Q3:45:LYS:HE3	79:Q3:45:LYS:HB2	1.73	0.41
3:S1:66:VAL:HG22	16:C4:34:SER:HA	2.03	0.41
42:L5:163:LEU:HD11	42:L5:175:HIS:CG	2.55	0.41
40:L3:108:GLU:O	40:L3:134:SER:OG	2.38	0.41
21:C9:61:VAL:HG21	21:C9:104:VAL:HG11	2.02	0.41
36:1:1146:C:H4'	36:1:1331:U:C4	2.55	0.41
69:O3:73:ARG:NH1	36:5:1166:G:H5''	243.64	0.41
1:2:132:U:O2'	1:2:133:U:P	2.78	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1347:U:C2	1:2:1517:U:C5	3.08	0.41
56:N0:19:VAL:HG12	56:N0:19:VAL:O	2.42	0.41
52:M6:83:ALA:CB	36:5:1313:G:H5'	258.78	0.41
36:5:1270:A:H2'	36:5:1271:A:C8	2.55	0.41
59:N3:45:ARG:O	59:N3:46:LEU:C	2.58	0.41
59:N3:46:LEU:O	59:N3:47:ASN:HB2	2.19	0.41
36:1:2505:U:H2'	36:1:2506:U:C6	2.55	0.41
1:6:882:U:H2'	1:6:883:C:C6	2.55	0.41
42:L5:46:THR:HG21	36:5:1078:U:H4'	237.81	0.41
36:1:965:A:H2	64:N8:43:ILE:HD12	1.86	0.41
5:S3:99:VAL:HG13	5:S3:173:ARG:NH2	2.62	0.41
38:8:100:U:OP2	86:8:219:OHX:N2	2.53	0.41
36:1:3385:U:H2'	36:1:3386:G:H8	1.84	0.41
64:N8:2:PRO:HG2	64:N8:5:PHE:CD2	2.55	0.41
1:2:315:A:C2	1:2:353:A:C5	3.07	0.41
86:2:2082:OHX:N3	86:2:2084:OHX:N1	2.68	0.41
36:5:2775:U:H2'	36:5:2776:C:H6	1.85	0.41
42:L5:191:ASP:HA	42:L5:192:PRO:HD3	2.35	0.41
39:L2:19:HIS:CD2	39:L2:19:HIS:N	2.99	0.41
36:5:1032:C:H5'	36:5:1033:U:OP2	2.21	0.41
43:L6:108:LYS:O	43:L6:109:GLU:HG2	2.21	0.41
5:S3:224:ASP:OD1	34:SR:228:LYS:HD2	2.60	0.41
1:6:1308:G:C2	1:6:1309:C:C2	3.08	0.41
55:M9:168:ALA:HB1	55:M9:172:ARG:NH1	2.35	0.41
52:M6:108:ILE:HG12	52:M6:108:ILE:O	4.73	0.41
52:M6:12:LYS:HG2	52:M6:40:GLU:CB	4.98	0.41
1:2:1565:C:OP1	20:C8:41:ARG:HG3	2.20	0.41
47:M0:66:GLU:OE2	47:M0:69:ARG:NH2	2.54	0.41
26:D4:124:ARG:O	26:D4:127:LYS:HG3	2.20	0.41
26:D4:131:ARG:HA	26:D4:131:ARG:HD2	2.44	0.41
26:D4:127:LYS:O	26:D4:131:ARG:HG2	2.20	0.41
74:O8:12:LEU:HA	74:O8:12:LEU:HD12	4.15	0.41
8:S6:174:LYS:HG3	1:6:79:C:H1'	342.55	0.41
1:2:512:A:H2'	1:2:513:U:C6	2.55	0.41
11:S9:162:SER:HA	11:S9:163:PRO:HD2	2.50	0.41
5:S3:161:GLY:O	5:S3:164:VAL:HB	2.20	0.41
28:D6:59:TYR:HA	28:D6:60:PRO:HD3	2.44	0.41
1:6:1698:G:H1'	1:6:1699:G:OP1	2.20	0.41
36:1:1027:A:C2	36:1:1029:G:H1'	2.55	0.41
41:L4:302:ALA:HB2	54:M8:39:ARG:CZ	2.50	0.41
1:6:1179:G:H2'	1:6:1180:C:O4'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2278:C:OP1	86:5:4091:OHX:N6	2.53	0.41
67:O1:10:ARG:NE	36:5:3386:G:H5'	156.58	0.41
7:S5:57:SER:HB3	30:D8:53:ILE:HB	2.03	0.41
41:L4:49:ALA:HA	41:L4:109:TRP:CZ2	2.62	0.41
48:M1:65:ILE:HD13	48:M1:65:ILE:HG21	1.86	0.41
36:5:550:A:H2'	36:5:551:A:C8	2.55	0.41
42:L5:61:ILE:HG12	42:L5:79:TYR:CE1	2.55	0.41
2:S0:27:ARG:NE	2:S0:44:GLY:O	3.55	0.41
1:2:866:G:H5''	15:C3:3:ARG:H	1.85	0.41
41:L4:89:ALA:O	41:L4:91:GLY:N	2.48	0.41
12:C0:12:HIS:CE1	12:C0:49:LEU:HD21	2.56	0.41
43:L6:28:GLN:OE1	43:L6:57:HIS:NE2	2.94	0.41
43:L6:42:LEU:O	43:L6:49:GLY:N	2.41	0.41
54:M8:40:THR:C	54:M8:42:ALA:N	2.74	0.41
58:N2:47:VAL:C	58:N2:49:ASN:H	2.70	0.41
36:1:1539:A:H2'	36:1:1540:U:H5'	2.02	0.41
45:L8:136:LEU:HD13	51:M5:3:ALA:CB	2.51	0.41
27:D5:54:VAL:HG22	27:D5:57:TYR:CE1	2.55	0.41
36:5:3189:G:H2'	36:5:3190:C:O4'	2.19	0.41
20:C8:112:ASP:OD2	1:6:1547:A:H5'	358.58	0.41
3:S1:146:GLN:HB3	3:S1:149:GLN:HE22	1.86	0.41
38:8:104:A:H3'	38:8:105:A:H5''	2.02	0.41
20:C8:11:PHE:CG	27:D5:41:ILE:HD13	4.89	0.41
62:N6:71:SER:HB3	62:N6:83:ASP:H	2.32	0.41
47:M0:153:ARG:HG3	47:M0:165:ILE:CD1	6.20	0.41
6:S4:192:ILE:HG22	6:S4:193:GLY:N	3.00	0.41
6:S4:4:GLY:HA3	1:6:93:A:HO2'	329.63	0.41
17:C5:116:LEU:HD23	17:C5:116:LEU:HA	1.82	0.41
36:5:2533:G:O6	86:5:4043:OHX:N1	2.53	0.41
17:C5:98:ASN:OD1	17:C5:101:ALA:N	4.53	0.41
7:S5:33:VAL:HG13	7:S5:37:GLN:NE2	2.36	0.41
36:1:2556:C:H5'	63:N7:136:PHE:C	2.41	0.41
63:N7:53:VAL:HG21	63:N7:62:VAL:HG13	2.02	0.41
46:L9:86:TYR:CE1	46:L9:151:VAL:HG13	2.55	0.41
18:C6:24:ALA:HA	18:C6:63:ILE:HA	2.03	0.41
36:1:2255:A:OP2	36:1:2261:G:N2	2.50	0.41
36:5:2768:U:H2'	36:5:2769:A:H8	1.85	0.41
69:O3:6:ARG:NH1	69:O3:8:TYR:O	2.54	0.41
56:N0:135:VAL:O	56:N0:141:LYS:HE3	2.20	0.41
8:S6:12:SER:OG	8:S6:127:THR:O	2.39	0.41
36:1:2419:A:H2'	36:1:2420:C:H6	1.86	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:M7:24:VAL:CG1	53:M7:86:LYS:HG2	2.51	0.41
36:1:1716:U:HO2'	36:1:1717:U:P	2.42	0.41
17:C5:99:GLY:O	1:6:1211:A:H1'	375.87	0.41
36:5:230:U:H2'	36:5:231:G:O4'	2.20	0.41
36:5:2711:C:H4'	86:5:4238:OHX:N1	2.35	0.41
36:5:381:U:O4	86:5:4128:OHX:N5	2.53	0.41
36:1:2401:A:O2'	36:1:2402:A:H5'	2.20	0.41
1:2:1230:A:H2'	1:2:1258:U:C5	2.55	0.41
63:N7:70:PRO:HG3	63:N7:115:LYS:HB2	2.02	0.41
36:1:1482:A:H4'	36:1:1483:G:OP2	2.20	0.41
1:2:383:G:N7	86:2:2130:OHX:N4	2.68	0.41
1:2:1105:C:H2'	1:2:1106:U:C6	2.55	0.41
1:6:176:C:OP1	86:6:2098:OHX:N6	2.53	0.41
25:D3:79:ASN:HB3	25:D3:81:LYS:H	1.84	0.41
13:C1:27:THR:HG22	13:C1:28:SER:H	4.49	0.41
46:L9:34:LEU:HD11	46:L9:149:ASN:O	2.21	0.41
48:M1:108:GLU:HB3	48:M1:122:ILE:CG2	3.73	0.41
23:D1:28:ASP:O	23:D1:31:SER:OG	2.88	0.41
36:5:2520:A:H2'	36:5:2521:U:C6	2.55	0.41
38:4:152:G:H2'	38:4:153:U:O4'	2.21	0.41
58:N2:84:LEU:O	58:N2:89:LEU:N	2.49	0.41
1:6:1122:G:O6	86:6:2164:OHX:N6	2.53	0.41
59:N3:95:PHE:CE1	60:N4:22:VAL:HG11	2.56	0.41
69:O3:59:VAL:C	69:O3:61:GLY:H	2.24	0.41
7:S5:39:GLU:HB3	7:S5:40:ILE:H	1.81	0.41
7:S5:43:PHE:CE2	7:S5:90:ILE:HG21	2.55	0.41
11:S9:129:ILE:HG12	11:S9:134:ILE:HD12	2.02	0.41
11:S9:151:ASP:OD1	11:S9:151:ASP:N	2.56	0.41
18:C6:47:LYS:HA	18:C6:47:LYS:HD2	2.00	0.41
7:S5:73:THR:HG23	18:C6:114:ARG:HB3	5.27	0.41
25:D3:116:ASP:O	25:D3:118:PRO:HD3	2.20	0.41
26:D4:57:VAL:HG22	26:D4:60:PHE:HE2	1.86	0.41
53:M7:69:ARG:CZ	36:5:2389:C:H1'	189.73	0.41
8:S6:155:ASP:OD2	8:S6:155:ASP:N	3.13	0.41
43:L6:31:ARG:HH12	69:O3:107:ILE:HG22	5.72	0.41
12:C0:2:LEU:HB3	12:C0:3:MET:H	4.36	0.41
36:5:1876:U:C6	36:5:1876:U:C5'	3.04	0.41
3:S1:184:LEU:HD13	3:S1:188:LEU:HG	2.01	0.41
1:6:234:G:H2'	1:6:235:G:O4'	2.19	0.41
42:L5:95:TRP:CZ2	42:L5:161:GLY:HA2	2.56	0.41
17:C5:34:VAL:HG21	17:C5:45:PHE:CB	2.50	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1233:G:H22	36:1:1255:C:N4	2.17	0.41
39:L2:112:ILE:HG12	79:Q3:79:VAL:HG13	4.77	0.41
52:M6:62:THR:HG22	52:M6:65:ASN:N	2.71	0.41
52:M6:121:PRO:HD2	56:N0:162:THR:O	2.21	0.41
1:6:103:A:H4'	1:6:104:A:O5'	2.19	0.41
9:S7:124:LYS:HD3	9:S7:124:LYS:HA	1.72	0.41
56:N0:1:MET:HE3	56:N0:2:ALA:HB3	2.03	0.41
5:S3:50:ILE:HB	5:S3:88:ALA:HA	2.02	0.41
36:1:1495:U:C5	36:1:1835:A:N1	2.80	0.41
53:M7:129:THR:HG23	53:M7:139:TYR:CB	2.49	0.41
1:2:1487:A:H2'	1:2:1488:G:C8	2.56	0.41
1:2:237:C:C5'	1:2:238:U:H5'	2.48	0.41
44:L7:139:PRO:HA	44:L7:237:ASN:OD1	2.19	0.41
55:M9:125:LYS:NZ	36:5:1720:U:O4	241.53	0.41
41:L4:91:GLY:HA3	41:L4:93:MET:CE	2.51	0.41
1:6:825:U:O2'	1:6:826:U:C6	2.73	0.41
36:1:872:U:H6	36:1:872:U:O5'	2.04	0.41
45:L8:91:PHE:CE1	45:L8:185:ARG:HD2	2.56	0.41
36:5:2960:C:H2'	36:5:2961:G:H8	1.83	0.41
36:5:2568:C:C4	36:5:2574:G:O6	2.73	0.41
68:O2:85:LEU:HD22	68:O2:92:TYR:HB2	2.24	0.41
43:L6:170:LYS:HA	43:L6:171:PRO:HD2	2.22	0.41
1:2:830:U:O2	1:2:830:U:H2'	2.19	0.41
28:D6:24:VAL:HG21	28:D6:71:LEU:CD1	2.51	0.41
49:M3:157:ARG:NH1	64:N8:146:GLU:OE2	2.54	0.41
58:N2:79:LEU:O	58:N2:82:LYS:HB3	2.21	0.41
63:N7:17:ARG:HB2	36:5:1635:G:O6	203.16	0.41
52:M6:138:LEU:HA	52:M6:138:LEU:HD12	1.83	0.41
4:S2:111:VAL:O	4:S2:136:VAL:HA	2.20	0.41
1:2:1762:A:C1'	1:2:1783:C:H5'	2.50	0.41
45:L8:25:PRO:HG2	45:L8:27:THR:HB	2.02	0.41
40:L3:360:ASP:OD1	40:L3:361:THR:N	2.53	0.41
1:2:531:C:OP2	86:2:2069:OHX:N4	2.54	0.41
33:E1:83:LYS:O	33:E1:84:VAL:HG12	2.19	0.41
34:SR:162:ALA:O	34:SR:163:ASP:HB3	2.20	0.41
36:5:83:U:H2'	36:5:84:U:O4'	2.20	0.41
1:6:1092:A:C8	1:6:1094:G:C8	3.09	0.41
45:L8:29:SER:O	45:L8:31:PRO:HD3	3.80	0.41
63:N7:124:ALA:O	63:N7:126:LYS:N	2.68	0.41
36:5:599:C:H2'	36:5:600:G:O4'	2.20	0.41
44:L7:239:LEU:HD22	44:L7:243:MET:SD	2.61	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:E1:98:VAL:HG13	33:E1:99:LYS:N	2.34	0.41
48:M1:60:ARG:O	48:M1:63:GLU:HB2	2.20	0.41
26:D4:87:PRO:HG2	26:D4:90:ARG:CZ	2.50	0.41
75:O9:10:LYS:HD2	36:5:1833:G:H5''	106.76	0.41
13:C1:16:GLN:HB3	13:C1:19:ILE:HG13	2.01	0.41
36:1:735:A:H2'	36:1:736:A:C8	2.55	0.41
86:2:2074:OHX:N3	86:2:2162:OHX:N5	2.68	0.41
1:2:1225:U:O2	1:2:1230:A:H4'	2.21	0.41
36:1:2413:A:H2'	36:1:2414:G:C8	2.55	0.41
36:5:1703:U:N3	36:5:1740:U:O2	2.53	0.41
43:L6:146:ILE:HG21	43:L6:146:ILE:HD13	3.45	0.41
1:2:333:A:H2'	1:2:334:G:C8	2.54	0.41
1:6:1570:A:C6	1:6:1571:C:C2	3.08	0.41
36:5:1952:G:H1	36:5:2094:C:H42	1.69	0.41
1:2:902:G:H8	1:2:902:G:O5'	2.03	0.41
40:L3:328:ILE:HG21	40:L3:328:ILE:HD13	1.76	0.41
26:D4:46:GLU:HG3	26:D4:46:GLU:H	1.63	0.41
1:6:1483:A:C6	1:6:1484:G:C6	3.09	0.41
37:3:101:G:H8	37:3:101:G:O5'	2.03	0.41
33:E1:94:LYS:HA	33:E1:94:LYS:HD3	1.83	0.41
63:N7:81:LEU:HA	63:N7:81:LEU:HD22	2.08	0.41
36:5:378:A:OP2	86:5:4205:OHX:N6	2.53	0.41
60:N4:63:ILE:HB	60:N4:64:THR:H	3.82	0.41
36:1:3276:G:H1	69:O3:60:ARG:HH12	1.67	0.41
7:S5:90:ILE:HD11	7:S5:130:ILE:HG13	2.02	0.41
47:M0:69:ARG:NH1	47:M0:70:ILE:HG13	2.35	0.41
10:S8:8:ARG:NH2	10:S8:28:GLU:OE1	9.77	0.41
1:2:452:A:H3'	1:2:453:U:C5	2.55	0.41
36:1:2206:G:OP2	36:1:2206:G:C8	2.73	0.41
10:S8:56:ARG:NH2	1:6:332:U:OP2	287.06	0.41
4:S2:140:ARG:HB3	4:S2:221:THR:HB	2.03	0.41
78:Q2:48:SER:O	86:Q2:502:OHX:N3	4.93	0.41
53:M7:27:LYS:HD3	53:M7:63:PHE:HB3	2.11	0.41
43:L6:43:LEU:HD21	43:L6:85:ILE:HG13	2.03	0.41
2:S0:150:ASP:OD1	2:S0:165:ARG:NH2	2.54	0.41
1:6:1542:G:N2	1:6:1569:A:OP2	2.49	0.41
3:S1:28:GLU:HB3	3:S1:94:LYS:NZ	6.23	0.41
7:S5:92:ARG:NH1	7:S5:92:ARG:HG2	3.13	0.41
2:S0:185:ARG:HB3	2:S0:186:GLY:H	3.38	0.41
42:L5:278:SER:O	42:L5:281:GLU:HB2	2.20	0.41
1:2:1558:U:O4	17:C5:122:THR:HG23	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:52:LYS:O	55:M9:53:LYS:O	2.37	0.41
52:M6:124:LEU:HD23	56:N0:168:PRO:HG3	2.29	0.41
4:S2:61:LEU:HD23	4:S2:61:LEU:HA	1.68	0.41
1:2:239:C:H2'	1:2:240:U:H6	1.86	0.41
16:C4:50:ALA:C	16:C4:52:ARG:N	2.88	0.41
12:C0:49:LEU:O	12:C0:54:TYR:HB2	2.21	0.41
1:6:1174:C:H2'	1:6:1175:U:O4'	2.20	0.41
7:S5:123:VAL:O	27:D5:58:ARG:NH1	2.33	0.41
41:L4:125:ALA:HB1	41:L4:238:LEU:HB3	2.03	0.41
1:2:778:G:H22	26:D4:10:ARG:NH1	2.19	0.41
1:6:1766:A:H5''	86:6:2128:OHX:N3	2.35	0.41
17:C5:81:ARG:NH1	17:C5:97:TYR:O	2.44	0.41
5:S3:175:VAL:CG1	5:S3:182:LEU:HB2	2.50	0.41
36:1:277:G:H2'	36:1:278:U:C6	2.55	0.41
7:S5:35:GLN:C	7:S5:37:GLN:H	2.48	0.41
36:1:2970:C:O2'	36:1:2971:A:H2	2.03	0.41
6:S4:29:PRO:O	1:6:449:C:OP1	363.41	0.41
50:M4:72:LEU:HD22	50:M4:73:PRO:CD	2.51	0.41
36:1:2261:G:O2'	36:1:2263:C:N4	2.53	0.41
1:2:858:G:O3'	9:S7:113:PRO:HB3	2.21	0.41
44:L7:98:LYS:HB3	44:L7:99:PRO:HD3	2.02	0.41
43:L6:60:ASP:O	43:L6:61:ASN:HB2	2.21	0.41
9:S7:24:PHE:HE1	9:S7:77:LEU:HD11	2.44	0.41
70:O4:37:LYS:NZ	36:5:1591:G:OP1	160.60	0.41
71:O5:74:LYS:HD3	71:O5:75:TYR:CE2	4.40	0.41
1:2:872:G:H2'	1:2:873:U:O4'	2.20	0.41
36:1:2882:U:H2'	36:1:2883:U:C6	2.56	0.41
12:C0:10:LYS:NZ	12:C0:36:ASP:HB3	3.43	0.41
1:2:526:A:C6	1:2:527:A:C5	3.08	0.41
76:Q0:93:LYS:HG3	76:Q0:102:ARG:HD3	2.03	0.41
1:6:145:A:HO2'	1:6:146:U:P	2.43	0.41
1:2:560:U:H2'	1:2:561:G:C8	2.55	0.41
36:5:641:C:N4	36:5:645:A:C8	2.89	0.41
36:5:2765:C:H2'	36:5:2766:U:C6	2.56	0.41
1:2:131:C:OP1	86:2:2072:OHX:N1	2.54	0.41
9:S7:42:GLN:HG2	9:S7:43:PHE:N	2.35	0.41
1:6:1672:G:H2'	1:6:1673:G:C8	2.55	0.41
36:1:1286:A:O2'	36:1:1287:A:OP2	2.27	0.41
34:SR:29:GLN:HG3	34:SR:32:LEU:CB	2.51	0.41
39:L2:29:LEU:O	39:L2:123:ARG:NH2	2.48	0.41
1:2:1425:A:C6	1:2:1426:C:N4	2.88	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2862:U:H2'	36:1:2863:G:O4'	2.20	0.41
36:5:1701:C:H2'	36:5:1702:U:O4'	2.21	0.41
15:C3:37:ILE:HG21	15:C3:74:ILE:HD12	4.63	0.41
62:N6:54:ASP:OD1	62:N6:109:LEU:HA	2.21	0.41
51:M5:97:SER:O	51:M5:100:ALA:N	2.79	0.41
36:5:3219:G:H4'	36:5:3220:G:H5'	2.03	0.41
36:1:129:U:H2'	36:1:130:A:C8	2.56	0.41
20:C8:25:ASN:O	27:D5:40:VAL:HG11	2.21	0.41
72:O6:5:THR:OG1	72:O6:7:ILE:HG12	2.20	0.41
36:1:1390:A:N6	36:1:1418:A:O2'	2.53	0.41
1:6:841:U:H2'	1:6:842:C:O4'	2.20	0.41
36:5:1382:G:O6	86:5:3939:OHX:N6	2.53	0.41
1:6:1662:G:H1	1:6:1739:C:H42	1.69	0.41
46:L9:172:ILE:O	46:L9:172:ILE:HG12	2.21	0.41
69:O3:106:ASN:O	69:O3:106:ASN:ND2	2.56	0.41
45:L8:184:ALA:O	45:L8:188:THR:HG23	2.67	0.41
36:5:881:C:H1'	36:5:1850:A:C8	2.56	0.41
1:2:1637:C:OP2	86:2:2112:OHX:N3	2.54	0.41
86:5:4035:OHX:N1	86:5:4083:OHX:N2	2.67	0.41
36:1:2227:C:P	78:Q2:32:LYS:HZ3	2.44	0.41
7:S5:90:ILE:HA	7:S5:90:ILE:HD13	2.07	0.41
86:5:4192:OHX:N5	86:5:4194:OHX:N6	2.69	0.41
44:L7:156:ILE:N	44:L7:158:LYS:O	2.52	0.41
18:C6:82:ARG:CZ	18:C6:116:LEU:HD11	2.51	0.41
7:S5:73:THR:N	7:S5:91:GLU:OE2	3.05	0.41
22:D0:104:THR:HG22	22:D0:116:VAL:HG21	2.02	0.41
22:D0:58:LEU:HD23	1:6:1516:A:C8	444.82	0.41
3:S1:35:PRO:HB3	3:S1:231:LEU:HD11	4.06	0.41
51:M5:7:LEU:HD22	51:M5:46:ASP:HB3	2.02	0.41
46:L9:54:LYS:HE3	46:L9:54:LYS:HB3	1.90	0.41
11:S9:93:LEU:O	11:S9:96:VAL:HG22	2.20	0.41
66:O0:42:ILE:O	66:O0:42:ILE:HG13	2.71	0.41
36:1:3073:A:H2'	36:1:3074:G:O4'	2.20	0.41
1:2:1291:G:O5'	1:2:1291:G:H8	2.03	0.41
36:1:1235:U:C4'	36:1:1236:G:H5'	2.50	0.41
39:L2:201:GLY:O	39:L2:204:MET:N	3.26	0.41
7:S5:56:ALA:O	7:S5:58:LEU:N	3.97	0.41
41:L4:107:ARG:NH2	36:5:1429:G:OP2	125.87	0.41
1:6:794:U:H4'	1:6:795:U:OP2	2.21	0.41
4:S2:83:ILE:HA	4:S2:99:LYS:O	2.72	0.41
41:L4:339:LEU:HA	41:L4:342:LYS:HB2	2.97	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:63:SER:HG	54:M8:65:SER:HG	2.65	0.41
20:C8:54:LEU:C	20:C8:56:LYS:H	2.54	0.41
36:1:3328:G:C2'	36:1:3329:U:H5'	2.51	0.41
36:1:1310:G:N7	86:1:4031:OHX:N5	2.68	0.41
1:6:329:G:H2'	1:6:330:G:C8	2.53	0.41
41:L4:197:ARG:HD2	41:L4:197:ARG:HH11	1.68	0.41
51:M5:11:GLN:O	51:M5:14:LYS:HE3	2.48	0.41
36:1:2767:U:O4	86:1:4041:OHX:N6	2.54	0.41
2:S0:144:ILE:HG23	2:S0:158:VAL:HG22	3.58	0.41
42:L5:261:THR:OG1	42:L5:264:GLN:HG3	2.88	0.41
58:N2:50:LEU:O	58:N2:52:ASN:N	2.53	0.41
15:C3:22:ALA:HB1	15:C3:23:PRO:CA	2.51	0.41
42:L5:22:ARG:HG2	42:L5:28:THR:HB	2.03	0.41
39:L2:65:ASP:HA	39:L2:66:PRO:HD3	1.92	0.41
45:L8:116:VAL:HG21	45:L8:123:GLN:HA	2.02	0.41
36:5:1439:U:H2'	36:5:1440:G:O4'	2.21	0.41
36:5:1817:G:O2'	36:5:1818:U:OP2	2.32	0.41
5:S3:79:TYR:CD1	5:S3:84:ILE:HB	2.99	0.41
36:1:3151:U:H4'	36:1:3294:A:H1'	2.02	0.41
57:N1:26:HIS:CD2	57:N1:26:HIS:N	4.15	0.41
1:6:846:G:H2'	1:6:847:A:C8	2.55	0.41
7:S5:29:ILE:HA	7:S5:30:PRO:HD3	1.94	0.41
1:2:616:G:C2	1:2:622:A:N7	2.88	0.41
34:SR:23:LEU:HB2	34:SR:293:ALA:HB2	2.57	0.41
21:C9:63:ARG:HG3	21:C9:67:MET:HE1	2.02	0.41
10:S8:48:THR:HG21	10:S8:54:LYS:HG3	3.27	0.41
86:5:4206:OHX:N2	86:8:226:OHX:N5	2.69	0.41
36:1:146:U:H5''	36:1:148:G:O4'	2.20	0.41
5:S3:178:ARG:H	5:S3:178:ARG:HG2	2.02	0.41
47:M0:142:ASP:OD2	47:M0:178:ARG:NH2	3.07	0.41
13:C1:22:ASN:HA	13:C1:23:PRO:HD3	1.85	0.41
36:1:2553:U:O2	36:1:2553:U:H2'	2.21	0.41
5:S3:8:LYS:HG2	22:D0:63:LEU:HD21	2.80	0.41
36:1:3227:A:C2'	36:1:3228:C:H5'	2.50	0.41
36:1:1528:G:H2'	36:1:1529:A:O4'	2.21	0.41
1:2:85:A:N6	1:2:86:A:C6	2.89	0.41
40:L3:255:TRP:CD1	36:5:2395:G:H5''	216.17	0.41
46:L9:88:TYR:CZ	46:L9:184:LYS:HG2	2.56	0.41
1:6:445:A:C2	1:6:446:A:C8	3.09	0.41
41:L4:286:VAL:HA	41:L4:289:ILE:HG13	2.02	0.41
37:7:48:U:O2	37:7:50:U:C4	2.73	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1194:A:OP2	22:D0:75:GLY:N	2.54	0.41
36:5:2985:C:H2'	36:5:2986:U:O4'	2.21	0.41
5:S3:108:LYS:HG2	5:S3:113:LEU:HD12	2.02	0.41
1:6:1662:G:O2'	1:6:1663:G:H5'	2.21	0.41
36:1:126:U:H2'	36:1:127:G:O4'	2.20	0.41
36:1:1892:G:N7	86:1:4082:OHX:N1	2.69	0.41
36:5:2743:A:H2'	36:5:2744:U:O4'	2.21	0.41
40:L3:39:LYS:HB2	40:L3:40:PRO:HD2	3.48	0.41
1:6:156:A:H2'	1:6:157:A:O4'	2.20	0.41
36:1:2352:A:N6	36:1:2353:G:C6	2.88	0.41
36:1:2179:C:C4	39:L2:131:GLY:HA3	2.55	0.41
64:N8:103:ASP:HB3	64:N8:106:ALA:HB3	2.02	0.41
36:1:883:A:O4'	53:M7:133:HIS:HA	2.20	0.41
54:M8:94:PHE:CZ	64:N8:119:PRO:HD3	2.88	0.41
67:O1:36:ILE:HD12	67:O1:59:ILE:HD11	2.02	0.41
1:2:892:A:H2'	1:2:893:U:C6	2.56	0.41
45:L8:70:LYS:HE3	45:L8:70:LYS:HB3	1.62	0.41
67:O1:34:LYS:HZ3	67:O1:34:LYS:HB2	5.16	0.41
6:S4:208:VAL:HG21	6:S4:225:VAL:HG21	2.42	0.41
37:3:12:U:O2	37:3:110:G:O2'	2.25	0.41
36:1:999:G:N3	36:1:1002:A:N6	2.69	0.41
1:6:1674:C:H2'	1:6:1675:C:C6	2.56	0.41
36:1:748:U:H2'	36:1:749:C:C6	2.56	0.41
5:S3:136:VAL:HG22	5:S3:186:VAL:HG13	2.03	0.41
36:1:1266:G:N2	36:1:1276:U:H1'	2.35	0.41
40:L3:35:ASP:OD2	40:L3:37:ARG:HD2	2.81	0.41
56:N0:166:LYS:O	56:N0:167:ARG:CB	2.68	0.41
36:5:1639:C:O2'	36:5:1640:G:H5'	2.20	0.41
7:S5:90:ILE:HG23	7:S5:90:ILE:HD12	2.11	0.41
36:1:3215:A:N6	50:M4:122:VAL:HG13	2.36	0.41
4:S2:151:PRO:HD3	23:D1:9:VAL:HG21	2.37	0.41
28:D6:87:ARG:HB2	28:D6:92:ARG:HG2	2.87	0.41
40:L3:232:ARG:HG2	40:L3:233:TRP:CD1	2.55	0.41
36:1:2394:G:H5'	40:L3:252:ILE:HG22	2.02	0.41
74:O8:11:PHE:CG	74:O8:54:LEU:HD22	2.56	0.41
1:2:66:U:O4	8:S6:158:ILE:HG21	2.21	0.41
33:E1:130:VAL:HG11	33:E1:143:LYS:HG2	2.02	0.41
44:L7:144:ILE:O	44:L7:148:VAL:HG23	2.20	0.41
3:S1:71:ALA:HB3	16:C4:114:ARG:NH1	2.58	0.41
25:D3:142:LYS:HA	25:D3:143:PRO:HD3	1.82	0.41
25:D3:97:ASP:HB2	25:D3:100:ASP:OD2	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:180:THR:HG22	3:S1:181:LEU:N	2.34	0.41
45:L8:82:LEU:HD12	45:L8:83:ASP:H	1.86	0.41
40:L3:286:GLY:HA3	40:L3:321:PHE:CE2	2.56	0.41
3:S1:91:VAL:HG23	3:S1:96:LEU:HB3	2.03	0.41
42:L5:107:ARG:HH12	42:L5:120:LYS:HA	1.85	0.41
40:L3:56:ILE:HG22	40:L3:74:GLU:HB2	2.60	0.41
1:6:1553:G:H2'	1:6:1555:A:OP2	2.20	0.41
1:6:901:G:N1	1:6:902:G:C6	2.89	0.41
36:1:1596:C:H2'	36:1:1597:C:H6	1.80	0.41
7:S5:185:ARG:HD3	1:6:1471:A:P	336.64	0.41
1:2:1584:G:C8	18:C6:122:ARG:HD2	2.56	0.41
7:S5:163:SER:HB3	30:D8:46:GLY:HA3	2.17	0.41
17:C5:128:HIS:HE1	1:6:1180:C:O2	341.12	0.41
17:C5:126:VAL:HG13	35:SM:71:ASN:HD21	1.86	0.41
17:C5:127:ARG:HA	17:C5:127:ARG:HD2	4.42	0.41
72:O6:74:LYS:HA	72:O6:83:ALA:HB2	2.15	0.41
36:1:1815:U:O2'	36:1:1816:A:P	2.79	0.41
56:N0:12:ARG:O	56:N0:13:ARG:C	2.58	0.41
56:N0:50:LYS:HD3	56:N0:50:LYS:HA	1.87	0.41
1:6:831:U:H6	1:6:831:U:OP2	2.03	0.41
41:L4:22:LEU:HA	41:L4:23:PRO:HD3	1.92	0.41
9:S7:115:SER:O	9:S7:116:ARG:HB2	2.30	0.41
1:6:486:G:N2	1:6:501:U:H3	2.12	0.41
9:S7:71:HIS:HD2	9:S7:74:GLN:OE1	6.38	0.41
2:S0:88:LYS:HD2	2:S0:88:LYS:N	2.36	0.41
1:6:1133:A:H2'	1:6:1134:C:O4'	2.21	0.41
37:3:61:G:H2'	37:3:62:U:H6	1.86	0.41
42:L5:296:GLN:O	42:L5:297:GLN:HB3	3.71	0.41
23:D1:71:ARG:HG3	23:D1:83:TRP:CZ2	2.81	0.41
24:D2:26:LEU:HD13	24:D2:27:ILE:H	5.84	0.41
62:N6:3:LYS:HD2	62:N6:8:VAL:HG22	2.58	0.41
36:5:1555:U:H5'	36:5:1556:C:OP2	2.21	0.41
36:5:1556:C:H5"	36:5:2169:G:N2	2.35	0.41
36:5:2169:G:O6	86:5:3957:OHX:N5	2.53	0.41
16:C4:81:VAL:HG22	16:C4:115:ILE:CB	2.50	0.41
20:C8:99:HIS:HD2	20:C8:101:LEU:HD21	1.85	0.41
30:D8:19:THR:OG1	30:D8:27:GLN:HG3	2.20	0.41
51:M5:173:GLY:HA3	51:M5:183:THR:OG1	2.21	0.41
41:L4:52:VAL:CG1	41:L4:99:MET:HE3	2.51	0.41
54:M8:151:ARG:O	54:M8:161:LYS:O	2.39	0.41
1:2:1619:C:H2'	1:2:1620:C:C6	2.56	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:C3:52:VAL:HG23	1:6:960:U:H1'	328.68	0.41
1:2:1597:A:H2'	1:2:1598:U:C6	2.56	0.41
86:1:4023:OHX:N6	86:1:4061:OHX:N2	2.68	0.41
36:5:2762:A:H1'	36:5:2800:G:C6	2.55	0.41
19:C7:34:LEU:O	19:C7:38:ILE:HG22	2.20	0.41
15:C3:65:VAL:HG23	15:C3:66:ILE:CG2	5.57	0.41
15:C3:26:PHE:HE2	15:C3:66:ILE:HD13	1.85	0.41
1:2:1586:A:H2'	1:2:1587:A:O4'	2.20	0.41
37:3:8:G:O6	42:L5:21:ARG:NH2	2.46	0.41
6:S4:42:LEU:HA	6:S4:43:PRO:HD3	1.77	0.41
32:E0:55:ARG:NH1	1:6:557:G:OP1	417.55	0.41
6:S4:39:ARG:HD3	6:S4:39:ARG:HH11	1.76	0.41
36:5:625:G:H2'	36:5:626:U:O4'	2.20	0.41
1:2:1504:G:C6	1:2:1505:A:C6	3.08	0.41
26:D4:34:ASN:HB2	26:D4:62:THR:HG21	2.03	0.41
70:O4:98:GLN:O	70:O4:98:GLN:NE2	4.70	0.41
19:C7:54:THR:HA	19:C7:57:LEU:HD12	3.30	0.41
3:S1:116:LYS:HB3	3:S1:117:TRP:CE3	2.56	0.41
1:2:386:G:C6	1:2:387:A:C6	3.09	0.41
1:2:386:G:C6	1:2:387:A:N6	2.89	0.41
1:2:355:G:O6	86:2:2026:OHX:N6	2.54	0.41
1:2:1325:A:C2	1:2:1326:A:C5	3.09	0.41
42:L5:52:VAL:O	42:L5:62:CYS:HA	2.20	0.41
15:C3:136:PRO:HA	15:C3:137:PRO:HD2	1.88	0.41
42:L5:55:PHE:CZ	42:L5:158:ARG:HB3	5.22	0.41
17:C5:100:LYS:HG3	17:C5:101:ALA:N	3.58	0.41
36:1:304:G:H2'	36:1:304:G:N3	2.36	0.41
1:2:794:U:O2'	1:2:795:U:C2	2.74	0.41
43:L6:55:LEU:HD12	43:L6:64:LEU:HD13	2.98	0.41
44:L7:24:GLU:O	44:L7:26:VAL:N	2.40	0.41
66:O0:87:VAL:HA	36:5:1728:G:O2'	249.10	0.41
31:D9:31:ILE:HD11	1:6:1199:G:O6	404.83	0.41
2:S0:41:ARG:HD2	2:S0:42:PRO:O	2.20	0.41
35:SM:29:ASN:C	35:SM:29:ASN:OD1	2.59	0.41
46:L9:78:MET:HB2	46:L9:78:MET:HE2	1.70	0.41
2:S0:54:TRP:O	2:S0:58:VAL:HG23	2.51	0.41
36:5:1200:A:H5'	36:5:1201:C:O5'	2.21	0.41
1:2:558:U:O2'	1:2:559:C:O5'	2.37	0.41
4:S2:137:ILE:HD12	4:S2:215:PHE:CE2	5.31	0.41
12:C0:29:GLN:O	12:C0:31:LYS:N	2.50	0.41
24:D2:67:GLY:C	24:D2:69:LEU:H	2.47	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2253:G:C2	36:1:2264:U:C2	3.09	0.41
36:5:1348:U:O4	36:5:1355:A:H2'	2.21	0.41
42:L5:257:GLU:N	42:L5:257:GLU:CD	4.32	0.41
50:M4:72:LEU:HD23	50:M4:73:PRO:HD2	3.33	0.41
52:M6:15:LEU:HD23	52:M6:15:LEU:HA	1.87	0.41
36:5:359:U:H4'	36:5:817:A:N6	2.36	0.41
42:L5:119:TYR:OH	42:L5:141:PRO:HD3	2.21	0.41
36:1:2260:U:H2'	36:1:2261:G:O4'	2.20	0.41
4:S2:224:PHE:HE2	1:6:1098:U:C5	393.42	0.41
1:2:226:A:C2'	1:2:227:U:H5'	2.50	0.41
1:2:996:U:H5''	1:2:996:U:C6	2.54	0.41
36:1:1397:C:O2'	36:1:1398:U:H5'	2.21	0.41
48:M1:153:LYS:HG2	48:M1:153:LYS:O	5.00	0.41
16:C4:103:ARG:HH12	28:D6:48:ALA:HB3	3.13	0.41
10:S8:102:VAL:HG22	10:S8:167:ALA:O	2.21	0.41
36:5:2505:U:H2'	36:5:2506:U:C4	2.56	0.41
1:6:872:G:H2'	1:6:873:U:O4'	2.21	0.41
9:S7:21:ALA:O	9:S7:25:VAL:HG23	2.76	0.41
9:S7:22:GLN:HA	9:S7:25:VAL:HG23	2.02	0.41
55:M9:8:LYS:HD2	55:M9:22:VAL:HG23	2.02	0.41
1:2:179:A:H2'	1:2:180:A:O4'	2.20	0.41
36:1:1345:G:N7	86:1:3962:OHX:N4	2.68	0.41
86:1:3962:OHX:N2	86:1:4144:OHX:N6	2.69	0.41
73:O7:58:THR:HB	73:O7:59:THR:H	1.93	0.41
1:6:60:U:H5'	1:6:61:A:OP2	2.20	0.41
36:5:1196:C:H6	36:5:1196:C:H2'	1.74	0.41
42:L5:196:ARG:HH22	42:L5:237:GLU:CD	2.23	0.41
36:5:240:U:O2'	36:5:241:G:H8	2.04	0.41
13:C1:54:ILE:HD12	13:C1:54:ILE:HG23	4.54	0.41
42:L5:122:VAL:O	42:L5:123:GLU:HB2	4.65	0.41
63:N7:34:LYS:O	63:N7:37:PRO:HG3	3.54	0.41
43:L6:155:LEU:O	43:L6:158:TYR:HB3	2.30	0.41
1:6:507:U:H2'	1:6:508:U:O4'	2.21	0.41
39:L2:188:LYS:HD2	39:L2:189:TYR:CE2	5.10	0.41
18:C6:6:SER:HB2	18:C6:23:LYS:HB3	2.93	0.41
36:5:1135:A:C2	36:5:1136:A:C8	3.09	0.41
7:S5:82:PHE:CE1	30:D8:49:ARG:HD2	3.17	0.41
36:5:3163:A:C6	36:5:3164:C:N4	2.88	0.41
1:6:1762:A:C2	1:6:1763:A:C8	3.09	0.41
41:L4:312:VAL:HG21	36:5:610:G:C8	223.00	0.41
5:S3:18:TYR:CE2	31:D9:49:ASP:HB3	2.56	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:152:SER:OG	39:L2:153:GLY:N	2.54	0.41
54:M8:179:ARG:O	54:M8:181:SER:N	2.89	0.41
36:5:3218:A:H4'	36:5:3219:G:O5'	2.20	0.41
86:5:4035:OHX:N1	86:5:4083:OHX:N4	2.69	0.41
1:6:1614:A:C6	1:6:1615:C:N4	2.89	0.41
1:2:627:C:H2'	1:2:628:G:O4'	2.20	0.41
1:6:1014:G:H2'	1:6:1015:U:O4'	2.21	0.41
36:1:2369:G:H2'	36:1:2370:G:O4'	2.21	0.41
36:5:1838:G:H4'	36:5:1839:A:N3	2.36	0.41
36:5:1744:G:C6	36:5:1745:C:C4	3.09	0.41
39:L2:120:PRO:HD3	39:L2:159:SER:HB3	2.02	0.41
36:5:2785:A:OP1	86:5:4171:OHX:N4	2.54	0.41
36:1:1178:G:O6	69:O3:20:LYS:HD3	2.21	0.41
1:2:1615:C:H4'	1:2:1616:G:O5'	2.20	0.41
36:5:29:C:H4'	36:5:62:A:H4'	2.03	0.41
62:N6:40:ARG:HD2	62:N6:40:ARG:HH11	2.70	0.41
48:M1:51:ARG:HH11	48:M1:51:ARG:HG2	4.91	0.41
44:L7:153:PHE:N	44:L7:153:PHE:CD2	2.98	0.41
51:M5:204:LYS:HE2	36:5:683:U:OP1	108.49	0.41
38:4:146:U:H2'	38:4:147:U:C6	2.55	0.41
41:L4:222:VAL:HA	41:L4:223:PRO:HD3	2.01	0.41
1:6:1670:G:O6	86:6:2192:OHX:N4	2.54	0.41
15:C3:44:GLY:O	15:C3:45:LEU:HD23	4.00	0.41
1:6:1497:U:C2	1:6:1498:G:C8	3.09	0.41
52:M6:119:VAL:HG23	56:N0:164:SER:HB3	2.03	0.41
36:1:1870:C:H4'	36:1:3076:C:O2	2.21	0.41
8:S6:84:TYR:OH	8:S6:91:GLU:HG2	2.20	0.41
40:L3:385:LYS:HB2	40:L3:386:ASP:H	1.71	0.41
1:6:1105:C:H2'	1:6:1106:U:H6	1.85	0.41
42:L5:41:LYS:HB2	57:N1:68:THR:O	2.47	0.41
36:1:2659:G:H4'	36:1:2751:G:O2'	2.21	0.41
1:6:1004:U:H4'	1:6:1005:A:OP2	2.21	0.41
36:5:764:U:H6	36:5:764:U:O5'	2.04	0.41
10:S8:14:THR:HG23	10:S8:14:THR:H	2.78	0.41
69:O3:102:LEU:HD23	69:O3:102:LEU:HA	1.80	0.41
27:D5:65:LEU:HA	27:D5:65:LEU:HD23	1.91	0.41
36:5:3162:C:H6	36:5:3162:C:O5'	2.04	0.41
77:Q1:13:LEU:HA	77:Q1:13:LEU:HD23	2.31	0.41
36:1:3153:U:O2	36:1:3158:G:N1	2.54	0.41
32:E0:51:ASN:HB3	32:E0:53:LYS:HG2	6.32	0.41
36:5:2358:A:H2'	36:5:2359:C:O4'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:O4:74:ARG:HG2	70:O4:75:ALA:H	2.91	0.41
64:N8:21:ARG:HD2	64:N8:21:ARG:HH11	1.69	0.41
53:M7:122:ALA:HB3	53:M7:143:PRO:HB2	2.31	0.41
86:5:4192:OHX:N1	86:5:4194:OHX:N4	2.69	0.41
86:5:4192:OHX:N5	86:5:4194:OHX:N2	2.69	0.41
1:6:1429:G:H2'	1:6:1430:U:H6	1.86	0.41
36:1:2854:U:P	47:M0:3:ARG:HH22	2.38	0.41
1:6:577:G:H3'	1:6:577:G:H8	1.86	0.41
36:5:1170:A:OP2	86:5:4004:OHX:N6	2.54	0.41
1:2:1013:A:H2'	1:2:1014:G:O4'	2.22	0.41
34:SR:44:SER:O	34:SR:58:VAL:HG22	2.21	0.41
1:6:300:A:O2'	1:6:301:A:H5'	2.21	0.41
1:2:929:A:N6	1:2:930:A:C6	2.88	0.41
1:6:886:U:H2'	1:6:887:A:H8	1.86	0.41
44:L7:121:LYS:HE2	44:L7:125:GLU:OE2	2.21	0.41
45:L8:33:ASN:HA	36:5:2549:G:N2	212.03	0.41
1:2:142:G:O5'	1:2:142:G:H8	2.04	0.41
5:S3:28:GLU:OE2	12:C0:56:LYS:NZ	2.36	0.41
6:S4:108:ARG:HH21	6:S4:108:ARG:HD3	2.10	0.41
9:S7:114:ARG:O	9:S7:117:THR:HG22	2.21	0.41
9:S7:131:PHE:HB3	9:S7:132:PRO:CD	2.50	0.41
40:L3:347:SER:O	40:L3:348:ARG:CB	2.69	0.41
74:O8:51:LEU:N	36:5:1613:A:OP1	136.43	0.41
39:L2:132:ASN:ND2	39:L2:151:PRO:HB3	2.31	0.41
22:D0:102:ARG:O	22:D0:106:ILE:HG22	2.21	0.41
1:2:1371:A:H8	1:2:1371:A:OP1	2.04	0.41
6:S4:126:VAL:CG2	6:S4:156:VAL:HA	2.58	0.41
36:5:2239:G:OP2	86:5:4195:OHX:N6	2.54	0.41
65:N9:58:LYS:HA	65:N9:58:LYS:HZ3	4.49	0.41
1:2:27:U:OP1	86:2:2083:OHX:N6	2.53	0.41
16:C4:52:ARG:NH2	1:6:905:A:H4'	300.54	0.41
1:2:905:A:H5''	16:C4:52:ARG:HD3	2.02	0.41
12:C0:44:LYS:NZ	12:C0:47:GLN:HE22	2.19	0.41
1:2:600:U:OP2	25:D3:108:GLY:HA2	2.21	0.41
86:1:3953:OHX:N2	86:1:4041:OHX:N5	2.69	0.41
54:M8:151:ARG:HD2	54:M8:151:ARG:HH11	1.83	0.41
64:N8:75:LEU:HD12	64:N8:137:LYS:HD2	2.30	0.41
7:S5:120:ILE:HG23	27:D5:59:TYR:CE1	2.55	0.41
19:C7:53:TYR:O	19:C7:56:HIS:HB3	2.94	0.41
14:C2:66:VAL:HB	14:C2:67:THR:H	1.48	0.41
36:1:425:G:C5	36:1:635:G:C2	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3151:U:OP2	40:L3:132:LYS:NZ	2.45	0.41
37:3:27:A:P	42:L5:57:ASN:H	2.45	0.41
1:2:793:A:H5''	1:2:794:U:C5	2.56	0.41
16:C4:90:ARG:HB3	16:C4:91:THR:H	1.67	0.41
34:SR:205:SER:OG	34:SR:207:ASP:OD2	2.72	0.41
78:Q2:63:LYS:HD3	36:5:2795:U:OP2	213.38	0.41
20:C8:96:LYS:HB2	20:C8:98:TYR:CE2	2.56	0.41
25:D3:114:LYS:HB3	25:D3:115:GLY:H	1.71	0.41
86:5:4206:OHX:N6	86:8:226:OHX:N3	2.68	0.41
1:2:854:U:O4	55:M9:173:ARG:NH2	2.54	0.41
9:S7:55:LYS:HB2	9:S7:87:ASP:O	2.20	0.41
36:5:1081:U:O2'	36:5:1082:U:C5'	2.69	0.41
32:E0:39:LEU:HD13	32:E0:42:ARG:HH12	1.85	0.41
11:S9:172:VAL:HG22	1:6:511:A:H5''	458.55	0.41
54:M8:57:ILE:HG21	54:M8:57:ILE:HD13	1.91	0.41
1:2:423:G:OP1	86:2:2041:OHX:N3	2.53	0.41
45:L8:134:TYR:CE2	45:L8:190:VAL:HG11	5.27	0.41
45:L8:190:VAL:HG13	45:L8:192:GLN:HG2	2.03	0.41
36:5:249:U:O2'	36:5:250:U:H5''	2.21	0.41
36:5:176:G:C2	36:5:177:U:C2	3.09	0.41
25:D3:68:ILE:HB	25:D3:70:LYS:HZ1	2.59	0.41
77:Q1:7:LYS:NZ	1:6:1774:G:OP1	305.22	0.41
36:5:976:U:H2'	36:5:977:C:O4'	2.21	0.41
36:5:1691:U:H2'	36:5:1692:U:C6	2.56	0.41
1:2:264:G:N7	86:2:2033:OHX:N1	2.69	0.41
1:2:861:U:O2'	24:D2:56:HIS:O	2.31	0.41
36:1:672:A:OP2	54:M8:55:SER:HB2	2.20	0.41
45:L8:62:LYS:HE2	51:M5:29:GLU:CD	2.42	0.41
36:5:3025:C:H2'	36:5:3026:G:O4'	2.21	0.41
8:S6:216:LEU:HD21	1:6:242:U:OP1	340.62	0.41
78:Q2:19:LYS:HA	36:5:2741:C:H4'	208.36	0.41
40:L3:44:THR:CG2	40:L3:184:ASN:HB2	3.02	0.41
11:S9:153:GLU:HA	11:S9:156:ILE:HD11	2.03	0.41
1:2:404:G:H2'	1:2:405:C:C6	2.56	0.41
1:6:1657:U:O2'	1:6:1658:G:OP2	2.22	0.41
36:1:2270:A:C6	36:1:2271:A:C6	3.09	0.41
75:O9:42:ARG:HG2	75:O9:43:ASN:N	2.57	0.41
55:M9:115:ILE:HD11	55:M9:123:LEU:HD12	2.01	0.41
56:N0:169:SER:HA	36:5:3185:U:O2	301.95	0.41
36:5:58:G:O2'	36:5:61:A:H5'	2.21	0.41
41:L4:104:LYS:HD2	41:L4:106:TRP:CZ2	2.56	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:4:91:C:H2'	38:4:92:A:H8	1.86	0.41
29:D7:82:LYS:HB2	29:D7:82:LYS:HE3	4.08	0.41
41:L4:134:LEU:HA	41:L4:134:LEU:HD23	1.71	0.41
30:D8:33:LEU:HD22	30:D8:33:LEU:HA	1.93	0.41
28:D6:66:LYS:HB2	28:D6:66:LYS:HE2	1.87	0.41
9:S7:184:GLU:HG2	9:S7:185:ILE:H	1.90	0.41
65:N9:49:GLY:HA3	36:5:1073:U:O2'	201.15	0.40
50:M4:47:ASP:CG	50:M4:55:ARG:HB2	2.42	0.40
54:M8:178:ARG:HE	54:M8:186:VAL:CG2	4.14	0.40
50:M4:128:ARG:HD3	50:M4:132:LYS:HD2	3.13	0.40
18:C6:112:TYR:HH	18:C6:114:ARG:HH11	1.61	0.40
53:M7:32:THR:O	53:M7:35:ALA:HB3	2.36	0.40
37:3:121:U:OP2	42:L5:265:TYR:OH	2.28	0.40
42:L5:265:TYR:O	42:L5:269:SER:OG	3.18	0.40
8:S6:153:VAL:HG21	8:S6:175:ILE:HG21	3.49	0.40
1:6:1529:C:H2'	1:6:1530:C:C6	2.56	0.40
68:O2:109:LEU:HA	68:O2:109:LEU:HD22	3.02	0.40
1:2:1382:A:O2'	1:2:1383:G:H5''	2.22	0.40
79:Q3:73:THR:HG22	79:Q3:76:ALA:HB2	2.02	0.40
1:6:219:A:O2'	1:6:220:A:O5'	2.35	0.40
1:6:836:U:H2'	1:6:837:G:H8	1.86	0.40
1:2:582:U:H3'	1:2:583:C:C6	2.55	0.40
72:O6:57:LEU:HD21	72:O6:73:ALA:HB2	2.19	0.40
5:S3:90:ARG:HB3	5:S3:91:VAL:H	2.76	0.40
63:N7:22:LYS:HG3	63:N7:49:TYR:OH	3.45	0.40
45:L8:54:GLU:OE2	86:5:3957:OHX:N4	146.48	0.40
6:S4:35:PRO:HG3	1:6:122:U:O2'	356.95	0.40
63:N7:15:ARG:HB2	63:N7:79:HIS:HB3	2.43	0.40
74:O8:70:PRO:HA	74:O8:71:PRO:HD3	1.90	0.40
1:2:331:A:H4'	10:S8:31:ARG:O	2.21	0.40
41:L4:93:MET:CE	41:L4:93:MET:H	2.94	0.40
2:S0:59:LEU:O	2:S0:63:ILE:HG13	2.40	0.40
5:S3:195:SER:O	5:S3:196:ARG:HB3	2.40	0.40
43:L6:35:VAL:O	43:L6:54:TYR:HD1	2.04	0.40
36:1:3242:G:H2'	40:L3:154:TYR:CE1	2.57	0.40
36:5:2112:U:H4'	36:5:2113:A:H5'	2.02	0.40
1:6:956:C:H2'	1:6:957:G:C8	2.56	0.40
19:C7:57:LEU:HD23	19:C7:57:LEU:HA	1.92	0.40
3:S1:117:TRP:NE1	3:S1:152:ARG:CZ	2.83	0.40
5:S3:74:GLN:NE2	5:S3:81:PRO:HG3	2.35	0.40
62:N6:126:LEU:HB3	62:N6:127:GLU:OE2	8.60	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:3155:U:H3'	36:5:3156:U:H5''	2.03	0.40
37:3:26:C:H2'	37:3:27:A:O4'	2.21	0.40
51:M5:187:ARG:HA	51:M5:190:THR:HG23	2.03	0.40
1:2:1165:G:C6	1:2:1166:A:C6	3.10	0.40
38:4:126:A:O2'	38:4:129:C:N4	2.54	0.40
52:M6:42:ASN:HA	52:M6:136:THR:O	2.23	0.40
25:D3:139:LYS:HG3	25:D3:139:LYS:H	1.64	0.40
54:M8:64:VAL:O	54:M8:96:PHE:HE2	2.04	0.40
41:L4:219:LEU:HD23	41:L4:219:LEU:HA	1.80	0.40
1:6:11:A:N1	1:6:1143:A:H2	2.19	0.40
26:D4:94:TYR:HB2	26:D4:96:LEU:HG	2.70	0.40
8:S6:3:LEU:O	8:S6:15:THR:HA	2.47	0.40
1:6:711:U:H3'	1:6:712:G:H8	1.86	0.40
79:Q3:35:ALA:HB3	79:Q3:37:TYR:CE2	3.63	0.40
1:2:1147:A:H2'	1:2:1148:C:H6	1.85	0.40
86:5:4078:OHX:N1	86:5:4139:OHX:N2	2.69	0.40
36:1:1808:G:O6	86:1:3984:OHX:N3	2.54	0.40
23:D1:17:CYS:HB2	23:D1:56:SER:HB3	2.30	0.40
70:O4:41:ARG:HA	70:O4:56:THR:HG22	3.19	0.40
32:E0:31:LYS:HE3	1:6:545:A:P	419.42	0.40
61:N5:86:VAL:HG21	61:N5:95:ILE:HG12	2.36	0.40
69:O3:88:ASN:HB2	36:5:429:U:H5'	214.74	0.40
35:SM:25:ILE:CG2	48:M1:46:VAL:HB	2.70	0.40
57:N1:102:ARG:O	57:N1:106:LEU:HD22	2.21	0.40
36:5:1146:C:H4'	36:5:1331:U:C4	2.56	0.40
36:1:2331:C:H2'	36:1:2332:A:O4'	2.21	0.40
70:O4:57:LEU:HB3	70:O4:61:GLN:HB2	2.02	0.40
45:L8:115:ALA:O	45:L8:119:GLY:N	3.02	0.40
36:5:1801:U:H2'	36:5:1802:C:C6	2.56	0.40
62:N6:52:ARG:HA	62:N6:70:ILE:HG22	2.30	0.40
5:S3:207:THR:HB	19:C7:40:THR:OG1	2.22	0.40
36:1:971:G:H2'	36:1:972:A:O4'	2.21	0.40
36:1:1332:A:H2'	36:1:1333:C:C6	2.56	0.40
36:1:1441:G:O6	86:1:3926:OHX:N1	2.54	0.40
36:1:29:C:H4'	36:1:62:A:H4'	2.03	0.40
1:6:1001:A:C6	1:6:1002:G:C6	3.09	0.40
43:L6:5:LYS:HA	43:L6:5:LYS:HD2	1.64	0.40
68:O2:8:LYS:HE3	68:O2:8:LYS:HB2	1.82	0.40
36:1:1127:G:O5'	36:1:1127:G:H8	2.05	0.40
55:M9:98:ARG:HH11	55:M9:98:ARG:HD3	1.72	0.40
36:1:374:A:HO2'	36:1:376:G:H8	1.63	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2300:G:H2'	36:1:2301:U:C6	2.56	0.40
36:5:849:C:H2'	36:5:850:U:C6	2.56	0.40
1:2:1469:A:H2'	1:2:1470:C:C6	2.56	0.40
40:L3:160:VAL:O	40:L3:180:GLU:HA	2.37	0.40
36:5:2836:C:H2'	36:5:2837:A:O4'	2.21	0.40
50:M4:55:ARG:HD3	56:N0:70:THR:OG1	2.22	0.40
35:SM:34:LYS:HA	35:SM:34:LYS:HD3	3.73	0.40
20:C8:81:ILE:HG23	20:C8:82:PRO:HD2	2.03	0.40
43:L6:166:LYS:O	43:L6:169:ASP:HB2	2.98	0.40
86:5:4067:OHX:N2	86:5:4076:OHX:N1	2.69	0.40
28:D6:8:ASN:HB2	28:D6:9:GLY:H	2.37	0.40
40:L3:221:THR:O	40:L3:272:TYR:HA	2.26	0.40
74:O8:11:PHE:HD1	74:O8:12:LEU:HD23	1.86	0.40
36:5:368:G:C2	36:5:369:A:N7	2.90	0.40
55:M9:106:LEU:HB3	55:M9:120:TYR:CD1	2.57	0.40
43:L6:31:ARG:HH11	69:O3:107:ILE:C	2.41	0.40
1:2:1253:U:O2'	33:E1:143:LYS:HA	2.21	0.40
3:S1:35:PRO:HB2	3:S1:36:SER:H	1.59	0.40
13:C1:93:TYR:HB2	13:C1:100:TYR:HE1	2.59	0.40
66:O0:99:ASP:N	66:O0:99:ASP:OD2	2.73	0.40
21:C9:53:TRP:HA	21:C9:56:LYS:HB2	2.03	0.40
36:1:1015:U:HO2'	36:1:1017:C:P	2.45	0.40
42:L5:110:LEU:O	42:L5:116:ASP:HB3	4.23	0.40
36:1:2534:G:H2'	36:1:2535:A:C8	2.56	0.40
5:S3:67:ASN:HA	5:S3:70:THR:OG1	2.63	0.40
53:M7:62:ARG:NH1	36:5:412:G:OP1	159.44	0.40
3:S1:160:HIS:O	3:S1:164:ILE:HG13	2.46	0.40
17:C5:130:ARG:HD3	35:SM:74:LYS:HG2	2.01	0.40
1:2:1291:G:H5'	4:S2:119:LYS:HE3	2.03	0.40
36:1:656:A:C2	36:1:1440:G:C2	3.09	0.40
39:L2:204:MET:CG	36:5:914:A:C2	195.23	0.40
18:C6:10:PHE:HA	18:C6:18:ALA:O	2.21	0.40
38:4:11:C:H2'	38:4:12:A:O4'	2.21	0.40
10:S8:5:ARG:NH1	10:S8:29:LEU:O	2.36	0.40
1:2:1067:C:H5''	3:S1:150:VAL:HG23	2.03	0.40
59:N3:120:LYS:HB2	59:N3:137:VAL:HG23	3.33	0.40
24:D2:29:PRO:HB2	24:D2:58:SER:HB2	2.02	0.40
1:2:387:A:C8	1:2:402:C:H5'	2.56	0.40
2:S0:105:GLY:O	2:S0:112:THR:HG21	2.20	0.40
36:1:3296:A:H2'	36:1:3297:U:O4'	2.21	0.40
1:2:1183:A:C5	1:2:1184:A:C6	3.09	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:86:ILE:H	24:D2:86:ILE:HG13	1.62	0.40
51:M5:184:LYS:O	51:M5:184:LYS:HG2	2.20	0.40
39:L2:48:ILE:HD11	79:Q3:63:THR:HG22	3.19	0.40
40:L3:10:ARG:HB2	40:L3:11:HIS:H	1.71	0.40
63:N7:55:LYS:O	63:N7:57:HIS:N	3.18	0.40
86:1:4088:OHX:N5	86:1:4158:OHX:N1	2.70	0.40
41:L4:255:PHE:O	41:L4:258:LEU:HB2	2.20	0.40
36:1:2802:A:N6	78:Q2:53:GLN:O	2.50	0.40
65:N9:3:LYS:HD3	36:5:2617:U:H5''	223.84	0.40
61:N5:27:ARG:H	61:N5:27:ARG:HG2	1.85	0.40
4:S2:178:ILE:HG21	4:S2:185:LYS:HA	2.33	0.40
44:L7:96:PRO:O	44:L7:100:ARG:HB2	2.22	0.40
1:2:1388:A:HO2'	1:2:1411:A:H2	1.66	0.40
45:L8:164:VAL:O	45:L8:167:PRO:HD2	2.40	0.40
76:Q0:103:LEU:HA	76:Q0:103:LEU:HD23	2.05	0.40
53:M7:30:ARG:HA	53:M7:119:VAL:CG1	2.68	0.40
52:M6:48:PHE:CE1	36:5:1191:U:C2	286.96	0.40
6:S4:31:PRO:HB2	6:S4:38:LEU:HD22	2.04	0.40
36:5:3287:U:H2'	36:5:3288:G:H5'	2.03	0.40
1:2:147:A:H2'	1:2:148:A:O4'	2.21	0.40
4:S2:69:ILE:CG1	4:S2:133:LYS:HB3	2.50	0.40
14:C2:29:LYS:HE2	14:C2:100:TRP:NE1	2.37	0.40
1:2:1765:A:OP2	86:2:2091:OHX:N5	2.55	0.40
11:S9:39:LYS:HB3	11:S9:43:TYR:CZ	2.88	0.40
37:3:57:G:H3'	37:3:58:C:C6	2.55	0.40
41:L4:161:LYS:NZ	36:5:209:A:OP1	74.89	0.40
47:M0:119:TRP:HZ3	36:5:1126:G:H5''	256.71	0.40
57:N1:14:MET:CE	57:N1:55:LYS:HB2	2.65	0.40
86:5:4096:OHX:N3	86:5:4238:OHX:N4	2.70	0.40
47:M0:65:LEU:HD23	47:M0:159:PHE:CZ	3.04	0.40
1:2:315:A:N3	1:2:316:A:H1'	2.36	0.40
43:L6:142:ASP:O	43:L6:146:ILE:HG12	2.21	0.40
49:M3:69:VAL:N	49:M3:149:GLN:OE1	2.95	0.40
1:2:1653:C:C2	1:2:1748:G:N2	2.89	0.40
44:L7:120:THR:HB	57:N1:132:PRO:HB2	2.04	0.40
36:5:3203:U:H2'	36:5:3204:C:C6	2.56	0.40
1:2:849:C:C2	1:2:850:A:C8	3.09	0.40
69:O3:37:THR:HB	69:O3:38:PRO:HD2	2.39	0.40
40:L3:307:PRO:HD3	40:L3:311:PHE:CE2	2.89	0.40
36:1:3000:A:H2'	36:1:3001:C:C6	2.57	0.40
11:S9:66:ASP:HA	11:S9:67:PRO:HD2	2.22	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1133:A:H2'	1:2:1134:C:O4'	2.22	0.40
36:1:1347:U:O4'	41:L4:305:ALA:HA	2.21	0.40
1:6:355:G:OP1	86:6:2069:OHX:N5	2.53	0.40
33:E1:133:ALA:N	33:E1:140:TYR:O	3.01	0.40
56:N0:114:HIS:CE1	36:5:1212:A:H1'	310.80	0.40
5:S3:71:LEU:HD23	5:S3:71:LEU:HA	1.87	0.40
1:6:576:G:H4'	1:6:580:A:C4	2.56	0.40
14:C2:63:VAL:HB	14:C2:64:SER:H	1.65	0.40
20:C8:30:TYR:HE2	20:C8:40:ARG:HD2	2.02	0.40
21:C9:45:MET:HB3	21:C9:45:MET:HE2	2.46	0.40
36:1:31:C:H5	51:M5:188:ARG:HH12	1.70	0.40
29:D7:29:ARG:CG	29:D7:29:ARG:HH11	2.43	0.40
55:M9:106:LEU:HB3	55:M9:120:TYR:HE1	1.84	0.40
48:M1:95:ASN:O	48:M1:102:PHE:HA	2.20	0.40
25:D3:19:ARG:O	25:D3:20:ARG:C	2.59	0.40
61:N5:129:ASP:HB2	61:N5:130:TYR:CD1	2.56	0.40
68:O2:100:ILE:CD1	36:5:1388:U:H4'	136.14	0.40
48:M1:23:VAL:CG1	48:M1:29:ARG:HH11	2.34	0.40
17:C5:65:LEU:C	17:C5:67:ALA:H	2.25	0.40
17:C5:130:ARG:NH2	35:SM:66:ALA:HA	3.81	0.40
35:SM:68:ARG:HD3	1:6:1460:A:OP2	335.88	0.40
35:SM:74:LYS:HB2	35:SM:74:LYS:HE2	4.77	0.40
49:M3:124:ILE:CD1	71:O5:117:ALA:HB3	2.51	0.40
31:D9:44:ARG:HB3	31:D9:44:ARG:HE	2.53	0.40
52:M6:60:LYS:NZ	36:5:1307:G:H5''	250.81	0.40
2:S0:182:LEU:C	2:S0:184:LEU:N	2.75	0.40
8:S6:120:GLU:HG3	8:S6:125:THR:HG22	3.16	0.40
36:5:1841:A:O2'	36:5:1842:A:H5''	2.21	0.40
1:6:460:A:H3'	1:6:461:G:H8	1.86	0.40
63:N7:48:ARG:NH1	63:N7:69:LYS:HD2	2.38	0.40
36:5:663:C:H2'	36:5:664:U:C6	2.56	0.40
56:N0:156:VAL:HG23	56:N0:156:VAL:O	2.21	0.40
62:N6:3:LYS:HE2	62:N6:8:VAL:O	2.37	0.40
34:SR:179:LYS:HD3	34:SR:181:TRP:CZ2	2.56	0.40
36:1:20:A:C6	36:1:21:G:C6	3.10	0.40
16:C4:29:HIS:CD2	16:C4:41:ARG:HB2	4.38	0.40
28:D6:18:VAL:HG21	28:D6:33:ASP:OD1	2.21	0.40
46:L9:173:ARG:H	46:L9:173:ARG:HG3	1.65	0.40
28:D6:64:LEU:HA	28:D6:65:PRO:HD2	2.57	0.40
40:L3:250:ALA:HB3	36:5:2880:U:O2	224.28	0.40
79:Q3:88:GLU:H	79:Q3:88:GLU:HG2	1.74	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:44:LYS:HE3	1:6:1217:A:H4'	425.68	0.40
86:5:4216:OHX:N1	86:5:4226:OHX:N5	2.68	0.40
54:M8:151:ARG:O	54:M8:161:LYS:HD3	2.21	0.40
58:N2:43:VAL:CG2	58:N2:50:LEU:HD23	2.51	0.40
1:6:188:A:H2'	1:6:189:C:O4'	2.20	0.40
36:5:1804:A:H2'	36:5:1805:C:C6	2.56	0.40
47:M0:75:TYR:CZ	47:M0:79:VAL:HG21	2.76	0.40
36:1:1051:U:H4'	57:N1:19:PHE:CE2	2.56	0.40
1:2:288:A:H2'	1:2:289:U:O4'	2.20	0.40
57:N1:101:CYS:HB3	36:5:990:U:C1'	252.28	0.40
55:M9:169:ALA:O	55:M9:173:ARG:HB3	4.27	0.40
27:D5:71:ILE:CG2	27:D5:76:ALA:HB2	3.55	0.40
9:S7:29:ASN:O	9:S7:30:SER:OG	2.28	0.40
1:2:1789:G:C8	16:C4:132:ARG:NH2	2.90	0.40
10:S8:150:ALA:O	10:S8:152:ILE:HG13	2.21	0.40
36:5:2897:A:H2'	36:5:2899:C:H5''	2.02	0.40
1:2:1294:G:C2	1:2:1322:A:C5	3.10	0.40
1:2:1491:U:O2	1:2:1491:U:H5''	2.21	0.40
41:L4:38:VAL:HG21	41:L4:121:ALA:HB2	2.33	0.40
1:2:761:G:H4'	11:S9:72:GLU:OE1	2.20	0.40
2:S0:120:LEU:HD13	2:S0:142:PRO:HB2	2.03	0.40
4:S2:97:ARG:HB2	4:S2:118:ALA:O	2.33	0.40
36:5:2993:G:C6	36:5:3142:A:C4	3.09	0.40
59:N3:11:PHE:CG	59:N3:88:ARG:HD2	2.69	0.40
21:C9:136:ALA:O	21:C9:140:LEU:HD12	2.22	0.40
33:E1:99:LYS:HE2	33:E1:99:LYS:HB3	4.37	0.40
1:2:814:A:C5'	55:M9:170:ARG:HH22	2.34	0.40
5:S3:183:GLY:C	5:S3:184:ILE:HD13	3.68	0.40
10:S8:70:GLU:HG3	10:S8:112:TRP:CH2	2.57	0.40
36:1:1767:C:H2'	36:1:1768:U:C6	2.56	0.40
1:6:1224:A:C6	1:6:1225:U:C4	3.09	0.40
38:4:145:U:H2'	38:4:146:U:C6	2.57	0.40
36:1:3153:U:H5''	36:1:3154:C:OP1	2.22	0.40
36:1:1571:A:H2'	36:1:1572:U:O4'	2.21	0.40
42:L5:90:HIS:NE2	42:L5:229:ASP:OD2	2.74	0.40
73:O7:19:CYS:O	73:O7:23:GLY:N	2.49	0.40
36:1:3011:A:C5	40:L3:13:HIS:CD2	3.10	0.40
36:1:1327:C:O2'	69:O3:76:GLY:HA2	2.22	0.40
41:L4:64:SER:HA	41:L4:75:PRO:HA	2.03	0.40
43:L6:97:ASN:O	43:L6:98:VAL:HB	2.21	0.40
1:6:1799:U:H4'	1:6:1800:A:H2'	2.02	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:152:THR:HA	43:L6:153:PRO:HD3	2.11	0.40
40:L3:194:TRP:CE2	40:L3:198:HIS:CE1	3.12	0.40
64:N8:88:ASP:O	64:N8:92:LYS:HG3	2.21	0.40
42:L5:92:LEU:HA	42:L5:92:LEU:HD23	3.65	0.40
41:L4:154:THR:HG22	41:L4:154:THR:O	2.37	0.40
25:D3:132:LEU:HA	25:D3:132:LEU:HD23	3.44	0.40
36:1:2396:G:OP1	36:1:2397:A:H4'	2.21	0.40
36:5:2524:A:H1'	36:5:2525:G:C8	2.57	0.40
29:D7:80:ARG:HG2	29:D7:81:ARG:H	1.86	0.40
10:S8:8:ARG:C	10:S8:9:HIS:O	2.58	0.40
11:S9:110:GLN:NE2	11:S9:126:ARG:HG2	2.36	0.40
1:2:735:C:O2'	1:2:736:C:H5''	2.21	0.40
55:M9:104:ARG:NH1	36:5:1949:G:H5''	219.19	0.40
55:M9:106:LEU:HD12	55:M9:106:LEU:HA	1.93	0.40
1:2:119:A:H1'	1:2:397:A:C4	2.56	0.40
24:D2:82:LYS:C	24:D2:84:GLY:H	2.14	0.40
3:S1:126:THR:HA	3:S1:135:LEU:O	2.59	0.40
2:S0:33:GLN:C	2:S0:35:PRO:HD2	3.66	0.40
44:L7:208:SER:HB2	36:5:1334:U:C1'	240.67	0.40
1:6:1234:A:HO2'	1:6:1235:C:H6	1.66	0.40
21:C9:102:ARG:O	21:C9:105:LEU:N	3.72	0.40
36:5:406:G:N3	38:8:16:G:C2	2.90	0.40
36:1:1913:A:N3	36:1:2120:A:H2'	2.36	0.40
6:S4:188:ASN:HB3	6:S4:191:ARG:HG3	3.15	0.40
62:N6:60:ARG:HD3	62:N6:60:ARG:HA	1.49	0.40
3:S1:140:ILE:O	3:S1:210:ILE:HA	2.22	0.40
25:D3:126:LYS:HA	25:D3:131:SER:HA	2.03	0.40
1:2:639:U:P	9:S7:117:THR:HG1	2.36	0.40
40:L3:291:GLU:O	40:L3:293:ASN:N	2.55	0.40
41:L4:107:ARG:HD2	41:L4:109:TRP:CH2	2.56	0.40
51:M5:169:LYS:HE2	36:5:64:G:OP2	100.39	0.40
36:1:2112:U:O2'	86:1:3961:OHX:N1	2.54	0.40
5:S3:7:LYS:HB2	1:6:1515:A:OP2	443.49	0.40
36:1:956:U:H2'	36:1:957:C:C6	2.57	0.40
31:D9:21:CYS:SG	31:D9:39:CYS:HB3	3.58	0.40
86:1:4137:OHX:N3	86:1:4194:OHX:N4	2.69	0.40
1:2:480:G:C2	1:2:509:G:N3	2.90	0.40
36:5:1426:C:H2'	36:5:1427:U:O4'	2.21	0.40
36:5:3117:C:N3	86:5:4207:OHX:N2	2.70	0.40
41:L4:126:ILE:HD11	41:L4:233:LEU:HD12	2.59	0.40
32:E0:13:LYS:HE2	32:E0:13:LYS:HB3	4.43	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3168:A:C2'	36:1:3169:U:H5'	2.52	0.40
27:D5:57:TYR:N	27:D5:57:TYR:CD2	3.15	0.40
42:L5:21:ARG:HH11	42:L5:21:ARG:HG2	1.91	0.40
23:D1:65:SER:O	23:D1:69:LEU:HB2	2.21	0.40
63:N7:24:VAL:HG22	63:N7:130:PHE:CE2	3.98	0.40
42:L5:184:ASP:O	42:L5:188:GLU:N	4.51	0.40
44:L7:27:ALA:HA	44:L7:30:ARG:HB3	2.03	0.40
40:L3:148:LEU:HA	40:L3:148:LEU:HD12	1.93	0.40
1:2:926:A:H2	16:C4:125:SER:HB3	1.87	0.40
1:2:927:C:H2'	1:2:928:U:C6	2.56	0.40
34:SR:266:ASP:HA	34:SR:267:PRO:HA	1.93	0.40
86:1:4088:OHX:N6	86:1:4158:OHX:N4	2.70	0.40
44:L7:116:PHE:HB2	44:L7:199:ASN:OD1	2.32	0.40
54:M8:19:PRO:HD3	54:M8:53:PHE:CD1	2.56	0.40
36:5:993:G:N3	36:5:2637:A:H2'	2.37	0.40
36:5:3053:G:O6	86:5:4175:OHX:N6	2.55	0.40
36:1:3:U:C2	38:4:157:U:C2	3.09	0.40
40:L3:236:LYS:HD3	36:5:2340:U:OP1	233.08	0.40
36:1:1295:G:H2'	36:1:1296:C:C6	2.56	0.40
2:S0:141:ILE:HA	2:S0:142:PRO:HD3	1.97	0.40
43:L6:102:ASN:OD1	43:L6:104:GLU:HB3	2.21	0.40
52:M6:48:PHE:CE1	52:M6:52:LEU:HD11	3.52	0.40
21:C9:65:ILE:HG23	21:C9:71:VAL:HG22	2.04	0.40
36:1:2223:A:C6	36:1:2224:A:C6	3.09	0.40
56:N0:40:ARG:NH2	56:N0:43:TYR:CE1	2.89	0.40
3:S1:222:LYS:HA	3:S1:222:LYS:HD3	1.99	0.40
43:L6:47:PHE:O	43:L6:50:LYS:HB2	2.21	0.40
1:6:89:G:C6	1:6:90:C:C4	3.10	0.40
37:3:58:C:H2'	37:3:59:U:C6	2.56	0.40
1:6:278:U:H2'	1:6:278:U:OP2	2.21	0.40
7:S5:82:PHE:CE2	30:D8:49:ARG:HB3	2.56	0.40
10:S8:82:VAL:HG12	10:S8:196:LEU:HD11	2.03	0.40
60:N4:86:SER:O	60:N4:88:ASP:N	2.55	0.40
61:N5:67:ILE:HD11	61:N5:85:GLN:HB2	2.57	0.40
64:N8:2:PRO:HG2	64:N8:5:PHE:CE2	2.88	0.40
36:1:1394:A:H2'	36:1:1395:G:O4'	2.20	0.40
36:5:766:U:H4'	36:5:767:U:O5'	2.22	0.40
34:SR:101:GLN:HG2	34:SR:138:GLY:HA3	2.90	0.40
53:M7:97:ASN:O	53:M7:100:ALA:HB3	2.48	0.40
39:L2:187:HIS:ND1	39:L2:190:ARG:NH1	4.12	0.40
62:N6:117:ALA:O	62:N6:121:ARG:HB2	2.22	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:N3:3:GLY:O	59:N3:6:ALA:HB3	2.21	0.40
54:M8:62:VAL:HG11	54:M8:83:VAL:HG21	2.38	0.40
26:D4:84:LYS:HG3	26:D4:85:PHE:N	2.36	0.40
49:M3:50:PRO:O	49:M3:52:ASP:N	3.52	0.40
42:L5:202:GLY:O	42:L5:206:GLN:HB2	2.21	0.40
18:C6:86:ALA:O	18:C6:90:VAL:HG13	2.21	0.40
18:C6:87:LYS:O	18:C6:90:VAL:HG22	2.21	0.40
35:SM:107:ASN:CG	35:SM:112:ASP:HB3	2.42	0.40
30:D8:5:THR:O	30:D8:7:VAL:N	3.55	0.40
56:N0:152:LEU:HA	56:N0:152:LEU:HD23	2.45	0.40
1:2:555:A:H3'	1:2:555:A:C8	2.57	0.40
7:S5:217:LEU:HA	7:S5:217:LEU:HD23	2.02	0.40
52:M6:128:ARG:HA	52:M6:128:ARG:HD3	3.01	0.40
24:D2:78:ARG:H	24:D2:78:ARG:HG2	1.72	0.40
1:6:669:G:HO2'	1:6:670:U:P	2.44	0.40
36:1:8:C:H2'	36:1:9:U:O4'	2.22	0.40
68:O2:110:ALA:O	68:O2:113:LYS:HB3	2.74	0.40
25:D3:60:GLU:CD	32:E0:3:LYS:HB2	2.48	0.40
1:2:1202:A:P	86:2:2110:OHX:N2	2.94	0.40
36:1:2232:A:H2'	36:1:2233:A:C8	2.56	0.40
28:D6:9:GLY:HA3	28:D6:34:LYS:HE2	2.78	0.40
70:O4:8:ARG:NH2	36:5:1597:C:OP1	137.37	0.40
36:1:915:A:H2'	36:1:915:A:N3	2.36	0.40
71:O5:76:GLN:HG3	71:O5:76:GLN:O	2.20	0.40
51:M5:114:ARG:HA	51:M5:114:ARG:HD3	2.39	0.40
3:S1:127:VAL:HG13	3:S1:176:VAL:HG11	2.04	0.40
49:M3:165:SER:HB3	49:M3:168:ARG:HB3	2.03	0.40
66:O0:100:ILE:HD12	66:O0:101:LEU:N	2.37	0.40
33:E1:95:HIS:CE1	1:6:1245:G:N2	422.31	0.40
21:C9:105:LEU:HA	21:C9:105:LEU:HD23	1.80	0.40
11:S9:92:LYS:HB2	11:S9:95:TYR:CD2	9.18	0.40
8:S6:30:LYS:O	8:S6:102:VAL:HG23	2.53	0.40
41:L4:302:ALA:HB2	54:M8:39:ARG:NH1	2.62	0.40
7:S5:84:LYS:HG3	7:S5:92:ARG:NH1	2.62	0.40
36:1:3139:A:C8	36:1:3139:A:C5'	3.04	0.40
47:M0:206:LEU:O	47:M0:210:ILE:HG13	2.42	0.40
36:1:2676:A:H4'	36:1:2677:G:O5'	2.22	0.40
1:2:196:G:C2	1:2:197:A:H1'	2.57	0.40
34:SR:260:ILE:HB	34:SR:274:LEU:HB2	2.04	0.40
86:6:2127:OHX:N5	86:6:2152:OHX:N1	2.69	0.40
64:N8:66:ALA:HB1	64:N8:69:TRP:HB2	4.38	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:49:LEU:HB3	12:C0:55:VAL:HG11	2.03	0.40
51:M5:73:ARG:HA	51:M5:74:PRO:HD2	2.33	0.40
1:2:1657:U:H1'	1:2:1658:G:OP2	2.22	0.40
15:C3:11:ILE:O	15:C3:12:SER:HB2	2.21	0.40
27:D5:57:TYR:CE2	27:D5:68:ARG:HD3	5.01	0.40
6:S4:42:LEU:CD2	6:S4:47:PHE:HB2	2.51	0.40
19:C7:13:SER:CB	19:C7:54:THR:HG22	3.09	0.40
1:2:52:U:H2'	1:2:53:G:C8	2.56	0.40
32:E0:18:THR:HA	32:E0:19:PRO:HD2	1.78	0.40
47:M0:152:LEU:HB2	47:M0:165:ILE:HD13	6.25	0.40
4:S2:90:THR:C	4:S2:92:ALA:H	2.26	0.40
1:2:795:U:H5	1:2:796:A:C4	2.40	0.40
1:2:116:U:H2'	1:2:117:U:H6	1.84	0.40
32:E0:20:LYS:HG3	32:E0:21:VAL:N	2.37	0.40
36:1:848:A:C5	36:1:849:C:H1'	2.56	0.40
73:O7:13:ASN:O	36:5:817:A:C4	140.12	0.40
38:4:123:G:C6	38:4:131:A:C6	3.10	0.40
1:2:28:A:H2'	1:2:29:U:H6	1.86	0.40
36:1:1273:A:HO2'	36:1:1274:A:P	2.43	0.40
1:2:1663:G:C6	1:2:1664:C:C4	3.10	0.40
73:O7:75:LYS:HD3	73:O7:76:ASN:OD1	5.34	0.40
52:M6:182:ASN:ND2	52:M6:186:ALA:HB2	7.24	0.40
57:N1:73:GLY:HA2	57:N1:89:LEU:O	2.35	0.40
10:S8:89:GLU:CD	10:S8:92:ARG:HH21	2.21	0.40
30:D8:11:LYS:HE2	30:D8:31:GLU:OE1	2.74	0.40
5:S3:212:LYS:O	5:S3:214:GLU:HG2	2.64	0.40
36:1:3341:U:HO2'	36:1:3342:A:P	2.44	0.40
4:S2:66:PHE:O	4:S2:69:ILE:N	2.55	0.40
13:C1:40:LEU:HD22	1:6:246:G:C2	327.35	0.40
1:2:420:A:H2'	1:2:421:A:O4'	2.22	0.40
39:L2:44:ILE:HD12	39:L2:44:ILE:H	2.07	0.40
42:L5:203:HIS:CE1	42:L5:204:VAL:HG23	3.03	0.40
36:5:1123:U:C2'	36:5:1124:U:H5'	2.51	0.40
36:5:371:G:H4'	36:5:396:A:N1	2.37	0.40
42:L5:155:THR:HA	42:L5:179:ARG:HA	2.30	0.40
46:L9:117:PHE:HE1	46:L9:178:GLY:HA2	1.86	0.40
36:1:1763:U:H3'	36:1:1764:U:C5	2.57	0.40
62:N6:54:ASP:O	62:N6:69:LYS:HA	2.50	0.40
5:S3:156:PHE:HE1	1:6:1326:A:O3'	421.01	0.40
36:1:3288:G:O2'	36:1:3289:G:OP2	2.33	0.40
1:2:1211:A:C6	1:2:1453:G:C6	3.10	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:706:A:H2'	1:6:707:A:O4'	2.22	0.40
36:5:1908:A:H2'	36:5:1909:A:O4'	2.21	0.40
41:L4:31:ARG:NH2	41:L4:34:ILE:HD11	2.76	0.40
36:1:175:C:C2	36:1:244:G:N2	2.89	0.40
67:O1:33:VAL:HG13	67:O1:51:LEU:HD12	2.37	0.40
36:5:1746:U:H2'	36:5:1747:G:H8	1.85	0.40
36:5:1475:A:H2'	36:5:1476:G:O4'	2.22	0.40
64:N8:14:HIS:N	64:N8:14:HIS:ND1	2.71	0.40
54:M8:36:LEU:HD23	54:M8:36:LEU:HA	2.11	0.40
15:C3:53:LEU:HA	15:C3:53:LEU:HD12	2.17	0.40
53:M7:4:TYR:CD2	53:M7:4:TYR:N	2.89	0.40
1:6:412:A:O5'	1:6:412:A:H8	2.04	0.40
16:C4:110:LEU:HD23	16:C4:110:LEU:HA	2.21	0.40
52:M6:94:ARG:HD3	52:M6:94:ARG:HH11	1.71	0.40
36:5:372:A:O5'	36:5:372:A:H8	2.04	0.40
1:6:1361:U:H2'	1:6:1361:U:O2	2.22	0.40
36:5:65:A:C4	36:5:110:G:N7	2.89	0.40
40:L3:47:LEU:HG	40:L3:335:ILE:HD11	2.47	0.40
36:1:2657:A:C2	36:1:2694:A:C8	3.10	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	S0	204/251 (81%)	145 (71%)	33 (16%)	26 (13%)	0	1
2	s0	204/251 (81%)	148 (72%)	33 (16%)	23 (11%)	0	2
3	S1	212/254 (84%)	147 (69%)	38 (18%)	27 (13%)	0	1
3	s1	214/254 (84%)	176 (82%)	22 (10%)	16 (8%)	1	6
4	S2	215/253 (85%)	179 (83%)	26 (12%)	10 (5%)	3	17

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	s2	215/253 (85%)	179 (83%)	25 (12%)	11 (5%)	2	15
5	S3	221/239 (92%)	178 (80%)	29 (13%)	14 (6%)	2	9
5	s3	221/239 (92%)	178 (80%)	27 (12%)	16 (7%)	1	7
6	S4	258/260 (99%)	206 (80%)	39 (15%)	13 (5%)	3	15
6	s4	258/260 (99%)	214 (83%)	30 (12%)	14 (5%)	2	14
7	S5	204/224 (91%)	160 (78%)	26 (13%)	18 (9%)	1	4
7	s5	204/224 (91%)	162 (79%)	27 (13%)	15 (7%)	1	6
8	S6	224/236 (95%)	194 (87%)	19 (8%)	11 (5%)	3	16
8	s6	216/236 (92%)	187 (87%)	19 (9%)	10 (5%)	3	18
9	S7	182/189 (96%)	134 (74%)	28 (15%)	20 (11%)	0	2
9	s7	184/189 (97%)	141 (77%)	33 (18%)	10 (5%)	2	14
10	S8	184/200 (92%)	159 (86%)	13 (7%)	12 (6%)	1	8
10	s8	184/200 (92%)	159 (86%)	20 (11%)	5 (3%)	6	32
11	S9	183/196 (93%)	152 (83%)	21 (12%)	10 (6%)	2	13
11	s9	183/196 (93%)	142 (78%)	33 (18%)	8 (4%)	3	18
12	C0	94/105 (90%)	71 (76%)	13 (14%)	10 (11%)	0	3
12	c0	92/105 (88%)	64 (70%)	14 (15%)	14 (15%)	0	1
13	C1	153/155 (99%)	123 (80%)	18 (12%)	12 (8%)	1	6
13	c1	144/155 (93%)	120 (83%)	15 (10%)	9 (6%)	2	9
14	C2	122/142 (86%)	68 (56%)	28 (23%)	26 (21%)	0	0
14	c2	122/142 (86%)	69 (57%)	31 (25%)	22 (18%)	0	0
15	C3	148/150 (99%)	125 (84%)	15 (10%)	8 (5%)	2	14
15	c3	148/150 (99%)	114 (77%)	24 (16%)	10 (7%)	1	7
16	C4	125/136 (92%)	91 (73%)	22 (18%)	12 (10%)	1	3
16	c4	126/136 (93%)	104 (82%)	15 (12%)	7 (6%)	2	13
17	C5	122/141 (86%)	85 (70%)	26 (21%)	11 (9%)	1	4
17	c5	133/141 (94%)	93 (70%)	22 (16%)	18 (14%)	0	1
18	C6	139/142 (98%)	113 (81%)	16 (12%)	10 (7%)	1	7
18	c6	140/142 (99%)	117 (84%)	16 (11%)	7 (5%)	3	15
19	C7	116/136 (85%)	90 (78%)	14 (12%)	12 (10%)	1	3
19	c7	113/136 (83%)	88 (78%)	18 (16%)	7 (6%)	2	10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
20	C8	143/145 (99%)	112 (78%)	20 (14%)	11 (8%)	1	6
20	c8	143/145 (99%)	112 (78%)	22 (15%)	9 (6%)	2	9
21	C9	141/143 (99%)	119 (84%)	17 (12%)	5 (4%)	4	24
21	c9	141/143 (99%)	118 (84%)	19 (14%)	4 (3%)	6	30
22	D0	105/120 (88%)	83 (79%)	14 (13%)	8 (8%)	1	6
22	d0	108/120 (90%)	83 (77%)	15 (14%)	10 (9%)	1	4
23	D1	85/87 (98%)	63 (74%)	14 (16%)	8 (9%)	1	4
23	d1	85/87 (98%)	70 (82%)	12 (14%)	3 (4%)	4	24
24	D2	127/129 (98%)	109 (86%)	17 (13%)	1 (1%)	24	66
24	d2	127/129 (98%)	116 (91%)	8 (6%)	3 (2%)	7	35
25	D3	142/144 (99%)	109 (77%)	21 (15%)	12 (8%)	1	5
25	d3	142/144 (99%)	128 (90%)	8 (6%)	6 (4%)	3	20
26	D4	132/134 (98%)	108 (82%)	14 (11%)	10 (8%)	1	6
26	d4	132/134 (98%)	108 (82%)	15 (11%)	9 (7%)	1	7
27	D5	68/107 (64%)	43 (63%)	14 (21%)	11 (16%)	0	1
27	d5	67/107 (63%)	55 (82%)	7 (10%)	5 (8%)	1	6
28	D6	95/97 (98%)	58 (61%)	19 (20%)	18 (19%)	0	0
28	d6	95/97 (98%)	73 (77%)	14 (15%)	8 (8%)	1	5
29	D7	79/81 (98%)	67 (85%)	8 (10%)	4 (5%)	2	15
29	d7	79/81 (98%)	66 (84%)	7 (9%)	6 (8%)	1	6
30	D8	61/66 (92%)	51 (84%)	7 (12%)	3 (5%)	3	16
30	d8	61/66 (92%)	46 (75%)	8 (13%)	7 (12%)	0	2
31	D9	51/55 (93%)	43 (84%)	6 (12%)	2 (4%)	4	21
31	d9	51/55 (93%)	42 (82%)	5 (10%)	4 (8%)	1	6
32	E0	58/60 (97%)	47 (81%)	7 (12%)	4 (7%)	1	7
33	E1	69/76 (91%)	36 (52%)	15 (22%)	18 (26%)	0	0
33	e1	74/76 (97%)	34 (46%)	20 (27%)	20 (27%)	0	0
34	SR	316/318 (99%)	277 (88%)	27 (8%)	12 (4%)	4	22
34	sR	316/318 (99%)	270 (85%)	36 (11%)	10 (3%)	5	27
35	SM	155/273 (57%)	113 (73%)	18 (12%)	24 (16%)	0	1
35	sM	98/273 (36%)	64 (65%)	20 (20%)	14 (14%)	0	1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
39	L2	250/253 (99%)	225 (90%)	17 (7%)	8 (3%)	5	27
39	l2	250/253 (99%)	211 (84%)	33 (13%)	6 (2%)	7	35
40	L3	384/386 (100%)	336 (88%)	31 (8%)	17 (4%)	3	18
40	l3	384/386 (100%)	341 (89%)	31 (8%)	12 (3%)	5	28
41	L4	359/361 (99%)	293 (82%)	46 (13%)	20 (6%)	2	13
41	l4	359/361 (99%)	305 (85%)	35 (10%)	19 (5%)	2	14
42	L5	294/296 (99%)	245 (83%)	31 (10%)	18 (6%)	2	11
42	l5	292/296 (99%)	259 (89%)	23 (8%)	10 (3%)	5	25
43	L6	152/175 (87%)	135 (89%)	14 (9%)	3 (2%)	9	41
43	l6	153/175 (87%)	125 (82%)	24 (16%)	4 (3%)	7	33
44	L7	220/243 (90%)	198 (90%)	14 (6%)	8 (4%)	4	24
44	l7	221/243 (91%)	199 (90%)	19 (9%)	3 (1%)	14	51
45	L8	231/255 (91%)	189 (82%)	34 (15%)	8 (4%)	4	24
45	l8	229/255 (90%)	183 (80%)	26 (11%)	20 (9%)	1	4
46	L9	189/191 (99%)	168 (89%)	15 (8%)	6 (3%)	5	27
46	l9	189/191 (99%)	174 (92%)	9 (5%)	6 (3%)	5	27
47	M0	207/220 (94%)	179 (86%)	20 (10%)	8 (4%)	4	21
47	m0	209/220 (95%)	168 (80%)	30 (14%)	11 (5%)	2	14
48	M1	167/173 (96%)	132 (79%)	17 (10%)	18 (11%)	0	2
48	m1	167/173 (96%)	140 (84%)	16 (10%)	11 (7%)	1	8
49	M3	191/198 (96%)	156 (82%)	28 (15%)	7 (4%)	4	23
49	m3	192/198 (97%)	156 (81%)	22 (12%)	14 (7%)	1	6
50	M4	134/137 (98%)	116 (87%)	10 (8%)	8 (6%)	2	11
50	m4	135/137 (98%)	121 (90%)	11 (8%)	3 (2%)	8	38
51	M5	201/203 (99%)	186 (92%)	10 (5%)	5 (2%)	7	34
51	m5	201/203 (99%)	181 (90%)	13 (6%)	7 (4%)	4	24
52	M6	195/198 (98%)	180 (92%)	12 (6%)	3 (2%)	13	50
52	m6	195/198 (98%)	174 (89%)	16 (8%)	5 (3%)	7	33
53	M7	181/183 (99%)	153 (84%)	20 (11%)	8 (4%)	3	18
53	m7	153/183 (84%)	140 (92%)	11 (7%)	2 (1%)	15	53
54	M8	183/185 (99%)	157 (86%)	21 (12%)	5 (3%)	6	32

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
54	m8	183/185 (99%)	157 (86%)	20 (11%)	6 (3%)	5	26
55	M9	186/188 (99%)	161 (87%)	23 (12%)	2 (1%)	17	58
55	m9	186/188 (99%)	163 (88%)	22 (12%)	1 (0%)	34	76
56	N0	170/172 (99%)	151 (89%)	14 (8%)	5 (3%)	6	29
56	n0	170/172 (99%)	154 (91%)	14 (8%)	2 (1%)	16	56
57	N1	157/159 (99%)	140 (89%)	12 (8%)	5 (3%)	5	27
57	n1	157/159 (99%)	139 (88%)	13 (8%)	5 (3%)	5	27
58	N2	98/120 (82%)	76 (78%)	15 (15%)	7 (7%)	1	7
58	n2	96/120 (80%)	82 (85%)	10 (10%)	4 (4%)	3	20
59	N3	134/136 (98%)	121 (90%)	11 (8%)	2 (2%)	13	50
59	n3	134/136 (98%)	122 (91%)	10 (8%)	2 (2%)	13	50
60	N4	96/155 (62%)	77 (80%)	12 (12%)	7 (7%)	1	6
60	n4	133/155 (86%)	110 (83%)	12 (9%)	11 (8%)	1	5
61	N5	119/141 (84%)	107 (90%)	9 (8%)	3 (2%)	7	34
61	n5	118/141 (84%)	96 (81%)	10 (8%)	12 (10%)	1	3
62	N6	124/126 (98%)	114 (92%)	7 (6%)	3 (2%)	7	35
62	n6	124/126 (98%)	110 (89%)	8 (6%)	6 (5%)	3	17
63	N7	133/135 (98%)	113 (85%)	12 (9%)	8 (6%)	2	11
63	n7	133/135 (98%)	104 (78%)	18 (14%)	11 (8%)	1	5
64	N8	146/148 (99%)	123 (84%)	13 (9%)	10 (7%)	1	7
64	n8	146/148 (99%)	121 (83%)	20 (14%)	5 (3%)	5	25
65	N9	56/58 (97%)	47 (84%)	7 (12%)	2 (4%)	4	24
65	n9	56/58 (97%)	41 (73%)	9 (16%)	6 (11%)	0	2
66	O0	95/104 (91%)	87 (92%)	8 (8%)	0	100	100
66	o0	98/104 (94%)	88 (90%)	9 (9%)	1 (1%)	19	61
67	O1	107/112 (96%)	98 (92%)	4 (4%)	5 (5%)	3	17
67	o1	107/112 (96%)	88 (82%)	15 (14%)	4 (4%)	4	23
68	O2	125/129 (97%)	112 (90%)	11 (9%)	2 (2%)	12	48
68	o2	125/129 (97%)	108 (86%)	12 (10%)	5 (4%)	4	21
69	O3	104/106 (98%)	96 (92%)	7 (7%)	1 (1%)	19	61
69	o3	104/106 (98%)	96 (92%)	7 (7%)	1 (1%)	19	61

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
70	O4	110/120 (92%)	100 (91%)	7 (6%)	3 (3%)	6	32
70	o4	110/120 (92%)	99 (90%)	7 (6%)	4 (4%)	4	24
71	O5	117/119 (98%)	103 (88%)	9 (8%)	5 (4%)	3	19
71	o5	117/119 (98%)	98 (84%)	14 (12%)	5 (4%)	3	19
72	O6	97/99 (98%)	76 (78%)	14 (14%)	7 (7%)	1	7
72	o6	97/99 (98%)	80 (82%)	9 (9%)	8 (8%)	1	5
73	O7	85/87 (98%)	72 (85%)	11 (13%)	2 (2%)	7	35
73	o7	85/87 (98%)	73 (86%)	10 (12%)	2 (2%)	7	35
74	O8	75/77 (97%)	59 (79%)	14 (19%)	2 (3%)	6	32
74	o8	75/77 (97%)	63 (84%)	8 (11%)	4 (5%)	2	14
75	O9	48/50 (96%)	42 (88%)	5 (10%)	1 (2%)	9	40
75	o9	48/50 (96%)	43 (90%)	5 (10%)	0	100	100
76	Q0	50/52 (96%)	44 (88%)	4 (8%)	2 (4%)	4	21
76	q0	50/52 (96%)	47 (94%)	1 (2%)	2 (4%)	4	21
77	Q1	23/25 (92%)	22 (96%)	1 (4%)	0	100	100
77	q1	23/25 (92%)	20 (87%)	3 (13%)	0	100	100
78	Q2	103/105 (98%)	83 (81%)	16 (16%)	4 (4%)	4	21
78	q2	103/105 (98%)	92 (89%)	8 (8%)	3 (3%)	6	29
79	Q3	89/91 (98%)	70 (79%)	16 (18%)	3 (3%)	5	25
79	q3	89/91 (98%)	80 (90%)	8 (9%)	1 (1%)	17	58
80	e0	60/62 (97%)	44 (73%)	10 (17%)	6 (10%)	1	3
82	p0	139/311 (45%)	115 (83%)	19 (14%)	5 (4%)	4	24
All	All	22333/24143 (92%)	18550 (83%)	2534 (11%)	1249 (6%)	2	13

All (1249) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	39	ASN
2	S0	49	ASN
2	S0	66	ALA
2	S0	158	VAL
2	S0	185	ARG
2	S0	191	ARG

Continued on next page...



*Continued from previous page...*

Mol	Chain	Res	Type
2	S0	203	PHE
3	S1	49	ASN
3	S1	58	SER
3	S1	63	GLY
3	S1	116	LYS
3	S1	148	ASN
3	S1	177	GLN
3	S1	179	SER
3	S1	206	PRO
3	S1	221	PRO
4	S2	148	LEU
5	S3	62	ASN
5	S3	65	ARG
5	S3	211	PRO
5	S3	212	LYS
5	S3	220	PRO
6	S4	26	CYS
6	S4	104	ASP
6	S4	164	LEU
7	S5	26	ALA
7	S5	35	GLN
7	S5	39	GLU
7	S5	63	GLN
7	S5	76	ARG
8	S6	20	ASP
8	S6	25	ARG
8	S6	154	ARG
8	S6	173	PRO
8	S6	174	LYS
9	S7	31	SER
9	S7	32	PRO
9	S7	64	VAL
9	S7	111	LYS
9	S7	112	ARG
9	S7	116	ARG
9	S7	131	PHE
9	S7	133	THR
9	S7	134	GLU
9	S7	155	ASP
10	S8	22	ARG
10	S8	52	ASN
11	S9	98	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	S9	134	ILE
11	S9	164	PHE
12	C0	54	TYR
12	C0	60	SER
12	C0	64	TYR
12	C0	81	ASN
12	C0	87	VAL
12	C0	88	PRO
13	C1	7	VAL
13	C1	29	LYS
13	C1	95	PRO
13	C1	96	LYS
13	C1	147	ALA
14	C2	89	ILE
14	C2	93	ASP
14	C2	127	GLY
15	C3	22	ALA
15	C3	27	LYS
15	C3	138	ASN
16	C4	39	ILE
16	C4	124	ASP
16	C4	125	SER
17	C5	54	ALA
17	C5	125	PRO
17	C5	126	VAL
18	C6	40	GLU
18	C6	41	PRO
18	C6	59	LYS
19	C7	85	VAL
19	C7	86	PRO
19	C7	88	VAL
19	C7	124	VAL
20	C8	14	ILE
20	C8	60	GLU
20	C8	82	PRO
20	C8	91	ASP
20	C8	92	ILE
21	C9	31	PRO
21	C9	53	TRP
22	D0	118	VAL
24	D2	83	ILE
25	D3	114	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	D3	131	SER
25	D3	137	LYS
26	D4	36	SER
27	D5	39	ALA
27	D5	43	ASP
27	D5	44	GLN
27	D5	71	ILE
27	D5	97	LYS
28	D6	18	VAL
28	D6	45	VAL
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
33	E1	98	VAL
33	E1	102	VAL
33	E1	103	LEU
33	E1	106	TYR
33	E1	128	ALA
34	SR	51	ASP
34	SR	161	LYS
34	SR	318	ALA
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	250	GLN
40	L3	3	HIS
40	L3	4	ARG
40	L3	138	ALA
40	L3	140	ASP
40	L3	300	ARG
40	L3	347	SER
40	L3	351	LEU
41	L4	130	ALA
41	L4	146	PRO
41	L4	268	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	L4	270	SER
41	L4	291	ASN
41	L4	317	PRO
41	L4	318	LEU
41	L4	338	LYS
42	L5	58	LYS
42	L5	233	ALA
42	L5	234	ASP
42	L5	258	LYS
43	L6	6	ALA
43	L6	98	VAL
44	L7	24	GLU
44	L7	26	VAL
44	L7	216	VAL
45	L8	25	PRO
45	L8	31	PRO
46	L9	50	ASN
46	L9	109	ALA
48	M1	8	PRO
48	M1	9	MET
48	M1	11	ASP
48	M1	74	PRO
48	M1	115	LYS
48	M1	165	GLN
49	M3	47	ALA
49	M3	129	ASN
50	M4	8	LYS
50	M4	9	ALA
50	M4	10	SER
51	M5	75	VAL
52	M6	111	PRO
53	M7	157	VAL
54	M8	41	ASP
54	M8	99	THR
55	M9	53	LYS
57	N1	159	PHE
58	N2	44	GLU
58	N2	51	GLY
60	N4	64	THR
60	N4	81	PRO
61	N5	44	PRO
62	N6	84	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
63	N7	17	ARG
64	N8	76	ASP
67	O1	6	ASP
67	O1	7	VAL
67	O1	84	ASP
71	O5	91	ALA
71	O5	119	LYS
72	O6	33	ALA
75	O9	4	GLN
76	Q0	78	ILE
78	Q2	15	LYS
78	Q2	30	ALA
78	Q2	100	LYS
2	s0	4	PRO
2	s0	8	ASP
2	s0	164	ASN
2	s0	183	ARG
2	s0	185	ARG
2	s0	186	GLY
2	s0	206	ASP
3	s1	147	ALA
3	s1	154	SER
3	s1	206	PRO
3	s1	223	PHE
4	s2	92	ALA
5	s3	179	GLN
5	s3	211	PRO
5	s3	216	PRO
5	s3	217	ILE
5	s3	220	PRO
5	s3	221	SER
6	s4	95	THR
6	s4	195	ILE
6	s4	196	VAL
7	s5	28	PRO
7	s5	39	GLU
7	s5	43	PHE
7	s5	54	LYS
7	s5	127	GLN
7	s5	184	PHE
7	s5	204	GLY
8	s6	153	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	s6	154	ARG
8	s6	173	PRO
8	s6	174	LYS
9	s7	64	VAL
9	s7	66	SER
9	s7	67	LEU
9	s7	74	GLN
9	s7	116	ARG
9	s7	131	PHE
9	s7	185	ILE
10	s8	62	THR
11	s9	118	LEU
11	s9	121	SER
12	c0	82	LEU
12	c0	83	PRO
12	c0	88	PRO
12	c0	97	PRO
13	c1	129	ARG
14	c2	22	VAL
14	c2	89	ILE
14	c2	131	ASP
15	c3	66	ILE
15	c3	87	ASP
15	c3	137	PRO
15	c3	139	TRP
16	c4	126	THR
16	c4	132	ARG
17	c5	9	LYS
17	c5	11	VAL
17	c5	51	SER
17	c5	52	LYS
17	c5	117	GLY
17	c5	125	PRO
17	c5	126	VAL
17	c5	127	ARG
17	c5	132	GLY
18	c6	42	GLU
18	c6	116	LEU
19	c7	88	VAL
19	c7	104	ASN
19	c7	116	LYS
20	c8	92	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	c9	29	GLU
21	c9	33	TYR
22	d0	15	GLN
22	d0	17	GLN
22	d0	49	ASN
22	d0	51	VAL
22	d0	97	VAL
22	d0	118	VAL
24	d2	68	ARG
25	d3	128	SER
25	d3	131	SER
25	d3	138	GLU
26	d4	30	PRO
26	d4	33	ALA
26	d4	35	VAL
26	d4	52	LYS
27	d5	85	LYS
27	d5	104	ALA
29	d7	3	LEU
29	d7	38	PRO
29	d7	60	SER
29	d7	75	GLU
30	d8	61	ARG
31	d9	6	VAL
31	d9	7	TRP
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	100	LEU
33	e1	102	VAL
33	e1	103	LEU
33	e1	106	TYR
34	sR	160	GLU
34	sR	163	ASP
34	sR	165	ASP
34	sR	318	ALA
35	sM	47	ALA
35	sM	50	ASN
39	l2	24	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	l2	56	ALA
39	l2	96	LEU
39	l2	215	ASN
40	l3	3	HIS
40	l3	140	ASP
40	l3	155	ALA
40	l3	347	SER
41	l4	15	ALA
41	l4	90	PHE
41	l4	145	ILE
41	l4	302	ALA
41	l4	311	HIS
41	l4	329	PRO
41	l4	330	TYR
42	l5	5	LYS
42	l5	260	PHE
43	l6	98	VAL
45	l8	25	PRO
45	l8	26	LEU
45	l8	34	PHE
45	l8	121	SER
45	l8	123	GLN
47	m0	25	ALA
47	m0	170	LYS
47	m0	175	ASN
47	m0	207	GLU
48	m1	8	PRO
48	m1	9	MET
48	m1	10	ARG
48	m1	108	GLU
48	m1	115	LYS
49	m3	47	ALA
49	m3	93	ILE
49	m3	101	ARG
49	m3	121	SER
49	m3	134	GLU
49	m3	152	THR
51	m5	183	THR
51	m5	187	ARG
52	m6	16	VAL
52	m6	110	PRO
54	m8	99	THR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
56	n0	2	ALA
57	n1	136	ARG
59	n3	42	SER
60	n4	26	SER
60	n4	71	ARG
60	n4	76	VAL
60	n4	133	THR
61	n5	38	LEU
61	n5	44	PRO
61	n5	45	LYS
61	n5	55	ASN
62	n6	83	ASP
62	n6	84	LYS
62	n6	125	LYS
62	n6	126	LEU
63	n7	16	GLY
63	n7	17	ARG
63	n7	129	TRP
64	n8	76	ASP
65	n9	21	ILE
65	n9	23	LYS
65	n9	25	LYS
65	n9	39	PHE
66	o0	100	ILE
67	o1	5	LYS
67	o1	45	GLY
68	o2	4	LEU
68	o2	5	PRO
68	o2	27	ARG
69	o3	88	ASN
70	o4	79	SER
71	o5	119	LYS
72	o6	33	ALA
72	o6	63	ASN
72	o6	64	SER
72	o6	98	ARG
74	o8	18	ALA
74	o8	19	ASP
82	p0	93	LEU
2	S0	5	ALA
2	S0	94	GLY
2	S0	95	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	S0	190	ASP
3	S1	60	ALA
3	S1	213	ARG
4	S2	107	SER
5	S3	81	PRO
5	S3	93	ASP
5	S3	216	PRO
6	S4	12	LEU
6	S4	195	ILE
7	S5	43	PHE
7	S5	74	ALA
7	S5	101	GLY
7	S5	150	GLY
7	S5	153	GLY
8	S6	122	GLU
9	S7	30	SER
9	S7	85	PHE
9	S7	156	SER
10	S8	59	ARG
10	S8	120	THR
10	S8	149	SER
10	S8	199	LYS
11	S9	150	LEU
12	C0	89	ALA
13	C1	6	THR
13	C1	55	ASP
13	C1	145	ALA
14	C2	21	GLU
14	C2	66	VAL
14	C2	83	GLU
14	C2	91	VAL
15	C3	12	SER
15	C3	28	LEU
15	C3	68	GLY
16	C4	40	ALA
16	C4	42	VAL
16	C4	50	ALA
16	C4	123	SER
16	C4	126	THR
17	C5	80	MET
17	C5	101	ALA
18	C6	114	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
19	C7	6	THR
19	C7	24	LEU
19	C7	83	GLN
19	C7	115	LEU
20	C8	25	ASN
20	C8	61	LEU
20	C8	83	ALA
20	C8	144	ARG
22	D0	17	GLN
23	D1	2	GLU
23	D1	4	ASP
23	D1	11	LEU
23	D1	12	TYR
23	D1	49	GLU
25	D3	3	LYS
25	D3	70	LYS
25	D3	96	VAL
26	D4	4	ALA
26	D4	5	VAL
26	D4	34	ASN
27	D5	56	THR
27	D5	88	ILE
28	D6	46	GLU
28	D6	47	ALA
28	D6	63	ALA
28	D6	82	ARG
29	D7	63	LEU
31	D9	8	PHE
33	E1	84	VAL
33	E1	85	TYR
33	E1	111	GLU
33	E1	144	CYS
33	E1	145	HIS
34	SR	295	SER
35	SM	47	ALA
35	SM	102	THR
35	SM	139	GLU
35	SM	153	ASP
39	L2	32	LEU
39	L2	251	LYS
40	L3	187	SER
41	L4	15	ALA

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
41	L4	131	VAL
41	L4	190	GLY
41	L4	311	HIS
42	L5	20	PHE
42	L5	57	ASN
42	L5	215	ASP
42	L5	252	ALA
42	L5	260	PHE
42	L5	295	GLY
44	L7	191	VAL
45	L8	36	ILE
45	L8	156	ASP
47	M0	24	ARG
47	M0	117	GLY
48	M1	24	GLY
48	M1	65	ILE
48	M1	94	ARG
48	M1	95	ASN
48	M1	151	SER
50	M4	112	LEU
51	M5	74	PRO
51	M5	184	LYS
52	M6	110	PRO
56	N0	2	ALA
56	N0	13	ARG
57	N1	124	VAL
58	N2	50	LEU
60	N4	87	LEU
61	N5	26	VAL
63	N7	18	TYR
63	N7	35	SER
63	N7	125	GLY
64	N8	47	LYS
64	N8	66	ALA
64	N8	79	TRP
64	N8	96	LYS
70	O4	74	ARG
70	O4	77	GLY
71	O5	97	ALA
72	O6	27	SER
72	O6	28	TYR
72	O6	34	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
73	O7	68	LYS
79	Q3	20	SER
79	Q3	58	SER
2	s0	14	ALA
2	s0	44	GLY
2	s0	95	ALA
2	s0	167	LYS
2	s0	184	LEU
2	s0	189	VAL
3	s1	26	ARG
3	s1	82	ARG
3	s1	93	GLY
4	s2	93	GLY
4	s2	107	SER
4	s2	163	GLY
5	s3	61	GLU
5	s3	76	ARG
5	s3	90	ARG
5	s3	195	SER
6	s4	12	LEU
6	s4	24	SER
6	s4	104	ASP
6	s4	163	ASP
6	s4	164	LEU
6	s4	245	LYS
7	s5	35	GLN
7	s5	36	ALA
7	s5	100	ASN
7	s5	209	TYR
8	s6	68	LEU
9	s7	155	ASP
10	s8	101	ILE
12	c0	30	ALA
12	c0	32	HIS
12	c0	92	ILE
12	c0	94	GLU
13	c1	7	VAL
13	c1	114	ALA
13	c1	121	ASP
13	c1	144	ALA
14	c2	66	VAL
14	c2	82	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	c2	91	VAL
14	c2	93	ASP
14	c2	101	ALA
14	c2	118	ALA
14	c2	119	SER
15	c3	19	SER
15	c3	60	VAL
15	c3	108	ASP
15	c3	140	LYS
16	c4	92	LYS
17	c5	7	ALA
17	c5	17	TYR
17	c5	68	PRO
17	c5	135	THR
18	c6	39	VAL
18	c6	113	ASP
19	c7	99	VAL
20	c8	55	HIS
20	c8	91	ASP
21	c9	28	LEU
22	d0	52	LYS
23	d1	43	GLY
26	d4	53	ASP
26	d4	58	PHE
26	d4	78	SER
28	d6	13	LYS
28	d6	34	LYS
28	d6	58	VAL
28	d6	82	ARG
29	d7	20	LYS
29	d7	62	ILE
31	d9	16	LYS
80	e0	47	VAL
33	e1	136	LYS
33	e1	145	HIS
34	sR	4	ASN
34	sR	161	LYS
35	sM	63	ASP
35	sM	67	GLY
35	sM	172	VAL
39	l2	127	ALA
39	l2	194	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	l3	142	ALA
40	l3	385	LYS
40	l3	386	ASP
41	l4	14	GLU
41	l4	232	SER
41	l4	342	LYS
42	l5	258	LYS
45	l8	81	THR
45	l8	122	LYS
45	l8	133	LYS
45	l8	203	VAL
45	l8	222	PHE
45	l8	223	ALA
45	l8	240	ASN
46	l9	144	ILE
47	m0	117	GLY
47	m0	204	GLY
47	m0	219	ALA
48	m1	94	ARG
49	m3	135	ALA
49	m3	141	ALA
49	m3	150	PRO
50	m4	135	LEU
51	m5	184	LYS
52	m6	13	GLY
53	m7	66	SER
53	m7	67	ILE
54	m8	41	ASP
54	m8	180	ARG
56	n0	133	ALA
57	n1	122	GLN
57	n1	135	PRO
58	n2	49	ASN
58	n2	91	ASP
60	n4	25	ASP
60	n4	63	ILE
61	n5	24	LEU
61	n5	47	ALA
63	n7	56	LYS
63	n7	105	SER
63	n7	125	GLY
63	n7	128	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
63	n7	130	PHE
67	o1	83	GLU
68	o2	6	HIS
73	o7	86	ALA
76	q0	78	ILE
82	p0	47	GLY
2	S0	27	ARG
2	S0	30	GLN
2	S0	36	TYR
3	S1	35	PRO
3	S1	51	SER
3	S1	54	LEU
3	S1	62	LYS
3	S1	130	SER
3	S1	132	ASP
3	S1	154	SER
3	S1	158	SER
4	S2	207	LEU
4	S2	248	SER
5	S3	218	LEU
6	S4	77	ARG
7	S5	64	VAL
7	S5	95	ASN
7	S5	100	ASN
7	S5	127	GLN
8	S6	152	ASP
9	S7	73	VAL
9	S7	98	ILE
9	S7	115	SER
10	S8	13	ALA
10	S8	40	ALA
10	S8	105	ASP
10	S8	152	ILE
10	S8	153	GLU
11	S9	163	PRO
12	C0	94	GLU
13	C1	146	ALA
13	C1	154	ALA
14	C2	87	PRO
14	C2	101	ALA
14	C2	107	ASP
14	C2	112	ALA

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
14	C2	119	SER
14	C2	131	ASP
15	C3	19	SER
16	C4	92	LYS
16	C4	127	ARG
17	C5	69	GLU
17	C5	87	PRO
18	C6	138	PHE
19	C7	72	LYS
20	C8	134	ARG
20	C8	142	GLY
23	D1	7	GLN
23	D1	10	GLU
25	D3	11	SER
25	D3	41	SER
25	D3	46	SER
25	D3	112	LYS
25	D3	128	SER
26	D4	47	VAL
26	D4	51	GLU
26	D4	60	PHE
28	D6	61	GLU
28	D6	62	TYR
28	D6	97	PRO
29	D7	51	GLN
33	E1	87	THR
33	E1	127	GLY
34	SR	98	GLU
35	SM	53	ARG
35	SM	88	ARG
35	SM	100	THR
35	SM	101	ASP
35	SM	173	GLU
39	L2	14	SER
39	L2	47	GLN
39	L2	143	GLU
39	L2	144	ASN
40	L3	155	ALA
40	L3	348	ARG
40	L3	386	ASP
41	L4	361	HIS
42	L5	6	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	L5	21	ARG
42	L5	115	LEU
42	L5	137	ASP
42	L5	253	PHE
43	L6	5	LYS
44	L7	159	GLN
45	L8	39	ALA
45	L8	119	GLY
47	M0	187	ALA
47	M0	220	GLN
48	M1	108	GLU
48	M1	114	ILE
49	M3	131	LYS
49	M3	193	ALA
50	M4	29	ALA
50	M4	135	LEU
53	M7	160	ALA
53	M7	162	GLU
53	M7	163	LYS
54	M8	91	ALA
56	N0	130	GLU
59	N3	4	ASN
60	N4	97	LYS
64	N8	78	LEU
72	O6	3	VAL
74	O8	33	LYS
78	Q2	94	GLY
2	s0	10	THR
2	s0	81	PHE
2	s0	194	PRO
2	s0	200	ASP
2	s0	203	PHE
3	s1	129	THR
3	s1	179	SER
3	s1	209	ASN
3	s1	232	HIS
4	s2	106	ASP
4	s2	234	PRO
5	s3	43	PRO
5	s3	45	LYS
5	s3	93	ASP
7	s5	60	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	s5	98	MET
8	s6	69	LEU
8	s6	70	PRO
8	s6	165	GLY
10	s8	199	LYS
11	s9	162	SER
12	c0	23	ALA
12	c0	31	LYS
12	c0	35	ILE
13	c1	133	LYS
14	c2	45	LEU
14	c2	58	LEU
14	c2	87	PRO
14	c2	108	ARG
16	c4	12	GLN
17	c5	14	THR
17	c5	50	THR
17	c5	128	HIS
19	c7	82	ASP
20	c8	44	ASN
22	d0	16	GLN
22	d0	96	PRO
23	d1	44	ARG
25	d3	70	LYS
26	d4	104	SER
27	d5	44	GLN
27	d5	87	GLY
28	d6	8	ASN
28	d6	47	ALA
28	d6	59	TYR
30	d8	65	ARG
31	d9	11	PRO
80	e0	38	LEU
33	e1	81	LYS
33	e1	112	GLY
33	e1	137	ASP
33	e1	146	SER
34	sR	15	GLY
34	sR	141	LEU
35	sM	41	SER
35	sM	64	LYS
40	l3	187	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	l3	235	THR
41	l4	146	PRO
41	l4	190	GLY
41	l4	233	LEU
42	l5	38	THR
42	l5	158	ARG
42	l5	178	ASN
42	l5	270	LYS
43	l6	10	TYR
43	l6	171	PRO
45	l8	39	ALA
45	l8	83	ASP
45	l8	112	GLU
45	l8	196	ALA
45	l8	237	ILE
47	m0	3	ARG
47	m0	82	ARG
47	m0	176	LEU
47	m0	195	ALA
48	m1	7	ASN
48	m1	39	GLN
49	m3	62	THR
49	m3	129	ASN
51	m5	76	PRO
51	m5	81	TYR
52	m6	183	ALA
57	n1	16	GLN
57	n1	117	ALA
58	n2	50	LEU
60	n4	77	LYS
61	n5	25	LYS
61	n5	48	SER
61	n5	136	ALA
64	n8	47	LYS
67	o1	47	ASP
70	o4	47	CYS
71	o5	14	LYS
71	o5	40	SER
78	q2	78	LYS
82	p0	68	SER
2	S0	103	THR
2	S0	130	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	S0	139	VAL
2	S0	163	ASN
2	S0	189	VAL
2	S0	195	TRP
3	S1	23	PRO
3	S1	26	ARG
4	S2	91	ARG
4	S2	150	GLN
5	S3	44	THR
5	S3	195	SER
5	S3	217	ILE
6	S4	233	LYS
6	S4	245	LYS
7	S5	51	VAL
7	S5	58	LEU
8	S6	69	LEU
8	S6	70	PRO
8	S6	138	ALA
8	S6	146	GLY
9	S7	36	ALA
9	S7	84	LYS
9	S7	110	GLN
10	S8	10	LYS
12	C0	34	GLU
13	C1	113	PRO
14	C2	39	ASP
14	C2	68	GLU
14	C2	106	ILE
14	C2	108	ARG
14	C2	125	ASN
16	C4	18	ARG
16	C4	75	GLY
17	C5	29	SER
17	C5	51	SER
17	C5	52	LYS
18	C6	33	GLY
18	C6	58	ASP
19	C7	87	GLU
19	C7	123	ASN
21	C9	28	LEU
21	C9	50	ALA
21	C9	69	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	D4	75	VAL
28	D6	32	LYS
28	D6	64	LEU
30	D8	36	THR
31	D9	20	GLN
33	E1	83	LYS
33	E1	86	THR
33	E1	100	LEU
33	E1	118	ARG
34	SR	3	SER
34	SR	28	GLY
34	SR	160	GLU
34	SR	237	GLN
35	SM	42	ALA
35	SM	46	LYS
35	SM	64	LYS
35	SM	111	GLY
41	L4	182	LEU
41	L4	232	SER
41	L4	233	LEU
41	L4	269	SER
42	L5	19	PRO
42	L5	125	VAL
42	L5	259	LYS
44	L7	163	LEU
45	L8	157	VAL
46	L9	96	HIS
46	L9	190	ASP
47	M0	7	ARG
48	M1	117	ASP
48	M1	152	HIS
48	M1	167	TYR
49	M3	76	THR
49	M3	130	GLY
49	M3	136	GLU
53	M7	161	ALA
53	M7	169	THR
54	M8	112	ALA
54	M8	162	ALA
56	N0	167	ARG
57	N1	114	ALA
58	N2	11	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
58	N2	59	ASP
58	N2	107	PHE
61	N5	25	LYS
62	N6	126	LEU
63	N7	36	HIS
63	N7	102	GLU
63	N7	103	GLN
64	N8	117	ARG
65	N9	25	LYS
67	O1	53	PRO
67	O1	82	GLU
68	O2	68	PRO
69	O3	59	VAL
76	Q0	79	GLU
2	s0	92	HIS
2	s0	103	THR
4	s2	91	ARG
4	s2	150	GLN
4	s2	235	LEU
4	s2	238	SER
6	s4	90	ILE
6	s4	213	SER
6	s4	260	GLY
8	s6	152	ASP
9	s7	112	ARG
11	s9	120	LYS
11	s9	150	LEU
12	c0	3	MET
14	c2	103	LEU
14	c2	106	ILE
14	c2	107	ASP
14	c2	115	VAL
16	c4	11	SER
16	c4	90	ARG
17	c5	130	ARG
20	c8	61	LEU
20	c8	135	GLY
24	d2	31	SER
27	d5	38	HIS
28	d6	46	GLU
30	d8	33	LEU
80	e0	54	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
80	e0	61	SER
33	e1	111	GLU
33	e1	131	PHE
35	sM	42	ALA
35	sM	43	ASP
35	sM	65	THR
35	sM	121	LYS
40	l3	141	GLY
40	l3	333	LYS
41	l4	142	VAL
44	l7	191	VAL
46	l9	2	LYS
46	l9	108	GLY
48	m1	114	ILE
49	m3	51	LEU
49	m3	60	ALA
50	m4	95	ALA
50	m4	136	ALA
54	m8	91	ALA
60	n4	72	SER
60	n4	83	THR
61	n5	39	LYS
61	n5	90	ALA
62	n6	91	ASN
63	n7	34	LYS
63	n7	103	GLN
64	n8	129	PHE
65	n9	24	PRO
68	o2	124	GLY
70	o4	82	ALA
71	o5	82	ALA
72	o6	12	ASN
72	o6	34	SER
73	o7	87	SER
78	q2	17	CYS
82	p0	198	PRO
2	S0	164	ASN
2	S0	194	PRO
3	S1	81	PHE
4	S2	36	VAL
4	S2	235	LEU
5	S3	72	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
6	S4	157	ASN
6	S4	163	ASP
6	S4	165	ALA
6	S4	200	ARG
7	S5	45	LYS
7	S5	65	ARG
11	S9	118	LEU
11	S9	147	MET
12	C0	92	ILE
13	C1	4	GLU
14	C2	22	VAL
14	C2	128	ALA
17	C5	22	LEU
19	C7	23	LYS
22	D0	21	LYS
22	D0	49	ASN
23	D1	15	ARG
25	D3	40	SER
26	D4	95	GLY
26	D4	100	VAL
27	D5	38	HIS
27	D5	41	ILE
27	D5	55	PRO
28	D6	36	ILE
30	D8	35	ASP
30	D8	61	ARG
32	E0	13	LYS
32	E0	33	ARG
33	E1	110	ALA
33	E1	148	TYR
34	SR	194	GLY
35	SM	12	VAL
35	SM	174	LEU
40	L3	188	ILE
40	L3	317	ILE
40	L3	385	LYS
41	L4	292	SER
46	L9	2	LYS
46	L9	39	LYS
47	M0	145	LYS
47	M0	211	ARG
48	M1	64	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	M1	111	ASP
50	M4	6	ILE
51	M5	94	TYR
51	M5	145	ASP
52	M6	16	VAL
53	M7	164	LYS
55	M9	3	ASN
57	N1	18	ASP
60	N4	69	LYS
63	N7	3	LYS
64	N8	27	LYS
64	N8	97	GLU
68	O2	127	ALA
70	O4	82	ALA
71	O5	90	ARG
72	O6	21	THR
73	O7	86	ALA
2	s0	65	ALA
3	s1	94	LYS
3	s1	106	THR
3	s1	224	ASP
5	s3	44	THR
6	s4	94	ALA
7	s5	29	ILE
8	s6	25	ARG
10	s8	52	ASN
10	s8	78	ILE
11	s9	168	ARG
12	c0	95	ARG
13	c1	5	LEU
13	c1	40	LEU
13	c1	55	ASP
14	c2	21	GLU
14	c2	39	ASP
14	c2	90	LYS
15	c3	22	ALA
17	c5	69	GLU
18	c6	142	TYR
19	c7	62	GLN
20	c8	29	VAL
22	d0	119	ALA
23	d1	10	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	d2	56	HIS
25	d3	27	ASN
25	d3	101	GLU
26	d4	50	ALA
30	d8	6	PRO
30	d8	20	GLY
30	d8	57	MET
30	d8	62	GLU
80	e0	51	ASN
33	e1	86	THR
33	e1	124	PRO
34	sR	149	ASP
34	sR	186	PHE
35	sM	46	LYS
41	l4	5	GLN
41	l4	339	LEU
41	l4	352	ALA
42	l5	168	ASP
43	l6	11	PRO
44	l7	178	ILE
45	l8	69	LEU
46	l9	62	ARG
46	l9	167	VAL
48	m1	95	ASN
48	m1	173	ASP
49	m3	76	THR
51	m5	68	ARG
52	m6	90	HIS
54	m8	171	LYS
60	n4	132	GLY
61	n5	40	LEU
63	n7	104	PRO
64	n8	28	HIS
70	o4	78	GLY
74	o8	17	ARG
78	q2	33	ALA
79	q3	51	ALA
82	p0	33	VAL
2	S0	117	GLU
2	S0	183	ARG
3	S1	93	GLY
3	S1	210	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	S2	39	THR
11	S9	126	ARG
14	C2	25	GLU
14	C2	75	VAL
14	C2	81	ASP
14	C2	82	PRO
15	C3	3	ARG
18	C6	113	ASP
22	D0	55	PRO
22	D0	106	ILE
27	D5	54	VAL
28	D6	53	LEU
35	SM	17	VAL
35	SM	82	THR
40	L3	142	ALA
44	L7	178	ILE
56	N0	24	LEU
62	N6	52	ARG
71	O5	75	TYR
72	O6	64	SER
74	O8	37	PRO
2	s0	68	PRO
2	s0	109	ASN
3	s1	60	ALA
3	s1	81	PHE
6	s4	30	ARG
11	s9	134	ILE
15	c3	29	SER
16	c4	114	ARG
18	c6	40	GLU
20	c8	14	ILE
21	c9	34	VAL
33	e1	110	ALA
35	sM	51	ARG
35	sM	167	PRO
40	l3	239	PRO
41	l4	301	PRO
42	l5	9	SER
44	l7	229	PHE
45	l8	150	LEU
45	l8	188	THR
46	l9	110	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	m5	74	PRO
54	m8	112	ALA
64	n8	120	ASN
71	o5	84	LYS
5	S3	112	GLY
9	S7	13	PRO
22	D0	59	PRO
22	D0	117	VAL
44	L7	91	GLY
50	M4	36	VAL
57	N1	123	GLY
58	N2	22	PRO
79	Q3	71	VAL
20	c8	9	GLY
65	n9	37	PRO
72	o6	61	ILE
74	o8	37	PRO
3	S1	176	VAL
4	S2	145	GLY
11	S9	162	SER
14	C2	55	GLY
28	D6	75	VAL
41	L4	4	PRO
60	N4	76	VAL
65	N9	21	ILE
5	s3	219	ALA
41	l4	328	ASN
6	S4	193	GLY
18	C6	39	VAL
18	C6	97	VAL
34	SR	105	GLY
39	L2	153	GLY
40	L3	141	GLY
45	L8	135	GLY
4	s2	83	ILE
11	s9	5	PRO
12	c0	4	PRO
14	c2	63	VAL
18	c6	97	VAL
19	c7	117	LEU
2	S0	64	ILE
3	S1	48	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	S9	168	ARG
14	C2	117	GLY
32	E0	50	VAL
34	SR	15	GLY
35	SM	172	VAL
47	M0	114	GLY
53	M7	51	VAL
59	N3	5	GLY
60	N4	82	ILE
64	N8	70	LYS
7	s5	153	GLY
9	s7	13	PRO
42	l5	125	VAL
58	n2	45	GLY
59	n3	41	GLY
60	n4	98	PRO
62	n6	85	VAL
72	o6	9	ILE
76	q0	80	PRO
3	S1	215	VAL
41	L4	23	PRO
5	s3	163	PRO
55	m9	77	GLY
40	L3	257	PRO

### 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%)	133 (81%)	31 (19%)	2	10
2	s0	165/209 (79%)	131 (79%)	34 (21%)	1	7
3	S1	191/223 (86%)	151 (79%)	40 (21%)	1	7
3	s1	192/223 (86%)	155 (81%)	37 (19%)	2	9
4	S2	176/204 (86%)	140 (80%)	36 (20%)	1	7

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	s2	176/204 (86%)	131 (74%)	45 (26%)	0	3
5	S3	182/194 (94%)	147 (81%)	35 (19%)	2	10
5	s3	182/194 (94%)	146 (80%)	36 (20%)	1	8
6	S4	221/221 (100%)	170 (77%)	51 (23%)	1	5
6	s4	221/221 (100%)	184 (83%)	37 (17%)	3	13
7	S5	173/190 (91%)	147 (85%)	26 (15%)	3	17
7	s5	173/190 (91%)	139 (80%)	34 (20%)	1	9
8	S6	188/201 (94%)	158 (84%)	30 (16%)	3	15
8	s6	187/201 (93%)	151 (81%)	36 (19%)	2	9
9	S7	165/169 (98%)	136 (82%)	29 (18%)	2	12
9	s7	165/169 (98%)	130 (79%)	35 (21%)	1	6
10	S8	150/161 (93%)	130 (87%)	20 (13%)	5	21
10	s8	150/161 (93%)	128 (85%)	22 (15%)	4	18
11	S9	158/165 (96%)	123 (78%)	35 (22%)	1	5
11	s9	158/165 (96%)	128 (81%)	30 (19%)	2	10
12	C0	77/98 (79%)	65 (84%)	12 (16%)	3	16
12	c0	73/98 (74%)	60 (82%)	13 (18%)	2	11
13	C1	129/136 (95%)	107 (83%)	22 (17%)	2	12
13	c1	129/136 (95%)	104 (81%)	25 (19%)	2	9
14	C2	88/118 (75%)	67 (76%)	21 (24%)	1	4
14	c2	88/118 (75%)	64 (73%)	24 (27%)	0	2
15	C3	127/127 (100%)	102 (80%)	25 (20%)	1	9
15	c3	127/127 (100%)	101 (80%)	26 (20%)	1	7
16	C4	81/104 (78%)	66 (82%)	15 (18%)	2	10
16	c4	97/104 (93%)	78 (80%)	19 (20%)	1	9
17	C5	101/117 (86%)	82 (81%)	19 (19%)	2	10
17	c5	103/117 (88%)	84 (82%)	19 (18%)	2	10
18	C6	117/118 (99%)	89 (76%)	28 (24%)	1	4
18	c6	118/118 (100%)	96 (81%)	22 (19%)	2	10
19	C7	94/124 (76%)	73 (78%)	21 (22%)	1	5
19	c7	92/124 (74%)	75 (82%)	17 (18%)	2	10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
20	C8	128/128 (100%)	97 (76%)	31 (24%)	1	4
20	c8	128/128 (100%)	105 (82%)	23 (18%)	2	11
21	C9	115/115 (100%)	92 (80%)	23 (20%)	1	8
21	c9	115/115 (100%)	98 (85%)	17 (15%)	4	17
22	D0	100/113 (88%)	80 (80%)	20 (20%)	1	8
22	d0	103/113 (91%)	76 (74%)	27 (26%)	0	3
23	D1	74/74 (100%)	61 (82%)	13 (18%)	2	12
23	d1	74/74 (100%)	59 (80%)	15 (20%)	1	7
24	D2	110/110 (100%)	93 (84%)	17 (16%)	3	16
24	d2	110/110 (100%)	99 (90%)	11 (10%)	9	34
25	D3	119/119 (100%)	95 (80%)	24 (20%)	1	8
25	d3	119/119 (100%)	100 (84%)	19 (16%)	3	15
26	D4	112/112 (100%)	92 (82%)	20 (18%)	2	11
26	d4	112/112 (100%)	92 (82%)	20 (18%)	2	11
27	D5	61/88 (69%)	45 (74%)	16 (26%)	0	3
27	d5	61/88 (69%)	52 (85%)	9 (15%)	4	17
28	D6	83/83 (100%)	66 (80%)	17 (20%)	1	7
28	d6	83/83 (100%)	72 (87%)	11 (13%)	5	21
29	D7	70/70 (100%)	61 (87%)	9 (13%)	5	23
29	d7	70/70 (100%)	56 (80%)	14 (20%)	1	8
30	D8	56/59 (95%)	45 (80%)	11 (20%)	1	9
30	d8	56/59 (95%)	44 (79%)	12 (21%)	1	6
31	D9	47/48 (98%)	41 (87%)	6 (13%)	5	23
31	d9	47/48 (98%)	36 (77%)	11 (23%)	1	4
32	E0	51/51 (100%)	42 (82%)	9 (18%)	2	12
33	E1	62/66 (94%)	48 (77%)	14 (23%)	1	5
33	e1	66/66 (100%)	49 (74%)	17 (26%)	0	3
34	SR	260/261 (100%)	226 (87%)	34 (13%)	5	22
34	sR	260/261 (100%)	230 (88%)	30 (12%)	7	28
35	SM	97/228 (42%)	75 (77%)	22 (23%)	1	5
35	sM	54/228 (24%)	39 (72%)	15 (28%)	0	2

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
39	L2	193/195 (99%)	152 (79%)	41 (21%)	1	6
39	l2	192/195 (98%)	148 (77%)	44 (23%)	1	5
40	L3	319/322 (99%)	256 (80%)	63 (20%)	1	9
40	l3	321/322 (100%)	261 (81%)	60 (19%)	2	10
41	L4	288/288 (100%)	227 (79%)	61 (21%)	1	6
41	l4	288/288 (100%)	234 (81%)	54 (19%)	2	10
42	L5	244/244 (100%)	195 (80%)	49 (20%)	1	8
42	l5	243/244 (100%)	203 (84%)	40 (16%)	3	13
43	L6	134/152 (88%)	113 (84%)	21 (16%)	3	15
43	l6	135/152 (89%)	112 (83%)	23 (17%)	2	13
44	L7	186/204 (91%)	156 (84%)	30 (16%)	3	14
44	l7	187/204 (92%)	156 (83%)	31 (17%)	3	13
45	L8	187/207 (90%)	153 (82%)	34 (18%)	2	11
45	l8	177/207 (86%)	143 (81%)	34 (19%)	2	10
46	L9	171/171 (100%)	131 (77%)	40 (23%)	1	4
46	l9	171/171 (100%)	133 (78%)	38 (22%)	1	5
47	M0	177/186 (95%)	143 (81%)	34 (19%)	2	10
47	m0	179/186 (96%)	139 (78%)	40 (22%)	1	5
48	M1	147/150 (98%)	116 (79%)	31 (21%)	1	6
48	m1	147/150 (98%)	123 (84%)	24 (16%)	3	14
49	M3	154/158 (98%)	126 (82%)	28 (18%)	2	11
49	m3	154/158 (98%)	129 (84%)	25 (16%)	3	14
50	M4	107/108 (99%)	87 (81%)	20 (19%)	2	10
50	m4	108/108 (100%)	90 (83%)	18 (17%)	3	13
51	M5	175/175 (100%)	144 (82%)	31 (18%)	2	11
51	m5	175/175 (100%)	149 (85%)	26 (15%)	4	17
52	M6	160/161 (99%)	135 (84%)	25 (16%)	3	16
52	m6	160/161 (99%)	130 (81%)	30 (19%)	2	10
53	M7	140/145 (97%)	112 (80%)	28 (20%)	1	8
53	m7	125/145 (86%)	97 (78%)	28 (22%)	1	5
54	M8	150/150 (100%)	129 (86%)	21 (14%)	4	19

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
54	m8	150/150 (100%)	122 (81%)	28 (19%)	2	10
55	M9	153/153 (100%)	126 (82%)	27 (18%)	2	12
55	m9	153/153 (100%)	119 (78%)	34 (22%)	1	5
56	N0	156/156 (100%)	125 (80%)	31 (20%)	1	8
56	n0	156/156 (100%)	126 (81%)	30 (19%)	2	10
57	N1	136/136 (100%)	110 (81%)	26 (19%)	2	10
57	n1	136/136 (100%)	112 (82%)	24 (18%)	2	12
58	N2	87/106 (82%)	77 (88%)	10 (12%)	7	28
58	n2	85/106 (80%)	69 (81%)	16 (19%)	2	10
59	N3	104/104 (100%)	84 (81%)	20 (19%)	2	10
59	n3	104/104 (100%)	92 (88%)	12 (12%)	7	28
60	N4	57/129 (44%)	49 (86%)	8 (14%)	4	19
60	n4	100/129 (78%)	83 (83%)	17 (17%)	2	13
61	N5	104/117 (89%)	78 (75%)	26 (25%)	1	3
61	n5	104/117 (89%)	83 (80%)	21 (20%)	1	8
62	N6	109/109 (100%)	87 (80%)	22 (20%)	1	8
62	n6	109/109 (100%)	82 (75%)	27 (25%)	1	3
63	N7	115/115 (100%)	92 (80%)	23 (20%)	1	8
63	n7	115/115 (100%)	90 (78%)	25 (22%)	1	6
64	N8	118/118 (100%)	96 (81%)	22 (19%)	2	10
64	n8	118/118 (100%)	95 (80%)	23 (20%)	2	9
65	N9	46/46 (100%)	36 (78%)	10 (22%)	1	6
65	n9	46/46 (100%)	34 (74%)	12 (26%)	0	3
66	O0	81/87 (93%)	66 (82%)	15 (18%)	2	10
66	o0	84/87 (97%)	67 (80%)	17 (20%)	1	8
67	O1	92/96 (96%)	71 (77%)	21 (23%)	1	5
67	o1	94/96 (98%)	71 (76%)	23 (24%)	1	4
68	O2	109/110 (99%)	92 (84%)	17 (16%)	3	16
68	o2	109/110 (99%)	85 (78%)	24 (22%)	1	6
69	O3	90/90 (100%)	80 (89%)	10 (11%)	8	29
69	o3	90/90 (100%)	75 (83%)	15 (17%)	3	13

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
70	O4	95/102 (93%)	82 (86%)	13 (14%)	4	20
70	o4	95/102 (93%)	74 (78%)	21 (22%)	1	5
71	O5	104/104 (100%)	81 (78%)	23 (22%)	1	5
71	o5	103/104 (99%)	81 (79%)	22 (21%)	1	6
72	O6	81/81 (100%)	59 (73%)	22 (27%)	0	2
72	o6	80/81 (99%)	53 (66%)	27 (34%)	0	1
73	O7	70/70 (100%)	55 (79%)	15 (21%)	1	6
73	o7	70/70 (100%)	55 (79%)	15 (21%)	1	6
74	O8	68/68 (100%)	50 (74%)	18 (26%)	0	3
74	o8	67/68 (98%)	54 (81%)	13 (19%)	2	9
75	O9	45/45 (100%)	38 (84%)	7 (16%)	3	16
75	o9	45/45 (100%)	35 (78%)	10 (22%)	1	5
76	Q0	47/47 (100%)	36 (77%)	11 (23%)	1	4
76	q0	47/47 (100%)	35 (74%)	12 (26%)	1	3
77	Q1	23/23 (100%)	15 (65%)	8 (35%)	0	1
77	q1	23/23 (100%)	16 (70%)	7 (30%)	0	2
78	Q2	90/90 (100%)	68 (76%)	22 (24%)	1	4
78	q2	90/90 (100%)	74 (82%)	16 (18%)	2	11
79	Q3	71/71 (100%)	56 (79%)	15 (21%)	1	6
79	q3	71/71 (100%)	61 (86%)	10 (14%)	4	19
80	e0	53/53 (100%)	42 (79%)	11 (21%)	1	7
82	p0	105/253 (42%)	86 (82%)	19 (18%)	2	11
All	All	18728/20241 (92%)	15139 (81%)	3589 (19%)	2	10

All (3589) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	S0	27	ARG
2	S0	30	GLN
2	S0	32	HIS
2	S0	47	VAL
2	S0	49	ASN
2	S0	52	LYS
2	S0	62	ARG

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type
2	S0	84	ARG
2	S0	87	LEU
2	S0	88	LYS
2	S0	96	THR
2	S0	101	ARG
2	S0	103	THR
2	S0	110	TYR
2	S0	111	ILE
2	S0	112	THR
2	S0	117	GLU
2	S0	119	ARG
2	S0	123	VAL
2	S0	124	THR
2	S0	154	GLU
2	S0	156	VAL
2	S0	157	ASP
2	S0	170	ILE
2	S0	172	LEU
2	S0	177	LEU
2	S0	185	ARG
2	S0	188	LEU
2	S0	196	SER
2	S0	198	MET
2	S0	200	ASP
3	S1	21	VAL
3	S1	25	THR
3	S1	29	TRP
3	S1	30	PHE
3	S1	46	THR
3	S1	55	LYS
3	S1	61	LEU
3	S1	70	LEU
3	S1	73	LEU
3	S1	77	GLU
3	S1	78	ASP
3	S1	81	PHE
3	S1	83	LYS
3	S1	85	LYS
3	S1	89	ASP
3	S1	91	VAL
3	S1	95	ASN
3	S1	96	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	S1	97	LEU
3	S1	105	PHE
3	S1	108	ASP
3	S1	111	ARG
3	S1	112	SER
3	S1	117	TRP
3	S1	137	ILE
3	S1	146	GLN
3	S1	149	GLN
3	S1	154	SER
3	S1	170	GLU
3	S1	177	GLN
3	S1	180	THR
3	S1	181	LEU
3	S1	198	GLU
3	S1	202	LYS
3	S1	214	LYS
3	S1	218	LEU
3	S1	219	LYS
3	S1	220	GLN
3	S1	222	LYS
3	S1	223	PHE
4	S2	41	LEU
4	S2	53	ILE
4	S2	55	GLU
4	S2	58	LEU
4	S2	64	LYS
4	S2	69	ILE
4	S2	73	LEU
4	S2	76	LEU
4	S2	77	GLN
4	S2	89	GLN
4	S2	90	THR
4	S2	95	ARG
4	S2	96	THR
4	S2	97	ARG
4	S2	111	VAL
4	S2	117	THR
4	S2	119	LYS
4	S2	130	ILE
4	S2	134	LEU
4	S2	140	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	S2	141	ARG
4	S2	146	THR
4	S2	148	LEU
4	S2	158	THR
4	S2	166	THR
4	S2	174	ARG
4	S2	187	LEU
4	S2	207	LEU
4	S2	221	THR
4	S2	222	TYR
4	S2	224	PHE
4	S2	226	THR
4	S2	237	VAL
4	S2	240	LEU
4	S2	242	ILE
4	S2	245	ASP
5	S3	4	LEU
5	S3	5	ILE
5	S3	7	LYS
5	S3	9	ARG
5	S3	23	GLU
5	S3	37	VAL
5	S3	59	LEU
5	S3	65	ARG
5	S3	66	ILE
5	S3	67	ASN
5	S3	84	ILE
5	S3	92	GLN
5	S3	93	ASP
5	S3	104	SER
5	S3	117	ARG
5	S3	127	MET
5	S3	134	CYS
5	S3	137	VAL
5	S3	142	LEU
5	S3	146	ARG
5	S3	151	LYS
5	S3	158	ILE
5	S3	170	THR
5	S3	172	THR
5	S3	175	VAL
5	S3	176	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	S3	178	ARG
5	S3	181	VAL
5	S3	186	VAL
5	S3	187	LYS
5	S3	190	ARG
5	S3	202	LEU
5	S3	207	THR
5	S3	215	GLU
5	S3	222	VAL
6	S4	6	LYS
6	S4	7	LYS
6	S4	9	LEU
6	S4	11	ARG
6	S4	12	LEU
6	S4	23	LEU
6	S4	26	CYS
6	S4	37	LYS
6	S4	38	LEU
6	S4	42	LEU
6	S4	45	ILE
6	S4	48	LEU
6	S4	56	LEU
6	S4	62	LYS
6	S4	65	LEU
6	S4	67	GLN
6	S4	68	ARG
6	S4	77	ARG
6	S4	78	THR
6	S4	79	ASP
6	S4	92	LEU
6	S4	93	ASP
6	S4	102	VAL
6	S4	113	ARG
6	S4	123	LEU
6	S4	126	VAL
6	S4	129	VAL
6	S4	131	LEU
6	S4	133	LYS
6	S4	155	LYS
6	S4	160	VAL
6	S4	164	LEU
6	S4	180	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	S4	182	TYR
6	S4	187	ARG
6	S4	197	HIS
6	S4	198	LYS
6	S4	214	LEU
6	S4	215	ASP
6	S4	222	LEU
6	S4	223	ASN
6	S4	226	PHE
6	S4	227	VAL
6	S4	231	GLN
6	S4	237	SER
6	S4	240	LYS
6	S4	242	LYS
6	S4	246	LEU
6	S4	248	ILE
6	S4	258	GLN
6	S4	259	GLN
7	S5	23	VAL
7	S5	24	VAL
7	S5	25	LEU
7	S5	27	THR
7	S5	32	GLU
7	S5	38	THR
7	S5	41	LYS
7	S5	43	PHE
7	S5	45	LYS
7	S5	53	VAL
7	S5	76	ARG
7	S5	79	ASN
7	S5	84	LYS
7	S5	89	ILE
7	S5	93	LEU
7	S5	94	THR
7	S5	146	THR
7	S5	147	THR
7	S5	156	ARG
7	S5	160	VAL
7	S5	162	VAL
7	S5	172	ILE
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	225	ARG
8	S6	19	ASP
8	S6	21	GLU
8	S6	25	ARG
8	S6	45	PHE
8	S6	58	LYS
8	S6	65	GLN
8	S6	67	VAL
8	S6	68	LEU
8	S6	69	LEU
8	S6	76	LEU
8	S6	78	THR
8	S6	79	LYS
8	S6	82	SER
8	S6	98	ARG
8	S6	120	GLU
8	S6	125	THR
8	S6	126	ASP
8	S6	127	THR
8	S6	128	THR
8	S6	129	VAL
8	S6	133	LEU
8	S6	154	ARG
8	S6	155	ASP
8	S6	169	TYR
8	S6	176	GLN
8	S6	177	ARG
8	S6	211	LEU
8	S6	212	LEU
8	S6	217	SER
8	S6	223	LYS
9	S7	19	GLN
9	S7	25	VAL
9	S7	28	GLU
9	S7	38	LEU
9	S7	45	SER
9	S7	46	ILE
9	S7	50	ASP
9	S7	60	ILE
9	S7	67	LEU
9	S7	70	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	S7	71	HIS
9	S7	79	ARG
9	S7	85	PHE
9	S7	87	ASP
9	S7	97	ARG
9	S7	104	ARG
9	S7	105	THR
9	S7	109	VAL
9	S7	114	ARG
9	S7	116	ARG
9	S7	126	LEU
9	S7	130	VAL
9	S7	131	PHE
9	S7	134	GLU
9	S7	144	VAL
9	S7	147	ASN
9	S7	167	GLU
9	S7	182	VAL
9	S7	185	ILE
10	S8	7	SER
10	S8	8	ARG
10	S8	14	THR
10	S8	17	LYS
10	S8	21	PHE
10	S8	29	LEU
10	S8	36	THR
10	S8	46	VAL
10	S8	49	ARG
10	S8	58	LEU
10	S8	60	ILE
10	S8	62	THR
10	S8	74	LYS
10	S8	77	ARG
10	S8	135	LYS
10	S8	138	ASN
10	S8	151	LYS
10	S8	152	ILE
10	S8	164	ARG
10	S8	196	LEU
11	S9	3	ARG
11	S9	7	THR
11	S9	14	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	S9	22	SER
11	S9	28	LEU
11	S9	39	LYS
11	S9	40	LYS
11	S9	54	ARG
11	S9	64	GLU
11	S9	66	ASP
11	S9	78	ARG
11	S9	79	ARG
11	S9	82	ARG
11	S9	83	VAL
11	S9	89	ASP
11	S9	92	LYS
11	S9	93	LEU
11	S9	94	ASP
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	130	THR
11	S9	134	ILE
11	S9	138	LYS
11	S9	149	ARG
11	S9	151	ASP
11	S9	161	THR
11	S9	162	SER
11	S9	171	ARG
11	S9	172	VAL
11	S9	174	ARG
11	S9	182	GLU
12	C0	1	MET
12	C0	20	VAL
12	C0	27	PHE
12	C0	32	HIS
12	C0	55	VAL
12	C0	56	LYS
12	C0	67	THR
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	8	GLN
13	C1	21	ASN
13	C1	29	LYS
13	C1	40	LEU
13	C1	43	LYS
13	C1	44	THR
13	C1	58	CYS
13	C1	63	LEU
13	C1	64	VAL
13	C1	67	ARG
13	C1	69	LYS
13	C1	74	THR
13	C1	79	LYS
13	C1	83	THR
13	C1	99	ARG
13	C1	109	VAL
13	C1	112	SER
13	C1	127	GLN
13	C1	128	CYS
13	C1	129	ARG
13	C1	131	ILE
13	C1	136	ARG
14	C2	28	LEU
14	C2	36	LEU
14	C2	37	VAL
14	C2	41	LEU
14	C2	43	ARG
14	C2	46	ARG
14	C2	50	LYS
14	C2	52	LEU
14	C2	54	ARG
14	C2	58	LEU
14	C2	61	VAL
14	C2	66	VAL
14	C2	71	ILE
14	C2	86	VAL
14	C2	89	ILE
14	C2	103	LEU
14	C2	121	VAL
14	C2	126	TRP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	C2	129	GLU
14	C2	132	GLU
14	C2	139	HIS
15	C3	3	ARG
15	C3	6	SER
15	C3	9	LYS
15	C3	16	ILE
15	C3	27	LYS
15	C3	39	LYS
15	C3	45	LEU
15	C3	56	ASP
15	C3	58	HIS
15	C3	62	GLN
15	C3	64	ARG
15	C3	66	ILE
15	C3	72	MET
15	C3	76	LYS
15	C3	83	GLU
15	C3	88	LEU
15	C3	94	LYS
15	C3	102	LEU
15	C3	114	ARG
15	C3	115	LEU
15	C3	125	LEU
15	C3	127	ARG
15	C3	134	VAL
15	C3	142	GLU
15	C3	151	ASN
16	C4	13	VAL
16	C4	14	PHE
16	C4	16	VAL
16	C4	20	TYR
16	C4	24	ASN
16	C4	29	HIS
16	C4	31	THR
16	C4	39	ILE
16	C4	42	VAL
16	C4	92	LYS
16	C4	103	ARG
16	C4	123	SER
16	C4	129	LYS
16	C4	136	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	C4	137	LEU
17	C5	22	LEU
17	C5	26	LEU
17	C5	29	SER
17	C5	34	VAL
17	C5	35	LYS
17	C5	36	LEU
17	C5	40	ARG
17	C5	44	ARG
17	C5	47	ARG
17	C5	50	THR
17	C5	52	LYS
17	C5	60	LEU
17	C5	69	GLU
17	C5	86	VAL
17	C5	92	SER
17	C5	110	GLU
17	C5	121	ILE
17	C5	124	THR
17	C5	125	PRO
18	C6	4	VAL
18	C6	12	LYS
18	C6	14	LYS
18	C6	23	LYS
18	C6	26	LYS
18	C6	28	LEU
18	C6	29	ILE
18	C6	39	VAL
18	C6	43	ILE
18	C6	44	LEU
18	C6	52	LEU
18	C6	53	LEU
18	C6	54	LEU
18	C6	57	LEU
18	C6	58	ASP
18	C6	65	ILE
18	C6	66	ARG
18	C6	68	ARG
18	C6	69	VAL
18	C6	98	ASP
18	C6	106	LYS
18	C6	114	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
18	C6	121	SER
18	C6	123	ARG
18	C6	128	LYS
18	C6	137	ARG
18	C6	141	SER
18	C6	143	ARG
19	C7	25	THR
19	C7	30	THR
19	C7	34	LEU
19	C7	38	ILE
19	C7	46	LEU
19	C7	49	LYS
19	C7	54	THR
19	C7	58	MET
19	C7	62	GLN
19	C7	69	ILE
19	C7	71	PHE
19	C7	72	LYS
19	C7	78	ARG
19	C7	83	GLN
19	C7	84	TYR
19	C7	87	GLU
19	C7	105	GLN
19	C7	107	SER
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	12	GLN
20	C8	13	HIS
20	C8	14	ILE
20	C8	17	LEU
20	C8	20	THR
20	C8	25	ASN
20	C8	26	ILE
20	C8	28	ILE
20	C8	32	LEU
20	C8	40	ARG
20	C8	53	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
20	C8	54	LEU
20	C8	60	GLU
20	C8	61	LEU
20	C8	71	GLN
20	C8	77	THR
20	C8	80	LYS
20	C8	86	LEU
20	C8	92	ILE
20	C8	97	ASP
20	C8	108	LYS
20	C8	131	LEU
20	C8	132	ARG
20	C8	136	GLN
20	C8	138	THR
20	C8	140	THR
20	C8	143	ARG
21	C9	4	VAL
21	C9	6	VAL
21	C9	18	TYR
21	C9	22	LEU
21	C9	24	ARG
21	C9	28	LEU
21	C9	30	VAL
21	C9	33	TYR
21	C9	35	ASP
21	C9	36	ILE
21	C9	37	VAL
21	C9	41	SER
21	C9	57	ARG
21	C9	63	ARG
21	C9	67	MET
21	C9	70	GLN
21	C9	94	ILE
21	C9	111	ILE
21	C9	123	ARG
21	C9	126	GLU
21	C9	130	ARG
21	C9	131	ASP
21	C9	144	GLU
22	D0	15	GLN
22	D0	22	ILE
22	D0	23	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
22	D0	27	THR
22	D0	31	VAL
22	D0	47	GLN
22	D0	48	HIS
22	D0	51	VAL
22	D0	57	ARG
22	D0	60	THR
22	D0	61	LYS
22	D0	72	ASN
22	D0	74	GLU
22	D0	76	SER
22	D0	81	THR
22	D0	89	ARG
22	D0	99	ILE
22	D0	103	ILE
22	D0	105	GLN
22	D0	121	ASN
23	D1	3	ASN
23	D1	5	LYS
23	D1	7	GLN
23	D1	11	LEU
23	D1	18	SER
23	D1	25	LYS
23	D1	41	GLU
23	D1	49	GLU
23	D1	52	THR
23	D1	62	ARG
23	D1	69	LEU
23	D1	78	LEU
23	D1	80	LYS
24	D2	4	SER
24	D2	7	LEU
24	D2	22	LYS
24	D2	24	GLN
24	D2	25	VAL
24	D2	27	ILE
24	D2	53	ILE
24	D2	65	LEU
24	D2	66	ASN
24	D2	81	VAL
24	D2	93	LEU
24	D2	98	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	D2	103	ILE
24	D2	104	LEU
24	D2	105	THR
24	D2	121	VAL
24	D2	129	VAL
25	D3	7	ARG
25	D3	9	LEU
25	D3	14	LYS
25	D3	16	ARG
25	D3	18	HIS
25	D3	19	ARG
25	D3	31	LYS
25	D3	41	SER
25	D3	62	LYS
25	D3	82	LYS
25	D3	84	THR
25	D3	96	VAL
25	D3	103	LEU
25	D3	107	PHE
25	D3	109	ARG
25	D3	110	LYS
25	D3	114	LYS
25	D3	117	ILE
25	D3	131	SER
25	D3	137	LYS
25	D3	138	GLU
25	D3	139	LYS
25	D3	140	LYS
25	D3	144	ARG
26	D4	17	LEU
26	D4	21	LYS
26	D4	29	HIS
26	D4	32	ARG
26	D4	34	ASN
26	D4	46	GLU
26	D4	47	VAL
26	D4	51	GLU
26	D4	57	VAL
26	D4	61	ARG
26	D4	81	GLU
26	D4	96	LEU
26	D4	99	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	D4	102	LYS
26	D4	105	ARG
26	D4	123	LYS
26	D4	124	ARG
26	D4	127	LYS
26	D4	128	LYS
26	D4	129	VAL
27	D5	42	LEU
27	D5	48	ASP
27	D5	49	ARG
27	D5	50	ILE
27	D5	58	ARG
27	D5	59	TYR
27	D5	63	SER
27	D5	67	ASP
27	D5	69	LEU
27	D5	71	ILE
27	D5	75	LEU
27	D5	77	ARG
27	D5	85	LYS
27	D5	92	ILE
27	D5	95	HIS
27	D5	100	ILE
28	D6	15	ARG
28	D6	30	ILE
28	D6	36	ILE
28	D6	38	ARG
28	D6	41	ILE
28	D6	44	ILE
28	D6	45	VAL
28	D6	61	GLU
28	D6	64	LEU
28	D6	67	THR
28	D6	68	TYR
28	D6	69	ASN
28	D6	70	LYS
28	D6	82	ARG
28	D6	83	ILE
28	D6	85	ARG
28	D6	89	ARG
29	D7	3	LEU
29	D7	20	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
29	D7	26	GLN
29	D7	33	LEU
29	D7	34	ASP
29	D7	55	THR
29	D7	60	SER
29	D7	61	THR
29	D7	74	SER
30	D8	13	ILE
30	D8	14	LYS
30	D8	19	THR
30	D8	32	PHE
30	D8	33	LEU
30	D8	39	THR
30	D8	49	ARG
30	D8	51	ASN
30	D8	52	ASP
30	D8	58	GLU
30	D8	64	ARG
31	D9	9	SER
31	D9	19	ARG
31	D9	22	ARG
31	D9	30	LEU
31	D9	32	ARG
31	D9	36	LEU
32	E0	3	LYS
32	E0	20	LYS
32	E0	21	VAL
32	E0	22	GLU
32	E0	28	LYS
32	E0	29	LYS
32	E0	42	ARG
32	E0	47	VAL
32	E0	50	VAL
33	E1	86	THR
33	E1	89	LYS
33	E1	91	ILE
33	E1	97	LYS
33	E1	106	TYR
33	E1	108	VAL
33	E1	113	LYS
33	E1	118	ARG
33	E1	120	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
33	E1	130	VAL
33	E1	139	LEU
33	E1	140	TYR
33	E1	147	VAL
33	E1	151	ASN
34	SR	6	VAL
34	SR	9	LEU
34	SR	29	GLN
34	SR	44	SER
34	SR	46	LYS
34	SR	48	THR
34	SR	52	GLN
34	SR	59	ARG
34	SR	76	ASP
34	SR	91	LEU
34	SR	109	ASP
34	SR	112	SER
34	SR	117	LYS
34	SR	136	ILE
34	SR	137	LYS
34	SR	141	LEU
34	SR	145	LEU
34	SR	149	ASP
34	SR	153	GLN
34	SR	165	ASP
34	SR	191	ASP
34	SR	193	ILE
34	SR	196	ASN
34	SR	199	ILE
34	SR	216	LYS
34	SR	222	LEU
34	SR	238	ASP
34	SR	248	ASN
34	SR	266	ASP
34	SR	268	GLN
34	SR	300	THR
34	SR	308	ASN
34	SR	316	MET
34	SR	317	THR
35	SM	28	SER
35	SM	34	LYS
35	SM	46	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	SM	48	ARG
35	SM	53	ARG
35	SM	61	ILE
35	SM	64	LYS
35	SM	68	ARG
35	SM	75	ASP
35	SM	78	ASP
35	SM	82	THR
35	SM	84	LYS
35	SM	89	ARG
35	SM	91	THR
35	SM	96	ARG
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	139	GLU
39	L2	10	LYS
39	L2	20	THR
39	L2	23	ARG
39	L2	30	ARG
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	73	GLU
39	L2	74	GLU
39	L2	88	ILE
39	L2	95	SER
39	L2	96	LEU
39	L2	97	ASN
39	L2	101	VAL
39	L2	104	LEU
39	L2	106	SER
39	L2	109	GLU
39	L2	116	VAL
39	L2	119	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
39	L2	130	SER
39	L2	137	ILE
39	L2	142	ASP
39	L2	143	GLU
39	L2	157	VAL
39	L2	158	ILE
39	L2	165	VAL
39	L2	169	ILE
39	L2	179	LEU
39	L2	181	LYS
39	L2	191	LEU
39	L2	202	VAL
39	L2	204	MET
39	L2	207	VAL
39	L2	219	ILE
39	L2	226	SER
39	L2	227	ARG
39	L2	230	VAL
40	L3	2	SER
40	L3	7	GLU
40	L3	10	ARG
40	L3	17	LEU
40	L3	19	ARG
40	L3	25	ILE
40	L3	37	ARG
40	L3	47	LEU
40	L3	56	ILE
40	L3	73	VAL
40	L3	79	VAL
40	L3	84	VAL
40	L3	85	VAL
40	L3	100	ARG
40	L3	103	THR
40	L3	112	ASP
40	L3	114	VAL
40	L3	116	ARG
40	L3	126	LYS
40	L3	134	SER
40	L3	139	GLN
40	L3	144	ILE
40	L3	146	ARG
40	L3	148	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	L3	150	ARG
40	L3	156	SER
40	L3	157	VAL
40	L3	169	THR
40	L3	173	GLN
40	L3	183	LEU
40	L3	188	ILE
40	L3	189	SER
40	L3	192	VAL
40	L3	196	ARG
40	L3	200	GLU
40	L3	202	THR
40	L3	205	VAL
40	L3	208	VAL
40	L3	210	GLU
40	L3	212	ASN
40	L3	229	VAL
40	L3	232	ARG
40	L3	235	THR
40	L3	236	LYS
40	L3	238	LEU
40	L3	244	ARG
40	L3	252	ILE
40	L3	277	SER
40	L3	284	ARG
40	L3	296	THR
40	L3	304	THR
40	L3	308	MET
40	L3	319	ASN
40	L3	320	ASP
40	L3	324	VAL
40	L3	328	ILE
40	L3	332	ARG
40	L3	337	THR
40	L3	338	LEU
40	L3	347	SER
40	L3	357	LYS
40	L3	380	MET
40	L3	382	THR
41	L4	4	PRO
41	L4	22	LEU
41	L4	27	SER

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
41	L4	32	PRO
41	L4	40	THR
41	L4	42	VAL
41	L4	47	ARG
41	L4	60	THR
41	L4	64	SER
41	L4	73	ARG
41	L4	74	ILE
41	L4	84	ARG
41	L4	93	MET
41	L4	98	ARG
41	L4	99	MET
41	L4	108	LYS
41	L4	112	LYS
41	L4	124	SER
41	L4	133	SER
41	L4	136	LEU
41	L4	138	ARG
41	L4	142	VAL
41	L4	144	LYS
41	L4	145	ILE
41	L4	150	LEU
41	L4	152	VAL
41	L4	156	LEU
41	L4	161	LYS
41	L4	170	LYS
41	L4	179	LEU
41	L4	187	LEU
41	L4	188	ARG
41	L4	193	LYS
41	L4	194	TYR
41	L4	200	THR
41	L4	203	ARG
41	L4	206	LEU
41	L4	220	ARG
41	L4	222	VAL
41	L4	230	VAL
41	L4	246	ARG
41	L4	256	THR
41	L4	258	LEU
41	L4	259	ASP
41	L4	267	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	L4	275	THR
41	L4	287	THR
41	L4	292	SER
41	L4	306	THR
41	L4	307	GLN
41	L4	308	LYS
41	L4	313	LEU
41	L4	314	LYS
41	L4	321	LYS
41	L4	322	GLN
41	L4	323	VAL
41	L4	332	LYS
41	L4	339	LEU
41	L4	343	LYS
41	L4	346	LYS
41	L4	349	THR
42	L5	5	LYS
42	L5	8	LYS
42	L5	20	PHE
42	L5	22	ARG
42	L5	23	ARG
42	L5	34	LYS
42	L5	35	ARG
42	L5	41	LYS
42	L5	66	SER
42	L5	67	SER
42	L5	69	ILE
42	L5	75	LEU
42	L5	80	SER
42	L5	85	ARG
42	L5	92	LEU
42	L5	101	THR
42	L5	105	ILE
42	L5	109	THR
42	L5	115	LEU
42	L5	118	THR
42	L5	131	LEU
42	L5	136	GLU
42	L5	137	ASP
42	L5	140	ARG
42	L5	144	VAL
42	L5	146	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	L5	151	GLN
42	L5	152	ARG
42	L5	154	THR
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	189	GLU
42	L5	194	LEU
42	L5	206	GLN
42	L5	216	GLU
42	L5	222	LEU
42	L5	238	ASP
42	L5	242	SER
42	L5	254	LYS
42	L5	257	GLU
42	L5	259	LYS
42	L5	264	GLN
42	L5	273	ARG
42	L5	290	ILE
42	L5	293	LEU
43	L6	2	SER
43	L6	5	LYS
43	L6	21	THR
43	L6	31	ARG
43	L6	35	VAL
43	L6	50	LYS
43	L6	52	VAL
43	L6	56	LYS
43	L6	59	GLU
43	L6	64	LEU
43	L6	65	ILE
43	L6	78	ARG
43	L6	79	VAL
43	L6	89	THR
43	L6	90	LYS
43	L6	93	VAL
43	L6	129	GLU
43	L6	134	ARG
43	L6	152	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
43	L6	155	LEU
43	L6	162	SER
44	L7	24	GLU
44	L7	25	GLN
44	L7	26	VAL
44	L7	38	LYS
44	L7	40	LYS
44	L7	45	LEU
44	L7	60	ARG
44	L7	78	GLU
44	L7	82	LYS
44	L7	83	LEU
44	L7	89	ILE
44	L7	92	ILE
44	L7	98	LYS
44	L7	100	ARG
44	L7	101	LYS
44	L7	109	THR
44	L7	110	ARG
44	L7	124	LEU
44	L7	128	LYS
44	L7	143	THR
44	L7	157	ASN
44	L7	164	SER
44	L7	173	LEU
44	L7	175	LYS
44	L7	178	ILE
44	L7	179	LEU
44	L7	184	LEU
44	L7	189	ILE
44	L7	216	VAL
44	L7	239	LEU
45	L8	26	LEU
45	L8	27	THR
45	L8	41	GLN
45	L8	47	SER
45	L8	50	VAL
45	L8	70	LYS
45	L8	74	THR
45	L8	79	GLN
45	L8	81	THR
45	L8	84	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	L8	92	LYS
45	L8	101	THR
45	L8	106	LYS
45	L8	132	VAL
45	L8	136	LEU
45	L8	145	ASN
45	L8	150	LEU
45	L8	156	ASP
45	L8	160	ILE
45	L8	163	VAL
45	L8	169	LEU
45	L8	172	LYS
45	L8	173	MET
45	L8	181	LYS
45	L8	185	ARG
45	L8	194	THR
45	L8	204	ARG
45	L8	206	GLU
45	L8	218	ILE
45	L8	238	LEU
45	L8	241	LYS
45	L8	243	GLN
45	L8	248	LYS
45	L8	251	LYS
46	L9	1	MET
46	L9	4	ILE
46	L9	5	GLN
46	L9	6	THR
46	L9	14	GLU
46	L9	16	VAL
46	L9	18	VAL
46	L9	22	SER
46	L9	33	THR
46	L9	41	ILE
46	L9	48	VAL
46	L9	52	LEU
46	L9	55	VAL
46	L9	62	ARG
46	L9	68	LEU
46	L9	69	ARG
46	L9	70	THR
46	L9	82	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	L9	91	ARG
46	L9	118	LEU
46	L9	123	ILE
46	L9	124	ARG
46	L9	132	VAL
46	L9	133	THR
46	L9	135	GLU
46	L9	138	THR
46	L9	139	ASN
46	L9	151	VAL
46	L9	152	GLU
46	L9	157	ASN
46	L9	161	LEU
46	L9	162	GLN
46	L9	164	ILE
46	L9	168	ARG
46	L9	170	LYS
46	L9	172	ILE
46	L9	173	ARG
46	L9	189	GLU
46	L9	190	ASP
46	L9	191	LEU
47	M0	3	ARG
47	M0	7	ARG
47	M0	13	LYS
47	M0	21	ARG
47	M0	24	ARG
47	M0	26	VAL
47	M0	30	LYS
47	M0	31	ILE
47	M0	32	ARG
47	M0	33	ILE
47	M0	36	LEU
47	M0	39	LYS
47	M0	40	LYS
47	M0	42	THR
47	M0	48	LEU
47	M0	52	LEU
47	M0	57	LEU
47	M0	62	SER
47	M0	63	GLU
47	M0	74	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	M0	87	LEU
47	M0	91	VAL
47	M0	99	ILE
47	M0	116	ARG
47	M0	129	VAL
47	M0	139	ARG
47	M0	163	GLN
47	M0	165	ILE
47	M0	167	LEU
47	M0	170	LYS
47	M0	174	THR
47	M0	177	ASP
47	M0	184	LYS
47	M0	203	LYS
48	M1	7	ASN
48	M1	9	MET
48	M1	10	ARG
48	M1	11	ASP
48	M1	12	LEU
48	M1	13	LYS
48	M1	16	LYS
48	M1	19	LEU
48	M1	44	THR
48	M1	46	VAL
48	M1	60	ARG
48	M1	61	ARG
48	M1	65	ILE
48	M1	70	THR
48	M1	80	LEU
48	M1	82	ARG
48	M1	94	ARG
48	M1	95	ASN
48	M1	106	ILE
48	M1	107	ASP
48	M1	112	LEU
48	M1	115	LYS
48	M1	120	ILE
48	M1	130	VAL
48	M1	140	ARG
48	M1	142	LYS
48	M1	147	THR
48	M1	148	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	M1	166	LYS
48	M1	168	ASP
48	M1	173	ASP
49	M3	17	HIS
49	M3	23	LYS
49	M3	24	VAL
49	M3	35	ARG
49	M3	42	ARG
49	M3	54	LEU
49	M3	55	ARG
49	M3	59	ARG
49	M3	62	THR
49	M3	63	VAL
49	M3	67	ARG
49	M3	69	VAL
49	M3	70	ARG
49	M3	85	LEU
49	M3	114	GLN
49	M3	115	ARG
49	M3	124	ILE
49	M3	128	ARG
49	M3	131	LYS
49	M3	134	GLU
49	M3	136	GLU
49	M3	144	THR
49	M3	164	GLU
49	M3	168	ARG
49	M3	171	ARG
49	M3	180	ARG
49	M3	190	LYS
49	M3	194	GLU
50	M4	5	SER
50	M4	8	LYS
50	M4	15	VAL
50	M4	20	VAL
50	M4	27	GLN
50	M4	50	LYS
50	M4	53	VAL
50	M4	63	VAL
50	M4	64	VAL
50	M4	66	THR
50	M4	72	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
50	M4	74	ARG
50	M4	90	VAL
50	M4	91	CYS
50	M4	92	GLU
50	M4	93	LYS
50	M4	102	LYS
50	M4	113	THR
50	M4	132	LYS
50	M4	135	LEU
51	M5	10	LEU
51	M5	18	VAL
51	M5	20	ARG
51	M5	22	LEU
51	M5	38	ARG
51	M5	43	THR
51	M5	49	ARG
51	M5	50	ARG
51	M5	68	ARG
51	M5	80	THR
51	M5	85	THR
51	M5	89	VAL
51	M5	96	ARG
51	M5	97	SER
51	M5	98	LEU
51	M5	105	ARG
51	M5	106	VAL
51	M5	109	ARG
51	M5	117	ASN
51	M5	123	GLN
51	M5	133	ILE
51	M5	138	GLN
51	M5	151	ILE
51	M5	155	VAL
51	M5	167	THR
51	M5	171	SER
51	M5	183	THR
51	M5	184	LYS
51	M5	190	THR
51	M5	196	THR
51	M5	204	LYS
52	M6	22	VAL
52	M6	25	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
52	M6	33	ILE
52	M6	58	LEU
52	M6	59	ARG
52	M6	68	ARG
52	M6	77	SER
52	M6	78	ARG
52	M6	84	LEU
52	M6	85	ARG
52	M6	106	GLU
52	M6	116	LYS
52	M6	117	ARG
52	M6	122	GLN
52	M6	124	LEU
52	M6	126	VAL
52	M6	128	ARG
52	M6	143	THR
52	M6	144	SER
52	M6	160	ARG
52	M6	166	GLU
52	M6	175	THR
52	M6	180	SER
52	M6	184	THR
52	M6	187	GLU
53	M7	3	ARG
53	M7	9	THR
53	M7	24	VAL
53	M7	29	THR
53	M7	32	THR
53	M7	36	ILE
53	M7	41	LEU
53	M7	52	LEU
53	M7	53	ASP
53	M7	56	ARG
53	M7	65	SER
53	M7	67	ILE
53	M7	91	VAL
53	M7	107	LEU
53	M7	112	LEU
53	M7	114	VAL
53	M7	119	VAL
53	M7	120	ASN
53	M7	126	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
53	M7	127	ARG
53	M7	136	ILE
53	M7	142	SER
53	M7	144	SER
53	M7	157	VAL
53	M7	168	LEU
53	M7	171	ARG
53	M7	180	LYS
53	M7	181	ARG
54	M8	17	THR
54	M8	24	VAL
54	M8	26	LEU
54	M8	32	LEU
54	M8	34	THR
54	M8	49	LEU
54	M8	69	ARG
54	M8	74	GLU
54	M8	81	VAL
54	M8	95	GLU
54	M8	122	ILE
54	M8	135	GLN
54	M8	138	LEU
54	M8	141	ARG
54	M8	150	VAL
54	M8	161	LYS
54	M8	168	THR
54	M8	178	ARG
54	M8	180	ARG
54	M8	181	SER
54	M8	185	LYS
55	M9	5	ARG
55	M9	10	LEU
55	M9	30	SER
55	M9	41	ILE
55	M9	43	LYS
55	M9	44	LEU
55	M9	46	LYS
55	M9	51	VAL
55	M9	52	LYS
55	M9	55	VAL
55	M9	60	LYS
55	M9	71	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
55	M9	74	ARG
55	M9	86	GLU
55	M9	99	LEU
55	M9	103	ARG
55	M9	104	ARG
55	M9	106	LEU
55	M9	110	ARG
55	M9	130	ASN
55	M9	138	LEU
55	M9	144	GLN
55	M9	153	LYS
55	M9	164	LEU
55	M9	175	GLN
55	M9	180	LYS
55	M9	182	ASP
56	N0	1	MET
56	N0	8	GLN
56	N0	12	ARG
56	N0	40	ARG
56	N0	45	LEU
56	N0	51	VAL
56	N0	57	GLU
56	N0	58	ILE
56	N0	61	ILE
56	N0	71	LYS
56	N0	80	ARG
56	N0	85	SER
56	N0	87	THR
56	N0	92	LYS
56	N0	97	VAL
56	N0	100	VAL
56	N0	105	THR
56	N0	115	ARG
56	N0	117	ARG
56	N0	131	LYS
56	N0	132	THR
56	N0	136	LYS
56	N0	137	ARG
56	N0	138	GLN
56	N0	142	GLN
56	N0	155	ARG
56	N0	157	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
56	N0	160	THR
56	N0	162	THR
56	N0	166	LYS
56	N0	172	TYR
57	N1	9	SER
57	N1	16	GLN
57	N1	26	HIS
57	N1	27	LEU
57	N1	72	VAL
57	N1	75	ILE
57	N1	78	LYS
57	N1	79	MET
57	N1	80	VAL
57	N1	83	ARG
57	N1	96	ILE
57	N1	97	LYS
57	N1	104	GLU
57	N1	106	LEU
57	N1	124	VAL
57	N1	126	VAL
57	N1	127	GLN
57	N1	128	LEU
57	N1	136	ARG
57	N1	139	ARG
57	N1	141	VAL
57	N1	144	GLU
57	N1	146	ASN
57	N1	149	GLN
57	N1	158	THR
57	N1	159	PHE
58	N2	10	LYS
58	N2	16	THR
58	N2	29	ASP
58	N2	38	ILE
58	N2	43	VAL
58	N2	52	ASN
58	N2	66	VAL
58	N2	88	GLN
58	N2	93	ILE
58	N2	100	THR
59	N3	13	ILE
59	N3	14	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
59	N3	32	ARG
59	N3	44	SER
59	N3	48	ARG
59	N3	54	LEU
59	N3	63	LYS
59	N3	64	LYS
59	N3	69	LEU
59	N3	72	LYS
59	N3	73	VAL
59	N3	74	MET
59	N3	84	SER
59	N3	88	ARG
59	N3	91	VAL
59	N3	102	ILE
59	N3	109	MET
59	N3	110	LYS
59	N3	115	THR
59	N3	128	ARG
60	N4	1	MET
60	N4	4	GLU
60	N4	5	ILE
60	N4	19	THR
60	N4	26	SER
60	N4	39	LEU
60	N4	52	THR
60	N4	64	THR
61	N5	27	ARG
61	N5	29	SER
61	N5	37	THR
61	N5	38	LEU
61	N5	39	LYS
61	N5	45	LYS
61	N5	57	LEU
61	N5	59	SER
61	N5	63	ILE
61	N5	71	THR
61	N5	73	MET
61	N5	74	LYS
61	N5	86	VAL
61	N5	92	LYS
61	N5	108	LEU
61	N5	112	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
61	N5	113	LEU
61	N5	115	ARG
61	N5	125	ARG
61	N5	133	LEU
61	N5	134	ASP
61	N5	135	ILE
61	N5	137	ASN
61	N5	138	ARG
61	N5	139	ILE
61	N5	142	ILE
62	N6	4	GLN
62	N6	5	SER
62	N6	8	VAL
62	N6	13	ARG
62	N6	37	LYS
62	N6	39	LEU
62	N6	42	GLN
62	N6	45	ILE
62	N6	50	ILE
62	N6	51	ARG
62	N6	56	VAL
62	N6	57	LEU
62	N6	60	ARG
62	N6	62	SER
62	N6	74	TYR
62	N6	76	LEU
62	N6	80	VAL
62	N6	94	SER
62	N6	105	VAL
62	N6	115	ARG
62	N6	125	LYS
62	N6	126	LEU
63	N7	14	VAL
63	N7	17	ARG
63	N7	24	VAL
63	N7	26	VAL
63	N7	27	LYS
63	N7	30	ASP
63	N7	34	LYS
63	N7	46	ILE
63	N7	54	THR
63	N7	64	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
63	N7	81	LEU
63	N7	83	THR
63	N7	86	THR
63	N7	87	LEU
63	N7	102	GLU
63	N7	103	GLN
63	N7	107	ARG
63	N7	108	GLU
63	N7	109	GLU
63	N7	121	ARG
63	N7	127	ASN
63	N7	134	LEU
63	N7	135	ARG
64	N8	4	ARG
64	N8	7	LYS
64	N8	8	THR
64	N8	10	LYS
64	N8	42	ARG
64	N8	46	ASP
64	N8	47	LYS
64	N8	56	VAL
64	N8	58	MET
64	N8	60	TYR
64	N8	65	GLN
64	N8	78	LEU
64	N8	85	ASP
64	N8	88	ASP
64	N8	91	LEU
64	N8	92	LYS
64	N8	115	LYS
64	N8	118	ILE
64	N8	120	ASN
64	N8	130	VAL
64	N8	133	LEU
64	N8	139	ARG
65	N9	14	ARG
65	N9	22	LYS
65	N9	25	LYS
65	N9	33	LYS
65	N9	35	VAL
65	N9	38	LYS
65	N9	40	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
65	N9	44	LYS
65	N9	50	THR
65	N9	59	LYS
66	O0	9	SER
66	O0	14	LEU
66	O0	30	THR
66	O0	32	LYS
66	O0	34	LEU
66	O0	36	GLN
66	O0	39	SER
66	O0	40	LYS
66	O0	54	SER
66	O0	61	MET
66	O0	66	LYS
66	O0	75	ASN
66	O0	83	LYS
66	O0	100	ILE
66	O0	101	LEU
67	O1	6	ASP
67	O1	8	VAL
67	O1	13	THR
67	O1	16	LEU
67	O1	26	LYS
67	O1	31	ARG
67	O1	47	ASP
67	O1	55	LEU
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	96	VAL
67	O1	102	LYS
67	O1	106	THR
67	O1	107	VAL
67	O1	110	GLU
68	O2	4	LEU
68	O2	19	ARG
68	O2	21	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
68	O2	33	ARG
68	O2	34	LYS
68	O2	41	VAL
68	O2	51	SER
68	O2	54	LYS
68	O2	62	LYS
68	O2	73	THR
68	O2	75	LEU
68	O2	76	VAL
68	O2	84	THR
68	O2	89	THR
68	O2	106	VAL
68	O2	125	ARG
68	O2	128	LEU
69	O3	15	SER
69	O3	28	SER
69	O3	31	LYS
69	O3	48	ARG
69	O3	49	ILE
69	O3	59	VAL
69	O3	70	LYS
69	O3	80	VAL
69	O3	81	VAL
69	O3	106	ASN
70	O4	5	VAL
70	O4	8	ARG
70	O4	20	ILE
70	O4	21	LYS
70	O4	24	LYS
70	O4	29	ILE
70	O4	33	GLN
70	O4	56	THR
70	O4	58	ARG
70	O4	65	VAL
70	O4	71	THR
70	O4	86	LYS
70	O4	104	VAL
71	O5	4	VAL
71	O5	15	GLU
71	O5	20	GLN
71	O5	21	LEU
71	O5	27	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
71	O5	28	LEU
71	O5	31	LEU
71	O5	46	THR
71	O5	47	VAL
71	O5	49	LYS
71	O5	62	GLN
71	O5	68	GLN
71	O5	71	LYS
71	O5	73	LYS
71	O5	81	ARG
71	O5	85	THR
71	O5	90	ARG
71	O5	96	GLU
71	O5	101	THR
71	O5	102	GLU
71	O5	104	GLN
71	O5	107	LYS
71	O5	119	LYS
72	O6	11	LEU
72	O6	16	LYS
72	O6	18	THR
72	O6	21	THR
72	O6	26	ILE
72	O6	28	TYR
72	O6	34	SER
72	O6	36	ARG
72	O6	45	ARG
72	O6	52	PRO
72	O6	57	LEU
72	O6	58	ILE
72	O6	60	LEU
72	O6	62	ARG
72	O6	68	ARG
72	O6	76	ARG
72	O6	81	THR
72	O6	88	GLU
72	O6	89	GLU
72	O6	90	MET
72	O6	97	SER
72	O6	99	ARG
73	O7	5	THR
73	O7	10	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
73	O7	17	THR
73	O7	24	ARG
73	O7	25	ARG
73	O7	33	THR
73	O7	36	SER
73	O7	58	THR
73	O7	59	THR
73	O7	65	ARG
73	O7	67	LEU
73	O7	72	ARG
73	O7	80	THR
73	O7	84	SER
73	O7	85	LYS
74	O8	5	ILE
74	O8	12	LEU
74	O8	22	THR
74	O8	24	THR
74	O8	31	LEU
74	O8	32	ASN
74	O8	41	THR
74	O8	45	VAL
74	O8	46	ARG
74	O8	48	SER
74	O8	53	THR
74	O8	64	LYS
74	O8	65	LEU
74	O8	67	GLN
74	O8	69	LEU
74	O8	72	THR
74	O8	77	ARG
74	O8	78	LEU
75	O9	5	LYS
75	O9	21	ARG
75	O9	28	ARG
75	O9	29	LEU
75	O9	45	ARG
75	O9	47	THR
75	O9	51	ILE
76	Q0	77	ILE
76	Q0	78	ILE
76	Q0	80	PRO
76	Q0	83	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
76	Q0	85	LEU
76	Q0	106	ARG
76	Q0	108	THR
76	Q0	112	LYS
76	Q0	113	ARG
76	Q0	114	LYS
76	Q0	127	LEU
77	Q1	4	LYS
77	Q1	6	ARG
77	Q1	9	ARG
77	Q1	11	ARG
77	Q1	13	LEU
77	Q1	16	LYS
77	Q1	17	ARG
77	Q1	19	LYS
78	Q2	8	ARG
78	Q2	13	LYS
78	Q2	17	CYS
78	Q2	26	THR
78	Q2	35	LEU
78	Q2	45	ARG
78	Q2	47	GLN
78	Q2	55	LYS
78	Q2	60	LYS
78	Q2	71	ARG
78	Q2	72	LEU
78	Q2	76	LYS
78	Q2	78	LYS
78	Q2	80	ARG
78	Q2	83	LEU
78	Q2	84	THR
78	Q2	85	LEU
78	Q2	92	GLU
78	Q2	93	LEU
78	Q2	100	LYS
78	Q2	104	LEU
78	Q2	105	GLN
79	Q3	5	THR
79	Q3	11	THR
79	Q3	16	VAL
79	Q3	25	GLN
79	Q3	36	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
79	Q3	45	LYS
79	Q3	46	THR
79	Q3	48	LYS
79	Q3	56	THR
79	Q3	60	CYS
79	Q3	73	THR
79	Q3	78	THR
79	Q3	84	ARG
79	Q3	88	GLU
79	Q3	91	GLU
2	s0	9	LEU
2	s0	10	THR
2	s0	12	GLU
2	s0	24	LEU
2	s0	29	VAL
2	s0	30	GLN
2	s0	31	VAL
2	s0	41	ARG
2	s0	45	VAL
2	s0	50	VAL
2	s0	59	LEU
2	s0	62	ARG
2	s0	72	ASP
2	s0	87	LEU
2	s0	88	LYS
2	s0	93	THR
2	s0	96	THR
2	s0	110	TYR
2	s0	123	VAL
2	s0	124	THR
2	s0	131	GLN
2	s0	144	ILE
2	s0	153	SER
2	s0	154	GLU
2	s0	156	VAL
2	s0	158	VAL
2	s0	172	LEU
2	s0	183	ARG
2	s0	185	ARG
2	s0	188	LEU
2	s0	189	VAL
2	s0	197	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	s0	198	MET
2	s0	202	TYR
3	s1	21	VAL
3	s1	25	THR
3	s1	36	SER
3	s1	37	THR
3	s1	47	LEU
3	s1	51	SER
3	s1	55	LYS
3	s1	58	SER
3	s1	61	LEU
3	s1	62	LYS
3	s1	70	LEU
3	s1	74	GLN
3	s1	78	ASP
3	s1	81	PHE
3	s1	83	LYS
3	s1	105	PHE
3	s1	116	LYS
3	s1	126	THR
3	s1	137	ILE
3	s1	151	LYS
3	s1	153	HIS
3	s1	154	SER
3	s1	159	SER
3	s1	169	SER
3	s1	170	GLU
3	s1	173	THR
3	s1	177	GLN
3	s1	181	LEU
3	s1	184	LEU
3	s1	193	ILE
3	s1	202	LYS
3	s1	203	ASP
3	s1	204	ILE
3	s1	212	VAL
3	s1	217	LEU
3	s1	219	LYS
3	s1	231	LEU
4	s2	41	LEU
4	s2	53	ILE
4	s2	54	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	s2	58	LEU
4	s2	60	SER
4	s2	69	ILE
4	s2	71	THR
4	s2	72	LEU
4	s2	73	LEU
4	s2	76	LEU
4	s2	80	VAL
4	s2	83	ILE
4	s2	89	GLN
4	s2	90	THR
4	s2	91	ARG
4	s2	95	ARG
4	s2	96	THR
4	s2	106	ASP
4	s2	111	VAL
4	s2	113	LEU
4	s2	117	THR
4	s2	129	ILE
4	s2	137	ILE
4	s2	139	ILE
4	s2	141	ARG
4	s2	146	THR
4	s2	148	LEU
4	s2	153	SER
4	s2	159	THR
4	s2	164	SER
4	s2	166	THR
4	s2	190	LEU
4	s2	194	GLU
4	s2	206	THR
4	s2	207	LEU
4	s2	218	ILE
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	238	SER
4	s2	240	LEU
4	s2	248	SER

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
5	s3	4	LEU
5	s3	7	LYS
5	s3	9	ARG
5	s3	10	LYS
5	s3	21	LEU
5	s3	32	GLU
5	s3	37	VAL
5	s3	39	VAL
5	s3	41	VAL
5	s3	44	THR
5	s3	59	LEU
5	s3	61	GLU
5	s3	67	ASN
5	s3	69	LEU
5	s3	70	THR
5	s3	84	ILE
5	s3	89	GLU
5	s3	90	ARG
5	s3	93	ASP
5	s3	94	ARG
5	s3	115	ILE
5	s3	125	TYR
5	s3	127	MET
5	s3	128	GLU
5	s3	132	LYS
5	s3	142	LEU
5	s3	143	ARG
5	s3	150	MET
5	s3	158	ILE
5	s3	162	GLN
5	s3	168	ILE
5	s3	170	THR
5	s3	172	THR
5	s3	202	LEU
5	s3	212	LYS
5	s3	224	ASP
6	s4	6	LYS
6	s4	7	LYS
6	s4	11	ARG
6	s4	23	LEU
6	s4	38	LEU
6	s4	39	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	s4	42	LEU
6	s4	48	LEU
6	s4	49	ARG
6	s4	51	ARG
6	s4	67	GLN
6	s4	70	VAL
6	s4	78	THR
6	s4	97	GLU
6	s4	104	ASP
6	s4	105	VAL
6	s4	116	ASP
6	s4	117	GLU
6	s4	126	VAL
6	s4	128	LYS
6	s4	133	LYS
6	s4	146	THR
6	s4	147	ILE
6	s4	148	ARG
6	s4	160	VAL
6	s4	176	ASP
6	s4	180	LEU
6	s4	181	VAL
6	s4	182	TYR
6	s4	187	ARG
6	s4	191	ARG
6	s4	194	THR
6	s4	221	ARG
6	s4	222	LEU
6	s4	233	LYS
6	s4	246	LEU
6	s4	254	ARG
7	s5	25	LEU
7	s5	27	THR
7	s5	31	GLU
7	s5	38	THR
7	s5	39	GLU
7	s5	41	LYS
7	s5	45	LYS
7	s5	53	VAL
7	s5	58	LEU
7	s5	63	GLN
7	s5	64	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	s5	68	ILE
7	s5	76	ARG
7	s5	83	ARG
7	s5	84	LYS
7	s5	86	GLN
7	s5	89	ILE
7	s5	93	LEU
7	s5	94	THR
7	s5	119	ASP
7	s5	125	THR
7	s5	128	ASN
7	s5	147	THR
7	s5	148	ARG
7	s5	157	ARG
7	s5	162	VAL
7	s5	163	SER
7	s5	186	ASN
7	s5	189	THR
7	s5	194	LEU
7	s5	203	LYS
7	s5	213	LYS
7	s5	216	GLU
7	s5	219	ARG
8	s6	15	THR
8	s6	21	GLU
8	s6	25	ARG
8	s6	30	LYS
8	s6	44	GLU
8	s6	71	THR
8	s6	74	LYS
8	s6	76	LEU
8	s6	78	THR
8	s6	89	ASP
8	s6	93	LYS
8	s6	97	VAL
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	s6	128	THR
8	s6	129	VAL
8	s6	137	ARG
8	s6	143	LYS
8	s6	151	ASP
8	s6	153	VAL
8	s6	155	ASP
8	s6	156	PHE
8	s6	168	THR
8	s6	169	TYR
8	s6	170	THR
8	s6	177	ARG
8	s6	179	VAL
8	s6	182	GLN
8	s6	193	LEU
8	s6	212	LEU
8	s6	215	ARG
9	s7	8	ILE
9	s7	9	LEU
9	s7	11	GLN
9	s7	28	GLU
9	s7	33	GLU
9	s7	38	LEU
9	s7	44	LYS
9	s7	49	ILE
9	s7	51	VAL
9	s7	60	ILE
9	s7	67	LEU
9	s7	75	THR
9	s7	77	LEU
9	s7	79	ARG
9	s7	80	GLU
9	s7	86	GLN
9	s7	87	ASP
9	s7	97	ARG
9	s7	105	THR
9	s7	108	GLN
9	s7	114	ARG
9	s7	115	SER
9	s7	116	ARG
9	s7	117	THR
9	s7	118	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	s7	126	LEU
9	s7	129	LEU
9	s7	135	ILE
9	s7	148	LYS
9	s7	154	LEU
9	s7	160	GLN
9	s7	165	LYS
9	s7	166	LEU
9	s7	185	ILE
9	s7	187	SER
10	s8	6	ASP
10	s8	10	LYS
10	s8	18	ARG
10	s8	20	GLN
10	s8	25	ARG
10	s8	29	LEU
10	s8	36	THR
10	s8	46	VAL
10	s8	58	LEU
10	s8	59	ARG
10	s8	64	ASN
10	s8	74	LYS
10	s8	76	THR
10	s8	97	THR
10	s8	138	ASN
10	s8	149	SER
10	s8	151	LYS
10	s8	152	ILE
10	s8	155	SER
10	s8	183	ILE
10	s8	184	LEU
10	s8	199	LYS
11	s9	3	ARG
11	s9	7	THR
11	s9	9	SER
11	s9	28	LEU
11	s9	33	GLU
11	s9	49	LEU
11	s9	77	ILE
11	s9	78	ARG
11	s9	82	ARG
11	s9	90	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	s9	93	LEU
11	s9	101	VAL
11	s9	105	LEU
11	s9	108	ARG
11	s9	109	LEU
11	s9	110	GLN
11	s9	111	THR
11	s9	115	LYS
11	s9	126	ARG
11	s9	130	THR
11	s9	133	HIS
11	s9	134	ILE
11	s9	142	ASN
11	s9	143	ILE
11	s9	149	ARG
11	s9	150	LEU
11	s9	161	THR
11	s9	172	VAL
11	s9	180	LYS
11	s9	182	GLU
12	c0	2	LEU
12	c0	5	LYS
12	c0	8	ARG
12	c0	13	GLN
12	c0	15	LEU
12	c0	20	VAL
12	c0	27	PHE
12	c0	36	ASP
12	c0	40	LEU
12	c0	47	GLN
12	c0	55	VAL
12	c0	57	THR
12	c0	71	GLU
13	c1	2	SER
13	c1	3	THR
13	c1	5	LEU
13	c1	10	GLU
13	c1	22	ASN
13	c1	26	LYS
13	c1	30	ARG
13	c1	31	THR
13	c1	32	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
13	c1	33	ARG
13	c1	40	LEU
13	c1	44	THR
13	c1	47	THR
13	c1	60	PHE
13	c1	67	ARG
13	c1	74	THR
13	c1	76	VAL
13	c1	80	MET
13	c1	82	ARG
13	c1	83	THR
13	c1	122	ILE
13	c1	123	VAL
13	c1	129	ARG
13	c1	138	ASN
13	c1	140	VAL
14	c2	28	LEU
14	c2	36	LEU
14	c2	39	ASP
14	c2	43	ARG
14	c2	46	ARG
14	c2	52	LEU
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	88	LEU
14	c2	89	ILE
14	c2	97	LEU
14	c2	103	LEU
14	c2	116	VAL
14	c2	121	VAL
14	c2	129	GLU
14	c2	132	GLU
14	c2	136	ILE
14	c2	138	GLU
14	c2	140	PHE
15	c3	12	SER
15	c3	14	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
15	c3	16	ILE
15	c3	20	ARG
15	c3	21	ASN
15	c3	27	LYS
15	c3	28	LEU
15	c3	29	SER
15	c3	35	GLU
15	c3	39	LYS
15	c3	46	THR
15	c3	60	VAL
15	c3	66	ILE
15	c3	70	LYS
15	c3	76	LYS
15	c3	80	LEU
15	c3	83	GLU
15	c3	84	ILE
15	c3	87	ASP
15	c3	94	LYS
15	c3	97	SER
15	c3	107	LYS
15	c3	115	LEU
15	c3	125	LEU
15	c3	127	ARG
15	c3	138	ASN
16	c4	13	VAL
16	c4	18	ARG
16	c4	20	TYR
16	c4	26	THR
16	c4	28	VAL
16	c4	31	THR
16	c4	43	THR
16	c4	49	LYS
16	c4	61	MET
16	c4	66	ASP
16	c4	81	VAL
16	c4	92	LYS
16	c4	102	LEU
16	c4	107	ARG
16	c4	114	ARG
16	c4	119	THR
16	c4	133	ARG
16	c4	136	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
16	c4	137	LEU
17	c5	12	PHE
17	c5	24	LYS
17	c5	27	GLU
17	c5	36	LEU
17	c5	40	ARG
17	c5	43	ARG
17	c5	44	ARG
17	c5	52	LYS
17	c5	69	GLU
17	c5	71	GLU
17	c5	77	ARG
17	c5	92	SER
17	c5	102	PHE
17	c5	107	ILE
17	c5	110	GLU
17	c5	121	ILE
17	c5	122	THR
17	c5	124	THR
17	c5	127	ARG
18	c6	7	VAL
18	c6	17	THR
18	c6	23	LYS
18	c6	28	LEU
18	c6	37	THR
18	c6	43	ILE
18	c6	48	VAL
18	c6	50	GLU
18	c6	53	LEU
18	c6	54	LEU
18	c6	57	LEU
18	c6	68	ARG
18	c6	69	VAL
18	c6	70	THR
18	c6	81	ILE
18	c6	94	GLN
18	c6	98	ASP
18	c6	107	LYS
18	c6	114	ARG
18	c6	115	THR
18	c6	128	LYS
18	c6	137	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
19	c7	3	ARG
19	c7	8	THR
19	c7	14	LYS
19	c7	19	ARG
19	c7	27	ASP
19	c7	29	GLN
19	c7	34	LEU
19	c7	46	LEU
19	c7	62	GLN
19	c7	69	ILE
19	c7	72	LYS
19	c7	83	GLN
19	c7	85	VAL
19	c7	88	VAL
19	c7	107	SER
19	c7	110	VAL
19	c7	113	LEU
20	c8	3	LEU
20	c8	4	VAL
20	c8	5	VAL
20	c8	6	GLN
20	c8	13	HIS
20	c8	15	LEU
20	c8	25	ASN
20	c8	26	ILE
20	c8	28	ILE
20	c8	29	VAL
20	c8	33	THR
20	c8	36	LYS
20	c8	40	ARG
20	c8	63	GLN
20	c8	77	THR
20	c8	85	PHE
20	c8	105	VAL
20	c8	116	LEU
20	c8	119	ILE
20	c8	120	ARG
20	c8	136	GLN
20	c8	138	THR
20	c8	144	ARG
21	c9	6	VAL
21	c9	20	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	c9	27	LYS
21	c9	28	LEU
21	c9	37	VAL
21	c9	57	ARG
21	c9	88	VAL
21	c9	100	ILE
21	c9	111	ILE
21	c9	123	ARG
21	c9	126	GLU
21	c9	132	LEU
21	c9	139	THR
21	c9	140	LEU
21	c9	141	GLU
21	c9	142	GLU
21	c9	144	GLU
22	d0	20	ILE
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	44	ASN
22	d0	47	GLN
22	d0	51	VAL
22	d0	57	ARG
22	d0	60	THR
22	d0	67	THR
22	d0	70	THR
22	d0	72	ASN
22	d0	74	GLU
22	d0	77	LYS
22	d0	88	LYS
22	d0	89	ARG
22	d0	99	ILE
22	d0	102	ARG
22	d0	103	ILE
22	d0	105	GLN
22	d0	107	THR
22	d0	108	ILE
22	d0	109	GLU
22	d0	115	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	d1	2	GLU
23	d1	5	LYS
23	d1	10	GLU
23	d1	11	LEU
23	d1	12	TYR
23	d1	25	LYS
23	d1	32	VAL
23	d1	38	LYS
23	d1	49	GLU
23	d1	50	TYR
23	d1	52	THR
23	d1	68	SER
23	d1	69	LEU
23	d1	78	LEU
23	d1	81	ASN
24	d2	6	VAL
24	d2	7	LEU
24	d2	23	ARG
24	d2	24	GLN
24	d2	25	VAL
24	d2	26	LEU
24	d2	37	PHE
24	d2	65	LEU
24	d2	98	GLN
24	d2	103	ILE
24	d2	105	THR
25	d3	9	LEU
25	d3	14	LYS
25	d3	16	ARG
25	d3	19	ARG
25	d3	20	ARG
25	d3	33	LEU
25	d3	40	SER
25	d3	66	SER
25	d3	73	ARG
25	d3	83	VAL
25	d3	84	THR
25	d3	96	VAL
25	d3	100	ASP
25	d3	103	LEU
25	d3	107	PHE
25	d3	109	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	d3	131	SER
25	d3	133	LEU
25	d3	144	ARG
26	d4	5	VAL
26	d4	10	ARG
26	d4	14	SER
26	d4	21	LYS
26	d4	26	ASP
26	d4	34	ASN
26	d4	36	SER
26	d4	42	GLU
26	d4	43	LYS
26	d4	49	LYS
26	d4	51	GLU
26	d4	62	THR
26	d4	83	LYS
26	d4	88	THR
26	d4	92	VAL
26	d4	100	VAL
26	d4	102	LYS
26	d4	124	ARG
26	d4	128	LYS
26	d4	132	ARG
27	d5	41	ILE
27	d5	43	ASP
27	d5	46	LYS
27	d5	51	LEU
27	d5	53	GLU
27	d5	57	TYR
27	d5	60	VAL
27	d5	81	ARG
27	d5	88	ILE
28	d6	10	ARG
28	d6	12	LYS
28	d6	13	LYS
28	d6	25	ASN
28	d6	34	LYS
28	d6	41	ILE
28	d6	55	GLU
28	d6	67	THR
28	d6	82	ARG
28	d6	85	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	d6	90	GLU
29	d7	3	LEU
29	d7	29	ARG
29	d7	34	ASP
29	d7	36	LYS
29	d7	43	ILE
29	d7	44	THR
29	d7	46	VAL
29	d7	52	THR
29	d7	61	THR
29	d7	63	LEU
29	d7	67	THR
29	d7	72	LYS
29	d7	77	THR
29	d7	81	ARG
30	d8	16	LEU
30	d8	19	THR
30	d8	22	ARG
30	d8	28	VAL
30	d8	30	VAL
30	d8	32	PHE
30	d8	33	LEU
30	d8	39	THR
30	d8	52	ASP
30	d8	54	LEU
30	d8	62	GLU
30	d8	64	ARG
31	d9	4	GLU
31	d9	6	VAL
31	d9	10	HIS
31	d9	25	SER
31	d9	30	LEU
31	d9	32	ARG
31	d9	36	LEU
31	d9	39	CYS
31	d9	41	GLN
31	d9	44	ARG
31	d9	54	LYS
80	e0	13	LYS
80	e0	22	GLU
80	e0	24	THR
80	e0	28	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
80	e0	29	LYS
80	e0	38	LEU
80	e0	39	LEU
80	e0	44	PHE
80	e0	46	ASN
80	e0	49	LEU
80	e0	56	MET
33	e1	80	ARG
33	e1	83	LYS
33	e1	87	THR
33	e1	90	LYS
33	e1	96	LYS
33	e1	99	LYS
33	e1	100	LEU
33	e1	102	VAL
33	e1	106	TYR
33	e1	107	LYS
33	e1	113	LYS
33	e1	120	GLU
33	e1	121	CYS
33	e1	134	ASN
33	e1	135	HIS
33	e1	140	TYR
33	e1	144	CYS
34	sR	21	THR
34	sR	25	THR
34	sR	29	GLN
34	sR	42	LEU
34	sR	58	VAL
34	sR	59	ARG
34	sR	64	HIS
34	sR	65	SER
34	sR	66	HIS
34	sR	76	ASP
34	sR	96	THR
34	sR	100	TYR
34	sR	106	HIS
34	sR	123	ILE
34	sR	145	LEU
34	sR	149	ASP
34	sR	157	VAL
34	sR	159	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	sR	168	THR
34	sR	176	LYS
34	sR	199	ILE
34	sR	228	LYS
34	sR	232	TYR
34	sR	275	ARG
34	sR	277	GLU
34	sR	286	GLU
34	sR	297	ASP
34	sR	309	VAL
34	sR	310	ILE
34	sR	312	VAL
35	sM	23	LYS
35	sM	27	LYS
35	sM	30	THR
35	sM	41	SER
35	sM	43	ASP
35	sM	45	SER
35	sM	48	ARG
35	sM	50	ASN
35	sM	53	ARG
35	sM	55	SER
35	sM	61	ILE
35	sM	68	ARG
35	sM	74	LYS
35	sM	75	ASP
35	sM	77	THR
39	l2	10	LYS
39	l2	15	ILE
39	l2	32	LEU
39	l2	44	ILE
39	l2	45	VAL
39	l2	49	VAL
39	l2	52	SER
39	l2	54	ARG
39	l2	61	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

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
39	12	101	VAL
39	12	107	VAL
39	12	111	THR
39	12	112	ILE
39	12	114	SER
39	12	119	LYS
39	12	134	VAL
39	12	137	ILE
39	12	142	ASP
39	12	147	ARG
39	12	155	LYS
39	12	157	VAL
39	12	158	ILE
39	12	159	SER
39	12	165	VAL
39	12	169	ILE
39	12	179	LEU
39	12	180	LEU
39	12	188	LYS
39	12	190	ARG
39	12	193	ARG
39	12	200	ARG
39	12	202	VAL
39	12	204	MET
39	12	205	ASN
39	12	207	VAL
39	12	230	VAL
39	12	246	LEU
39	12	249	SER
40	13	3	HIS
40	13	4	ARG
40	13	10	ARG
40	13	17	LEU
40	13	19	ARG
40	13	25	ILE
40	13	36	ASP
40	13	37	ARG
40	13	43	LEU
40	13	47	LEU
40	13	67	PHE
40	13	69	LYS
40	13	73	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	l3	79	VAL
40	l3	81	THR
40	l3	84	VAL
40	l3	85	VAL
40	l3	102	LEU
40	l3	103	THR
40	l3	114	VAL
40	l3	139	GLN
40	l3	146	ARG
40	l3	148	LEU
40	l3	160	VAL
40	l3	167	ARG
40	l3	169	THR
40	l3	178	LEU
40	l3	183	LEU
40	l3	184	ASN
40	l3	187	SER
40	l3	196	ARG
40	l3	197	GLU
40	l3	202	THR
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	238	LEU
40	l3	242	THR
40	l3	244	ARG
40	l3	252	ILE
40	l3	266	ARG
40	l3	274	SER
40	l3	284	ARG
40	l3	287	LYS
40	l3	297	SER
40	l3	304	THR
40	l3	328	ILE
40	l3	332	ARG
40	l3	335	ILE
40	l3	340	LYS
40	l3	341	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	l3	346	THR
40	l3	353	GLU
40	l3	354	VAL
40	l3	361	THR
40	l3	382	THR
41	l4	3	ARG
41	l4	27	SER
41	l4	47	ARG
41	l4	52	VAL
41	l4	53	SER
41	l4	55	LYS
41	l4	73	ARG
41	l4	90	PHE
41	l4	93	MET
41	l4	112	LYS
41	l4	118	LYS
41	l4	120	TYR
41	l4	122	THR
41	l4	129	THR
41	l4	144	LYS
41	l4	145	ILE
41	l4	148	ILE
41	l4	150	LEU
41	l4	151	VAL
41	l4	156	LEU
41	l4	169	LEU
41	l4	170	LYS
41	l4	179	LEU
41	l4	186	LYS
41	l4	187	LEU
41	l4	193	LYS
41	l4	200	THR
41	l4	201	GLN
41	l4	203	ARG
41	l4	206	LEU
41	l4	220	ARG
41	l4	222	VAL
41	l4	226	GLU
41	l4	230	VAL
41	l4	233	LEU
41	l4	246	ARG
41	l4	265	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	14	282	SER
41	14	283	THR
41	14	299	ILE
41	14	306	THR
41	14	307	GLN
41	14	313	LEU
41	14	314	LYS
41	14	319	LYS
41	14	323	VAL
41	14	327	LEU
41	14	333	VAL
41	14	338	LYS
41	14	339	LEU
41	14	347	THR
41	14	357	GLU
41	14	358	THR
41	14	359	LEU
42	15	4	GLN
42	15	10	SER
42	15	34	LYS
42	15	35	ARG
42	15	38	THR
42	15	51	LEU
42	15	70	THR
42	15	74	VAL
42	15	84	PRO
42	15	93	THR
42	15	109	THR
42	15	110	LEU
42	15	112	LYS
42	15	115	LEU
42	15	118	THR
42	15	136	GLU
42	15	140	ARG
42	15	144	VAL
42	15	146	LEU
42	15	148	ILE
42	15	151	GLN
42	15	152	ARG
42	15	155	THR
42	15	158	ARG
42	15	164	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	15	185	PHE
42	15	190	ILE
42	15	194	LEU
42	15	211	LEU
42	15	218	ARG
42	15	227	LEU
42	15	247	ILE
42	15	254	LYS
42	15	258	LYS
42	15	259	LYS
42	15	268	GLU
42	15	273	ARG
42	15	282	ARG
42	15	293	LEU
42	15	297	GLN
43	16	8	LYS
43	16	12	SER
43	16	15	VAL
43	16	20	LYS
43	16	21	THR
43	16	31	ARG
43	16	35	VAL
43	16	50	LYS
43	16	64	LEU
43	16	65	ILE
43	16	78	ARG
43	16	89	THR
43	16	93	VAL
43	16	98	VAL
43	16	99	GLU
43	16	108	LYS
43	16	109	GLU
43	16	133	GLU
43	16	151	LYS
43	16	152	THR
43	16	155	LEU
43	16	162	SER
43	16	171	PRO
44	17	22	THR
44	17	26	VAL
44	17	41	ARG
44	17	45	LEU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
44	17	53	LYS
44	17	56	GLU
44	17	60	ARG
44	17	77	VAL
44	17	83	LEU
44	17	88	ARG
44	17	98	LYS
44	17	100	ARG
44	17	101	LYS
44	17	110	ARG
44	17	119	VAL
44	17	124	LEU
44	17	130	ILE
44	17	157	ASN
44	17	158	LYS
44	17	159	GLN
44	17	173	LEU
44	17	175	LYS
44	17	178	ILE
44	17	179	LEU
44	17	184	LEU
44	17	196	LYS
44	17	219	LYS
44	17	225	GLN
44	17	229	PHE
44	17	234	GLU
44	17	239	LEU
45	18	26	LEU
45	18	33	ASN
45	18	66	SER
45	18	68	ARG
45	18	74	THR
45	18	79	GLN
45	18	81	THR
45	18	89	GLU
45	18	95	ASN
45	18	109	LEU
45	18	111	LYS
45	18	136	LEU
45	18	146	LYS
45	18	149	LYS
45	18	150	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	18	160	ILE
45	18	163	VAL
45	18	169	LEU
45	18	172	LYS
45	18	183	LYS
45	18	191	ASN
45	18	200	LEU
45	18	204	ARG
45	18	208	GLU
45	18	213	LYS
45	18	214	LEU
45	18	217	THR
45	18	221	ASN
45	18	222	PHE
45	18	230	LYS
45	18	231	LYS
45	18	241	LYS
45	18	245	LYS
45	18	248	LYS
46	19	5	GLN
46	19	6	THR
46	19	18	VAL
46	19	19	SER
46	19	26	LYS
46	19	33	THR
46	19	39	LYS
46	19	43	VAL
46	19	44	THR
46	19	46	THR
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	78	MET
46	19	80	THR
46	19	82	VAL
46	19	91	ARG
46	19	105	GLU
46	19	106	LYS
46	19	107	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	l9	123	ILE
46	l9	129	ARG
46	l9	132	VAL
46	l9	133	THR
46	l9	137	SER
46	l9	138	THR
46	l9	144	ILE
46	l9	151	VAL
46	l9	154	VAL
46	l9	157	ASN
46	l9	161	LEU
46	l9	162	GLN
46	l9	166	ARG
46	l9	170	LYS
46	l9	191	LEU
47	m0	4	ARG
47	m0	19	LYS
47	m0	21	ARG
47	m0	24	ARG
47	m0	32	ARG
47	m0	36	LEU
47	m0	42	THR
47	m0	44	ASP
47	m0	48	LEU
47	m0	52	LEU
47	m0	58	GLU
47	m0	63	GLU
47	m0	66	GLU
47	m0	71	CYS
47	m0	74	LYS
47	m0	76	MET
47	m0	77	THR
47	m0	87	LEU
47	m0	91	VAL
47	m0	99	ILE
47	m0	121	LYS
47	m0	129	VAL
47	m0	130	ASP
47	m0	139	ARG
47	m0	144	ASN
47	m0	145	LYS
47	m0	154	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
47	m0	162	GLN
47	m0	163	GLN
47	m0	167	LEU
47	m0	169	LYS
47	m0	170	LYS
47	m0	176	LEU
47	m0	177	ASP
47	m0	182	LEU
47	m0	197	VAL
47	m0	200	LEU
47	m0	206	LEU
47	m0	211	ARG
47	m0	217	PHE
48	m1	6	GLN
48	m1	10	ARG
48	m1	11	ASP
48	m1	13	LYS
48	m1	16	LYS
48	m1	30	LEU
48	m1	44	THR
48	m1	46	VAL
48	m1	54	VAL
48	m1	55	ARG
48	m1	56	THR
48	m1	61	ARG
48	m1	80	LEU
48	m1	107	ASP
48	m1	108	GLU
48	m1	112	LEU
48	m1	129	VAL
48	m1	140	ARG
48	m1	147	THR
48	m1	158	ASP
48	m1	159	THR
48	m1	161	SER
48	m1	166	LYS
48	m1	171	VAL
49	m3	28	GLN
49	m3	41	THR
49	m3	54	LEU
49	m3	59	ARG
49	m3	67	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	m3	68	LYS
49	m3	69	VAL
49	m3	73	ARG
49	m3	76	THR
49	m3	100	ARG
49	m3	107	GLU
49	m3	118	GLU
49	m3	121	SER
49	m3	123	ILE
49	m3	124	ILE
49	m3	131	LYS
49	m3	149	GLN
49	m3	152	THR
49	m3	154	VAL
49	m3	164	GLU
49	m3	165	SER
49	m3	168	ARG
49	m3	171	ARG
49	m3	184	GLU
49	m3	194	GLU
50	m4	3	THR
50	m4	6	ILE
50	m4	13	ARG
50	m4	27	GLN
50	m4	42	LYS
50	m4	53	VAL
50	m4	63	VAL
50	m4	64	VAL
50	m4	72	LEU
50	m4	80	THR
50	m4	107	GLU
50	m4	113	THR
50	m4	123	LEU
50	m4	124	ARG
50	m4	126	GLN
50	m4	128	ARG
50	m4	130	THR
50	m4	135	LEU
51	m5	5	LYS
51	m5	7	LEU
51	m5	10	LEU
51	m5	15	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	m5	22	LEU
51	m5	24	ARG
51	m5	50	ARG
51	m5	67	ARG
51	m5	76	PRO
51	m5	80	THR
51	m5	83	LYS
51	m5	85	THR
51	m5	92	LEU
51	m5	96	ARG
51	m5	97	SER
51	m5	105	ARG
51	m5	106	VAL
51	m5	135	VAL
51	m5	138	GLN
51	m5	153	ASP
51	m5	155	VAL
51	m5	171	SER
51	m5	176	LYS
51	m5	184	LYS
51	m5	190	THR
51	m5	204	LYS
52	m6	12	LYS
52	m6	16	VAL
52	m6	22	VAL
52	m6	25	LYS
52	m6	36	VAL
52	m6	41	LEU
52	m6	49	ARG
52	m6	59	ARG
52	m6	67	THR
52	m6	74	ARG
52	m6	78	ARG
52	m6	79	ILE
52	m6	85	ARG
52	m6	106	GLU
52	m6	108	ILE
52	m6	110	PRO
52	m6	117	ARG
52	m6	124	LEU
52	m6	126	VAL
52	m6	129	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
52	m6	130	LYS
52	m6	160	ARG
52	m6	166	GLU
52	m6	170	LYS
52	m6	171	LYS
52	m6	175	THR
52	m6	182	ASN
52	m6	184	THR
52	m6	190	VAL
52	m6	197	LEU
53	m7	7	THR
53	m7	9	THR
53	m7	23	ARG
53	m7	24	VAL
53	m7	31	GLU
53	m7	32	THR
53	m7	41	LEU
53	m7	46	LYS
53	m7	52	LEU
53	m7	56	ARG
53	m7	69	ARG
53	m7	78	VAL
53	m7	79	THR
53	m7	89	LYS
53	m7	94	LEU
53	m7	96	GLN
53	m7	107	LEU
53	m7	112	LEU
53	m7	114	VAL
53	m7	118	GLN
53	m7	119	VAL
53	m7	120	ASN
53	m7	124	LYS
53	m7	126	ARG
53	m7	127	ARG
53	m7	128	ARG
53	m7	153	LYS
53	m7	155	GLU
54	m8	3	ILE
54	m8	7	SER
54	m8	12	ARG
54	m8	17	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	m8	24	VAL
54	m8	26	LEU
54	m8	31	LYS
54	m8	32	LEU
54	m8	34	THR
54	m8	41	ASP
54	m8	49	LEU
54	m8	57	ILE
54	m8	63	SER
54	m8	64	VAL
54	m8	66	ARG
54	m8	80	THR
54	m8	81	VAL
54	m8	93	ILE
54	m8	113	LYS
54	m8	129	VAL
54	m8	135	GLN
54	m8	138	LEU
54	m8	161	LYS
54	m8	165	ILE
54	m8	166	LEU
54	m8	168	THR
54	m8	170	ARG
54	m8	178	ARG
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	30	SER
55	m9	31	GLU
55	m9	36	ASN
55	m9	43	LYS
55	m9	49	THR
55	m9	52	LYS
55	m9	56	THR
55	m9	57	VAL
55	m9	63	THR
55	m9	70	LYS
55	m9	74	ARG
55	m9	76	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
55	m9	88	ARG
55	m9	91	SER
55	m9	99	LEU
55	m9	105	LEU
55	m9	106	LEU
55	m9	126	GLU
55	m9	127	SER
55	m9	138	LEU
55	m9	143	ILE
55	m9	152	GLU
55	m9	153	LYS
55	m9	162	ARG
55	m9	164	LEU
55	m9	167	ARG
55	m9	173	ARG
55	m9	177	VAL
56	n0	13	ARG
56	n0	17	GLU
56	n0	21	GLU
56	n0	23	LYS
56	n0	32	SER
56	n0	45	LEU
56	n0	50	LYS
56	n0	52	LYS
56	n0	53	LYS
56	n0	58	ILE
56	n0	60	SER
56	n0	80	ARG
56	n0	87	THR
56	n0	92	LYS
56	n0	97	VAL
56	n0	100	VAL
56	n0	104	GLU
56	n0	105	THR
56	n0	115	ARG
56	n0	117	ARG
56	n0	130	GLU
56	n0	132	THR
56	n0	142	GLN
56	n0	148	LEU
56	n0	157	GLN
56	n0	160	THR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
56	n0	162	THR
56	n0	166	LYS
56	n0	169	SER
56	n0	172	TYR
57	n1	9	SER
57	n1	25	VAL
57	n1	26	HIS
57	n1	27	LEU
57	n1	55	LYS
57	n1	68	THR
57	n1	71	SER
57	n1	75	ILE
57	n1	78	LYS
57	n1	83	ARG
57	n1	86	GLU
57	n1	88	ARG
57	n1	96	ILE
57	n1	104	GLU
57	n1	124	VAL
57	n1	126	VAL
57	n1	130	ARG
57	n1	131	GLN
57	n1	135	PRO
57	n1	139	ARG
57	n1	141	VAL
57	n1	143	THR
57	n1	150	THR
57	n1	158	THR
58	n2	13	LYS
58	n2	16	THR
58	n2	27	VAL
58	n2	37	LEU
58	n2	39	ASP
58	n2	43	VAL
58	n2	50	LEU
58	n2	54	VAL
58	n2	55	THR
58	n2	66	VAL
58	n2	74	LYS
58	n2	75	TYR
58	n2	88	GLN
58	n2	90	ARG

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
58	n2	98	THR
58	n2	100	THR
59	n3	7	GLN
59	n3	13	ILE
59	n3	14	SER
59	n3	45	ARG
59	n3	48	ARG
59	n3	66	LYS
59	n3	70	ARG
59	n3	73	VAL
59	n3	74	MET
59	n3	88	ARG
59	n3	91	VAL
59	n3	115	THR
60	n4	1	MET
60	n4	19	THR
60	n4	25	ASP
60	n4	39	LEU
60	n4	43	ARG
60	n4	54	LEU
60	n4	57	LYS
60	n4	63	ILE
60	n4	89	LEU
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	134	GLN
60	n4	135	SER
61	n5	24	LEU
61	n5	27	ARG
61	n5	34	LEU
61	n5	37	THR
61	n5	39	LYS
61	n5	56	ARG
61	n5	57	LEU
61	n5	63	ILE
61	n5	64	GLU
61	n5	65	GLN
61	n5	71	THR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
61	n5	73	MET
61	n5	74	LYS
61	n5	78	ASP
61	n5	86	VAL
61	n5	109	LYS
61	n5	115	ARG
61	n5	125	ARG
61	n5	133	LEU
61	n5	135	ILE
61	n5	142	ILE
62	n6	3	LYS
62	n6	4	GLN
62	n6	9	SER
62	n6	10	SER
62	n6	12	ARG
62	n6	13	ARG
62	n6	17	LYS
62	n6	37	LYS
62	n6	39	LEU
62	n6	40	ARG
62	n6	45	ILE
62	n6	50	ILE
62	n6	51	ARG
62	n6	55	GLU
62	n6	57	LEU
62	n6	62	SER
62	n6	66	GLN
62	n6	70	ILE
62	n6	74	TYR
62	n6	76	LEU
62	n6	80	VAL
62	n6	83	ASP
62	n6	97	ILE
62	n6	105	VAL
62	n6	108	LYS
62	n6	120	GLN
62	n6	127	GLU
63	n7	3	LYS
63	n7	14	VAL
63	n7	15	ARG
63	n7	17	ARG
63	n7	24	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
63	n7	26	VAL
63	n7	34	LYS
63	n7	46	ILE
63	n7	52	LYS
63	n7	65	ARG
63	n7	72	ILE
63	n7	81	LEU
63	n7	86	THR
63	n7	94	SER
63	n7	95	VAL
63	n7	98	THR
63	n7	99	GLU
63	n7	102	GLU
63	n7	103	GLN
63	n7	105	SER
63	n7	111	LYS
63	n7	121	ARG
63	n7	126	LYS
63	n7	134	LEU
63	n7	135	ARG
64	n8	4	ARG
64	n8	6	THR
64	n8	8	THR
64	n8	10	LYS
64	n8	16	SER
64	n8	26	ARG
64	n8	42	ARG
64	n8	43	ILE
64	n8	46	ASP
64	n8	47	LYS
64	n8	56	VAL
64	n8	60	TYR
64	n8	78	LEU
64	n8	82	ILE
64	n8	85	ASP
64	n8	91	LEU
64	n8	98	THR
64	n8	115	LYS
64	n8	123	VAL
64	n8	128	ARG
64	n8	132	LYS
64	n8	133	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
64	n8	139	ARG
65	n9	14	ARG
65	n9	21	ILE
65	n9	22	LYS
65	n9	23	LYS
65	n9	26	THR
65	n9	33	LYS
65	n9	38	LYS
65	n9	50	THR
65	n9	52	LYS
65	n9	54	LEU
65	n9	58	LYS
65	n9	59	LYS
66	o0	6	SER
66	o0	8	GLU
66	o0	9	SER
66	o0	18	ILE
66	o0	19	LYS
66	o0	32	LYS
66	o0	33	SER
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	81	VAL
66	o0	86	ARG
66	o0	99	ASP
66	o0	103	THR
67	o1	6	ASP
67	o1	8	VAL
67	o1	13	THR
67	o1	16	LEU
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	55	LEU
67	o1	64	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
67	o1	76	SER
67	o1	84	ASP
67	o1	91	SER
67	o1	93	VAL
67	o1	98	VAL
67	o1	102	LYS
67	o1	104	LEU
67	o1	106	THR
67	o1	107	VAL
67	o1	110	GLU
67	o1	111	GLU
68	o2	4	LEU
68	o2	8	LYS
68	o2	16	LYS
68	o2	18	LYS
68	o2	19	ARG
68	o2	24	ARG
68	o2	27	ARG
68	o2	33	ARG
68	o2	35	GLN
68	o2	41	VAL
68	o2	51	SER
68	o2	54	LYS
68	o2	61	LYS
68	o2	71	HIS
68	o2	73	THR
68	o2	75	LEU
68	o2	82	LEU
68	o2	89	THR
68	o2	91	THR
68	o2	95	GLU
68	o2	101	SER
68	o2	109	LEU
68	o2	125	ARG
68	o2	126	LEU
69	o3	4	SER
69	o3	20	LYS
69	o3	31	LYS
69	o3	49	ILE
69	o3	56	SER
69	o3	58	GLU
69	o3	59	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
69	o3	62	SER
69	o3	70	LYS
69	o3	78	SER
69	o3	84	THR
69	o3	86	ARG
69	o3	98	VAL
69	o3	106	ASN
69	o3	107	ILE
70	o4	5	VAL
70	o4	9	ARG
70	o4	20	ILE
70	o4	21	LYS
70	o4	24	LYS
70	o4	25	THR
70	o4	30	LEU
70	o4	31	ARG
70	o4	35	VAL
70	o4	47	CYS
70	o4	49	SER
70	o4	58	ARG
70	o4	65	VAL
70	o4	68	THR
70	o4	71	THR
70	o4	79	SER
70	o4	84	CYS
70	o4	86	LYS
70	o4	87	GLU
70	o4	88	ARG
70	o4	98	GLN
71	o5	15	GLU
71	o5	20	GLN
71	o5	21	LEU
71	o5	27	GLU
71	o5	28	LEU
71	o5	36	LEU
71	o5	37	SER
71	o5	38	ARG
71	o5	45	LYS
71	o5	47	VAL
71	o5	48	ARG
71	o5	62	GLN
71	o5	69	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
71	o5	79	ASP
71	o5	80	LEU
71	o5	81	ARG
71	o5	85	THR
71	o5	86	ARG
71	o5	89	ARG
71	o5	101	THR
71	o5	107	LYS
71	o5	113	GLN
72	o6	3	VAL
72	o6	7	ILE
72	o6	9	ILE
72	o6	12	ASN
72	o6	21	THR
72	o6	25	LYS
72	o6	26	ILE
72	o6	29	LYS
72	o6	34	SER
72	o6	36	ARG
72	o6	37	THR
72	o6	42	SER
72	o6	43	LEU
72	o6	45	ARG
72	o6	57	LEU
72	o6	58	ILE
72	o6	59	ASP
72	o6	60	LEU
72	o6	64	SER
72	o6	66	GLU
72	o6	68	ARG
72	o6	75	LYS
72	o6	76	ARG
72	o6	79	SER
72	o6	90	MET
72	o6	94	ILE
72	o6	98	ARG
73	o7	3	LYS
73	o7	11	ARG
73	o7	17	THR
73	o7	25	ARG
73	o7	33	THR
73	o7	36	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
73	o7	44	THR
73	o7	45	ARG
73	o7	59	THR
73	o7	65	ARG
73	o7	67	LEU
73	o7	68	LYS
73	o7	72	ARG
73	o7	75	LYS
73	o7	80	THR
74	o8	5	ILE
74	o8	12	LEU
74	o8	24	THR
74	o8	41	THR
74	o8	45	VAL
74	o8	46	ARG
74	o8	50	SER
74	o8	53	THR
74	o8	61	LYS
74	o8	64	LYS
74	o8	65	LEU
74	o8	72	THR
74	o8	78	LEU
75	o9	4	GLN
75	o9	11	GLN
75	o9	15	LYS
75	o9	21	ARG
75	o9	29	LEU
75	o9	41	ARG
75	o9	45	ARG
75	o9	47	THR
75	o9	48	LYS
75	o9	51	ILE
76	q0	78	ILE
76	q0	79	GLU
76	q0	83	LYS
76	q0	85	LEU
76	q0	87	SER
76	q0	88	LYS
76	q0	106	ARG
76	q0	108	THR
76	q0	112	LYS
76	q0	113	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
76	q0	114	LYS
76	q0	127	LEU
77	q1	6	ARG
77	q1	9	ARG
77	q1	13	LEU
77	q1	14	LYS
77	q1	21	ARG
77	q1	23	ARG
77	q1	24	SER
78	q2	7	THR
78	q2	8	ARG
78	q2	20	HIS
78	q2	26	THR
78	q2	38	GLN
78	q2	61	LYS
78	q2	75	VAL
78	q2	78	LYS
78	q2	83	LEU
78	q2	84	THR
78	q2	85	LEU
78	q2	93	LEU
78	q2	96	GLU
78	q2	100	LYS
78	q2	104	LEU
78	q2	105	GLN
79	q3	3	LYS
79	q3	20	SER
79	q3	24	ARG
79	q3	42	CYS
79	q3	48	LYS
79	q3	49	ARG
79	q3	54	ILE
79	q3	56	THR
79	q3	81	SER
79	q3	90	VAL
82	p0	4	ILE
82	p0	5	ARG
82	p0	10	GLU
82	p0	15	LEU
82	p0	30	VAL
82	p0	39	HIS
82	p0	44	GLU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
82	p0	46	ARG
82	p0	48	ARG
82	p0	50	VAL
82	p0	51	VAL
82	p0	55	LYS
82	p0	67	LEU
82	p0	70	LEU
82	p0	76	LEU
82	p0	93	LEU
82	p0	97	LYS
82	p0	104	ARG
82	p0	185	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (57) such sidechains are listed below:

Mol	Chain	Res	Type
3	S1	79	HIS
3	S1	149	GLN
3	S1	157	GLN
3	S1	177	GLN
5	S3	74	GLN
5	S3	179	GLN
7	S5	224	ASN
9	S7	74	GLN
12	C0	12	HIS
20	C8	25	ASN
20	C8	89	GLN
23	D1	74	GLN
23	D1	75	ASN
34	SR	195	HIS
39	L2	83	HIS
39	L2	132	ASN
39	L2	209	HIS
40	L3	139	GLN
41	L4	110	ASN
42	L5	81	HIS
44	L7	244	ASN
47	M0	144	ASN
50	M4	62	GLN
56	N0	138	GLN
57	N1	26	HIS
69	O3	106	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	s0	23	HIS
7	s5	103	ASN
7	s5	104	ASN
7	s5	186	ASN
9	s7	71	HIS
9	s7	86	GLN
11	s9	110	GLN
11	s9	142	ASN
12	c0	32	HIS
20	c8	13	HIS
20	c8	25	ASN
22	d0	72	ASN
26	d4	22	GLN
26	d4	29	HIS
26	d4	34	ASN
80	e0	17	GLN
39	l2	50	HIS
40	l3	139	GLN
44	l7	80	GLN
44	l7	104	GLN
46	l9	50	ASN
47	m0	144	ASN
52	m6	90	HIS
55	m9	7	GLN
59	n3	4	ASN
64	n8	25	HIS
64	n8	44	ASN
64	n8	49	HIS
71	o5	20	GLN
75	o9	25	GLN
75	o9	50	ASN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	1747/1800 (97%)	481 (27%)	68 (3%)
1	6	1793/1800 (99%)	463 (25%)	56 (3%)
36	1	3145/3396 (92%)	688 (21%)	83 (2%)
36	5	3145/3396 (92%)	647 (20%)	93 (2%)
37	3	120/121 (99%)	20 (16%)	4 (3%)
37	7	120/121 (99%)	19 (15%)	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
38	4	157/158 (99%)	35 (22%)	4 (2%)
38	8	157/158 (99%)	40 (25%)	3 (1%)
All	All	10384/10950 (94%)	2393 (23%)	311 (2%)

All (2393) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	2	2	A
1	2	4	C
1	2	17	C
1	2	25	C
1	2	26	A
1	2	27	U
1	2	34	G
1	2	40	A
1	2	45	U
1	2	46	A
1	2	47	A
1	2	57	G
1	2	60	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	97	C
1	2	100	A
1	2	104	A
1	2	114	C
1	2	120	U
1	2	127	G
1	2	130	C
1	2	131	C
1	2	132	U
1	2	133	U
1	2	134	U
1	2	135	A
1	2	136	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	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	196	G
1	2	197	A
1	2	198	A
1	2	200	A
1	2	215	A
1	2	218	A
1	2	219	A
1	2	226	A
1	2	227	U
1	2	228	G
1	2	229	U
1	2	233	C
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	250	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	260	U
1	2	261	U
1	2	262	U
1	2	265	A
1	2	267	U
1	2	271	A
1	2	272	U
1	2	274	G
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	284	G
1	2	288	A
1	2	290	G
1	2	299	A
1	2	302	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	337	G
1	2	338	C
1	2	341	A
1	2	352	A
1	2	359	A
1	2	360	A
1	2	361	C
1	2	363	G
1	2	387	A
1	2	393	C
1	2	399	A
1	2	400	A
1	2	402	C
1	2	403	G
1	2	404	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	427	C
1	2	428	A
1	2	434	G
1	2	439	U
1	2	444	C
1	2	448	C
1	2	468	A
1	2	477	A
1	2	484	C
1	2	485	A
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
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	508	U
1	2	510	G
1	2	511	A
1	2	512	A
1	2	513	U
1	2	515	A
1	2	516	G
1	2	519	C
1	2	527	A
1	2	532	U
1	2	534	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	570	A
1	2	578	U
1	2	579	A
1	2	580	A
1	2	585	A
1	2	594	A
1	2	595	G
1	2	605	A
1	2	619	A
1	2	620	A
1	2	621	A
1	2	622	A
1	2	623	A
1	2	624	G
1	2	639	U
1	2	640	U
1	2	650	U
1	2	653	C
1	2	655	G
1	2	656	G
1	2	657	U
1	2	658	C
1	2	677	G
1	2	679	U
1	2	680	U
1	2	684	A
1	2	685	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	686	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	706	A
1	2	707	A
1	2	709	C
1	2	710	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
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	744	U
1	2	745	U
1	2	754	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	2	755	A
1	2	756	A
1	2	758	U
1	2	765	G
1	2	766	U
1	2	774	A
1	2	775	G
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	794	U
1	2	795	U
1	2	803	A
1	2	812	A
1	2	815	G
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	823	G
1	2	824	G
1	2	829	A
1	2	830	U
1	2	831	U
1	2	833	U
1	2	840	U
1	2	846	G
1	2	848	C
1	2	854	U
1	2	856	A
1	2	860	U
1	2	862	A
1	2	863	A
1	2	864	U
1	2	876	G
1	2	886	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	892	A
1	2	896	U
1	2	898	A
1	2	910	C
1	2	912	U
1	2	913	G
1	2	914	G
1	2	916	U
1	2	921	U
1	2	926	A
1	2	933	A
1	2	935	U
1	2	942	G
1	2	944	A
1	2	951	A
1	2	960	U
1	2	966	A
1	2	971	A
1	2	988	A
1	2	992	A
1	2	993	A
1	2	994	G
1	2	996	U
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	1074	G
1	2	1079	U
1	2	1080	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1082	C
1	2	1083	G
1	2	1086	A
1	2	1091	A
1	2	1092	A
1	2	1093	A
1	2	1096	C
1	2	1097	U
1	2	1100	G
1	2	1109	G
1	2	1111	G
1	2	1135	U
1	2	1138	A
1	2	1139	A
1	2	1150	G
1	2	1151	A
1	2	1152	A
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	1176	G
1	2	1185	U
1	2	1188	G
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	1221	A
1	2	1226	A
1	2	1227	A
1	2	1228	G
1	2	1229	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1244	A
1	2	1245	G
1	2	1250	U
1	2	1251	U
1	2	1256	A
1	2	1257	U
1	2	1258	U
1	2	1286	U
1	2	1292	G
1	2	1314	U
1	2	1315	U
1	2	1321	A
1	2	1337	A
1	2	1338	C
1	2	1339	C
1	2	1340	U
1	2	1341	A
1	2	1344	A
1	2	1345	A
1	2	1349	G
1	2	1354	G
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	1372	U
1	2	1379	C
1	2	1383	G
1	2	1388	A
1	2	1390	U
1	2	1398	U
1	2	1399	C
1	2	1412	G
1	2	1413	U
1	2	1415	U
1	2	1427	A
1	2	1428	G
1	2	1431	C
1	2	1432	U
1	2	1435	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1446	A
1	2	1448	G
1	2	1457	C
1	2	1458	G
1	2	1459	C
1	2	1461	C
1	2	1471	A
1	2	1473	U
1	2	1474	G
1	2	1482	C
1	2	1486	G
1	2	1488	G
1	2	1489	U
1	2	1490	C
1	2	1491	U
1	2	1492	A
1	2	1493	A
1	2	1499	G
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	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	1569	A
1	2	1574	G
1	2	1584	G
1	2	1590	G
1	2	1601	G
1	2	1614	A
1	2	1616	G
1	2	1624	C
1	2	1627	U
1	2	1631	A
1	2	1657	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1658	G
1	2	1663	G
1	2	1664	C
1	2	1673	G
1	2	1680	G
1	2	1683	C
1	2	1684	U
1	2	1719	A
1	2	1750	A
1	2	1756	A
1	2	1759	C
1	2	1760	G
1	2	1761	U
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	1792	G
1	2	1793	G
1	2	1794	A
1	2	1795	U
1	2	1796	C
36	1	16	A
36	1	26	A
36	1	40	A
36	1	43	A
36	1	45	A
36	1	49	A
36	1	57	A
36	1	59	G
36	1	60	A
36	1	65	A
36	1	66	A
36	1	68	C
36	1	74	G
36	1	75	G
36	1	83	U
36	1	92	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	99	A
36	1	109	A
36	1	110	G
36	1	121	A
36	1	122	A
36	1	133	U
36	1	135	C
36	1	136	G
36	1	147	U
36	1	154	U
36	1	156	G
36	1	157	A
36	1	160	G
36	1	166	C
36	1	169	U
36	1	170	G
36	1	172	G
36	1	187	A
36	1	190	U
36	1	191	U
36	1	192	C
36	1	210	U
36	1	218	G
36	1	219	A
36	1	224	C
36	1	240	U
36	1	243	G
36	1	245	U
36	1	249	U
36	1	250	U
36	1	251	G
36	1	252	U
36	1	269	G
36	1	283	G
36	1	284	A
36	1	286	U
36	1	295	A
36	1	298	U
36	1	299	G
36	1	305	U
36	1	315	C
36	1	323	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	329	U
36	1	339	C
36	1	343	U
36	1	349	A
36	1	350	C
36	1	376	G
36	1	397	A
36	1	398	A
36	1	401	U
36	1	402	A
36	1	403	C
36	1	417	A
36	1	421	G
36	1	422	A
36	1	439	C
36	1	440	A
36	1	495	G
36	1	498	A
36	1	507	U
36	1	517	G
36	1	520	U
36	1	521	A
36	1	525	C
36	1	530	G
36	1	535	G
36	1	544	C
36	1	546	C
36	1	547	G
36	1	548	G
36	1	551	A
36	1	552	G
36	1	553	U
36	1	555	U
36	1	556	U
36	1	557	A
36	1	559	A
36	1	560	G
36	1	578	A
36	1	579	G
36	1	592	A
36	1	600	G
36	1	604	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
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	639	G
36	1	642	U
36	1	644	G
36	1	649	A
36	1	658	G
36	1	660	A
36	1	661	G
36	1	677	A
36	1	681	U
36	1	691	A
36	1	705	A
36	1	708	G
36	1	712	G
36	1	715	A
36	1	716	A
36	1	720	A
36	1	726	G
36	1	758	C
36	1	763	G
36	1	764	U
36	1	766	U
36	1	767	U
36	1	776	U
36	1	777	U
36	1	781	G
36	1	785	G
36	1	786	A
36	1	804	C
36	1	806	A
36	1	817	A
36	1	830	A
36	1	837	A
36	1	849	C
36	1	861	C
36	1	874	U
36	1	879	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	881	C
36	1	882	A
36	1	890	C
36	1	896	A
36	1	897	U
36	1	907	G
36	1	908	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	937	G
36	1	943	U
36	1	944	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	993	G
36	1	994	G
36	1	1001	G
36	1	1002	A
36	1	1006	A
36	1	1010	G
36	1	1014	U
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1063	G
36	1	1064	A
36	1	1065	A
36	1	1072	G
36	1	1081	U
36	1	1082	U
36	1	1083	G
36	1	1087	G
36	1	1088	U
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	1111	U
36	1	1116	G
36	1	1117	G
36	1	1121	U
36	1	1128	U
36	1	1131	G
36	1	1144	U
36	1	1153	A
36	1	1159	A
36	1	1168	U
36	1	1180	A
36	1	1181	U
36	1	1182	A
36	1	1191	U
36	1	1192	C
36	1	1193	A
36	1	1201	C
36	1	1209	G
36	1	1212	A
36	1	1213	G
36	1	1216	C
36	1	1218	U
36	1	1222	G
36	1	1225	A
36	1	1227	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1232	C
36	1	1233	G
36	1	1235	U
36	1	1236	G
36	1	1237	G
36	1	1241	U
36	1	1242	G
36	1	1243	G
36	1	1245	A
36	1	1246	G
36	1	1248	C
36	1	1249	G
36	1	1251	A
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	1285	G
36	1	1287	A
36	1	1292	C
36	1	1307	G
36	1	1308	A
36	1	1309	U
36	1	1313	G
36	1	1323	G
36	1	1325	U
36	1	1330	A
36	1	1333	C
36	1	1345	G
36	1	1348	U
36	1	1349	G
36	1	1351	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1352	A
36	1	1353	U
36	1	1355	A
36	1	1356	U
36	1	1357	G
36	1	1379	G
36	1	1380	G
36	1	1386	A
36	1	1392	G
36	1	1399	A
36	1	1400	G
36	1	1405	U
36	1	1406	A
36	1	1418	A
36	1	1419	A
36	1	1425	U
36	1	1431	G
36	1	1434	G
36	1	1437	C
36	1	1446	A
36	1	1450	G
36	1	1455	U
36	1	1481	A
36	1	1482	A
36	1	1485	G
36	1	1490	A
36	1	1496	C
36	1	1503	A
36	1	1508	C
36	1	1528	G
36	1	1529	A
36	1	1555	U
36	1	1556	C
36	1	1558	A
36	1	1560	G
36	1	1561	G
36	1	1562	C
36	1	1563	C
36	1	1564	U
36	1	1566	A
36	1	1567	U
36	1	1568	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1569	U
36	1	1570	U
36	1	1572	U
36	1	1576	G
36	1	1579	C
36	1	1580	A
36	1	1582	C
36	1	1583	A
36	1	1587	A
36	1	1589	A
36	1	1593	A
36	1	1607	U
36	1	1620	U
36	1	1629	U
36	1	1639	C
36	1	1641	U
36	1	1642	A
36	1	1643	A
36	1	1644	C
36	1	1645	U
36	1	1651	U
36	1	1657	C
36	1	1683	A
36	1	1714	A
36	1	1716	U
36	1	1717	U
36	1	1724	U
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	1770	G
36	1	1775	G
36	1	1780	G
36	1	1781	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1797	A
36	1	1805	C
36	1	1809	A
36	1	1810	A
36	1	1812	G
36	1	1814	A
36	1	1816	A
36	1	1817	G
36	1	1818	U
36	1	1819	U
36	1	1820	U
36	1	1821	U
36	1	1834	U
36	1	1838	G
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	1850	A
36	1	1855	U
36	1	1863	G
36	1	1864	A
36	1	1871	U
36	1	1879	A
36	1	1880	U
36	1	1886	A
36	1	1901	A
36	1	1906	G
36	1	1908	A
36	1	1935	G
36	1	1948	G
36	1	1951	C
36	1	1952	G
36	1	1953	G
36	1	1954	G
36	1	2094	C
36	1	2101	C
36	1	2102	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2107	A
36	1	2112	U
36	1	2113	A
36	1	2121	G
36	1	2122	G
36	1	2130	G
36	1	2131	A
36	1	2134	G
36	1	2140	U
36	1	2144	A
36	1	2158	A
36	1	2165	G
36	1	2169	G
36	1	2170	U
36	1	2177	G
36	1	2188	A
36	1	2192	C
36	1	2193	U
36	1	2194	G
36	1	2205	U
36	1	2208	A
36	1	2209	U
36	1	2210	G
36	1	2223	A
36	1	2228	A
36	1	2244	A
36	1	2249	G
36	1	2250	G
36	1	2255	A
36	1	2256	A
36	1	2272	G
36	1	2273	G
36	1	2279	A
36	1	2281	A
36	1	2282	U
36	1	2284	C
36	1	2288	G
36	1	2298	U
36	1	2307	G
36	1	2310	U
36	1	2313	A
36	1	2315	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2319	U
36	1	2330	C
36	1	2334	U
36	1	2336	U
36	1	2341	A
36	1	2372	A
36	1	2373	A
36	1	2374	C
36	1	2375	G
36	1	2385	G
36	1	2393	G
36	1	2395	G
36	1	2397	A
36	1	2401	A
36	1	2402	A
36	1	2403	G
36	1	2404	A
36	1	2411	U
36	1	2418	G
36	1	2419	A
36	1	2424	A
36	1	2435	G
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	2511	A
36	1	2513	U
36	1	2514	U
36	1	2515	A
36	1	2519	A
36	1	2522	G
36	1	2523	A
36	1	2525	G
36	1	2526	C
36	1	2530	G
36	1	2532	U
36	1	2533	G
36	1	2534	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	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	2576	G
36	1	2581	U
36	1	2585	G
36	1	2586	G
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	2626	A
36	1	2629	U
36	1	2637	A
36	1	2652	U
36	1	2656	A
36	1	2672	G
36	1	2674	A
36	1	2677	G
36	1	2681	U
36	1	2689	A
36	1	2690	G
36	1	2691	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2694	A
36	1	2696	A
36	1	2702	A
36	1	2705	A
36	1	2714	G
36	1	2728	G
36	1	2729	U
36	1	2752	U
36	1	2753	G
36	1	2762	A
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	2787	G
36	1	2796	G
36	1	2799	A
36	1	2800	G
36	1	2801	A
36	1	2802	A
36	1	2810	C
36	1	2814	G
36	1	2816	G
36	1	2817	A
36	1	2818	U
36	1	2819	A
36	1	2829	U
36	1	2834	G
36	1	2836	C
36	1	2842	U
36	1	2843	U
36	1	2845	A
36	1	2847	A
36	1	2849	C
36	1	2860	U
36	1	2867	C
36	1	2871	G
36	1	2872	A
36	1	2875	U
36	1	2883	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2887	A
36	1	2889	C
36	1	2899	C
36	1	2900	A
36	1	2910	A
36	1	2914	G
36	1	2923	U
36	1	2927	C
36	1	2935	U
36	1	2936	A
36	1	2942	C
36	1	2944	U
36	1	2945	G
36	1	2947	G
36	1	2971	A
36	1	2974	U
36	1	2979	U
36	1	2983	C
36	1	2990	G
36	1	2992	U
36	1	2996	U
36	1	2997	G
36	1	3006	A
36	1	3012	A
36	1	3040	A
36	1	3049	A
36	1	3050	U
36	1	3057	U
36	1	3058	U
36	1	3059	G
36	1	3078	U
36	1	3079	U
36	1	3080	G
36	1	3083	G
36	1	3086	A
36	1	3087	A
36	1	3092	C
36	1	3113	A
36	1	3119	U
36	1	3122	A
36	1	3128	G
36	1	3130	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	3131	U
36	1	3139	A
36	1	3141	A
36	1	3142	A
36	1	3143	C
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	3169	U
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	3185	U
36	1	3187	A
36	1	3196	U
36	1	3198	U
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	3221	C
36	1	3223	A
36	1	3228	C
36	1	3229	G
36	1	3235	C
36	1	3243	A
36	1	3245	A
36	1	3246	G
36	1	3247	G
36	1	3253	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	3259	U
36	1	3269	U
36	1	3270	U
36	1	3272	C
36	1	3273	A
36	1	3275	U
36	1	3276	G
36	1	3279	A
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	3304	U
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	3330	A
36	1	3335	A
36	1	3341	U
36	1	3342	A
36	1	3345	G
36	1	3347	A
36	1	3348	G
36	1	3351	U
36	1	3352	U
36	1	3353	G
36	1	3354	U
36	1	3355	U
36	1	3356	G
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	3	7	G
37	3	9	C
37	3	13	A
37	3	14	U
37	3	18	C
37	3	21	G
37	3	22	A
37	3	26	C
37	3	42	A
37	3	51	A
37	3	53	U
37	3	54	U
37	3	64	A
37	3	65	G
37	3	76	A
37	3	91	G
37	3	101	G
37	3	102	A
37	3	112	G
37	3	121	U
38	4	2	A
38	4	20	U
38	4	22	U
38	4	26	U
38	4	34	U
38	4	35	C
38	4	52	A
38	4	53	A
38	4	59	A
38	4	62	C
38	4	63	G
38	4	75	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	86	U
38	4	87	G
38	4	90	U
38	4	95	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	4	97	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	152	G
38	4	155	A
38	4	157	U
38	4	158	U
1	6	2	A
1	6	4	C
1	6	17	C
1	6	25	C
1	6	26	A
1	6	27	U
1	6	34	G
1	6	44	U
1	6	46	A
1	6	47	A
1	6	49	C
1	6	57	G
1	6	67	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	103	A
1	6	104	A
1	6	114	C
1	6	116	U
1	6	127	G
1	6	137	U
1	6	138	A
1	6	140	A
1	6	141	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	6	142	G
1	6	143	G
1	6	144	U
1	6	145	A
1	6	146	U
1	6	153	G
1	6	158	U
1	6	159	U
1	6	166	C
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
1	6	193	U
1	6	195	G
1	6	199	G
1	6	200	A
1	6	215	A
1	6	216	U
1	6	217	A
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	229	U
1	6	230	C
1	6	232	U
1	6	233	C
1	6	234	G
1	6	235	G
1	6	238	U
1	6	240	U
1	6	241	U
1	6	249	U
1	6	250	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	260	U
1	6	261	U
1	6	265	A
1	6	271	A
1	6	272	U
1	6	273	G
1	6	276	C
1	6	277	U
1	6	278	U
1	6	280	U
1	6	281	G
1	6	287	G
1	6	298	C
1	6	299	A
1	6	308	C
1	6	314	C
1	6	316	A
1	6	319	U
1	6	320	U
1	6	321	C
1	6	322	G
1	6	337	G
1	6	338	C
1	6	341	A
1	6	352	A
1	6	359	A
1	6	360	A
1	6	361	C
1	6	381	C
1	6	387	A
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	424	C
1	6	425	A
1	6	426	G
1	6	434	G
1	6	439	U
1	6	444	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	448	C
1	6	454	U
1	6	468	A
1	6	470	A
1	6	475	A
1	6	480	G
1	6	484	C
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
1	6	494	U
1	6	496	G
1	6	497	G
1	6	500	C
1	6	501	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	512	A
1	6	513	U
1	6	514	G
1	6	515	A
1	6	519	C
1	6	527	A
1	6	536	C
1	6	538	A
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	578	U
1	6	579	A
1	6	580	A
1	6	582	U
1	6	594	A
1	6	595	G
1	6	609	U
1	6	610	G
1	6	611	U
1	6	617	U
1	6	619	A
1	6	620	A
1	6	621	A
1	6	622	A
1	6	623	A
1	6	624	G
1	6	630	A
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	651	G
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	670	U
1	6	676	G
1	6	678	A
1	6	679	U
1	6	680	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	695	U
1	6	697	C
1	6	698	U
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	723	G
1	6	730	G
1	6	734	A
1	6	742	U
1	6	751	G
1	6	753	A
1	6	754	A
1	6	755	A
1	6	756	A
1	6	765	G
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	793	A
1	6	794	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	806	A
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	829	A
1	6	830	U
1	6	831	U
1	6	832	U
1	6	834	G
1	6	835	U
1	6	856	A
1	6	861	U
1	6	863	A
1	6	898	A
1	6	906	A
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	959	U
1	6	960	U
1	6	966	A
1	6	969	C
1	6	970	A
1	6	971	A
1	6	976	G
1	6	992	A
1	6	993	A
1	6	997	G
1	6	1003	A
1	6	1004	U
1	6	1005	A
1	6	1014	G
1	6	1021	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1026	A
1	6	1028	C
1	6	1039	A
1	6	1040	G
1	6	1041	G
1	6	1052	U
1	6	1053	G
1	6	1055	U
1	6	1057	U
1	6	1058	U
1	6	1059	U
1	6	1060	U
1	6	1063	U
1	6	1070	C
1	6	1071	U
1	6	1073	G
1	6	1082	C
1	6	1091	A
1	6	1092	A
1	6	1093	A
1	6	1096	C
1	6	1097	U
1	6	1098	U
1	6	1100	G
1	6	1101	G
1	6	1109	G
1	6	1138	A
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	1167	G
1	6	1185	U
1	6	1194	A
1	6	1196	A
1	6	1199	G
1	6	1200	G
1	6	1202	A
1	6	1208	A
1	6	1217	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1218	G
1	6	1220	C
1	6	1225	U
1	6	1226	A
1	6	1228	G
1	6	1229	G
1	6	1230	A
1	6	1238	A
1	6	1239	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	1255	G
1	6	1256	A
1	6	1257	U
1	6	1258	U
1	6	1259	U
1	6	1262	U
1	6	1284	C
1	6	1285	U
1	6	1286	U
1	6	1288	G
1	6	1314	U
1	6	1315	U
1	6	1316	G
1	6	1321	A
1	6	1338	C
1	6	1343	U
1	6	1344	A
1	6	1345	A
1	6	1346	A
1	6	1354	G
1	6	1355	C
1	6	1361	U
1	6	1362	U
1	6	1363	U
1	6	1364	G
1	6	1371	A
1	6	1372	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1382	A
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	1427	A
1	6	1428	G
1	6	1429	G
1	6	1433	G
1	6	1445	G
1	6	1446	A
1	6	1448	G
1	6	1454	G
1	6	1458	G
1	6	1459	C
1	6	1461	C
1	6	1471	A
1	6	1481	C
1	6	1482	C
1	6	1489	U
1	6	1490	C
1	6	1491	U
1	6	1492	A
1	6	1493	A
1	6	1496	U
1	6	1506	G
1	6	1510	U
1	6	1514	U
1	6	1515	A
1	6	1516	A
1	6	1521	G
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1540	G
1	6	1554	U
1	6	1555	A
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	1578	U
1	6	1582	U
1	6	1584	G
1	6	1601	G
1	6	1615	C
1	6	1616	G
1	6	1621	U
1	6	1634	C
1	6	1635	A
1	6	1637	C
1	6	1638	G
1	6	1657	U
1	6	1658	G
1	6	1696	G
1	6	1697	G
1	6	1698	G
1	6	1699	G
1	6	1700	C
1	6	1701	A
1	6	1702	A
1	6	1705	C
1	6	1710	U
1	6	1712	A
1	6	1715	G
1	6	1716	C
1	6	1717	G
1	6	1731	A
1	6	1736	G
1	6	1755	A
1	6	1760	G
1	6	1762	A
1	6	1766	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1767	G
1	6	1769	U
1	6	1770	U
1	6	1780	G
1	6	1782	A
1	6	1783	C
1	6	1789	G
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	15	C
36	5	26	A
36	5	33	G
36	5	40	A
36	5	43	A
36	5	49	A
36	5	60	A
36	5	65	A
36	5	66	A
36	5	73	C
36	5	74	G
36	5	76	G
36	5	83	U
36	5	92	G
36	5	99	A
36	5	109	A
36	5	110	G
36	5	113	C
36	5	116	A
36	5	120	G
36	5	121	A
36	5	122	A
36	5	133	U
36	5	134	U
36	5	135	C
36	5	136	G
36	5	142	C
36	5	156	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	157	A
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	187	A
36	5	190	U
36	5	191	U
36	5	200	C
36	5	210	U
36	5	211	A
36	5	218	G
36	5	219	A
36	5	221	A
36	5	224	C
36	5	231	G
36	5	236	G
36	5	237	G
36	5	238	A
36	5	239	G
36	5	240	U
36	5	244	G
36	5	246	U
36	5	247	C
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	259	C
36	5	269	G
36	5	284	A
36	5	286	U
36	5	295	A
36	5	322	U
36	5	323	A
36	5	329	U
36	5	330	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	334	A
36	5	349	A
36	5	350	C
36	5	370	U
36	5	375	A
36	5	376	G
36	5	395	A
36	5	398	A
36	5	399	A
36	5	401	U
36	5	402	A
36	5	403	C
36	5	407	A
36	5	421	G
36	5	422	A
36	5	436	A
36	5	437	G
36	5	438	A
36	5	439	C
36	5	441	U
36	5	442	G
36	5	492	U
36	5	495	G
36	5	521	A
36	5	532	A
36	5	535	G
36	5	546	C
36	5	547	G
36	5	548	G
36	5	551	A
36	5	553	U
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	594	U
36	5	595	G
36	5	600	G
36	5	604	G
36	5	608	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	649	A
36	5	656	A
36	5	660	A
36	5	675	C
36	5	677	A
36	5	681	U
36	5	683	U
36	5	705	A
36	5	708	G
36	5	712	G
36	5	715	A
36	5	716	A
36	5	726	G
36	5	735	A
36	5	736	A
36	5	758	C
36	5	765	C
36	5	766	U
36	5	767	U
36	5	776	U
36	5	777	U
36	5	780	A
36	5	781	G
36	5	785	G
36	5	786	A
36	5	806	A
36	5	817	A
36	5	830	A
36	5	855	U
36	5	861	C
36	5	874	U
36	5	879	U
36	5	896	A
36	5	897	U
36	5	907	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	908	G
36	5	914	A
36	5	916	G
36	5	917	A
36	5	921	A
36	5	924	G
36	5	937	G
36	5	943	U
36	5	944	C
36	5	948	C
36	5	959	C
36	5	960	U
36	5	961	C
36	5	963	G
36	5	964	G
36	5	979	U
36	5	980	A
36	5	993	G
36	5	994	G
36	5	1000	C
36	5	1001	G
36	5	1002	A
36	5	1003	A
36	5	1006	A
36	5	1010	G
36	5	1014	U
36	5	1015	U
36	5	1016	C
36	5	1017	C
36	5	1018	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	1034	U
36	5	1035	G
36	5	1047	A
36	5	1049	C
36	5	1064	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1065	A
36	5	1071	U
36	5	1072	G
36	5	1081	U
36	5	1082	U
36	5	1088	U
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	1131	G
36	5	1152	G
36	5	1153	A
36	5	1156	C
36	5	1159	A
36	5	1160	C
36	5	1166	G
36	5	1180	A
36	5	1181	U
36	5	1182	A
36	5	1191	U
36	5	1192	C
36	5	1193	A
36	5	1197	A
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
36	5	1246	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1252	A
36	5	1258	U
36	5	1259	A
36	5	1262	G
36	5	1263	A
36	5	1264	G
36	5	1265	U
36	5	1266	G
36	5	1268	G
36	5	1281	G
36	5	1307	G
36	5	1308	A
36	5	1309	U
36	5	1312	C
36	5	1313	G
36	5	1330	A
36	5	1332	A
36	5	1348	U
36	5	1349	G
36	5	1351	U
36	5	1352	A
36	5	1353	U
36	5	1354	G
36	5	1355	A
36	5	1356	U
36	5	1357	G
36	5	1385	C
36	5	1386	A
36	5	1387	G
36	5	1399	A
36	5	1400	G
36	5	1418	A
36	5	1419	A
36	5	1434	G
36	5	1437	C
36	5	1443	G
36	5	1446	A
36	5	1450	G
36	5	1481	A
36	5	1482	A
36	5	1490	A
36	5	1495	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1502	C
36	5	1503	A
36	5	1508	C
36	5	1519	G
36	5	1528	G
36	5	1536	G
36	5	1541	G
36	5	1554	U
36	5	1555	U
36	5	1556	C
36	5	1560	G
36	5	1561	G
36	5	1562	C
36	5	1565	G
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	1580	A
36	5	1581	C
36	5	1582	C
36	5	1583	A
36	5	1589	A
36	5	1600	U
36	5	1601	U
36	5	1619	A
36	5	1620	U
36	5	1629	U
36	5	1632	A
36	5	1639	C
36	5	1643	A
36	5	1644	C
36	5	1645	U
36	5	1657	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1683	A
36	5	1687	U
36	5	1716	U
36	5	1717	U
36	5	1724	U
36	5	1725	C
36	5	1741	A
36	5	1750	A
36	5	1751	G
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	1780	G
36	5	1793	C
36	5	1794	G
36	5	1797	A
36	5	1809	A
36	5	1810	A
36	5	1813	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	1847	A
36	5	1848	G
36	5	1849	C
36	5	1850	A
36	5	1876	U
36	5	1878	G
36	5	1879	A
36	5	1880	U
36	5	1884	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1893	A
36	5	1906	G
36	5	1908	A
36	5	1932	A
36	5	1935	G
36	5	1947	G
36	5	1953	G
36	5	2100	A
36	5	2101	C
36	5	2102	U
36	5	2110	G
36	5	2111	G
36	5	2112	U
36	5	2113	A
36	5	2121	G
36	5	2122	G
36	5	2131	A
36	5	2144	A
36	5	2158	A
36	5	2169	G
36	5	2170	U
36	5	2184	U
36	5	2187	G
36	5	2188	A
36	5	2198	A
36	5	2205	U
36	5	2210	G
36	5	2223	A
36	5	2225	U
36	5	2228	A
36	5	2229	A
36	5	2231	C
36	5	2244	A
36	5	2250	G
36	5	2253	G
36	5	2255	A
36	5	2256	A
36	5	2257	C
36	5	2258	U
36	5	2273	G
36	5	2276	G
36	5	2278	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2279	A
36	5	2280	A
36	5	2281	A
36	5	2282	U
36	5	2288	G
36	5	2298	U
36	5	2307	G
36	5	2310	U
36	5	2313	A
36	5	2315	G
36	5	2334	U
36	5	2336	U
36	5	2366	C
36	5	2373	A
36	5	2374	C
36	5	2375	G
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	2401	A
36	5	2403	G
36	5	2404	A
36	5	2411	U
36	5	2418	G
36	5	2435	G
36	5	2436	U
36	5	2437	G
36	5	2438	A
36	5	2439	A
36	5	2440	G
36	5	2441	A
36	5	2443	A
36	5	2504	U
36	5	2505	U
36	5	2506	U
36	5	2507	C
36	5	2508	U
36	5	2511	A
36	5	2512	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2514	U
36	5	2515	A
36	5	2518	C
36	5	2522	G
36	5	2523	A
36	5	2526	C
36	5	2530	G
36	5	2531	C
36	5	2532	U
36	5	2534	G
36	5	2537	U
36	5	2538	U
36	5	2539	C
36	5	2540	A
36	5	2543	U
36	5	2549	G
36	5	2552	C
36	5	2555	G
36	5	2562	A
36	5	2566	C
36	5	2567	C
36	5	2568	C
36	5	2569	A
36	5	2571	U
36	5	2573	G
36	5	2574	G
36	5	2584	G
36	5	2585	G
36	5	2586	G
36	5	2593	A
36	5	2594	C
36	5	2606	G
36	5	2607	G
36	5	2610	G
36	5	2614	G
36	5	2631	U
36	5	2637	A
36	5	2639	G
36	5	2652	U
36	5	2656	A
36	5	2674	A
36	5	2677	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2681	U
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	2700	G
36	5	2714	G
36	5	2728	G
36	5	2729	U
36	5	2752	U
36	5	2753	G
36	5	2755	C
36	5	2762	A
36	5	2772	C
36	5	2773	C
36	5	2777	G
36	5	2778	G
36	5	2783	U
36	5	2787	G
36	5	2796	G
36	5	2799	A
36	5	2800	G
36	5	2801	A
36	5	2810	C
36	5	2814	G
36	5	2817	A
36	5	2818	U
36	5	2839	G
36	5	2840	C
36	5	2843	U
36	5	2845	A
36	5	2849	C
36	5	2853	A
36	5	2871	G
36	5	2872	A
36	5	2874	G
36	5	2875	U
36	5	2887	A
36	5	2889	C
36	5	2896	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2899	C
36	5	2902	A
36	5	2904	U
36	5	2912	G
36	5	2923	U
36	5	2935	U
36	5	2936	A
36	5	2942	C
36	5	2947	G
36	5	2954	U
36	5	2957	G
36	5	2971	A
36	5	2972	G
36	5	2979	U
36	5	2983	C
36	5	2990	G
36	5	2996	U
36	5	2997	G
36	5	3012	A
36	5	3056	U
36	5	3057	U
36	5	3059	G
36	5	3078	U
36	5	3079	U
36	5	3086	A
36	5	3092	C
36	5	3093	C
36	5	3102	G
36	5	3104	U
36	5	3119	U
36	5	3122	A
36	5	3123	A
36	5	3130	A
36	5	3131	U
36	5	3142	A
36	5	3143	C
36	5	3153	U
36	5	3155	U
36	5	3156	U
36	5	3157	U
36	5	3158	G
36	5	3159	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	5	3164	C
36	5	3165	A
36	5	3168	A
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
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	3227	A
36	5	3228	C
36	5	3229	G
36	5	3239	G
36	5	3242	G
36	5	3244	A
36	5	3245	A
36	5	3246	G
36	5	3247	G
36	5	3253	G
36	5	3259	U
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	3281	U
36	5	3282	U
36	5	3285	C
36	5	3286	G
36	5	3288	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	3289	G
36	5	3290	G
36	5	3294	A
36	5	3304	U
36	5	3313	U
36	5	3315	G
36	5	3316	A
36	5	3317	U
36	5	3319	U
36	5	3330	A
36	5	3331	U
36	5	3332	U
36	5	3333	G
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	3378	C
36	5	3382	U
36	5	3383	G
36	5	3389	U
36	5	3390	G
36	5	3393	U
36	5	3394	U
36	5	3396	U
37	7	7	G
37	7	22	A
37	7	33	U
37	7	51	A
37	7	54	U
37	7	58	C
37	7	60	G
37	7	65	G
37	7	73	C
37	7	74	C
37	7	76	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	7	91	G
37	7	93	C
37	7	99	G
37	7	101	G
37	7	102	A
37	7	103	A
37	7	112	G
37	7	114	U
38	8	21	C
38	8	24	G
38	8	34	U
38	8	35	C
38	8	46	G
38	8	48	A
38	8	51	G
38	8	52	A
38	8	53	A
38	8	57	C
38	8	58	G
38	8	59	A
38	8	62	C
38	8	63	G
38	8	79	A
38	8	80	A
38	8	81	U
38	8	83	C
38	8	84	C
38	8	86	U
38	8	87	G
38	8	88	A
38	8	95	G
38	8	96	A
38	8	97	A
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	130	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	8	137	C
38	8	138	A
38	8	152	G
38	8	156	U
38	8	157	U
38	8	158	U

All (311) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	2	25	C
1	2	45	U
1	2	68	A
1	2	73	U
1	2	74	U
1	2	103	A
1	2	126	A
1	2	130	C
1	2	131	C
1	2	133	U
1	2	139	C
1	2	144	U
1	2	158	U
1	2	187	G
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	400	A
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	555	A
1	2	558	U
1	2	582	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	781	U
1	2	782	U
1	2	794	U
1	2	811	A
1	2	815	G
1	2	829	A
1	2	913	G
1	2	1051	G
1	2	1058	U
1	2	1081	A
1	2	1150	G
1	2	1157	A
1	2	1196	A
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	1517	U
1	2	1568	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	169	U
36	1	210	U
36	1	223	U
36	1	239	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	282	G
36	1	283	G
36	1	397	A
36	1	547	G
36	1	588	G
36	1	594	U
36	1	620	U
36	1	715	A
36	1	763	G
36	1	816	A
36	1	873	C
36	1	896	A
36	1	916	G
36	1	981	U
36	1	993	G
36	1	1064	A
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
36	1	1352	A
36	1	1355	A
36	1	1419	A
36	1	1484	U
36	1	1507	G
36	1	1554	U
36	1	1562	C
36	1	1716	U
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	2101	C
36	1	2112	U
36	1	2209	U
36	1	2227	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2281	A
36	1	2372	A
36	1	2373	A
36	1	2374	C
36	1	2418	G
36	1	2513	U
36	1	2522	G
36	1	2525	G
36	1	2537	U
36	1	2541	U
36	1	2554	A
36	1	2585	G
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	3056	U
36	1	3078	U
36	1	3121	U
36	1	3139	A
36	1	3169	U
36	1	3195	U
36	1	3207	U
36	1	3218	A
36	1	3228	C
36	1	3269	U
36	1	3275	U
36	1	3303	G
36	1	3319	U
36	1	3350	C
36	1	3351	U
36	1	3353	G
36	1	3375	A
37	3	13	A
37	3	49	G
37	3	52	G
37	3	86	U
38	4	82	U
38	4	85	G
38	4	111	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	4	125	U
1	6	25	C
1	6	66	U
1	6	76	A
1	6	103	A
1	6	114	C
1	6	136	C
1	6	139	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	280	U
1	6	400	A
1	6	417	A
1	6	512	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	667	U
1	6	678	A
1	6	697	C
1	6	717	C
1	6	755	A
1	6	811	A
1	6	829	A
1	6	834	G
1	6	914	G
1	6	1051	G
1	6	1058	U
1	6	1081	A
1	6	1097	U
1	6	1137	A
1	6	1227	A
1	6	1244	A
1	6	1255	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1344	A
1	6	1431	C
1	6	1481	C
1	6	1489	U
1	6	1491	U
1	6	1535	U
1	6	1568	C
1	6	1573	A
1	6	1615	C
1	6	1620	C
1	6	1637	C
1	6	1657	U
1	6	1696	G
1	6	1698	G
1	6	1700	C
36	5	43	A
36	5	210	U
36	5	223	U
36	5	238	A
36	5	374	A
36	5	397	A
36	5	546	C
36	5	588	G
36	5	647	A
36	5	659	G
36	5	715	A
36	5	726	G
36	5	735	A
36	5	765	C
36	5	816	A
36	5	873	C
36	5	896	A
36	5	908	G
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	1181	U
36	5	1192	C
36	5	1199	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1236	G
36	5	1238	C
36	5	1241	U
36	5	1307	G
36	5	1329	U
36	5	1331	U
36	5	1352	A
36	5	1355	A
36	5	1370	G
36	5	1392	G
36	5	1434	G
36	5	1481	A
36	5	1514	G
36	5	1554	U
36	5	1560	G
36	5	1580	A
36	5	1716	U
36	5	1815	U
36	5	1816	A
36	5	1819	U
36	5	1846	C
36	5	1849	C
36	5	1878	G
36	5	1879	A
36	5	2101	C
36	5	2112	U
36	5	2204	C
36	5	2209	U
36	5	2249	G
36	5	2255	A
36	5	2257	C
36	5	2281	A
36	5	2372	A
36	5	2440	G
36	5	2507	C
36	5	2513	U
36	5	2531	C
36	5	2539	C
36	5	2682	C
36	5	2714	G
36	5	2728	G
36	5	2772	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2801	A
36	5	2817	A
36	5	2818	U
36	5	2887	A
36	5	2896	A
36	5	2971	A
36	5	2996	U
36	5	3055	U
36	5	3056	U
36	5	3078	U
36	5	3121	U
36	5	3154	C
36	5	3195	U
36	5	3207	U
36	5	3218	A
36	5	3228	C
36	5	3259	U
36	5	3275	U
36	5	3289	G
36	5	3303	G
36	5	3330	A
36	5	3340	G
36	5	3341	U
36	5	3357	U
38	8	34	U
38	8	111	A
38	8	126	A

## 5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

## 5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

Of 2562 ligands modelled in this entry, 1427 are monoatomic - leaving 1135 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	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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
86	OHX	1	4213	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4214	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4215	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	1	4216	-	0,6,6	0.00	-	0,15,15	0.00	-
88	HMT	1	4217	-	37,43,43	0.54	0	38,66,66	0.61	0
86	OHX	2	2022	-	0,6,6	0.00	-	0,15,15	0.00	-
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
86	OHX	2	2180	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	3	214	-	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	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	4	237	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	4	238	-	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	-
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	-



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	86	0,6,6	0.00	-	0,15,15	0.00	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	86	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	-
86	OHX	5	4246	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4247	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4248	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4249	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4250	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4251	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4252	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4253	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	5	4254	-	0,6,6	0.00	-	0,15,15	0.00	-
88	HMT	5	4255	-	37,43,43	0.53	0	38,66,66	0.60	1 (2%)
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	-



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	-	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	6	2205	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	6	2206	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	7	217	-	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	7	228	-	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	-
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	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
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	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	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	402	-	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	206	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	M7	207	-	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	M9	203	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	N1	201	-	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	O2	202	-	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	O7	104	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	O7	105	-	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	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	201	-	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	-
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	l3	406	-	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	302	-	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	l5	303	-	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	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	203	-	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	301	-	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	n9	101	-	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	503	-	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	s1	302	-	0,6,6	0.00	-	0,15,15	0.00	-
86	OHX	s4	302	-	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	s9	202	-	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	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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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
86	OHX	1	4213	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4214	-	-	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	4215	-	-	0/0/0/0	0/0/0/0
86	OHX	1	4216	-	-	0/0/0/0	0/0/0/0
88	HMT	1	4217	-	-	0/27/74/74	0/5/5/5
86	OHX	2	2022	-	-	0/0/0/0	0/0/0/0
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
86	OHX	2	2059	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2060	-	-	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	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
86	OHX	2	2101	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2102	-	-	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	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
86	OHX	2	2143	-	-	0/0/0/0	0/0/0/0
86	OHX	2	2144	-	-	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	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	2	2180	-	-	0/0/0/0	0/0/0/0
86	OHX	3	214	-	-	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	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	4	237	-	-	0/0/0/0	0/0/0/0
86	OHX	4	238	-	-	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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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	86	-	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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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	86	-	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
86	OHX	5	4246	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4247	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4248	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4249	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4250	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4251	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4252	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4253	-	-	0/0/0/0	0/0/0/0
86	OHX	5	4254	-	-	0/0/0/0	0/0/0/0
88	HMT	5	4255	-	-	0/27/74/74	0/5/5/5
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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
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

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
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	-	-	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	6	2205	-	-	0/0/0/0	0/0/0/0
86	OHX	6	2206	-	-	0/0/0/0	0/0/0/0
86	OHX	7	217	-	-	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
86	OHX	7	227	-	-	0/0/0/0	0/0/0/0
86	OHX	7	228	-	-	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	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	C3	201	-	-	0/0/0/0	0/0/0/0
86	OHX	C5	201	-	-	0/0/0/0	0/0/0/0
86	OHX	C8	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	402	-	-	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	206	-	-	0/0/0/0	0/0/0/0
86	OHX	M7	207	-	-	0/0/0/0	0/0/0/0
86	OHX	M8	201	-	-	0/0/0/0	0/0/0/0
86	OHX	M9	203	-	-	0/0/0/0	0/0/0/0
86	OHX	N1	201	-	-	0/0/0/0	0/0/0/0
86	OHX	N9	101	-	-	0/0/0/0	0/0/0/0
86	OHX	O2	202	-	-	0/0/0/0	0/0/0/0
86	OHX	O3	202	-	-	0/0/0/0	0/0/0/0
86	OHX	O7	104	-	-	0/0/0/0	0/0/0/0
86	OHX	O7	105	-	-	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	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
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	d4	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	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	l3	406	-	-	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	302	-	-	0/0/0/0	0/0/0/0
86	OHX	l5	303	-	-	0/0/0/0	0/0/0/0
86	OHX	l5	304	-	-	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	203	-	-	0/0/0/0	0/0/0/0
86	OHX	m4	201	-	-	0/0/0/0	0/0/0/0
86	OHX	m5	301	-	-	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	n9	101	-	-	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	503	-	-	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	s1	302	-	-	0/0/0/0	0/0/0/0
86	OHX	s4	302	-	-	0/0/0/0	0/0/0/0
86	OHX	s8	303	-	-	0/0/0/0	0/0/0/0
86	OHX	s9	202	-	-	0/0/0/0	0/0/0/0
86	OHX	sR	401	-	-	0/0/0/0	0/0/0/0

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
88	5	4255	HMT	C18-O3-C2	-2.02	112.77	116.28

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

501 monomers are involved in 797 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	1	3867	OHX	1	0
86	1	3869	OHX	1	0
86	1	3871	OHX	1	0
86	1	3872	OHX	2	0
86	1	3876	OHX	1	0
86	1	3878	OHX	1	0
86	1	3880	OHX	1	0
86	1	3883	OHX	1	0
86	1	3885	OHX	2	0
86	1	3886	OHX	2	0
86	1	3888	OHX	2	0
86	1	3892	OHX	2	0
86	1	3893	OHX	1	0
86	1	3894	OHX	1	0
86	1	3895	OHX	1	0
86	1	3901	OHX	1	0
86	1	3902	OHX	1	0
86	1	3903	OHX	1	0
86	1	3907	OHX	1	0
86	1	3913	OHX	1	0
86	1	3915	OHX	1	0
86	1	3916	OHX	1	0
86	1	3921	OHX	1	0
86	1	3923	OHX	1	0
86	1	3925	OHX	1	0
86	1	3926	OHX	1	0
86	1	3927	OHX	1	0
86	1	3928	OHX	1	0
86	1	3932	OHX	2	0
86	1	3934	OHX	2	0
86	1	3935	OHX	1	0
86	1	3937	OHX	1	0
86	1	3940	OHX	6	0
86	1	3941	OHX	1	0
86	1	3942	OHX	1	0
86	1	3943	OHX	1	0
86	1	3945	OHX	1	0
86	1	3948	OHX	1	0
86	1	3949	OHX	1	0
86	1	3953	OHX	2	0
86	1	3956	OHX	1	0
86	1	3959	OHX	2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	1	3960	OHX	4	0
86	1	3961	OHX	1	0
86	1	3962	OHX	6	0
86	1	3964	OHX	1	0
86	1	3965	OHX	1	0
86	1	3966	OHX	1	0
86	1	3968	OHX	1	0
86	1	3971	OHX	1	0
86	1	3974	OHX	6	0
86	1	3975	OHX	1	0
86	1	3977	OHX	1	0
86	1	3978	OHX	1	0
86	1	3979	OHX	1	0
86	1	3983	OHX	2	0
86	1	3984	OHX	1	0
86	1	3985	OHX	2	0
86	1	3988	OHX	1	0
86	1	3997	OHX	1	0
86	1	4001	OHX	1	0
86	1	4005	OHX	1	0
86	1	4006	OHX	1	0
86	1	4007	OHX	6	0
86	1	4010	OHX	2	0
86	1	4011	OHX	1	0
86	1	4012	OHX	1	0
86	1	4014	OHX	1	0
86	1	4017	OHX	2	0
86	1	4019	OHX	1	0
86	1	4021	OHX	1	0
86	1	4023	OHX	3	0
86	1	4027	OHX	2	0
86	1	4031	OHX	2	0
86	1	4034	OHX	1	0
86	1	4036	OHX	6	0
86	1	4038	OHX	1	0
86	1	4041	OHX	4	0
86	1	4042	OHX	2	0
86	1	4043	OHX	1	0
86	1	4044	OHX	1	0
86	1	4046	OHX	2	0
86	1	4047	OHX	3	0
86	1	4048	OHX	6	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	1	4049	OHX	1	0
86	1	4051	OHX	3	0
86	1	4052	OHX	1	0
86	1	4059	OHX	4	0
86	1	4060	OHX	5	0
86	1	4061	OHX	3	0
86	1	4065	OHX	1	0
86	1	4066	OHX	1	0
86	1	4067	OHX	1	0
86	1	4070	OHX	1	0
86	1	4073	OHX	1	0
86	1	4078	OHX	1	0
86	1	4079	OHX	1	0
86	1	4082	OHX	1	0
86	1	4084	OHX	2	0
86	1	4088	OHX	5	0
86	1	4089	OHX	2	0
86	1	4092	OHX	1	0
86	1	4094	OHX	1	0
86	1	4098	OHX	1	0
86	1	4099	OHX	1	0
86	1	4100	OHX	1	0
86	1	4102	OHX	1	0
86	1	4103	OHX	2	0
86	1	4111	OHX	1	0
86	1	4113	OHX	1	0
86	1	4122	OHX	1	0
86	1	4124	OHX	1	0
86	1	4126	OHX	1	0
86	1	4129	OHX	1	0
86	1	4132	OHX	2	0
86	1	4136	OHX	3	0
86	1	4137	OHX	2	0
86	1	4139	OHX	2	0
86	1	4142	OHX	1	0
86	1	4143	OHX	3	0
86	1	4144	OHX	5	0
86	1	4145	OHX	2	0
86	1	4147	OHX	2	0
86	1	4153	OHX	1	0
86	1	4154	OHX	2	0
86	1	4158	OHX	4	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	1	4159	OHX	1	0
86	1	4160	OHX	6	0
86	1	4162	OHX	1	0
86	1	4167	OHX	4	0
86	1	4168	OHX	3	0
86	1	4169	OHX	1	0
86	1	4170	OHX	5	0
86	1	4171	OHX	2	0
86	1	4172	OHX	3	0
86	1	4176	OHX	6	0
86	1	4178	OHX	1	0
86	1	4179	OHX	1	0
86	1	4183	OHX	1	0
86	1	4184	OHX	1	0
86	1	4185	OHX	5	0
86	1	4187	OHX	1	0
86	1	4188	OHX	3	0
86	1	4192	OHX	1	0
86	1	4193	OHX	1	0
86	1	4194	OHX	1	0
86	1	4196	OHX	1	0
86	1	4198	OHX	1	0
86	1	4199	OHX	1	0
86	1	4200	OHX	1	0
86	1	4201	OHX	6	0
86	1	4202	OHX	1	0
86	1	4204	OHX	1	0
86	1	4207	OHX	2	0
86	1	4208	OHX	1	0
86	1	4209	OHX	1	0
86	1	4210	OHX	1	0
86	1	4213	OHX	1	0
88	1	4217	HMT	4	0
86	2	2023	OHX	1	0
86	2	2025	OHX	3	0
86	2	2026	OHX	1	0
86	2	2030	OHX	8	0
86	2	2031	OHX	2	0
86	2	2033	OHX	1	0
86	2	2034	OHX	1	0
86	2	2035	OHX	3	0
86	2	2037	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	2	2038	OHX	2	0
86	2	2041	OHX	2	0
86	2	2043	OHX	6	0
86	2	2044	OHX	1	0
86	2	2046	OHX	1	0
86	2	2047	OHX	1	0
86	2	2050	OHX	1	0
86	2	2052	OHX	1	0
86	2	2053	OHX	1	0
86	2	2056	OHX	1	0
86	2	2057	OHX	2	0
86	2	2061	OHX	1	0
86	2	2063	OHX	1	0
86	2	2069	OHX	3	0
86	2	2071	OHX	1	0
86	2	2072	OHX	1	0
86	2	2073	OHX	2	0
86	2	2074	OHX	3	0
86	2	2075	OHX	1	0
86	2	2077	OHX	1	0
86	2	2081	OHX	2	0
86	2	2082	OHX	1	0
86	2	2083	OHX	3	0
86	2	2084	OHX	1	0
86	2	2085	OHX	1	0
86	2	2088	OHX	2	0
86	2	2089	OHX	6	0
86	2	2090	OHX	1	0
86	2	2091	OHX	1	0
86	2	2092	OHX	1	0
86	2	2093	OHX	1	0
86	2	2095	OHX	1	0
86	2	2098	OHX	7	0
86	2	2099	OHX	1	0
86	2	2103	OHX	1	0
86	2	2105	OHX	1	0
86	2	2107	OHX	1	0
86	2	2108	OHX	1	0
86	2	2109	OHX	1	0
86	2	2110	OHX	5	0
86	2	2112	OHX	1	0
86	2	2114	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	2	2116	OHX	1	0
86	2	2120	OHX	2	0
86	2	2122	OHX	1	0
86	2	2125	OHX	1	0
86	2	2126	OHX	1	0
86	2	2127	OHX	1	0
86	2	2129	OHX	1	0
86	2	2130	OHX	1	0
86	2	2131	OHX	8	0
86	2	2132	OHX	1	0
86	2	2136	OHX	2	0
86	2	2138	OHX	1	0
86	2	2140	OHX	1	0
86	2	2141	OHX	1	0
86	2	2144	OHX	1	0
86	2	2145	OHX	2	0
86	2	2146	OHX	6	0
86	2	2148	OHX	2	0
86	2	2152	OHX	1	0
86	2	2154	OHX	2	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	2	0
86	2	2161	OHX	1	0
86	2	2162	OHX	3	0
86	2	2166	OHX	1	0
86	2	2168	OHX	1	0
86	2	2169	OHX	1	0
86	3	215	OHX	1	0
86	3	218	OHX	1	0
86	3	219	OHX	1	0
86	3	223	OHX	1	0
86	3	224	OHX	2	0
86	4	224	OHX	1	0
86	4	225	OHX	2	0
86	4	227	OHX	1	0
86	4	228	OHX	1	0
86	4	230	OHX	1	0
86	4	234	OHX	3	0
86	5	3903	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	5	3905	OHX	1	0
86	5	3907	OHX	1	0
86	5	3908	OHX	1	0
86	5	3909	OHX	2	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	3918	OHX	1	0
86	5	3919	OHX	2	0
86	5	3925	OHX	1	0
86	5	3927	OHX	3	0
86	5	3935	OHX	1	0
86	5	3939	OHX	1	0
86	5	3945	OHX	7	0
86	5	3946	OHX	1	0
86	5	3948	OHX	2	0
86	5	3950	OHX	1	0
86	5	3951	OHX	1	0
86	5	3957	OHX	2	0
86	5	3959	OHX	1	0
86	5	3960	OHX	3	0
86	5	3961	OHX	1	0
86	5	3962	OHX	1	0
86	5	3965	OHX	4	0
86	5	3969	OHX	1	0
86	5	3972	OHX	1	0
86	5	3975	OHX	2	0
86	5	3976	OHX	7	0
86	5	3979	OHX	1	0
86	5	3981	OHX	8	0
86	5	3985	OHX	1	0
86	5	3986	OHX	1	0
86	5	3987	OHX	1	0
86	5	3990	OHX	1	0
86	5	3992	OHX	1	0
86	5	3998	OHX	1	0
86	5	4003	OHX	8	0
86	5	4004	OHX	8	0
86	5	4005	OHX	1	0
86	5	4009	OHX	1	0
86	5	4013	OHX	6	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	5	4015	OHX	2	0
86	5	4017	OHX	1	0
86	5	4020	OHX	1	0
86	5	4022	OHX	7	0
86	5	4025	OHX	3	0
86	5	4026	OHX	2	0
86	5	4029	OHX	1	0
86	5	4030	OHX	1	0
86	5	4031	OHX	1	0
86	5	4032	OHX	1	0
86	5	4035	OHX	2	0
86	5	4036	OHX	3	0
86	5	4041	OHX	1	0
86	5	4043	OHX	1	0
86	5	4048	OHX	1	0
86	5	4051	OHX	1	0
86	5	4053	OHX	1	0
86	5	4056	OHX	1	0
86	5	4057	OHX	6	0
86	5	4058	OHX	1	0
86	5	4067	OHX	2	0
86	5	4068	OHX	7	0
86	5	4070	OHX	1	0
86	5	4074	OHX	1	0
86	5	4076	OHX	2	0
86	5	4078	OHX	2	0
86	5	4080	OHX	1	0
86	5	4082	OHX	1	0
86	5	4083	OHX	2	0
86	5	4089	OHX	1	0
86	5	4090	OHX	1	0
86	5	4091	OHX	8	0
86	5	4092	OHX	2	0
86	5	4093	OHX	1	0
86	5	4095	OHX	2	0
86	5	4096	OHX	2	0
86	5	4098	OHX	1	0
86	5	4099	OHX	1	0
86	5	4101	OHX	1	0
86	5	4104	OHX	3	0
86	5	4107	OHX	1	0
86	5	4108	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	5	4109	OHX	1	0
86	5	4113	OHX	1	0
86	5	4119	OHX	1	0
86	5	4120	OHX	2	0
86	5	4121	OHX	1	0
86	5	4122	OHX	1	0
86	5	4128	OHX	1	0
86	5	4130	OHX	1	0
86	5	4131	OHX	1	0
86	5	4132	OHX	1	0
86	5	4133	OHX	1	0
86	5	4135	OHX	1	0
86	5	4139	OHX	1	0
86	5	4140	OHX	1	0
86	5	4142	OHX	1	0
86	5	4143	OHX	1	0
86	5	4145	OHX	6	0
86	5	4146	OHX	1	0
86	5	4149	OHX	1	0
86	5	4155	OHX	1	0
86	5	4156	OHX	1	0
86	5	4161	OHX	2	0
86	5	4164	OHX	2	0
86	5	4170	OHX	1	0
86	5	4171	OHX	1	0
86	5	4175	OHX	2	0
86	5	4183	OHX	2	0
86	5	4184	OHX	1	0
86	5	4185	OHX	1	0
86	5	4187	OHX	1	0
86	5	4188	OHX	1	0
86	5	4192	OHX	5	0
86	5	4194	OHX	5	0
86	5	4195	OHX	3	0
86	5	4196	OHX	1	0
86	5	4197	OHX	1	0
86	5	4198	OHX	1	0
86	5	4200	OHX	1	0
86	5	4201	OHX	11	0
86	5	4202	OHX	7	0
86	5	4203	OHX	7	0
86	5	4204	OHX	2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	5	4205	OHX	1	0
86	5	4206	OHX	5	0
86	5	4207	OHX	1	0
86	5	4210	OHX	1	0
86	5	4213	OHX	1	0
86	5	4216	OHX	3	0
86	5	4219	OHX	8	0
86	5	4221	OHX	1	0
86	5	4223	OHX	1	0
86	5	4225	OHX	1	0
86	5	4226	OHX	4	0
86	5	4228	OHX	1	0
86	5	4230	OHX	1	0
86	5	4231	OHX	1	0
86	5	4236	OHX	6	0
86	5	4238	OHX	3	0
86	5	4239	OHX	1	0
86	5	4242	OHX	1	0
86	5	4245	OHX	8	0
86	5	4246	OHX	1	0
86	5	4249	OHX	1	0
86	5	4251	OHX	1	0
86	5	4253	OHX	1	0
88	5	4255	HMT	3	0
86	6	2051	OHX	1	0
86	6	2055	OHX	1	0
86	6	2056	OHX	1	0
86	6	2062	OHX	6	0
86	6	2064	OHX	1	0
86	6	2068	OHX	1	0
86	6	2069	OHX	1	0
86	6	2073	OHX	1	0
86	6	2074	OHX	1	0
86	6	2076	OHX	1	0
86	6	2077	OHX	1	0
86	6	2078	OHX	1	0
86	6	2080	OHX	1	0
86	6	2082	OHX	1	0
86	6	2086	OHX	1	0
86	6	2089	OHX	1	0
86	6	2095	OHX	1	0
86	6	2098	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	6	2099	OHX	1	0
86	6	2101	OHX	1	0
86	6	2103	OHX	3	0
86	6	2105	OHX	1	0
86	6	2106	OHX	1	0
86	6	2108	OHX	1	0
86	6	2110	OHX	1	0
86	6	2111	OHX	1	0
86	6	2112	OHX	1	0
86	6	2114	OHX	2	0
86	6	2115	OHX	1	0
86	6	2121	OHX	1	0
86	6	2122	OHX	8	0
86	6	2123	OHX	1	0
86	6	2125	OHX	2	0
86	6	2126	OHX	1	0
86	6	2127	OHX	7	0
86	6	2128	OHX	3	0
86	6	2130	OHX	1	0
86	6	2132	OHX	2	0
86	6	2137	OHX	1	0
86	6	2138	OHX	1	0
86	6	2139	OHX	3	0
86	6	2140	OHX	1	0
86	6	2145	OHX	2	0
86	6	2146	OHX	1	0
86	6	2148	OHX	1	0
86	6	2149	OHX	7	0
86	6	2151	OHX	1	0
86	6	2152	OHX	7	0
86	6	2153	OHX	2	0
86	6	2156	OHX	2	0
86	6	2161	OHX	3	0
86	6	2162	OHX	1	0
86	6	2164	OHX	1	0
86	6	2165	OHX	1	0
86	6	2170	OHX	1	0
86	6	2173	OHX	8	0
86	6	2177	OHX	1	0
86	6	2180	OHX	1	0
86	6	2181	OHX	1	0
86	6	2184	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
86	6	2185	OHX	1	0
86	6	2186	OHX	2	0
86	6	2190	OHX	2	0
86	6	2191	OHX	3	0
86	6	2192	OHX	1	0
86	6	2194	OHX	1	0
86	6	2195	OHX	1	0
86	6	2197	OHX	1	0
86	6	2204	OHX	2	0
86	6	2206	OHX	1	0
86	7	219	OHX	6	0
86	7	220	OHX	1	0
86	7	222	OHX	1	0
86	7	227	OHX	7	0
86	8	216	OHX	1	0
86	8	217	OHX	3	0
86	8	218	OHX	6	0
86	8	219	OHX	1	0
86	8	221	OHX	1	0
86	8	222	OHX	1	0
86	8	223	OHX	1	0
86	8	225	OHX	7	0
86	8	226	OHX	6	0
86	8	227	OHX	1	0
86	C3	201	OHX	2	0
86	C5	201	OHX	6	0
86	L3	404	OHX	2	0
86	L4	402	OHX	1	0
86	M0	304	OHX	1	0
86	M5	303	OHX	1	0
86	M7	206	OHX	2	0
86	M9	203	OHX	1	0
86	N1	201	OHX	1	0
86	N9	101	OHX	1	0
86	O3	202	OHX	1	0
86	O7	104	OHX	4	0
86	O7	105	OHX	1	0
86	O9	101	OHX	1	0
86	Q2	502	OHX	6	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.