



# Full wwPDB X-ray Structure Validation Report ⓘ

Jun 1, 2020 – 02:54 pm BST

PDB ID : 5FCJ  
Title : Structure of the anisomycin-containing uL3 W255C mutant 80S yeast ribosome  
Authors : Mailliot, J.; Garreau de Loubresse, N.; Yusupova, G.; Dinman, J.D.; Yusupov, M.  
Deposited on : 2015-12-15  
Resolution : 3.10 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

<https://www.wwpdb.org/validation/2017/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	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.11
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.11

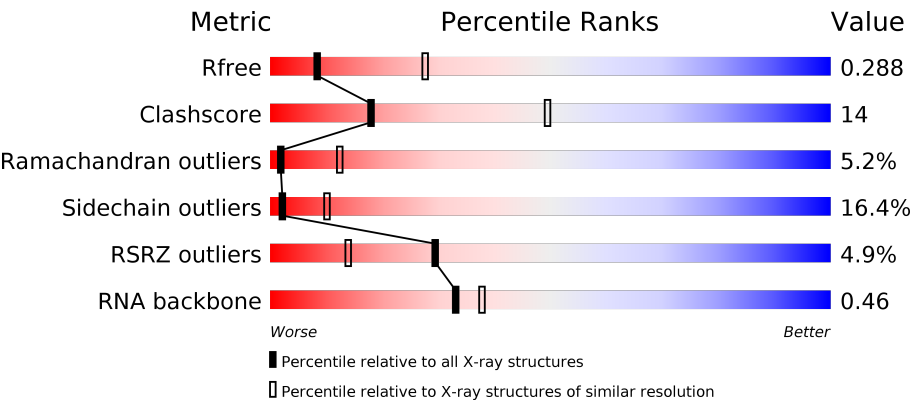
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.10 Å.

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



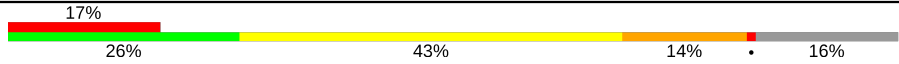

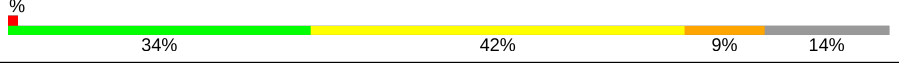

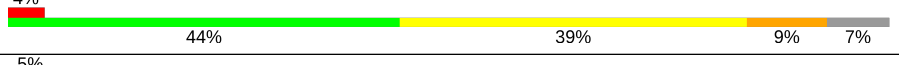
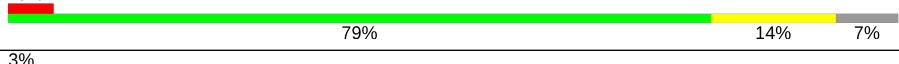
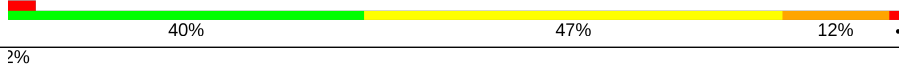

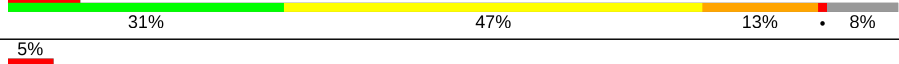


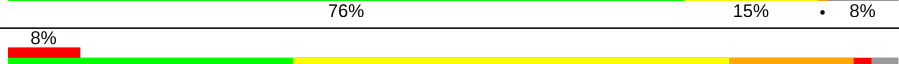

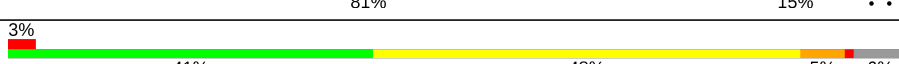

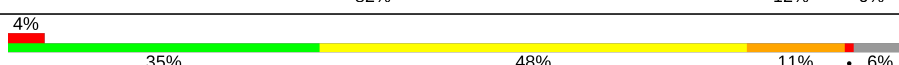
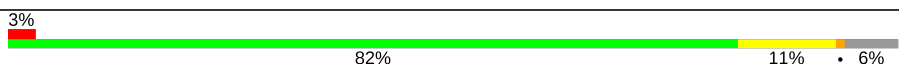
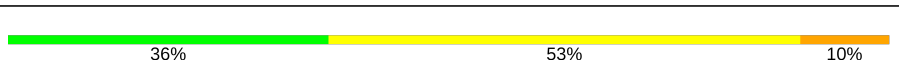
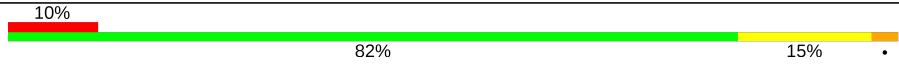


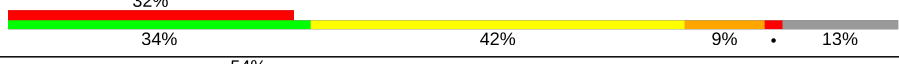
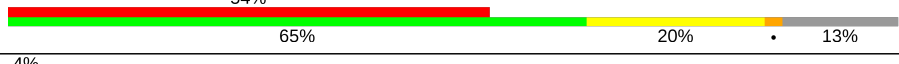
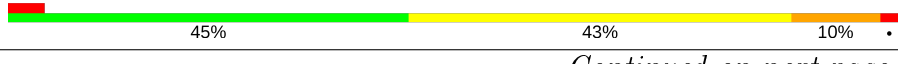

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R <sub>free</sub>	130704	1094 (3.10-3.10)
Clashscore	141614	1184 (3.10-3.10)
Ramachandran outliers	138981	1141 (3.10-3.10)
Sidechain outliers	138945	1141 (3.10-3.10)
RSRZ outliers	127900	1067 (3.10-3.10)
RNA backbone	3102	1116 (3.40-2.80)

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 respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	2	1800	<div><div>8%</div><div>39%43%16%..</div></div>
1	6	1800	<div><div>7%</div><div>43%40%15%.</div></div>
2	S0	251	<div><div>6%</div><div>27%43%12%18%</div></div>
2	s0	251	<div><div>2%</div><div>66%16%.18%</div></div>




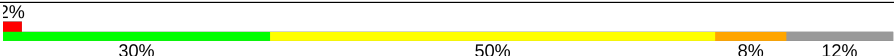
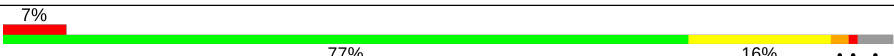
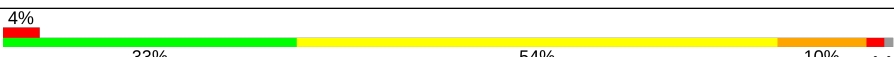
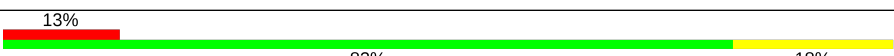
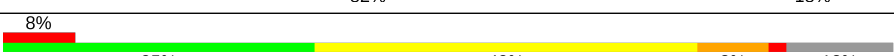
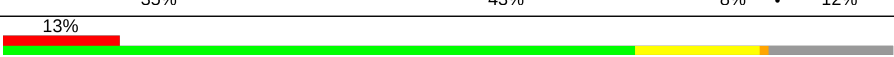
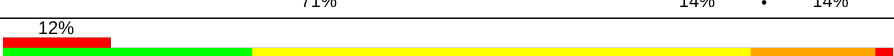
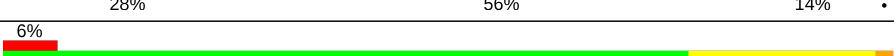
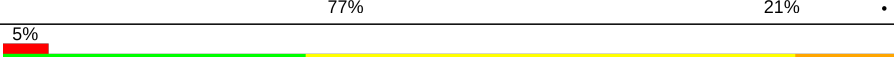

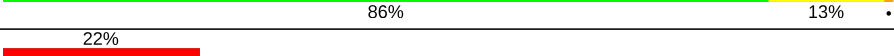
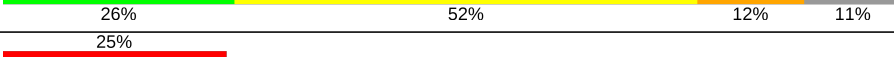

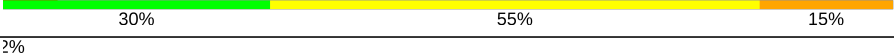


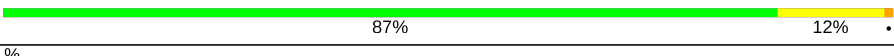
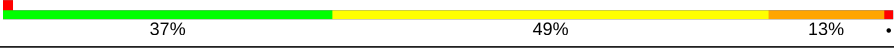
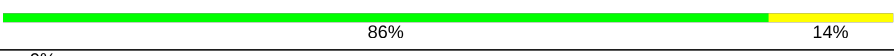



Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	S1	254	
3	s1	254	
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	96	
12	c0	96	
13	C1	155	
13	c1	155	
14	C2	142	
14	c2	142	
15	C3	150	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	c3	150	
16	C4	136	
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	




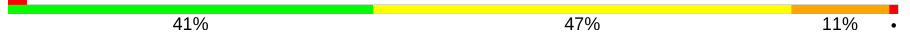



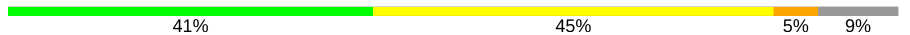

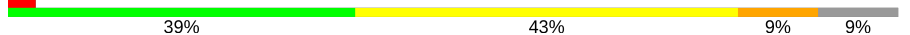

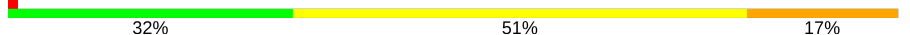













Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	D6	97	
28	d6	97	
29	D7	81	
29	d7	81	
30	D8	66	
30	d8	66	
31	D9	55	
31	d9	55	
32	E0	62	
32	e0	62	
33	E1	76	
33	e1	76	
34	SR	318	
34	sR	318	
35	SM	182	
35	sM	182	
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	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
40	l3	386	
41	L4	361	
41	l4	361	
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	



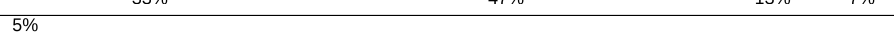

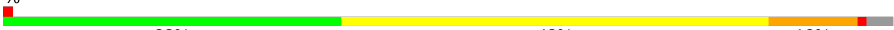
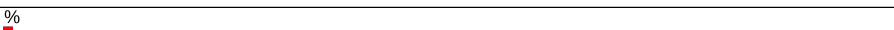
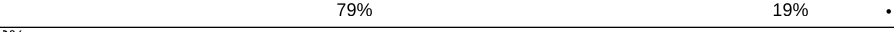
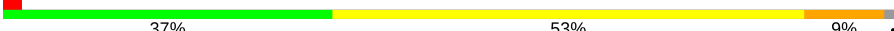

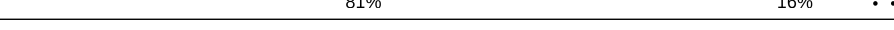











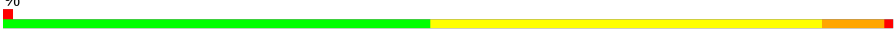



Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	M7	183	
53	m7	183	
54	M8	185	
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	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
65	n9	58	
66	O0	104	
66	o0	104	
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	

Continued on next page...



*Continued from previous page...*

Mol	Chain	Length	Quality of chain
78	Q2	105	
78	q2	105	
79	Q3	91	
79	q3	91	
80	m2	150	
81	p0	311	
82	p1	47	
83	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
84	MG	1	3414	-	-	-	X
84	MG	1	3435	-	-	-	X
84	MG	1	3487	-	-	-	X
84	MG	1	3496	-	-	-	X
84	MG	1	3568	-	-	-	X
84	MG	1	3570	-	-	-	X
84	MG	1	3599	-	-	-	X
84	MG	1	3630	-	-	-	X
84	MG	1	3639	-	-	-	X
84	MG	1	3667	-	-	-	X
84	MG	1	3673	-	-	-	X
84	MG	1	3694	-	-	-	X
84	MG	1	3709	-	-	-	X
84	MG	1	3715	-	-	-	X
84	MG	1	4043	-	-	-	X
84	MG	2	1904	-	-	-	X
84	MG	2	1909	-	-	-	X
84	MG	2	1911	-	-	-	X
84	MG	2	1912	-	-	-	X
84	MG	2	1915	-	-	-	X
84	MG	2	1923	-	-	-	X
84	MG	2	1941	-	-	-	X
84	MG	2	1946	-	-	-	X

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
84	MG	2	1956	-	-	-	X
84	MG	2	1962	-	-	-	X
84	MG	2	1969	-	-	-	X
84	MG	2	1970	-	-	-	X
84	MG	2	1972	-	-	-	X
84	MG	2	1978	-	-	-	X
84	MG	4	202	-	-	-	X
84	MG	5	3457	-	-	-	X
84	MG	5	3476	-	-	-	X
84	MG	5	3542	-	-	-	X
84	MG	5	3617	-	-	-	X
84	MG	5	3632	-	-	-	X
84	MG	5	3636	-	-	-	X
84	MG	5	3641	-	-	-	X
84	MG	5	3643	-	-	-	X
84	MG	5	3655	-	-	-	X
84	MG	5	3709	-	-	-	X
84	MG	5	3731	-	-	-	X
84	MG	6	1917	-	-	-	X
84	MG	6	1930	-	-	-	X
84	MG	6	1938	-	-	-	X
84	MG	6	1961	-	-	-	X
84	MG	6	1965	-	-	-	X
84	MG	6	1969	-	-	-	X
84	MG	6	1971	-	-	-	X
84	MG	6	1984	-	-	-	X
84	MG	6	2001	-	-	-	X
84	MG	6	2002	-	-	-	X
84	MG	6	2008	-	-	-	X
84	MG	8	207	-	-	-	X
84	MG	O7	103	-	-	-	X
84	MG	SM	201	-	-	-	X
84	MG	l6	201	-	-	-	X
85	OHX	1	3818	-	-	X	-
85	OHX	1	3832	-	-	X	-
85	OHX	1	3836	-	-	X	-
85	OHX	1	3880	-	-	X	-
85	OHX	1	3904	-	-	X	-
85	OHX	1	3912	-	-	X	-
85	OHX	1	3916	-	-	X	-
85	OHX	1	3927	-	-	X	-
85	OHX	1	3940	-	-	X	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
85	OHX	1	3944	-	-	X	-
85	OHX	1	3975	-	-	X	-
85	OHX	1	4004	-	-	X	-
85	OHX	1	4008	-	-	X	-
85	OHX	1	4009	-	-	X	-
85	OHX	1	4017	-	-	X	-
85	OHX	2	2048	-	-	X	-
85	OHX	2	2054	-	-	X	-
85	OHX	2	2068	-	-	X	-
85	OHX	2	2079	-	-	X	-
85	OHX	5	3806	-	-	X	-
85	OHX	5	3822	-	-	X	-
85	OHX	5	3844	-	-	X	-
85	OHX	5	3846	-	-	X	-
85	OHX	5	3854	-	-	X	-
85	OHX	5	3877	-	-	X	-
85	OHX	5	3898	-	-	X	-
85	OHX	5	3923	-	-	X	-
85	OHX	5	3934	-	-	X	-
85	OHX	5	4007	-	-	X	-
85	OHX	5	4025	-	-	X	-
85	OHX	5	4027	-	-	X	-
85	OHX	5	4035	-	-	X	-
85	OHX	5	4036	-	-	X	-
85	OHX	5	4037	-	-	X	-
85	OHX	5	4038	-	-	X	-
85	OHX	5	4049	-	-	X	-
85	OHX	5	4054	-	-	X	-
85	OHX	6	2023	-	-	X	-
85	OHX	6	2109	-	-	X	-
85	OHX	6	2116	-	-	X	-
85	OHX	6	2121	-	-	X	-
85	OHX	6	2152	-	-	X	-
85	OHX	7	219	-	-	X	-
85	OHX	L4	401	-	-	X	-
87	ANM	1	3401	X	-	X	X

## 2 Entry composition [i](#)

There are 87 unique types of molecules in this entry. The entry contains 410912 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	1781	Total	C	N	O	P	0	1	0
			37970	16975	6720	12493	1782			
1	6	1795	Total	C	N	O	P	0	1	0
			38260	17105	6763	12596	1796			

- 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
			1612	1034	285	291	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
			1492	957	267	268			

- 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,40S ribosomal protein S10-A,40S ribosomal protein S10-A,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			

- Molecule 13 is a protein called 40S ribosomal protein S11-A,40S ribosomal protein S11-A,40S ribosomal protein S11-A,40S ribosomal protein S11-A,40S ribosomal protein S11-A (uS17).

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
			1169	748	221	197	3			

- 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
			890	560	156	172	2			
14	c2	124	Total	C	N	O	S	0	0	0
			890	560	156	172	2			

- 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			

*Continued on next page...*

*Continued from previous page...*

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	C7	120	Total	C	N	O	S	0	0	0
			926	577	177	170	2			
19	c7	117	Total	C	N	O	S	0	0	0
			944	591	179	172	2			

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	d9	53	Total	C	N	O	S	0	0	0
			443	275	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			
32	e0	62	Total	C	N	O	S	0	0	0
			491	309	101	80	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
			2437	1541	418	470	8			
34	sR	318	Total	C	N	O	S	0	0	0
			2445	1546	419	472	8			

- Molecule 35 is a protein called Suppressor protein STM1,Suppressor protein STM1,Suppressor protein STM1,Suppressor protein STM1,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			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	5	3150	Total	C	N	O	P	0	0	0
			67377	30095	12145	21987	3150			

- 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	l2	252	Total	C	N	O	S	0	0	0
			1918	1193	389	335	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
			3067	1942	583	533	9			
40	l3	386	Total	C	N	O	S	0	0	0
			3073	1948	583	533	9			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
L3	255	CYS	TRP	engineered mutation	UNP P14126
l3	255	CYS	TRP	engineered mutation	UNP P14126

- 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	14	361	Total	C	N	O	S	0	0	0
			2749	1730	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	15	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	16	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	17	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			
45	18	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			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	19	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
			1733	1101	327	299	6			

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

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	S	0	0	0
			1053	675	199	177	2			
50	m4	137	Total	C	N	O	S	0	0	0
			1059	678	200	179	2			

- 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	S	0	0	0
			796	516	131	149				
58	n2	98	Total	C	N	O	S	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
			1089	682	219	187	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			
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	S	0	0	0
			993	625	192	176				

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
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
			890	565	168	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
			881	546	179	152	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	O5	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			
71	o5	119	Total	C	N	O	S	0	0	0
			969	615	186	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
			771	481	156	132	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	S	0	0	0
			612	391	115	106				
74	o8	77	Total	C	N	O	S	0	0	0
			612	391	115	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			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
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 60S ribosomal protein L12-A (uL11).

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

- Molecule 81 is a protein called 60S acidic ribosomal protein P0.

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

- Molecule 82 is a protein called 60S ribosomal protein P1 alpha.

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

- Molecule 83 is a protein called 60S ribosomal protein P2 beta.

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

- Molecule 84 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
84	L7	1	Total	Mg	0	0
			1	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
84	l6	1	Total 1	Mg 1	0	0
84	o1	1	Total 1	Mg 1	0	0
84	6	110	Total 110	Mg 110	0	0
84	sM	2	Total 2	Mg 2	0	0
84	O4	2	Total 2	Mg 2	0	0
84	m5	3	Total 3	Mg 3	0	0
84	l3	5	Total 5	Mg 5	0	0
84	d6	1	Total 1	Mg 1	0	0
84	2	82	Total 82	Mg 82	0	0
84	n0	2	Total 2	Mg 2	0	0
84	m6	1	Total 1	Mg 1	0	0
84	l7	1	Total 1	Mg 1	0	0
84	M5	1	Total 1	Mg 1	0	0
84	O3	1	Total 1	Mg 1	0	0
84	q0	1	Total 1	Mg 1	0	0
84	SM	1	Total 1	Mg 1	0	0
84	o4	1	Total 1	Mg 1	0	0
84	M0	1	Total 1	Mg 1	0	0
84	c1	1	Total 1	Mg 1	0	0
84	5	349	Total 349	Mg 349	0	0
84	O7	2	Total 2	Mg 2	0	0

*Continued on next page...*

*Continued from previous page...*

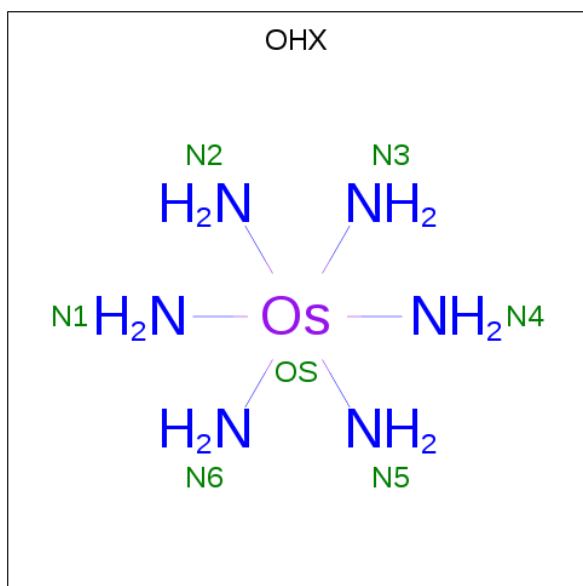
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
84	n9	1	Total 1	Mg 1	0	0
84	1	330	Total 330	Mg 330	0	0
84	l8	1	Total 1	Mg 1	0	0
84	Q2	1	Total 1	Mg 1	0	0
84	m1	1	Total 1	Mg 1	0	0
84	O2	1	Total 1	Mg 1	0	0
84	D9	1	Total 1	Mg 1	0	0
84	o3	1	Total 1	Mg 1	0	0
84	M3	1	Total 1	Mg 1	0	0
84	N3	1	Total 1	Mg 1	0	0
84	N8	2	Total 2	Mg 2	0	0
84	4	14	Total 14	Mg 14	0	0
84	S4	1	Total 1	Mg 1	0	0
84	L2	2	Total 2	Mg 2	0	0
84	n6	2	Total 2	Mg 2	0	0
84	M7	4	Total 4	Mg 4	0	0
84	L6	1	Total 1	Mg 1	0	0
84	l9	1	Total 1	Mg 1	0	0
84	s8	1	Total 1	Mg 1	0	0
84	m7	3	Total 3	Mg 3	0	0
84	n8	2	Total 2	Mg 2	0	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
84	7	10	Total 10	Mg 10	0	0
84	n3	1	Total 1	Mg 1	0	0
84	q1	1	Total 1	Mg 1	0	0
84	L3	1	Total 1	Mg 1	0	0
84	l2	3	Total 3	Mg 3	0	0
84	8	10	Total 10	Mg 10	0	0
84	M6	1	Total 1	Mg 1	0	0
84	3	10	Total 10	Mg 10	0	0

- Molecule 85 is osmium (III) hexammine (three-letter code: OHX) (formula:  $\text{H}_{12}\text{N}_6\text{Os}$ ).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	2	1	Total 7	N 6	Os 1	0	0
85	2	1	Total 7	N 6	Os 1	0	0
85	2	1	Total 7	N 6	Os 1	0	0

Continued on next page...

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	2	1	Total	N	Os	0	0
			7	6	1		
85	S6	1	Total	N	Os	0	0
			7	6	1		
85	S8	1	Total	N	Os	0	0
			7	6	1		
85	C3	1	Total	N	Os	0	0
			7	6	1		
85	C5	1	Total	N	Os	0	0
			7	6	1		
85	C8	1	Total	N	Os	0	0
			7	6	1		
85	D9	1	Total	N	Os	0	0
			7	6	1		
85	SR	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	1	1	Total	N	Os	0	0
			7	6	1		
85	3	1	Total	N	Os	0	0
			7	6	1		
85	3	1	Total	N	Os	0	0
			7	6	1		
85	3	1	Total	N	Os	0	0
			7	6	1		
85	3	1	Total	N	Os	0	0
			7	6	1		
85	3	1	Total	N	Os	0	0
			7	6	1		
85	3	1	Total	N	Os	0	0
			7	6	1		
85	3	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	3	1	Total	N	Os	0	0
			7	6	1		
85	3	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	4	1	Total	N	Os	0	0
			7	6	1		
85	L3	1	Total	N	Os	0	0
			7	6	1		
85	L3	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	L4	1	Total 7	N 6	Os 1	0	0
85	M0	1	Total 7	N 6	Os 1	0	0
85	M5	1	Total 7	N 6	Os 1	0	0
85	M6	1	Total 7	N 6	Os 1	0	0
85	M7	1	Total 7	N 6	Os 1	0	0
85	M9	1	Total 7	N 6	Os 1	0	0
85	N1	1	Total 7	N 6	Os 1	0	0
85	N8	1	Total 7	N 6	Os 1	0	0
85	N9	1	Total 7	N 6	Os 1	0	0
85	O3	1	Total 7	N 6	Os 1	0	0
85	O7	1	Total 7	N 6	Os 1	0	0
85	O7	1	Total 7	N 6	Os 1	0	0
85	O9	1	Total 7	N 6	Os 1	0	0
85	Q2	1	Total 7	N 6	Os 1	0	0
85	6	1	Total 7	N 6	Os 1	0	0
85	6	1	Total 7	N 6	Os 1	0	0
85	6	1	Total 7	N 6	Os 1	0	0
85	6	1	Total 7	N 6	Os 1	0	0
85	6	1	Total 7	N 6	Os 1	0	0
85	6	1	Total 7	N 6	Os 1	0	0
85	6	1	Total 7	N 6	Os 1	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	6	1	Total	N	Os	0	0
			7	6	1		
85	s4	1	Total	N	Os	0	0
			7	6	1		
85	s8	1	Total	N	Os	0	0
			7	6	1		
85	s9	1	Total	N	Os	0	0
			7	6	1		
85	c3	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	c5	1	Total	N	Os	0	0
			7	6	1		
85	c8	1	Total	N	Os	0	0
			7	6	1		
85	d4	1	Total	N	Os	0	0
			7	6	1		
85	sR	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	5	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	7	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		
85	7	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		
85	8	1	Total	N	Os	0	0
			7	6	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	8	1	Total 7	N 6	Os 1	0	0
85	8	1	Total 7	N 6	Os 1	0	0
85	l3	1	Total 7	N 6	Os 1	0	0
85	l3	1	Total 7	N 6	Os 1	0	0
85	l3	1	Total 7	N 6	Os 1	0	0
85	l4	1	Total 7	N 6	Os 1	0	0
85	l4	1	Total 7	N 6	Os 1	0	0
85	l5	1	Total 7	N 6	Os 1	0	0
85	l5	1	Total 7	N 6	Os 1	0	0
85	l9	1	Total 7	N 6	Os 1	0	0
85	m0	1	Total 7	N 6	Os 1	0	0
85	m0	1	Total 7	N 6	Os 1	0	0
85	m1	1	Total 7	N 6	Os 1	0	0
85	m5	1	Total 7	N 6	Os 1	0	0
85	m5	1	Total 7	N 6	Os 1	0	0
85	m7	1	Total 7	N 6	Os 1	0	0
85	n3	1	Total 7	N 6	Os 1	0	0
85	n3	1	Total 7	N 6	Os 1	0	0
85	n9	1	Total 7	N 6	Os 1	0	0
85	o3	1	Total 7	N 6	Os 1	0	0
85	o7	1	Total 7	N 6	Os 1	0	0

*Continued on next page...*

*Continued from previous page...*

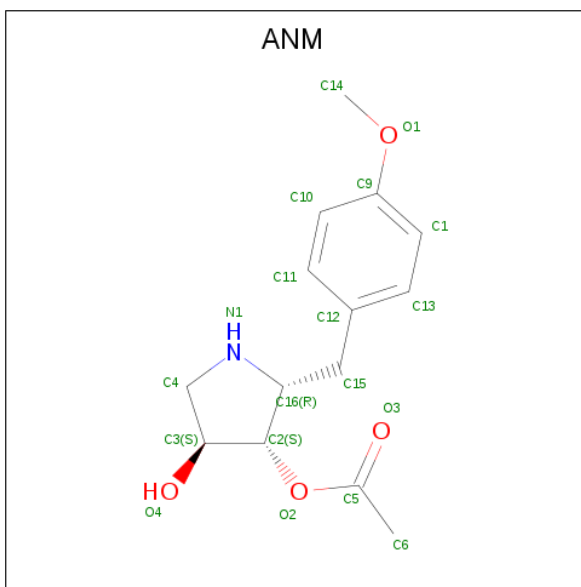
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
85	o9	1	Total	N	Os	0	0
			7	6	1		
85	q2	1	Total	N	Os	0	0
			7	6	1		

- Molecule 86 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	q0	1	Total	Zn	0	0
			1	1		
86	D6	1	Total	Zn	0	0
			1	1		
86	Q2	1	Total	Zn	0	0
			1	1		
86	e1	1	Total	Zn	0	0
			1	1		
86	Q3	1	Total	Zn	0	0
			1	1		
86	D9	1	Total	Zn	0	0
			1	1		
86	E1	1	Total	Zn	0	0
			1	1		
86	Q0	1	Total	Zn	0	0
			1	1		
86	d7	1	Total	Zn	0	0
			1	1		
86	q3	1	Total	Zn	0	0
			1	1		
86	d9	1	Total	Zn	0	0
			1	1		
86	D7	1	Total	Zn	0	0
			1	1		
86	d6	1	Total	Zn	0	0
			1	1		
86	o7	1	Total	Zn	0	0
			1	1		
86	O7	1	Total	Zn	0	0
			1	1		
86	q2	1	Total	Zn	0	0
			1	1		

- Molecule 87 is ANISOMYCIN (three-letter code: ANM) (formula: C<sub>14</sub>H<sub>19</sub>NO<sub>4</sub>).



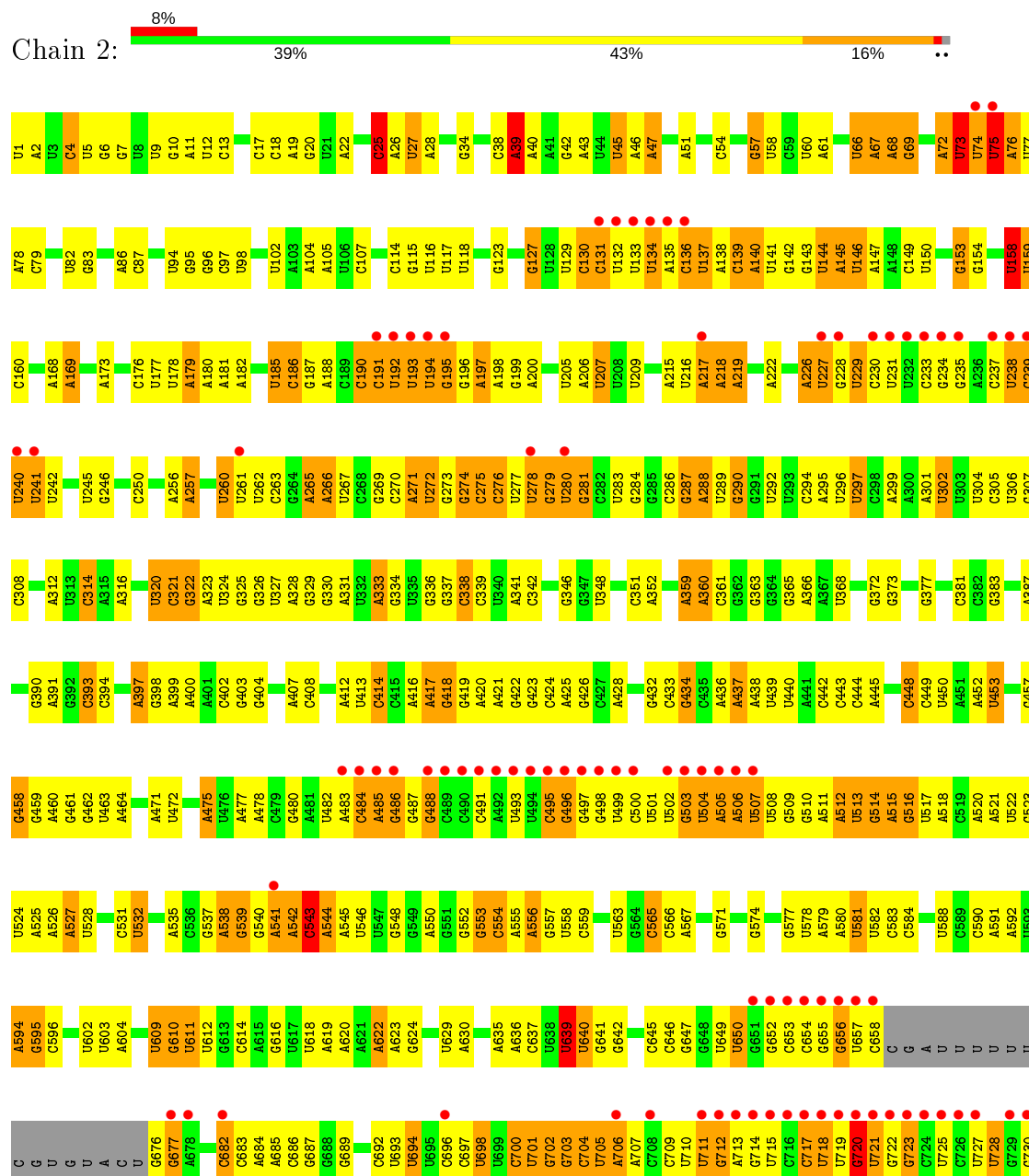


Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
87	1	1	Total	C	N	O	0	0
			19	14	1	4		

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

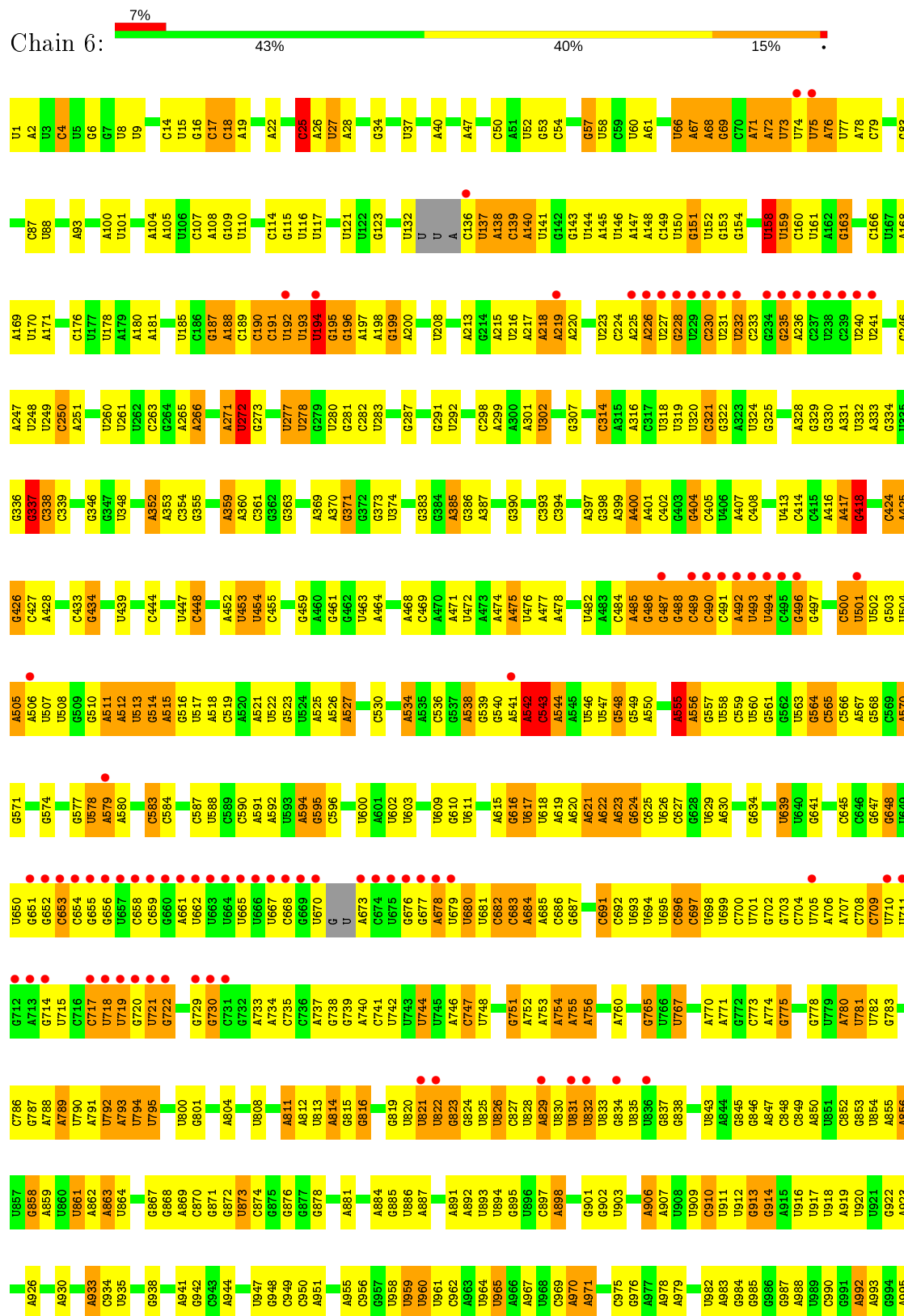
- Molecule 1: 18S ribosomal RNA

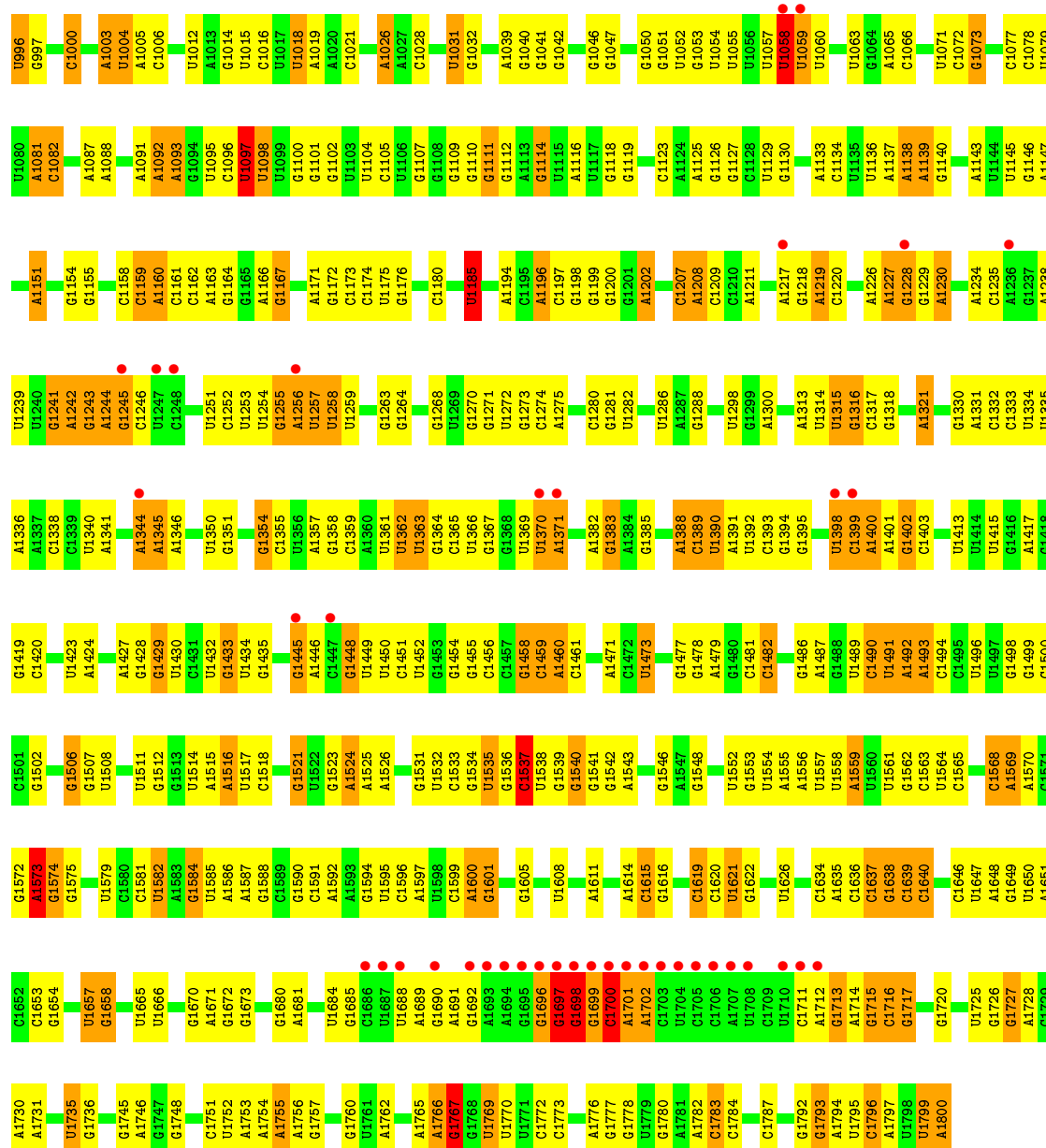




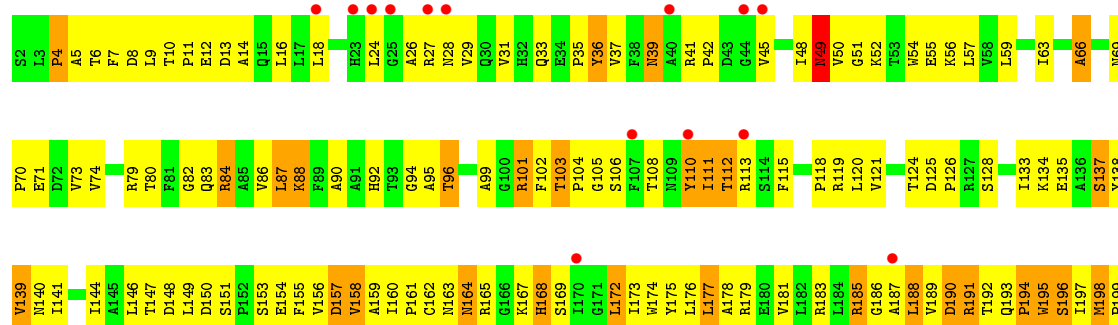
• Molecule 1: 18S ribosomal RNA

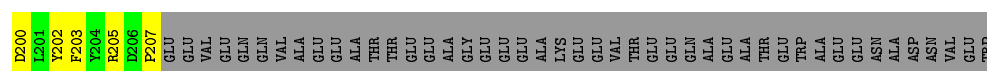
Chain 6:



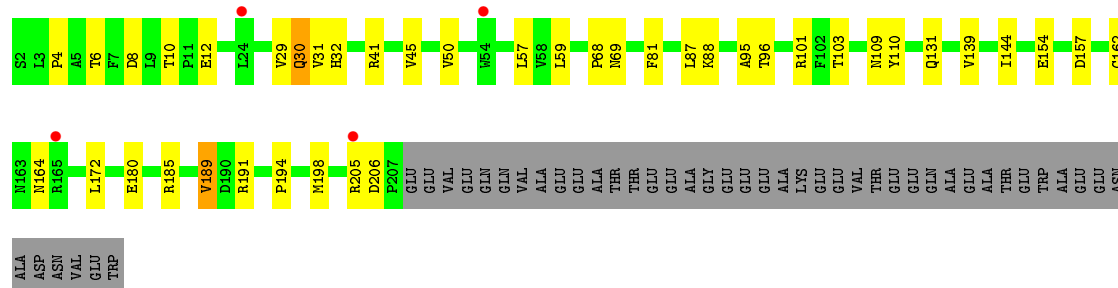


• Molecule 2: 40S ribosomal protein S0-A

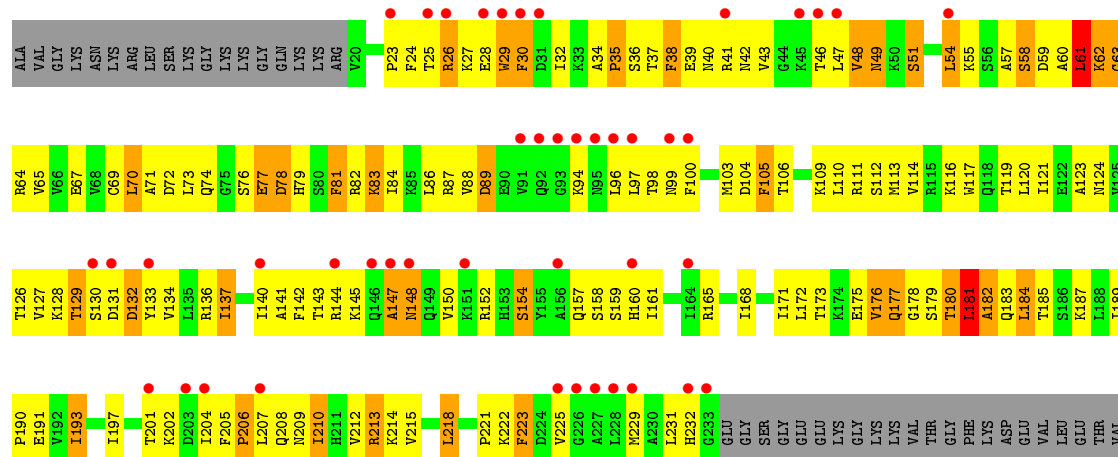




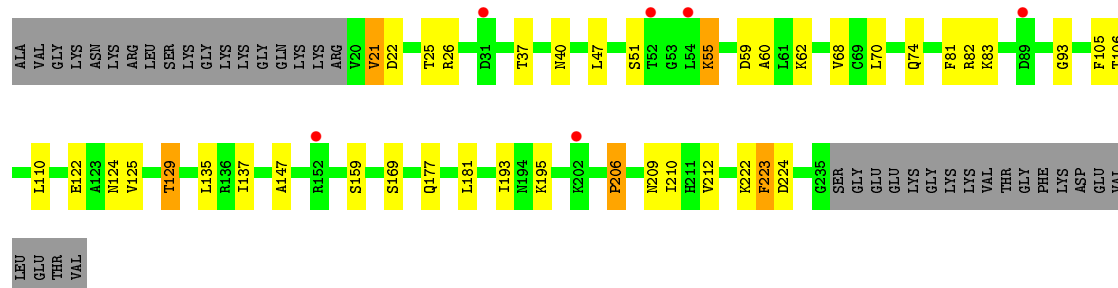
• Molecule 2: 40S ribosomal protein S0-A



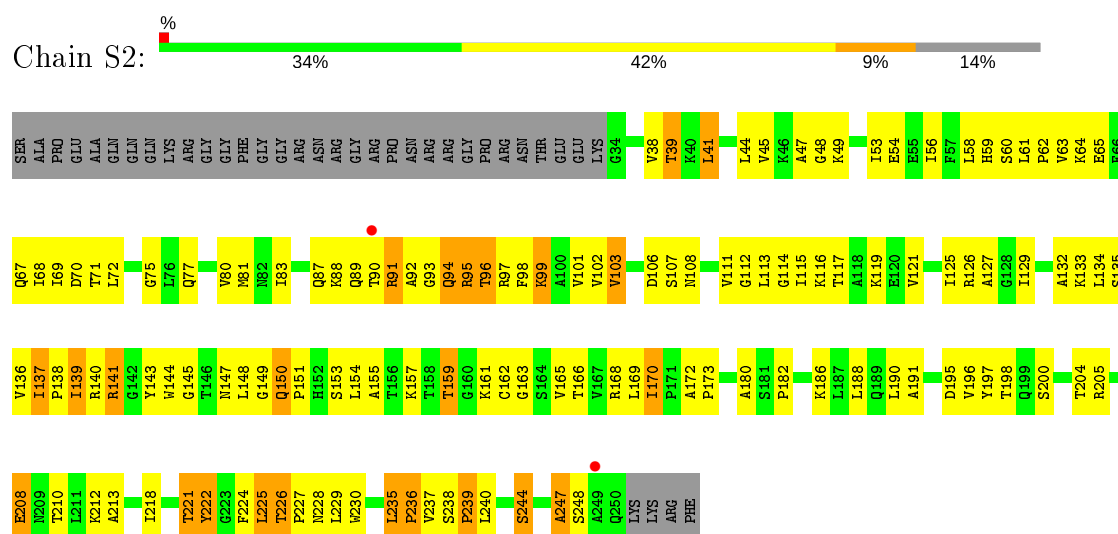
• Molecule 3: 40S ribosomal protein S1-A



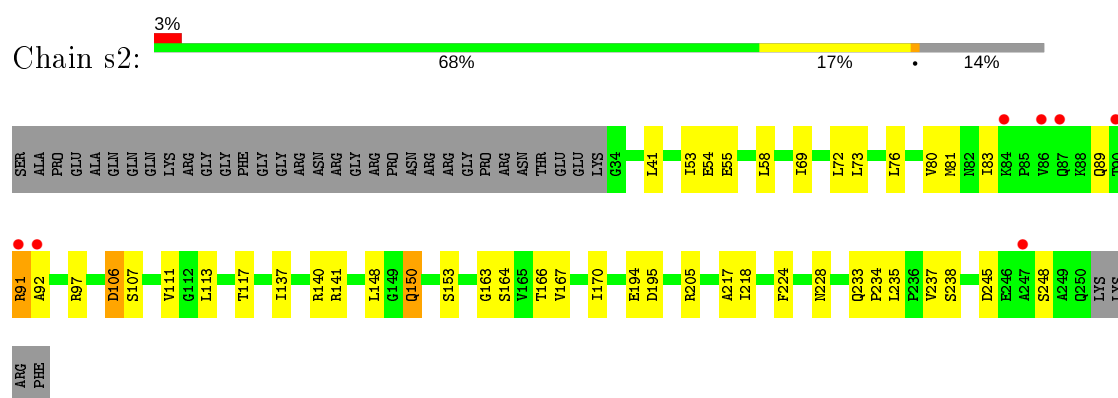
• Molecule 3: 40S ribosomal protein S1-A



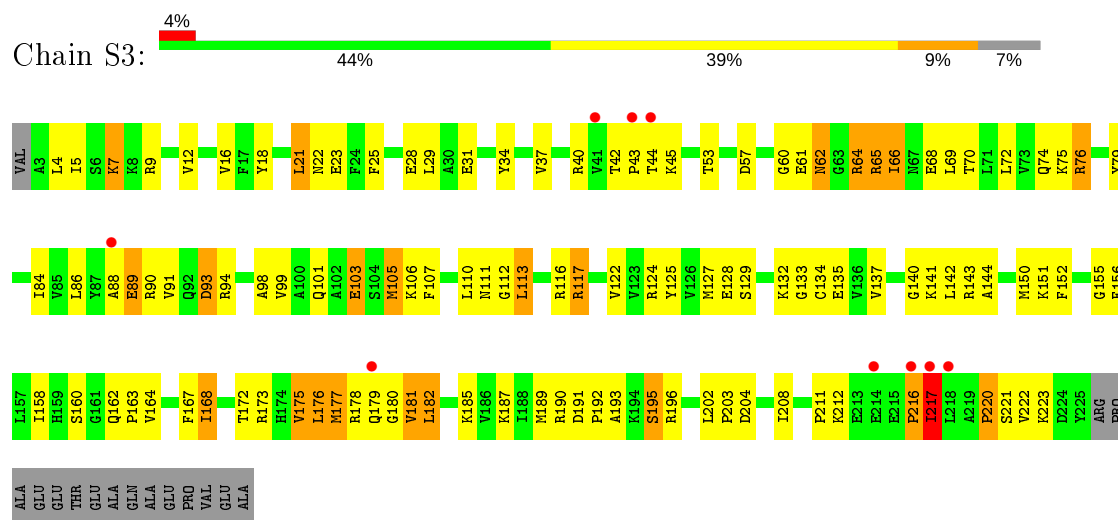
• Molecule 4: 40S ribosomal protein S2



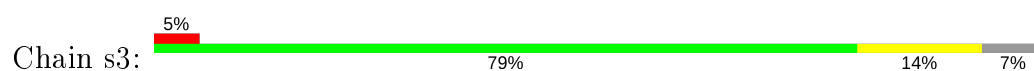
- Molecule 4: 40S ribosomal protein S2

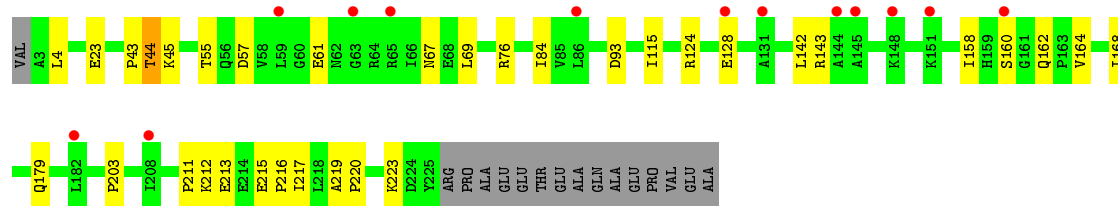


- Molecule 5: 40S ribosomal protein S3

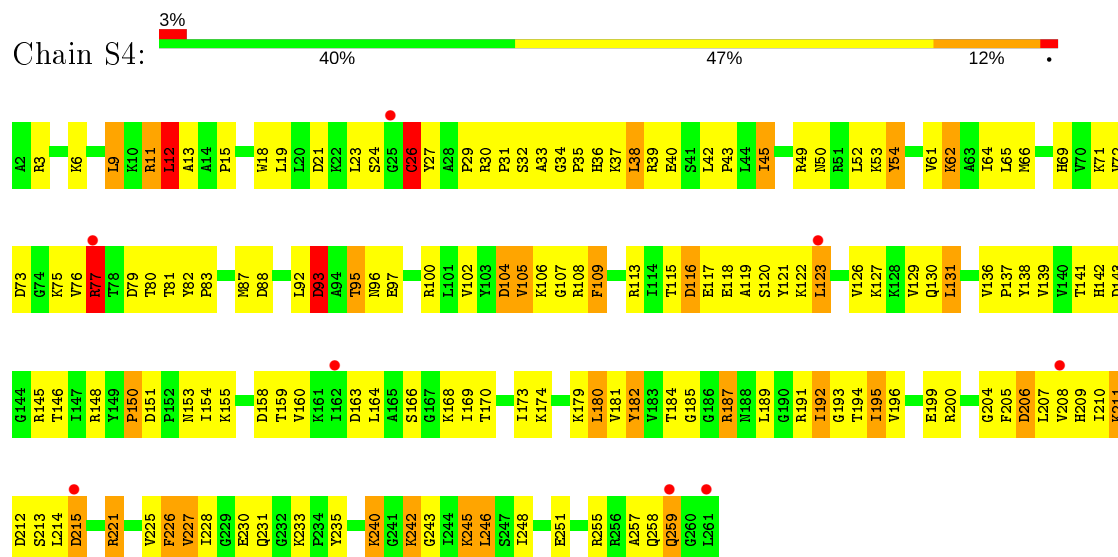


- Molecule 5: 40S ribosomal protein S3

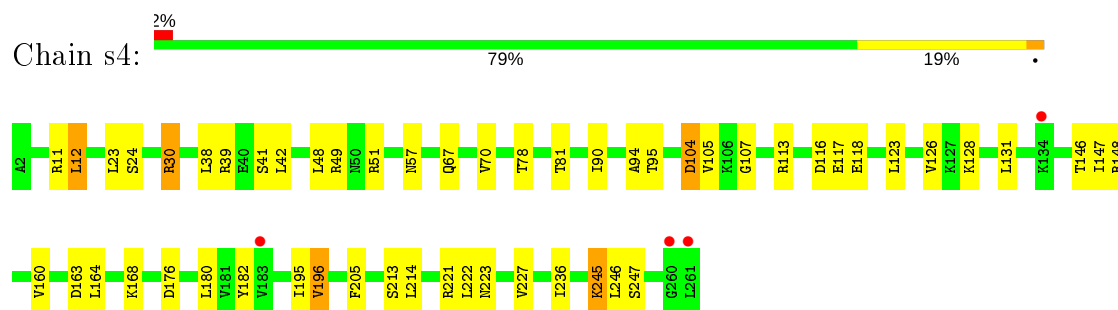




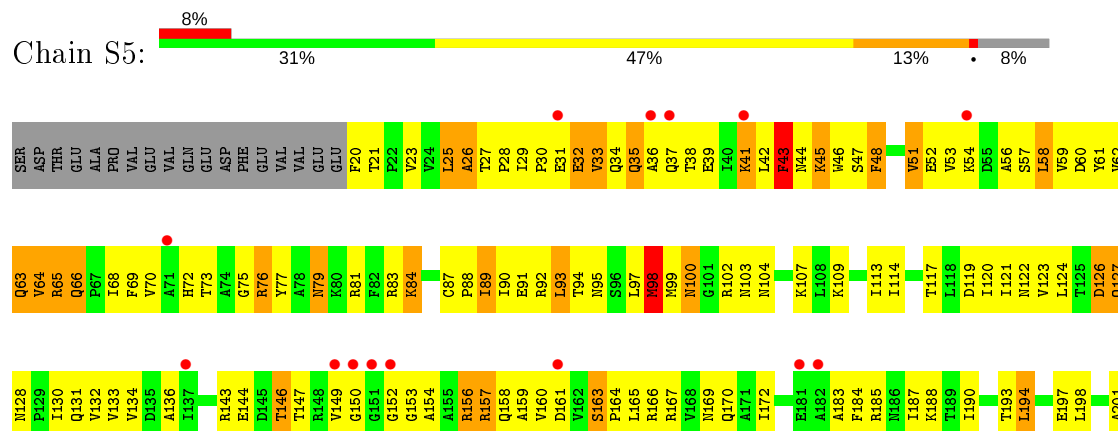
• Molecule 6: 40S ribosomal protein S4-A



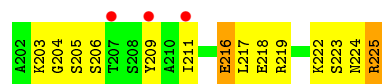
• Molecule 6: 40S ribosomal protein S4-A



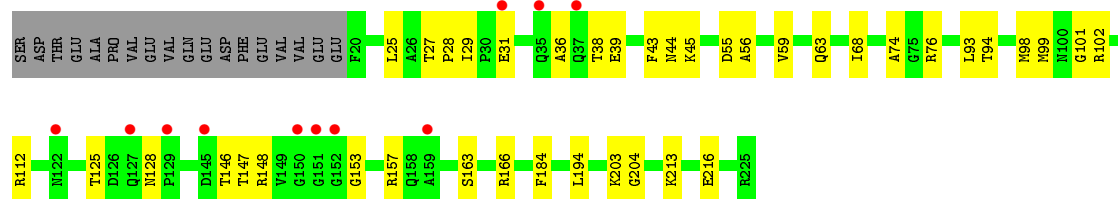
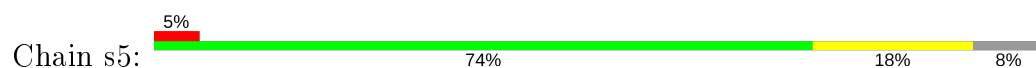
• Molecule 7: 40S ribosomal protein S5



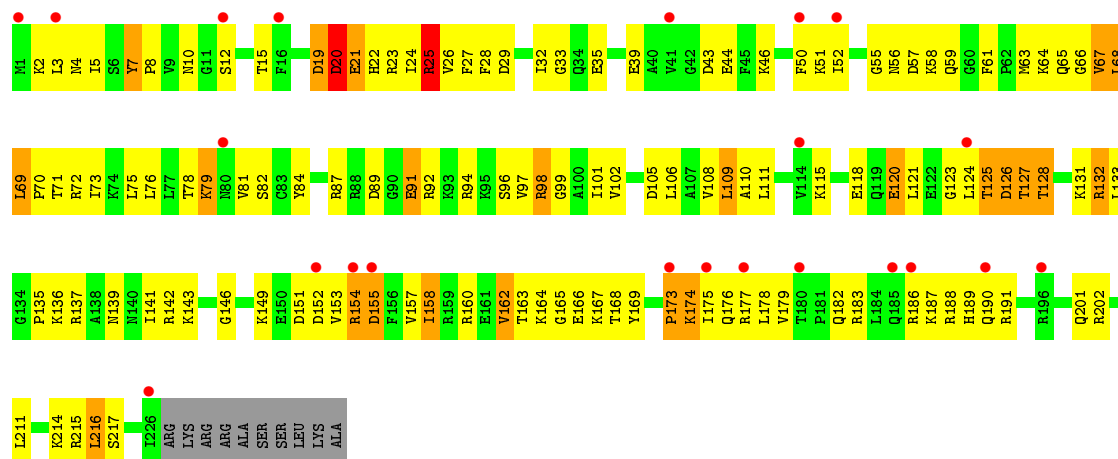




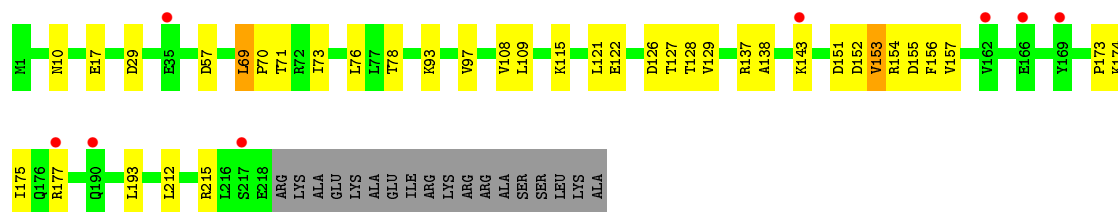
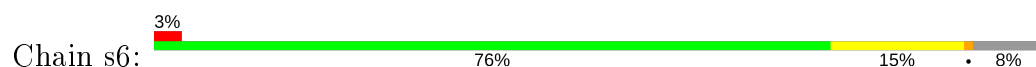
• Molecule 7: 40S ribosomal protein S5



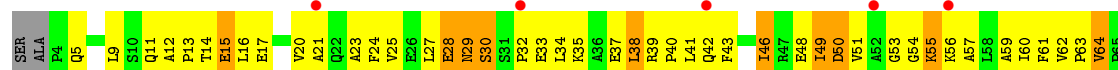
• Molecule 8: 40S ribosomal protein S6-A

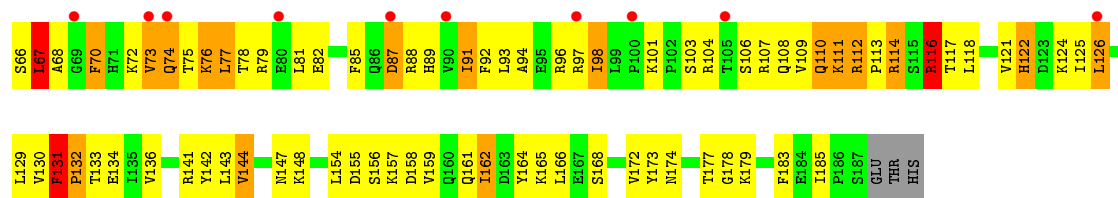


• Molecule 8: 40S ribosomal protein S6-A

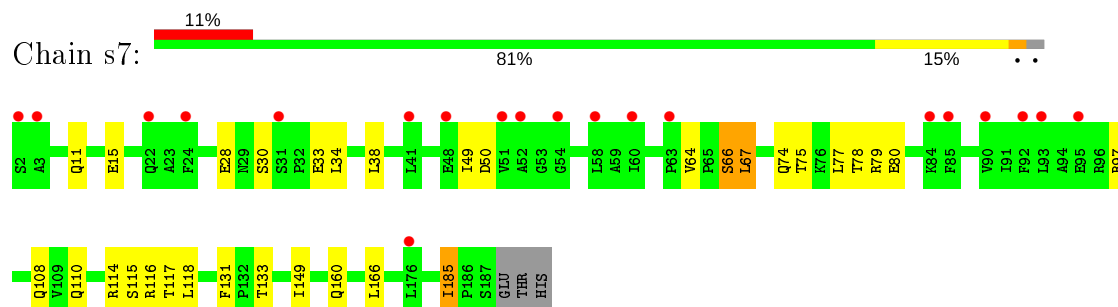


• Molecule 9: 40S ribosomal protein S7-A

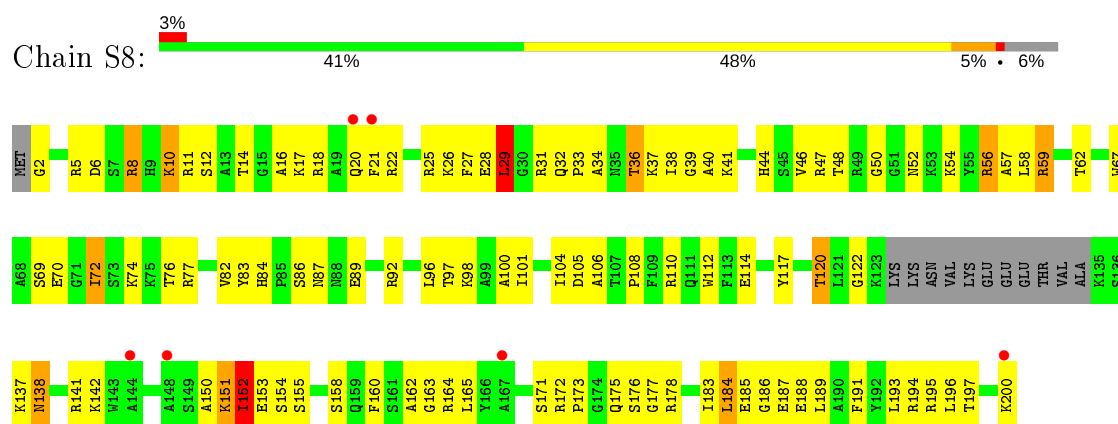




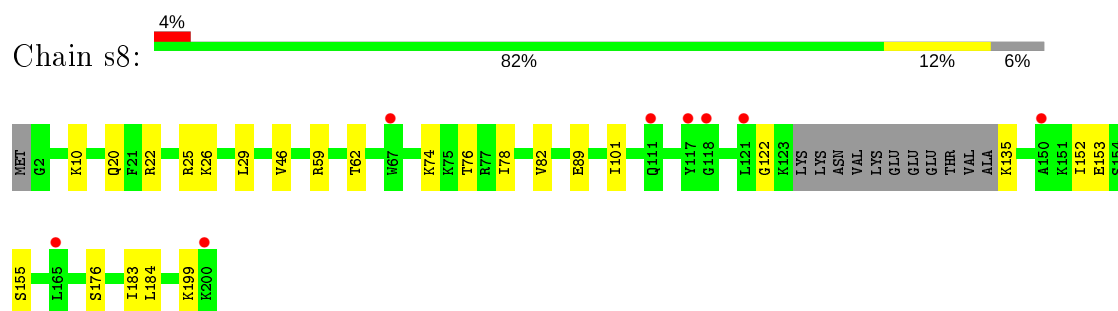
• Molecule 9: 40S ribosomal protein S7-A



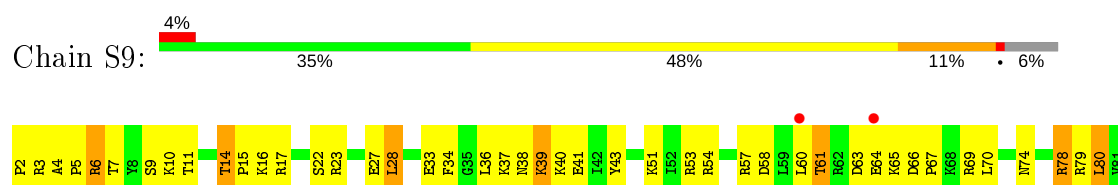
• Molecule 10: 40S ribosomal protein S8-A



• Molecule 10: 40S ribosomal protein S8-A

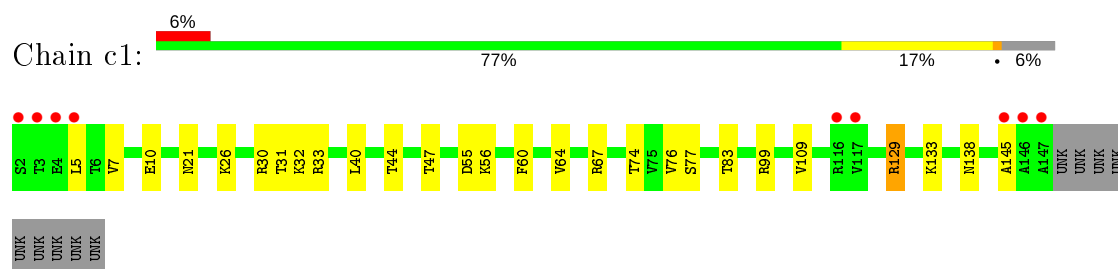


• Molecule 11: 40S ribosomal protein S9-A

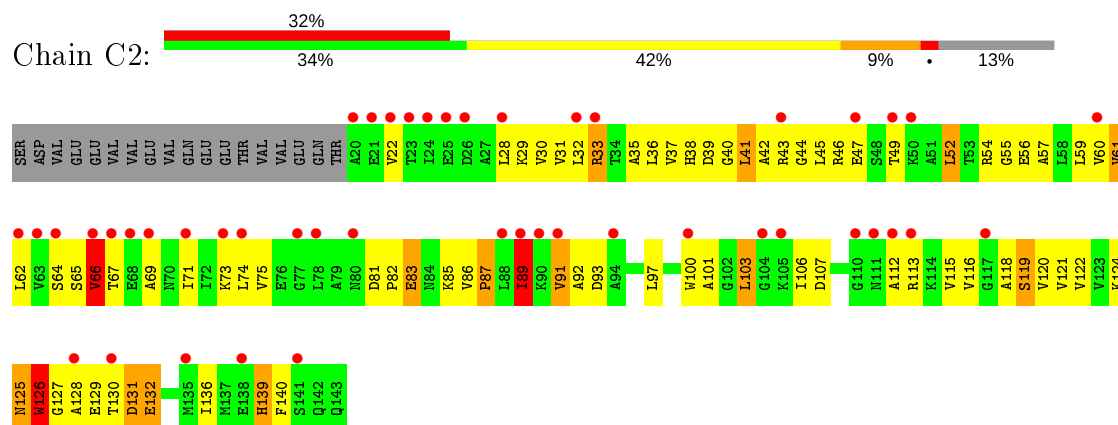




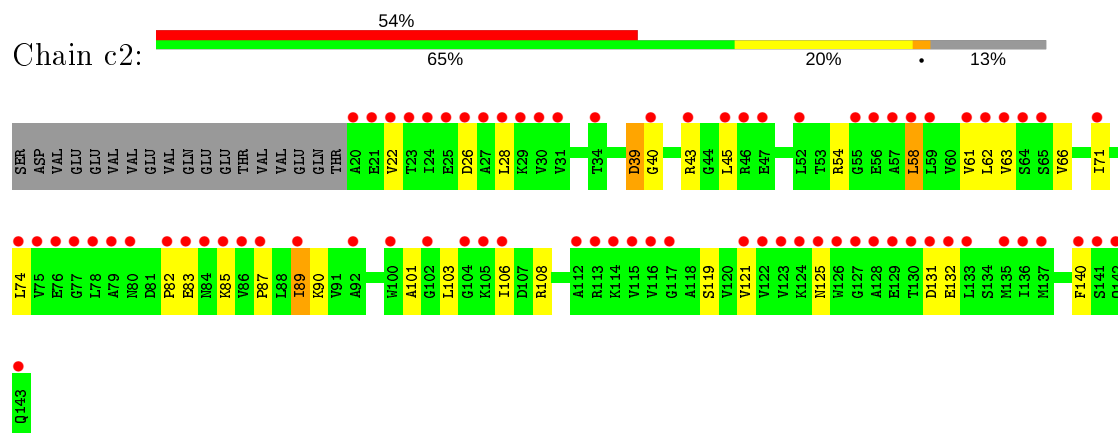
- Molecule 13: 40S ribosomal protein S11-A,40S ribosomal protein S11-A,40S ribosomal protein S11-A,40S ribosomal protein S11-A,40S ribosomal protein S11-A (uS17)



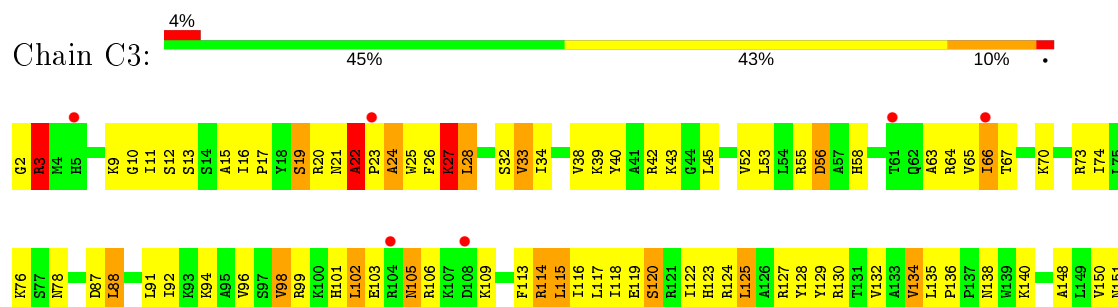
- Molecule 14: 40S ribosomal protein S12




- Molecule 14: 40S ribosomal protein S12



- Molecule 15: 40S ribosomal protein S13



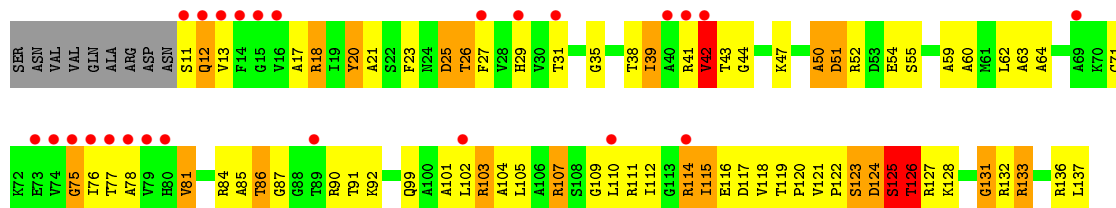
- Molecule 15: 40S ribosomal protein S13

Chain c3: 




- Molecule 16: 40S ribosomal protein S14-A

Chain C4: 



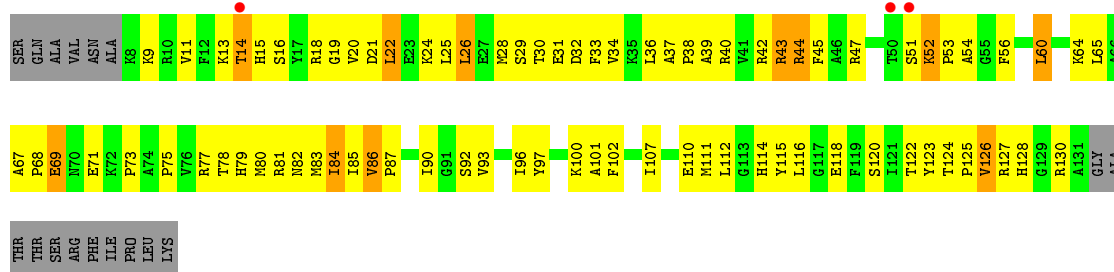
- Molecule 16: 40S ribosomal protein S14-A

Chain c4: 




- Molecule 17: 40S ribosomal protein S15

Chain C5: 



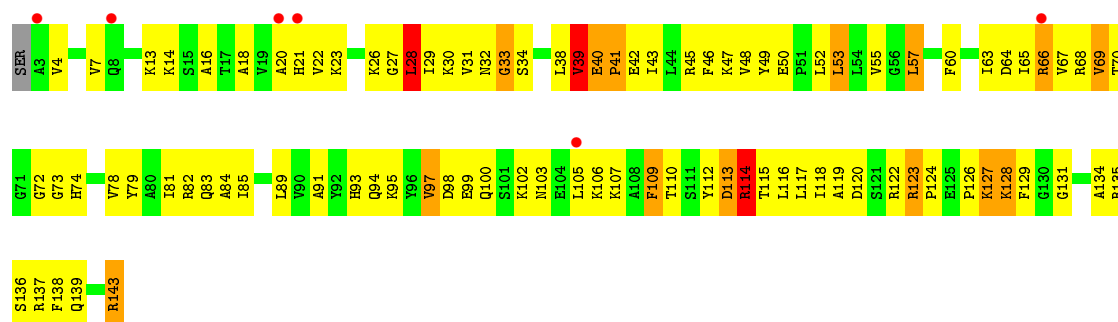
- Molecule 17: 40S ribosomal protein S15

Chain c5: 

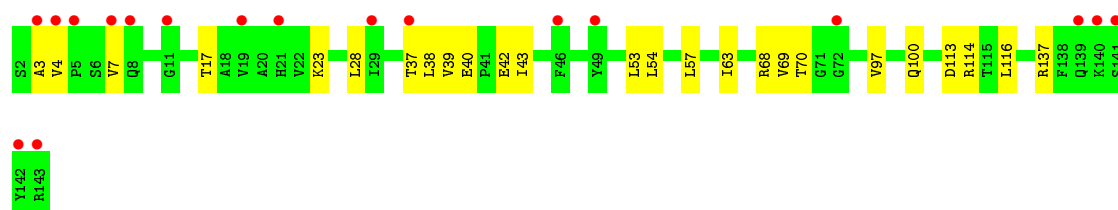
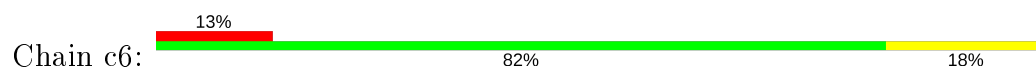


- Molecule 18: 40S ribosomal protein S16-A

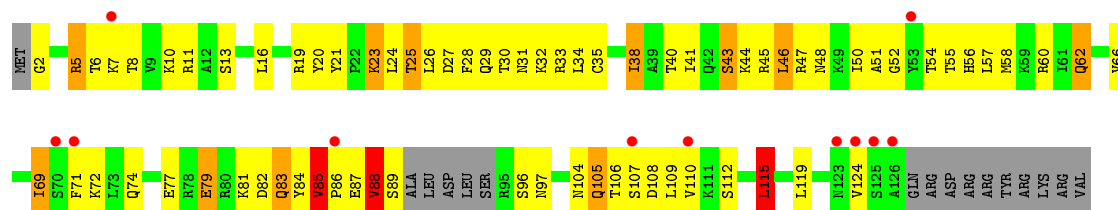
Chain C6: 



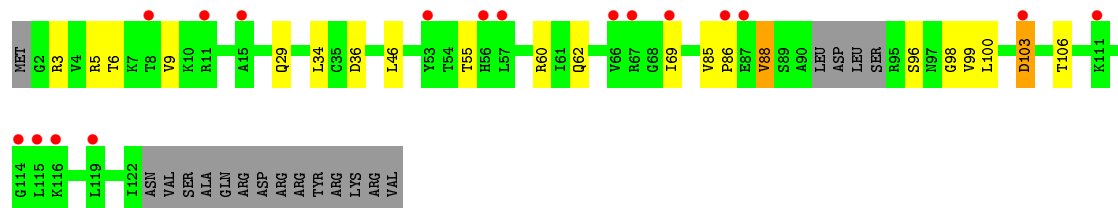
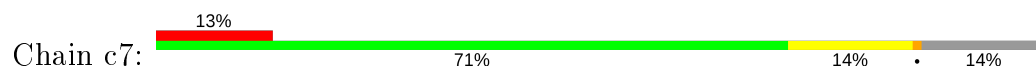
• Molecule 18: 40S ribosomal protein S16-A



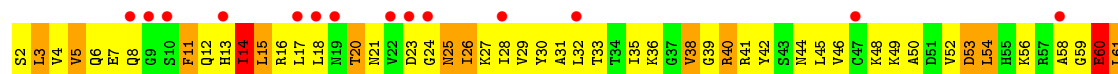
• Molecule 19: 40S ribosomal protein S17-A

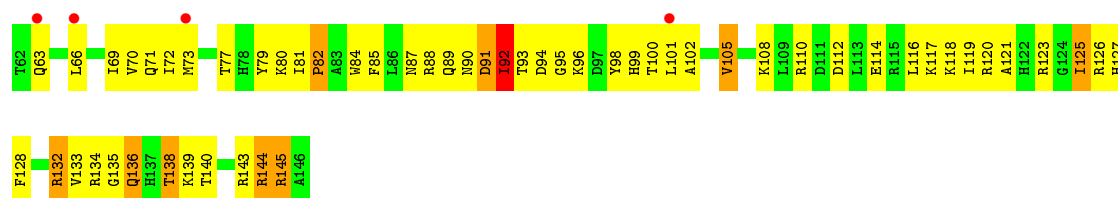


• Molecule 19: 40S ribosomal protein S17-A

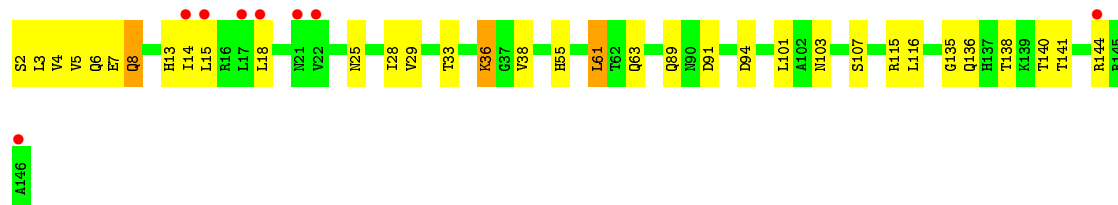
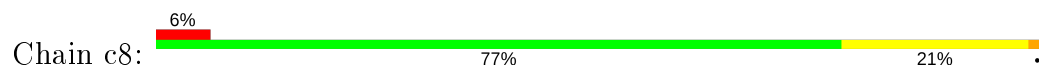


• Molecule 20: 40S ribosomal protein S18-A

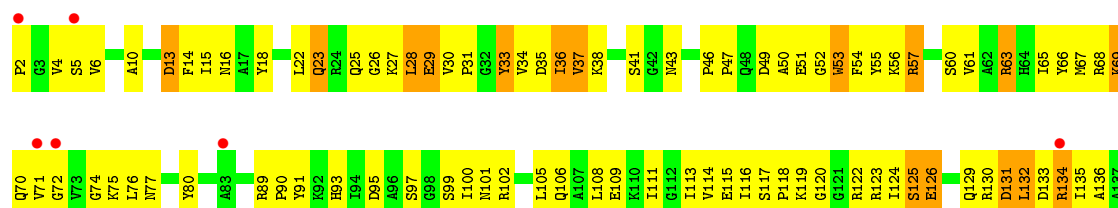




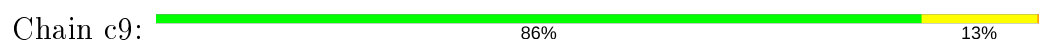
- Molecule 20: 40S ribosomal protein S18-A



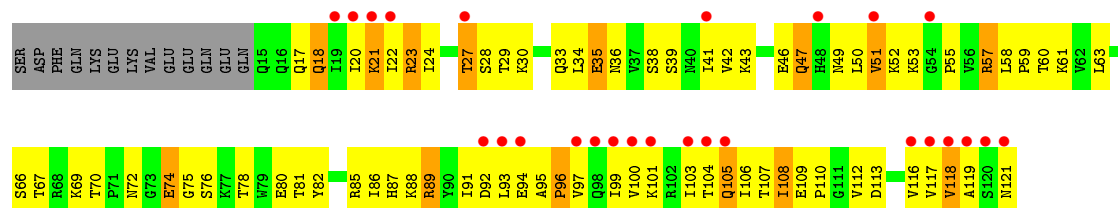
- Molecule 21: 40S ribosomal protein S19-A



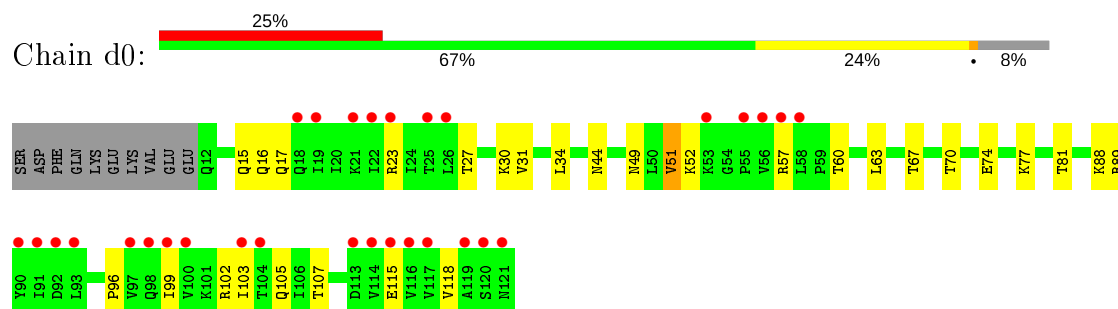
- Molecule 21: 40S ribosomal protein S19-A



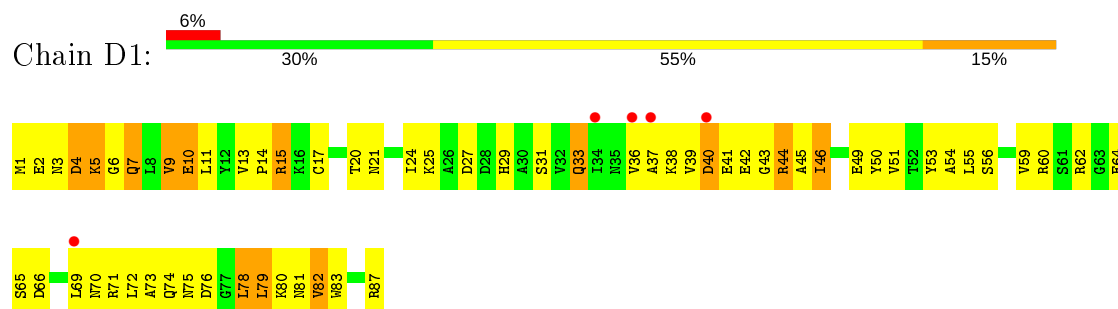
- Molecule 22: 40S ribosomal protein S20



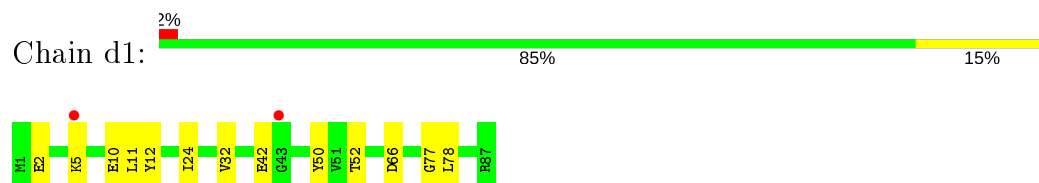
- Molecule 22: 40S ribosomal protein S20



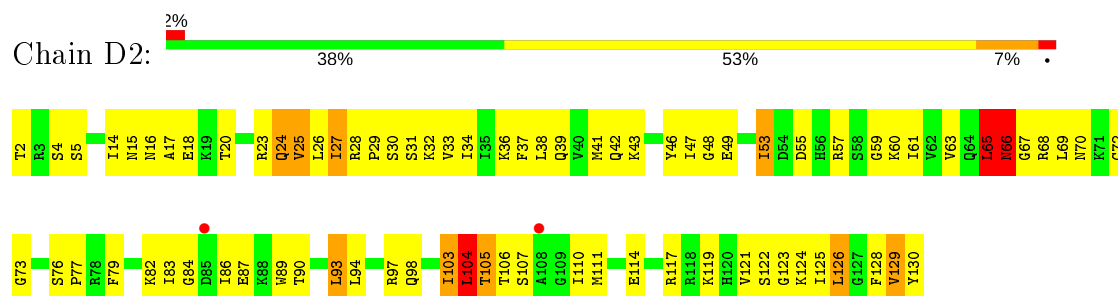
- Molecule 23: 40S ribosomal protein S21-A



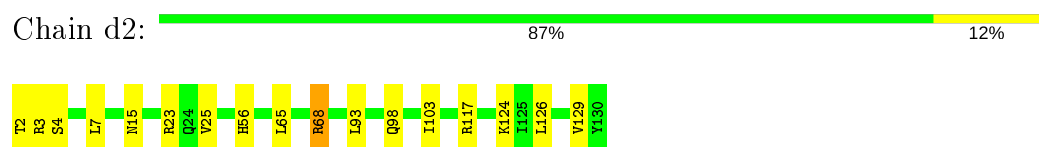
- Molecule 23: 40S ribosomal protein S21-A



- Molecule 24: 40S ribosomal protein S22-A



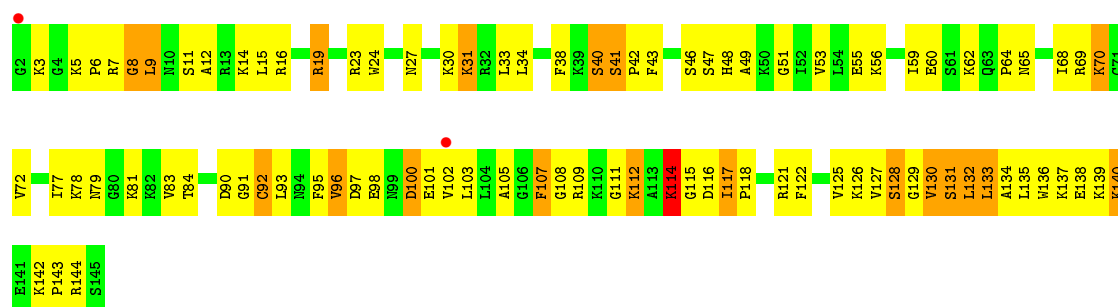
- Molecule 24: 40S ribosomal protein S22-A



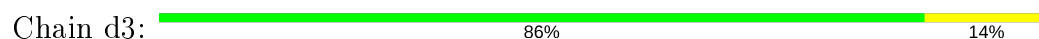
- Molecule 25: 40S ribosomal protein S23-A



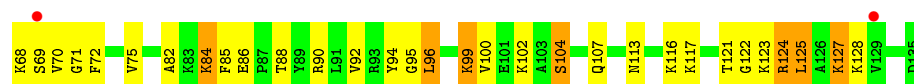
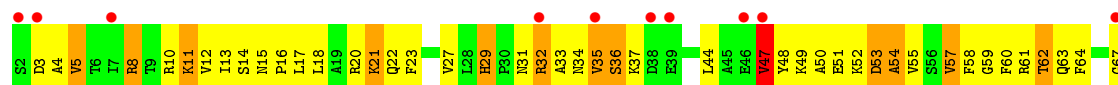
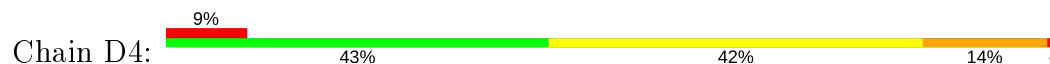




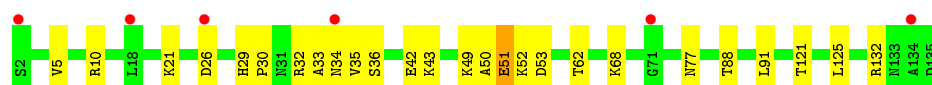
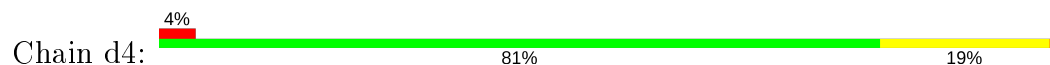
- Molecule 25: 40S ribosomal protein S23-A



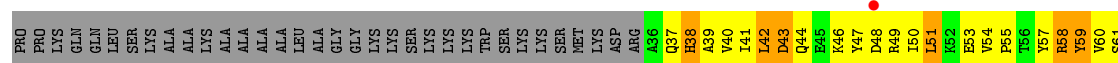
- Molecule 26: 40S ribosomal protein S24-A



- Molecule 26: 40S ribosomal protein S24-A

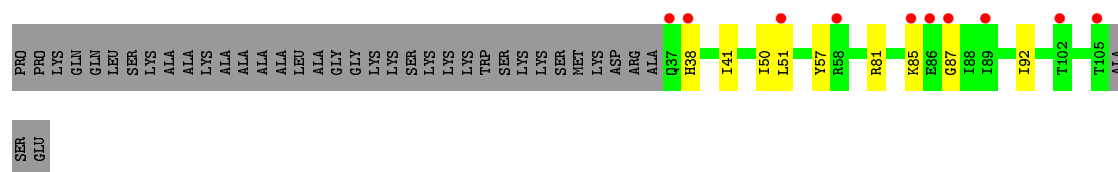


- Molecule 27: 40S ribosomal protein S25-A

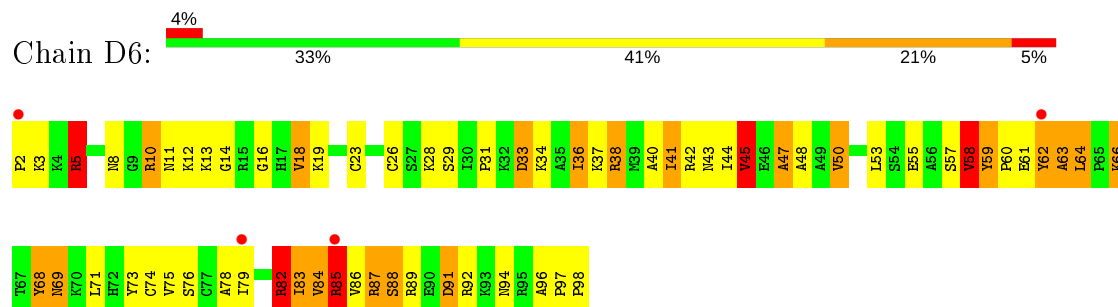


- Molecule 27: 40S ribosomal protein S25-A

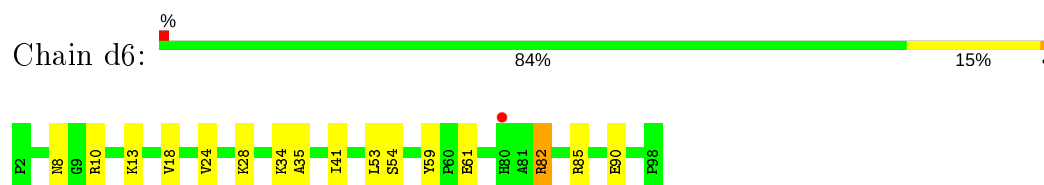




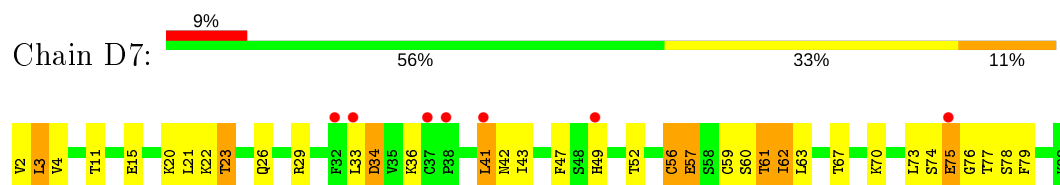
- Molecule 28: 40S ribosomal protein S26-B



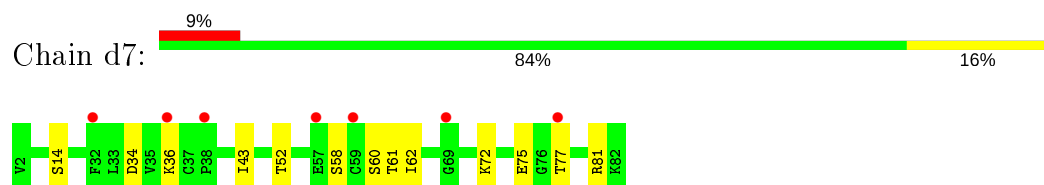
- Molecule 28: 40S ribosomal protein S26-B



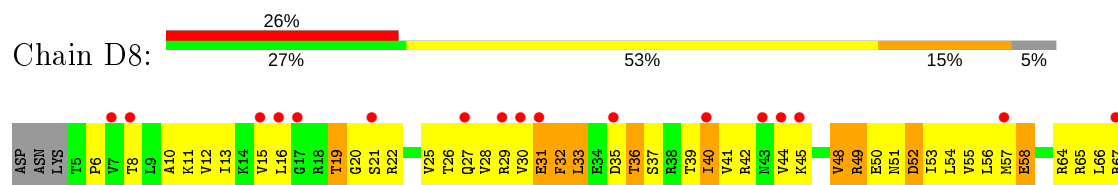
- Molecule 29: 40S ribosomal protein S27-A



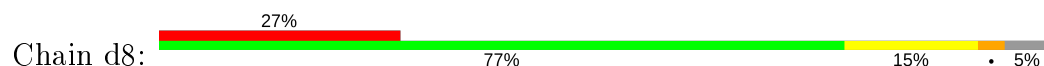
- Molecule 29: 40S ribosomal protein S27-A



- Molecule 30: 40S ribosomal protein S28-A



- Molecule 30: 40S ribosomal protein S28-A

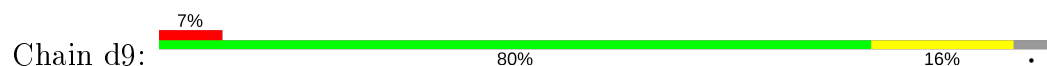




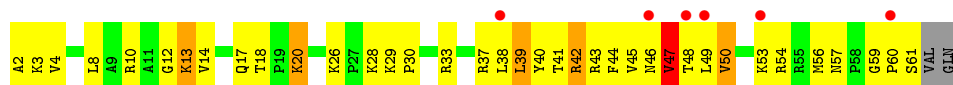
- Molecule 31: 40S ribosomal protein S29-A



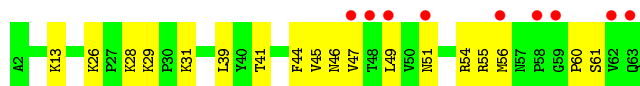
- Molecule 31: 40S ribosomal protein S29-A



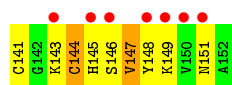
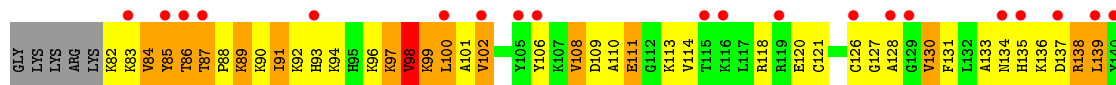
- Molecule 32: 40S ribosomal protein S30-A



- Molecule 32: 40S ribosomal protein S30-A

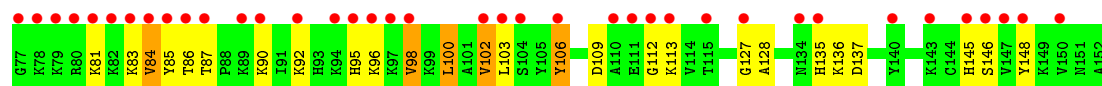


- Molecule 33: Ubiquitin-40S ribosomal protein S31

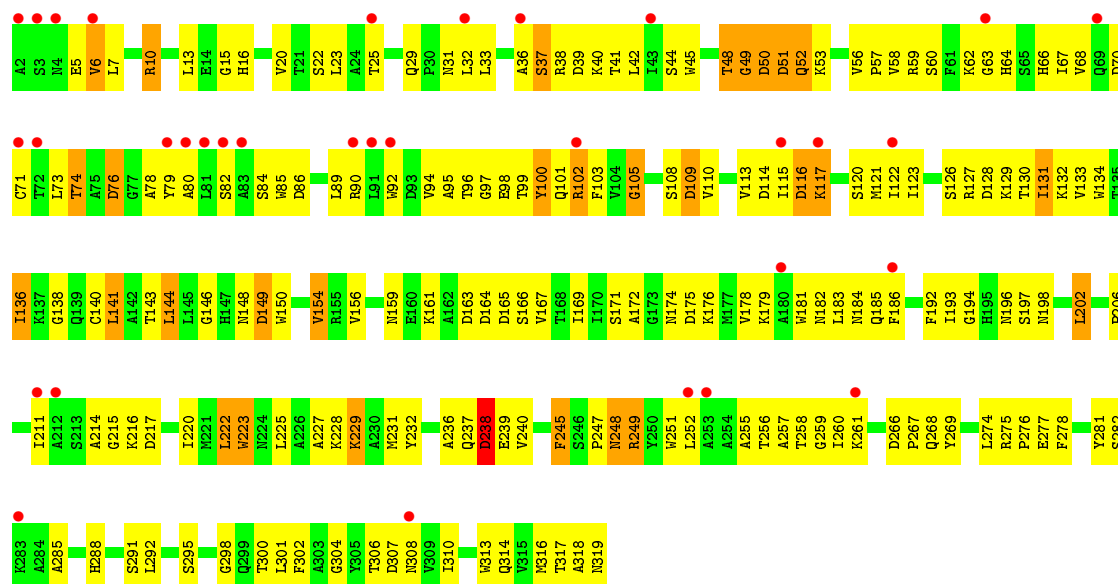


- Molecule 33: Ubiquitin-40S ribosomal protein S31

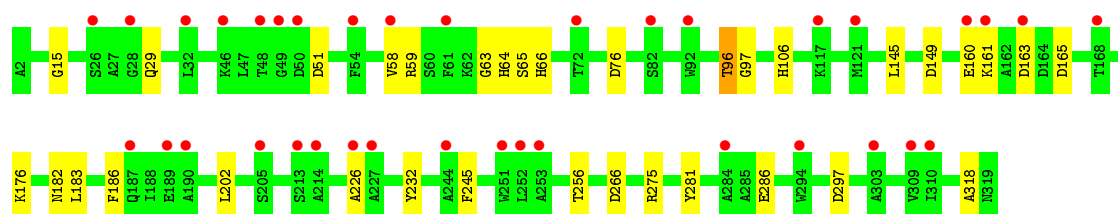
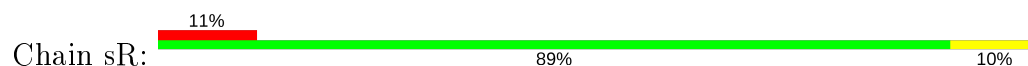




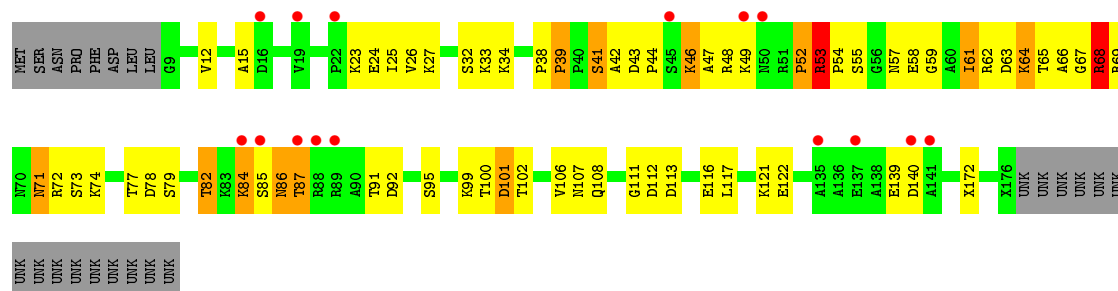
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein



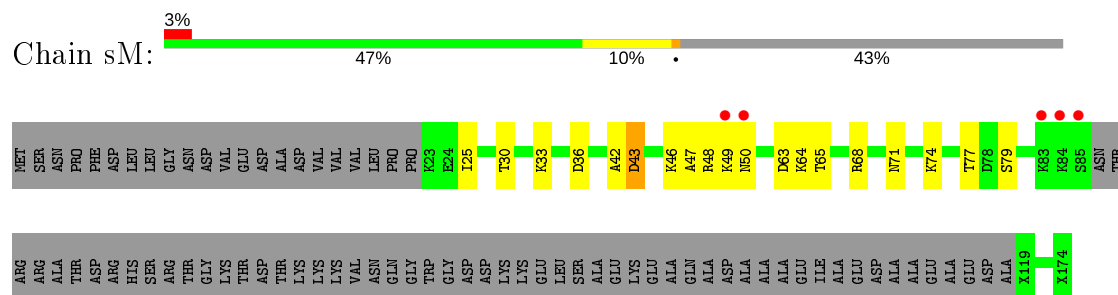
- Molecule 34: Guanine nucleotide-binding protein subunit beta-like protein



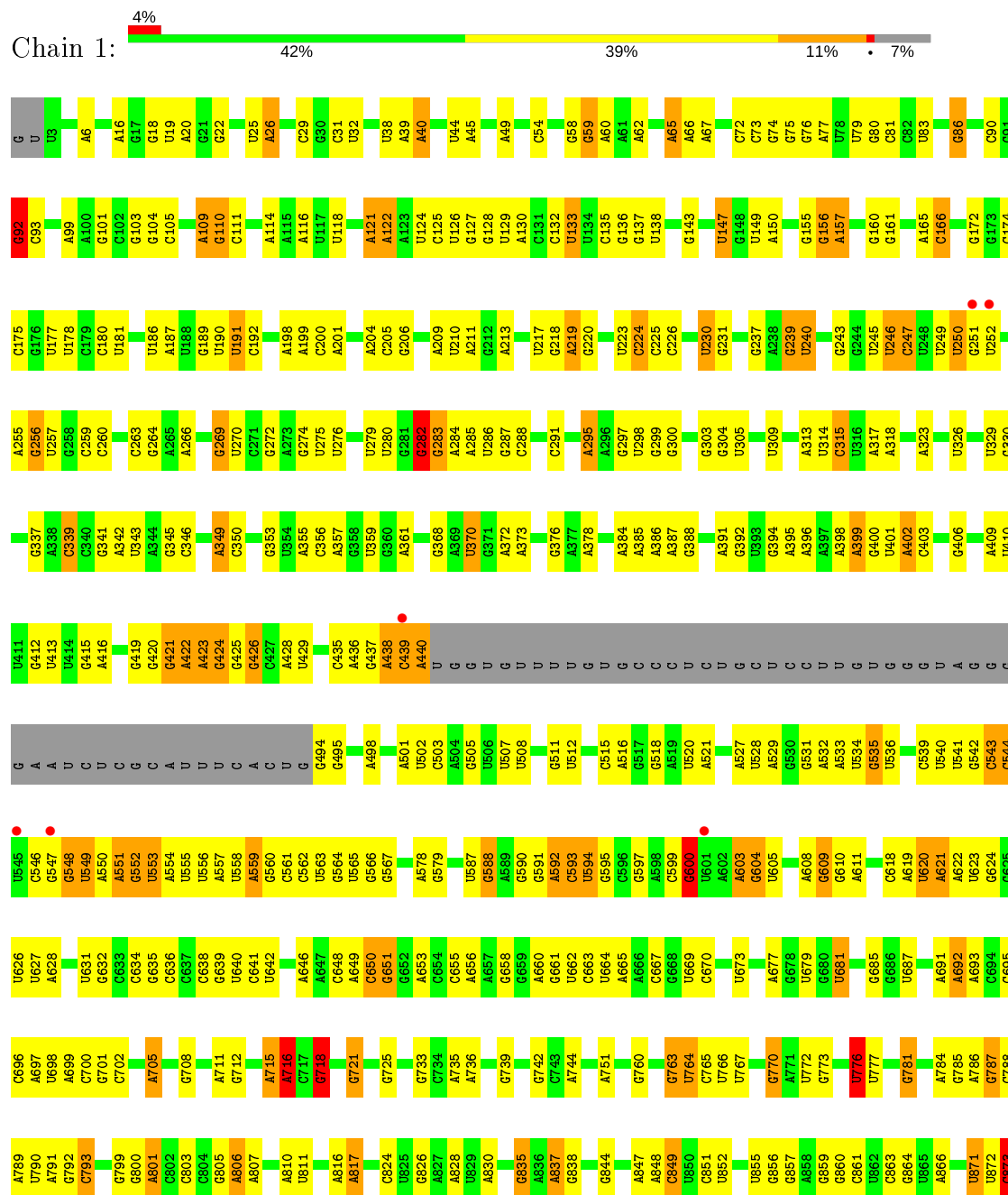
- Molecule 35: Suppressor protein STM1, Suppressor protein STM1, Suppressor protein STM1, Suppressor protein STM1, Suppressor protein STM1



- Molecule 35: Suppressor protein STM1,Suppressor protein STM1,Suppressor protein STM1,Suppressor protein STM1,Suppressor protein STM1

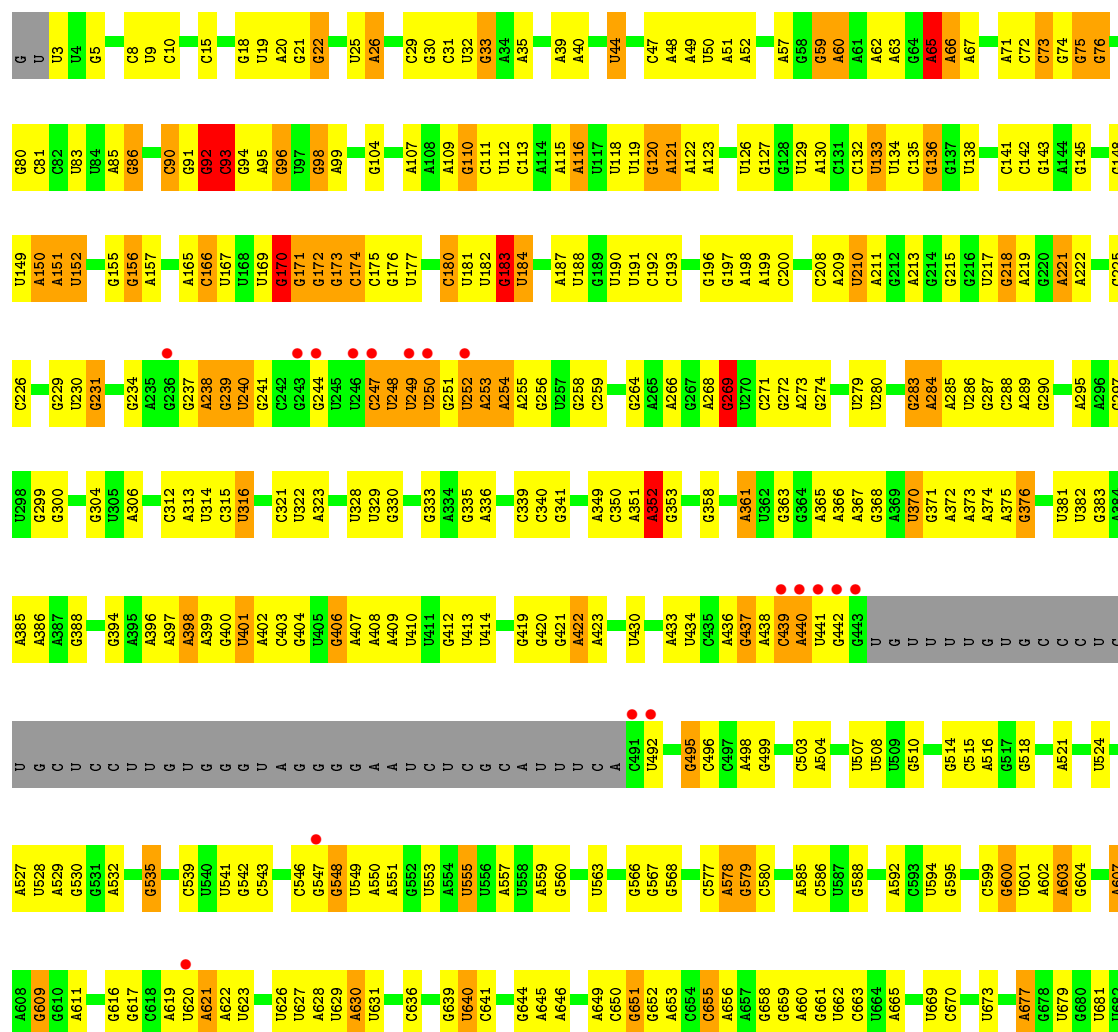


- Molecule 36: 25S ribosomal RNA



A1886	A1798	U1724	U1641	U1569	U1484	G1412	U1331	G1260	U1191	U1114	A1030	G963	U874
A1887	A1799	C1725	A1642	U1570	G1485	G1412	A1332	G1261	U1191	G1115	U1033	G964	G875
A1888	C1803	A1729	A1643	A1571	G1486	G1414	C1333	A1262	C1192	G1116	U1033	A965	A876
A1889	G1730	A1731	U1645	G1573	G1488	U1415	U1334	A1263	A1193	G1117	U1034	A966	U879
G1898	G1808	A1732	U1646	C1574	A1489	C1416	G1340	U1265	A1195	G1118	A1036	U967	C800
G1899	A1809	U1733	A1647	A1575	A1490	G1417	U1341	G1266	C1196	C1119	C1037	G968	
A1900	A1810	G1734	U1651	G1576	A1491	A1418	G1345	U1269	C1201	U1121	C1038		A895
G1902	A1814	G1735	A1654	C1577	G1492	A1419	G1346	A1270	A1202	U1122	U1039	A972	A973
C1904	U1815	G1736		C1578	U1495	G1421	U1347	A1271	A1203	G1127	A1040	A974	U897
G1905	A1816	U1740	C1657	A1580	C1496	U1425	U1348	G1272	A1204	U1128	A1047	G974	U898
	G1817	A1741	G1658	C1581	C1497	G1426	A1350	A1273	G1209	A1129	A1048	C975	U899
	U1818	A1742	U1659	A1582	A1498	U1427	U1351	A1274	U1210	A1130	G1049	U976	G900
U1912	U1819	G1743	C1660	G1583	A1499	U1428	A1352	C1275	U1211	C1132	U1060	U979	G907
A1913	U1820	G1744	G1661	A1587	G1500	G1429	U1353	G1276	A1212	A1133	A1062	A980	G908
G1914	U1821	C1745	G1662	A1588	U1501	G1430	G1354	A1278	G1213	G1134	G1063	C982	C911
A1915	C1822	U1746		A1589	A1503	G1431	A1355	C1279	G1216	A1135	A1064	C981	G912
U1916	A1823	G1747	G1673	G1590	A1504	C1432	U1356	C1280	A1217	U1138	A1065	C983	G913
U1917	U1824	G1748	G1674	G1591	C1505	A1433	G1357	G1281	A1220	G1145	G1066	A984	A914
C1918	G1825	A1749	G1675	A1592	A1506	G1434	A1362	C1282	U1220	C1141	U1067	U985	A915
G1919	C1826	A1750	A1676	G1507	G1507	A1435	A1363	G1283	A1221	G1146	C1068	U986	G916
	A1835	G1751	G1677	U1596	C1508	U1436	A1366	G1284	G1222	G1147	C1069	U987	A917
G1935		A1752	A1678	C1597	U1517	U1437	A1367	G1285	A1222	G1148	U1070		A920
	G1838	G1753	A1679	G1598	U1518	U1438	A1368	A1286	G1225	G1149	U1071	A992	A921
U1938	A1839	G1758	G1680	G1599	G1521	G1443	U1369	C1292	A1226	G1150	U1072	A993	A922
G1939	U1840	A1760	U1681	U1601	G1521	U1444	A1369	C1293	G1227	A1151	U1073	G994	C923
A1940	A1841	G1761	A1682	U1602	A1524	U1445	A1374	C1294	G1228	U1151	U1074		G924
C1941	U1842	C1762	U1683	A1602	A1524	G1446	G1375	C1295	G1229	G1152	U1077	A997	A925
U1942		U1686	U1686	A1605	C1527	G1447	G1376	C1296	G1230	A1153	U1078	A998	
C1943	G1845	U1763	U1687	A1606	U1533	C1450	G1379	C1297	A1231	U1154	U1081	C1000	A929
U1944	C1846	U1764	U1688	U1607	U1534	C1451	G1380	C1298	G1232	G1157	G1082	C1001	U930
A1945		U1765	U1689	U1607	A1535	A1452	A1381	U1299	G1234	A1158	U1083	A1003	G834
A1946	C1849	G1766	U1695	G1610	A1535	A1453	G1382	G1300	U1235	A1159	G1087	U1004	U935
G1947	U1853	C1767	U1696		A1535	A1454	G1383	A1304	U1236	C1160		G1005	A936
G1948	C1854	U1769	U1697	A1613	G1543	U1455	U1384	U1305	G1237	G1161		A1006	G937
U1949	U1855	G1770	C1701	C1614	A1544	U1456	C1385	G1306	C1238	U1162	A1093		C938
U1950	C1856	C1771	U1702	C1615	A1545	U1457	A1386	G1307	G1239	A1165	U1094	A1009	U939
C1951	C1857	C1772	U1703	U1616	A1546	U1458	G1387	C1308	A1240	A1166	U1095	G1010	G940
G1952	A1858	G1773	U1704	G1617	G1547	U1459	U1388	G1309	U1241	U1167	U1096		
C1953		U1775	U1705	G1618	C1548	A1462	U1389	G1310	G1242	A1168	U1097	G1013	U943
U1954		G1776	C1706	A1619	U1554	G1464	A1390	G1313	G1243	U1169	G1098	U1014	C944
U1955	G1861	U1777	U1707	U1620	U1555	G1465	A1393	A1317	A1244	G1170	G1101	U1015	C945
A	U1862	G1778	C1708	A1621	C1556	G1466	A1394	A1318	G1245	A1171	A1102	G1016	U946
G	G1863	C1779	U1709	U1622	U1557	G1467	A1399	G1319	G1246	G1172	A1103	G1017	
U	C1866	G1780	C1710	G1624	A1558	C1468	A1399	A1318	U1247	G1171	G1104	G1018	G950
A		U1785	G1711	G1624	A1558	C1469	A1399	G1319	G1248	G1172	A1103	G1019	A951
G	C1872	U1786	G1712		A1559	U1470	A1399	G1319	G1249	C1176	G1104	G1020	A952
G	U1873	A1787	U1716	U1629	G1560	U1471	G1400	A1282		G1177	G1106	G1021	G953
G	A1874	C1788	U1717	C1633	G1561	U1472	A1401	U1232	U1254	G1178	C1107	U1024	U954
C		G1789	U1718	G1634	C1562	U1473	G1404	U1322	C1254	A1179	G1107	G1024	U955
U	U1877	G1790	G1718	G1635	C1563	A1475	U1405	G1323	C1255	A1180	U1109	A1025	U956
U	A1878		G1719	U1636	U1564	A1475	A1406	C1327	G1286	U1181	U1110	A1026	C957
U	U1721	G1794	U1720	G1638	U1565	G1480	A1407	C1328	C1257	A1182	U1111	A1027	C958
G	U1795	U1795	U1721	A1638	U1566	A1481	U1407	U1329	U1258	A1182	U1112	A1028	C959
G	G1796	A1881	U1722	C1639	U1567	A1482	A1408	U1329	U1258	A1182	U1112	A1028	C959
U	G1882	A1797	A1723	U1640	U1568	G1483	G1409	A1330	A1259	G1113	G1113	G1029	U960

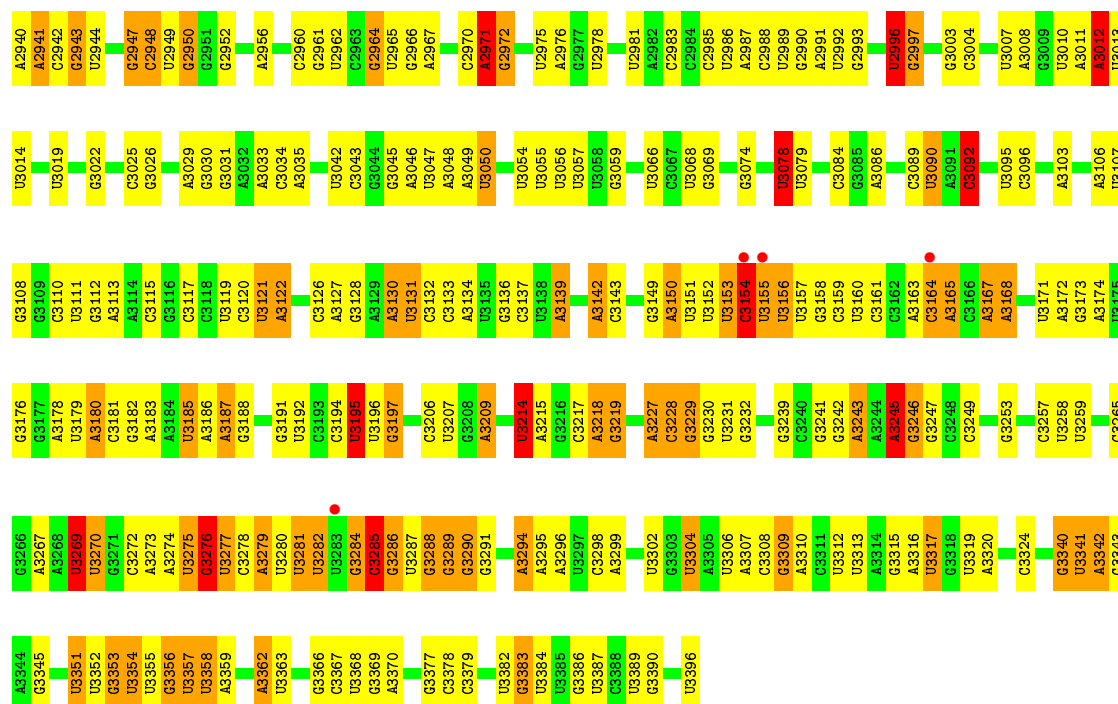
U3042	C3043	G3044	U3047	A3048	A3049	U3055	U3056	U3057	U3058	G3059	G3060	G3061	U3066	C3067	U3068	G3069	A3070	G3074	U3078	U3079	G3080	G3081	G3082	G3083	G3084	G3085	A3086	U3090	A3091	G3092	U3095	C3096	C3097	A3103	U3104	U3105	A3106	U3107	G3108	G3109	G3110	G3111	G3112	A3113	G3114	G3115	G3116	G3117	G3118	U3119	G3120																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
C2960	G2961	U2962	A2971	U2972	U2973	C2983	C2984	C2985	U2986	A2987	C2988	C2989	U2990	U2991	U2992	A2995	U2996	U2997	U2998	A3000	C3001	C3002	G3003	U3007	A3008	G3009	U3010	A3011	A3012	U3013	U3014	C3018	U3019	U3020	A3021	G3022	U3023	A3024	C3025	G3026	A3027	G3028	A3029	G3030	G3031	G2943	A3032	U2944	A3035	C3039	A3040	U3041																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
U2869	G2870	G2871	U2872	U2873	U2874	U2875	U2876	U2877	U2878	U2879	U2880	U2881	U2882	U2883	U2884	U2885	U2886	U2887	U2888	U2889	U2890	U2891	U2892	U2893	U2894	U2895	U2896	U2897	U2898	U2899	U2900	U2901	U2902	U2903	U2904	U2905	U2906	U2907	U2908	U2909	U2910	U2911	U2912	U2913	U2914	U2915	U2916	U2917	U2918	U2919	U2920																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
C2772	C2773	C2774	C2775	C2776	C2777	C2778	C2779	C2780	C2781	C2782	C2783	C2784	C2785	C2786	C2787	C2788	C2789	C2790	C2791	C2792	C2793	C2794	C2795	C2796	C2797	C2798	C2799	C2800	C2801	C2802	C2803	C2804	C2805	C2806	C2807	C2808	C2809	C2810	C2811	C2812	C2813	C2814	C2815	C2816	C2817	C2818	C2819	C2820	C2821	C2822	C2823	C2824																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
A2691	A2692	A2693	A2694	A2695	A2696	A2697	A2698	A2699	A2700	A2701	A2702	A2703	A2704	A2705	A2706	A2707	A2708	A2709	A2710	A2711	A2712	A2713	A2714	A2715	A2716	A2717	A2718	A2719	A2720	A2721	A2722	A2723	A2724	A2725	A2726	A2727	A2728	A2729	A2730	A2731	A2732	A2733	A2734	A2735	A2736	A2737	A2738	A2739	A2740	A2741	A2742	A2743	A2744	A2745	A2746	A2747	A2748	A2749	A2750	A2751	A2752	A2753	A2754	A2755	A2756	A2757	A2758	A2759	A2760	A2761	A2762	A2763	A2764	A2765	A2766	A2767	A2768	A2769	A2770	A2771	A2772	A2773	A2774	A2775	A2776	A2777	A2778	A2779	A2780	A2781	A2782	A2783	A2784	A2785	A2786	A2787	A2788	A2789	A2790	A2791	A2792	A2793	A2794	A2795	A2796	A2797	A2798	A2799	A2800	A2801	A2802	A2803	A2804	A2805	A2806	A2807	A2808	A2809	A2810	A2811	A2812	A2813	A2814	A2815	A2816	A2817	A2818	A2819	A2820	A2821	A2822	A2823	A2824	A2825	A2826	A2827	A2828	A2829	A2830	A2831	A2832	A2833	A2834	A2835	A2836	A2837	A2838	A2839	A2840	A2841	A2842	A2843	A2844	A2845	A2846	A2847	A2848	A2849	A2850	A2851	A2852	A2853	A2854	A2855	A2856	A2857	A2858	A2859	A2860	A2861	A2862	A2863	A2864	A2865	A2866	A2867	A2868	A2869	A2870	A2871	A2872	A2873	A2874	A2875	A2876	A2877	A2878	A2879	A2880	A2881	A2882	A2883	A2884	A2885	A2886	A2887	A2888	A2889	A2890	A2891	A2892	A2893	A2894	A2895	A2896	A2897	A2898	A2899	A2900	A2901	A2902	A2903	A2904	A2905	A2906	A2907	A2908	A2909	A2910	A2911	A2912	A2913	A2914	A2915	A2916	A2917	A2918	A2919	A2920	A2921	A2922	A2923	A2924	A2925	A2926	A2927	A2928	A2929	A2930	A2931	A2932	A2933	A2934	A2935	A2936	A2937	A2938	A2939	A2940	A2941	A2942	A2943	A2944	A2945	A2946	A2947	A2948	A2949	A2950	A2951	A2952	A2953	A2954	A2955	A2956	A2957	A2958	A2959	A2960	A2961	A2962	A2963	A2964	A2965	A2966	A2967	A2968	A2969	A2970	A2971	A2972	A2973	A2974	A2975	A2976	A2977	A2978	A2979	A2980	A2981	A2982	A2983	A2984	A2985	A2986	A2987	A2988	A2989	A2990	A2991	A2992	A2993	A2994	A2995	A2996	A2997	A2998	A2999	A3000	A3001	A3002	A3003	A3004	A3005	A3006	A3007	A3008	A3009	A3010	A3011	A3012	A3013	A3014	A3015	A3016	A3017	A3018	A3019	A3020	A3021	A3022	A3023	A3024	A3025	A3026	A3027	A3028	A3029	A3030	A3031	A3032	A3033	A3034	A3035	A3036	A3037	A3038	A3039	A3040	A3041	A3042	A3043	A3044	A3045	A3046	A3047	A3048	A3049	A3050	A3051	A3052	A3053	A3054	A3055	A3056	A3057	A3058	A3059	A3060	A3061	A3062	A3063	A3064	A3065	A3066	A3067	A3068	A3069	A3070	A3071	A3072	A3073	A3074	A3075	A3076	A3077	A3078	A3079	A3080	A3081	A3082	A3083	A3084	A3085	A3086	A3087	A3088	A3089	A3090	A3091	A3092	A3093	A3094	A3095	A3096	A3097	A3098	A3099	A3100	A3101	A3102	A3103	A3104	A3105	A3106	A3107	A3108	A3109	A3110	A3111	A3112	A3113	A3114	A3115	A3116	A3117	A3118	A3119	A3120	A3121	A3122	A3123	A3124	A3125	A3126	A3127	A3128	A3129	A3130	A3131	A3132	A3133	A3134	A3135	A3136	A3137	A3138	A3139	A3140	A3141	A3142	A3143	A3144	A3145	A3146	A3147	A3148	A3149	A3150	A3151	A3152	A3153	A3154	A3155	A3156	A3157	A3158																																																																																																																																									
U2538	C2539	U2540	U2541	U2542	U2543	U2544	U2545	U2546	U2547	U2548	U2549	U2550	U2551	U2552	U2553	U2554	U2555	U2556	U2557	U2558	U2559	U2560	U2561	U2562	U2563	U2564	U2565	U2566	U2567	U2568	U2569	U2570	U2571	U2572	U2573	U2574	U2575	U2576	U2577	U2578	U2579	U2580	U2581	U2582	U2583	U2584	U2585	U2586	U2587	U2588	U2589	U2590	U2591	U2592	U2593	U2594	U2595	U2596	U2597	U2598	U2599	U2600	U2601	U2602	U2603	U2604	U2605	U2606	U2607	U2608	U2609	U2610	U2611	U2612	U2613	U2614	U2615	U2616	U2617	U2618	U2619	U2620	U2621	U2622	U2623	U2624	U2625	U2626	U2627	U2628	U2629	U2630	U2631	U2632	U2633	U2634	U2635	U2636	U2637	U2638	U2639	U2640	U2641	U2642	U2643	U2644	U2645	U2646	U2647	U2648	U2649	U2650	U2651	U2652	U2653	U2654	U2655	U2656	U2657	U2658	U2659	U2660	U2661	U2662	U2663	U2664	U2665	U2666	U2667	U2668	U2669	U2670	U2671	U2672	U2673	U2674	U2675	U2676	U2677	U2678	U2679	U2680	U2681	U2682	U2683	U2684	U2685	U2686	U2687	U2688	U2689	U2690	U2691	U2692	U2693	U2694	U2695	U2696	U2697	U2698	U2699	U2700	U2701	U2702	U2703	U2704	U2705	U2706	U2707	U2708	U2709	U2710	U2711	U2712	U2713	U2714	U2715	U2716	U2717	U2718	U2719	U2720	U2721	U2722	U2723	U2724	U2725	U2726	U2727	U2728	U2729	U2730	U2731	U2732	U2733	U2734	U2735	U2736	U2737	U2738	U2739	U2740	U2741	U2742	U2743	U2744	U2745	U2746	U2747	U2748	U2749	U2750	U2751	U2752	U2753	U2754	U2755	U2756	U2757	U2758	U2759	U2760	U2761	U2762	U2763	U2764	U2765	U2766	U2767	U2768	U2769	U2770	U2771	U2772	U2773	U2774	U2775	U2776	U2777	U2778	U2779	U2780	U2781	U2782	U2783	U2784	U2785	U2786	U2787	U2788	U2789	U2790	U2791	U2792	U2793	U2794	U2795	U2796	U2797	U2798	U2799	U2800	U2801	U2802	U2803	U2804	U2805	U2806	U2807	U2808	U2809	U2810	U2811	U2812	U2813	U2814	U2815	U2816	U2817	U2818	U2819	U2820	U2821	U2822	U2823	U2824	U2825	U2826	U2827	U2828	U2829	U2830	U2831	U2832	U2833	U2834	U2835	U2836	U2837	U2838	U2839	U2840	U2841	U2842	U2843	U2844	U2845	U2846	U2847	U2848	U2849	U2850	U2851	U2852	U2853	U2854	U2855	U2856	U2857	U2858	U2859	U2860	U2861	U2862	U2863	U2864	U2865	U2866	U2867	U2868	U2869	U2870	U2871	U2872	U2873	U2874	U2875	U2876	U2877	U2878	U2879	U2880	U2881	U2882	U2883	U2884	U2885	U2886	U2887	U2888	U2889	U2890	U2891	U2892	U2893	U2894	U2895	U2896	U2897	U2898	U2899	U2900	U2901	U2902	U2903	U2904	U2905	U2906	U2907	U2908	U2909	U2910	U2911	U2912	U2913	U2914	U2915	U2916	U2917	U2918	U2919	U2920	U2921	U2922	U2923	U2924	U2925	U2926	U2927	U2928	U2929	U2930	U2931	U2932	U2933	U2934	U2935	U2936	U2937	U2938	U2939	U2940	U2941	U2942	U2943	U2944	U2945	U2946	U2947	U2948	U2949	U2950	U2951	U2952	U2953	U2954	U2955	U2956	U2957	U2958	U2959	U2960	U2961	U2962	U2963	U2964	U2965	U2966	U2967	U2968	U2969	U2970	U2971	U2972	U2973	U2974	U2975	U2976	U2977	U2978	U2979	U2980	U2981	U2982	U2983	U2984	U2985	U2986	U2987	U2988	U2989	U2990	U2991	U2992	U2993	U2994	U2995	U2996	U2997	U2998	U2999	U3000	U3001	U3002	U3003	U3004	U3005	U3006	U3007	U3008	U3009	U3010	U3011	U3012	U3013	U3014	U3015	U3016	U3017	U3018	U3019	U3020	U3021	U3022	U3023	U3024	U3025	U3026	U3027	U3028	U3029	U3030	U3031	U3032	U3033	U3034	U3035	U3036	U3037	U3038	U3039	U3040	U3041	U3042	U3043	U3044	U3045	U3046	U3047	U3048	U3049	U3050	U3051	U3052	U3053	U3054	U3055	U3056	U3057	U3058	U3059	U3060	U3061	U3062	U3063	U3064	U3065	U3066	U3067	U3068	U3069	U3070	U3071	U3072	U3073	U3074	U3075	U3076	U3077	U3078	U3079	U3080	U3081	U3082	U3083	U3084	U3085	U3086	U3087	U3088	U3089	U3090	U3091	U3092	U3093	U3094	U3095	U3096	U3097	U3098	U3099	U3100	U3101	U3102	U3103	U3104	U3105	U3106	U3107	U3108	U3109	U3110	U3111	U3112	U3113	U3114	U3115	U3116	U3117	U3118	U3119	U3120	U3121	U3122	U3123	U3124	U3125	U3126	U3127	U3128	U3129	U3130	U3131	U3132	U3133	U3134	U3135	U3136	U3137	U3138	U3139	U3140	U3141	U3142



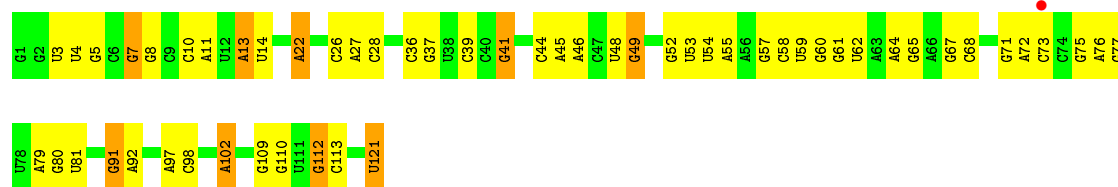


U1763	U1764	U1765	G1766	G1770	C1771	U1772	C1773	C1774	G1780	C1781	U1782	G1786	A1787	G1788	G1789	G1790	G1791	C1792	A1793	G1794	G1795	G1796	G1797	G1798	G1799	G1800	G1801	G1802	G1803	G1804	G1805	G1806	G1807	G1808	A1809	G1810	G1811	G1812	A1813	A1814	A1815	G1816	G1817	G1818	G1819	U1820	U1821	C1822	A1823	G1830	U1831	C1832	A1833	U1834	A1835	A1836	A1837	G1838	G1839	G1840	A1841	A1842	C1843	G1844	G1845																																																																																																																																																																					
U1672	G1677	A1683	U1684	C1685	U1686	U1687	U1688	C1689	U1690	U1691	U1692	G1693	A1694	U1695	U1696	U1697	G1698	A1699	G1700	A1701	A1702	A1703	A1704	A1705	A1706	A1707	A1708	A1709	A1710	A1711	A1712	A1713	A1714	A1715	A1716	A1717	A1718	A1719	A1720	A1721	A1722	A1723	A1724	C1725	A1726	A1727	A1728	A1729	G1730	G1731	G1732	G1733	G1734	A1735	A1736	A1737	A1738	A1739	A1740	A1741	A1742	A1743	A1744	A1745	A1746	A1747	A1748	A1749	A1750	A1751	A1752	A1753	A1754	A1755	A1756	A1757	A1758	A1759	A1760	C1761	C1762																																																																																																																																																					
G1513	G1514	A1515	G1519	G1520	U1523	A1524	U1525	U1526	U1530	G1536	G1537	G1538	G1541	G1542	G1543	G1547	U1548	U1549	C1550	C1551	G1552	U1553	U1554	U1555	C1556	A1557	A1558	A1559	G1560	G1561	C1562	C1563	U1564	G1565	A1566	A1567	U1568	U1569	U1570	A1571	U1572	G1573	C1574	A1575	G1576	U1577	C1578	G1579	A1580	C1581	C1582	A1583	G1584	G1585	G1586	G1587	G1588	G1589	G1590	G1591	G1592	G1593	G1594	G1595	G1596	G1597	G1598	G1599																																																																																																																																																																		
G1586	A1587	A1588	A1589	G1590	G1591	G1592	A1593	A1594	U1595	C1596	A1597	G1598	U1599	G1604	U1605	U1607	G1611	A1612	A1613	C1614	C1615	U1616	U1617	U1620	C1628	U1629	U1630	C1631	A1632	G1635	U1636	C1639	A1643	U1644	U1645	G1650	A1654	A1655	A1656	C1657	G1658	U1659	C1660	G1661	G1662	C1663	G1668	C1669																																																																																																																																																																																						
U1673	U1674	U1675	G1676	A1683	C1684	U1685	U1686	U1687	U1688	C1689	U1690	U1691	U1692	G1693	A1694	U1695	U1696	G1698	A1699	G1700	A1701	A1702	A1703	A1704	A1705	A1706	A1707	A1708	A1709	A1710	A1711	A1712	A1713	A1714	A1715	A1716	A1717	A1718	A1719	A1720	A1721	A1722	A1723	A1724	C1725	A1726	A1727	A1728	A1729	G1730	G1731	G1732	G1733	G1734	A1735	A1736	A1737	A1738	A1739	A1740	A1741	A1742	A1743	A1744	A1745	A1746	A1747	A1748	A1749	A1750	A1751	A1752	A1753	A1754	A1755	A1756	A1757	A1758	A1759	A1760	C1761	C1762																																																																																																																																																				
U1683	G1684	G1685	G1686	A1691	A1692	C1695	U1698	A1699	C1700	G1701	G1702	G1703	U1704	A1705	A1706	U1707	G1708	A1709	G1712	U1713	G1714	A1715	A1716	A1717	A1718	A1719	A1720	A1721	A1722	A1723	A1724	C1725	A1726	A1727	A1728	A1729	A1730	A1731	C1732	G1733	G1734	A1735	A1736	A1737	A1738	A1739	A1740	A1741	A1742	A1743	A1744	A1745	A1746	A1747	A1748	A1749	A1750	A1751	A1752	A1753	A1754	A1755	A1756	A1757	A1758	A1759	A1760	C1761	C1762																																																																																																																																																																	
G758	U759	G760	G763	G764	G765	U766	G767	G768	G769	G770	G773	U776	U777	U778	U779	U780	G781	U782	A783	A784	G785	A786	G787	G788	A789	U790	G791	G792	G793	G794	G795	C982	U796	G984	G985	G986	G987	G988	G989	G990	G991	G992	A801	C802	A806	U814	G815	A816	A817	U821	G822	C823	C824	U825	G826	A830	U838	G839	G840	U841	U842	U843	U844	U845	U846	U847	U848	U849	U850	U851	U852	U853	U854	U855	U856	U857	U858	U859	U860	U861	U862	U863	U864	U865	U866	U867	U868	U869	U870	U871	U872	U873	U874	U875	U876	U877	U878	U879	U880	U881	U882	U883	U884	U885	U886	U887	U888	U889	U890	U891	U892	U893	U894	U895	U896	U897	U898	U899	U900	U901	U902	U903	U904	U905	U906	U907	U908	U909	U910	U911	U912	U913	U914	U915	U916	U917	U918	U919	U920	U921	U922	U923	U924	U925	U926	U927	U928	U929	U930	U931	U932	U933	U934	U935	U936	U937	U938	U939	U940	U941	U942	U943	U944	U945	U946	U947	U948	U949	U950	U951	U952	U953	U954	U955	U956	U957	U958	U959	U960	U961	U962	U963	U964	U965	U966	U967	U968	U969	U970	U971	U972	U973	U974	U975	U976	U977	U978	U979	U980	U981	U982	U983	U984	U985	U986	U987	U988	U989	U990	U991	U992	U993	U994	U995	U996	U997	U998	U999	U1000	U1001	U1002	U1003	U1004	U1005	U1006	U1007	U1008	U1009	U1010	U1011
G1012	G1013	U1014	U1015	U1016	U1017	G1018	G1019	G1020	U1021	U1022	G1023	G1024	A1025	A1026	A1027	U1028	C958	C959	C960	C961	C1032	G1035	A1047	A1048	C1049	A1054	A1055	U1060	G1063	A1064	A1065	A1066	C1069	U1070	U1071	G1072	U1073	A1080	U1081	U1082	G1083	A1084	A1085	U1091	C1092	A1093	U1094	U1095	U1096	U1097	A1098	A1099	G1102	G1103	G1104	G1105	U1109	U1110	U1111	U1112	U1113	U1114	U1115	U1116	U1117	U1121	U1122	U1123	U1128	A1129	U1130	G1131	A1132	A1133	A1134	A1135	C1141	U1142	A1143	U1144	G1145	C1146	G1152	A1153	A1154	C1155	C1156	G1157	A1158	A1159	G1161	A1165	G1166	U1169	A1170	G1171	U1172	U1173	C1176	G1177	G1178																																																																																																																																	
U1179	A1180	A1181	A1182	G1184	C1183	G1184	A1189	U1191	C1192	C1193	G1194	A1195	C1196	A1197	A1200	C1201	A1202	A1205	U1208	U1209	U1210	U1211	U1212	U1213	U1214	U1215	U1216	G1222	A1223	A1231	C1232	G1233	G1234	U1235	U1236	G1237	C1238	C1239	A1240	U1241	G1242	A1243	A1244	A1245	G1246	G1249	G1250	A1251	U1252	U1253	C1254	G1255	G1256	C1257																																																																																																																																																																																
U1258	A1259	G1261	G1262	A1263	G1264	U1265	U1266	G1268	U1276	C1280	G1281	G1282	G1283	C1284	G1285	U1293	A1294	G1295	A1301	G1306	G1307	A1308	U1309	G1310	C1311	C1312	G1313	C1314	U1315	G1316	A1317	A1318	G1319	C1320	G1321	C1327	G1328	U1329	A1330	U1331	U1334	C1335	U1336	A1337	C1338	C1339	G1340	U1341	G1345																																																																																																																																																																																					
G1346	U1347	G1348	G1349	U1351	A1352	U1353	G1354	A1355	U1356	G1357	C1358	C1359	C1360	A1366	G1367	G1370	G1371	A1372	A1373	G1374	G1375	C1376	U1377	U1378	A1381	G1382	G1383	U1384	C1385	A1386	G1387	A1390	A1393	A1394	G1395	C1396	C1397	U1398	A1399	G1400	G1404	U1405	A1406	A1407	G1408	G1409	G1414	U1415	C1416	A1418																																																																																																																																																																																				
A1419	C1420	U1427	A1428	G1431	G1434	A1435	C1437	U1438	G1443	A1446	G1447	G1450	A1454	U1455	A1462	U1463	G1464	A1465	A1466	A1467	U1470	U1471	U1472	U1475	U1479	G1480	A1481	A1482	A1483	U1484	G1485	A1489	G1493	U1494	U1495	C1496	G1500	U1501	C1502	A1503	A1506	C1507	C1508	G1513	G1514	A1515	G1519	G1520	U1523	A1524	U1525	U1526	U1530	G1536	G1537	G1538	G1541	G1542	G1543	G1547	U1548	U1549	C1550	C1551	G1552	U1553	U1554	U1555	C1556	A1557	A1558	A1559	G1560	G1561	C1562	C1563	U1564	G1565	A1566	A1567	U1568	U1569	U1570	A1571	U1572	G1573	C1574	A1575	G1576	U1577	C1578	G1579	A1580	C1581	C1582	A1583	G1584	G1585	G1586	G1587	G1588	G1589	G1590	G1591	G1592	G1593	G1594	G1595	G1596	G1597	G1598	G1599																																																																																																																						
G1586	A1587	A1588	A1589	G1590	G1591	G1592	A1593	A1594	U1595	C1596	A1597	G1598	U1599	G1604	U1605	U1607	G1611	A1612	A1613	C1614	C1615	U1616	U1617	U1620	C1628	U1629	U1630	C1631	A1632	G1635	U1636	C1639	A1643	U1644	U1645	G1650	A1654	A1655	A1656	C1657	G1658	U1659	C1660	G1661	G1662	C1663	G1668	C1669																																																																																																																																																																																						
U1672	G1677	A1683	U1684	C1685	U1686	U1687	U1688	C1689	U1690	U1691	U1692	G1693	A1694	U1695	U1696	U1697	G1698	A1699	G1700	A1701	A1702	A1703	A1704	A1705	A1706	A1707	A1708	A1709	A1710	A1711	A1712	A1713	A1714	A1715	A1716	A1717	A1718	A1719	A1720	A1721	A1722	A1723	A1724	C1725	A1726	A1727	A1728	A1729	G1730	G1731	G1732	G1733	G1734	A1735	A1736	A1737	A1738	A1739	A1740	A1741	A1742	A1743	A1744	A1745	A1746	A1747	A1748	A1749	A1750	A1751	A1752	A1753	A1754	A1755	A1756	A1757	A1758	A1759	A1760	C1761	C1762																																																																																																																																																					
U1763	U1764	U1765	G1766	A1770	C1771	U1772	C1773	C1774	G1780	C1781	U1782	G1786	A1787	G1788	G1789	G1790	G1791	C1792	A1793	G1794	G1795	G1796	G1797	G1798	G1799	G1800	G1801	G1802	G1803	G1804	G1805	G1806	G1807	G1808	A1809	G1810	G1811	G1812	A1813	A1814	A1815	G1816	G1817	U1818	U1819	U1820	U1821	C1822	A1823	G1830	U1831	C1832	A1833	U1834	A1835	A1836	A1837	G1838	G1839	G1840	A1841	A1842	C1843	G1844	G1845																																																																																																																																																																					

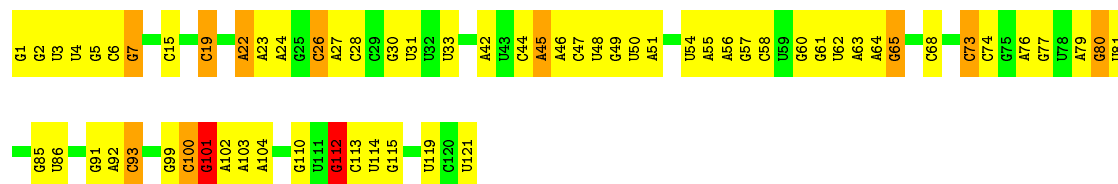




### • Molecule 37: 5S ribosomal RNA



### • Molecule 37: 5S ribosomal RNA



### • Molecule 38: 5.8S ribosomal RNA

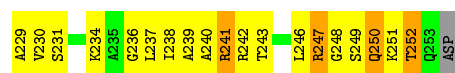
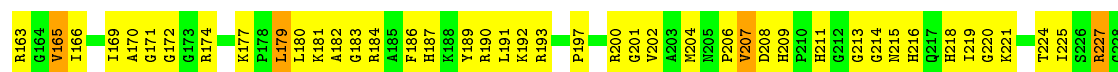
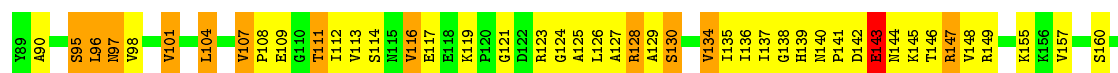




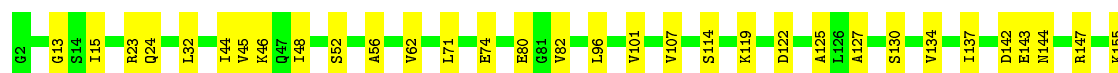
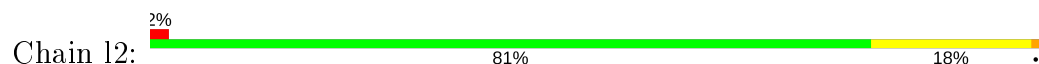
- Molecule 38: 5.8S ribosomal RNA



- Molecule 39: 60S ribosomal protein L2-A

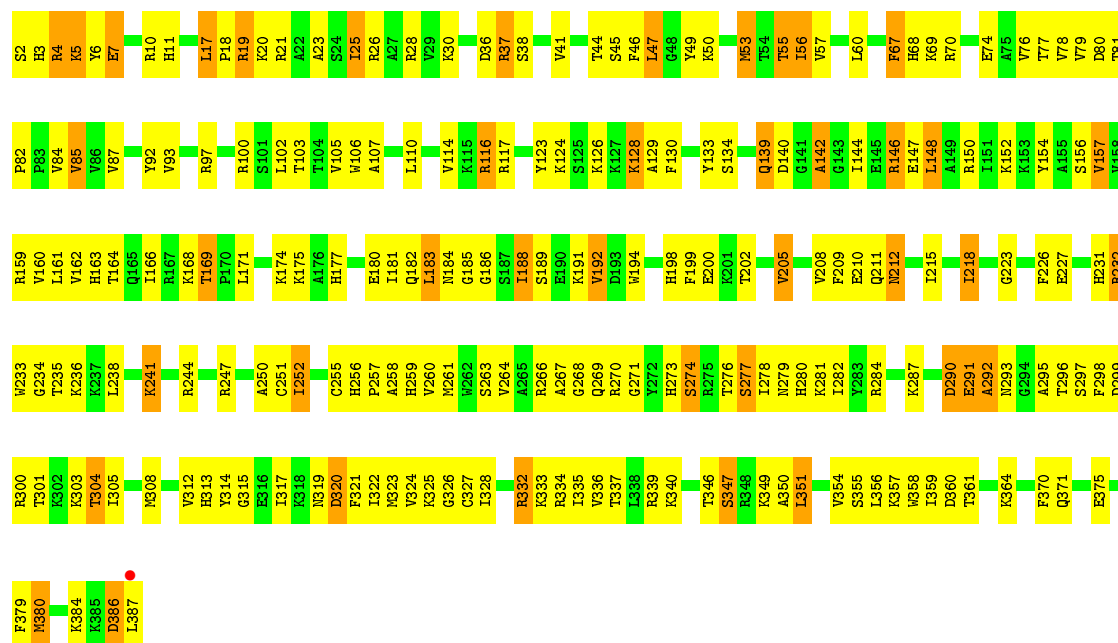


- Molecule 39: 60S ribosomal protein L2-A



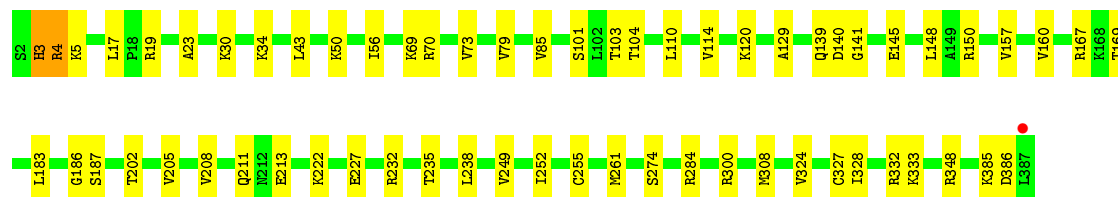
- Molecule 40: 60S ribosomal protein L3





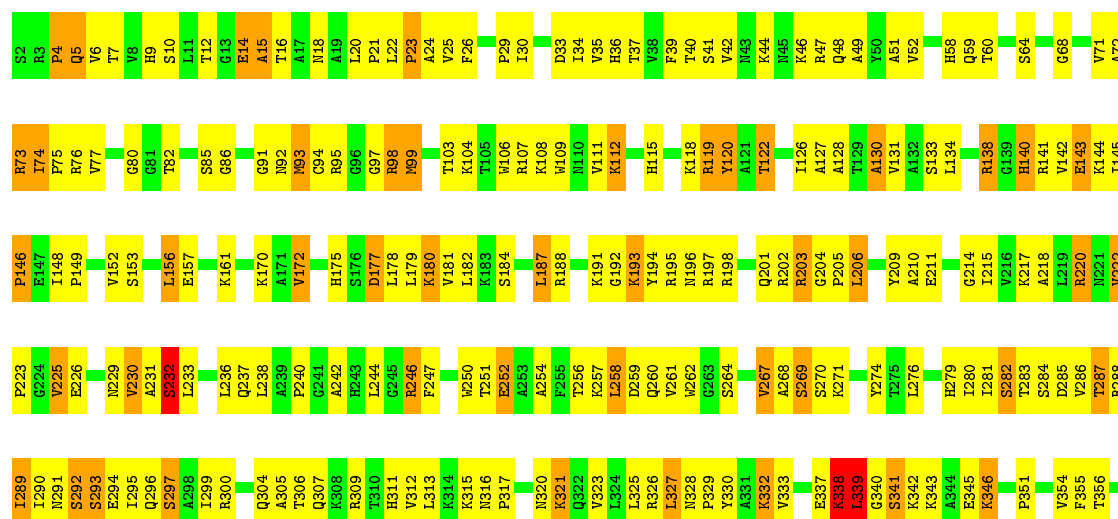
- Molecule 40: 60S ribosomal protein L3

Chain 13: 84% 16%



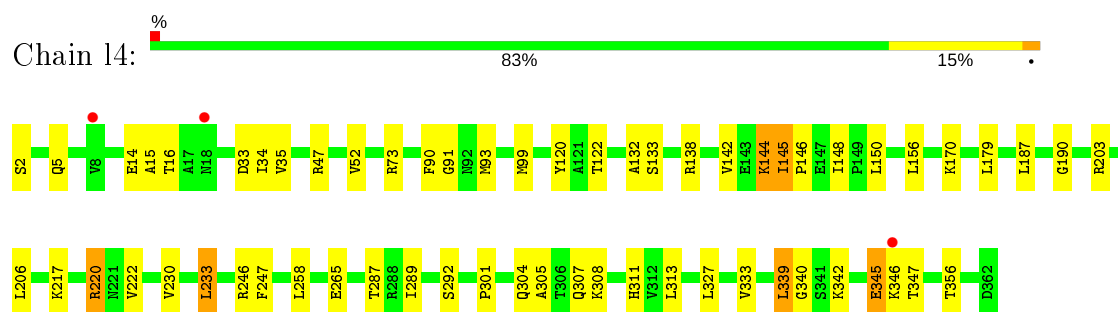
- Molecule 41: 60S ribosomal protein L4-A

Chain L4: 39% 47% 13%

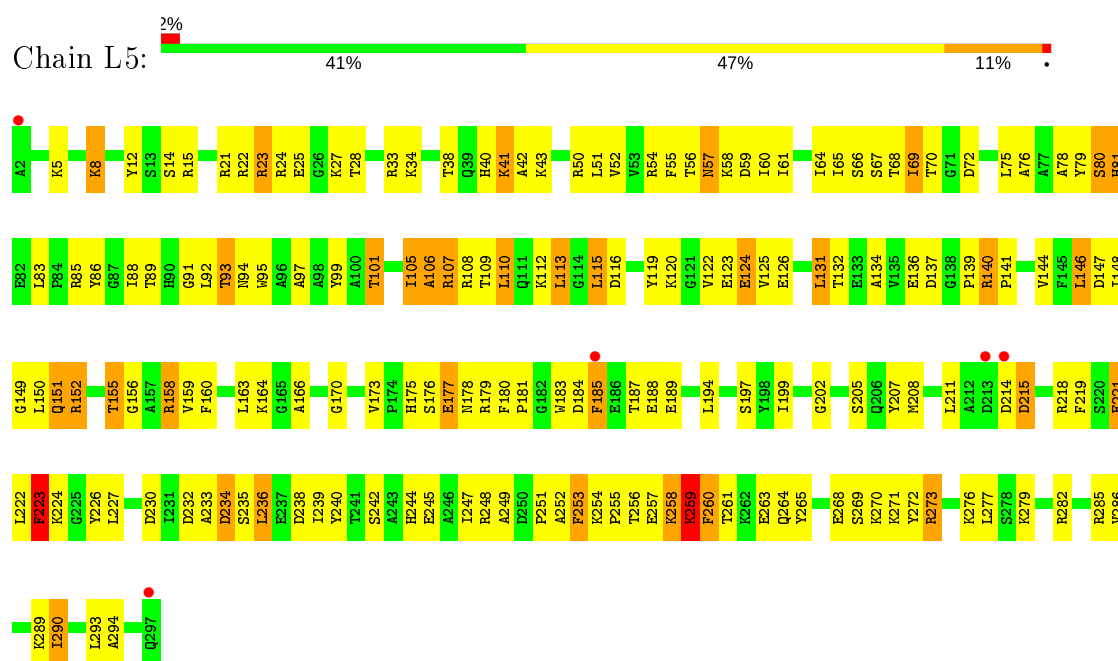


D362

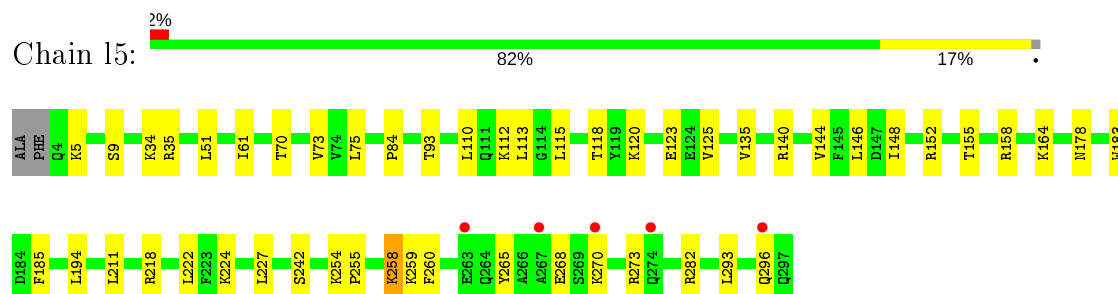
- Molecule 41: 60S ribosomal protein L4-A



- Molecule 42: 60S ribosomal protein L5

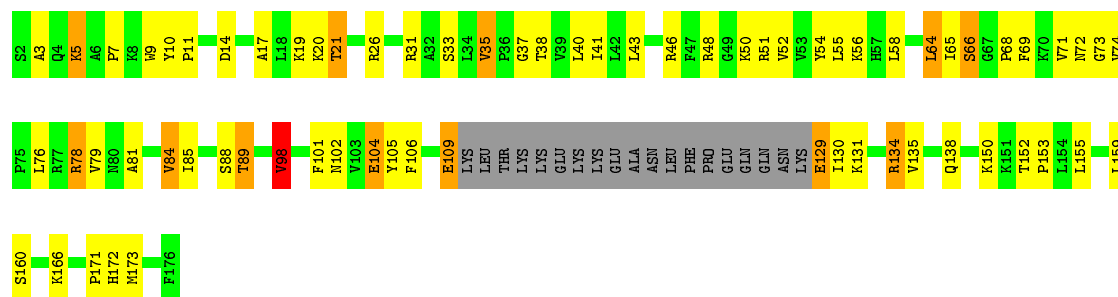


- Molecule 42: 60S ribosomal protein L5

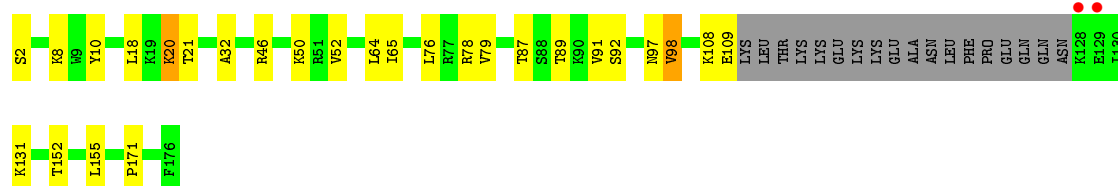
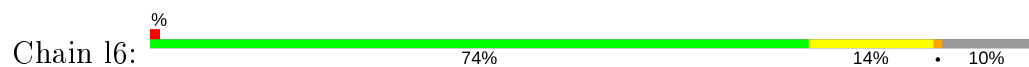


- Molecule 43: 60S ribosomal protein L6-A

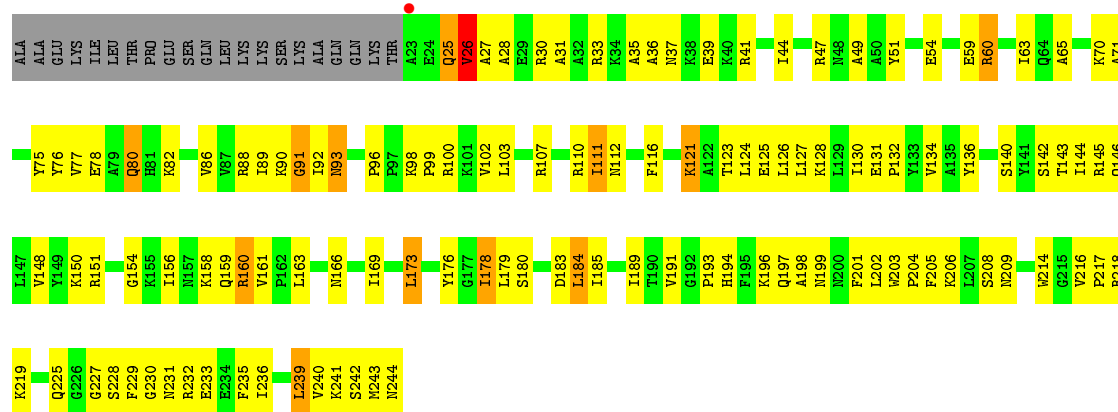




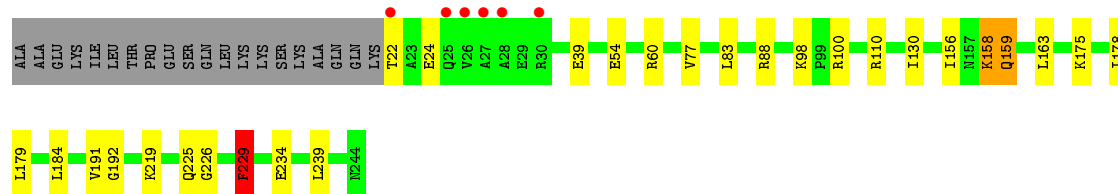
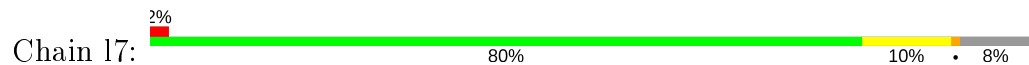
- Molecule 43: 60S ribosomal protein L6-A



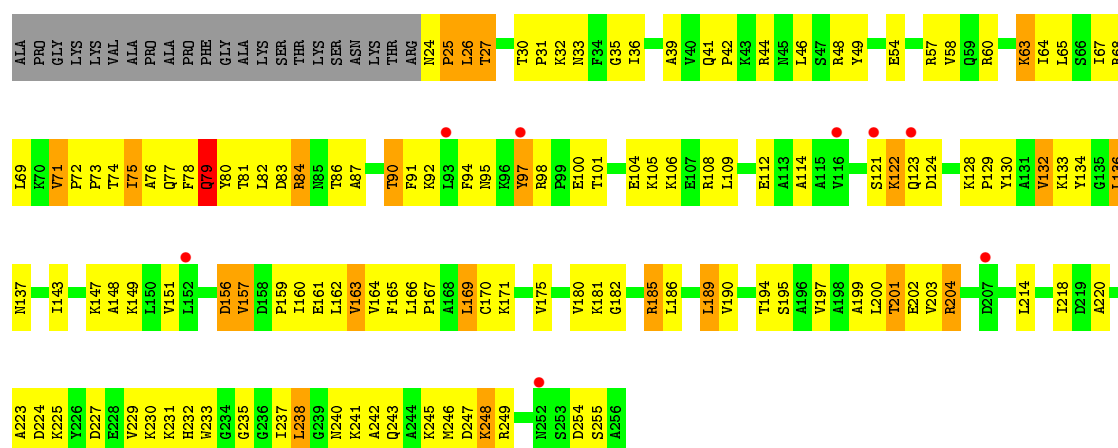
- Molecule 44: 60S ribosomal protein L7-A



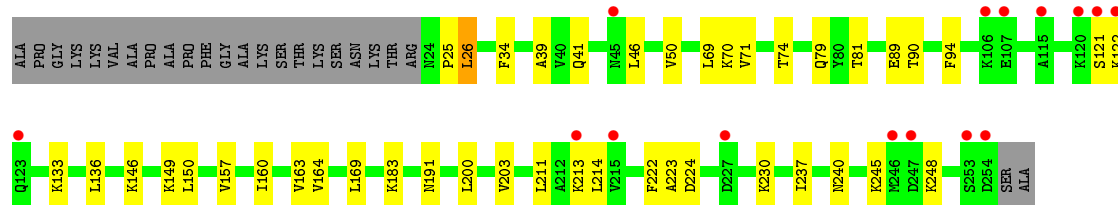
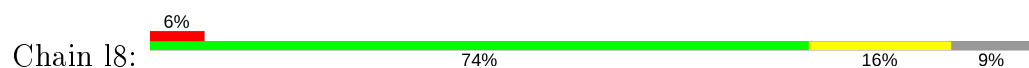
- Molecule 44: 60S ribosomal protein L7-A



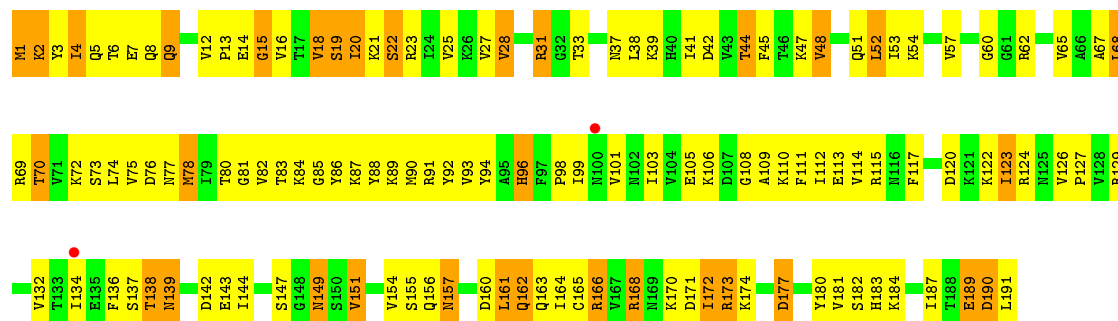
- Molecule 45: 60S ribosomal protein L8-A



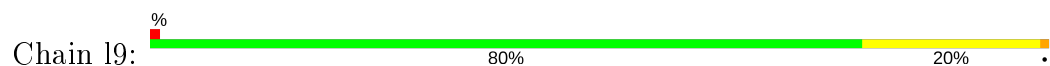
• Molecule 45: 60S ribosomal protein L8-A



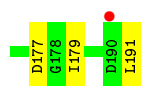
• Molecule 46: 60S ribosomal protein L9-A



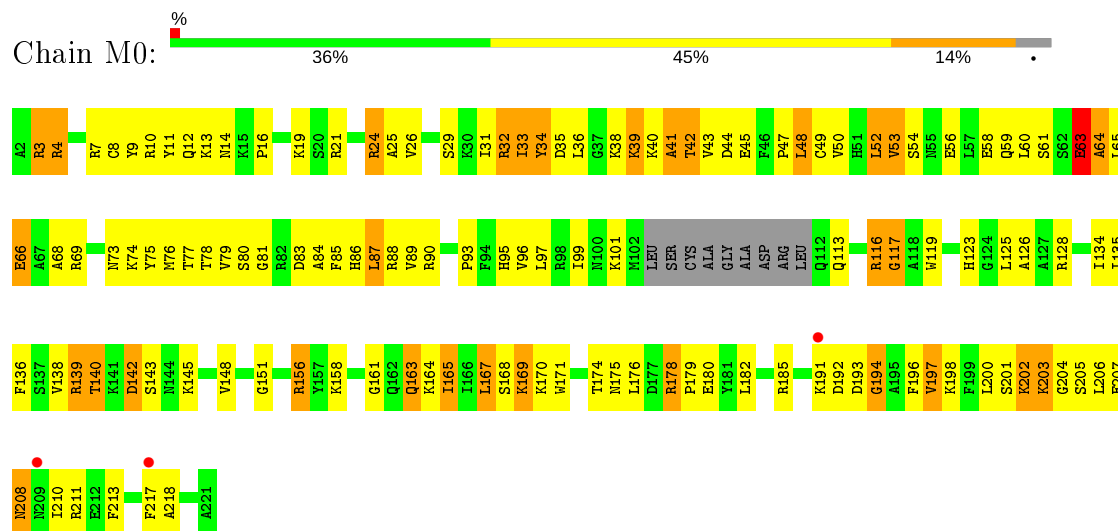
• Molecule 46: 60S ribosomal protein L9-A



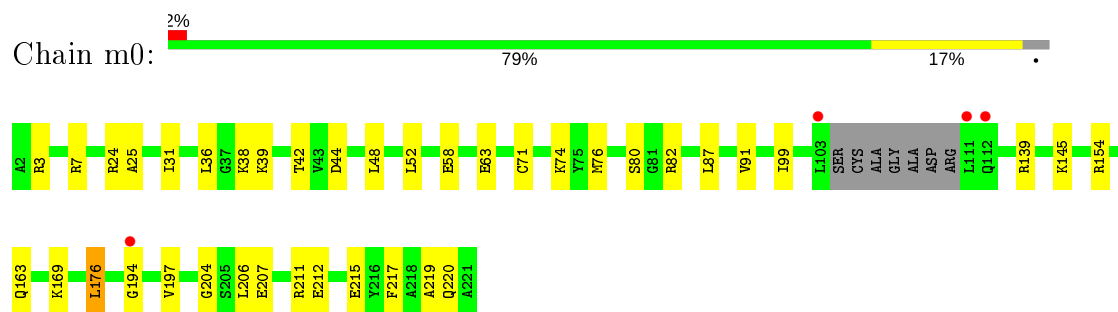




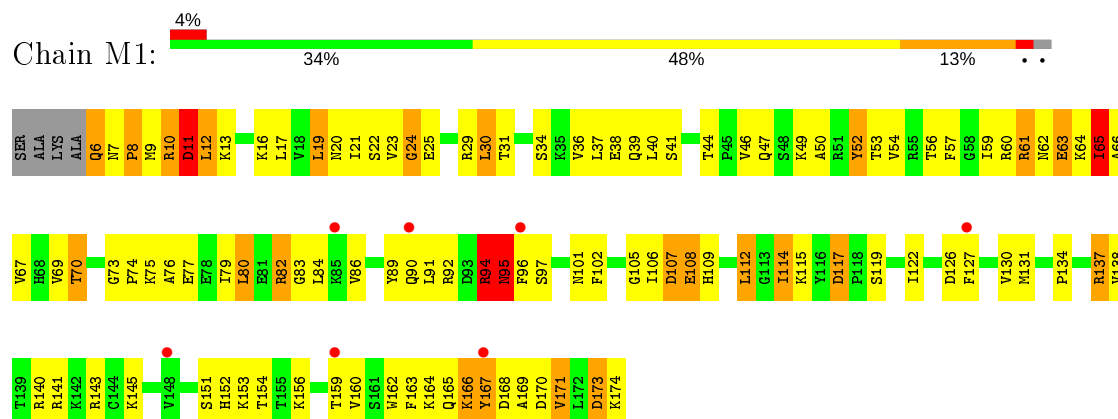
- Molecule 47: 60S ribosomal protein L10



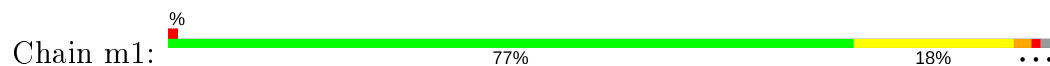
- Molecule 47: 60S ribosomal protein L10



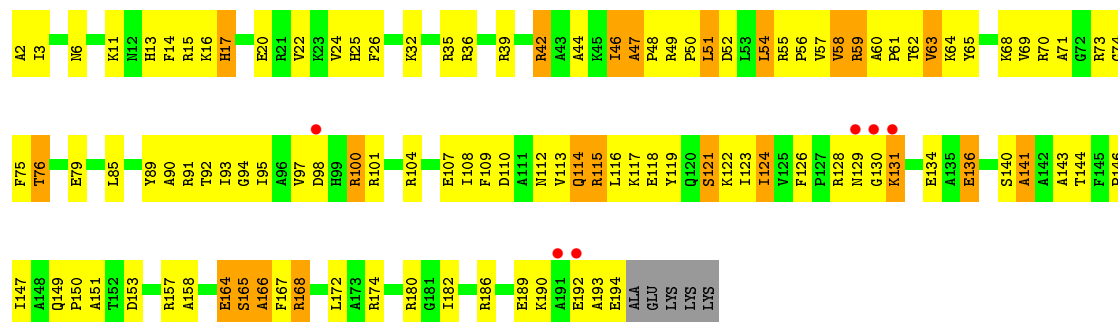
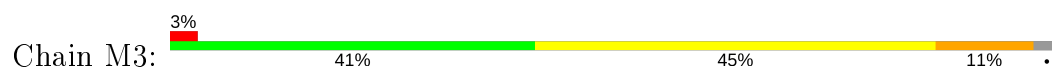
- Molecule 48: 60S ribosomal protein L11-A



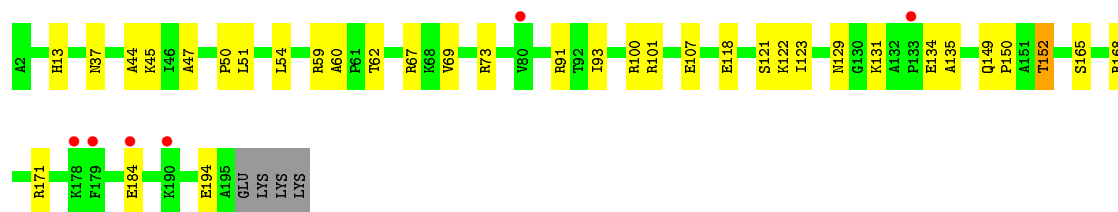
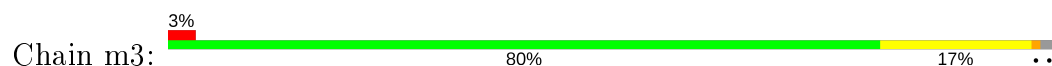
- Molecule 48: 60S ribosomal protein L11-A



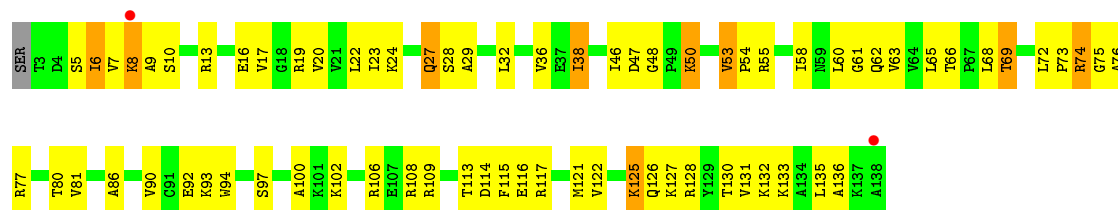
- Molecule 49: 60S ribosomal protein L13-A



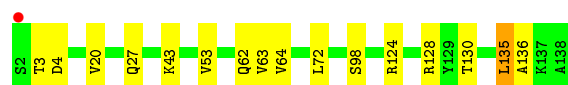
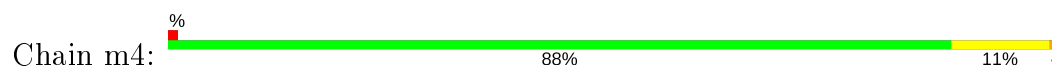
- Molecule 49: 60S ribosomal protein L13-A



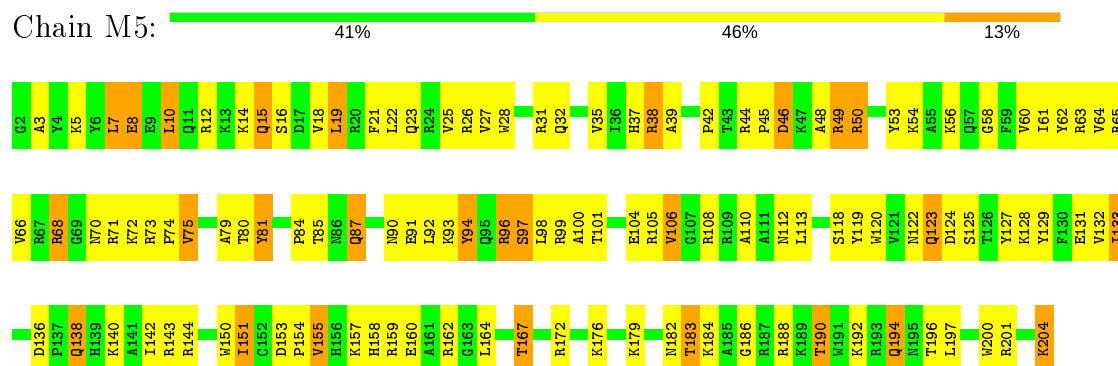
- Molecule 50: 60S ribosomal protein L14-A



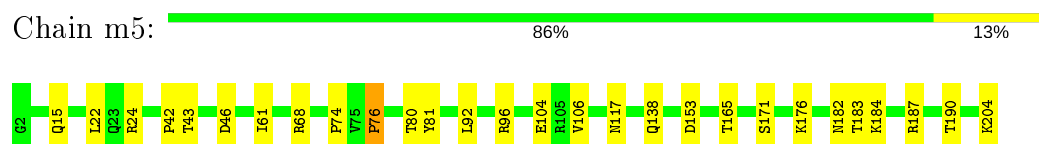
- Molecule 50: 60S ribosomal protein L14-A



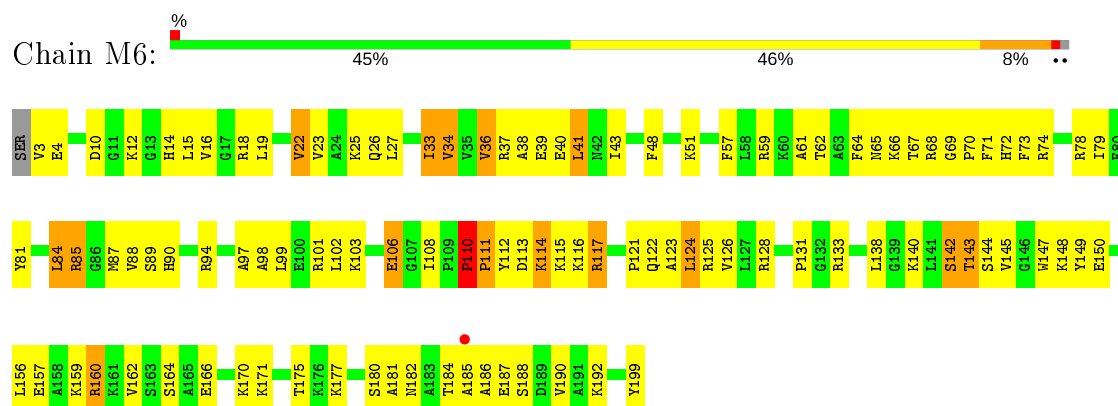
- Molecule 51: 60S ribosomal protein L15-A



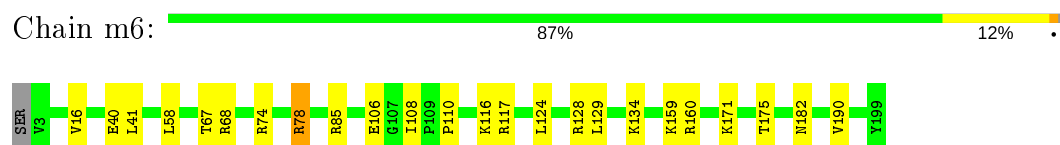
- Molecule 51: 60S ribosomal protein L15-A



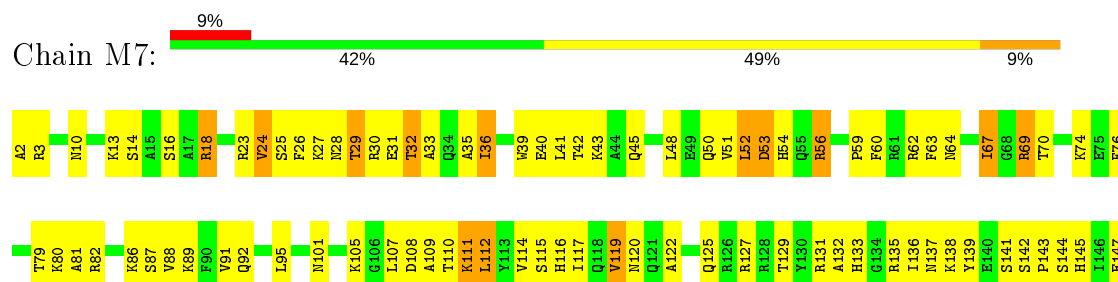
- Molecule 52: 60S ribosomal protein L16-A

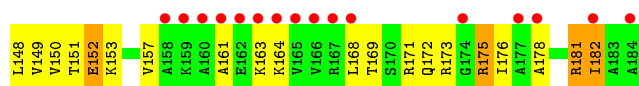


- Molecule 52: 60S ribosomal protein L16-A

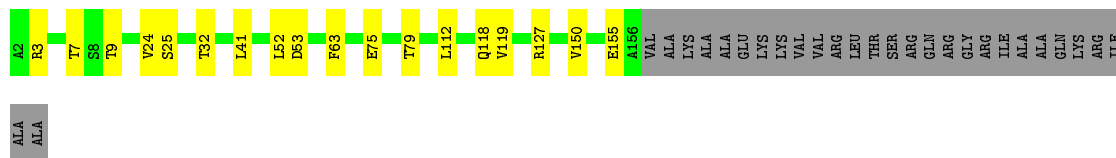


- Molecule 53: 60S ribosomal protein L17-A

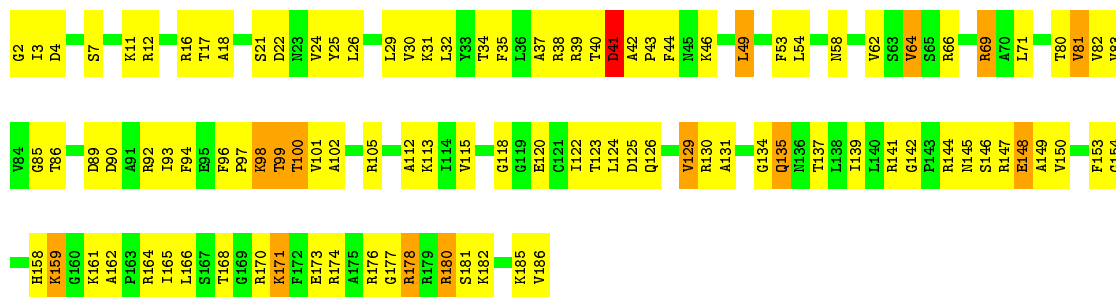




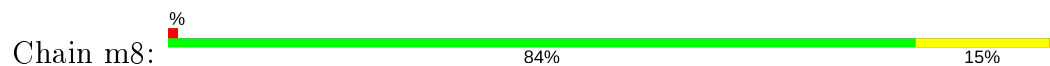
- Molecule 53: 60S ribosomal protein L17-A



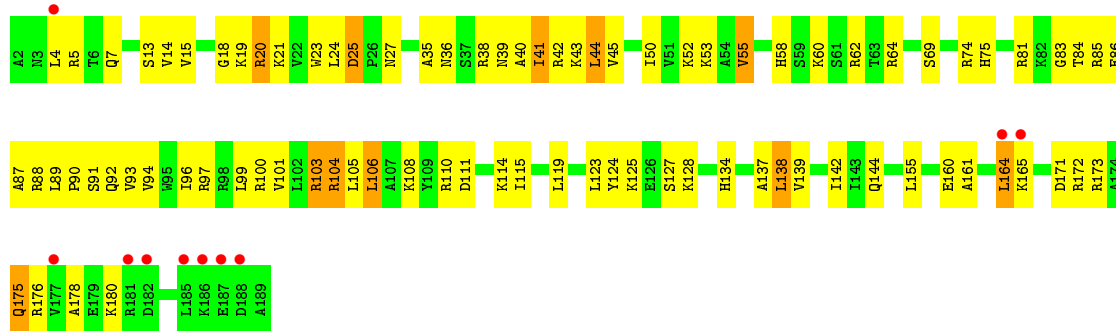
- Molecule 54: 60S ribosomal protein L18-A



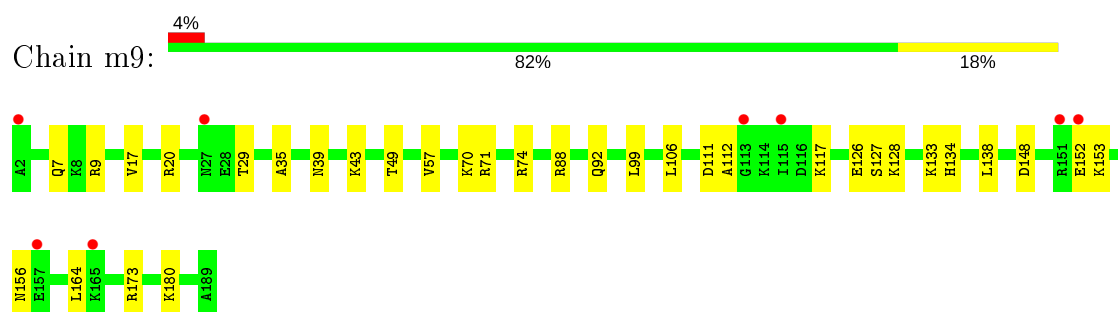
- Molecule 54: 60S ribosomal protein L18-A



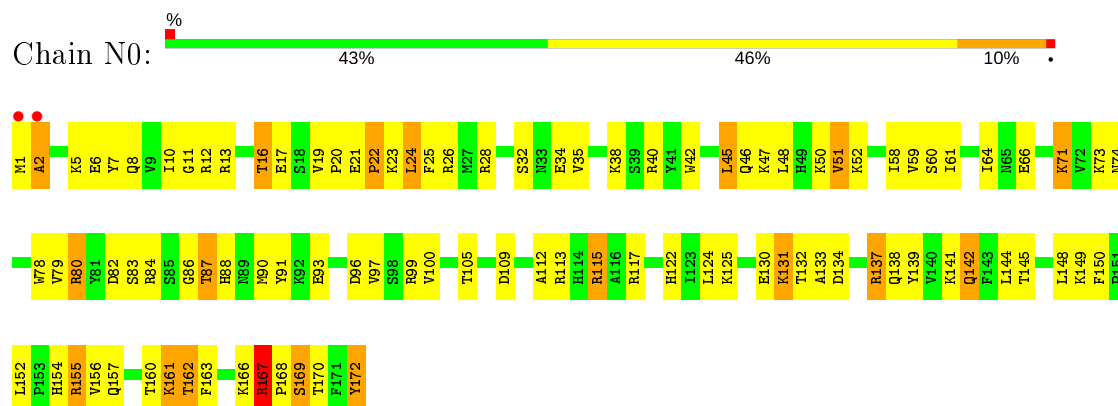
- Molecule 55: 60S ribosomal protein L19-A



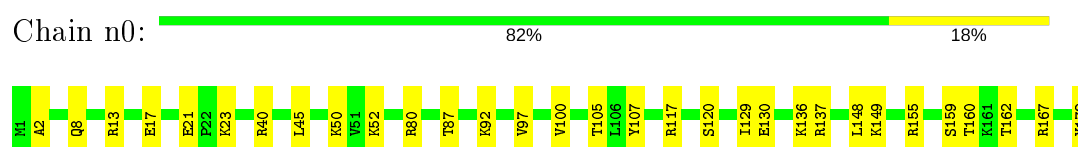
- Molecule 55: 60S ribosomal protein L19-A



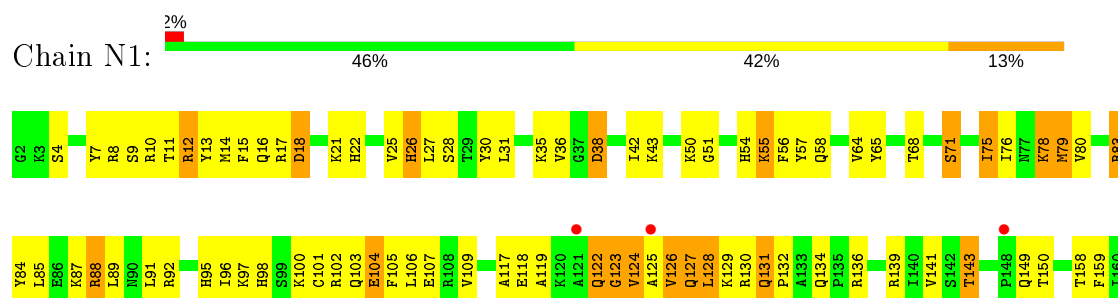
- Molecule 56: 60S ribosomal protein L20-A



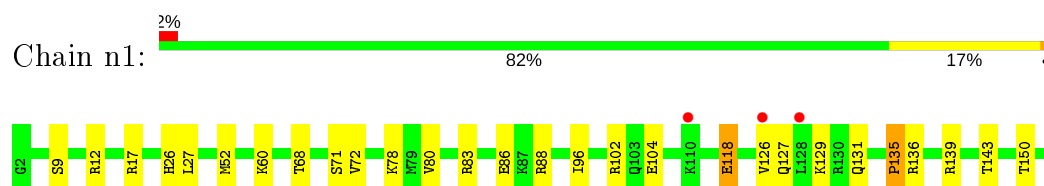
- Molecule 56: 60S ribosomal protein L20-A



- Molecule 57: 60S ribosomal protein L21-A



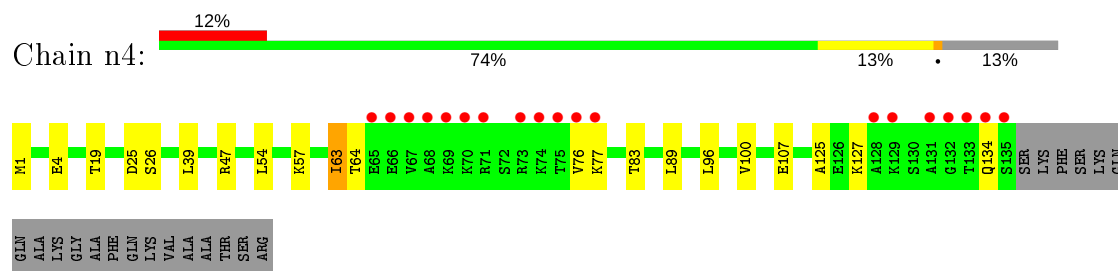
- Molecule 57: 60S ribosomal protein L21-A



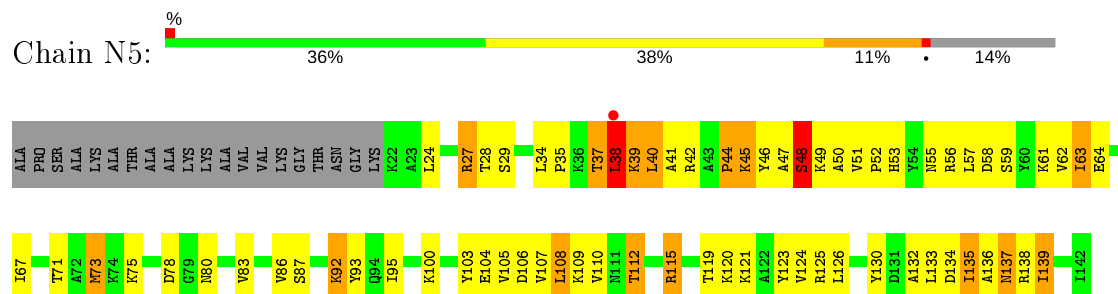
- Molecule 58: 60S ribosomal protein L22-A



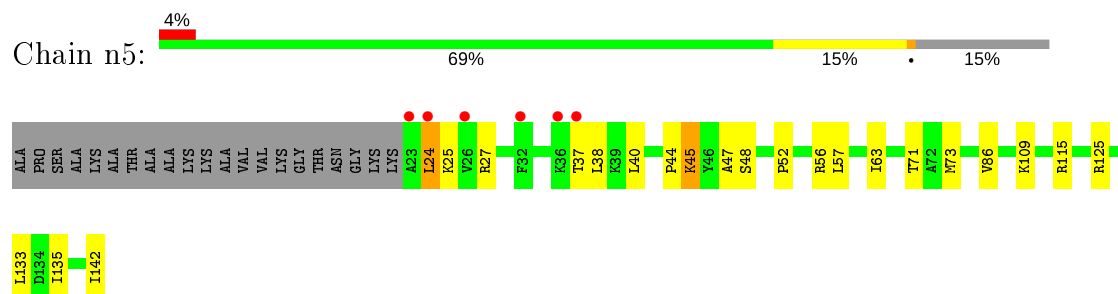
- Molecule 60: 60S ribosomal protein L24-A



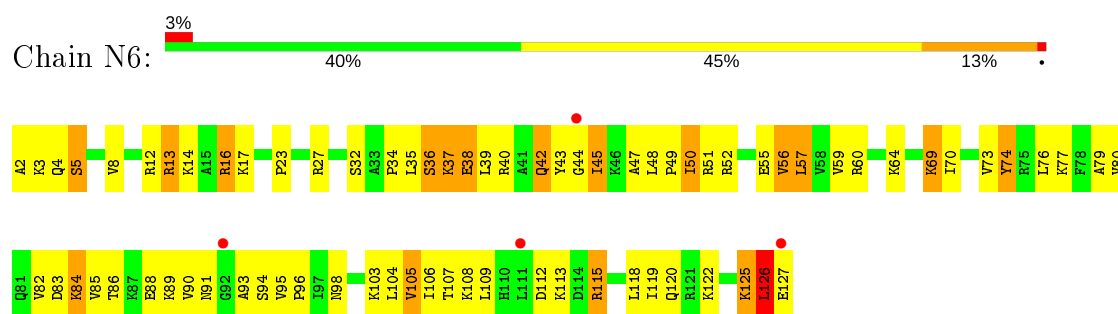
- Molecule 61: 60S ribosomal protein L25



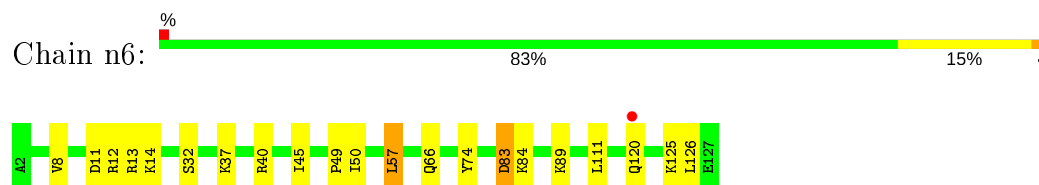
- Molecule 61: 60S ribosomal protein L25



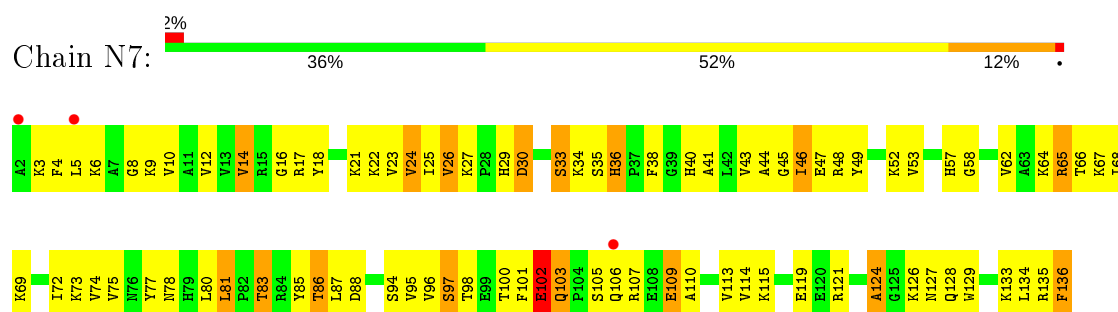
- Molecule 62: 60S ribosomal protein L26-A



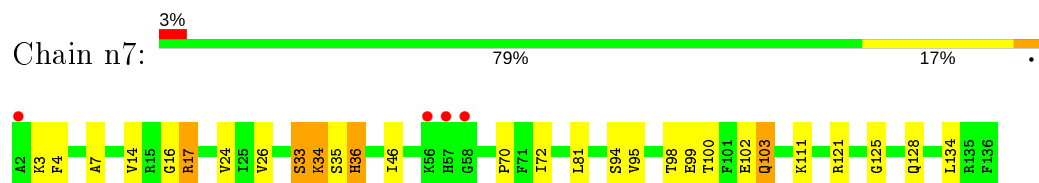
- Molecule 62: 60S ribosomal protein L26-A



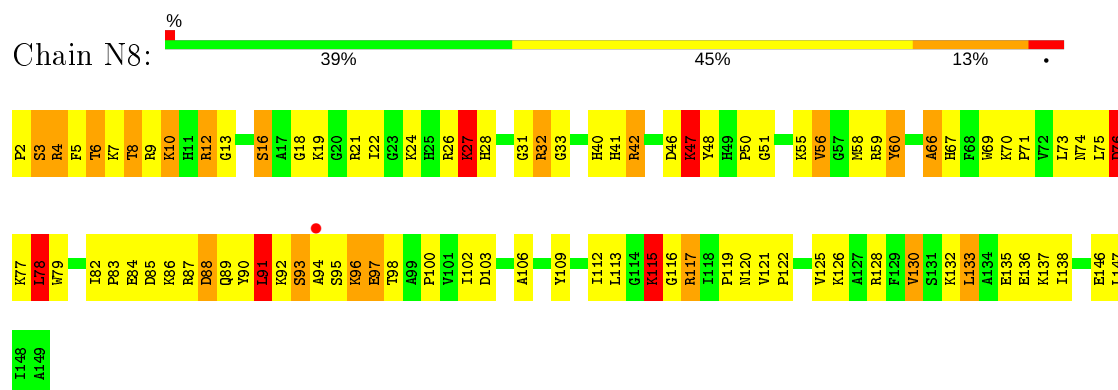
- Molecule 63: 60S ribosomal protein L27-A



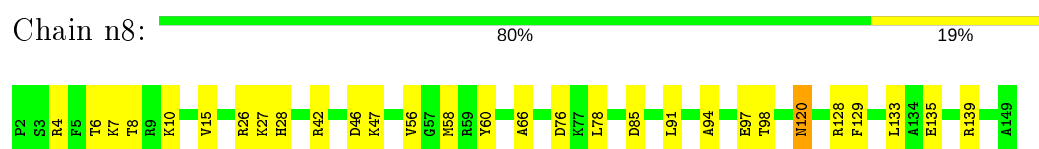
- Molecule 63: 60S ribosomal protein L27-A



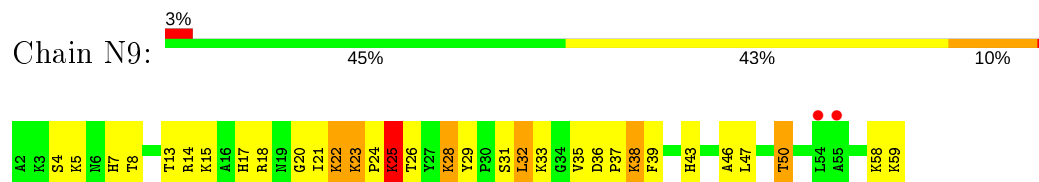
- Molecule 64: 60S ribosomal protein L28



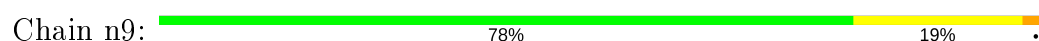
- Molecule 64: 60S ribosomal protein L28



- Molecule 65: 60S ribosomal protein L29



- Molecule 65: 60S ribosomal protein L29



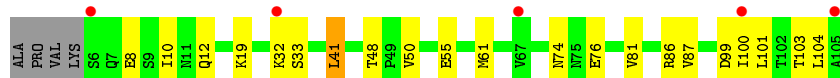




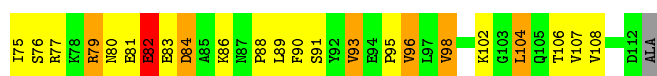
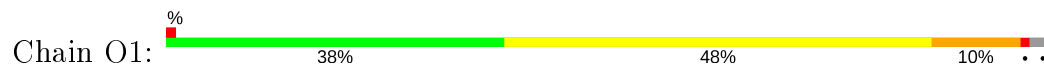
- Molecule 66: 60S ribosomal protein L30



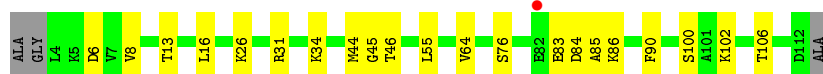
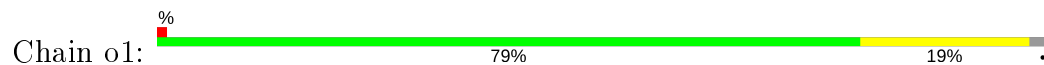
- Molecule 66: 60S ribosomal protein L30



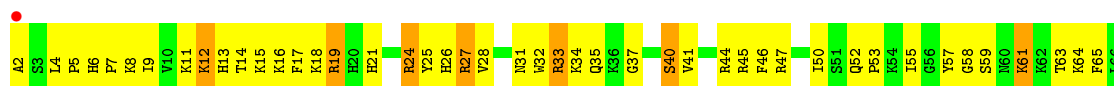
- Molecule 67: 60S ribosomal protein L31-A



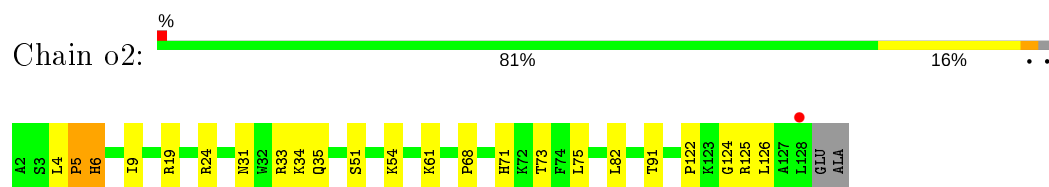
- Molecule 67: 60S ribosomal protein L31-A



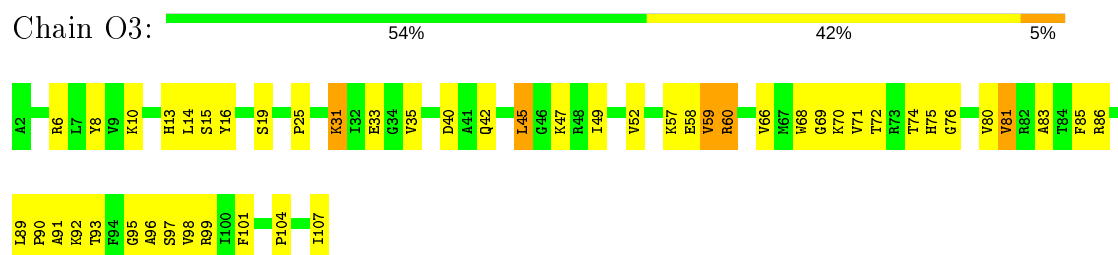
- Molecule 68: 60S ribosomal protein L32



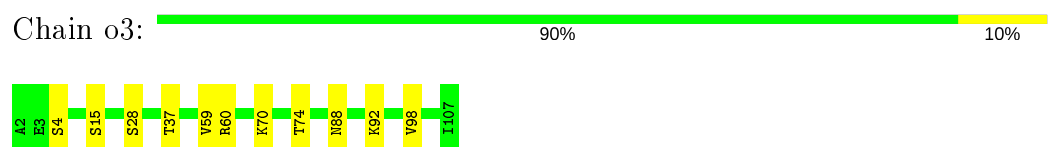
- Molecule 68: 60S ribosomal protein L32



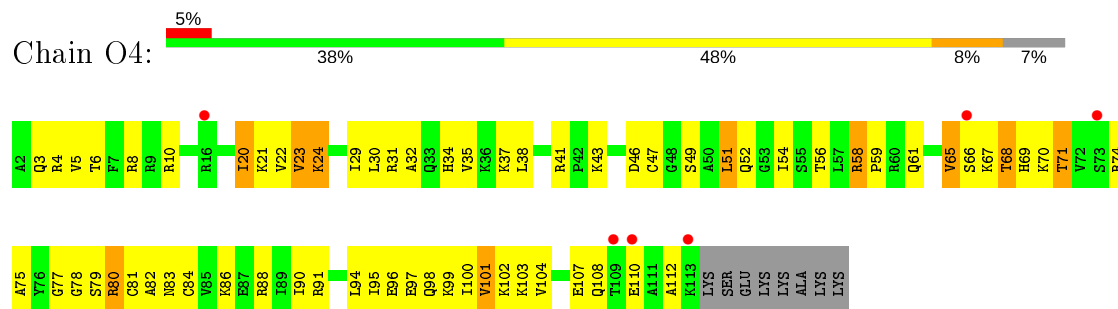
- Molecule 69: 60S ribosomal protein L33-A



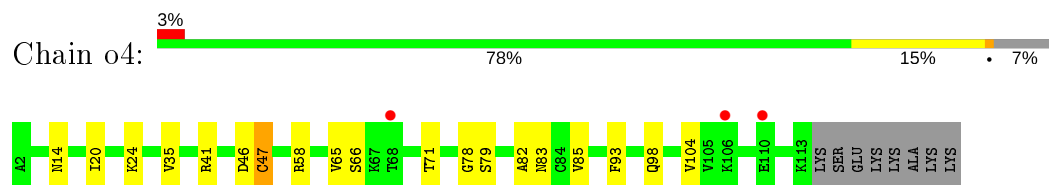
- Molecule 69: 60S ribosomal protein L33-A



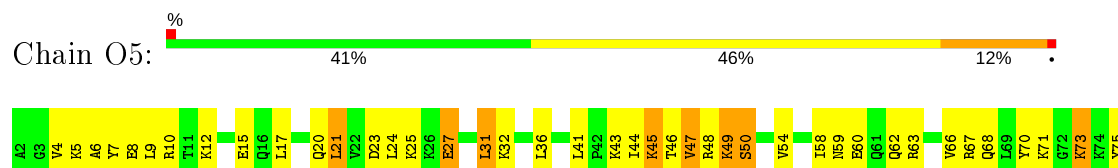
- Molecule 70: 60S ribosomal protein L34-A



- Molecule 70: 60S ribosomal protein L34-A

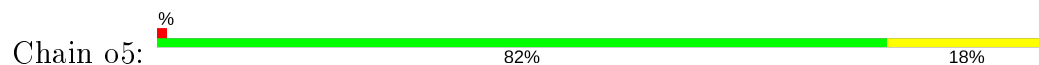


- Molecule 71: 60S ribosomal protein L35-A

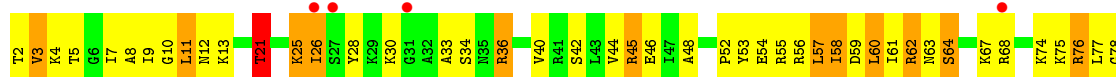




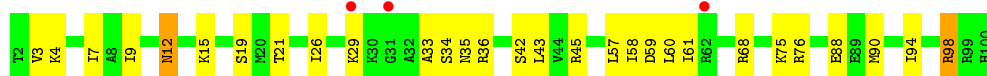
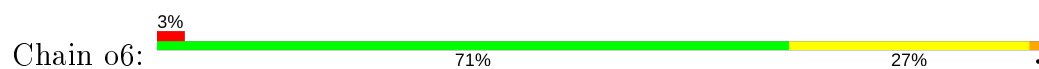
- Molecule 71: 60S ribosomal protein L35-A



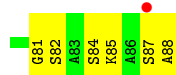
- Molecule 72: 60S ribosomal protein L36-A



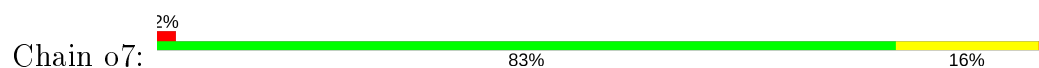
- Molecule 72: 60S ribosomal protein L36-A



- Molecule 73: 60S ribosomal protein L37-A

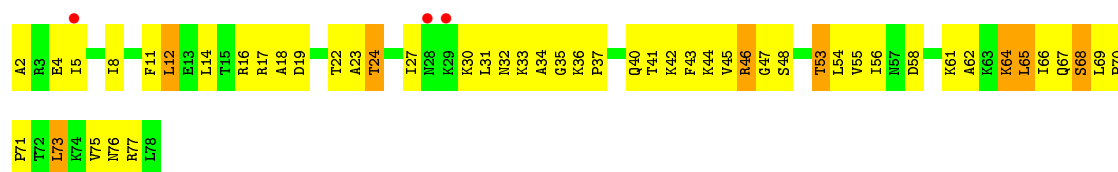


- Molecule 73: 60S ribosomal protein L37-A

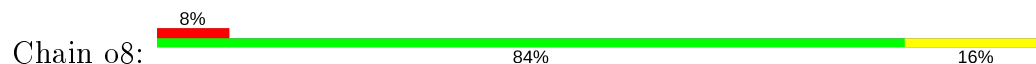


- Molecule 74: 60S ribosomal protein L38





- Molecule 74: 60S ribosomal protein L38



- Molecule 75: 60S ribosomal protein L39



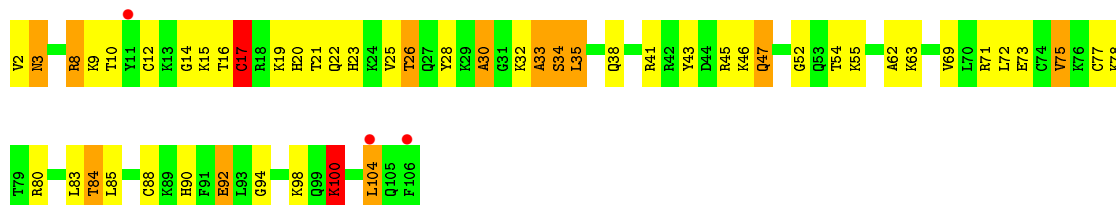
- Molecule 77: 60S ribosomal protein L41-A

Chain q1:  68% 32%




- Molecule 78: 60S ribosomal protein L42-A

Chain Q2:  3% 50% 36% 11%



- Molecule 78: 60S ribosomal protein L42-A

Chain q2:  4% 84% 16%




- Molecule 79: 60S ribosomal protein L43-A

Chain Q3:  33% 55% 12%



- Molecule 79: 60S ribosomal protein L43-A

Chain q3:  86% 11%

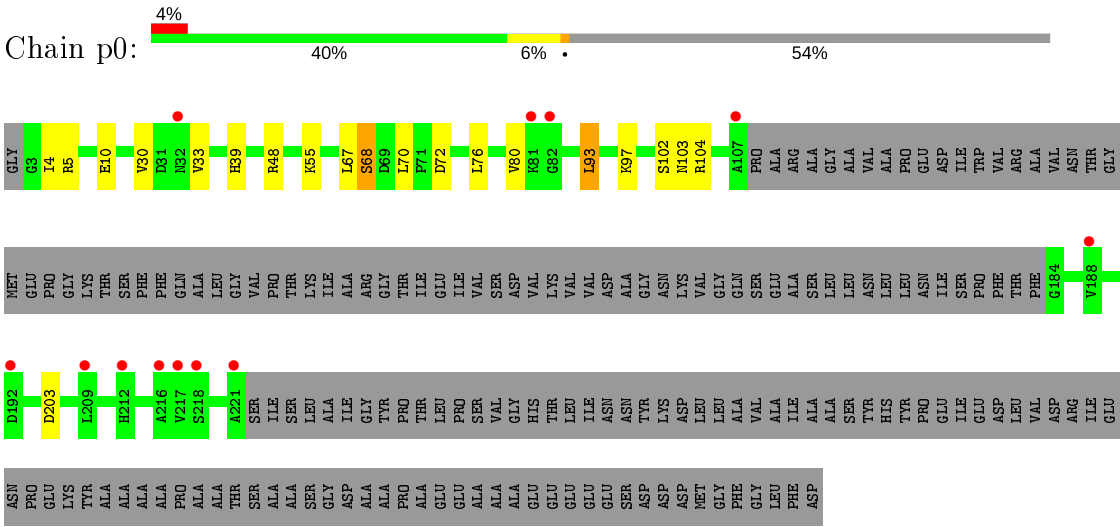


- Molecule 80: 60S ribosomal protein L12-A (uL11)

Chain m2:  100%

There are no outlier residues recorded for this chain.

- Molecule 81: 60S acidic ribosomal protein P0



• Molecule 82: 60S ribosomal protein P1 alpha



There are no outlier residues recorded for this chain.

• Molecule 83: 60S ribosomal protein P2 beta



There are no outlier residues recorded for this chain.

## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	436.11Å 287.31Å 303.99Å 90.00° 98.86° 90.00°	Depositor
Resolution (Å)	49.96 – 3.10 49.96 – 3.10	Depositor EDS
% Data completeness (in resolution range)	99.9 (49.96-3.10) 89.6 (49.96-3.10)	Depositor EDS
$R_{merge}$	0.39	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	0.84 (at 3.12Å)	Xtriage
Refinement program	PHENIX	Depositor
R, $R_{free}$	0.234 , 0.291 0.243 , 0.288	Depositor DCC
$R_{free}$ test set	26664 reflections (2.00%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	63.6	Xtriage
Anisotropy	0.067	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.27 , 51.8	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.47$ , $\langle L^2 \rangle = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
$F_o, F_c$ correlation	0.88	EDS
Total number of atoms	410912	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	70.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.43% 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, 0.333 respectively for untwinned datasets, and 0.375, 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: ANM, 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	0.50	0/42468	1.01	74/66173 (0.1%)
1	6	0.60	0/42790	1.06	102/66673 (0.2%)
2	S0	0.35	0/1617	0.56	0/2215
2	s0	0.34	0/1653	0.55	0/2261
3	S1	0.32	0/1735	0.59	0/2335
3	s1	0.36	0/1748	0.58	0/2352
4	S2	0.37	0/1665	0.57	0/2263
4	s2	0.42	0/1665	0.62	0/2263
5	S3	0.37	0/1759	0.55	0/2368
5	s3	0.33	0/1759	0.52	0/2368
6	S4	0.36	0/2109	0.59	0/2839
6	s4	0.39	0/2109	0.61	0/2839
7	S5	0.33	0/1629	0.55	0/2202
7	s5	0.33	0/1629	0.55	0/2202
8	S6	0.38	0/1823	0.55	0/2439
8	s6	0.39	0/1779	0.56	0/2379
9	S7	0.34	0/1506	0.57	0/2028
9	s7	0.34	0/1517	0.58	0/2044
10	S8	0.38	0/1514	0.59	1/2021 (0.0%)
10	s8	0.43	0/1514	0.58	0/2021
11	S9	0.36	0/1519	0.56	0/2035
11	s9	0.39	0/1519	0.57	0/2035
12	C0	0.34	0/730	0.52	0/985
12	c0	0.29	0/718	0.53	1/968 (0.1%)
13	C1	0.43	0/1195	0.57	0/1612
13	c1	0.44	0/1195	0.60	0/1612
14	C2	0.34	0/898	0.55	0/1220
14	c2	0.25	0/898	0.50	0/1220
15	C3	0.36	0/1215	0.57	1/1638 (0.1%)
15	c3	0.38	0/1215	0.58	0/1638
16	C4	0.30	0/901	0.56	0/1217
16	c4	0.39	0/960	0.62	0/1290



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	C5	0.34	0/998	0.57	0/1341
17	c5	0.38	0/1060	0.59	0/1426
18	C6	0.36	0/1125	0.62	3/1510 (0.2%)
18	c6	0.35	0/1131	0.57	0/1518
19	C7	0.37	0/935	0.60	0/1254
19	c7	0.31	0/953	0.53	0/1275
20	C8	0.36	0/1211	0.55	0/1628
20	c8	0.36	0/1211	0.58	0/1628
21	C9	0.33	0/1130	0.52	0/1517
21	c9	0.35	0/1130	0.55	0/1517
22	D0	0.36	0/865	0.57	0/1169
22	d0	0.36	0/892	0.58	0/1205
23	D1	0.36	0/693	0.54	0/935
23	d1	0.35	0/693	0.50	0/935
24	D2	0.37	0/1038	0.63	3/1395 (0.2%)
24	d2	0.44	0/1038	0.62	1/1395 (0.1%)
25	D3	0.44	0/1139	0.64	0/1518
25	d3	0.49	0/1139	0.66	1/1518 (0.1%)
26	D4	0.37	0/1087	0.55	0/1449
26	d4	0.40	0/1087	0.61	0/1449
27	D5	0.33	0/571	0.60	0/768
27	d5	0.33	0/566	0.54	0/761
28	D6	0.36	0/782	0.57	0/1047
28	d6	0.47	0/782	0.58	0/1047
29	D7	0.35	0/620	0.58	0/838
29	d7	0.36	0/620	0.56	0/838
30	D8	0.32	0/499	0.53	0/670
30	d8	0.34	0/499	0.54	0/670
31	D9	0.36	0/452	0.58	1/600 (0.2%)
31	d9	0.36	0/453	0.53	0/602
32	E0	0.37	0/483	0.54	0/643
32	e0	0.39	0/499	0.62	0/665
33	E1	0.35	0/577	0.61	0/770
33	e1	0.34	0/619	0.65	0/822
34	SR	0.31	0/2490	0.52	0/3389
34	sR	0.29	0/2498	0.49	0/3398
35	SM	0.38	0/984	0.56	0/1323
35	sM	0.40	0/480	0.60	0/642
36	1	0.78	3/75394 (0.0%)	1.21	317/117545 (0.3%)
36	5	0.82	7/75418 (0.0%)	1.21	316/117583 (0.3%)
37	3	0.65	0/2883	1.03	1/4491 (0.0%)
37	7	0.79	0/2883	1.20	8/4491 (0.2%)
38	4	0.73	0/3746	1.15	8/5832 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
38	8	0.68	0/3746	1.12	4/5832 (0.1%)
39	L2	0.50	0/1948	0.66	0/2617
39	l2	0.48	0/1952	0.69	2/2622 (0.1%)
40	L3	0.52	0/3136	0.64	0/4213
40	l3	0.59	1/3142 (0.0%)	0.68	1/4224 (0.0%)
41	L4	0.55	1/2800 (0.0%)	0.72	1/3790 (0.0%)
41	l4	0.53	0/2801	0.69	2/3792 (0.1%)
42	L5	0.43	0/2425	0.61	0/3271
42	l5	0.53	0/2408	0.65	0/3248
43	L6	0.53	0/1260	0.64	0/1694
43	l6	0.49	0/1269	0.62	0/1705
44	L7	0.53	0/1821	0.66	0/2451
44	l7	0.58	0/1828	0.70	1/2461 (0.0%)
45	L8	0.42	0/1836	0.60	0/2481
45	l8	0.40	0/1795	0.56	0/2429
46	L9	0.47	0/1539	0.59	0/2073
46	l9	0.54	0/1539	0.64	0/2073
47	M0	0.54	0/1741	0.66	0/2335
47	m0	0.55	0/1769	0.68	0/2372
48	M1	0.39	0/1374	0.59	0/1842
48	m1	0.47	0/1374	0.68	2/1842 (0.1%)
49	M3	0.51	0/1568	0.67	1/2106 (0.0%)
49	m3	0.47	0/1573	0.66	0/2113
50	M4	0.51	0/1068	0.64	0/1438
50	m4	0.53	0/1074	0.66	0/1446
51	M5	0.50	0/1757	0.64	0/2354
51	m5	0.47	0/1757	0.63	0/2354
52	M6	0.55	0/1585	0.69	1/2128 (0.0%)
52	m6	0.68	1/1585 (0.1%)	0.74	2/2128 (0.1%)
53	M7	0.53	0/1443	0.67	0/1944
53	m7	0.59	0/1250	0.69	0/1683
54	M8	0.51	0/1465	0.68	1/1965 (0.1%)
54	m8	0.53	0/1465	0.72	1/1965 (0.1%)
55	M9	0.38	0/1538	0.56	0/2050
55	m9	0.43	0/1538	0.57	0/2050
56	N0	0.55	0/1481	0.65	0/1990
56	n0	0.58	0/1481	0.70	0/1990
57	N1	0.56	0/1300	0.67	0/1743
57	n1	0.60	0/1300	0.62	0/1743
58	N2	0.36	0/812	0.54	0/1099
58	n2	0.39	0/794	0.60	0/1076
59	N3	0.53	0/1018	0.64	0/1369
59	n3	0.60	0/1018	0.74	0/1369

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
60	N4	0.42	0/712	0.57	0/958
60	n4	0.47	0/1103	0.60	0/1458
61	N5	0.44	0/979	0.64	1/1321 (0.1%)
61	n5	0.46	0/974	0.64	0/1314
62	N6	0.51	0/1004	0.69	0/1341
62	n6	0.45	0/1004	0.65	1/1341 (0.1%)
63	N7	0.40	0/1118	0.58	0/1497
63	n7	0.36	0/1118	0.53	0/1497
64	N8	0.54	0/1204	0.71	0/1612
64	n8	0.55	0/1204	0.71	0/1612
65	N9	0.48	0/473	0.68	1/629 (0.2%)
65	n9	0.54	0/473	0.82	1/629 (0.2%)
66	O0	0.38	0/751	0.51	0/1008
66	o0	0.40	0/775	0.58	1/1040 (0.1%)
67	O1	0.43	0/890	0.58	0/1196
67	o1	0.52	0/904	0.63	0/1213
68	O2	0.53	0/1041	0.67	0/1394
68	o2	0.57	0/1041	0.66	0/1394
69	O3	0.59	0/868	0.63	0/1168
69	o3	0.60	0/868	0.69	0/1168
70	O4	0.43	0/890	0.61	1/1189 (0.1%)
70	o4	0.43	0/891	0.63	0/1191
71	O5	0.49	0/978	0.64	0/1301
71	o5	0.42	0/978	0.54	0/1301
72	O6	0.46	0/778	0.62	0/1034
72	o6	0.43	0/778	0.58	0/1034
73	O7	0.57	0/696	0.70	1/923 (0.1%)
73	o7	0.49	0/696	0.66	0/923
74	O8	0.39	0/618	0.57	0/826
74	o8	0.34	0/618	0.50	0/826
75	O9	0.55	0/443	0.72	0/588
75	o9	0.47	0/443	0.66	0/588
76	Q0	0.52	0/423	0.69	0/562
76	q0	0.64	0/423	0.74	0/562
77	Q1	0.43	0/234	0.60	0/300
77	q1	0.49	0/234	0.71	0/300
78	Q2	0.65	1/860 (0.1%)	0.72	0/1136
78	q2	0.58	1/860 (0.1%)	0.69	1/1136 (0.1%)
79	Q3	0.52	0/701	0.66	0/934
79	q3	0.52	0/701	0.66	0/934
81	p0	0.34	0/1092	0.52	0/1474
All	All	0.62	15/430516 (0.0%)	0.98	865/632094 (0.1%)

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
7	s5	0	1
9	S7	0	1
17	c5	0	1
19	C7	0	1
26	d4	0	1
27	D5	0	1
28	D6	0	1
44	l7	0	2
52	M6	0	1
56	N0	0	2
59	n3	0	1
64	n8	0	1
79	q3	0	1
All	All	0	15

All (15) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	Q2	17	CYS	CB-SG	11.25	2.01	1.82
36	5	1152	G	N9-C4	-9.21	1.30	1.38
78	q2	17	CYS	CB-SG	8.36	1.96	1.82
36	5	1152	G	N3-C4	-6.38	1.30	1.35
36	5	2941	A	N9-C4	-6.19	1.34	1.37
36	5	1143	A	N9-C4	-5.83	1.34	1.37
36	1	2147	A	N9-C4	-5.68	1.34	1.37
36	1	2401	A	N3-C4	5.48	1.38	1.34
40	l3	255	CYS	CB-SG	-5.45	1.73	1.81
41	L4	94	CYS	CB-SG	-5.31	1.73	1.81
36	5	2358	A	N9-C4	-5.29	1.34	1.37
36	1	2971	A	N9-C4	5.27	1.41	1.37
36	5	1152	G	C2-N3	-5.24	1.28	1.32
52	m6	40	GLU	CG-CD	5.15	1.59	1.51
36	5	2769	A	N9-C4	-5.02	1.34	1.37

All (865) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	N3-C4-N9	-17.27	115.64	126.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	N3-C4-C5	16.41	136.81	128.60
36	5	1152	G	C2-N3-C4	-11.50	106.15	111.90
36	1	2617	U	N3-C2-O2	-10.99	114.51	122.20
36	5	1307	G	P-O3'-C3'	10.06	131.77	119.70
36	5	2617	U	O5'-P-OP2	-9.54	97.11	105.70
36	1	2996	U	C2-N1-C1'	9.16	128.69	117.70
36	5	1152	G	C8-N9-C1'	9.15	138.89	127.00
1	6	163	G	N3-C4-N9	-9.11	120.54	126.00
36	5	2728	G	O5'-P-OP2	-9.04	97.57	105.70
1	6	1	U	C2-N1-C1'	8.98	128.47	117.70
36	1	2622	C	C6-N1-C2	-8.89	116.74	120.30
36	1	3278	C	N1-C2-O2	8.88	124.23	118.90
1	6	1000	C	C2-N1-C1'	8.84	128.52	118.80
36	1	3217	C	C2-N1-C1'	8.59	128.25	118.80
36	5	406	G	O4'-C1'-N9	8.54	115.03	108.20
36	1	3278	C	N3-C2-O2	-8.49	115.96	121.90
1	6	453	U	C2-N1-C1'	8.49	127.89	117.70
36	1	2419	A	O5'-P-OP1	-8.48	98.07	105.70
36	5	2572	C	N1-C2-O2	8.44	123.96	118.90
36	5	1152	G	N3-C2-N2	-8.39	114.03	119.90
38	4	125	U	N1-C2-O2	8.39	128.67	122.80
36	5	1152	G	C5-N7-C8	-8.38	100.11	104.30
36	5	2272	G	O4'-C1'-N9	8.36	114.89	108.20
36	5	3276	G	O4'-C1'-N9	8.36	114.89	108.20
1	6	321	C	N3-C2-O2	-8.30	116.09	121.90
36	5	948	C	C6-N1-C2	8.28	123.61	120.30
36	5	2726	C	C6-N1-C2	-8.26	117.00	120.30
36	5	922	U	N3-C2-O2	-8.19	116.47	122.20
36	5	3154	C	N1-C2-O2	8.16	123.80	118.90
36	1	2572	C	N1-C2-O2	8.13	123.78	118.90
36	1	2403	G	N1-C6-O6	8.11	124.76	119.90
36	1	406	G	O4'-C1'-N9	8.07	114.65	108.20
1	6	1537	C	C5-C6-N1	8.06	125.03	121.00
36	5	1152	G	C4-N9-C1'	-7.99	116.11	126.50
1	6	194	U	C2-N1-C1'	7.95	127.24	117.70
36	1	2572	C	C2-N1-C1'	7.95	127.54	118.80
36	5	3245	A	C2-N3-C4	-7.93	106.63	110.60
36	5	3245	A	C5-N7-C8	-7.90	99.95	103.90
1	2	639	U	N3-C2-O2	-7.76	116.77	122.20
36	1	2726	C	N3-C2-O2	-7.74	116.48	121.90
36	5	283	G	C4-C5-N7	7.74	113.90	110.80
36	1	2617	U	C5-C4-O4	7.72	130.53	125.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	641	C	N1-C2-O2	-7.71	114.28	118.90
1	2	1096	C	C2-N1-C1'	7.69	127.26	118.80
36	5	3197	G	N3-C4-N9	-7.67	121.40	126.00
36	5	2816	G	C8-N9-C4	7.67	109.47	106.40
1	6	1537	C	C2-N3-C4	7.66	123.73	119.90
36	5	835	G	O4'-C1'-N9	7.65	114.32	108.20
36	5	2351	U	N3-C2-O2	-7.62	116.86	122.20
36	1	639	G	N1-C6-O6	7.60	124.46	119.90
36	5	3197	G	N3-C2-N2	-7.60	114.58	119.90
36	1	590	G	C5-C6-O6	-7.59	124.04	128.60
36	1	1365	G	N3-C4-C5	-7.59	124.80	128.60
36	1	1846	C	N1-C2-O2	-7.57	114.36	118.90
1	2	1052	U	C2-N1-C1'	7.55	126.76	117.70
48	m1	112	LEU	CA-CB-CG	7.53	132.61	115.30
36	5	2572	C	C2-N1-C1'	7.50	127.05	118.80
36	1	1365	G	C8-N9-C4	-7.47	103.41	106.40
36	1	1565	G	C8-N9-C4	-7.46	103.42	106.40
36	1	1904	C	C6-N1-C2	-7.45	117.32	120.30
36	5	2341	A	C8-N9-C4	7.42	108.77	105.80
36	5	3154	C	C2-N1-C1'	7.42	126.96	118.80
36	5	1208	U	N3-C2-O2	-7.39	117.03	122.20
36	1	2403	G	C5-C6-O6	-7.37	124.18	128.60
36	1	2870	C	C2-N1-C1'	-7.33	110.74	118.80
1	2	1537	C	C5-C6-N1	7.30	124.65	121.00
36	1	406	G	N1-C6-O6	-7.28	115.53	119.90
38	4	125	U	N3-C2-O2	-7.28	117.10	122.20
36	1	692	A	O5'-P-OP1	-7.27	99.15	105.70
36	5	708	G	C8-N9-C4	-7.26	103.49	106.40
36	5	639	G	N1-C6-O6	7.26	124.26	119.90
36	5	1208	U	C5-C4-O4	7.25	130.25	125.90
36	1	1389	G	C4-C5-N7	7.23	113.69	110.80
36	1	2314	U	C5-C6-N1	7.22	126.31	122.70
36	5	2726	C	C5-C4-N4	7.22	125.25	120.20
36	5	2874	G	P-O3'-C3'	7.21	128.35	119.70
36	1	1581	C	N1-C2-O2	7.20	123.22	118.90
18	C6	40	GLU	C-N-CD	-7.19	104.79	120.60
36	1	3319	U	P-O3'-C3'	7.17	128.31	119.70
36	1	2401	A	C2-N3-C4	-7.17	107.01	110.60
36	5	3245	A	N7-C8-N9	7.15	117.38	113.80
36	1	638	C	N1-C2-O2	7.10	123.16	118.90
1	2	728	U	C2-N1-C1'	7.06	126.17	117.70
36	1	2363	A	N1-C6-N6	-7.02	114.39	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	639	U	N1-C2-O2	7.00	127.70	122.80
36	1	2629	U	O5'-P-OP2	-7.00	99.40	105.70
1	2	73	U	O4'-C1'-N1	7.00	113.80	108.20
36	5	2701	U	C5-C4-O4	-7.00	121.70	125.90
36	1	1508	C	C6-N1-C2	-6.98	117.51	120.30
36	5	2704	A	O5'-P-OP1	-6.98	99.42	105.70
36	5	3012	A	C8-N9-C4	6.98	108.59	105.80
38	4	99	C	C6-N1-C2	6.95	123.08	120.30
36	5	987	U	O5'-P-OP1	-6.95	99.44	105.70
36	1	1269	U	C2-N1-C1'	6.92	126.00	117.70
36	5	2572	C	N3-C2-O2	-6.91	117.06	121.90
1	6	321	C	C6-N1-C2	-6.91	117.54	120.30
36	5	361	A	N1-C6-N6	-6.91	114.46	118.60
36	1	3306	U	N3-C2-O2	-6.90	117.37	122.20
78	q2	17	CYS	CA-CB-SG	6.90	126.42	114.00
36	1	2872	A	N1-C6-N6	6.89	122.74	118.60
36	1	2885	C	C6-N1-C2	6.88	123.05	120.30
1	6	1097	U	P-O3'-C3'	6.88	127.95	119.70
36	5	2231	C	C2-N1-C1'	6.86	126.34	118.80
1	6	1114	G	O4'-C1'-N9	6.86	113.69	108.20
36	5	1060	U	C6-N1-C2	6.85	125.11	121.00
36	5	2334	U	N3-C2-O2	-6.84	117.41	122.20
36	5	1495	U	C2-N1-C1'	6.84	125.91	117.70
1	6	194	U	N1-C2-O2	6.84	127.59	122.80
36	1	421	G	O5'-P-OP1	-6.82	99.56	105.70
1	2	959	U	N3-C2-O2	-6.82	117.42	122.20
1	6	1000	C	C6-N1-C1'	-6.82	112.62	120.80
1	2	830	U	N3-C2-O2	-6.81	117.43	122.20
36	5	3214	U	N3-C2-O2	-6.80	117.44	122.20
36	1	3362	A	O4'-C1'-N9	6.80	113.64	108.20
36	5	3092	C	O4'-C1'-N1	6.79	113.63	108.20
1	2	1096	C	N1-C2-O2	6.78	122.97	118.90
1	6	795	U	N3-C2-O2	-6.77	117.46	122.20
1	6	321	C	N1-C2-O2	6.74	122.94	118.90
36	1	2550	U	N3-C2-O2	-6.74	117.49	122.20
1	2	1039	A	O4'-C1'-N9	6.73	113.58	108.20
1	6	813	U	C2-N1-C1'	6.73	125.78	117.70
36	1	939	U	N1-C2-O2	-6.72	118.10	122.80
36	1	959	C	C6-N1-C2	6.71	122.98	120.30
36	5	1210	U	O5'-P-OP1	-6.70	99.67	105.70
36	1	2996	U	N1-C2-O2	6.69	127.48	122.80
1	2	1370	U	P-O3'-C3'	6.69	127.73	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1094	U	OP1-P-O3'	6.68	119.90	105.20
36	1	1495	U	C2-N1-C1'	-6.67	109.69	117.70
36	5	2644	C	O5'-P-OP1	-6.67	99.69	105.70
36	5	2726	C	N3-C2-O2	-6.67	117.23	121.90
36	5	921	A	C8-N9-C4	-6.67	103.13	105.80
36	1	92	G	C5-C6-N1	6.67	114.83	111.50
1	6	1	U	N1-C2-O2	6.65	127.46	122.80
1	2	728	U	N1-C2-O2	6.64	127.45	122.80
36	1	2572	C	N3-C2-O2	-6.63	117.26	121.90
1	2	75	U	C2-N1-C1'	6.62	125.65	117.70
36	1	402	A	N1-C6-N6	-6.62	114.63	118.60
36	1	282	G	O5'-P-OP1	-6.62	99.74	105.70
65	n9	23	LYS	C-N-CD	6.62	142.30	128.40
36	1	770	G	O4'-C1'-N9	6.61	113.49	108.20
36	1	3181	C	N3-C2-O2	-6.61	117.27	121.90
1	6	194	U	N3-C2-O2	-6.60	117.58	122.20
36	5	2403	G	O5'-P-OP2	-6.60	99.76	105.70
36	5	2978	U	O4'-C1'-N1	6.59	113.47	108.20
36	5	1308	A	O5'-P-OP1	-6.59	99.77	105.70
1	2	1698	G	P-O3'-C3'	6.58	127.60	119.70
36	1	1380	G	N3-C4-C5	6.56	131.88	128.60
36	5	2403	G	N1-C6-O6	6.56	123.84	119.90
38	4	125	U	C2-N1-C1'	6.54	125.55	117.70
36	5	1856	C	C6-N1-C2	-6.54	117.68	120.30
52	m6	78	ARG	NE-CZ-NH1	6.53	123.57	120.30
1	2	728	U	N3-C2-O2	-6.52	117.64	122.20
31	D9	36	LEU	CA-CB-CG	6.52	130.30	115.30
36	5	1878	G	C4-N9-C1'	6.51	134.96	126.50
1	2	1600	A	O4'-C1'-N9	6.51	113.41	108.20
1	2	959	U	N1-C2-O2	6.50	127.35	122.80
1	2	831	U	C5-C6-N1	6.49	125.94	122.70
40	l3	4	ARG	NE-CZ-NH1	6.47	123.54	120.30
36	1	3306	U	C5-C4-O4	6.47	129.78	125.90
36	1	439	C	N1-C2-O2	6.47	122.78	118.90
36	1	702	C	C6-N1-C2	-6.47	117.71	120.30
1	6	163	G	N3-C2-N2	-6.47	115.37	119.90
36	1	646	A	C8-N9-C4	-6.46	103.21	105.80
36	1	2983	C	N3-C2-O2	-6.46	117.38	121.90
36	1	2827	U	C5-C4-O4	6.44	129.77	125.90
36	5	1208	U	N3-C4-O4	-6.44	114.89	119.40
36	1	1495	U	N1-C2-O2	-6.44	118.29	122.80
44	17	229	PHE	CB-CG-CD1	6.44	125.31	120.80

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2306	C	N1-C2-O2	6.44	122.76	118.90
36	1	874	U	O5'-P-OP1	-6.43	99.91	105.70
36	1	2306	C	C2-N1-C1'	6.43	125.87	118.80
36	5	908	G	C4-N9-C1'	6.43	134.85	126.50
36	5	1115	G	C4-N9-C1'	6.42	134.85	126.50
36	1	2144	A	O4'-C1'-N9	6.42	113.33	108.20
36	1	65	A	P-O3'-C3'	6.41	127.40	119.70
36	1	1368	U	O5'-P-OP1	-6.41	99.93	105.70
36	5	1321	G	N1-C6-O6	6.40	123.74	119.90
36	1	3344	A	N7-C8-N9	6.40	117.00	113.80
36	5	2710	C	N1-C2-O2	-6.40	115.06	118.90
36	1	2872	A	C6-C5-N7	-6.39	127.83	132.30
1	6	610	G	C8-N9-C1'	-6.38	118.70	127.00
1	2	553	G	N1-C6-O6	6.38	123.73	119.90
36	1	2996	U	C6-N1-C1'	-6.38	112.27	121.20
36	1	1484	U	P-O3'-C3'	6.37	127.34	119.70
36	1	1904	C	C5-C6-N1	6.36	124.18	121.00
36	1	2298	U	C5-C4-O4	6.36	129.72	125.90
36	5	2231	C	O4'-C1'-N1	6.35	113.28	108.20
36	5	3050	U	C5-C4-O4	6.35	129.71	125.90
36	1	1849	C	O5'-P-OP1	-6.34	100.00	105.70
36	1	2714	G	C2-N3-C4	-6.33	108.73	111.90
36	1	3217	C	N3-C2-O2	-6.33	117.47	121.90
36	1	1820	U	P-O3'-C3'	6.31	127.27	119.70
24	d2	93	LEU	CA-CB-CG	6.31	129.81	115.30
36	1	890	C	C6-N1-C2	-6.31	117.78	120.30
36	5	1878	G	C8-N9-C1'	-6.31	118.80	127.00
36	1	2719	U	N1-C2-O2	-6.30	118.39	122.80
1	6	1773	C	N3-C4-C5	-6.29	119.38	121.90
36	1	2872	A	N7-C8-N9	6.29	116.94	113.80
36	1	3208	G	N3-C4-C5	-6.28	125.46	128.60
36	1	979	U	C6-N1-C2	-6.28	117.23	121.00
36	5	3310	A	N1-C6-N6	-6.28	114.83	118.60
36	1	3277	U	N3-C2-O2	-6.27	117.81	122.20
36	5	646	A	C8-N9-C4	-6.26	103.29	105.80
1	6	1	U	C5-C6-N1	6.26	125.83	122.70
36	1	2138	A	C8-N9-C4	-6.26	103.30	105.80
1	6	858	G	O4'-C1'-N9	6.26	113.21	108.20
36	5	1116	G	N3-C4-C5	-6.26	125.47	128.60
36	1	2156	C	C6-N1-C2	6.25	122.80	120.30
36	1	2714	G	N3-C4-C5	6.25	131.73	128.60
1	6	1767	G	C8-N9-C4	6.25	108.90	106.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1114	U	N1-C2-O2	6.24	127.17	122.80
1	2	1537	C	C6-N1-C2	-6.23	117.81	120.30
1	2	1560	U	N3-C2-O2	-6.23	117.84	122.20
36	5	2283	G	O5'-P-OP2	-6.22	100.10	105.70
36	1	1901	A	N1-C6-N6	-6.22	114.87	118.60
36	1	2314	U	C2-N1-C1'	6.22	125.16	117.70
36	5	92	G	C5-C6-N1	6.21	114.61	111.50
36	5	3078	U	N3-C2-O2	-6.21	117.85	122.20
36	1	1153	A	O5'-P-OP1	-6.21	100.11	105.70
1	6	163	G	N9-C4-C5	6.21	107.88	105.40
1	6	610	G	C4-N9-C1'	6.20	134.56	126.50
36	5	2816	G	N7-C8-N9	-6.20	110.00	113.10
36	1	1881	A	C8-N9-C4	6.20	108.28	105.80
36	5	776	U	C5-C6-N1	-6.20	119.60	122.70
36	1	950	G	C4-C5-N7	6.19	113.28	110.80
36	1	2385	G	N3-C4-C5	6.18	131.69	128.60
36	1	2983	C	C4-C5-C6	6.18	120.49	117.40
1	6	1000	C	N3-C2-O2	-6.17	117.58	121.90
36	1	2393	G	N3-C2-N2	-6.17	115.58	119.90
36	1	1556	C	C6-N1-C2	-6.17	117.83	120.30
38	4	126	A	O5'-P-OP1	-6.17	100.15	105.70
1	2	1052	U	N1-C2-O2	6.16	127.11	122.80
36	5	2411	U	C5-C6-N1	-6.15	119.63	122.70
36	5	1420	C	C6-N1-C2	6.15	122.76	120.30
36	5	963	G	N3-C4-C5	-6.14	125.53	128.60
36	1	2444	C	C2-N1-C1'	6.14	125.55	118.80
36	5	2271	A	N1-C6-N6	-6.14	114.92	118.60
1	6	1	U	C6-N1-C1'	-6.13	112.61	121.20
1	2	1761	U	P-O3'-C3'	6.13	127.06	119.70
36	1	2621	G	N3-C2-N2	-6.13	115.61	119.90
36	5	1141	C	O5'-P-OP1	-6.13	100.18	105.70
1	2	1096	C	C6-N1-C1'	-6.13	113.45	120.80
36	1	2836	C	C4-C5-C6	6.12	120.46	117.40
1	6	1698	G	P-O3'-C3'	6.12	127.05	119.70
36	1	2571	U	N3-C2-O2	-6.12	117.92	122.20
36	5	35	A	O5'-P-OP2	-6.12	100.19	105.70
36	1	2426	U	C5-C4-O4	6.11	129.56	125.90
36	5	2281	A	O5'-P-OP2	-6.10	100.21	105.70
36	1	1351	U	C2-N1-C1'	6.10	125.02	117.70
36	5	3269	U	P-O3'-C3'	6.10	127.02	119.70
12	c0	83	PRO	N-CA-CB	6.10	110.61	103.30
36	5	1437	C	C6-N1-C2	-6.09	117.87	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3217	C	N1-C2-O2	6.08	122.55	118.90
1	6	453	U	N1-C2-O2	6.08	127.06	122.80
1	6	1748	G	C8-N9-C4	6.07	108.83	106.40
39	12	216	HIS	N-CA-C	-6.07	94.60	111.00
1	6	542	A	O4'-C1'-N9	6.06	113.05	108.20
1	6	1340	U	N1-C2-O2	6.05	127.03	122.80
36	1	3217	C	C6-N1-C1'	-6.04	113.55	120.80
1	6	639	U	C2-N1-C1'	6.04	124.95	117.70
36	1	2343	C	N3-C4-C5	6.03	124.31	121.90
36	5	2841	G	N3-C4-C5	6.03	131.61	128.60
1	2	1274	C	N1-C2-O2	6.02	122.51	118.90
36	5	1483	G	O4'-C1'-N9	6.02	113.01	108.20
1	6	472	U	C2-N3-C4	-6.01	123.39	127.00
1	6	1340	U	N3-C2-O2	-6.01	117.99	122.20
36	5	1513	G	C8-N9-C4	-6.01	104.00	106.40
38	8	80	A	N7-C8-N9	6.01	116.80	113.80
36	1	2617	U	N1-C2-N3	6.00	118.50	114.90
54	M8	41	ASP	CB-CG-OD1	6.00	123.70	118.30
1	6	1535	U	C5-C6-N1	-6.00	119.70	122.70
36	1	400	G	C5-C6-O6	-6.00	125.00	128.60
41	L4	179	LEU	CA-CB-CG	6.00	129.09	115.30
36	5	3197	G	N3-C4-C5	5.99	131.60	128.60
36	1	946	U	O5'-P-OP2	-5.98	100.32	105.70
36	1	1297	C	O5'-P-OP1	-5.98	100.32	105.70
36	1	2617	U	N1-C2-O2	5.98	126.98	122.80
36	1	1495	U	N1-C2-N3	5.97	118.48	114.90
36	5	944	C	C6-N1-C2	5.97	122.69	120.30
36	1	1201	C	N3-C4-N4	5.97	122.18	118.00
1	6	337	G	C4-C5-N7	5.97	113.19	110.80
36	1	2827	U	O4'-C1'-N1	5.96	112.97	108.20
36	5	776	U	C5-C4-O4	5.96	129.48	125.90
1	6	1473	U	C2-N1-C1'	5.96	124.85	117.70
1	6	163	G	N3-C4-C5	5.96	131.58	128.60
36	5	2215	A	C8-N9-C4	5.95	108.18	105.80
1	2	1096	C	C5-C6-N1	5.95	123.97	121.00
36	1	2726	C	C6-N1-C2	-5.95	117.92	120.30
1	6	1389	C	C2-N1-C1'	5.94	125.33	118.80
1	6	621	A	O5'-P-OP1	-5.94	100.36	105.70
36	5	2950	G	O4'-C1'-N9	5.94	112.95	108.20
36	5	283	G	C6-C5-N7	-5.94	126.84	130.40
36	5	2405	C	N3-C2-O2	-5.93	117.75	121.90
36	1	1151	U	C6-N1-C2	-5.92	117.45	121.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	418	G	O5'-P-OP1	-5.91	100.38	105.70
36	1	2362	C	N1-C2-O2	5.91	122.45	118.90
36	5	1372	C	C6-N1-C2	5.91	122.66	120.30
15	C3	22	ALA	C-N-CD	-5.90	107.61	120.60
36	1	1157	G	N9-C4-C5	5.90	107.76	105.40
36	1	2403	G	N3-C4-N9	5.89	129.54	126.00
1	2	720	G	P-O3'-C3'	5.89	126.77	119.70
1	2	287	G	O4'-C1'-N9	5.89	112.91	108.20
36	1	439	C	C2-N1-C1'	5.87	125.26	118.80
36	1	2412	G	C5-C6-N1	5.87	114.44	111.50
36	1	776	U	C4-C5-C6	5.87	123.22	119.70
24	D2	93	LEU	CA-CB-CG	5.86	128.78	115.30
36	5	1239	C	C5-C6-N1	5.85	123.92	121.00
36	5	2629	U	C5-C4-O4	-5.85	122.39	125.90
1	6	1640	C	C5-C6-N1	5.84	123.92	121.00
36	1	1389	G	C5-C6-O6	-5.84	125.09	128.60
36	1	1495	U	C6-N1-C1'	5.84	129.38	121.20
36	5	2825	C	N3-C2-O2	5.84	125.98	121.90
36	5	1014	U	C2-N1-C1'	5.83	124.70	117.70
36	1	1508	C	N3-C4-C5	-5.82	119.57	121.90
36	5	767	U	O4'-C1'-N1	5.82	112.86	108.20
1	2	934	C	C2-N1-C1'	5.82	125.20	118.80
1	6	1058	U	OP1-P-O3'	5.82	118.00	105.20
36	5	2293	C	N1-C2-O2	5.82	122.39	118.90
36	5	2899	C	C6-N1-C2	-5.82	117.97	120.30
36	1	2903	A	C8-N9-C4	5.82	108.13	105.80
36	1	1351	U	C5-C6-N1	5.82	125.61	122.70
36	1	1269	U	N1-C2-O2	5.81	126.87	122.80
1	6	1	U	N3-C2-O2	-5.81	118.13	122.20
1	6	390	G	O5'-P-OP2	-5.81	100.47	105.70
36	5	2866	U	N3-C2-O2	-5.80	118.14	122.20
36	1	650	C	C6-N1-C2	5.80	122.62	120.30
36	1	1179	A	C8-N9-C4	5.80	108.12	105.80
36	1	1192	C	N1-C2-O2	5.80	122.38	118.90
1	6	795	U	N1-C2-O2	5.80	126.86	122.80
36	1	339	C	C5-C4-N4	5.80	124.26	120.20
36	5	1192	C	C2-N1-C1'	5.79	125.17	118.80
36	1	2365	C	C6-N1-C2	5.79	122.62	120.30
36	5	90	C	C6-N1-C2	-5.79	117.98	120.30
36	1	2306	C	N3-C2-O2	-5.79	117.85	121.90
36	1	2873	U	N3-C2-O2	-5.78	118.15	122.20
36	5	2392	C	C2-N1-C1'	-5.78	112.44	118.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2403	G	O5'-P-OP1	5.78	117.64	110.70
36	1	2571	U	N1-C2-O2	5.78	126.84	122.80
36	1	3318	G	C4-N9-C1'	5.78	134.01	126.50
36	1	805	G	C8-N9-C4	5.77	108.71	106.40
1	2	75	U	N1-C2-O2	5.77	126.84	122.80
36	1	3344	A	C8-N9-C4	-5.77	103.49	105.80
61	N5	38	LEU	CA-CB-CG	5.77	128.56	115.30
36	5	1628	C	C6-N1-C2	-5.77	117.99	120.30
36	5	3351	U	C2-N1-C1'	5.76	124.61	117.70
36	5	1467	A	O5'-P-OP2	-5.76	100.52	105.70
1	6	1123	C	C6-N1-C2	-5.76	118.00	120.30
36	1	2870	C	C6-N1-C1'	5.75	127.71	120.80
36	1	1157	G	C5-C6-O6	5.75	132.05	128.60
1	2	1052	U	N3-C2-O2	-5.75	118.18	122.20
36	1	101	G	O4'-C1'-N9	5.75	112.80	108.20
36	1	1157	G	N1-C6-O6	-5.74	116.46	119.90
36	1	282	G	C8-N9-C4	-5.74	104.11	106.40
36	1	1329	U	C6-N1-C2	-5.74	117.56	121.00
37	7	100	C	C5-C6-N1	-5.74	118.13	121.00
36	5	1308	A	O5'-P-OP2	5.74	117.58	110.70
36	1	2842	U	N1-C2-O2	5.73	126.81	122.80
36	1	2403	G	C6-C5-N7	-5.72	126.97	130.40
36	1	1117	G	O5'-P-OP1	-5.72	100.55	105.70
36	5	1307	G	OP2-P-O3'	5.72	117.78	105.20
36	5	1496	C	N1-C2-O2	5.72	122.33	118.90
36	5	966	U	C2-N1-C1'	5.71	124.56	117.70
36	5	2996	U	O5'-P-OP1	5.71	117.55	110.70
36	5	1381	A	C2-N3-C4	-5.70	107.75	110.60
36	5	2197	C	C6-N1-C2	5.70	122.58	120.30
36	5	1899	G	C5-C6-O6	5.70	132.02	128.60
36	5	2211	U	C4-C5-C6	5.70	123.12	119.70
36	1	922	U	N1-C2-O2	5.69	126.78	122.80
36	5	283	G	C5-N7-C8	-5.69	101.45	104.30
36	1	2971	A	C8-N9-C4	-5.69	103.52	105.80
1	6	151	G	N3-C2-N2	-5.68	115.92	119.90
1	6	194	U	C5-C6-N1	5.68	125.54	122.70
36	5	2866	U	N1-C2-O2	5.68	126.78	122.80
36	1	186	U	N1-C2-O2	5.68	126.78	122.80
36	1	1419	A	O5'-P-OP2	-5.68	100.59	105.70
36	5	3154	C	N3-C2-O2	-5.68	117.92	121.90
54	m8	127	LEU	CA-CB-CG	5.68	128.36	115.30
36	5	1844	C	C6-N1-C2	-5.67	118.03	120.30

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1157	G	C8-N9-C4	-5.67	104.13	106.40
52	m6	78	ARG	NE-CZ-NH2	-5.67	117.46	120.30
36	1	639	G	N3-C2-N2	-5.67	115.93	119.90
52	M6	110	PRO	C-N-CD	-5.66	108.14	120.60
10	S8	29	LEU	CA-CB-CG	5.66	128.32	115.30
36	5	708	G	N7-C8-N9	5.66	115.93	113.10
1	6	1123	C	C5-C6-N1	5.66	123.83	121.00
36	5	3050	U	N3-C2-O2	-5.66	118.24	122.20
36	1	716	A	N1-C6-N6	5.66	121.99	118.60
36	5	1481	A	P-O3'-C3'	5.66	126.49	119.70
36	1	515	C	C6-N1-C2	-5.65	118.04	120.30
48	m1	12	LEU	CA-CB-CG	5.65	128.30	115.30
36	1	1419	A	O5'-P-OP1	5.65	117.48	110.70
36	1	2513	U	OP1-P-O3'	5.65	117.63	105.20
36	1	2585	G	N3-C4-C5	-5.65	125.78	128.60
36	1	1111	U	C6-N1-C2	5.65	124.39	121.00
36	1	3208	G	N3-C4-N9	5.65	129.39	126.00
36	5	2606	G	C8-N9-C4	-5.65	104.14	106.40
36	5	2943	G	C6-C5-N7	-5.64	127.01	130.40
36	1	2363	A	C5-C6-N6	5.64	128.21	123.70
1	6	453	U	N3-C2-O2	-5.64	118.25	122.20
1	6	1596	C	N3-C2-O2	-5.64	117.95	121.90
1	2	1274	C	C2-N1-C1'	5.64	125.00	118.80
1	2	1596	C	N3-C2-O2	-5.64	117.95	121.90
36	1	2872	A	C5-N7-C8	-5.64	101.08	103.90
36	5	1006	A	O5'-P-OP2	-5.63	100.63	105.70
1	6	543	C	N1-C2-O2	5.63	122.28	118.90
36	5	3133	C	C6-N1-C2	-5.63	118.05	120.30
1	6	18	C	C6-N1-C2	-5.63	118.05	120.30
36	5	65	A	P-O3'-C3'	5.63	126.45	119.70
36	5	3351	U	N3-C2-O2	-5.62	118.26	122.20
1	6	400	A	N1-C6-N6	5.62	121.97	118.60
36	5	908	G	C8-N9-C1'	-5.62	119.69	127.00
36	1	1433	A	C8-N9-C4	-5.62	103.55	105.80
1	2	1456	C	C2-N1-C1'	5.61	124.97	118.80
36	1	424	G	N1-C6-O6	-5.61	116.54	119.90
36	1	610	G	O5'-P-OP1	-5.61	100.66	105.70
36	1	2572	C	C6-N1-C1'	-5.61	114.07	120.80
36	5	922	U	N1-C2-O2	5.60	126.72	122.80
41	14	339	LEU	CA-CB-CG	5.60	128.19	115.30
36	5	2365	C	O5'-P-OP1	-5.60	100.66	105.70
36	1	2978	U	O4'-C1'-N1	5.59	112.67	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3217	C	C6-N1-C2	-5.59	118.06	120.30
36	5	404	G	O5'-P-OP2	-5.59	100.67	105.70
36	1	2659	G	N1-C6-O6	5.59	123.25	119.90
36	1	639	G	C5-C6-O6	-5.58	125.25	128.60
1	2	192	U	N3-C2-O2	-5.58	118.29	122.20
36	1	2541	U	P-O3'-C3'	5.58	126.40	119.70
36	5	2531	C	N1-C2-O2	5.58	122.25	118.90
1	2	767	U	N3-C2-O2	-5.58	118.30	122.20
36	5	3050	U	N1-C2-O2	5.58	126.70	122.80
1	6	453	U	C6-N1-C1'	-5.57	113.40	121.20
36	1	859	G	C6-C5-N7	-5.57	127.06	130.40
36	5	1588	A	C8-N9-C4	5.57	108.03	105.80
36	5	1907	C	N1-C2-O2	-5.57	115.56	118.90
36	5	2899	C	N3-C2-O2	-5.57	118.00	121.90
1	2	543	C	N1-C2-O2	5.56	122.23	118.90
36	5	3007	U	N1-C2-O2	5.55	126.69	122.80
36	1	1362	G	C8-N9-C4	5.55	108.62	106.40
36	5	822	G	O5'-P-OP1	-5.55	100.71	105.70
36	5	1308	A	OP1-P-OP2	-5.55	111.28	119.60
36	1	1495	U	C5-C6-N1	-5.54	119.93	122.70
38	4	20	U	O5'-P-OP2	-5.54	100.72	105.70
36	5	2351	U	N1-C2-O2	5.54	126.67	122.80
1	2	1052	U	C5-C6-N1	5.53	125.47	122.70
36	5	1437	C	C2-N1-C1'	5.53	124.88	118.80
36	1	590	G	C4-C5-N7	5.52	113.01	110.80
36	5	98	G	O5'-P-OP2	-5.52	100.73	105.70
36	5	2898	G	C4-N9-C1'	-5.52	119.32	126.50
36	1	400	G	N1-C6-O6	5.52	123.21	119.90
36	1	590	G	N1-C6-O6	5.52	123.21	119.90
36	1	1556	C	C2-N1-C1'	5.52	124.87	118.80
36	5	1496	C	C2-N1-C1'	5.52	124.87	118.80
36	5	1604	G	C4-N9-C1'	5.52	133.67	126.50
36	5	1003	A	N1-C6-N6	5.51	121.91	118.60
36	1	2355	G	N1-C6-O6	5.51	123.21	119.90
36	5	1184	A	N1-C6-N6	-5.51	115.29	118.60
36	5	2403	G	N3-C2-N2	-5.51	116.04	119.90
36	5	3010	U	C5-C4-O4	5.51	129.21	125.90
36	1	166	C	N1-C2-O2	5.50	122.20	118.90
36	1	895	A	C4-C5-N7	5.50	113.45	110.70
36	1	1201	C	C5-C6-N1	5.50	123.75	121.00
38	4	85	G	C8-N9-C4	-5.50	104.20	106.40
1	2	581	U	C2-N1-C1'	5.50	124.30	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	653	A	N1-C6-N6	5.50	121.90	118.60
36	1	217	U	OP1-P-O3'	5.50	117.29	105.20
36	1	646	A	C4-C5-C6	5.49	119.75	117.00
36	1	3344	A	O4'-C1'-N9	5.49	112.59	108.20
1	6	813	U	N1-C2-O2	5.49	126.65	122.80
36	5	2354	C	N1-C2-O2	-5.49	115.60	118.90
36	5	2948	C	N3-C4-C5	5.49	124.10	121.90
36	5	67	A	C8-N9-C4	5.49	108.00	105.80
36	5	908	G	O4'-C1'-N9	-5.49	103.81	108.20
36	1	1294	A	O4'-C1'-N9	5.49	112.59	108.20
36	5	1152	G	N1-C6-O6	5.49	123.19	119.90
36	5	2211	U	N3-C2-O2	-5.49	118.36	122.20
36	5	2355	G	C6-C5-N7	-5.49	127.11	130.40
38	8	108	C	C6-N1-C2	-5.49	118.11	120.30
24	D2	65	LEU	CA-CB-CG	5.48	127.91	115.30
36	1	2571	U	C2-N1-C1'	5.48	124.28	117.70
1	2	830	U	N1-C2-O2	5.48	126.64	122.80
1	2	1202	A	C8-N9-C4	-5.48	103.61	105.80
36	1	2619	G	O5'-P-OP1	-5.48	100.77	105.70
36	5	170	G	C4-N9-C1'	5.48	133.62	126.50
1	2	1340	U	N1-C2-O2	5.48	126.63	122.80
1	2	720	G	OP1-P-O3'	5.47	117.24	105.20
36	1	803	C	C5-C6-N1	5.47	123.74	121.00
36	5	908	G	C6-C5-N7	-5.47	127.12	130.40
36	5	873	C	P-O3'-C3'	5.47	126.27	119.70
36	5	2816	G	C4-N9-C1'	-5.47	119.39	126.50
36	5	3007	U	N3-C2-O2	-5.47	118.37	122.20
36	5	640	U	N3-C4-O4	5.46	123.22	119.40
36	5	2981	U	N3-C2-O2	-5.46	118.38	122.20
36	1	939	U	C5-C4-O4	-5.46	122.62	125.90
1	6	1700	C	N1-C2-O2	5.46	122.17	118.90
36	5	880	G	C4-N9-C1'	-5.46	119.41	126.50
36	5	779	G	N1-C6-O6	5.45	123.17	119.90
36	5	640	U	N1-C2-N3	5.45	118.17	114.90
36	5	822	G	N3-C2-N2	-5.45	116.08	119.90
36	5	3154	C	C6-N1-C1'	-5.45	114.26	120.80
36	5	3245	A	C4-C5-N7	5.45	113.43	110.70
36	1	2996	U	C5-C6-N1	5.45	125.43	122.70
36	5	1152	G	N1-C2-N2	5.45	121.11	116.20
36	5	1192	C	N3-C4-N4	5.45	121.82	118.00
36	1	1133	A	O5'-P-OP2	-5.45	100.80	105.70
1	6	1473	U	N3-C2-O2	-5.45	118.39	122.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2197	C	C6-N1-C2	5.45	122.48	120.30
36	5	770	G	O4'-C1'-N9	5.45	112.56	108.20
36	1	895	A	C5-N7-C8	-5.44	101.18	103.90
1	6	1640	C	C2-N1-C1'	5.44	124.79	118.80
36	5	269	G	C8-N9-C4	5.44	108.58	106.40
36	5	85	A	O5'-P-OP2	-5.44	100.81	105.70
36	5	3004	C	OP2-P-O3'	5.44	117.16	105.20
36	1	3092	C	C6-N1-C2	5.43	122.47	120.30
36	1	701	G	OP2-P-O3'	5.43	117.15	105.20
36	5	1060	U	C5-C6-N1	-5.42	119.99	122.70
36	5	954	U	O5'-P-OP1	-5.42	100.82	105.70
36	5	2897	A	C5-C6-N6	-5.42	119.36	123.70
36	1	874	U	N3-C4-O4	-5.42	115.61	119.40
36	1	439	C	C5-C6-N1	5.42	123.71	121.00
36	1	1381	A	C8-N9-C4	5.42	107.97	105.80
1	6	542	A	P-O3'-C3'	5.41	126.19	119.70
36	5	3382	U	C2-N1-C1'	5.41	124.19	117.70
36	1	3275	U	C5-C6-N1	5.41	125.41	122.70
36	5	3188	G	N1-C6-O6	-5.41	116.65	119.90
36	1	2816	G	N1-C6-O6	5.41	123.14	119.90
36	1	3278	C	C6-N1-C2	-5.41	118.14	120.30
36	1	1858	A	C2-N3-C4	5.41	113.30	110.60
36	5	908	G	C5-C6-O6	-5.41	125.36	128.60
36	5	2552	C	C2-N1-C1'	5.41	124.75	118.80
36	1	421	G	N9-C4-C5	-5.40	103.24	105.40
36	1	3318	G	N3-C4-N9	5.40	129.24	126.00
39	12	179	LEU	CA-CB-CG	5.40	127.71	115.30
36	1	3141	A	C8-N9-C4	5.39	107.96	105.80
36	5	1868	G	N3-C4-N9	5.39	129.24	126.00
1	2	1274	C	N3-C2-O2	-5.39	118.12	121.90
36	1	2985	C	O5'-P-OP1	-5.39	100.85	105.70
1	6	158	U	P-O3'-C3'	5.39	126.17	119.70
36	1	2870	C	O4'-C1'-N1	5.39	112.51	108.20
1	6	25	C	P-O3'-C3'	5.39	126.17	119.70
36	5	577	C	C6-N1-C2	5.38	122.45	120.30
1	2	1458	G	N3-C4-N9	5.38	129.23	126.00
73	O7	65	ARG	NE-CZ-NH1	5.38	122.99	120.30
36	5	2964	G	N1-C6-O6	-5.38	116.67	119.90
36	1	873	C	P-O3'-C3'	5.37	126.15	119.70
1	6	163	G	C2-N3-C4	-5.37	109.21	111.90
1	2	1458	G	C4-N9-C1'	5.37	133.48	126.50
36	1	718	G	N3-C4-C5	5.37	131.28	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3305	A	N1-C6-N6	-5.37	115.38	118.60
36	5	1495	U	C6-N1-C2	-5.37	117.78	121.00
37	7	19	C	O5'-P-OP2	-5.37	100.87	105.70
36	5	640	U	C6-N1-C2	-5.36	117.78	121.00
36	5	1113	G	C2-N3-C4	-5.36	109.22	111.90
36	5	1520	G	C5-C6-O6	-5.36	125.38	128.60
1	2	297	U	N1-C2-O2	5.36	126.55	122.80
36	5	1152	G	N9-C4-C5	5.36	107.54	105.40
36	1	1565	G	N7-C8-N9	5.36	115.78	113.10
36	5	2634	U	C5-C4-O4	-5.36	122.69	125.90
36	1	2137	U	C2-N1-C1'	5.35	124.12	117.70
1	6	555	A	C8-N9-C4	-5.35	103.66	105.80
36	5	2971	A	C2-N3-C4	5.35	113.28	110.60
36	1	2298	U	N3-C4-O4	-5.35	115.65	119.40
36	1	1179	A	C2-N3-C4	-5.35	107.92	110.60
36	1	1725	C	C2-N1-C1'	-5.35	112.92	118.80
1	6	1698	G	N1-C6-O6	-5.35	116.69	119.90
36	1	1165	A	O5'-P-OP2	-5.34	100.89	105.70
36	1	2408	U	O5'-P-OP1	-5.34	100.89	105.70
1	2	453	U	C2-N1-C1'	5.34	124.11	117.70
36	5	646	A	C4-C5-C6	5.34	119.67	117.00
1	2	158	U	P-O3'-C3'	5.34	126.11	119.70
1	2	553	G	C6-C5-N7	-5.34	127.20	130.40
36	5	2286	U	N3-C2-O2	-5.33	118.47	122.20
36	5	3133	C	N3-C4-C5	-5.33	119.77	121.90
38	8	38	U	C2-N1-C1'	5.33	124.10	117.70
1	6	678	A	P-O3'-C3'	5.33	126.10	119.70
36	5	981	U	C6-N1-C2	-5.33	117.80	121.00
36	1	2631	U	C5-C6-N1	-5.33	120.04	122.70
1	2	831	U	C6-N1-C2	-5.33	117.80	121.00
36	1	2247	G	N1-C6-O6	5.33	123.10	119.90
36	1	3170	A	C8-N9-C4	-5.33	103.67	105.80
1	6	1700	C	C2-N1-C1'	5.33	124.66	118.80
36	5	966	U	N3-C2-O2	-5.33	118.47	122.20
1	2	1370	U	OP2-P-O3'	5.32	116.91	105.20
36	1	3181	C	C6-N1-C2	-5.32	118.17	120.30
36	5	580	C	C6-N1-C2	-5.32	118.17	120.30
36	1	426	G	N9-C4-C5	-5.32	103.27	105.40
36	5	2572	C	C6-N1-C2	-5.32	118.17	120.30
36	1	801	A	O4'-C1'-N9	-5.31	103.95	108.20
36	5	2629	U	N3-C4-O4	5.31	123.12	119.40
37	7	101	G	N9-C4-C5	-5.31	103.28	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1481	C	C6-N1-C2	-5.31	118.18	120.30
36	1	2816	G	C5-C6-O6	-5.31	125.42	128.60
1	2	75	U	N3-C2-O2	-5.30	118.49	122.20
36	1	198	A	C8-N9-C4	-5.30	103.68	105.80
1	6	1573	A	OP2-P-O3'	5.30	116.86	105.20
36	5	1604	G	C8-N9-C1'	-5.30	120.11	127.00
36	1	3178	A	C8-N9-C4	5.30	107.92	105.80
1	6	747	C	C6-N1-C2	-5.30	118.18	120.30
36	1	2163	C	C5-C6-N1	-5.30	118.35	121.00
36	5	2375	G	N1-C6-O6	-5.30	116.72	119.90
36	5	423	A	OP2-P-O3'	5.29	116.84	105.20
36	5	655	C	C6-N1-C2	-5.29	118.18	120.30
36	5	2514	U	C5-C6-N1	5.29	125.35	122.70
36	5	1131	G	N1-C6-O6	5.29	123.07	119.90
70	O4	51	LEU	CA-CB-CG	5.28	127.45	115.30
36	5	640	U	N1-C2-O2	-5.28	119.10	122.80
36	5	2307	G	N1-C6-O6	-5.28	116.73	119.90
36	5	2913	C	N1-C2-O2	-5.28	115.73	118.90
36	1	600	G	C4-N9-C1'	5.28	133.37	126.50
36	5	1192	C	C6-N1-C1'	-5.28	114.46	120.80
1	6	1596	C	C6-N1-C2	-5.28	118.19	120.30
36	1	2622	C	O5'-P-OP2	-5.28	100.95	105.70
1	6	1185	U	N1-C2-O2	5.28	126.49	122.80
1	2	39	A	O4'-C1'-N9	5.27	112.42	108.20
36	1	282	G	C2'-C3'-O3'	5.27	122.14	113.70
36	5	630	A	C8-N9-C4	5.27	107.91	105.80
1	2	1258	U	N3-C2-O2	-5.27	118.51	122.20
1	6	385	A	N1-C6-N6	-5.27	115.44	118.60
36	5	2144	A	O4'-C1'-N9	5.27	112.42	108.20
36	1	346	C	C5-C6-N1	-5.27	118.37	121.00
36	1	2598	G	C5-C6-O6	-5.27	125.44	128.60
36	1	2996	U	N3-C2-O2	-5.27	118.51	122.20
36	5	639	G	C5-C6-O6	-5.27	125.44	128.60
36	1	395	A	O5'-P-OP2	-5.26	100.96	105.70
36	1	1407	A	C8-N9-C4	5.26	107.91	105.80
36	1	2651	G	O5'-P-OP1	-5.26	100.96	105.70
36	1	2550	U	C5-C4-O4	5.26	129.06	125.90
36	1	1141	C	N1-C2-O2	-5.26	115.75	118.90
36	5	1604	G	N3-C4-N9	5.26	129.16	126.00
36	1	3306	U	N3-C4-O4	-5.26	115.72	119.40
36	5	3185	U	N3-C2-O2	-5.26	118.52	122.20
36	1	635	G	N3-C2-N2	-5.25	116.22	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3228	C	C2-N1-C1'	5.25	124.58	118.80
49	M3	85	LEU	CA-CB-CG	5.25	127.38	115.30
1	6	1	U	O4'-C1'-N1	5.25	112.40	108.20
1	6	1145	U	N1-C2-O2	-5.25	119.12	122.80
36	1	423	A	N1-C6-N6	5.25	121.75	118.60
36	1	3318	G	C6-C5-N7	-5.25	127.25	130.40
36	5	57	A	C8-N9-C4	5.25	107.90	105.80
36	1	2163	C	C4-C5-C6	5.25	120.02	117.40
36	5	2339	C	C2-N1-C1'	5.25	124.57	118.80
36	1	648	C	C2-N1-C1'	5.25	124.57	118.80
36	1	1201	C	C5-C4-N4	-5.25	116.53	120.20
36	5	699	A	N1-C6-N6	5.25	121.75	118.60
37	7	112	G	C8-N9-C4	-5.24	104.30	106.40
1	2	1202	A	C2-N3-C4	5.24	113.22	110.60
36	5	363	G	OP1-P-O3'	5.24	116.72	105.20
36	5	358	G	N3-C4-C5	5.24	131.22	128.60
41	14	340	GLY	N-CA-C	-5.24	100.01	113.10
36	1	940	G	N1-C6-O6	-5.23	116.76	119.90
36	1	2624	G	N1-C6-O6	5.23	123.04	119.90
36	1	1060	U	C5-C6-N1	-5.23	120.08	122.70
1	6	813	U	C6-N1-C1'	-5.23	113.88	121.20
36	5	2897	A	N1-C6-N6	5.22	121.73	118.60
36	1	2852	C	N3-C4-C5	5.22	123.99	121.90
36	1	339	C	N3-C4-N4	-5.22	114.35	118.00
36	1	2624	G	C5-C6-O6	-5.22	125.47	128.60
1	6	272	U	P-O3'-C3'	5.22	125.96	119.70
1	6	314	C	N3-C2-O2	-5.22	118.25	121.90
18	C6	40	GLU	C-N-CA	5.22	143.92	122.00
1	6	1537	C	C6-N1-C2	-5.22	118.21	120.30
1	2	1761	U	C6-N1-C2	-5.21	117.87	121.00
36	5	222	A	N1-C6-N6	5.21	121.73	118.60
36	1	1521	G	N3-C4-C5	5.21	131.21	128.60
36	1	1159	A	N1-C6-N6	-5.21	115.47	118.60
36	5	706	A	C8-N9-C4	5.21	107.89	105.80
36	1	2306	C	C6-N1-C2	-5.21	118.22	120.30
36	5	2726	C	N3-C4-N4	-5.21	114.35	118.00
1	2	25	C	OP2-P-O3'	5.21	116.65	105.20
36	5	2937	G	N1-C6-O6	5.21	123.02	119.90
1	2	1059	U	C2-N1-C1'	5.20	123.94	117.70
36	5	880	G	O4'-C1'-N9	5.20	112.36	108.20
36	1	1118	C	C6-N1-C2	-5.20	118.22	120.30
36	1	1367	G	N9-C4-C5	-5.20	103.32	105.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2444	C	C6-N1-C1'	-5.20	114.56	120.80
36	5	1437	C	C5-C6-N1	5.20	123.60	121.00
62	n6	57	LEU	CA-CB-CG	5.20	127.26	115.30
1	6	14	C	C6-N1-C2	-5.20	118.22	120.30
36	1	1165	A	C8-N9-C4	5.20	107.88	105.80
1	6	583	C	C5-C6-N1	5.20	123.60	121.00
1	6	1537	C	N3-C4-C5	-5.20	119.82	121.90
36	5	655	C	O5'-P-OP2	-5.20	101.03	105.70
1	6	864	U	N3-C2-O2	-5.19	118.56	122.20
36	1	793	C	C5-C4-N4	-5.19	116.57	120.20
36	1	934	G	C8-N9-C1'	-5.19	120.25	127.00
36	5	1419	A	O5'-P-OP2	-5.19	101.03	105.70
1	6	1129	U	N3-C4-O4	-5.19	115.77	119.40
24	D2	104	LEU	CA-CB-CG	5.19	127.23	115.30
1	6	1697	G	N3-C4-C5	-5.19	126.01	128.60
36	5	1017	C	C5-C6-N1	5.19	123.59	121.00
36	1	953	G	N3-C4-N9	-5.18	122.89	126.00
1	6	151	G	N3-C4-N9	-5.18	122.89	126.00
36	5	1655	G	C8-N9-C4	5.18	108.47	106.40
37	7	26	C	C4-C5-C6	5.18	119.99	117.40
1	6	1021	C	C6-N1-C2	-5.18	118.23	120.30
36	5	1213	G	C8-N9-C4	5.18	108.47	106.40
36	1	3208	G	N3-C2-N2	5.17	123.52	119.90
36	5	1014	U	C6-N1-C1'	-5.17	113.96	121.20
36	5	3285	C	C2-N1-C1'	5.17	124.49	118.80
36	1	1367	G	N3-C4-N9	5.17	129.10	126.00
36	5	1146	C	N1-C2-O2	5.17	122.00	118.90
36	5	217	U	OP1-P-O3'	5.17	116.58	105.20
36	5	2627	C	OP2-P-O3'	5.17	116.58	105.20
36	1	2622	C	N3-C4-C5	-5.17	119.83	121.90
65	N9	32	LEU	CA-CB-CG	5.17	127.19	115.30
36	1	600	G	C8-N9-C4	-5.17	104.33	106.40
36	1	1365	G	N7-C8-N9	5.17	115.68	113.10
36	1	2631	U	N3-C4-O4	-5.16	115.79	119.40
36	5	2683	U	C5-C6-N1	5.16	125.28	122.70
36	5	2965	U	N1-C2-O2	-5.16	119.19	122.80
36	5	2376	G	O5'-P-OP2	-5.16	101.05	105.70
36	1	2572	C	C6-N1-C2	-5.16	118.24	120.30
36	5	2351	U	C5-C4-O4	5.16	129.00	125.90
36	5	3351	U	N1-C2-O2	5.16	126.41	122.80
36	5	1307	G	C2'-C3'-O3'	5.16	121.95	113.70
36	5	1406	A	O5'-P-OP2	-5.16	101.06	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2309	A	N1-C6-N6	5.16	121.69	118.60
36	1	3318	G	N3-C4-C5	-5.16	126.02	128.60
1	6	1619	C	C6-N1-C2	-5.16	118.24	120.30
36	1	2401	A	O4'-C1'-N9	5.15	112.32	108.20
36	1	230	U	C2-N3-C4	-5.15	123.91	127.00
36	1	1146	C	O5'-P-OP2	-5.15	101.06	105.70
36	5	1170	A	N1-C6-N6	5.15	121.69	118.60
36	5	2531	C	C2-N1-C1'	5.15	124.47	118.80
36	5	3245	A	N1-C6-N6	5.15	121.69	118.60
1	6	337	G	C5-N7-C8	-5.15	101.72	104.30
1	6	965	U	N1-C2-O2	5.15	126.41	122.80
1	6	1698	G	C5-C6-O6	5.15	131.69	128.60
36	5	2987	A	C5-C6-N1	-5.15	115.13	117.70
36	1	803	C	C4-C5-C6	-5.15	114.83	117.40
36	1	3208	G	N1-C2-N2	-5.15	111.57	116.20
36	5	1131	G	N3-C2-N2	-5.15	116.30	119.90
36	1	1405	U	OP1-P-O3'	5.14	116.52	105.20
36	1	2872	A	C2-N3-C4	-5.14	108.03	110.60
36	1	2112	U	P-O3'-C3'	5.14	125.87	119.70
36	1	721	G	C5-C6-O6	-5.14	125.52	128.60
36	5	669	U	N3-C2-O2	-5.14	118.61	122.20
1	6	1573	A	P-O3'-C3'	5.13	125.86	119.70
36	5	183	G	P-O3'-C3'	5.13	125.86	119.70
1	2	25	C	P-O3'-C3'	5.13	125.86	119.70
1	2	1568	C	P-O3'-C3'	5.13	125.86	119.70
36	1	1172	G	O5'-P-OP1	-5.13	101.08	105.70
36	1	2215	A	C8-N9-C4	5.13	107.85	105.80
36	5	2899	C	C2-N1-C1'	5.13	124.44	118.80
1	2	1340	U	N3-C2-O2	-5.13	118.61	122.20
36	5	283	G	C5-C6-O6	-5.13	125.52	128.60
36	5	352	A	O4'-C1'-N9	5.12	112.30	108.20
38	4	103	G	N3-C4-C5	-5.12	126.04	128.60
36	5	361	A	C5-C6-N6	5.12	127.80	123.70
36	1	663	C	N3-C4-C5	-5.12	119.85	121.90
37	3	73	C	N1-C2-O2	5.12	121.97	118.90
36	1	1306	G	N1-C6-O6	5.12	122.97	119.90
36	5	2930	A	O4'-C1'-N9	5.12	112.30	108.20
36	5	3195	U	C2-N1-C1'	5.12	123.84	117.70
1	6	194	U	C6-N1-C2	-5.12	117.93	121.00
36	1	282	G	P-O3'-C3'	5.11	125.83	119.70
36	5	86	G	N3-C2-N2	5.11	123.48	119.90
1	6	996	U	O5'-P-OP1	-5.11	101.10	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	641	C	O4'-C1'-N1	5.11	112.29	108.20
36	5	1239	C	C2-N1-C1'	5.11	124.42	118.80
36	5	2403	G	C5-C6-O6	-5.11	125.54	128.60
37	7	100	C	C6-N1-C2	5.11	122.34	120.30
36	5	2830	G	N1-C2-N3	5.11	126.96	123.90
36	1	916	G	P-O3'-C3'	5.10	125.83	119.70
36	1	1269	U	N3-C2-O2	-5.10	118.63	122.20
18	C6	28	LEU	CA-CB-CG	5.10	127.04	115.30
36	5	3197	G	N1-C2-N2	5.10	120.79	116.20
36	5	976	U	N3-C2-O2	-5.10	118.63	122.20
36	1	1329	U	O4'-C1'-N1	5.10	112.28	108.20
36	1	1380	G	C2-N3-C4	-5.10	109.35	111.90
36	1	3121	U	OP1-P-O3'	5.10	116.41	105.20
36	5	2914	G	O5'-P-OP2	-5.10	101.11	105.70
36	1	960	U	C5-C4-O4	-5.09	122.84	125.90
36	5	3197	G	C8-N9-C1'	5.09	133.62	127.00
36	5	2572	C	C6-N1-C1'	-5.09	114.69	120.80
38	8	26	U	O5'-P-OP2	-5.09	101.12	105.70
36	1	2156	C	C5-C6-N1	-5.09	118.46	121.00
36	5	1180	A	O4'-C1'-N9	-5.09	104.13	108.20
36	5	2526	C	N1-C2-O2	5.09	121.95	118.90
1	2	864	U	N3-C2-O2	-5.09	118.64	122.20
1	6	1389	C	N1-C2-O2	5.08	121.95	118.90
1	2	1560	U	C6-N1-C2	-5.08	117.95	121.00
36	5	283	G	C4-N9-C1'	5.08	133.10	126.50
36	5	2552	C	N1-C2-O2	5.08	121.95	118.90
36	5	2283	G	C5-C6-O6	-5.08	125.55	128.60
36	1	900	G	C5-C6-O6	-5.08	125.55	128.60
36	1	1556	C	N3-C2-O2	-5.08	118.34	121.90
36	1	2161	G	N1-C6-O6	-5.08	116.85	119.90
36	5	1561	G	O4'-C1'-N9	5.07	112.26	108.20
36	5	3362	A	C5-N7-C8	-5.07	101.36	103.90
36	5	3377	G	C5-C6-O6	-5.07	125.56	128.60
36	5	358	G	N3-C4-N9	-5.07	122.96	126.00
36	5	776	U	C4-C5-C6	5.07	122.74	119.70
36	1	2846	U	N3-C2-O2	-5.07	118.65	122.20
36	5	1177	G	O4'-C1'-N9	5.07	112.25	108.20
36	5	776	U	N1-C2-N3	5.07	117.94	114.90
25	d3	45	GLY	N-CA-C	-5.06	100.44	113.10
36	5	3090	U	OP1-P-O3'	5.06	116.34	105.20
36	1	2884	C	N3-C4-C5	5.06	123.92	121.90
36	5	914	A	C2-N3-C4	-5.06	108.07	110.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2257	C	C6-N1-C2	-5.06	118.28	120.30
36	5	2400	G	N3-C4-C5	5.06	131.13	128.60
36	5	2769	A	C8-N9-C4	5.06	107.83	105.80
1	2	610	G	C4-N9-C1'	5.06	133.08	126.50
36	5	1434	G	N9-C4-C5	5.06	107.42	105.40
36	5	2188	A	C8-N9-C4	5.06	107.82	105.80
1	2	1458	G	C8-N9-C1'	-5.06	120.42	127.00
36	1	424	G	O5'-P-OP2	-5.06	101.15	105.70
36	5	2965	U	N3-C2-O2	5.06	125.74	122.20
36	1	1157	G	C4-C5-N7	-5.06	108.78	110.80
36	5	3309	G	C4-N9-C1'	5.06	133.07	126.50
36	1	2883	U	C5-C6-N1	5.05	125.23	122.70
36	5	1238	C	P-O3'-C3'	5.05	125.77	119.70
37	7	80	G	C6-C5-N7	-5.05	127.37	130.40
36	1	2374	C	O5'-P-OP2	-5.05	101.15	105.70
36	1	3353	G	P-O3'-C3'	5.05	125.76	119.70
36	5	1378	U	C6-N1-C2	5.05	124.03	121.00
1	6	453	U	C5-C6-N1	5.05	125.22	122.70
36	5	2523	A	OP2-P-O3'	5.05	116.31	105.20
36	5	801	A	O4'-C1'-N9	-5.04	104.16	108.20
36	5	1180	A	N9-C4-C5	5.04	107.82	105.80
36	1	86	G	O5'-P-OP2	-5.04	101.16	105.70
1	2	1389	C	N1-C2-O2	5.04	121.92	118.90
36	1	1790	G	N1-C6-O6	5.04	122.92	119.90
36	1	2983	C	C2-N1-C1'	5.04	124.34	118.80
66	o0	41	LEU	CA-CB-CG	5.04	126.89	115.30
36	5	1161	G	C8-N9-C4	5.04	108.41	106.40
36	5	2756	C	C6-N1-C2	-5.04	118.28	120.30
1	6	1619	C	C5-C6-N1	5.03	123.52	121.00
36	5	953	G	N3-C4-C5	5.03	131.12	128.60
36	1	1168	U	N1-C2-O2	5.03	126.32	122.80
36	5	2872	A	C5-C6-N1	-5.03	115.19	117.70
36	1	972	A	C8-N9-C4	5.03	107.81	105.80
36	5	2890	A	OP2-P-O3'	5.03	116.26	105.20
1	2	959	U	C2-N1-C1'	5.03	123.73	117.70
36	1	326	U	C5-C6-N1	5.03	125.21	122.70
1	2	1761	U	OP2-P-O3'	5.02	116.25	105.20
36	5	631	U	O5'-P-OP1	-5.02	101.18	105.70
36	5	2632	G	O5'-P-OP1	-5.02	101.18	105.70
36	1	835	G	O4'-C1'-N9	5.02	112.22	108.20
36	1	1331	U	N3-C4-O4	5.02	122.91	119.40
36	1	2403	G	N3-C4-C5	-5.02	126.09	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2553	U	C2-N1-C1'	5.02	123.72	117.70
1	6	459	G	N1-C6-O6	5.02	122.91	119.90
37	7	101	G	N1-C6-O6	5.02	122.91	119.90
36	1	206	G	N1-C6-O6	-5.02	116.89	119.90
36	5	93	C	C6-N1-C2	5.02	122.31	120.30
36	5	514	G	N1-C6-O6	5.02	122.91	119.90
36	5	2372	A	C8-N9-C4	-5.02	103.79	105.80
36	5	2710	C	N3-C2-O2	5.02	125.41	121.90
36	5	2211	U	N3-C4-C5	-5.01	111.59	114.60
36	1	421	G	N3-C4-N9	5.01	129.01	126.00
1	6	1197	C	C2-N1-C1'	5.01	124.31	118.80
36	5	1395	G	OP2-P-O3'	5.01	116.23	105.20
1	2	1060	U	C2-N1-C1'	5.01	123.71	117.70
36	1	1724	U	O4'-C1'-N1	5.01	112.21	108.20
36	5	2385	G	O5'-P-OP1	-5.01	101.19	105.70
36	1	2385	G	N3-C4-N9	-5.01	123.00	126.00
1	6	1000	C	N1-C2-O2	5.01	121.90	118.90
36	5	2319	U	C5-C6-N1	-5.01	120.20	122.70
36	5	22	G	N1-C6-O6	5.00	122.90	119.90
36	5	1169	A	OP2-P-O3'	5.00	116.21	105.20
1	2	414	C	C6-N1-C2	5.00	122.30	120.30
1	2	1339	C	C2-N1-C1'	5.00	124.30	118.80
36	1	1583	A	C8-N9-C4	-5.00	103.80	105.80
36	5	947	G	N1-C2-N2	-5.00	111.70	116.20

There are no chirality outliers.

All (15) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
19	C7	85	VAL	Peptide
27	D5	94	LYS	Peptide
28	D6	10	ARG	Peptide
52	M6	110	PRO	Peptide
56	N0	166	LYS	Peptide
56	N0	22	PRO	Peptide
9	S7	131	PHE	Peptide
17	c5	52	LYS	Peptide
26	d4	29	HIS	Peptide
44	l7	192	GLY	Peptide
44	l7	226	GLY	Peptide
59	n3	41	GLY	Peptide
64	n8	66	ALA	Peptide

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
79	q3	41	PHE	Peptide
7	s5	44	ASN	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	37970	0	19104	888	1
1	6	38260	0	19251	812	0
2	S0	1577	0	1567	136	0
2	s0	1612	0	1623	0	0
3	S1	1709	0	1784	153	0
3	s1	1722	0	1793	0	0
4	S2	1635	0	1723	106	0
4	s2	1635	0	1723	0	0
5	S3	1734	0	1817	95	0
5	s3	1734	0	1817	0	0
6	S4	2068	0	2154	150	0
6	s4	2068	0	2154	0	0
7	S5	1609	0	1675	138	0
7	s5	1609	0	1675	0	0
8	S6	1799	0	1879	126	0
8	s6	1755	0	1845	0	0
9	S7	1481	0	1572	106	0
9	s7	1492	0	1581	0	0
10	S8	1489	0	1525	102	0
10	s8	1489	0	1525	0	0
11	S9	1494	0	1573	124	0
11	s9	1494	0	1573	0	0
12	C0	773	0	716	59	0
12	c0	762	0	691	0	0
13	C1	1214	0	1245	71	0
13	c1	1169	0	1235	0	0
14	C2	890	0	887	53	0
14	c2	890	0	887	0	0
15	C3	1192	0	1255	74	0
15	c3	1192	0	1255	0	0
16	C4	891	0	883	75	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
16	c4	949	0	985	0	0
17	C5	977	0	1002	74	0
17	c5	1039	0	1050	0	0
18	C6	1105	0	1166	103	0
18	c6	1111	0	1171	0	0
19	C7	926	0	930	62	0
19	c7	944	0	1006	0	0
20	C8	1192	0	1222	105	0
20	c8	1192	0	1222	0	0
21	C9	1112	0	1124	86	0
21	c9	1112	0	1124	0	0
22	D0	855	0	917	69	0
22	d0	882	0	939	0	0
23	D1	684	0	672	56	0
23	d1	684	0	672	0	0
24	D2	1021	0	1060	64	0
24	d2	1021	0	1060	0	0
25	D3	1121	0	1196	87	0
25	d3	1121	0	1196	0	0
26	D4	1073	0	1132	69	0
26	d4	1073	0	1132	0	0
27	D5	563	0	603	57	0
27	d5	558	0	598	0	0
28	D6	769	0	814	81	0
28	d6	769	0	814	0	0
29	D7	610	0	631	30	0
29	d7	610	0	631	0	0
30	D8	497	0	535	43	0
30	d8	497	0	535	0	0
31	D9	442	0	428	26	0
31	d9	443	0	432	0	0
32	E0	475	0	525	46	0
32	e0	491	0	542	0	0
33	E1	566	0	602	48	0
33	e1	608	0	657	0	0
34	SR	2437	0	2386	157	0
34	sR	2445	0	2401	0	0
35	SM	1104	0	971	66	0
35	sM	680	0	539	0	0
36	1	67355	0	33846	1296	1
36	5	67377	0	33857	1249	1
37	3	2579	0	1304	54	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
37	7	2579	0	1304	59	0
38	4	3353	0	1695	71	0
38	8	3353	0	1695	84	0
39	L2	1914	0	1981	157	0
39	l2	1918	0	1987	0	0
40	L3	3067	0	3137	205	0
40	l3	3073	0	3160	0	0
41	L4	2748	0	2859	212	0
41	l4	2749	0	2863	0	0
42	L5	2375	0	2325	187	0
42	l5	2359	0	2311	0	0
43	L6	1239	0	1326	57	0
43	l6	1248	0	1339	0	0
44	L7	1784	0	1862	114	0
44	l7	1791	0	1869	0	0
45	L8	1804	0	1877	121	0
45	l8	1763	0	1819	0	0
46	L9	1518	0	1587	131	0
46	l9	1518	0	1587	0	0
47	M0	1705	0	1736	131	0
47	m0	1733	0	1776	0	0
48	M1	1353	0	1383	96	0
48	m1	1353	0	1383	0	0
49	M3	1543	0	1608	118	0
49	m3	1548	0	1613	0	0
50	M4	1053	0	1149	65	0
50	m4	1059	0	1154	0	0
51	M5	1720	0	1779	125	0
51	m5	1720	0	1779	0	0
52	M6	1555	0	1659	102	0
52	m6	1555	0	1659	0	0
53	M7	1420	0	1437	115	0
53	m7	1227	0	1236	0	0
54	M8	1441	0	1543	102	0
54	m8	1441	0	1543	0	0
55	M9	1521	0	1617	71	0
55	m9	1521	0	1617	0	0
56	N0	1445	0	1487	86	0
56	n0	1445	0	1487	0	0
57	N1	1276	0	1323	86	0
57	n1	1276	0	1323	0	0
58	N2	796	0	812	41	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	n2	778	0	791	0	0
59	N3	1003	0	1048	62	0
59	n3	1003	0	1048	0	0
60	N4	699	0	640	26	0
60	n4	1089	0	1183	0	0
61	N5	964	0	1025	62	0
61	n5	959	0	1023	0	0
62	N6	993	0	1081	69	0
62	n6	993	0	1081	0	0
63	N7	1092	0	1155	76	0
63	n7	1092	0	1155	0	0
64	N8	1173	0	1215	114	0
64	n8	1173	0	1215	0	0
65	N9	462	0	491	37	0
65	n9	462	0	491	0	0
66	O0	743	0	797	59	0
66	o0	767	0	816	0	0
67	O1	876	0	912	46	0
67	o1	890	0	938	0	0
68	O2	1020	0	1090	71	0
68	o2	1020	0	1090	0	0
69	O3	850	0	880	44	0
69	o3	850	0	880	0	0
70	O4	880	0	945	73	0
70	o4	881	0	949	0	0
71	O5	969	0	1078	74	0
71	o5	969	0	1078	0	0
72	O6	771	0	849	65	0
72	o6	771	0	849	0	0
73	O7	681	0	683	45	0
73	o7	681	0	683	0	0
74	O8	612	0	682	40	0
74	o8	612	0	682	0	0
75	O9	436	0	475	33	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	18	0
77	q1	233	0	284	0	0
78	Q2	847	0	914	49	0
78	q2	847	0	914	0	0
79	Q3	694	0	734	63	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
79	q3	694	0	734	0	0
80	m2	750	0	176	0	0
81	p0	1077	0	1041	0	0
82	p1	235	0	50	0	0
83	p2	230	0	50	0	0
84	1	330	0	0	0	0
84	2	82	0	0	0	0
84	3	10	0	0	0	0
84	4	14	0	0	0	0
84	5	349	0	0	0	0
84	6	110	0	0	0	0
84	7	10	0	0	0	0
84	8	10	0	0	0	0
84	D9	1	0	0	0	0
84	L2	2	0	0	0	0
84	L3	1	0	0	0	0
84	L6	1	0	0	0	0
84	L7	1	0	0	0	0
84	M0	1	0	0	0	0
84	M3	1	0	0	0	0
84	M5	1	0	0	0	0
84	M6	1	0	0	0	0
84	M7	4	0	0	0	0
84	N3	1	0	0	0	0
84	N8	2	0	0	0	0
84	O2	1	0	0	0	0
84	O3	1	0	0	0	0
84	O4	2	0	0	0	0
84	O7	2	0	0	0	0
84	Q2	1	0	0	0	0
84	S4	1	0	0	0	0
84	SM	1	0	0	0	0
84	c1	1	0	0	0	0
84	d6	1	0	0	0	0
84	l2	3	0	0	0	0
84	l3	5	0	0	0	0
84	l6	1	0	0	0	0
84	l7	1	0	0	0	0
84	l8	1	0	0	0	0
84	l9	1	0	0	0	0
84	m1	1	0	0	0	0
84	m5	3	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
84	m6	1	0	0	0	0
84	m7	3	0	0	0	0
84	n0	2	0	0	0	0
84	n3	1	0	0	0	0
84	n6	2	0	0	0	0
84	n8	2	0	0	0	0
84	n9	1	0	0	0	0
84	o1	1	0	0	0	0
84	o3	1	0	0	0	0
84	o4	1	0	0	0	0
84	q0	1	0	0	0	0
84	q1	1	0	0	0	0
84	s8	1	0	0	0	0
84	sM	2	0	0	0	0
85	1	2191	0	0	228	0
85	2	959	0	0	120	0
85	3	70	0	0	5	0
85	4	119	0	0	10	0
85	5	2303	0	0	247	0
85	6	1050	0	0	107	0
85	7	77	0	0	7	0
85	8	105	0	0	15	0
85	C3	7	0	0	3	0
85	C5	7	0	0	3	0
85	C8	7	0	0	0	1
85	D9	7	0	0	3	0
85	L3	14	0	0	2	0
85	L4	7	0	0	5	0
85	M0	7	0	0	0	0
85	M5	7	0	0	0	0
85	M6	7	0	0	0	0
85	M7	7	0	0	1	0
85	M9	7	0	0	1	0
85	N1	7	0	0	0	0
85	N8	7	0	0	0	0
85	N9	7	0	0	0	0
85	O3	7	0	0	2	0
85	O7	14	0	0	1	0
85	O9	7	0	0	2	0
85	Q2	7	0	0	0	0
85	S6	7	0	0	1	0
85	S8	7	0	0	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
85	SR	7	0	0	0	0
85	c3	7	0	0	0	0
85	c5	7	0	0	0	0
85	c8	7	0	0	0	0
85	d4	7	0	0	0	0
85	l3	21	0	0	0	0
85	l4	14	0	0	0	0
85	l5	14	0	0	0	0
85	l9	7	0	0	0	0
85	m0	14	0	0	0	0
85	m1	7	0	0	0	0
85	m5	14	0	0	0	0
85	m7	7	0	0	0	0
85	n3	14	0	0	0	0
85	n9	7	0	0	0	0
85	o3	7	0	0	0	0
85	o7	7	0	0	0	0
85	o9	7	0	0	0	0
85	q2	7	0	0	0	0
85	s4	7	0	0	0	0
85	s8	7	0	0	0	0
85	s9	7	0	0	0	0
85	sR	7	0	0	0	0
86	D6	1	0	0	0	0
86	D7	1	0	0	0	0
86	D9	1	0	0	0	0
86	E1	1	0	0	0	0
86	O7	1	0	0	0	0
86	Q0	1	0	0	0	0
86	Q2	1	0	0	0	0
86	Q3	1	0	0	0	0
86	d6	1	0	0	0	0
86	d7	1	0	0	0	0
86	d9	1	0	0	0	0
86	e1	1	0	0	0	0
86	o7	1	0	0	0	0
86	q0	1	0	0	0	0
86	q2	1	0	0	0	0
86	q3	1	0	0	0	0
87	1	19	0	19	16	0
All	All	410912	0	297885	9383	2

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 (9383) 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)
36:1:1149:G:N7	85:1:4017:OHX:N6	2.05	1.04
1:6:1537:C:N3	85:6:2121:OHX:N5	2.06	1.03
36:1:1466:G:O6	85:1:3739:OHX:N4	1.93	1.01
36:1:1481:A:O2'	36:1:1858:A:N3	1.91	1.01
47:M0:38:LYS:HG2	47:M0:41:ALA:HB2	2.79	1.00
36:5:2361:A:OP2	85:5:4007:OHX:N2	1.93	1.00
49:M3:46:ILE:HG22	49:M3:49:ARG:HB2	1.84	0.97
50:M4:128:ARG:NH2	36:5:3214:U:OP2	281.04	0.95
1:2:830:U:HO2'	1:2:831:U:H6	1.08	0.95
36:5:2273:G:O6	85:5:4035:OHX:N5	2.00	0.95
36:1:2940:A:N7	40:L3:2:SER:N	2.14	0.94
7:S5:94:THR:HG22	7:S5:114:ILE:HG13	1.50	0.94
36:1:1951:C:H42	36:1:2095:G:H1	1.16	0.93
1:6:755:A:HO2'	1:6:756:A:H8	1.10	0.93
36:1:3182:G:OP1	52:M6:160:ARG:NH2	2.01	0.93
36:1:1639:C:OP2	70:O4:74:ARG:NH2	2.02	0.93
36:1:640:U:OP1	64:N8:21:ARG:NH2	2.02	0.92
1:2:701:U:H3	1:2:737:A:H61	1.16	0.92
36:1:2208:A:N1	85:1:3904:OHX:N2	2.17	0.92
63:N7:83:THR:HG23	63:N7:85:TYR:H	1.34	0.92
36:5:3194:C:O2	36:5:3197:G:N2	2.03	0.91
36:5:2836:C:H5	36:5:2852:C:H42	1.19	0.91
47:M0:3:ARG:NH2	36:5:2854:U:OP2	290.95	0.90
36:5:2234:G:O6	85:5:3806:OHX:N4	2.04	0.90
40:L3:185:GLY:O	40:L3:191:LYS:NZ	3.01	0.90
16:C4:85:ALA:H	16:C4:119:THR:HG22	1.34	0.90
36:5:1239:C:H42	36:5:1249:G:H1	1.18	0.90
33:E1:141:CYS:SG	33:E1:144:CYS:HB2	2.11	0.89
34:SR:171:SER:HG	34:SR:181:TRP:HE1	2.72	0.89
40:L3:41:VAL:HA	40:L3:185:GLY:HA3	1.58	0.89
1:2:169:A:H5''	8:S6:176:GLN:HG2	1.55	0.88
1:2:491:C:H42	1:2:496:G:H1	1.20	0.88
36:5:437:G:H1	36:5:622:A:H61	1.20	0.88
51:M5:188:ARG:NH2	36:5:31:C:OP2	122.65	0.88
36:5:801:A:O2'	85:5:3872:OHX:N1	2.06	0.88
40:L3:81:THR:HG22	40:L3:321:PHE:HA	5.07	0.88
36:1:781:G:N7	85:1:3801:OHX:N5	2.22	0.88
36:5:2284:C:O2	85:5:4016:OHX:N1	2.07	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2392:C:O2'	40:L3:266:ARG:NH2	2.06	0.88
26:D4:29:HIS:HB3	26:D4:32:ARG:HB2	6.07	0.88
85:2:1996:OHX:N2	10:S8:17:LYS:O	2.07	0.87
52:M6:68:ARG:NH1	36:5:2988:C:OP1	217.73	0.87
1:2:79:C:H1'	8:S6:174:LYS:HD3	1.56	0.87
85:5:3748:OHX:N6	38:8:16:G:O6	2.08	0.86
47:M0:63:GLU:HB2	36:5:2853:A:H5'	297.33	0.86
49:M3:74:GLY:O	49:M3:101:ARG:NH1	2.08	0.86
9:S7:50:ASP:HB3	9:S7:56:LYS:HG2	1.57	0.86
42:L5:134:ALA:HB2	42:L5:141:PRO:HD3	3.08	0.86
56:N0:90:MET:HG3	36:5:1213:G:H4'	317.52	0.86
87:1:3401:ANM:H13	87:1:3401:ANM:HN1	1.39	0.86
6:S4:49:ARG:NH1	1:6:448:C:OP2	379.55	0.86
2:S0:52:LYS:HD3	23:D1:82:VAL:HA	1.56	0.86
34:SR:42:LEU:HD21	34:SR:82:SER:HB3	2.04	0.86
22:D0:74:GLU:HG2	1:6:1429:G:H1'	378.42	0.86
49:M3:180:ARG:HD3	72:O6:11:LEU:HD21	1.55	0.86
36:1:599:C:OP1	41:L4:332:LYS:NZ	2.09	0.85
36:5:1481:A:O2'	36:5:1858:A:N3	2.08	0.85
73:O7:65:ARG:HG3	73:O7:65:ARG:HH11	1.41	0.85
1:2:127:G:N7	8:S6:202:ARG:NH2	2.25	0.85
40:L3:169:THR:HG23	40:L3:171:LEU:H	2.03	0.85
10:S8:76:THR:HG22	10:S8:108:PRO:HG2	1.57	0.85
1:2:1595:U:H3	1:2:1600:A:H2	1.24	0.85
1:2:715:U:H3	1:2:723:G:H1	1.24	0.85
62:N6:2:ALA:N	36:5:213:A:OP1	82.24	0.85
2:S0:139:VAL:HG23	4:S2:62:PRO:HG3	2.56	0.85
36:1:276:U:O2	51:M5:93:LYS:NZ	2.10	0.85
9:S7:55:LYS:HE2	9:S7:87:ASP:HA	2.00	0.85
38:4:124:G:H1	38:4:129:C:H42	1.20	0.84
36:1:2248:C:OP2	85:1:3742:OHX:N6	2.10	0.84
1:2:820:U:H2'	1:2:821:U:H4'	1.58	0.84
36:1:272:G:OP2	85:1:3891:OHX:N3	2.10	0.84
36:1:3344:A:H2	36:1:3361:G:H21	1.21	0.84
49:M3:63:VAL:HG22	36:5:72:C:H5'	113.64	0.84
79:Q3:4:ARG:NH1	36:5:837:A:OP2	239.18	0.84
16:C4:20:TYR:HB3	16:C4:27:PHE:HB2	1.75	0.84
3:S1:181:LEU:O	3:S1:184:LEU:N	2.09	0.84
36:5:3317:U:O2'	85:5:3976:OHX:N6	2.11	0.84
19:C7:27:ASP:O	19:C7:31:ASN:ND2	2.10	0.84
34:SR:149:ASP:HB2	34:SR:175:ASP:HB3	1.78	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1203:A:OP2	85:2:2070:OHX:N5	2.10	0.84
70:O4:74:ARG:NH2	36:5:1639:C:OP2	200.66	0.84
49:M3:165:SER:O	49:M3:167:PHE:N	2.10	0.83
36:1:1898:G:OP2	85:1:3791:OHX:N4	2.12	0.83
36:5:3153:U:H4'	36:5:3154:C:H5'	1.59	0.83
36:1:837:A:OP2	79:Q3:4:ARG:NH1	2.11	0.83
20:C8:44:ASN:OD1	20:C8:48:LYS:NZ	3.19	0.83
1:6:1636:C:H4'	1:6:1637:C:H5'	1.59	0.83
69:O3:14:LEU:HD11	69:O3:31:LYS:HB2	1.98	0.83
29:D7:23:THR:HG21	29:D7:29:ARG:HH22	3.55	0.83
71:O5:78:LYS:HA	71:O5:81:ARG:HD3	2.48	0.83
1:2:1745:G:O6	85:2:2045:OHX:N6	2.11	0.83
41:L4:16:THR:HG22	41:L4:18:ASN:H	1.43	0.83
1:2:1046:G:OP1	3:S1:157:GLN:NE2	2.11	0.83
1:2:976:G:H1	1:2:1023:A:HO2'	1.27	0.83
2:S0:119:ARG:HE	4:S2:240:LEU:HD23	2.72	0.83
36:5:2444:C:H42	36:5:2503:G:H1	1.26	0.83
36:5:566:G:N7	85:5:3968:OHX:N5	2.26	0.83
36:5:3074:G:OP1	85:5:3957:OHX:N4	2.11	0.83
36:5:2537:U:O2'	36:5:2538:U:O4'	1.97	0.82
1:2:700:C:H42	1:2:738:G:H1	1.24	0.82
55:M9:101:VAL:O	55:M9:104:ARG:NH1	2.12	0.82
85:2:1999:OHX:N1	25:D3:64:PRO:O	2.13	0.82
6:S4:117:GLU:O	6:S4:119:ALA:N	3.51	0.82
18:C6:82:ARG:HH12	18:C6:114:ARG:HB2	3.67	0.82
36:1:1119:C:OP2	85:1:3814:OHX:N1	2.13	0.82
50:M4:48:GLY:HA3	50:M4:53:VAL:HG13	1.92	0.82
36:1:735:A:H2'	36:1:736:A:H8	1.45	0.82
1:2:1173:C:OP1	20:C8:132:ARG:NH1	2.12	0.82
36:1:1222:G:HO2'	36:1:1285:G:H1	0.82	0.82
36:1:600:G:N7	85:1:3956:OHX:N1	2.28	0.82
13:C1:99:ARG:NH1	25:D3:7:ARG:O	2.12	0.82
1:2:1588:G:H1	1:2:1608:U:H3	1.22	0.82
21:C9:52:GLY:O	21:C9:54:PHE:N	2.12	0.82
45:L8:84:ARG:H	45:L8:84:ARG:HE	1.24	0.82
73:O7:88:ALA:O	85:8:212:OHX:N6	18.96	0.82
36:1:2836:C:H5	36:1:2852:C:H42	1.25	0.82
36:1:2356:A:H61	36:1:2983:C:H5	1.24	0.82
87:1:3401:ANM:C15	87:1:3401:ANM:H63	2.10	0.82
85:1:3940:OHX:N1	72:O6:28:TYR:O	2.13	0.81
1:2:1542:G:H22	1:2:1568:C:H1'	1.45	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:S9:126:ARG:NH1	1:6:475:A:OP2	424.48	0.81
42:L5:60:ILE:HB	42:L5:80:SER:HB3	1.62	0.81
45:L8:171:LYS:NZ	45:L8:223:ALA:O	2.50	0.81
19:C7:82:ASP:O	19:C7:83:GLN:NE2	2.13	0.81
41:L4:203:ARG:NH1	41:L4:226:GLU:OE2	2.14	0.81
50:M4:60:LEU:HD13	56:N0:152:LEU:HD11	1.60	0.81
87:1:3401:ANM:H151	87:1:3401:ANM:C6	2.10	0.81
1:6:1588:G:H1	1:6:1608:U:H3	1.28	0.81
38:8:79:A:H3'	38:8:80:A:C8	2.15	0.81
36:5:652:G:OP2	85:5:4007:OHX:N3	2.13	0.81
72:O6:9:ILE:HA	72:O6:13:LYS:HD3	2.60	0.81
36:5:1565:G:N1	36:5:1574:C:N3	2.28	0.81
71:O5:85:THR:HG22	71:O5:88:LEU:H	1.45	0.81
38:4:16:G:OP1	85:4:227:OHX:N4	2.12	0.81
69:O3:68:TRP:NE1	36:5:3275:U:OP2	228.24	0.81
1:6:1097:U:H4'	1:6:1098:U:H5'	1.60	0.81
39:L2:27:ALA:O	39:L2:128:ARG:NH2	2.13	0.81
50:M4:132:LYS:HD3	36:5:3230:G:H4'	286.49	0.81
36:1:1374:G:O6	64:N8:10:LYS:NZ	2.13	0.81
35:SM:32:SER:OG	36:1:2666:C:O2'	1.99	0.81
1:2:1202:A:OP1	85:2:2070:OHX:N1	2.13	0.81
36:5:1555:U:O4	36:5:1557:A:N6	2.13	0.81
53:M7:62:ARG:NH1	36:5:412:G:OP1	159.76	0.81
53:M7:64:ASN:O	53:M7:80:LYS:NZ	3.03	0.81
64:N8:96:LYS:O	64:N8:98:THR:N	2.13	0.81
24:D2:104:LEU:HA	24:D2:126:LEU:HB2	1.63	0.81
13:C1:5:LEU:HB3	13:C1:6:THR:HG23	1.64	0.80
21:C9:37:VAL:HG11	21:C9:100:ILE:HD11	2.27	0.80
36:5:1443:G:O6	85:5:3852:OHX:N5	2.13	0.80
47:M0:86:HIS:HB3	47:M0:139:ARG:HG2	1.75	0.80
52:M6:160:ARG:NH2	36:5:3182:G:OP1	280.38	0.80
9:S7:131:PHE:O	9:S7:133:THR:N	2.13	0.80
1:6:1665:U:O4	85:6:2085:OHX:N6	2.14	0.80
36:1:627:U:O4	85:1:3860:OHX:N5	2.15	0.80
1:2:800:U:O4	85:2:2013:OHX:N5	2.14	0.80
1:6:754:A:N6	1:6:793:A:N7	2.29	0.80
39:L2:189:TYR:HA	39:L2:192:LYS:HG3	2.83	0.80
36:1:824:C:H5''	39:L2:21:ARG:HD3	1.63	0.80
71:O5:78:LYS:HA	71:O5:81:ARG:HD2	1.62	0.80
36:1:860:G:OP1	79:Q3:17:ARG:NH1	2.15	0.80
1:2:434:G:N7	85:2:2007:OHX:N4	2.29	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:Q1:6:ARG:NH2	1:6:1112:G:OP1	316.11	0.80
22:D0:69:LYS:HE2	22:D0:80:GLU:HG3	3.31	0.80
39:L2:117:GLU:OE2	39:L2:121:GLY:N	2.14	0.80
56:N0:13:ARG:HH11	56:N0:13:ARG:HG3	4.09	0.80
36:1:2875:U:H3	36:1:2952:G:H1	1.30	0.80
36:5:1898:G:OP2	85:5:3789:OHX:N5	2.15	0.80
17:C5:68:PRO:HG2	17:C5:71:GLU:HB3	1.62	0.80
19:C7:66:VAL:HB	19:C7:69:ILE:HD11	1.64	0.80
44:L7:217:PRO:O	85:5:3846:OHX:N6	259.90	0.80
51:M5:46:ASP:OD1	51:M5:50:ARG:NH2	2.14	0.80
2:S0:79:ARG:NH1	2:S0:164:ASN:O	3.91	0.80
1:2:992:A:OP1	85:2:1995:OHX:N2	2.14	0.80
54:M8:71:LEU:HD13	54:M8:99:THR:HG21	1.64	0.79
36:1:1171:G:N7	85:1:3818:OHX:N2	2.30	0.79
38:4:155:A:OP1	45:L8:185:ARG:NH2	2.15	0.79
1:2:1557:U:OP2	1:2:1559:A:O2'	2.00	0.79
47:M0:205:SER:OG	47:M0:208:ASN:OD1	2.81	0.79
36:5:1170:A:OP2	85:5:3846:OHX:N4	2.15	0.79
36:5:1759:C:N4	36:5:1766:G:O6	2.16	0.79
75:O9:2:ALA:N	36:5:1493:G:O6	122.93	0.79
40:L3:287:LYS:HA	40:L3:320:ASP:HB3	1.64	0.79
36:1:1564:U:H2'	36:1:1565:G:C8	2.18	0.79
36:1:368:G:OP1	85:1:3744:OHX:N5	2.15	0.79
36:1:1409:G:N7	85:1:3926:OHX:N3	2.31	0.79
46:L9:22:SER:OG	46:L9:23:ARG:N	2.16	0.79
36:1:1592:G:OP2	70:O4:37:LYS:NZ	2.12	0.79
36:5:1940:G:H21	36:5:3362:A:H8	1.29	0.79
1:2:393:C:OP2	10:S8:2:GLY:N	2.16	0.79
36:5:2128:C:OP1	85:5:3932:OHX:N3	2.15	0.79
45:L8:54:GLU:OE2	85:5:3798:OHX:N4	146.42	0.79
6:S4:9:LEU:HB2	6:S4:30:ARG:HB2	1.95	0.79
18:C6:50:GLU:OE2	18:C6:82:ARG:NH2	2.91	0.79
43:L6:31:ARG:NH1	69:O3:107:ILE:O	2.26	0.79
36:5:2718:U:O4	85:5:4062:OHX:N6	2.16	0.78
20:C8:120:ARG:HG2	35:SM:61:ILE:HG21	6.40	0.78
23:D1:60:ARG:HA	23:D1:65:SER:HB2	2.27	0.78
39:L2:14:SER:OG	39:L2:15:ILE:N	2.12	0.78
78:Q2:12:CYS:SG	78:Q2:17:CYS:HB3	2.58	0.78
16:C4:38:THR:HG21	1:6:895:G:H21	264.29	0.78
16:C4:50:ALA:O	16:C4:52:ARG:N	2.35	0.78
39:L2:204:MET:HE2	39:L2:209:HIS:HB2	1.64	0.78

*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	1.65	0.78
71:O5:101:THR:HG23	71:O5:104:GLN:HB2	1.63	0.78
36:1:1334:U:O2'	44:L7:151:ARG:NH2	2.16	0.78
36:1:2531:C:N4	36:1:2548:C:O2	2.16	0.78
1:2:1537:C:N3	85:2:2112:OHX:N4	2.31	0.78
36:5:652:G:OP2	85:5:4007:OHX:N6	2.17	0.78
1:6:653:C:H42	1:6:677:G:H1	1.27	0.78
36:1:2534:G:O6	85:1:3858:OHX:N4	2.16	0.78
36:1:3376:A:OP2	85:1:3766:OHX:N5	2.16	0.78
87:1:3401:ANM:H13	87:1:3401:ANM:N1	1.98	0.78
41:L4:229:ASN:OD1	41:L4:231:ALA:N	2.16	0.78
42:L5:83:LEU:HB3	42:L5:88:ILE:HB	1.64	0.78
47:M0:193:ASP:OD1	36:5:1010:G:N2	335.86	0.78
34:SR:13:LEU:HB2	34:SR:310:ILE:HB	1.65	0.78
63:N7:135:ARG:NH2	36:5:2556:C:O2'	200.59	0.78
36:5:980:A:H2'	36:5:981:U:C2	2.19	0.78
75:O9:23:LEU:HD22	75:O9:24:PRO:HD2	2.17	0.78
1:2:57:G:O6	85:2:2005:OHX:N3	2.15	0.78
22:D0:106:ILE:HG23	22:D0:107:THR:HG23	1.66	0.78
57:N1:51:GLY:HA3	57:N1:92:ARG:HG3	2.03	0.78
36:1:1194:G:OP1	85:1:3823:OHX:N3	2.17	0.78
1:2:1542:G:N2	1:2:1569:A:OP2	2.16	0.78
38:4:16:G:O6	85:4:215:OHX:N3	2.17	0.78
36:5:1024:G:O6	36:5:1029:G:N2	2.17	0.78
38:4:95:G:OP2	73:O7:72:ARG:NH1	2.16	0.78
36:1:978:G:O2'	36:1:979:U:O2	2.01	0.78
1:2:346:G:N7	85:2:2084:OHX:N1	2.31	0.78
24:D2:15:ASN:ND2	24:D2:72:CYS:SG	2.57	0.78
41:L4:204:GLY:O	41:L4:246:ARG:NH1	2.41	0.78
36:1:2736:A:OP1	57:N1:92:ARG:NH1	2.17	0.78
59:N3:45:ARG:HB3	59:N3:48:ARG:HG3	1.66	0.78
73:O7:21:ARG:NH2	73:O7:41:ALA:O	2.17	0.78
36:5:3115:C:O2	36:5:3117:C:N4	2.17	0.78
36:5:600:G:O6	85:5:3963:OHX:N4	2.16	0.78
24:D2:82:LYS:O	24:D2:84:GLY:N	2.16	0.78
25:D3:109:ARG:O	25:D3:112:LYS:NZ	6.51	0.78
42:L5:76:ALA:HB3	42:L5:109:THR:HG22	1.65	0.78
67:O1:13:THR:HG22	67:O1:72:ARG:HD3	1.64	0.78
36:1:3224:G:O6	85:1:3753:OHX:N4	2.17	0.78
28:D6:41:ILE:HG22	28:D6:68:TYR:HB3	1.66	0.78
61:N5:57:LEU:HD23	61:N5:61:LYS:HG2	5.66	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:18:G:OP1	71:O5:81:ARG:NH2	2.16	0.77
1:2:207:U:O2	10:S8:178:ARG:NH1	2.17	0.77
1:6:1385:G:N7	85:6:2083:OHX:N6	2.31	0.77
13:C1:132:SER:O	13:C1:134:THR:N	3.63	0.77
41:L4:143:GLU:O	85:L4:401:OHX:N1	3.63	0.77
36:5:196:G:N7	85:5:3788:OHX:N3	2.33	0.77
13:C1:96:LYS:NZ	1:6:374:U:OP1	347.74	0.77
40:L3:296:THR:HG22	40:L3:298:PHE:H	5.39	0.77
6:S4:13:ALA:O	6:S4:39:ARG:NH2	2.17	0.77
7:S5:92:ARG:NH2	7:S5:169:ASN:OD1	3.03	0.77
38:8:67:U:O4	85:8:221:OHX:N3	2.17	0.77
36:1:2207:A:H2'	36:1:2208:A:H5'	1.65	0.77
36:1:2535:A:H61	36:1:2544:U:H3	1.33	0.77
1:6:1154:G:N7	85:6:2097:OHX:N2	2.33	0.77
38:8:150:G:N7	85:8:214:OHX:N5	2.32	0.77
18:C6:46:PHE:HA	18:C6:49:TYR:HB2	1.67	0.77
22:D0:51:VAL:HG13	22:D0:94:GLU:HB2	1.66	0.77
51:M5:31:ARG:NH1	51:M5:124:ASP:OD1	2.16	0.77
36:5:1887:A:OP2	85:5:3774:OHX:N5	2.18	0.77
44:L7:151:ARG:NH1	44:L7:244:ASN:O	2.71	0.77
36:1:3272:C:OP2	43:L6:78:ARG:NH1	2.17	0.77
72:O6:82:ARG:NH2	36:5:271:C:O2	131.14	0.77
1:6:1543:A:N6	1:6:1568:C:O2	2.17	0.77
1:6:1584:G:N2	1:6:1611:A:OP2	2.13	0.77
1:2:140:A:OP2	8:S6:187:LYS:NZ	2.16	0.77
74:O8:31:LEU:HA	74:O8:37:PRO:HA	1.64	0.77
4:S2:139:ILE:HG22	4:S2:141:ARG:HD2	1.66	0.77
36:1:1555:U:H5	36:1:1559:A:H61	1.32	0.77
36:1:76:G:O2'	49:M3:100:ARG:NH1	2.17	0.77
77:Q1:15:ARG:NH1	1:6:1126:G:OP1	281.65	0.77
1:6:800:U:H2'	1:6:801:G:H8	1.48	0.77
17:C5:15:HIS:H	17:C5:22:LEU:HD22	2.62	0.77
41:L4:269:SER:O	41:L4:271:LYS:N	2.16	0.77
9:S7:66:SER:O	9:S7:68:ALA:N	2.38	0.77
36:1:1317:A:OP1	85:1:3923:OHX:N2	2.18	0.77
1:2:7:G:N7	4:S2:205:ARG:NH1	2.29	0.77
71:O5:81:ARG:NH2	36:5:18:G:OP1	77.06	0.77
36:1:718:G:C2	36:1:721:G:H1'	2.20	0.77
36:5:398:A:O2'	36:5:1416:C:OP1	2.01	0.77
36:5:2724:U:O4	85:5:3803:OHX:N1	2.18	0.77
66:O0:13:LYS:NZ	66:O0:99:ASP:OD1	3.35	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:252:ILE:HG13	40:L3:266:ARG:HH21	4.28	0.76
51:M5:49:ARG:NH1	36:5:149:U:OP2	101.58	0.76
70:O4:29:ILE:HD11	70:O4:31:ARG:HH21	1.48	0.76
36:1:695:C:OP1	41:L4:271:LYS:NZ	2.17	0.76
36:5:1387:G:OP1	85:5:4037:OHX:N3	2.18	0.76
36:5:2717:U:OP1	85:5:3911:OHX:N3	2.19	0.76
17:C5:77:ARG:NH1	1:6:1241:G:OP2	383.80	0.76
32:E0:41:THR:HG22	32:E0:45:VAL:HG11	3.77	0.76
47:M0:193:ASP:OD2	47:M0:194:GLY:N	2.18	0.76
3:S1:109:LYS:HG3	3:S1:113:MET:HE3	1.64	0.76
35:SM:84:LYS:HG2	35:SM:86:ASN:H	1.48	0.76
36:1:1129:A:OP1	47:M0:13:LYS:NZ	2.17	0.76
36:1:2318:U:O4	85:1:3900:OHX:N2	2.18	0.76
36:5:1538:G:OP2	85:5:3849:OHX:N2	2.16	0.76
39:L2:112:ILE:HG12	39:L2:135:ILE:HG22	1.66	0.76
1:2:237:C:H5''	1:2:238:U:H5'	1.67	0.76
37:3:44:C:OP2	48:M1:137:ARG:NH2	2.18	0.76
41:L4:145:ILE:O	85:L4:401:OHX:N5	2.18	0.76
48:M1:107:ASP:N	48:M1:107:ASP:OD1	2.14	0.76
36:1:541:U:O4	85:1:3917:OHX:N6	2.18	0.76
1:2:45:U:O2'	1:2:46:A:H2'	1.85	0.76
3:S1:77:GLU:OE1	16:C4:114:ARG:NH2	2.22	0.76
40:L3:25:ILE:HD13	40:L3:25:ILE:H	1.48	0.76
15:C3:124:ARG:NH2	1:6:967:A:OP2	320.04	0.76
43:L6:31:ARG:NH2	43:L6:81:ALA:O	2.19	0.76
36:5:1238:C:O2'	36:5:1239:C:OP1	2.03	0.76
1:6:770:A:OP2	85:6:2100:OHX:N3	2.19	0.76
18:C6:112:TYR:OH	18:C6:114:ARG:NH1	2.19	0.76
70:O4:102:LYS:HB3	70:O4:103:LYS:HE3	4.41	0.76
78:Q2:17:CYS:SG	78:Q2:77:CYS:CB	2.72	0.76
40:L3:266:ARG:NH2	36:5:2392:C:O2'	209.39	0.76
2:S0:9:LEU:HD11	2:S0:14:ALA:HB2	2.35	0.76
36:5:1450:G:OP1	85:5:4059:OHX:N4	2.19	0.76
41:L4:193:LYS:NZ	38:8:21:C:OP1	109.09	0.76
36:5:1912:U:N3	36:5:2122:G:OP2	2.19	0.76
1:6:647:G:H22	1:6:687:G:H1	1.34	0.76
27:D5:74:SER:OG	1:6:1534:G:OP2	344.76	0.76
40:L3:320:ASP:N	40:L3:320:ASP:OD2	2.19	0.76
56:N0:13:ARG:NH1	37:7:73:C:O2	305.99	0.76
2:S0:150:ASP:OD1	2:S0:165:ARG:NH2	2.19	0.75
36:1:297:G:N2	36:1:297:G:OP2	2.19	0.75

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
87:1:3401:ANM:H151	87:1:3401:ANM:H63	1.69	0.75
36:1:410:U:O4	85:1:3915:OHX:N5	2.18	0.75
64:N8:21:ARG:NH2	36:5:640:U:OP1	182.21	0.75
72:O6:28:TYR:O	85:5:4025:OHX:N2	104.73	0.75
78:Q2:17:CYS:SG	78:Q2:77:CYS:HB3	2.25	0.75
36:5:240:U:HO2'	36:5:241:G:H8	1.31	0.75
70:O4:54:ILE:HD11	70:O4:78:GLY:HA2	2.20	0.75
76:Q0:106:ARG:HH11	76:Q0:106:ARG:HB2	3.29	0.75
1:2:1488:G:H3'	1:2:1515:A:H61	1.49	0.75
34:SR:216:LYS:HA	34:SR:239:GLU:HG3	1.68	0.75
36:1:269:G:N2	36:1:295:A:OP2	2.17	0.75
1:2:523:G:OP2	26:D4:37:LYS:NZ	2.20	0.75
51:M5:96:ARG:NH2	51:M5:104:GLU:OE1	2.61	0.75
1:2:952:A:OP1	15:C3:94:LYS:NZ	2.19	0.75
52:M6:18:ARG:NH2	36:5:1318:A:OP1	276.82	0.75
1:2:1349:G:H1	1:2:1376:C:H42	1.33	0.75
1:2:1370:U:O4	85:2:2079:OHX:N5	2.20	0.75
1:6:1595:U:H3	1:6:1600:A:H2	1.32	0.75
23:D1:74:GLN:NE2	23:D1:81:ASN:O	2.20	0.75
41:L4:217:LYS:HA	41:L4:220:ARG:HG2	3.52	0.75
36:1:508:U:O4	85:1:3864:OHX:N6	2.20	0.75
1:2:1291:G:N2	1:2:1324:G:H22	1.84	0.75
72:O6:59:ASP:O	72:O6:63:ASN:ND2	4.76	0.75
3:S1:83:LYS:HD2	3:S1:106:THR:H	3.33	0.75
36:1:1759:C:N4	36:1:1766:G:O6	2.19	0.75
1:2:1159:C:N3	85:2:2074:OHX:N4	2.35	0.75
1:2:770:A:OP2	85:2:2097:OHX:N6	2.19	0.75
36:5:1541:G:OP2	85:5:3934:OHX:N4	2.19	0.75
36:5:2568:C:N4	36:5:2574:G:O6	2.20	0.75
40:L3:260:VAL:HG11	40:L3:266:ARG:HH11	1.50	0.75
41:L4:33:ASP:OD1	41:L4:34:ILE:N	2.19	0.75
54:M8:180:ARG:HH11	54:M8:185:LYS:HB3	3.30	0.75
36:1:953:G:OP1	65:N9:15:LYS:NZ	2.19	0.75
6:S4:153:ASN:O	6:S4:174:LYS:NZ	2.20	0.75
8:S6:78:THR:HG23	8:S6:92:ARG:HG2	2.82	0.75
43:L6:85:ILE:HG23	69:O3:107:ILE:HG21	2.99	0.74
35:SM:26:VAL:HG11	48:M1:49:LYS:HE3	1.68	0.74
36:5:1806:A:OP2	85:5:3868:OHX:N5	2.20	0.74
36:1:687:U:OP2	49:M3:36:ARG:NH2	2.21	0.74
57:N1:14:MET:HE1	57:N1:55:LYS:HB2	2.48	0.74
3:S1:157:GLN:O	3:S1:159:SER:N	2.20	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:8:80:A:H2	38:8:83:C:H41	1.35	0.74
21:C9:49:ASP:HB3	21:C9:53:TRP:HB3	1.69	0.74
85:1:3818:OHX:N6	44:L7:217:PRO:O	2.20	0.74
56:N0:71:LYS:NZ	36:5:563:U:OP1	341.58	0.74
66:O0:57:GLU:OE1	66:O0:69:TYR:OH	2.26	0.74
8:S6:2:LYS:HB3	8:S6:108:VAL:HG22	1.67	0.74
36:5:1878:G:OP1	85:5:3801:OHX:N5	2.20	0.74
1:6:1765:A:OP1	85:6:2088:OHX:N2	2.20	0.74
17:C5:43:ARG:NH2	1:6:1552:U:OP2	403.88	0.74
56:N0:8:GLN:HB3	56:N0:64:ILE:HD11	1.69	0.74
54:M8:66:ARG:NH2	36:5:744:A:OP1	166.94	0.74
67:O1:19:ARG:HD3	67:O1:35:GLU:HG2	1.69	0.74
36:1:837:A:OP1	79:Q3:5:THR:OG1	2.05	0.74
36:1:2771:U:OP2	36:1:2772:C:N4	2.19	0.74
36:1:300:G:O6	85:1:4004:OHX:N1	2.21	0.74
36:1:3340:G:O6	85:1:3912:OHX:N4	2.20	0.74
47:M0:76:MET:HE1	47:M0:148:VAL:HA	2.79	0.74
59:N3:131:SER:O	59:N3:133:SER:N	2.20	0.74
64:N8:116:GLY:O	64:N8:137:LYS:NZ	4.85	0.74
1:2:1738:U:O4	85:2:2001:OHX:N4	2.21	0.74
37:3:77:G:N2	37:3:102:A:OP2	2.17	0.74
44:L7:206:LYS:HB3	36:5:1334:U:H5'	236.81	0.74
36:5:549:U:O4	85:5:3856:OHX:N4	2.21	0.74
1:6:22:A:OP2	85:6:2110:OHX:N2	2.20	0.74
36:5:3242:G:H5'	36:5:3245:A:H8	1.52	0.74
29:D7:61:THR:HG23	29:D7:62:ILE:H	1.53	0.74
46:L9:44:THR:HG22	36:5:3186:A:N3	325.86	0.74
2:S0:26:ALA:H	2:S0:149:LEU:HD12	1.53	0.74
1:2:652:G:H1	1:2:682:C:H42	1.34	0.74
36:5:679:U:O4	85:5:3858:OHX:N2	2.20	0.74
3:S1:157:GLN:OE1	85:6:2019:OHX:N3	326.62	0.74
22:D0:117:VAL:HG13	22:D0:118:VAL:H	1.52	0.74
60:N4:9:SER:HA	60:N4:52:THR:HG22	2.24	0.74
36:1:739:G:O6	85:1:3778:OHX:N3	2.20	0.73
51:M5:44:ARG:NH2	36:5:269:G:OP1	123.90	0.73
48:M1:94:ARG:O	48:M1:96:PHE:N	2.20	0.73
58:N2:51:GLY:O	58:N2:52:ASN:ND2	2.21	0.73
64:N8:9:ARG:NH2	36:5:1431:G:N7	148.86	0.73
25:D3:68:ILE:O	25:D3:70:LYS:NZ	2.21	0.73
57:N1:88:ARG:NH2	65:N9:33:LYS:O	2.21	0.73
78:Q2:28:TYR:HB3	78:Q2:69:VAL:HB	2.30	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:24:LEU:O	2:S0:163:ASN:ND2	2.29	0.73
20:C8:145:ARG:HG3	35:SM:68:ARG:HH22	3.43	0.73
85:1:3829:OHX:N1	38:4:31:G:OP2	2.21	0.73
1:2:1795:U:H3'	28:D6:5:ARG:HH12	1.52	0.73
37:3:60:G:H2'	37:3:61:G:H8	1.53	0.73
79:Q3:44:LYS:NZ	36:5:1727:G:OP1	231.13	0.73
55:M9:104:ARG:NH1	36:5:1949:G:OP1	222.64	0.73
20:C8:53:ASP:HB3	20:C8:56:LYS:HG3	1.68	0.73
32:E0:37:ARG:NH1	1:6:478:A:OP1	440.79	0.73
41:L4:327:LEU:HA	44:L7:166:ASN:HD21	1.52	0.73
63:N7:102:GLU:H	63:N7:107:ARG:HH21	2.26	0.73
72:O6:58:ILE:HG22	72:O6:90:MET:HG3	1.85	0.73
36:1:2373:A:N3	36:1:2824:G:O2'	2.21	0.73
36:1:2669:G:N7	85:1:3930:OHX:N4	2.37	0.73
36:5:1066:G:OP1	85:5:4058:OHX:N2	2.20	0.73
27:D5:43:ASP:HB2	27:D5:46:LYS:HB2	2.58	0.73
40:L3:53:MET:HG2	40:L3:77:THR:HG22	2.69	0.73
1:2:149:C:O2'	8:S6:132:ARG:NH1	2.21	0.73
38:4:103:G:O6	85:4:218:OHX:N6	2.21	0.73
11:S9:149:ARG:NE	1:6:765:G:N7	429.04	0.73
40:L3:152:LYS:HG2	40:L3:192:VAL:HG11	1.70	0.73
45:L8:95:ASN:OD1	45:L8:98:ARG:NH1	3.45	0.73
63:N7:16:GLY:O	63:N7:18:TYR:N	3.06	0.73
64:N8:6:THR:HG23	64:N8:8:THR:HG23	1.71	0.73
36:5:1765:U:H4'	36:5:1765:U:OP1	1.88	0.73
43:L6:3:ALA:HB2	68:O2:77:ALA:HB2	2.18	0.73
5:S3:105:MET:HG2	5:S3:122:VAL:HG21	1.91	0.73
1:2:1471:A:OP1	7:S5:185:ARG:NH1	2.22	0.73
16:C4:131:GLY:O	16:C4:133:ARG:N	2.75	0.73
36:1:1564:U:H2'	36:1:1565:G:H8	1.51	0.73
36:1:3259:U:H6	36:1:3259:U:H5'	1.54	0.73
36:5:2996:U:OP1	36:5:2996:U:H4'	1.89	0.73
26:D4:11:LYS:NZ	1:6:775:G:N7	414.87	0.73
39:L2:70:ARG:HD2	39:L2:72:ARG:HE	4.70	0.73
36:1:2734:A:OP1	85:1:3867:OHX:N3	2.22	0.73
36:5:1103:A:H3'	36:5:1104:G:H5'	1.71	0.73
44:L7:92:ILE:HD11	54:M8:4:ASP:HB2	1.68	0.73
33:E1:97:LYS:NZ	1:6:1253:U:O4	440.69	0.72
50:M4:55:ARG:NH2	50:M4:76:ALA:O	2.22	0.72
62:N6:39:LEU:HD12	62:N6:43:TYR:HE2	4.68	0.72
36:1:343:U:OP2	85:1:3744:OHX:N6	2.22	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:N8:4:ARG:NH2	36:5:1427:U:OP2	135.62	0.72
79:Q3:4:ARG:NH2	36:5:838:G:O6	236.77	0.72
41:L4:20:LEU:HD11	41:L4:252:GLU:HG3	3.28	0.72
41:L4:283:THR:HG22	41:L4:285:ASP:H	1.55	0.72
36:1:2295:A:OP1	59:N3:63:LYS:NZ	2.23	0.72
36:1:2683:U:H2'	36:1:2684:C:C6	2.24	0.72
87:1:3401:ANM:C13	87:1:3401:ANM:HN1	2.01	0.72
40:L3:21:ARG:NH2	36:5:3309:G:O6	199.16	0.72
63:N7:33:SER:OG	63:N7:34:LYS:N	3.80	0.72
1:2:1485:C:OP1	85:2:2059:OHX:N6	2.22	0.72
38:8:139:U:O4	85:8:219:OHX:N5	2.21	0.72
14:C2:61:VAL:HG13	14:C2:121:VAL:HG23	1.70	0.72
45:L8:161:GLU:OE2	51:M5:26:ARG:NH2	2.92	0.72
61:N5:92:LYS:HD2	61:N5:112:THR:HG23	1.71	0.72
36:1:964:G:HO2'	64:N8:41:HIS:HE2	1.36	0.72
67:O1:80:ASN:HA	67:O1:90:PHE:CE2	5.56	0.72
6:S4:146:THR:HG21	1:6:123:G:H21	342.40	0.72
36:5:1543:G:O6	85:5:4038:OHX:N1	2.23	0.72
1:6:1564:U:H2'	1:6:1565:C:C6	2.24	0.72
8:S6:176:GLN:HG2	1:6:169:A:H5''	328.65	0.72
15:C3:101:HIS:O	15:C3:105:ASN:ND2	2.19	0.72
30:D8:36:THR:OG1	30:D8:37:SER:N	2.23	0.72
63:N7:88:ASP:O	63:N7:121:ARG:NH2	2.22	0.72
72:O6:74:LYS:HD2	72:O6:80:PHE:HD2	1.54	0.72
63:N7:67:LYS:NZ	36:5:1630:U:OP1	197.25	0.72
39:L2:20:THR:HA	39:L2:23:ARG:HD2	1.71	0.72
40:L3:53:MET:HE1	40:L3:327:CYS:HB3	1.99	0.72
50:M4:16:GLU:HB3	56:N0:149:LYS:HB3	2.74	0.72
74:O8:36:LYS:HG2	74:O8:37:PRO:HD2	1.72	0.72
79:Q3:49:ARG:HD2	79:Q3:50:GLY:H	1.52	0.72
3:S1:26:ARG:NH1	3:S1:49:ASN:OD1	2.21	0.72
36:1:1170:A:OP2	85:1:3818:OHX:N6	2.23	0.72
20:C8:126:ARG:HB2	20:C8:133:VAL:HG12	6.18	0.72
49:M3:58:VAL:HG13	36:5:75:G:H5''	88.40	0.72
66:O0:18:ILE:HG22	66:O0:19:LYS:HD3	5.40	0.72
13:C1:33:ARG:NH2	13:C1:51:GLY:O	2.71	0.72
33:E1:91:ILE:HG12	33:E1:92:LYS:H	1.54	0.72
36:1:2895:G:O2'	76:Q0:100:TYR:O	2.06	0.72
1:6:1370:U:H4'	1:6:1371:A:H4'	1.72	0.72
64:N8:6:THR:HG22	64:N8:9:ARG:HG2	2.00	0.72
73:O7:87:SER:O	85:O7:104:OHX:N3	2.22	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:34:ALA:HB2	10:S8:56:ARG:HD3	1.90	0.72
36:1:1240:A:H61	36:1:1244:A:H5''	1.55	0.72
36:5:2248:C:OP2	85:5:3822:OHX:N6	2.22	0.72
25:D3:91:GLY:O	25:D3:93:LEU:N	2.23	0.72
28:D6:10:ARG:HB2	28:D6:34:LYS:HA	2.06	0.72
34:SR:236:ALA:O	34:SR:261:LYS:NZ	3.70	0.72
36:1:1298:C:OP2	85:1:3823:OHX:N4	2.22	0.71
1:6:1579:U:OP1	85:6:2147:OHX:N4	2.22	0.71
43:L6:166:LYS:HZ1	36:5:3214:U:H6	272.71	0.71
50:M4:23:ILE:HA	50:M4:63:VAL:HG23	1.72	0.71
36:1:2310:U:OP1	85:1:3997:OHX:N1	2.22	0.71
36:1:2687:G:N7	85:1:3759:OHX:N2	2.37	0.71
36:1:3042:U:OP2	36:1:3092:C:N4	2.20	0.71
36:1:979:U:H1'	36:1:980:A:C8	2.25	0.71
1:2:1482:C:O2'	18:C6:72:GLY:O	2.08	0.71
1:6:1151:A:O2'	1:6:1766:A:N7	2.22	0.71
1:2:900:A:OP1	16:C4:43:THR:OG1	2.08	0.71
85:1:3944:OHX:N4	55:M9:14:VAL:O	2.23	0.71
56:N0:6:GLU:OE1	56:N0:99:ARG:NH2	3.02	0.71
3:S1:137:ILE:HD11	3:S1:172:LEU:HD22	3.38	0.71
4:S2:90:THR:HG22	4:S2:92:ALA:H	1.53	0.71
36:1:1310:G:O6	85:1:3888:OHX:N1	2.23	0.71
36:1:600:G:O6	85:1:3956:OHX:N5	2.24	0.71
30:D8:11:LYS:NZ	30:D8:31:GLU:OE1	4.95	0.71
54:M8:170:ARG:NH1	64:N8:56:VAL:O	2.23	0.71
10:S8:48:THR:HG21	10:S8:54:LYS:HE3	1.71	0.71
34:SR:82:SER:HG	34:SR:92:TRP:HE1	2.16	0.71
36:1:2796:G:N7	78:Q2:63:LYS:NZ	2.39	0.71
36:1:807:A:H61	36:1:934:G:H22	1.38	0.71
1:2:190:C:N4	1:2:196:G:O6	2.18	0.71
36:5:1564:U:H2'	36:5:1565:G:C8	2.25	0.71
36:5:2744:U:OP1	85:5:3935:OHX:N2	2.23	0.71
36:1:1364:C:OP1	44:L7:110:ARG:NH2	2.20	0.71
36:1:2687:G:OP1	42:L5:8:LYS:NZ	2.23	0.71
36:5:3192:U:O4	85:5:3979:OHX:N2	2.22	0.71
36:5:2371:G:O6	85:5:3752:OHX:N4	2.23	0.71
36:5:990:U:O4	85:5:4021:OHX:N6	2.24	0.71
77:Q1:11:ARG:NH2	1:6:1127:G:OP1	294.32	0.71
25:D3:90:ASP:O	25:D3:136:TRP:NE1	2.20	0.71
36:1:2573:G:O6	85:1:3859:OHX:N3	2.23	0.71
39:L2:128:ARG:NH1	36:5:2177:G:OP2	198.84	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:101:GLU:OE2	25:D3:16:ARG:NH2	3.94	0.71
39:L2:108:PRO:O	39:L2:111:THR:OG1	2.08	0.71
47:M0:19:LYS:HE3	47:M0:26:VAL:HG22	3.15	0.71
63:N7:83:THR:HA	66:O0:58:TYR:HE2	2.14	0.71
2:S0:13:ASP:OD1	2:S0:179:ARG:NH2	2.88	0.71
5:S3:164:VAL:HG13	5:S3:168:ILE:HD11	1.71	0.71
1:2:1727:G:H21	10:S8:32:GLN:HE22	1.36	0.71
11:S9:133:HIS:NE2	1:6:513:U:OP1	448.15	0.71
41:L4:144:LYS:O	85:L4:401:OHX:N1	6.25	0.71
41:L4:292:SER:OG	41:L4:294:GLU:OE1	3.23	0.71
53:M7:30:ARG:HA	53:M7:119:VAL:HG11	2.34	0.71
66:O0:100:ILE:HG13	66:O0:101:LEU:HD22	5.16	0.71
68:O2:91:THR:HG22	68:O2:92:TYR:HD2	1.55	0.71
34:SR:20:VAL:HG11	34:SR:310:ILE:HG12	2.18	0.71
20:C8:91:ASP:OD1	20:C8:92:ILE:N	2.39	0.71
22:D0:106:ILE:HG13	22:D0:107:THR:H	1.56	0.71
49:M3:13:HIS:NE2	36:5:98:G:N7	139.47	0.71
3:S1:48:VAL:HG21	3:S1:61:LEU:HD22	4.79	0.71
10:S8:18:ARG:NH1	1:6:105:A:OP1	305.85	0.71
87:1:3401:ANM:C5	87:1:3401:ANM:H151	2.20	0.71
36:1:533:A:O2'	36:1:535:G:OP2	2.08	0.71
64:N8:27:LYS:NZ	36:5:801:A:OP1	154.56	0.71
1:6:58:U:O4	85:6:2053:OHX:N6	2.24	0.71
36:1:19:U:O2'	51:M5:138:GLN:NE2	2.24	0.71
64:N8:28:HIS:CD2	64:N8:32:ARG:HG3	2.25	0.71
18:C6:110:THR:HA	18:C6:113:ASP:HB2	2.33	0.71
40:L3:375:GLU:OE2	60:N4:14:TYR:OH	2.06	0.71
51:M5:58:GLY:HA3	51:M5:142:ILE:HD11	1.72	0.71
61:N5:105:VAL:HG11	61:N5:126:LEU:HD13	1.72	0.71
36:1:2419:A:H2'	36:1:2420:C:H6	1.56	0.70
36:1:2794:G:N7	85:1:3794:OHX:N2	2.39	0.70
10:S8:162:ALA:HA	36:1:3353:G:H5'	1.73	0.70
1:2:1542:G:N2	1:2:1568:C:H1'	2.06	0.70
70:O4:37:LYS:NZ	36:5:1591:G:OP1	160.31	0.70
1:6:67:A:O2'	1:6:69:G:OP1	2.07	0.70
18:C6:40:GLU:HA	18:C6:42:GLU:N	2.05	0.70
4:S2:143:TYR:O	24:D2:98:GLN:NE2	2.86	0.70
43:L6:78:ARG:NH1	36:5:3272:C:OP2	247.45	0.70
46:L9:12:VAL:HB	46:L9:51:GLN:HA	1.71	0.70
48:M1:160:VAL:O	48:M1:164:LYS:N	2.22	0.70
59:N3:2:SER:OG	59:N3:3:GLY:N	4.12	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:N6:82:VAL:HG12	62:N6:85:VAL:H	1.56	0.70
78:Q2:12:CYS:SG	78:Q2:17:CYS:CB	2.94	0.70
36:5:1110:U:O4	85:5:3834:OHX:N4	2.24	0.70
16:C4:29:HIS:HB3	16:C4:41:ARG:HG3	1.72	0.70
17:C5:68:PRO:O	85:C5:201:OHX:N1	6.86	0.70
42:L5:68:THR:HG22	42:L5:70:THR:H	1.55	0.70
49:M3:91:ARG:NH2	49:M3:97:VAL:O	2.23	0.70
7:S5:62:VAL:HG13	7:S5:89:ILE:HG12	1.72	0.70
1:2:591:A:H2'	1:2:592:A:C8	2.27	0.70
36:5:3055:U:O2'	36:5:3057:U:OP1	2.09	0.70
36:5:3274:A:H3'	36:5:3275:U:H5''	1.73	0.70
36:5:437:G:N7	85:5:4068:OHX:N3	2.39	0.70
1:6:1524:A:H2'	1:6:1525:A:C8	2.27	0.70
1:6:987:G:O6	85:6:2082:OHX:N4	2.24	0.70
21:C9:28:LEU:HA	21:C9:111:ILE:HD11	4.14	0.70
40:L3:347:SER:O	40:L3:349:LYS:N	2.24	0.70
41:L4:6:VAL:N	41:L4:20:LEU:O	2.24	0.70
54:M8:176:ARG:NH1	64:N8:46:ASP:OD2	2.24	0.70
56:N0:155:ARG:NH1	36:5:3206:C:O2	311.10	0.70
3:S1:110:LEU:HD21	3:S1:213:ARG:HD2	1.73	0.70
8:S6:120:GLU:HG3	8:S6:125:THR:HB	1.72	0.70
36:1:2977:G:OP1	85:1:3980:OHX:N5	2.24	0.70
1:2:749:U:H3	1:2:800:U:H3	1.40	0.70
64:N8:117:ARG:NH2	36:5:718:G:OP1	158.34	0.70
2:S0:185:ARG:HB2	23:D1:45:ALA:H	1.56	0.70
33:E1:108:VAL:HB	33:E1:114:VAL:HG22	1.72	0.70
48:M1:23:VAL:O	48:M1:25:GLU:N	2.23	0.70
72:O6:36:ARG:NH1	36:5:116:A:OP1	108.21	0.70
2:S0:69:ASN:OD1	4:S2:244:SER:OG	2.09	0.70
36:5:2874:G:H1'	36:5:2875:U:H5'	1.72	0.70
54:M8:21:SER:OG	36:5:673:U:OP1	150.68	0.70
63:N7:127:ASN:O	63:N7:129:TRP:N	2.24	0.70
4:S2:157:LYS:HG2	4:S2:170:ILE:HG13	1.73	0.70
36:1:114:A:N1	36:1:266:A:O2'	2.24	0.70
36:1:1230:G:H1	36:1:1279:C:H42	1.36	0.70
36:1:1881:A:H2'	36:1:1882:G:H8	1.55	0.70
36:1:735:A:H2'	36:1:736:A:C8	2.27	0.70
3:S1:129:THR:OG1	3:S1:131:ASP:OD1	6.63	0.70
36:1:2924:U:O4	85:1:3878:OHX:N1	2.25	0.70
1:2:1067:C:H5''	3:S1:150:VAL:HG23	1.71	0.70
36:5:2610:G:O6	85:5:4011:OHX:N6	2.24	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:C8:27:LYS:O	20:C8:31:ALA:N	2.69	0.70
25:D3:137:LYS:HE3	25:D3:139:LYS:HD2	1.73	0.70
50:M4:13:ARG:NH1	50:M4:65:LEU:O	2.37	0.70
56:N0:52:LYS:NZ	37:7:100:C:OP2	281.45	0.70
57:N1:8:ARG:O	57:N1:11:THR:OG1	2.55	0.70
63:N7:23:VAL:HG12	63:N7:45:GLY:HA3	1.85	0.70
1:2:885:G:OP1	3:S1:136:ARG:NH1	2.23	0.70
3:S1:27:LYS:NZ	3:S1:48:VAL:O	2.17	0.70
6:S4:199:GLU:HB2	6:S4:207:LEU:HB2	1.72	0.70
10:S8:76:THR:HB	10:S8:105:ASP:HB2	1.74	0.70
38:4:150:G:N7	85:4:220:OHX:N4	2.39	0.70
36:1:1382:G:OP2	41:L4:188:ARG:NH1	2.25	0.70
46:L9:48:VAL:HG13	46:L9:52:LEU:HB3	1.73	0.70
36:1:2419:A:H2'	36:1:2420:C:C6	2.27	0.70
85:2:2092:OHX:N6	10:S8:52:ASN:OD1	2.24	0.70
78:Q2:45:ARG:NH2	36:5:283:G:OP2	147.73	0.70
1:6:453:U:O4	85:6:2025:OHX:N4	2.24	0.70
59:N3:48:ARG:HH11	59:N3:48:ARG:HG3	2.65	0.70
20:C8:120:ARG:NH2	35:SM:58:GLU:OE1	2.25	0.70
36:1:2218:G:H2'	36:1:2219:A:H8	1.57	0.70
36:1:2636:A:H5''	36:1:2637:A:H5'	1.73	0.70
36:5:155:G:H5''	36:5:156:G:C8	2.27	0.70
14:C2:66:VAL:HG11	14:C2:71:ILE:HD12	3.33	0.70
20:C8:94:ASP:OD1	20:C8:98:TYR:OH	2.07	0.70
39:L2:204:MET:HG2	39:L2:208:ASP:HB2	4.59	0.70
40:L3:260:VAL:HG11	40:L3:266:ARG:NH1	2.07	0.70
53:M7:29:THR:HA	53:M7:32:THR:HG23	1.74	0.70
56:N0:91:TYR:O	56:N0:137:ARG:NH1	2.24	0.70
4:S2:80:VAL:HA	4:S2:102:VAL:HG22	1.72	0.70
4:S2:161:LYS:NZ	4:S2:163:GLY:O	2.25	0.70
36:1:425:G:O6	85:1:3735:OHX:N6	2.24	0.69
1:2:656:G:O2'	1:2:657:U:O4'	2.10	0.69
53:M7:122:ALA:HB3	53:M7:143:PRO:HB2	2.67	0.69
2:S0:103:THR:O	2:S0:106:SER:OG	2.33	0.69
9:S7:74:GLN:O	9:S7:78:THR:OG1	2.25	0.69
36:1:742:G:N7	85:1:3835:OHX:N1	2.40	0.69
1:2:1041:G:H2'	1:2:1042:G:C8	2.27	0.69
1:2:1188:G:O2'	1:2:1430:U:OP1	2.10	0.69
36:5:1919:G:N7	85:5:3915:OHX:N4	2.41	0.69
30:D8:12:VAL:HA	30:D8:30:VAL:HG12	1.73	0.69
57:N1:12:ARG:NH1	57:N1:13:TYR:OH	2.24	0.69

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:S2:140:ARG:NH2	4:S2:226:THR:OG1	4.94	0.69
36:1:3043:C:OP2	59:N3:48:ARG:NH2	2.25	0.69
1:2:1500:C:OP1	21:C9:122:ARG:NH2	2.24	0.69
37:3:121:U:H1'	42:L5:268:GLU:HG2	1.73	0.69
1:6:110:U:O4	85:6:2054:OHX:N2	2.26	0.69
42:L5:8:LYS:NZ	37:7:15:C:O3'	312.29	0.69
30:D8:31:GLU:O	30:D8:33:LEU:N	3.33	0.69
6:S4:230:GLU:HB2	6:S4:233:LYS:HB2	1.74	0.69
11:S9:143:ILE:HG22	11:S9:145:SER:H	1.57	0.69
48:M1:137:ARG:NH1	37:7:28:C:OP1	301.86	0.69
1:2:1587:A:O2'	7:S5:104:ASN:OD1	2.10	0.69
8:S6:84:TYR:OH	8:S6:91:GLU:O	2.46	0.69
36:5:2877:G:N7	85:5:3977:OHX:N1	2.40	0.69
46:L9:120:ASP:OD1	46:L9:124:ARG:NH2	2.46	0.69
64:N8:147:LEU:HD12	72:O6:7:ILE:HD11	6.14	0.69
64:N8:85:ASP:OD1	64:N8:86:LYS:N	2.25	0.69
73:O7:35:SER:OG	36:5:361:A:H5'	126.26	0.69
11:S9:109:LEU:HB2	11:S9:146:PHE:HB3	1.75	0.69
34:SR:267:PRO:HD2	34:SR:269:TYR:HE1	3.65	0.69
16:C4:12:GLN:HG3	16:C4:111:ARG:HG3	1.75	0.69
23:D1:81:ASN:O	23:D1:83:TRP:N	2.25	0.69
3:S1:127:VAL:HG11	3:S1:176:VAL:HG21	1.75	0.69
4:S2:47:ALA:O	4:S2:49:LYS:N	2.24	0.69
7:S5:117:THR:HG21	7:S5:194:LEU:HD12	1.72	0.69
36:1:1276:U:OP1	85:1:3945:OHX:N4	2.25	0.69
37:3:62:U:O3'	42:L5:285:ARG:NH1	2.26	0.69
36:5:2895:G:H2'	36:5:2896:A:H5''	1.73	0.69
42:L5:285:ARG:NH1	37:7:62:U:O3'	341.47	0.69
15:C3:91:LEU:HD12	15:C3:125:LEU:HD12	2.93	0.69
48:M1:50:ALA:HB2	48:M1:65:ILE:HD12	1.73	0.69
49:M3:151:ALA:O	49:M3:153:ASP:N	3.99	0.69
36:1:353:G:N7	73:O7:55:ARG:HD3	2.08	0.69
26:D4:116:LYS:NZ	1:6:57:G:OP2	338.41	0.69
41:L4:354:VAL:HG11	57:N1:143:THR:HG21	1.77	0.69
55:M9:86:GLU:OE2	55:M9:91:SER:N	2.20	0.69
1:6:1680:G:O6	85:6:2153:OHX:N4	2.26	0.69
18:C6:82:ARG:NH1	18:C6:114:ARG:O	3.25	0.69
18:C6:49:TYR:HB3	18:C6:53:LEU:HD21	3.16	0.69
71:O5:21:LEU:HD22	71:O5:25:LYS:HE3	2.35	0.69
11:S9:60:LEU:HD21	11:S9:93:LEU:HB3	4.94	0.69
36:1:3281:U:H2'	36:1:3282:U:C6	2.28	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3353:G:O2'	36:1:3354:U:OP1	2.10	0.69
1:2:1522:U:OP2	85:2:2018:OHX:N3	2.25	0.69
1:2:792:U:H3'	1:2:793:A:H8	1.58	0.69
47:M0:4:ARG:NH1	36:5:2828:G:O2'	264.75	0.69
22:D0:20:ILE:HD12	22:D0:100:VAL:HG21	4.19	0.69
68:O2:100:ILE:O	68:O2:105:ARG:NH1	2.26	0.69
9:S7:49:ILE:HG13	9:S7:57:ALA:HB3	3.47	0.69
10:S8:89:GLU:OE1	10:S8:92:ARG:NH2	2.26	0.69
1:2:301:A:OP2	85:2:2023:OHX:N2	2.26	0.69
37:3:11:A:N1	37:3:67:G:O2'	2.23	0.69
36:5:1134:G:N7	85:5:3830:OHX:N3	2.41	0.69
15:C3:151:ASN:O	85:C3:201:OHX:N6	2.25	0.69
17:C5:126:VAL:HG13	17:C5:127:ARG:H	1.59	0.69
22:D0:61:LYS:HG3	22:D0:86:ILE:HB	1.74	0.69
66:O0:45:ALA:O	66:O0:48:THR:OG1	4.38	0.69
6:S4:108:ARG:NH1	1:6:788:A:OP2	398.05	0.69
36:1:1744:G:O6	85:1:3954:OHX:N2	2.26	0.68
36:1:1790:G:O6	85:1:4019:OHX:N4	2.26	0.68
1:2:40:A:O2'	85:2:2043:OHX:N5	2.26	0.68
1:2:9:U:O4	85:2:2113:OHX:N6	2.26	0.68
64:N8:22:ILE:HD13	36:5:1114:U:H5''	192.72	0.68
36:5:272:G:OP2	85:5:3917:OHX:N6	2.26	0.68
18:C6:32:ASN:O	18:C6:66:ARG:NH1	2.26	0.68
44:L7:134:VAL:O	44:L7:229:PHE:HA	2.62	0.68
48:M1:6:GLN:O	48:M1:7:ASN:ND2	2.26	0.68
53:M7:136:ILE:O	53:M7:137:ASN:ND2	2.65	0.68
59:N3:2:SER:HA	59:N3:56:ASP:HA	4.14	0.68
77:Q1:21:ARG:NH1	1:6:1654:G:OP1	282.80	0.68
78:Q2:25:VAL:HG22	78:Q2:72:LEU:HD22	1.75	0.68
1:2:872:G:O6	85:2:2085:OHX:N3	2.26	0.68
37:3:112:G:OP2	85:3:215:OHX:N1	2.26	0.68
13:C1:21:ASN:N	13:C1:21:ASN:OD1	2.71	0.68
32:E0:29:LYS:HG3	32:E0:30:PRO:HD2	4.86	0.68
39:L2:206:PRO:HG3	39:L2:213:GLY:HA2	3.62	0.68
39:L2:70:ARG:NH2	36:5:2522:G:O6	176.30	0.68
45:L8:78:PHE:O	45:L8:80:TYR:N	2.24	0.68
69:O3:86:ARG:O	85:O3:202:OHX:N1	2.26	0.68
11:S9:113:VAL:HG21	11:S9:134:ILE:HD12	1.75	0.68
36:1:20:A:OP2	71:O5:90:ARG:NH1	2.26	0.68
1:2:1254:U:OP2	14:C2:46:ARG:NH1	2.27	0.68
36:5:3242:G:H5'	36:5:3245:A:C8	2.27	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:330:G:OP2	85:5:3892:OHX:N1	2.26	0.68
1:6:918:U:H2'	1:6:919:A:H8	1.58	0.68
22:D0:28:SER:HB2	22:D0:112:VAL:HA	1.75	0.68
36:1:2177:G:OP2	39:L2:128:ARG:NH1	2.26	0.68
42:L5:151:GLN:OE1	42:L5:152:ARG:N	2.26	0.68
57:N1:26:HIS:ND1	57:N1:26:HIS:O	2.25	0.68
63:N7:88:ASP:HB3	63:N7:121:ARG:HH22	1.58	0.68
72:O6:9:ILE:HD13	72:O6:10:GLY:H	4.96	0.68
11:S9:93:LEU:HA	11:S9:96:VAL:HG13	1.75	0.68
1:2:1114:G:O6	85:2:2033:OHX:N5	2.26	0.68
25:D3:96:VAL:HG23	25:D3:97:ASP:H	1.58	0.68
41:L4:338:LYS:O	41:L4:340:GLY:N	2.25	0.68
36:1:1430:U:O4	64:N8:3:SER:OG	2.12	0.68
2:S0:193:GLN:O	2:S0:195:TRP:N	2.26	0.68
36:1:1565:G:N2	36:1:1574:C:O2	2.26	0.68
1:6:1202:A:OP1	85:6:2092:OHX:N2	2.26	0.68
14:C2:124:LYS:O	14:C2:126:TRP:N	2.25	0.68
33:E1:87:THR:O	1:6:1445:G:N1	378.28	0.68
40:L3:218:ILE:HG13	40:L3:276:THR:HG23	4.13	0.68
44:L7:228:SER:HA	44:L7:232:ARG:HH21	2.42	0.68
54:M8:100:THR:HG23	54:M8:120:GLU:HB3	1.74	0.68
3:S1:51:SER:HA	3:S1:57:ALA:H	1.58	0.68
8:S6:57:ASP:HA	8:S6:106:LEU:HA	1.76	0.68
36:5:993:G:OP1	85:5:3754:OHX:N6	2.26	0.68
3:S1:40:ASN:ND2	3:S1:42:ASN:O	2.26	0.68
36:5:2258:U:OP2	85:5:3792:OHX:N4	2.27	0.68
1:6:471:A:OP2	85:6:2066:OHX:N5	2.27	0.68
10:S8:11:ARG:O	13:C1:133:LYS:NZ	2.26	0.68
46:L9:8:GLN:HG2	46:L9:68:LEU:HD13	1.75	0.68
50:M4:80:THR:HG21	36:5:560:G:H5'	354.21	0.68
54:M8:158:HIS:H	54:M8:186:VAL:HG12	1.58	0.68
6:S4:73:ASP:OD2	6:S4:122:LYS:NZ	2.43	0.68
7:S5:57:SER:O	7:S5:59:VAL:N	2.22	0.68
8:S6:153:VAL:O	8:S6:155:ASP:N	2.27	0.68
41:L4:217:LYS:NZ	36:5:210:U:O2	66.87	0.68
1:6:1769:U:OP2	85:6:2106:OHX:N2	2.27	0.68
14:C2:52:LEU:O	14:C2:85:LYS:NZ	2.27	0.68
54:M8:37:ALA:O	54:M8:46:LYS:NZ	2.27	0.68
59:N3:136:VAL:HG12	59:N3:137:VAL:HG23	1.75	0.68
74:O8:32:ASN:O	74:O8:34:ALA:N	2.27	0.68
1:2:66:U:H5	8:S6:173:PRO:HG3	1.59	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:67:LEU:HG	9:S7:94:ALA:HB2	2.16	0.68
1:2:511:A:OP2	11:S9:176:ASN:ND2	2.27	0.68
36:1:357:A:OP2	85:O9:101:OHX:N4	2.27	0.68
1:2:1160:A:H2'	1:2:1161:C:C6	2.29	0.68
1:6:383:G:N7	85:6:2111:OHX:N5	2.41	0.68
30:D8:52:ASP:OD1	30:D8:52:ASP:N	2.26	0.68
40:L3:76:VAL:HG12	40:L3:325:LYS:HA	1.75	0.68
44:L7:25:GLN:H	44:L7:28:ALA:HB3	1.59	0.68
46:L9:28:VAL:HG22	46:L9:33:THR:HB	3.84	0.68
57:N1:101:CYS:HB3	36:5:990:U:H1'	252.32	0.68
5:S3:29:LEU:HD21	5:S3:69:LEU:HD21	3.76	0.68
1:2:283:U:H5''	8:S6:188:ARG:HD3	1.75	0.68
1:2:1570:A:OP1	85:2:2112:OHX:N5	2.27	0.68
1:2:639:U:OP1	9:S7:117:THR:OG1	2.11	0.68
37:3:26:C:H5'	42:L5:56:THR:HB	1.76	0.68
17:C5:37:ALA:O	17:C5:42:ARG:NH1	3.00	0.68
25:D3:92:CYS:HA	25:D3:95:PHE:HD2	1.59	0.68
46:L9:171:ASP:OD2	46:L9:173:ARG:NH1	2.27	0.68
47:M0:33:ILE:H	47:M0:33:ILE:HD13	1.57	0.68
47:M0:36:LEU:HD21	47:M0:69:ARG:HH11	1.58	0.68
48:M1:49:LYS:HB3	48:M1:62:ASN:HA	1.76	0.68
3:S1:212:VAL:O	3:S1:214:LYS:N	2.27	0.68
5:S3:28:GLU:OE2	12:C0:56:LYS:NZ	2.24	0.68
36:1:3074:G:OP1	85:1:3899:OHX:N1	2.27	0.67
36:1:1752:A:OP2	85:1:3907:OHX:N5	2.27	0.67
11:S9:58:ASP:O	11:S9:61:THR:OG1	2.29	0.67
36:1:2233:A:OP2	85:1:3904:OHX:N5	2.27	0.67
1:2:322:G:O2'	10:S8:10:LYS:NZ	2.27	0.67
36:5:2818:U:H6	36:5:2818:U:H5'	1.58	0.67
36:5:3241:G:H2'	36:5:3245:A:C8	2.29	0.67
1:6:845:G:H2'	1:6:846:G:H8	1.60	0.67
28:D6:43:ASN:OD1	28:D6:66:LYS:NZ	6.25	0.67
62:N6:112:ASP:H	62:N6:115:ARG:HB2	1.58	0.67
66:O0:99:ASP:N	66:O0:99:ASP:OD2	2.70	0.67
2:S0:13:ASP:HA	2:S0:16:LEU:HD12	1.76	0.67
34:SR:256:THR:N	34:SR:259:GLY:O	2.90	0.67
1:2:115:G:OP1	13:C1:67:ARG:NH1	2.27	0.67
75:O9:45:ARG:NH2	36:5:1841:A:N3	128.44	0.67
8:S6:177:ARG:NH2	1:6:143:G:N7	311.88	0.67
42:L5:269:SER:OG	37:7:1:G:N3	316.39	0.67
20:C8:139:LYS:O	20:C8:143:ARG:NH1	2.23	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:35:VAL:O	43:L6:38:THR:OG1	2.69	0.67
70:O4:91:ARG:HG3	70:O4:95:ILE:HD13	1.75	0.67
79:Q3:73:THR:HG22	79:Q3:76:ALA:H	1.60	0.67
34:SR:76:ASP:OD1	34:SR:76:ASP:N	2.26	0.67
36:1:1238:C:N4	36:1:1245:A:OP2	2.26	0.67
36:1:3148:U:O4	85:1:3971:OHX:N2	2.27	0.67
36:5:2233:A:OP2	85:5:3806:OHX:N5	2.27	0.67
49:M3:65:TYR:OH	36:5:700:C:OP1	109.14	0.67
20:C8:87:ASN:OD1	20:C8:88:ARG:N	2.23	0.67
40:L3:188:ILE:HD12	40:L3:189:SER:H	1.58	0.67
3:S1:181:LEU:O	3:S1:183:GLN:N	2.27	0.67
35:SM:49:LYS:N	36:1:1019:G:OP1	2.28	0.67
36:1:155:G:H5''	36:1:156:G:C8	2.29	0.67
87:1:3401:ANM:C5	87:1:3401:ANM:C15	2.73	0.67
1:2:1291:G:H5'	4:S2:119:LYS:HE3	1.77	0.67
1:2:574:G:O6	25:D3:65:ASN:ND2	2.22	0.67
16:C4:25:ASP:OD1	16:C4:26:THR:N	3.18	0.67
49:M3:166:ALA:HB1	64:N8:147:LEU:HD21	2.77	0.67
5:S3:182:LEU:H	5:S3:182:LEU:HD12	1.59	0.67
7:S5:79:ASN:OD1	7:S5:83:ARG:NH2	2.79	0.67
10:S8:82:VAL:HG13	10:S8:101:ILE:HG22	6.50	0.67
36:5:1024:G:N2	36:5:1026:A:OP2	2.28	0.67
14:C2:103:LEU:HG	14:C2:116:VAL:HG22	1.77	0.67
7:S5:143:ARG:NH1	30:D8:57:MET:SD	2.68	0.67
51:M5:106:VAL:HG11	51:M5:132:VAL:HG21	1.77	0.67
51:M5:14:LYS:HA	51:M5:19:LEU:HD23	2.05	0.67
62:N6:45:ILE:HD12	62:N6:119:ILE:HG23	1.87	0.67
6:S4:131:LEU:HD22	6:S4:137:PRO:HB3	1.77	0.67
7:S5:149:VAL:HG23	30:D8:67:ARG:H	1.58	0.67
1:2:740:A:H2'	1:2:741:C:H5''	1.76	0.67
36:5:1025:A:H3'	36:5:1026:A:H4'	1.76	0.67
39:L2:193:ARG:NH1	36:5:2174:G:OP2	190.72	0.67
78:Q2:41:ARG:NH1	36:5:284:A:OP2	156.81	0.67
1:6:1696:G:O2'	1:6:1698:G:N7	2.17	0.67
10:S8:50:GLY:HA2	1:6:397:A:O3'	315.71	0.67
42:L5:265:TYR:HE1	37:7:121:U:H5''	316.88	0.67
56:N0:12:ARG:HB3	56:N0:24:LEU:HD23	2.01	0.67
72:O6:25:LYS:HB2	72:O6:28:TYR:HD2	1.73	0.67
8:S6:78:THR:HG22	8:S6:92:ARG:HG2	1.77	0.67
1:6:40:A:O2'	85:6:2071:OHX:N4	2.27	0.67
1:6:1041:G:OP1	85:6:2137:OHX:N4	2.28	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D3:114:LYS:HE2	1:6:571:G:H5'	363.96	0.67
41:L4:300:ARG:O	54:M8:39:ARG:NH1	2.27	0.67
42:L5:85:ARG:NH1	42:L5:254:LYS:H	1.92	0.67
55:M9:62:ARG:NH2	36:5:3068:U:OP2	172.67	0.67
6:S4:50:ASN:O	6:S4:53:LYS:NZ	2.25	0.67
10:S8:31:ARG:NH2	1:6:333:A:OP1	298.80	0.67
36:1:1789:G:O6	85:1:4019:OHX:N4	2.28	0.67
36:1:624:G:OP2	85:1:3993:OHX:N3	2.28	0.67
1:2:1280:C:H2'	1:2:1281:G:H8	1.60	0.67
6:S4:79:ASP:HB3	6:S4:82:TYR:HB2	1.76	0.67
7:S5:152:GLY:O	7:S5:154:ALA:N	2.27	0.67
10:S8:36:THR:HG21	10:S8:173:PRO:HB2	1.92	0.67
36:1:2174:G:OP2	39:L2:193:ARG:NH1	2.21	0.67
1:2:1711:C:H2'	1:2:1712:A:H5''	1.75	0.67
1:2:484:C:H42	1:2:503:G:H22	1.42	0.67
36:5:132:C:H2'	36:5:133:U:H5''	1.76	0.67
1:6:895:G:H1	1:6:917:U:H3	1.41	0.67
44:L7:143:THR:HG22	44:L7:241:LYS:HE3	1.76	0.67
1:2:743:U:OP1	9:S7:108:GLN:N	2.27	0.67
36:1:2216:G:OP1	72:O6:75:LYS:NZ	2.25	0.66
36:1:2579:G:O6	85:1:3786:OHX:N2	2.28	0.66
36:1:3035:A:OP2	85:1:3934:OHX:N4	2.28	0.66
1:6:1698:G:N2	1:6:1699:G:N7	2.43	0.66
47:M0:43:VAL:HG21	47:M0:197:VAL:HB	2.05	0.66
36:1:1369:A:OP1	64:N8:21:ARG:NH1	2.28	0.66
1:6:976:G:O6	85:6:2043:OHX:N6	2.27	0.66
42:L5:83:LEU:HD22	42:L5:88:ILE:HD12	1.77	0.66
63:N7:46:ILE:HD13	63:N7:68:ILE:HG23	1.77	0.66
36:1:1114:U:H5''	64:N8:22:ILE:HD12	1.77	0.66
71:O5:45:LYS:O	71:O5:49:LYS:HG2	4.84	0.66
34:SR:238:ASP:OD2	34:SR:258:THR:OG1	2.09	0.66
36:1:801:A:O2'	85:1:3841:OHX:N2	2.28	0.66
36:5:2400:G:O2'	36:5:2401:A:OP1	2.14	0.66
1:6:1649:G:N7	85:6:2073:OHX:N2	2.42	0.66
1:2:1382:A:H5''	22:D0:60:THR:HG22	1.78	0.66
36:1:912:G:OP2	39:L2:9:ARG:NH1	2.28	0.66
41:L4:292:SER:OG	41:L4:293:SER:N	2.21	0.66
54:M8:185:LYS:HG2	54:M8:186:VAL:HG23	1.76	0.66
1:2:535:A:OP1	11:S9:168:ARG:NH1	2.26	0.66
36:1:1148:G:O6	85:1:4017:OHX:N3	2.28	0.66
36:1:1596:C:H2'	36:1:1597:C:C6	2.29	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2874:G:O3'	87:1:3401:ANM:H11	1.95	0.66
1:2:591:A:H2'	1:2:592:A:H8	1.60	0.66
1:2:706:A:N1	1:2:734:A:N6	2.43	0.66
46:L9:70:THR:HG21	36:5:3122:A:N1	324.56	0.66
42:L5:279:LYS:NZ	37:7:110:G:OP2	326.53	0.66
51:M5:155:VAL:O	51:M5:162:ARG:NH2	2.28	0.66
36:1:1433:A:N3	68:O2:27:ARG:NH1	2.44	0.66
36:1:1420:C:OP2	41:L4:193:LYS:NZ	2.27	0.66
36:1:2108:C:H1'	36:1:3344:A:C8	2.30	0.66
36:1:3308:C:N3	53:M7:69:ARG:NH1	2.42	0.66
1:2:245:U:O4	85:2:2052:OHX:N5	2.28	0.66
1:2:452:A:OP2	85:2:1998:OHX:N5	2.28	0.66
36:5:900:G:H1'	36:5:1589:A:N6	2.11	0.66
8:S6:179:VAL:HG21	1:6:140:A:H1'	328.42	0.66
39:L2:192:LYS:HB3	39:L2:193:ARG:NH2	2.10	0.66
42:L5:56:THR:O	42:L5:58:LYS:N	2.28	0.66
66:O0:33:SER:HB2	66:O0:93:LEU:HD21	1.78	0.66
73:O7:66:TYR:OH	73:O7:73:ARG:NH2	2.96	0.66
3:S1:109:LYS:O	3:S1:112:SER:OG	2.32	0.66
3:S1:36:SER:O	3:S1:38:PHE:N	2.29	0.66
11:S9:27:GLU:OE1	11:S9:39:LYS:NZ	3.03	0.66
36:1:1952:G:H3'	36:1:1953:G:H5''	1.78	0.66
1:2:1240:U:OP2	85:2:2101:OHX:N1	2.29	0.66
36:5:2875:U:H3	36:5:2952:G:H1	1.42	0.66
36:5:2985:C:H2'	36:5:2986:U:C6	2.31	0.66
12:C0:31:LYS:NZ	12:C0:36:ASP:O	2.28	0.66
18:C6:109:PHE:O	18:C6:113:ASP:N	2.65	0.66
6:S4:150:PRO:HB2	6:S4:154:ILE:HD12	1.76	0.66
1:2:1339:C:O2'	1:2:1341:A:N7	2.27	0.66
1:2:1562:G:OP1	21:C9:89:ARG:NH2	2.29	0.66
36:1:1618:G:H4'	38:4:129:C:H1'	1.78	0.66
19:C7:28:PHE:HA	19:C7:55:THR:HG21	3.06	0.66
1:2:1796:C:OP1	28:D6:87:ARG:NH1	2.29	0.66
36:1:516:A:O3'	44:L7:60:ARG:NH2	2.28	0.66
51:M5:125:SER:HB3	36:5:2433:U:H1'	161.28	0.66
56:N0:91:TYR:HD1	56:N0:137:ARG:NH1	1.94	0.66
36:1:180:C:H2'	36:1:181:U:H6	1.61	0.66
1:2:1297:G:N2	1:2:1300:A:OP2	2.26	0.66
1:2:637:C:O2	9:S7:114:ARG:NH2	2.29	0.66
1:2:854:U:O4	55:M9:173:ARG:NH2	2.29	0.66
38:4:87:G:OP2	71:O5:7:TYR:OH	2.11	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1317:A:OP1	85:5:3939:OHX:N1	2.28	0.66
1:6:1699:G:H22	1:6:1702:A:H5''	1.61	0.66
15:C3:109:LYS:HD2	1:6:975:C:H5''	283.75	0.66
15:C3:65:VAL:HG23	15:C3:66:ILE:HG23	5.54	0.66
41:L4:232:SER:OG	41:L4:233:LEU:N	2.28	0.66
57:N1:92:ARG:NH1	36:5:2736:A:OP1	236.17	0.66
34:SR:64:HIS:ND1	34:SR:86:ASP:OD2	2.28	0.66
36:1:109:A:H4'	36:1:110:G:OP1	1.96	0.66
36:1:3166:C:H42	36:1:3284:G:H1	1.43	0.66
1:2:482:U:H2'	1:2:483:A:H8	1.60	0.66
37:3:75:G:OP1	85:3:210:OHX:N6	2.28	0.66
36:5:1631:C:H5''	36:5:1632:A:H5''	1.77	0.66
46:L9:62:ARG:NH2	36:5:3115:C:OP1	330.22	0.66
36:5:1383:G:O6	85:5:3780:OHX:N6	2.29	0.66
1:6:833:U:O4	85:6:2064:OHX:N2	2.28	0.66
16:C4:81:VAL:HG22	16:C4:115:ILE:HB	1.77	0.66
16:C4:84:ARG:HB2	16:C4:118:VAL:HG23	1.77	0.66
53:M7:53:ASP:O	85:M7:205:OHX:N3	2.29	0.66
72:O6:98:ARG:HD2	72:O6:98:ARG:H	1.60	0.66
34:SR:16:HIS:ND1	34:SR:37:SER:OG	2.26	0.66
34:SR:80:ALA:HB3	34:SR:92:TRP:HB2	2.16	0.66
1:2:1649:G:N7	85:2:2010:OHX:N1	2.44	0.66
1:6:1735:U:O4	85:6:2085:OHX:N5	2.29	0.66
15:C3:40:TYR:HB3	15:C3:45:LEU:HD12	3.38	0.66
16:C4:54:GLU:OE1	1:6:901:G:N2	282.89	0.66
25:D3:30:LYS:HE2	25:D3:34:LEU:HD11	1.75	0.66
52:M6:84:LEU:HD13	52:M6:102:LEU:HD21	1.77	0.66
2:S0:105:GLY:N	2:S0:135:GLU:OE2	2.19	0.66
1:2:284:G:N7	8:S6:188:ARG:NH1	2.44	0.66
11:S9:82:ARG:HH11	11:S9:149:ARG:HD3	7.81	0.66
38:8:106:C:O2'	85:8:224:OHX:N5	2.28	0.65
19:C7:108:ASP:O	19:C7:112:SER:OG	2.10	0.65
46:L9:18:VAL:HB	46:L9:27:VAL:HG22	1.78	0.65
46:L9:37:ASN:OD1	46:L9:39:LYS:HB2	2.54	0.65
63:N7:52:LYS:O	63:N7:65:ARG:NH1	2.29	0.65
51:M5:143:ARG:HE	71:O5:92:LEU:HD23	1.61	0.65
87:1:3401:ANM:H152	87:1:3401:ANM:H63	1.77	0.65
36:1:562:C:OP2	50:M4:77:ARG:NH1	2.27	0.65
1:2:176:C:OP1	85:2:2032:OHX:N3	2.29	0.65
36:5:2840:C:OP1	85:5:3974:OHX:N3	2.29	0.65
36:5:314:U:O4	85:5:4027:OHX:N5	2.29	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1785:U:OP1	16:C4:136:ARG:NH1	2.27	0.65
21:C9:108:LEU:HA	21:C9:111:ILE:HG22	1.78	0.65
21:C9:38:LYS:NZ	21:C9:43:ASN:O	2.27	0.65
37:3:4:U:H2'	37:3:5:G:C8	2.31	0.65
51:M5:90:ASN:ND2	36:5:2425:G:OP2	167.86	0.65
29:D7:56:CYS:SG	29:D7:57:GLU:N	2.69	0.65
53:M7:105:LYS:HB3	53:M7:107:LEU:HD13	2.34	0.65
6:S4:240:LYS:HE2	6:S4:240:LYS:H	1.60	0.65
10:S8:36:THR:HG22	10:S8:57:ALA:O	2.74	0.65
34:SR:164:ASP:O	34:SR:166:SER:N	2.80	0.65
36:1:2572:C:O2'	36:1:2573:G:O4'	2.14	0.65
1:2:1615:C:O2'	1:2:1616:G:OP2	2.12	0.65
1:2:565:C:O2	85:2:1999:OHX:N5	2.29	0.65
36:5:2704:A:OP2	85:5:3742:OHX:N2	2.30	0.65
24:D2:66:ASN:N	24:D2:66:ASN:OD1	2.24	0.65
33:E1:144:CYS:HB3	33:E1:147:VAL:HG12	3.53	0.65
39:L2:200:ARG:NH1	36:5:2146:C:OP1	213.68	0.65
40:L3:227:GLU:HG3	40:L3:270:ARG:HE	4.17	0.65
36:1:1720:U:O4	55:M9:125:LYS:NZ	2.29	0.65
11:S9:65:LYS:HA	11:S9:70:LEU:HD21	1.77	0.65
36:5:2211:U:O4	85:5:3806:OHX:N4	2.29	0.65
40:L3:10:ARG:NH1	40:L3:11:HIS:O	3.51	0.65
41:L4:206:LEU:HD23	41:L4:226:GLU:HB2	3.65	0.65
41:L4:98:ARG:HD2	41:L4:99:MET:O	1.96	0.65
49:M3:56:PRO:HG3	49:M3:74:GLY:O	1.97	0.65
50:M4:13:ARG:HB2	50:M4:65:LEU:HD12	2.99	0.65
64:N8:58:MET:SD	36:5:2786:G:N2	156.13	0.65
36:1:2578:U:OP1	85:1:4002:OHX:N5	2.29	0.65
36:5:1556:C:O2'	85:5:3798:OHX:N1	2.30	0.65
1:6:491:C:H42	1:6:497:G:H21	1.45	0.65
1:6:691:C:OP1	1:6:696:C:N4	2.29	0.65
63:N7:17:ARG:NH2	63:N7:18:TYR:OH	2.29	0.65
63:N7:36:HIS:CD2	63:N7:74:VAL:HG11	2.62	0.65
1:2:273:G:H1	1:2:283:U:H3	1.44	0.65
1:6:190:C:N4	1:6:196:G:O6	2.30	0.65
1:6:729:G:O2'	1:6:730:G:O5'	2.15	0.65
71:O5:83:LYS:HA	38:8:38:U:H5	65.99	0.65
17:C5:87:PRO:HA	17:C5:90:ILE:HG13	1.79	0.65
46:L9:173:ARG:HB2	46:L9:173:ARG:HH11	2.36	0.65
56:N0:115:ARG:NH2	36:5:1320:C:O2	289.53	0.65
2:S0:26:ALA:HB3	2:S0:149:LEU:HB2	2.00	0.65

*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:HD22	1.77	0.65
1:2:154:G:OP1	8:S6:2:LYS:NZ	2.29	0.65
1:2:1516:A:OP1	22:D0:88:LYS:NZ	2.23	0.65
36:5:172:G:N7	85:5:4069:OHX:N1	2.44	0.65
1:6:1161:C:OP1	85:6:2147:OHX:N6	2.30	0.65
13:C1:33:ARG:NH1	13:C1:53:TYR:O	3.20	0.65
57:N1:124:VAL:HG12	57:N1:125:ALA:H	1.61	0.65
62:N6:112:ASP:HB3	62:N6:115:ARG:HB2	3.83	0.65
6:S4:151:ASP:HB3	6:S4:154:ILE:HG13	1.79	0.65
9:S7:112:ARG:NH2	9:S7:117:THR:OG1	2.88	0.65
36:5:2137:U:OP1	85:5:3815:OHX:N5	2.30	0.65
57:N1:13:TYR:O	85:5:3754:OHX:N4	261.55	0.65
20:C8:100:THR:HG23	20:C8:105:VAL:HG12	7.64	0.65
21:C9:65:ILE:HG23	21:C9:71:VAL:HG13	3.59	0.65
26:D4:35:VAL:HG13	26:D4:36:SER:H	1.61	0.65
41:L4:33:ASP:O	41:L4:37:THR:HG23	1.96	0.65
57:N1:130:ARG:NH1	36:5:1098:A:OP2	253.74	0.65
3:S1:129:THR:OG1	3:S1:131:ASP:O	2.96	0.65
1:2:142:G:O6	8:S6:177:ARG:NH1	2.30	0.65
1:2:635:A:H2'	1:2:636:A:H8	1.61	0.65
36:5:1110:U:H2'	36:5:1111:U:C6	2.31	0.65
1:6:482:U:H3	1:6:505:A:H61	1.42	0.65
1:6:833:U:O4	85:6:2064:OHX:N5	2.29	0.65
15:C3:66:ILE:HG13	15:C3:67:THR:HG23	2.23	0.65
17:C5:64:LYS:HA	17:C5:73:PRO:HB3	1.79	0.65
6:S4:179:LYS:N	6:S4:194:THR:O	2.29	0.65
36:1:1696:A:OP2	85:1:4011:OHX:N3	2.29	0.64
73:O7:45:ARG:NH2	36:5:361:A:O3'	124.30	0.64
36:5:371:G:O6	85:5:4042:OHX:N5	2.30	0.64
71:O5:83:LYS:NZ	38:8:38:U:O2'	72.43	0.64
21:C9:102:ARG:NH2	1:6:1502:G:N7	405.64	0.64
21:C9:117:SER:HB2	21:C9:123:ARG:HB2	1.79	0.64
36:1:3139:A:OP1	40:L3:274:SER:OG	2.15	0.64
41:L4:73:ARG:NH2	36:5:2814:G:OP1	172.67	0.64
51:M5:99:ARG:HD3	51:M5:167:THR:HB	1.79	0.64
53:M7:16:SER:HB3	53:M7:149:VAL:HG22	1.79	0.64
36:1:1233:G:H1	36:1:1255:C:H42	1.44	0.64
36:1:3294:A:H5'	40:L3:128:LYS:HG3	1.78	0.64
36:1:3364:C:OP1	85:1:3788:OHX:N5	2.30	0.64
36:5:300:G:O6	85:5:4027:OHX:N2	2.29	0.64
20:C8:49:LYS:NZ	20:C8:79:TYR:O	2.31	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:37:PHE:CE2	24:D2:103:ILE:HD11	3.96	0.64
36:1:2899:C:C5	46:L9:171:ASP:HA	2.32	0.64
49:M3:59:ARG:HE	49:M3:69:VAL:HG23	2.47	0.64
53:M7:125:GLN:HB2	53:M7:141:SER:HB2	1.94	0.64
5:S3:141:LYS:NZ	1:6:1275:A:N3	391.55	0.64
7:S5:216:GLU:OE2	7:S5:219:ARG:NH2	2.29	0.64
8:S6:98:ARG:NH2	8:S6:101:ILE:O	2.28	0.64
8:S6:160:ARG:HG3	60:N4:84:GLY:HA3	1.78	0.64
11:S9:106:GLU:O	11:S9:111:THR:OG1	3.75	0.64
1:2:4:C:O2'	11:S9:17:ARG:NH1	2.29	0.64
35:SM:53:ARG:HE	35:SM:54:PRO:HD2	1.62	0.64
36:1:1613:A:OP1	74:O8:2:ALA:N	2.31	0.64
85:1:3895:OHX:N2	68:O2:14:THR:O	2.30	0.64
1:2:129:U:O2	85:2:1994:OHX:N1	2.30	0.64
36:5:188:U:H1'	36:5:208:C:H1'	1.79	0.64
36:5:1196:C:O2	85:5:3844:OHX:N1	2.30	0.64
1:6:454:U:H5''	1:6:455:C:C5	2.33	0.64
24:D2:25:VAL:HG23	24:D2:63:VAL:HB	1.79	0.64
30:D8:11:LYS:O	30:D8:31:GLU:N	2.87	0.64
42:L5:270:LYS:HB3	37:7:1:G:O2'	322.07	0.64
59:N3:13:ILE:HG12	59:N3:53:SER:HB2	1.79	0.64
62:N6:52:ARG:NH2	38:8:71:A:O2'	34.79	0.64
64:N8:133:LEU:HD11	64:N8:137:LYS:HE3	2.42	0.64
1:2:186:C:H42	1:2:199:G:H1	1.43	0.64
40:L3:81:THR:HG21	40:L3:322:ILE:HD13	5.01	0.64
70:O4:99:LYS:O	70:O4:103:LYS:HG2	2.07	0.64
3:S1:168:ILE:HG12	3:S1:197:ILE:HD12	1.77	0.64
4:S2:115:ILE:HD11	4:S2:212:LYS:HD2	2.61	0.64
4:S2:126:ARG:HA	4:S2:129:ILE:HD12	3.76	0.64
4:S2:56:ILE:HG23	4:S2:61:LEU:HB2	1.79	0.64
9:S7:129:LEU:HD21	9:S7:172:VAL:HG11	1.78	0.64
20:C8:125:ILE:HG12	35:SM:61:ILE:HG23	1.78	0.64
36:1:1498:A:H2'	36:1:1499:C:C6	2.33	0.64
1:2:154:G:O6	26:D4:128:LYS:NZ	2.30	0.64
1:2:520:A:H2'	1:2:521:A:C8	2.32	0.64
20:C8:30:TYR:HE2	20:C8:40:ARG:HH11	2.17	0.64
23:D1:71:ARG:O	23:D1:75:ASN:ND2	2.31	0.64
41:L4:138:ARG:HH21	41:L4:240:PRO:HB2	2.83	0.64
4:S2:87:GLN:HG2	4:S2:96:THR:HB	1.79	0.64
36:1:2169:G:O6	85:1:3772:OHX:N4	2.31	0.64
1:2:588:U:O2	32:E0:57:ASN:ND2	2.29	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:732:G:O2'	1:2:733:A:O4'	2.15	0.64
36:5:2187:G:OP2	85:5:3816:OHX:N4	2.31	0.64
36:5:3103:A:OP2	85:5:3995:OHX:N2	2.30	0.64
21:C9:97:SER:O	21:C9:101:ASN:ND2	2.31	0.64
59:N3:125:LEU:HB3	59:N3:126:TRP:CD1	2.33	0.64
70:O4:41:ARG:HG2	70:O4:56:THR:HG21	1.78	0.64
72:O6:58:ILE:HA	72:O6:61:ILE:HD12	1.78	0.64
2:S0:8:ASP:O	2:S0:54:TRP:NE1	3.63	0.64
6:S4:199:GLU:N	6:S4:207:LEU:O	2.87	0.64
36:1:1723:A:OP2	55:M9:103:ARG:NH2	2.31	0.64
36:5:145:G:O6	85:5:3861:OHX:N5	2.31	0.64
36:5:2369:G:OP2	85:5:3752:OHX:N5	2.30	0.64
36:5:1171:G:O6	85:5:3846:OHX:N1	2.31	0.64
13:C1:82:ARG:O	13:C1:110:HIS:ND1	3.69	0.64
16:C4:51:ASP:OD1	1:6:902:G:N1	283.92	0.64
40:L3:291:GLU:O	40:L3:293:ASN:N	2.30	0.64
41:L4:47:ARG:NH1	41:L4:109:TRP:O	3.43	0.64
45:L8:71:VAL:HG22	45:L8:76:ALA:HB2	1.78	0.64
48:M1:137:ARG:HD3	37:7:28:C:OP1	304.17	0.64
57:N1:118:GLU:OE1	57:N1:122:GLN:NE2	7.19	0.64
70:O4:8:ARG:HH21	70:O4:31:ARG:HD3	1.63	0.64
4:S2:69:ILE:HD11	4:S2:133:LYS:HB3	1.80	0.64
35:SM:67:GLY:O	35:SM:69:ARG:N	2.31	0.64
1:6:653:C:N4	1:6:677:G:H1	1.95	0.64
42:L5:261:THR:H	42:L5:264:GLN:HG3	1.62	0.64
59:N3:2:SER:N	59:N3:56:ASP:OD1	5.43	0.64
62:N6:79:ALA:HB1	62:N6:98:ASN:HB3	1.79	0.64
3:S1:154:SER:OG	3:S1:154:SER:O	2.14	0.64
11:S9:173:ALA:N	1:6:512:A:OP2	458.53	0.64
15:C3:74:ILE:O	15:C3:78:ASN:ND2	2.85	0.64
21:C9:16:ASN:OD1	21:C9:56:LYS:NZ	3.60	0.64
21:C9:5:SER:HG	21:C9:66:TYR:HH	1.41	0.64
40:L3:188:ILE:HD12	40:L3:188:ILE:H	2.66	0.64
62:N6:36:SER:HB2	62:N6:37:LYS:HE2	2.97	0.64
5:S3:42:THR:OG1	5:S3:45:LYS:O	2.14	0.64
1:2:143:G:N7	8:S6:177:ARG:NH2	2.45	0.64
34:SR:166:SER:HA	34:SR:184:ASN:HD21	1.60	0.64
36:1:2683:U:H2'	36:1:2684:C:H6	1.63	0.64
36:5:1523:U:OP2	36:5:1604:G:O2'	2.15	0.64
17:C5:44:ARG:NH2	17:C5:82:ASN:O	3.10	0.64
18:C6:13:LYS:HD3	18:C6:14:LYS:HG3	1.80	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:C6:22:VAL:HG22	18:C6:65:ILE:HD13	1.79	0.64
19:C7:51:ALA:O	19:C7:55:THR:OG1	2.95	0.64
25:D3:93:LEU:HD21	32:E0:8:LEU:HD13	1.80	0.64
40:L3:303:LYS:HD2	40:L3:361:THR:HG21	1.98	0.64
41:L4:237:GLN:O	41:L4:246:ARG:HG3	1.97	0.64
49:M3:48:PRO:HB2	71:O5:117:ALA:HB2	2.38	0.64
49:M3:47:ALA:HB1	49:M3:48:PRO:HD2	1.78	0.64
51:M5:186:GLY:O	51:M5:190:THR:HG22	1.98	0.64
38:4:60:U:P	61:N5:61:LYS:HZ1	2.20	0.64
74:O8:46:ARG:NH1	74:O8:47:GLY:O	2.29	0.64
2:S0:163:ASN:O	2:S0:165:ARG:N	3.43	0.64
7:S5:144:GLU:OE1	7:S5:225:ARG:NH2	2.31	0.64
36:1:2563:G:OP1	45:L8:27:THR:OG1	2.14	0.63
85:1:3831:OHX:N4	55:M9:87:ALA:O	2.30	0.63
36:1:2960:C:OP1	85:1:3862:OHX:N4	2.31	0.63
36:5:783:A:OP2	85:5:4028:OHX:N6	2.31	0.63
1:6:513:U:H2'	1:6:514:G:C8	2.33	0.63
18:C6:21:HIS:HB2	18:C6:66:ARG:HB3	3.57	0.63
85:1:3737:OHX:N5	51:M5:91:GLU:OE2	2.31	0.63
58:N2:18:ASP:OD2	58:N2:20:SER:OG	2.33	0.63
63:N7:115:LYS:NZ	63:N7:119:GLU:OE2	2.61	0.63
69:O3:6:ARG:NH1	69:O3:8:TYR:O	2.30	0.63
70:O4:58:ARG:HG3	70:O4:59:PRO:HD2	1.84	0.63
36:1:283:G:OP1	78:Q2:45:ARG:NH2	2.31	0.63
34:SR:169:ILE:HG13	34:SR:181:TRP:HB2	1.80	0.63
36:1:2873:U:H2'	87:1:3401:ANM:H2	1.79	0.63
1:2:895:G:H1	1:2:917:U:H3	1.47	0.63
36:5:535:G:O6	85:5:3926:OHX:N2	2.31	0.63
18:C6:66:ARG:NH1	1:6:1351:G:OP1	434.81	0.63
13:C1:29:LYS:O	13:C1:31:THR:N	2.31	0.63
15:C3:55:ARG:NH1	15:C3:56:ASP:OD1	4.11	0.63
24:D2:46:TYR:HB3	24:D2:69:LEU:HD13	1.80	0.63
40:L3:171:LEU:O	85:L3:403:OHX:N6	2.31	0.63
48:M1:137:ARG:HG2	37:7:28:C:H5"	308.35	0.63
46:L9:4:ILE:HD11	56:N0:148:LEU:HD21	4.20	0.63
63:N7:9:LYS:HB3	63:N7:25:ILE:HD12	1.81	0.63
3:S1:126:THR:HG22	3:S1:136:ARG:HE	2.28	0.63
6:S4:248:ILE:HA	6:S4:251:GLU:HB2	3.18	0.63
36:1:2718:U:OP2	85:1:3843:OHX:N3	2.31	0.63
1:2:1459:C:OP1	20:C8:126:ARG:NH2	2.31	0.63
1:2:1767:G:OP2	1:2:1770:U:O2'	2.14	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
85:2:1992:OHX:N3	15:C3:12:SER:O	2.31	0.63
85:5:3822:OHX:N2	85:5:4035:OHX:N1	2.46	0.63
26:D4:36:SER:OG	26:D4:37:LYS:N	2.29	0.63
39:L2:181:LYS:HB2	36:5:860:G:C6	213.48	0.63
44:L7:217:PRO:O	85:5:3846:OHX:N3	260.35	0.63
44:L7:33:ARG:HA	44:L7:36:ALA:HB3	2.34	0.63
46:L9:163:GLN:O	46:L9:166:ARG:HD3	1.97	0.63
61:N5:80:ASN:ND2	61:N5:126:LEU:O	2.32	0.63
63:N7:38:PHE:O	63:N7:40:HIS:ND1	2.17	0.63
65:N9:20:GLY:HA2	65:N9:22:LYS:HE2	4.62	0.63
39:L2:70:ARG:HH22	36:5:2522:G:H1	173.21	0.63
36:5:549:U:H2'	36:5:550:A:C8	2.34	0.63
20:C8:28:ILE:HD11	20:C8:56:LYS:HB2	6.70	0.63
24:D2:105:THR:HG22	1:6:804:A:N3	366.94	0.63
41:L4:293:SER:O	41:L4:297:SER:OG	2.15	0.63
44:L7:88:ARG:HD2	44:L7:90:LYS:O	2.03	0.63
63:N7:10:VAL:O	63:N7:83:THR:HG22	2.38	0.63
36:1:838:G:O6	79:Q3:4:ARG:NH2	2.32	0.63
1:6:235:G:H2'	1:6:236:A:H8	1.63	0.63
1:6:699:U:H3	1:6:739:G:H1	1.47	0.63
4:S2:225:LEU:HD13	24:D2:68:ARG:HA	2.12	0.63
26:D4:86:GLU:OE2	26:D4:90:ARG:NH1	3.24	0.63
41:L4:161:LYS:NZ	36:5:209:A:OP1	74.36	0.63
53:M7:48:LEU:HD22	53:M7:88:VAL:HG13	2.36	0.63
64:N8:59:ARG:NH1	36:5:90:C:OP1	152.46	0.63
65:N9:23:LYS:HB3	65:N9:24:PRO:HD3	3.26	0.63
66:O0:22:LYS:HB2	66:O0:94:GLU:HB2	1.80	0.63
78:Q2:2:VAL:N	78:Q2:90:HIS:O	3.06	0.63
36:1:1747:G:OP1	74:O8:42:LYS:NZ	2.30	0.63
38:4:77:A:OP2	85:4:219:OHX:N2	2.31	0.63
3:S1:83:LYS:NZ	16:C4:116:GLU:OE2	2.24	0.63
28:D6:37:LYS:NZ	1:6:933:A:OP2	321.83	0.63
28:D6:5:ARG:NH2	1:6:1793:G:O2'	336.30	0.63
47:M0:14:ASN:O	47:M0:128:ARG:NH2	2.31	0.63
53:M7:25:SER:O	53:M7:29:THR:HG23	2.29	0.63
69:O3:47:LYS:NZ	69:O3:104:PRO:O	3.34	0.63
71:O5:10:ARG:NH1	71:O5:60:GLU:OE2	2.32	0.63
35:SM:23:LYS:HD2	35:SM:23:LYS:H	1.64	0.63
36:1:3284:G:OP1	85:1:4003:OHX:N6	2.32	0.63
39:L2:224:THR:HG21	36:5:2201:G:H21	223.06	0.63
10:S8:33:PRO:HA	1:6:331:A:H5'	277.14	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:744:U:N3	1:6:808:U:O2	2.31	0.63
63:N7:53:VAL:HG21	63:N7:62:VAL:HG13	1.81	0.63
75:O9:44:TRP:CH2	75:O9:45:ARG:HD3	2.33	0.63
6:S4:141:THR:OG1	6:S4:143:ASP:OD2	2.17	0.63
8:S6:2:LYS:HB3	8:S6:108:VAL:HG12	5.06	0.63
34:SR:178:VAL:HB	34:SR:192:PHE:HB2	2.32	0.63
34:SR:63:GLY:HA3	34:SR:90:ARG:NH1	2.38	0.63
36:1:1659:U:H2'	36:1:1660:C:C6	2.34	0.63
36:1:2852:C:N3	47:M0:158:LYS:NZ	2.46	0.63
36:1:626:U:O4	85:1:3860:OHX:N5	2.32	0.63
1:2:1370:U:O4	85:2:2079:OHX:N1	2.32	0.63
1:2:641:G:H1	1:2:693:U:H3	1.44	0.63
37:3:112:G:H2'	37:3:113:C:C6	2.34	0.63
38:4:24:G:OP1	62:N6:17:LYS:NZ	2.31	0.63
36:5:2666:C:H2'	36:5:2667:A:H5''	1.80	0.63
54:M8:177:GLY:O	54:M8:186:VAL:N	2.47	0.63
76:Q0:125:LYS:NZ	36:5:2898:G:N7	328.69	0.63
7:S5:64:VAL:HG12	7:S5:65:ARG:HD3	1.81	0.63
8:S6:163:THR:HA	8:S6:168:THR:HG22	3.79	0.63
87:1:3401:ANM:C15	87:1:3401:ANM:C6	2.74	0.63
36:1:361:A:O3'	73:O7:45:ARG:NH2	2.32	0.63
36:5:2971:A:H3'	36:5:2971:A:N3	2.14	0.63
1:6:154:G:H1	1:6:160:C:H42	1.45	0.63
1:6:1726:G:N7	85:6:2109:OHX:N5	2.47	0.63
1:6:291:G:H2'	1:6:292:U:C6	2.34	0.63
17:C5:122:THR:HG22	17:C5:123:TYR:HD1	5.68	0.63
16:C4:111:ARG:NH2	28:D6:57:SER:O	2.32	0.63
36:1:3151:U:OP1	40:L3:128:LYS:NZ	2.31	0.63
36:1:1427:U:OP2	64:N8:4:ARG:NH2	2.32	0.63
68:O2:9:ILE:HG23	68:O2:63:THR:HB	2.34	0.63
49:M3:128:ARG:NH1	71:O5:109:ILE:O	2.70	0.63
3:S1:27:LYS:NZ	3:S1:49:ASN:OD1	3.43	0.63
36:1:977:C:OP1	54:M8:141:ARG:NH2	2.31	0.62
36:5:3126:C:OP1	85:5:4034:OHX:N5	2.32	0.62
1:6:1336:A:OP1	85:6:2141:OHX:N1	2.32	0.62
50:M4:24:LYS:NZ	50:M4:61:GLY:O	2.23	0.62
67:O1:75:ILE:HG12	67:O1:93:VAL:HG13	2.93	0.62
39:L2:83:HIS:HB3	79:Q3:64:VAL:HG12	1.80	0.62
5:S3:72:LEU:HD22	12:C0:65:TYR:HD1	2.35	0.62
11:S9:93:LEU:O	11:S9:96:VAL:HG22	2.24	0.62
36:1:224:C:O2	62:N6:103:LYS:NZ	2.32	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Q2:63:LYS:NZ	36:5:2761:G:N7	212.72	0.62
73:O7:59:THR:HG22	38:8:41:A:O2'	92.40	0.62
18:C6:115:THR:O	18:C6:117:LEU:N	4.07	0.62
36:1:860:G:OP2	39:L2:181:LYS:NZ	2.32	0.62
51:M5:136:ASP:OD2	51:M5:138:GLN:HG2	2.00	0.62
53:M7:14:SER:OG	53:M7:151:THR:OG1	2.77	0.62
66:O0:34:LEU:HD23	66:O0:59:TYR:HB3	1.88	0.62
2:S0:112:THR:HG23	2:S0:115:PHE:HB2	1.80	0.62
5:S3:160:SER:O	1:6:1420:C:O2'	415.35	0.62
5:S3:176:LEU:HA	5:S3:181:VAL:HG12	4.91	0.62
5:S3:22:ASN:OD1	5:S3:34:TYR:OH	2.13	0.62
6:S4:246:LEU:HB2	6:S4:251:GLU:HG3	1.81	0.62
6:S4:52:LEU:HB3	6:S4:54:TYR:HD2	2.52	0.62
36:1:1383:G:O3'	41:L4:138:ARG:NH2	2.32	0.62
1:6:1767:G:OP1	1:6:1770:U:H4'	1.99	0.62
16:C4:87:GLY:HA3	16:C4:120:PRO:HG2	1.86	0.62
26:D4:52:LYS:O	26:D4:54:ALA:N	2.25	0.62
40:L3:11:HIS:ND1	40:L3:234:GLY:O	2.32	0.62
40:L3:4:ARG:HG3	40:L3:4:ARG:HH11	3.73	0.62
41:L4:145:ILE:O	85:L4:401:OHX:N3	3.69	0.62
45:L8:90:THR:HA	45:L8:214:LEU:HD21	1.81	0.62
57:N1:17:ARG:O	57:N1:18:ASP:HB2	1.99	0.62
58:N2:21:SER:HB3	58:N2:107:PHE:HB2	4.19	0.62
63:N7:46:ILE:HG12	63:N7:49:TYR:CE1	3.15	0.62
78:Q2:47:GLN:OE1	78:Q2:54:THR:OG1	2.53	0.62
3:S1:32:ILE:HG13	3:S1:96:LEU:HD21	1.82	0.62
10:S8:52:ASN:OD1	85:6:2098:OHX:N3	311.46	0.62
34:SR:132:LYS:NZ	34:SR:143:THR:OG1	2.32	0.62
34:SR:211:ILE:HG13	34:SR:225:LEU:HB2	1.81	0.62
36:1:1101:G:H5"	44:L7:107:ARG:HD3	1.81	0.62
36:1:1485:G:N2	70:O4:4:ARG:HD2	2.14	0.62
36:1:3111:U:OP2	85:1:3751:OHX:N1	2.32	0.62
1:2:66:U:OP1	8:S6:136:LYS:NZ	2.31	0.62
55:M9:39:ASN:ND2	36:5:1765:U:OP2	94.82	0.62
85:5:3822:OHX:N4	85:5:4035:OHX:N3	2.48	0.62
36:5:1657:C:OP2	85:5:4015:OHX:N2	2.33	0.62
1:6:151:G:H1	1:6:163:G:H1	1.45	0.62
15:C3:3:ARG:NH1	1:6:955:A:OP1	329.21	0.62
17:C5:126:VAL:O	17:C5:127:ARG:HB2	2.34	0.62
40:L3:4:ARG:NH1	40:L3:6:TYR:O	3.08	0.62
63:N7:14:VAL:HG13	70:O4:86:LYS:HG2	1.80	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:N8:16:SER:HA	36:5:942:U:N3	169.65	0.62
36:1:1078:U:O4	85:1:3826:OHX:N2	2.32	0.62
36:1:2771:U:O2'	36:1:2772:C:O4'	2.16	0.62
12:C0:25:LYS:NZ	1:6:1435:G:N7	419.42	0.62
1:6:500:C:O2'	1:6:501:U:O4'	2.16	0.62
15:C3:38:VAL:HG12	15:C3:42:ARG:HH12	1.64	0.62
32:E0:59:GLY:O	32:E0:61:SER:N	3.81	0.62
48:M1:52:TYR:HA	48:M1:61:ARG:HG3	1.81	0.62
53:M7:25:SER:HB3	53:M7:28:ASN:HB2	2.54	0.62
6:S4:93:ASP:O	6:S4:95:THR:N	3.77	0.62
8:S6:73:ILE:HD11	8:S6:75:LEU:HD21	2.69	0.62
36:1:1915:A:H5''	55:M9:84:THR:HG22	1.81	0.62
36:1:673:U:OP1	54:M8:21:SER:OG	2.18	0.62
1:6:1584:G:H22	1:6:1611:A:P	2.21	0.62
46:L9:111:PHE:HD1	46:L9:127:PRO:HA	2.00	0.62
63:N7:5:LEU:HD11	66:O0:35:ARG:HD2	1.81	0.62
3:S1:89:ASP:HB3	3:S1:223:PHE:HE2	1.64	0.62
6:S4:195:ILE:HG22	6:S4:196:VAL:H	3.03	0.62
36:1:1815:U:O2'	36:1:1816:A:OP2	2.17	0.62
36:1:1918:C:OP2	85:1:3874:OHX:N2	2.33	0.62
1:2:1585:U:H3	1:2:1611:A:H2	1.47	0.62
36:5:247:C:C2	36:5:248:U:H1'	2.35	0.62
1:6:1268:G:H1'	1:6:1448:G:H5''	1.81	0.62
1:6:868:G:H1	1:6:960:U:H3	1.46	0.62
43:L6:43:LEU:HD11	43:L6:85:ILE:HG13	1.82	0.62
46:L9:101:VAL:HG12	46:L9:136:PHE:HE1	1.64	0.62
58:N2:32:SER:HA	58:N2:35:LYS:HB3	1.81	0.62
78:Q2:10:THR:HG22	78:Q2:23:HIS:CD2	2.35	0.62
1:2:116:U:H2'	1:2:117:U:C6	2.34	0.62
1:2:123:G:H21	6:S4:146:THR:HG21	1.65	0.62
1:2:67:A:C2	1:2:69:G:H1'	2.35	0.62
36:5:1724:U:H1'	36:5:1725:C:C6	2.35	0.62
36:5:3241:G:H2'	36:5:3245:A:H8	1.63	0.62
1:6:1280:C:H2'	1:6:1281:G:H8	1.64	0.62
1:6:152:U:C2	1:6:163:G:N2	2.67	0.62
41:L4:271:LYS:HB2	41:L4:274:TYR:HB3	2.34	0.62
47:M0:194:GLY:HA3	36:5:1010:G:N3	336.56	0.62
49:M3:50:PRO:O	49:M3:52:ASP:N	2.73	0.62
52:M6:78:ARG:HH11	52:M6:78:ARG:HG3	3.25	0.62
34:SR:167:VAL:HG23	34:SR:183:LEU:HB2	4.82	0.62
1:2:1504:G:H2'	1:2:1505:A:C8	2.34	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:513:U:OP1	11:S9:133:HIS:NE2	2.27	0.62
36:5:3134:A:OP1	85:5:3769:OHX:N5	2.32	0.62
1:6:250:C:H2'	1:6:251:A:H8	1.64	0.62
52:M6:36:VAL:HB	52:M6:108:ILE:HG12	1.80	0.62
64:N8:88:ASP:HA	64:N8:91:LEU:HB2	1.82	0.62
72:O6:74:LYS:HD2	72:O6:80:PHE:CD2	2.35	0.62
36:1:3107:U:OP1	76:Q0:114:LYS:NZ	2.31	0.62
8:S6:136:LYS:HG3	8:S6:173:PRO:HB3	2.40	0.62
36:1:1695:U:O2'	36:1:1749:A:N1	2.32	0.62
36:1:80:G:H2'	36:1:81:C:C6	2.35	0.62
1:2:1370:U:O2'	1:2:1371:A:OP2	2.13	0.62
1:2:1520:U:OP2	21:C9:75:LYS:NZ	2.32	0.62
36:5:2659:G:O6	85:5:3751:OHX:N6	2.33	0.62
12:C0:16:PHE:HD2	12:C0:76:LEU:HD23	1.65	0.62
20:C8:49:LYS:HG3	20:C8:81:ILE:HD11	2.66	0.62
22:D0:23:ARG:HB3	22:D0:117:VAL:HB	4.42	0.62
24:D2:55:ASP:O	24:D2:57:ARG:N	3.10	0.62
33:E1:135:HIS:HB2	33:E1:138:ARG:HB3	1.81	0.62
39:L2:143:GLU:O	39:L2:145:LYS:N	3.00	0.62
40:L3:105:VAL:HG21	40:L3:148:LEU:HD13	1.82	0.62
42:L5:64:ILE:HG13	42:L5:109:THR:HG21	3.53	0.62
49:M3:42:ARG:O	49:M3:46:ILE:HG12	2.44	0.62
3:S1:35:PRO:HB3	3:S1:231:LEU:HD21	6.28	0.62
3:S1:62:LYS:O	3:S1:64:ARG:N	2.27	0.62
1:2:159:U:O2'	8:S6:87:ARG:NH1	2.32	0.62
9:S7:64:VAL:HG22	9:S7:94:ALA:HB1	2.56	0.62
34:SR:101:GLN:HG2	34:SR:138:GLY:HA3	2.39	0.62
36:1:1845:G:O2'	73:O7:5:THR:HB	2.00	0.61
1:2:138:A:OP2	1:2:1706:C:O2'	2.18	0.61
36:5:541:U:H2'	36:5:542:G:C8	2.33	0.61
17:C5:127:ARG:O	17:C5:130:ARG:NH1	4.76	0.61
18:C6:7:VAL:HG12	18:C6:22:VAL:HB	5.65	0.61
18:C6:98:ASP:OD2	18:C6:99:GLU:N	2.33	0.61
51:M5:119:TYR:OH	51:M5:131:GLU:OE1	2.55	0.61
4:S2:88:LYS:HB3	4:S2:95:ARG:HB3	2.83	0.61
5:S3:175:VAL:HG13	5:S3:182:LEU:HD13	1.82	0.61
6:S4:199:GLU:OE2	6:S4:209:HIS:NE2	2.25	0.61
9:S7:30:SER:HB2	9:S7:34:LEU:HB2	2.52	0.61
11:S9:171:ARG:HE	11:S9:174:ARG:HB2	5.00	0.61
36:1:1148:G:N7	85:1:4017:OHX:N4	2.48	0.61
36:1:505:G:OP1	41:L4:320:ASN:ND2	2.29	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1256:A:OP1	12:C0:5:LYS:NZ	2.28	0.61
1:2:134:U:OP1	1:2:136:C:N4	2.33	0.61
1:2:320:U:H3'	1:2:321:C:H5''	1.81	0.61
45:L8:48:ARG:NH2	36:5:2588:U:OP1	184.03	0.61
1:6:329:G:H2'	1:6:330:G:H8	1.65	0.61
10:S8:10:LYS:NZ	1:6:337:G:O2'	285.03	0.61
60:N4:63:ILE:O	60:N4:65:GLU:N	3.02	0.61
67:O1:44:MET:O	67:O1:46:THR:N	3.30	0.61
70:O4:46:ASP:OD2	70:O4:80:ARG:NH1	4.35	0.61
36:1:1094:U:H4'	36:1:1095:U:OP1	2.00	0.61
36:1:1887:A:OP1	85:1:3947:OHX:N5	2.33	0.61
36:1:80:G:H2'	36:1:81:C:H6	1.65	0.61
36:5:2810:C:OP1	85:5:3921:OHX:N3	2.33	0.61
36:5:129:U:O4	85:5:3776:OHX:N4	2.33	0.61
1:6:1429:G:H2'	1:6:1430:U:C6	2.35	0.61
1:6:1239:U:O4	85:6:2060:OHX:N5	2.33	0.61
1:6:140:A:N6	1:6:281:G:OP1	2.33	0.61
1:6:263:C:H4'	1:6:292:U:H5'	1.81	0.61
14:C2:81:ASP:O	14:C2:83:GLU:N	3.09	0.61
15:C3:55:ARG:NH1	15:C3:56:ASP:OD2	2.33	0.61
21:C9:109:GLU:HG2	21:C9:114:VAL:HG23	8.49	0.61
31:D9:19:ARG:HD2	31:D9:32:ARG:HD2	1.81	0.61
47:M0:87:LEU:HD23	47:M0:138:VAL:HG22	2.86	0.61
61:N5:137:ASN:OD1	61:N5:137:ASN:N	2.23	0.61
7:S5:63:GLN:OE1	7:S5:65:ARG:N	3.70	0.61
36:1:3215:A:O5'	50:M4:121:MET:HE1	2.00	0.61
36:5:1470:U:OP1	85:5:3801:OHX:N6	2.33	0.61
36:5:3019:U:O4	85:5:3829:OHX:N2	2.34	0.61
1:6:1130:G:OP2	85:6:2076:OHX:N1	2.34	0.61
15:C3:127:ARG:NH2	1:6:629:U:OP1	308.82	0.61
1:6:874:C:OP1	85:6:2019:OHX:N1	2.33	0.61
26:D4:12:VAL:HG22	26:D4:23:PHE:HB3	2.51	0.61
26:D4:62:THR:HA	26:D4:69:SER:HA	2.11	0.61
27:D5:44:GLN:NE2	27:D5:48:ASP:OD2	2.29	0.61
42:L5:106:ALA:HB2	42:L5:166:ALA:HA	1.82	0.61
46:L9:149:ASN:N	46:L9:149:ASN:OD1	2.32	0.61
49:M3:140:SER:OG	49:M3:141:ALA:N	2.33	0.61
43:L6:51:ARG:NH1	50:M4:114:ASP:OD2	2.54	0.61
63:N7:36:HIS:HD2	63:N7:74:VAL:HG11	3.06	0.61
2:S0:124:THR:HG22	2:S0:174:TRP:HE1	1.68	0.61
36:1:2338:C:OP1	40:L3:236:LYS:NZ	2.32	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:501:A:H2'	36:1:502:U:C6	2.35	0.61
36:5:2771:U:O2'	36:5:2772:C:O4'	2.18	0.61
85:5:3854:OHX:N6	85:5:4037:OHX:N2	2.49	0.61
36:5:1192:C:H5	85:5:3933:OHX:N6	1.98	0.61
39:L2:204:MET:HG3	36:5:914:A:C2	196.14	0.61
36:5:955:U:H2'	36:5:956:U:C6	2.34	0.61
14:C2:56:GLU:OE1	14:C2:124:LYS:NZ	3.18	0.61
19:C7:10:LYS:NZ	1:6:1401:A:O3'	407.49	0.61
20:C8:42:TYR:HE2	20:C8:73:MET:HG3	3.68	0.61
24:D2:18:GLU:HG3	24:D2:69:LEU:HD23	1.83	0.61
33:E1:98:VAL:HG12	33:E1:99:LYS:H	3.86	0.61
49:M3:6:ASN:O	54:M8:164:ARG:NH1	2.95	0.61
50:M4:47:ASP:OD1	50:M4:55:ARG:HB2	2.51	0.61
57:N1:119:ALA:O	57:N1:123:GLY:N	2.92	0.61
62:N6:39:LEU:HD21	62:N6:107:THR:O	3.39	0.61
68:O2:101:SER:O	68:O2:105:ARG:HG3	2.00	0.61
8:S6:3:LEU:HD22	8:S6:111:LEU:HD11	3.06	0.61
36:1:1413:G:N7	85:1:3983:OHX:N4	2.48	0.61
36:1:3329:U:H5''	40:L3:308:MET:HE2	1.83	0.61
36:1:543:C:H42	36:1:548:G:H1	1.49	0.61
1:2:197:A:H61	10:S8:138:ASN:HD22	1.48	0.61
36:5:284:A:H4'	36:5:285:A:C2	2.35	0.61
54:M8:147:ARG:NH2	36:5:670:C:OP1	162.48	0.61
40:L3:293:ASN:HB2	40:L3:304:THR:HA	1.84	0.61
41:L4:51:ALA:HB3	38:8:27:U:H4'	109.79	0.61
42:L5:95:TRP:CH2	42:L5:181:PRO:HD3	4.90	0.61
54:M8:178:ARG:HG2	64:N8:51:GLY:HA3	2.84	0.61
2:S0:185:ARG:H	23:D1:45:ALA:H	2.26	0.61
3:S1:23:PRO:O	3:S1:26:ARG:HB3	2.70	0.61
4:S2:101:VAL:HG22	4:S2:115:ILE:HG12	1.82	0.61
1:2:270:C:H41	8:S6:182:GLN:HE22	1.47	0.61
9:S7:155:ASP:OD2	9:S7:156:SER:N	2.44	0.61
36:1:1808:G:O6	85:1:3842:OHX:N3	2.33	0.61
36:1:2538:U:HO2'	36:1:2541:U:H3	1.46	0.61
1:2:778:G:H3'	1:2:780:A:H2	1.64	0.61
36:5:826:G:O6	85:5:3807:OHX:N2	2.34	0.61
1:6:452:A:OP2	85:6:2025:OHX:N1	2.32	0.61
22:D0:103:ILE:HA	22:D0:106:ILE:HG22	2.55	0.61
43:L6:50:LYS:HE2	43:L6:72:ASN:HB2	4.47	0.61
44:L7:158:LYS:HD2	44:L7:159:GLN:N	4.74	0.61
53:M7:129:THR:HG23	53:M7:139:TYR:HB2	1.83	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1524:A:OP1	61:N5:92:LYS:NZ	2.34	0.61
36:1:634:C:O2'	68:O2:47:ARG:HD3	2.00	0.61
74:O8:27:ILE:HD13	74:O8:41:THR:HB	3.13	0.61
1:2:788:A:H2'	6:S4:19:LEU:HD22	1.81	0.61
36:1:1334:U:H5''	44:L7:206:LYS:HB3	1.83	0.61
37:3:97:A:O4'	44:L7:225:GLN:NE2	2.31	0.61
36:5:129:U:H2'	36:5:130:A:C8	2.34	0.61
21:C9:49:ASP:OD1	21:C9:53:TRP:N	2.28	0.61
29:D7:61:THR:OG1	29:D7:62:ILE:N	2.70	0.61
40:L3:2:SER:N	36:5:2940:A:N7	238.18	0.61
40:L3:56:ILE:HD11	40:L3:356:LEU:HD13	3.26	0.61
47:M0:193:ASP:OD2	47:M0:198:LYS:NZ	5.77	0.61
51:M5:143:ARG:HH21	71:O5:92:LEU:HD23	1.66	0.61
71:O5:6:ALA:HB1	71:O5:10:ARG:HH21	2.69	0.61
6:S4:95:THR:HG23	6:S4:97:GLU:HG3	5.46	0.61
8:S6:78:THR:HG22	8:S6:79:LYS:H	3.62	0.61
9:S7:73:VAL:HG12	9:S7:76:LYS:HB2	3.92	0.61
34:SR:25:THR:HG21	34:SR:295:SER:HA	2.81	0.61
34:SR:89:LEU:HB2	34:SR:103:PHE:HB2	1.83	0.61
36:1:1350:A:O2'	36:1:1351:U:H5'	2.01	0.61
1:2:1401:A:O3'	19:C7:10:LYS:NZ	2.33	0.61
37:3:3:U:H2'	37:3:4:U:C6	2.35	0.61
39:L2:8:GLN:HA	36:5:2163:C:H4'	184.40	0.61
18:C6:83:GLN:HE22	18:C6:119:ALA:HA	1.66	0.61
40:L3:232:ARG:NH1	40:L3:269:GLN:O	2.34	0.61
44:L7:196:LYS:HE3	36:5:1100:U:OP2	246.57	0.61
45:L8:100:GLU:OE2	45:L8:108:ARG:NH1	2.60	0.61
56:N0:42:TRP:O	56:N0:46:GLN:HG3	2.01	0.61
3:S1:141:ALA:HB1	3:S1:207:LEU:HD22	3.72	0.61
4:S2:116:LYS:HG2	4:S2:127:ALA:HB3	1.98	0.61
36:5:3128:G:OP2	85:5:3995:OHX:N3	2.34	0.61
16:C4:60:ALA:HB1	16:C4:101:ALA:HB2	2.78	0.61
36:1:149:U:OP2	51:M5:49:ARG:NH2	2.33	0.61
74:O8:24:THR:HB	74:O8:76:ASN:HB3	1.83	0.61
36:1:3134:A:OP1	85:1:3761:OHX:N4	2.34	0.60
36:1:370:U:OP1	85:1:3978:OHX:N2	2.34	0.60
36:1:979:U:H1'	36:1:980:A:N7	2.16	0.60
36:5:3287:U:H2'	36:5:3288:G:H5'	1.81	0.60
18:C6:82:ARG:HA	18:C6:85:ILE:HD12	1.83	0.60
41:L4:191:LYS:HG3	41:L4:194:TYR:CZ	4.68	0.60
42:L5:270:LYS:HE2	42:L5:273:ARG:HA	10.09	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:41:GLN:HG3	45:L8:44:ARG:HH12	1.87	0.60
53:M7:27:LYS:HD3	53:M7:63:PHE:HB3	2.15	0.60
68:O2:40:SER:O	68:O2:44:ARG:HG3	2.00	0.60
72:O6:2:THR:OG1	72:O6:3:VAL:N	2.28	0.60
7:S5:146:THR:HG23	7:S5:157:ARG:HB3	3.53	0.60
36:1:2987:A:O2'	40:L3:259:HIS:HB3	2.01	0.60
1:2:326:G:OP1	13:C1:57:LYS:NZ	2.34	0.60
20:C8:138:THR:HB	1:6:1459:C:H2'	346.06	0.60
1:6:1164:G:H1	1:6:1581:C:H42	1.49	0.60
1:6:346:G:N7	85:6:2124:OHX:N2	2.49	0.60
1:6:755:A:O2'	1:6:756:A:H5''	2.01	0.60
18:C6:40:GLU:HA	18:C6:42:GLU:H	1.65	0.60
41:L4:337:GLU:O	41:L4:339:LEU:N	2.35	0.60
37:3:49:G:N7	42:L5:58:LYS:HG3	2.15	0.60
64:N8:73:LEU:HD21	64:N8:78:LEU:HA	1.83	0.60
66:O0:30:THR:HG21	66:O0:89:VAL:HG22	2.34	0.60
74:O8:32:ASN:HD21	74:O8:36:LYS:HB3	1.65	0.60
3:S1:28:GLU:OE2	3:S1:94:LYS:NZ	3.27	0.60
4:S2:188:LEU:HD13	4:S2:196:VAL:HG11	1.83	0.60
1:2:1041:G:OP1	85:2:2107:OHX:N5	2.34	0.60
36:5:2697:A:H2'	36:5:2698:G:C8	2.36	0.60
36:5:3227:A:H2'	36:5:3228:C:H5'	1.83	0.60
36:5:177:U:OP2	85:5:3860:OHX:N6	2.35	0.60
1:6:1018:U:H2'	1:6:1019:A:C8	2.35	0.60
5:S3:75:LYS:HB3	12:C0:22:VAL:HG22	2.53	0.60
21:C9:119:LYS:NZ	1:6:1369:U:OP1	443.37	0.60
28:D6:38:ARG:HH21	28:D6:83:ILE:HG13	1.66	0.60
33:E1:88:PRO:HB2	33:E1:89:LYS:HD3	6.80	0.60
46:L9:47:LYS:HB2	50:M4:7:VAL:HB	1.82	0.60
47:M0:49:CYS:HB3	47:M0:168:SER:HB3	1.82	0.60
2:S0:56:LYS:HD2	2:S0:158:VAL:HG23	1.83	0.60
3:S1:229:MET:SD	3:S1:232:HIS:ND1	2.72	0.60
6:S4:151:ASP:OD1	8:S6:215:ARG:NH1	3.49	0.60
1:2:753:A:H5'	6:S4:221:ARG:HG3	1.84	0.60
36:1:2680:A:C2	48:M1:24:GLY:HA3	2.37	0.60
1:2:1202:A:OP2	85:2:2070:OHX:N2	2.35	0.60
1:2:976:G:O6	85:2:2009:OHX:N3	2.34	0.60
36:5:1155:C:O2'	36:5:1197:A:N1	2.32	0.60
36:5:1934:G:O6	85:5:3759:OHX:N2	2.33	0.60
36:5:381:U:O4	85:5:4039:OHX:N2	2.35	0.60
1:6:1160:A:H2'	1:6:1161:C:C6	2.36	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:107:ARG:HH22	1:6:741:C:H2'	345.86	0.60
14:C2:87:PRO:HA	14:C2:140:PHE:HE1	1.87	0.60
28:D6:44:ILE:HD12	28:D6:45:VAL:HG13	1.82	0.60
28:D6:66:LYS:HE2	28:D6:68:TYR:HE1	1.67	0.60
40:L3:168:LYS:O	40:L3:319:ASN:ND2	2.34	0.60
40:L3:4:ARG:HD3	40:L3:7:GLU:HA	1.82	0.60
46:L9:138:THR:O	46:L9:139:ASN:ND2	2.34	0.60
2:S0:148:ASP:OD1	2:S0:149:LEU:N	2.39	0.60
6:S4:118:GLU:HG3	6:S4:121:TYR:HE1	1.66	0.60
6:S4:123:LEU:HD21	6:S4:235:TYR:HB2	2.80	0.60
36:1:1387:G:OP1	85:1:4009:OHX:N6	2.34	0.60
1:2:1597:A:OP2	31:D9:32:ARG:NH2	2.35	0.60
1:2:1303:U:O4	85:2:2036:OHX:N6	2.35	0.60
1:2:25:C:H4'	1:2:25:C:OP2	2.01	0.60
36:5:419:G:N7	85:8:211:OHX:N3	2.50	0.60
12:C0:27:PHE:HB3	12:C0:40:LEU:HD23	1.82	0.60
16:C4:13:VAL:HG13	16:C4:77:THR:H	1.65	0.60
42:L5:211:LEU:HD13	42:L5:219:PHE:HA	3.28	0.60
44:L7:173:LEU:HD23	44:L7:178:ILE:HG21	1.89	0.60
58:N2:42:LYS:HZ1	36:5:1686:U:P	177.53	0.60
76:Q0:77:ILE:HG13	76:Q0:78:ILE:H	3.69	0.60
79:Q3:73:THR:HB	79:Q3:76:ALA:H	3.90	0.60
34:SR:206:PRO:HG2	34:SR:247:PRO:HA	2.58	0.60
36:1:1234:G:O6	85:1:3966:OHX:N6	2.34	0.60
36:1:1306:G:C6	52:M6:62:THR:HA	2.36	0.60
36:1:561:C:H2'	36:1:562:C:C6	2.37	0.60
36:1:873:C:H5''	36:1:874:U:O5'	2.01	0.60
36:5:2822:U:OP2	85:5:3797:OHX:N1	2.35	0.60
36:5:410:U:O4	85:5:3944:OHX:N1	2.34	0.60
1:6:107:C:H42	1:6:307:G:H1	1.48	0.60
25:D3:127:VAL:O	25:D3:129:GLY:N	2.34	0.60
24:D2:57:ARG:NH2	29:D7:26:GLN:OE1	4.10	0.60
41:L4:144:LYS:HG2	41:L4:145:ILE:H	4.91	0.60
42:L5:132:THR:HG21	42:L5:170:GLY:HA2	1.82	0.60
45:L8:86:THR:O	45:L8:90:THR:OG1	2.18	0.60
46:L9:129:ARG:N	46:L9:157:ASN:OD1	2.26	0.60
50:M4:94:TRP:O	50:M4:97:SER:OG	2.57	0.60
36:1:150:A:OP1	51:M5:56:LYS:NZ	2.34	0.60
36:1:2355:G:H4'	53:M7:139:TYR:CE2	2.36	0.60
57:N1:130:ARG:O	36:5:1098:A:O2'	256.66	0.60
64:N8:18:GLY:O	36:5:1370:G:H5''	174.71	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2593:A:H4'	36:1:2594:C:O5'	2.01	0.60
85:1:3832:OHX:N6	85:1:4009:OHX:N4	2.49	0.60
36:1:544:C:H1'	36:1:548:G:H22	1.67	0.60
1:2:205:U:O4	85:2:2026:OHX:N3	2.35	0.60
1:2:290:G:O6	85:2:2110:OHX:N6	2.35	0.60
1:2:68:A:OP1	8:S6:160:ARG:NH2	2.33	0.60
36:5:2254:U:H2'	36:5:2261:G:N2	2.16	0.60
36:5:370:U:OP1	85:5:4002:OHX:N1	2.34	0.60
1:6:1542:G:N2	1:6:1569:A:OP2	2.34	0.60
1:6:213:A:OP2	85:6:2112:OHX:N1	2.35	0.60
19:C7:13:SER:HA	19:C7:54:THR:HG22	4.62	0.60
20:C8:134:ARG:O	20:C8:136:GLN:N	4.16	0.60
26:D4:55:VAL:HG12	26:D4:75:VAL:HG13	7.62	0.60
28:D6:84:VAL:HG13	28:D6:85:ARG:H	1.67	0.60
43:L6:40:LEU:HD13	43:L6:84:VAL:HG11	2.22	0.60
63:N7:33:SER:HB2	63:N7:36:HIS:HB2	1.84	0.60
69:O3:85:PHE:O	85:O3:202:OHX:N2	4.03	0.60
2:S0:140:ASN:ND2	4:S2:60:SER:O	4.38	0.60
8:S6:214:LYS:HA	8:S6:217:SER:HB3	1.83	0.60
8:S6:33:GLY:HA2	8:S6:51:LYS:HE2	1.84	0.60
11:S9:123:HIS:CD2	32:E0:37:ARG:HD2	5.02	0.60
36:1:1110:U:H2'	36:1:1111:U:C6	2.37	0.60
36:1:2916:U:H1'	59:N3:44:SER:HB2	1.84	0.60
36:1:3119:U:OP2	85:1:3751:OHX:N6	2.35	0.60
1:2:1011:G:OP2	85:2:2049:OHX:N6	2.35	0.60
39:L2:236:GLY:N	36:5:2183:A:O2'	205.72	0.60
1:6:1799:U:H4'	1:6:1800:A:H2'	1.82	0.60
18:C6:50:GLU:OE1	18:C6:114:ARG:NH1	2.34	0.60
42:L5:251:PRO:O	42:L5:253:PHE:N	2.28	0.60
70:O4:80:ARG:HG3	70:O4:88:ARG:HH21	3.49	0.60
74:O8:73:LEU:HD23	74:O8:75:VAL:HG22	1.84	0.60
7:S5:123:VAL:O	27:D5:58:ARG:NH1	2.35	0.60
36:1:1014:U:H2'	36:1:1015:U:H5''	1.83	0.60
85:5:3854:OHX:N3	85:5:4037:OHX:N5	2.50	0.60
1:6:578:U:O2	85:6:2116:OHX:N5	2.35	0.60
1:6:886:U:H2'	1:6:887:A:C8	2.37	0.60
16:C4:35:GLY:HA3	1:6:919:A:H5'	270.30	0.60
20:C8:135:GLY:HA3	1:6:1559:A:H5''	366.34	0.60
21:C9:33:TYR:HH	21:C9:99:SER:HG	1.47	0.60
27:D5:46:LYS:HD3	27:D5:70:LYS:HD2	1.83	0.60
28:D6:58:VAL:HG22	28:D6:59:TYR:H	4.25	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:190:THR:O	51:M5:194:GLN:HG2	2.01	0.60
64:N8:84:GLU:O	64:N8:87:ARG:HB2	2.53	0.60
2:S0:157:ASP:OD1	23:D1:60:ARG:NH2	2.35	0.60
36:1:1675:G:H2'	36:1:1676:A:H8	1.67	0.60
36:1:3103:A:OP2	85:1:4018:OHX:N3	2.35	0.60
36:1:3113:A:OP1	46:L9:73:SER:OG	2.20	0.60
36:1:3181:C:HO2'	52:M6:164:SER:HG	1.50	0.60
36:1:776:U:H5	36:1:2719:U:O2	1.85	0.60
1:2:158:U:O2'	1:2:159:U:H3'	2.02	0.60
1:2:885:G:H21	16:C4:123:SER:HB2	1.67	0.60
79:Q3:44:LYS:HZ3	36:5:1727:G:P	231.60	0.60
36:5:1932:A:H5'	36:5:1933:A:OP2	2.02	0.60
15:C3:22:ALA:HB1	15:C3:23:PRO:HA	1.87	0.60
21:C9:33:TYR:HD1	21:C9:34:VAL:H	2.84	0.60
30:D8:22:ARG:NH1	1:6:1619:C:O2	340.17	0.60
39:L2:204:MET:HE3	39:L2:208:ASP:HB3	1.83	0.60
40:L3:250:ALA:HB3	36:5:2880:U:H1'	224.55	0.60
41:L4:35:VAL:HG21	41:L4:244:LEU:HD21	1.84	0.60
49:M3:157:ARG:NH1	64:N8:146:GLU:OE2	2.44	0.60
60:N4:5:ILE:HD12	60:N4:10:GLY:HA2	1.84	0.60
61:N5:58:ASP:OD1	71:O5:25:LYS:NZ	2.35	0.60
4:S2:143:TYR:OH	4:S2:150:GLN:N	3.12	0.60
7:S5:56:ALA:O	7:S5:58:LEU:N	3.74	0.60
36:1:440:A:OP1	36:1:494:G:H1'	2.02	0.59
1:2:1537:C:N3	85:2:2112:OHX:N3	2.50	0.59
1:2:603:U:H2'	1:2:604:A:H8	1.66	0.59
38:4:43:A:OP1	85:4:231:OHX:N6	2.35	0.59
36:5:2311:G:OP2	85:5:4035:OHX:N1	2.35	0.59
27:D5:77:ARG:NH1	1:6:1533:C:OP2	352.75	0.59
1:6:697:C:OP2	85:6:2037:OHX:N5	2.35	0.59
16:C4:71:CYS:O	16:C4:76:ILE:N	2.80	0.59
27:D5:61:SER:H	27:D5:64:VAL:HB	1.69	0.59
40:L3:166:ILE:O	40:L3:169:THR:HG22	2.87	0.59
48:M1:10:ARG:HA	48:M1:134:PRO:HD2	2.95	0.59
49:M3:74:GLY:HA3	49:M3:98:ASP:HB2	2.02	0.59
53:M7:116:HIS:NE2	53:M7:147:GLU:OE2	2.91	0.59
61:N5:135:ILE:HD11	61:N5:138:ARG:HH11	1.67	0.59
61:N5:38:LEU:HD11	61:N5:40:LEU:HD13	1.83	0.59
36:1:3276:G:H1	69:O3:60:ARG:HH22	1.48	0.59
74:O8:4:GLU:HG2	74:O8:5:ILE:H	1.67	0.59
36:1:1062:A:N3	57:N1:130:ARG:NH2	2.48	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1235:U:H4'	36:1:1236:G:H5'	1.84	0.59
36:1:3026:G:O6	85:1:3800:OHX:N4	2.35	0.59
36:1:409:A:OP2	85:1:3915:OHX:N5	2.35	0.59
36:1:791:A:OP1	41:L4:108:LYS:NZ	2.34	0.59
1:2:1357:A:H2'	1:2:1358:G:C8	2.37	0.59
1:2:1487:A:H2'	1:2:1488:G:H8	1.65	0.59
36:5:1393:A:N3	36:5:1419:A:O2'	2.34	0.59
36:5:385:A:H2'	36:5:386:A:C8	2.36	0.59
36:5:3078:U:O2'	85:5:4030:OHX:N1	2.34	0.59
21:C9:89:ARG:NH2	1:6:1562:G:OP1	376.88	0.59
26:D4:88:THR:O	26:D4:88:THR:OG1	4.33	0.59
39:L2:116:VAL:HG22	39:L2:126:LEU:HD12	1.84	0.59
55:M9:90:PRO:HB2	55:M9:93:VAL:HG23	1.83	0.59
61:N5:100:LYS:HZ2	61:N5:107:VAL:H	1.50	0.59
2:S0:108:THR:OG1	2:S0:135:GLU:OE1	3.59	0.59
4:S2:227:PRO:HA	4:S2:230:TRP:CE2	2.37	0.59
6:S4:88:ASP:OD1	6:S4:122:LYS:NZ	2.34	0.59
6:S4:192:ILE:HG13	6:S4:243:GLY:HA3	1.82	0.59
11:S9:28:LEU:HD11	32:E0:39:LEU:HB3	1.82	0.59
36:1:2869:U:H5''	36:1:2870:C:OP2	2.01	0.59
36:1:2898:G:H5''	36:1:2899:C:H5'	1.83	0.59
1:2:1657:U:H4'	1:2:1658:G:O5'	2.01	0.59
36:5:2261:G:O2'	36:5:2263:C:N4	2.36	0.59
36:5:240:U:O2'	36:5:241:G:H8	1.85	0.59
36:5:2572:C:O2'	36:5:2573:G:OP2	2.18	0.59
1:6:1116:A:H62	1:6:1130:G:H21	1.48	0.59
1:6:277:U:O2'	1:6:278:U:OP1	2.20	0.59
38:8:110:C:O2'	38:8:112:U:OP2	2.18	0.59
18:C6:93:HIS:HA	18:C6:97:VAL:HG23	1.88	0.59
25:D3:48:HIS:HB3	25:D3:103:LEU:HD21	3.14	0.59
39:L2:238:ILE:O	39:L2:240:ALA:N	3.15	0.59
39:L2:8:GLN:O	36:5:2163:C:O2'	179.62	0.59
44:L7:178:ILE:HA	44:L7:183:ASP:HB3	2.15	0.59
85:1:4029:OHX:N1	51:M5:204:LYS:O	2.35	0.59
55:M9:35:ALA:O	55:M9:36:ASN:ND2	6.17	0.59
64:N8:13:GLY:HA2	36:5:943:U:H3'	163.83	0.59
67:O1:54:GLU:OE2	67:O1:54:GLU:N	2.35	0.59
67:O1:64:VAL:HG23	67:O1:65:LYS:HG2	1.84	0.59
1:2:145:A:O2'	1:2:146:U:O5'	2.18	0.59
36:5:1018:G:H2'	36:5:1019:G:O4'	2.01	0.59
47:M0:7:ARG:NH1	36:5:2828:G:OP1	269.69	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1006:C:O2	85:6:2106:OHX:N5	2.35	0.59
1:6:831:U:O2'	1:6:832:U:H5'	2.03	0.59
14:C2:73:LYS:NZ	33:E1:108:VAL:HG13	2.17	0.59
15:C3:73:ARG:HD3	1:6:859:A:C6	330.55	0.59
18:C6:128:LYS:NZ	18:C6:134:ALA:O	2.83	0.59
15:C3:11:ILE:HD12	29:D7:21:LEU:HD12	1.84	0.59
40:L3:223:GLY:HA2	40:L3:271:GLY:HA3	1.84	0.59
47:M0:156:ARG:HD3	47:M0:163:GLN:O	3.15	0.59
49:M3:75:PHE:O	49:M3:79:GLU:HB2	2.02	0.59
8:S6:186:ARG:O	8:S6:190:GLN:HG2	2.03	0.59
10:S8:114:GLU:HG2	10:S8:120:THR:HA	1.84	0.59
10:S8:62:THR:HA	10:S8:76:THR:O	2.39	0.59
36:1:1819:U:O4	85:1:3901:OHX:N4	2.35	0.59
36:1:419:G:N7	85:4:216:OHX:N6	2.51	0.59
36:5:2696:A:H2'	36:5:2697:A:C8	2.36	0.59
40:L3:7:GLU:HG2	36:5:2915:U:C5	257.33	0.59
1:6:1042:G:N2	1:6:1077:C:O2	2.36	0.59
1:6:1672:G:H2'	1:6:1673:G:C8	2.38	0.59
1:6:1139:A:OP2	85:6:2035:OHX:N1	2.35	0.59
27:D5:39:ALA:HB1	27:D5:71:ILE:H	1.67	0.59
39:L2:201:GLY:HA2	39:L2:204:MET:HG3	1.85	0.59
54:M8:86:THR:HB	54:M8:105:ARG:HB2	2.58	0.59
59:N3:74:MET:HG3	59:N3:102:ILE:HG23	5.87	0.59
67:O1:23:VAL:O	67:O1:28:ARG:NH1	2.35	0.59
11:S9:176:ASN:HA	11:S9:179:ARG:HG2	4.70	0.59
35:SM:64:LYS:O	35:SM:66:ALA:N	2.99	0.59
36:1:3375:A:O2'	36:1:3378:C:OP2	2.21	0.59
36:1:528:U:H2'	36:1:529:A:C8	2.38	0.59
36:5:528:U:H2'	36:5:529:A:C8	2.38	0.59
1:6:1392:U:H2'	1:6:1393:C:C6	2.37	0.59
1:6:658:C:N4	1:6:673:A:N1	2.51	0.59
37:7:85:G:N7	85:7:214:OHX:N6	2.51	0.59
1:2:867:G:OP2	15:C3:3:ARG:NH1	2.35	0.59
25:D3:109:ARG:HB3	25:D3:112:LYS:HB2	1.84	0.59
42:L5:140:ARG:NH2	36:5:1080:A:OP2	229.49	0.59
37:3:22:A:H1'	42:L5:272:TYR:CZ	2.37	0.59
44:L7:102:VAL:HG12	44:L7:130:ILE:HD12	3.60	0.59
47:M0:88:ARG:HG2	47:M0:90:ARG:HG2	1.91	0.59
50:M4:20:VAL:HG22	50:M4:66:THR:OG1	2.02	0.59
53:M7:69:ARG:HG2	53:M7:79:THR:OG1	3.64	0.59
36:1:1355:A:H4'	36:1:1356:U:O5'	2.02	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:N6:2:ALA:N	36:5:213:A:H5''	80.86	0.59
36:5:821:U:OP2	85:5:3886:OHX:N6	2.35	0.59
1:6:1590:G:H2'	1:6:1591:C:H6	1.67	0.59
12:C0:15:LEU:HD13	12:C0:21:VAL:HG23	1.84	0.59
19:C7:47:ARG:NH1	19:C7:48:ASN:OD1	2.35	0.59
26:D4:29:HIS:O	26:D4:31:ASN:N	3.81	0.59
47:M0:47:PRO:HB3	47:M0:171:TRP:CZ2	2.56	0.59
3:S1:201:THR:HG21	3:S1:207:LEU:HD22	1.84	0.59
7:S5:143:ARG:N	7:S5:218:GLU:OE2	2.28	0.59
36:1:565:U:H2'	36:1:566:G:H8	1.68	0.59
1:2:1528:U:OP1	7:S5:109:LYS:HG2	2.02	0.59
1:2:516:G:N2	1:2:537:G:H1'	2.17	0.59
36:5:1414:G:N7	85:5:3983:OHX:N1	2.51	0.59
64:N8:12:ARG:NH2	36:5:661:G:OP2	152.86	0.59
68:O2:33:ARG:HH11	36:5:944:C:H4'	161.88	0.59
49:M3:15:ARG:NH2	36:5:96:G:OP1	154.44	0.59
36:5:86:G:O2'	36:5:98:G:O6	2.15	0.59
1:6:194:U:O2	1:6:195:G:O2'	2.19	0.59
1:6:385:A:H2'	1:6:386:G:C8	2.38	0.59
40:L3:77:THR:HG23	40:L3:326:GLY:O	2.53	0.59
42:L5:107:ARG:NH1	42:L5:120:LYS:O	2.91	0.59
52:M6:65:ASN:OD1	52:M6:67:THR:HB	2.03	0.59
52:M6:85:ARG:HD3	52:M6:90:HIS:CG	3.10	0.59
4:S2:45:VAL:HG21	4:S2:68:ILE:HG23	1.88	0.59
11:S9:34:PHE:O	11:S9:110:GLN:NE2	4.85	0.59
36:1:2433:U:H1'	51:M5:125:SER:HB3	1.85	0.59
36:1:2611:U:H2'	36:1:2612:U:C6	2.38	0.59
36:1:2717:U:OP1	85:1:3843:OHX:N6	2.35	0.59
36:1:2927:C:H2'	36:1:2928:C:C6	2.38	0.59
36:1:3315:G:OP1	40:L3:174:LYS:NZ	2.30	0.59
20:C8:41:ARG:HD3	1:6:1565:C:OP1	369.25	0.59
1:6:992:A:OP1	85:6:2016:OHX:N1	2.35	0.59
14:C2:119:SER:OG	14:C2:120:VAL:N	2.35	0.59
18:C6:123:ARG:HG3	18:C6:124:PRO:HD2	1.84	0.59
23:D1:24:ILE:HD13	23:D1:31:SER:HB2	2.74	0.59
28:D6:12:LYS:HD2	28:D6:16:GLY:H	3.43	0.59
41:L4:74:ILE:HD11	41:L4:93:MET:HE3	5.34	0.59
45:L8:160:ILE:HG23	45:L8:164:VAL:HG13	3.58	0.59
46:L9:101:VAL:HG22	46:L9:114:VAL:HG22	1.85	0.59
46:L9:28:VAL:HG13	46:L9:33:THR:HB	1.84	0.59
52:M6:156:LEU:HD13	36:5:3243:A:C8	263.87	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:M7:112:LEU:HG	53:M7:150:VAL:HB	2.20	0.59
53:M7:60:PHE:CE2	53:M7:82:ARG:HB2	2.37	0.59
55:M9:123:LEU:O	55:M9:127:SER:OG	2.57	0.59
50:M4:38:ILE:HD11	56:N0:150:PHE:HE2	1.67	0.59
3:S1:61:LEU:O	3:S1:63:GLY:N	2.35	0.59
36:1:1740:U:H1'	36:1:1741:A:H2	1.68	0.59
1:2:1228:G:H5'	1:2:1229:G:C8	2.37	0.59
36:5:2874:G:OP1	36:5:2874:G:H4'	2.01	0.59
1:6:1227:A:H4'	1:6:1228:G:H5'	1.85	0.59
18:C6:32:ASN:N	18:C6:67:VAL:O	2.18	0.59
22:D0:24:ILE:HG12	22:D0:116:VAL:HG12	3.68	0.59
46:L9:113:GLU:OE1	46:L9:115:ARG:NE	3.21	0.59
48:M1:117:ASP:OD2	48:M1:119:SER:OG	2.17	0.59
74:O8:58:ASP:OD2	74:O8:61:LYS:N	2.28	0.59
4:S2:140:ARG:HG2	4:S2:155:ALA:HB2	3.78	0.59
7:S5:43:PHE:N	7:S5:46:TRP:O	2.89	0.59
9:S7:28:GLU:HG2	9:S7:35:LYS:HG3	1.85	0.59
1:2:1606:C:H2'	1:2:1607:G:C8	2.37	0.58
1:2:491:C:N3	1:2:496:G:N2	2.47	0.58
1:2:887:A:H1'	16:C4:122:PRO:HB3	1.85	0.58
36:5:173:G:H1'	36:5:174:C:H5'	1.84	0.58
36:5:2102:U:H2'	36:5:2103:U:H6	1.68	0.58
36:5:253:A:HO2'	36:5:254:A:H8	1.50	0.58
36:5:2123:G:N7	85:5:3941:OHX:N1	2.51	0.58
1:6:1350:U:H2'	1:6:1351:G:C8	2.37	0.58
1:6:1783:C:H2'	1:6:1784:C:H6	1.67	0.58
1:6:819:G:O2'	1:6:821:U:OP2	2.20	0.58
23:D1:62:ARG:HH22	24:D2:20:THR:HG22	1.68	0.58
41:L4:36:HIS:O	41:L4:40:THR:HG23	2.03	0.58
36:1:2561:A:N1	45:L8:32:LYS:HB2	2.18	0.58
46:L9:9:GLN:HG3	46:L9:52:LEU:HD21	1.84	0.58
48:M1:108:GLU:HG2	48:M1:122:ILE:HG21	2.51	0.58
51:M5:28:TRP:O	51:M5:32:GLN:HG2	2.03	0.58
55:M9:4:LEU:HB3	55:M9:24:LEU:HD23	1.85	0.58
74:O8:8:ILE:HD12	74:O8:8:ILE:H	1.66	0.58
5:S3:137:VAL:HB	5:S3:185:LYS:HB2	1.85	0.58
5:S3:94:ARG:O	5:S3:101:GLN:NE2	4.01	0.58
7:S5:166:ARG:NH1	7:S5:170:GLN:OE1	2.36	0.58
19:C7:33:ARG:NH2	34:SR:109:ASP:OD2	2.35	0.58
36:1:1240:A:H2	36:1:1248:C:H41	1.51	0.58
36:1:3160:U:H2'	36:1:3161:C:C6	2.39	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
85:1:3832:OHX:N3	85:1:4009:OHX:N1	2.51	0.58
1:2:1535:U:O2'	1:2:1536:G:N3	2.34	0.58
1:2:652:G:H1	1:2:682:C:N4	2.01	0.58
38:4:151:C:C4	61:N5:24:LEU:HD11	2.38	0.58
36:5:2407:C:H1'	36:5:2818:U:O2	2.04	0.58
36:5:2514:U:OP1	36:5:2514:U:H6	1.86	0.58
1:6:894:U:H2'	1:6:895:G:C8	2.37	0.58
38:8:79:A:H3'	38:8:80:A:H8	1.66	0.58
1:2:325:G:H4'	13:C1:83:THR:HG21	1.84	0.58
53:M7:40:GLU:O	53:M7:43:LYS:N	2.36	0.58
64:N8:77:LYS:O	64:N8:79:TRP:N	2.45	0.58
78:Q2:14:GLY:O	78:Q2:16:THR:N	2.36	0.58
10:S8:138:ASN:N	10:S8:138:ASN:OD1	2.32	0.58
34:SR:117:LYS:H	34:SR:117:LYS:HD2	1.67	0.58
36:1:172:G:N7	85:1:3852:OHX:N5	2.51	0.58
1:2:1776:A:H2'	1:2:1777:G:C8	2.38	0.58
1:2:363:G:OP1	85:2:2037:OHX:N2	2.36	0.58
1:2:689:G:O6	85:2:2108:OHX:N1	2.36	0.58
36:5:2102:U:H2'	36:5:2103:U:C6	2.38	0.58
45:L8:241:LYS:HD3	36:5:2586:G:C8	185.37	0.58
36:5:3112:G:N7	85:5:3761:OHX:N6	2.51	0.58
39:L2:104:LEU:O	39:L2:139:HIS:HE1	2.12	0.58
40:L3:252:ILE:HG13	40:L3:266:ARG:NH2	4.18	0.58
40:L3:41:VAL:HA	40:L3:185:GLY:CA	2.39	0.58
45:L8:133:LYS:HB2	45:L8:199:ALA:O	3.39	0.58
46:L9:77:ASN:HB3	46:L9:151:VAL:HG21	1.84	0.58
47:M0:76:MET:CE	47:M0:148:VAL:HA	2.72	0.58
48:M1:23:VAL:HG11	48:M1:29:ARG:HG2	1.84	0.58
57:N1:83:ARG:NH1	57:N1:85:LEU:HD21	2.18	0.58
63:N7:102:GLU:H	63:N7:107:ARG:NH2	3.08	0.58
63:N7:101:PHE:HA	63:N7:107:ARG:HE	2.21	0.58
36:1:1381:A:OP1	41:L4:197:ARG:NH1	2.36	0.58
17:C5:47:ARG:NH2	1:6:1555:A:OP2	404.58	0.58
1:6:1015:U:OP1	85:6:2018:OHX:N3	2.36	0.58
1:6:647:G:N2	1:6:687:G:H22	2.02	0.58
12:C0:1:MET:HG2	12:C0:2:LEU:H	1.68	0.58
15:C3:87:ASP:OD2	15:C3:88:LEU:N	2.34	0.58
20:C8:54:LEU:H	20:C8:54:LEU:HD22	1.69	0.58
27:D5:71:ILE:HG21	27:D5:76:ALA:HB2	3.00	0.58
28:D6:87:ARG:HD2	1:6:1797:A:N1	346.10	0.58
23:D1:64:GLU:OE1	29:D7:3:LEU:HB2	2.04	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:104:LYS:HD2	41:L4:106:TRP:CZ2	2.39	0.58
42:L5:152:ARG:HG3	37:7:44:C:H4'	282.36	0.58
44:L7:103:LEU:HA	44:L7:130:ILE:HD11	4.51	0.58
61:N5:50:ALA:HB2	71:O5:79:ASP:HB3	5.72	0.58
71:O5:118:ILE:O	71:O5:119:LYS:HB2	2.36	0.58
72:O6:54:GLU:OE2	72:O6:86:LYS:NZ	2.36	0.58
4:S2:44:LEU:HD11	4:S2:247:ALA:HB2	1.84	0.58
35:SM:84:LYS:HG2	35:SM:86:ASN:N	2.17	0.58
36:1:2376:G:H2'	36:1:2377:G:C8	2.38	0.58
36:1:413:U:OP1	53:M7:30:ARG:NH2	2.30	0.58
1:2:1795:U:H3'	28:D6:5:ARG:NH1	2.18	0.58
36:5:1223:A:OP2	36:5:1223:A:H8	1.86	0.58
85:5:3822:OHX:N2	85:5:4035:OHX:N5	2.51	0.58
21:C9:68:ARG:NH1	1:6:1521:G:O6	414.53	0.58
1:6:329:G:H2'	1:6:330:G:C8	2.38	0.58
1:6:837:G:H2'	1:6:838:G:H8	1.68	0.58
38:8:19:C:OP2	85:8:218:OHX:N2	2.36	0.58
30:D8:10:ALA:HA	30:D8:32:PHE:HA	1.86	0.58
49:M3:16:LYS:NZ	36:5:98:G:OP1	133.74	0.58
56:N0:42:TRP:CZ2	56:N0:58:ILE:HG13	5.15	0.58
36:1:1489:A:OP1	70:O4:10:ARG:NH1	2.36	0.58
36:1:2097:U:H2'	36:1:2098:C:C6	2.38	0.58
36:1:3233:C:H2'	36:1:3234:A:C8	2.39	0.58
1:2:397:A:O3'	10:S8:50:GLY:HA2	2.04	0.58
1:2:953:G:H2'	1:2:954:G:C8	2.38	0.58
1:2:993:A:OP1	1:2:1777:G:N2	2.24	0.58
1:6:800:U:H2'	1:6:801:G:C8	2.37	0.58
20:C8:17:LEU:O	20:C8:20:THR:N	2.91	0.58
21:C9:30:VAL:HG12	21:C9:54:PHE:CD2	2.39	0.58
26:D4:124:ARG:NH2	1:6:151:G:O6	319.28	0.58
30:D8:22:ARG:HH11	1:6:1619:C:H1'	339.69	0.58
47:M0:208:ASN:OD1	47:M0:208:ASN:N	2.23	0.58
53:M7:48:LEU:HD13	53:M7:92:GLN:HB3	1.85	0.58
64:N8:112:ILE:HB	64:N8:130:VAL:HG12	2.63	0.58
67:O1:88:PRO:HG2	67:O1:89:LEU:HD13	1.86	0.58
3:S1:34:ALA:HB3	3:S1:41:ARG:HA	1.85	0.58
1:2:1213:G:O6	85:2:1989:OHX:N3	2.35	0.58
1:6:565:C:O2	85:6:2120:OHX:N1	2.36	0.58
1:6:218:A:H2'	1:6:219:A:H5''	1.86	0.58
20:C8:123:ARG:HG3	20:C8:133:VAL:HG21	1.86	0.58
44:L7:142:SER:O	44:L7:146:GLN:HG3	2.22	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:62:THR:H	52:M6:69:GLY:HA3	1.69	0.58
62:N6:82:VAL:O	62:N6:84:LYS:N	2.72	0.58
3:S1:81:PHE:HD2	3:S1:82:ARG:HG3	1.67	0.58
6:S4:181:VAL:HG21	6:S4:195:ILE:HD11	2.50	0.58
11:S9:34:PHE:HD1	11:S9:111:THR:HG21	1.69	0.58
35:SM:47:ALA:HB2	36:1:2678:A:C8	2.39	0.58
36:5:1586:G:OP1	85:5:3835:OHX:N3	2.37	0.58
36:5:249:U:O2'	36:5:250:U:H5'	2.04	0.58
1:6:369:A:O2'	1:6:371:G:OP2	2.16	0.58
26:D4:29:HIS:HB2	26:D4:67:GLY:HA2	5.06	0.58
1:2:1433:G:C8	31:D9:41:GLN:HG2	2.39	0.58
46:L9:156:GLN:NE2	46:L9:160:ASP:OD1	2.45	0.58
46:L9:166:ARG:HH21	46:L9:168:ARG:NH1	11.58	0.58
53:M7:67:ILE:HD11	36:5:1447:G:H3'	165.03	0.58
62:N6:3:LYS:HD2	62:N6:8:VAL:HG13	1.85	0.58
2:S0:126:PRO:HG2	2:S0:151:SER:HB2	3.77	0.58
1:2:1330:G:N2	5:S3:204:ASP:OD1	2.36	0.58
10:S8:39:GLY:O	10:S8:59:ARG:HB3	2.04	0.58
1:2:1015:U:OP1	85:2:2004:OHX:N6	2.36	0.58
1:2:843:U:H2'	1:2:844:A:C8	2.39	0.58
36:5:2442:G:H22	36:5:2506:U:H3	1.52	0.58
36:5:3152:U:O2	85:5:4056:OHX:N5	2.37	0.58
85:5:3822:OHX:N6	85:5:4035:OHX:N3	2.52	0.58
15:C3:23:PRO:O	15:C3:25:TRP:N	2.36	0.58
21:C9:30:VAL:HG12	21:C9:54:PHE:HD2	1.69	0.58
27:D5:96:SER:O	27:D5:98:GLN:N	2.37	0.58
11:S9:123:HIS:HD2	32:E0:33:ARG:HE	2.99	0.58
39:L2:208:ASP:OD2	36:5:912:G:N1	187.20	0.58
40:L3:123:TYR:CE2	40:L3:124:LYS:HG3	2.39	0.58
60:N4:50:ALA:HA	60:N4:55:PHE:CG	2.39	0.58
62:N6:51:ARG:HG2	62:N6:115:ARG:NH2	2.18	0.58
63:N7:95:VAL:HG21	63:N7:113:VAL:HG11	1.86	0.58
6:S4:105:VAL:HG13	6:S4:243:GLY:HA2	1.85	0.58
36:1:1483:G:O6	70:O4:4:ARG:NH2	2.37	0.58
36:1:18:G:OP2	61:N5:46:TYR:OH	2.20	0.58
36:1:2836:C:H5	36:1:2852:C:N4	1.97	0.58
1:2:365:G:N7	85:2:2065:OHX:N5	2.52	0.58
1:2:348:U:O4	85:2:2086:OHX:N5	2.37	0.58
1:2:693:U:H5'	1:2:694:U:H5'	1.85	0.58
36:5:2225:U:H2'	36:5:2226:U:H6	1.69	0.58
54:M8:141:ARG:NH1	36:5:743:C:N3	179.35	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1238:A:OP2	85:6:2060:OHX:N1	2.36	0.58
10:S8:10:LYS:HG2	13:C1:133:LYS:HE3	1.85	0.58
17:C5:79:HIS:O	17:C5:81:ARG:N	2.36	0.58
41:L4:226:GLU:OE2	41:L4:246:ARG:NH2	2.66	0.58
42:L5:52:VAL:HA	42:L5:147:ASP:HB3	1.85	0.58
52:M6:88:VAL:O	52:M6:90:HIS:N	2.37	0.58
59:N3:10:LYS:NZ	59:N3:53:SER:OG	2.36	0.58
61:N5:63:ILE:HA	61:N5:86:VAL:HG23	1.86	0.58
65:N9:14:ARG:NH1	65:N9:18:ARG:HD3	2.44	0.58
78:Q2:46:LYS:HD3	78:Q2:54:THR:HB	2.36	0.58
3:S1:157:GLN:HB2	3:S1:160:HIS:CE1	2.84	0.58
34:SR:74:THR:HG1	34:SR:78:ALA:H	1.52	0.58
36:1:1686:U:O2	36:1:1688:U:H1'	2.03	0.57
36:1:1878:G:OP1	85:1:3787:OHX:N4	2.37	0.57
36:1:314:U:H2'	36:1:315:C:C6	2.39	0.57
36:1:3174:A:OP1	69:O3:97:SER:OG	2.12	0.57
36:1:3294:A:H2'	36:1:3295:A:O4'	2.04	0.57
36:1:2823:G:O6	85:1:3764:OHX:N1	2.37	0.57
1:2:826:U:H2'	1:2:827:C:C6	2.39	0.57
1:6:1230:A:H8	1:6:1258:U:C4	2.21	0.57
1:2:896:U:H1'	16:C4:38:THR:HG21	1.86	0.57
17:C5:28:MET:O	17:C5:32:ASP:HB2	2.04	0.57
24:D2:105:THR:OG1	24:D2:126:LEU:HG	2.16	0.57
24:D2:41:MET:HG2	24:D2:129:VAL:HG21	2.95	0.57
42:L5:91:GLY:O	42:L5:94:ASN:ND2	2.37	0.57
46:L9:117:PHE:CE1	46:L9:165:CYS:HB3	2.85	0.57
51:M5:39:ALA:HB3	51:M5:61:ILE:HG22	2.58	0.57
4:S2:108:ASN:HA	4:S2:141:ARG:HH12	1.69	0.57
4:S2:139:ILE:HD11	4:S2:218:ILE:HD13	3.28	0.57
7:S5:87:CYS:SG	7:S5:92:ARG:HG3	2.64	0.57
34:SR:159:ASN:O	34:SR:161:LYS:N	3.65	0.57
34:SR:10:ARG:NH1	34:SR:51:ASP:OD1	6.90	0.57
36:1:1064:A:H4'	36:1:1065:A:O5'	2.03	0.57
36:1:3153:U:O2	36:1:3158:G:N1	2.37	0.57
36:1:3343:G:H21	36:1:3362:A:H2	1.51	0.57
1:2:1487:A:H2'	1:2:1488:G:C8	2.39	0.57
1:2:1699:G:N2	1:2:1701:A:H5''	2.19	0.57
1:2:422:G:N7	85:2:2067:OHX:N5	2.52	0.57
1:2:978:A:H2'	1:2:979:A:O4'	2.04	0.57
49:M3:39:ARG:NH1	36:5:107:A:OP1	74.13	0.57
85:5:3854:OHX:N4	85:5:4037:OHX:N1	2.52	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:439:C:H4'	36:5:440:A:H5'	1.87	0.57
1:6:318:U:O4	85:6:2124:OHX:N4	2.37	0.57
1:6:578:U:H4'	1:6:579:A:H5'	1.84	0.57
1:6:751:G:H2'	1:6:752:A:C8	2.39	0.57
73:O7:60:GLY:N	38:8:42:G:OP1	88.49	0.57
13:C1:78:THR:OG1	13:C1:78:THR:O	2.22	0.57
22:D0:27:THR:HB	22:D0:88:LYS:HG3	1.86	0.57
27:D5:57:TYR:CE2	27:D5:68:ARG:HD3	5.59	0.57
42:L5:144:VAL:HG12	42:L5:173:VAL:HG22	1.86	0.57
47:M0:36:LEU:HD21	47:M0:69:ARG:HD3	3.63	0.57
36:1:3041:U:OP1	59:N3:12:ARG:NH1	2.37	0.57
61:N5:105:VAL:HG13	61:N5:130:TYR:CD2	2.52	0.57
5:S3:116:ARG:HH12	35:SM:113:ASP:HA	1.69	0.57
8:S6:55:GLY:O	8:S6:63:MET:HG3	2.04	0.57
34:SR:295:SER:HB3	34:SR:302:PHE:HE2	4.02	0.57
36:1:1743:G:H2'	36:1:1744:G:H8	1.69	0.57
36:1:2218:G:H2'	36:1:2219:A:C8	2.37	0.57
1:2:635:A:H2'	1:2:636:A:C8	2.39	0.57
1:2:222:A:N6	1:2:840:U:O4	2.37	0.57
42:L5:15:ARG:NH1	36:5:1003:A:H1'	289.57	0.57
36:5:3352:U:O2'	85:5:4060:OHX:N1	2.37	0.57
14:C2:118:ALA:HA	1:6:1227:A:H3'	462.30	0.57
1:6:193:U:C2	1:6:195:G:H1'	2.39	0.57
1:6:694:U:H3'	1:6:695:U:O2	2.04	0.57
1:6:837:G:H2'	1:6:838:G:C8	2.38	0.57
16:C4:123:SER:HB2	1:6:885:G:H21	286.72	0.57
16:C4:121:VAL:O	1:6:886:U:O2'	287.81	0.57
18:C6:112:TYR:CZ	18:C6:114:ARG:HD2	5.36	0.57
36:1:2163:C:H4'	39:L2:8:GLN:HA	1.86	0.57
42:L5:155:THR:HA	42:L5:179:ARG:HA	1.86	0.57
42:L5:22:ARG:NH2	42:L5:28:THR:OG1	2.28	0.57
45:L8:65:LEU:HD12	51:M5:25:VAL:HG13	1.93	0.57
49:M3:100:ARG:NH1	36:5:76:G:O2'	84.64	0.57
61:N5:57:LEU:HD22	61:N5:62:VAL:HG22	3.99	0.57
54:M8:182:LYS:NZ	64:N8:55:LYS:O	2.60	0.57
36:1:143:G:H4'	38:4:145:U:OP1	2.04	0.57
36:1:191:U:H2'	36:1:192:C:C6	2.39	0.57
37:3:60:G:H2'	37:3:61:G:C8	2.36	0.57
36:5:1409:G:O6	85:5:3998:OHX:N6	2.38	0.57
36:5:2962:U:OP1	85:5:3822:OHX:N4	2.38	0.57
1:6:1058:U:H4'	1:6:1059:U:OP1	2.03	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:5:LEU:O	13:C1:7:VAL:N	2.27	0.57
17:C5:67:ALA:O	85:C5:201:OHX:N5	4.86	0.57
63:N7:25:ILE:HA	63:N7:43:VAL:HG12	1.85	0.57
63:N7:26:VAL:HG21	63:N7:96:VAL:HB	1.85	0.57
74:O8:44:LYS:HG2	74:O8:53:THR:HB	2.06	0.57
5:S3:179:GLN:OE1	5:S3:180:GLY:N	5.17	0.57
34:SR:29:GLN:HG3	34:SR:32:LEU:HB3	1.86	0.57
36:1:3060:C:OP1	85:1:3899:OHX:N4	2.37	0.57
36:1:544:C:H1'	36:1:548:G:N2	2.19	0.57
36:5:1688:U:H2'	36:5:1689:U:C6	2.39	0.57
36:5:252:U:H4'	36:5:253:A:C5'	2.35	0.57
17:C5:122:THR:HG22	1:6:1558:U:H3	367.48	0.57
18:C6:38:LEU:O	18:C6:40:GLU:N	2.37	0.57
1:2:1429:G:H1'	22:D0:74:GLU:HG2	1.84	0.57
25:D3:6:PRO:HG3	25:D3:14:LYS:HG2	1.85	0.57
31:D9:33:LYS:O	31:D9:36:LEU:HD23	2.04	0.57
44:L7:88:ARG:HG2	44:L7:111:ILE:HA	1.87	0.57
49:M3:64:LYS:HG3	64:N8:69:TRP:CG	2.51	0.57
55:M9:23:TRP:CZ3	55:M9:25:ASP:HB2	2.40	0.57
8:S6:35:GLU:HG2	8:S6:51:LYS:HB2	3.81	0.57
36:1:3151:U:H4'	36:1:3294:A:H1'	1.86	0.57
1:2:1114:G:O2'	1:2:1130:G:O6	2.16	0.57
1:2:1470:C:OP1	1:2:1540:G:O2'	2.20	0.57
1:2:280:U:O2'	1:2:281:G:OP2	2.17	0.57
1:2:958:U:O4	15:C3:12:SER:OG	2.19	0.57
36:5:2520:A:H2'	36:5:2521:U:C6	2.39	0.57
39:L2:181:LYS:HB2	36:5:860:G:C5	212.49	0.57
1:6:578:U:O2	85:6:2116:OHX:N3	2.38	0.57
13:C1:83:THR:HG21	1:6:325:G:H4'	289.46	0.57
17:C5:24:LYS:O	17:C5:28:MET:HB2	2.04	0.57
19:C7:24:LEU:HD23	19:C7:34:LEU:HD13	1.86	0.57
41:L4:23:PRO:HB3	41:L4:258:LEU:HB3	1.85	0.57
45:L8:33:ASN:O	45:L8:35:GLY:N	3.65	0.57
54:M8:83:VAL:O	54:M8:85:GLY:N	2.61	0.57
70:O4:3:GLN:HE22	70:O4:29:ILE:HG12	4.97	0.57
6:S4:205:PHE:HB3	6:S4:221:ARG:HD2	1.87	0.57
8:S6:64:LYS:HD3	8:S6:97:VAL:HG21	2.92	0.57
9:S7:41:LEU:HB3	9:S7:70:PHE:CE1	2.40	0.57
1:2:197:A:N1	10:S8:138:ASN:ND2	2.53	0.57
36:1:1010:G:N2	47:M0:193:ASP:OD2	2.37	0.57
36:1:1245:A:H3'	36:1:1246:G:H5''	1.87	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2128:C:OP1	85:1:3817:OHX:N4	2.37	0.57
36:1:2768:U:H2'	36:1:2769:A:H8	1.69	0.57
1:2:1165:G:O6	1:2:1166:A:N6	2.38	0.57
1:2:1508:U:O4	85:2:1991:OHX:N5	2.37	0.57
36:5:2530:G:H2'	36:5:2531:C:H5''	1.87	0.57
36:5:25:U:O4	85:5:3750:OHX:N6	2.38	0.57
36:5:3066:U:O4	85:5:3947:OHX:N3	2.38	0.57
3:S1:148:ASN:OD1	1:6:1066:C:O2'	351.36	0.57
1:6:1280:C:H2'	1:6:1281:G:C8	2.40	0.57
31:D9:14:TYR:OH	1:6:1553:G:O2'	402.90	0.57
1:6:878:G:N7	85:6:2077:OHX:N1	2.52	0.57
25:D3:59:ILE:HG13	32:E0:4:VAL:HG22	4.95	0.57
39:L2:201:GLY:O	39:L2:204:MET:HB2	2.92	0.57
40:L3:299:ASP:OD1	40:L3:301:THR:HG23	2.76	0.57
41:L4:118:LYS:O	41:L4:122:THR:HG23	2.05	0.57
36:1:103:G:OP1	49:M3:70:ARG:NH2	2.37	0.57
55:M9:104:ARG:HH11	55:M9:104:ARG:HB3	1.70	0.57
56:N0:16:THR:OG1	56:N0:19:VAL:N	2.60	0.57
56:N0:80:ARG:HB2	56:N0:124:LEU:HD11	1.87	0.57
64:N8:119:PRO:O	64:N8:121:VAL:N	3.12	0.57
4:S2:227:PRO:HA	4:S2:230:TRP:CD2	2.40	0.57
6:S4:121:TYR:HA	6:S4:163:ASP:O	3.21	0.57
9:S7:109:VAL:HG22	9:S7:110:GLN:H	1.68	0.57
36:1:2403:G:C8	36:1:2870:C:H4'	2.39	0.57
1:2:422:G:OP1	85:2:2002:OHX:N6	2.38	0.57
47:M0:116:ARG:NH2	36:5:2617:U:O3'	228.53	0.57
36:5:3035:A:OP2	85:5:3894:OHX:N5	2.38	0.57
1:6:301:A:OP2	85:6:2056:OHX:N1	2.38	0.57
1:6:961:U:H2'	1:6:962:C:C6	2.39	0.57
73:O7:81:GLY:O	38:8:95:G:H1'	41.17	0.57
2:S0:52:LYS:HB3	23:D1:82:VAL:HG22	1.85	0.57
46:L9:174:LYS:HB2	76:Q0:127:LEU:HD11	1.85	0.57
47:M0:41:ALA:O	47:M0:139:ARG:NH2	3.93	0.57
48:M1:90:GLN:HG2	48:M1:170:ASP:HB2	1.87	0.57
52:M6:68:ARG:HH12	36:5:2988:C:P	215.72	0.57
54:M8:170:ARG:O	54:M8:171:LYS:HB2	2.07	0.57
4:S2:44:LEU:HD21	4:S2:247:ALA:HB2	2.21	0.57
11:S9:108:ARG:HB2	11:S9:111:THR:HG23	2.69	0.57
11:S9:129:ILE:HG22	11:S9:142:ASN:HA	1.86	0.57
11:S9:134:ILE:HD13	11:S9:141:VAL:O	5.25	0.57
11:S9:157:ASP:OD1	11:S9:158:PHE:N	3.96	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:149:U:P	51:M5:49:ARG:HH22	2.28	0.57
36:1:174:C:H2'	36:1:175:C:C6	2.40	0.57
36:1:2768:U:H2'	36:1:2769:A:C8	2.40	0.57
1:2:1098:U:OP2	4:S2:168:ARG:NH2	2.38	0.57
36:5:3280:U:O2'	36:5:3281:U:H5''	2.04	0.57
85:6:2023:OHX:N2	85:6:2109:OHX:N4	2.53	0.57
17:C5:92:SER:HB2	17:C5:107:ILE:HD11	6.50	0.57
17:C5:22:LEU:HA	17:C5:25:LEU:HB2	2.97	0.57
18:C6:112:TYR:O	18:C6:114:ARG:NH1	7.15	0.57
22:D0:28:SER:OG	22:D0:29:THR:N	2.36	0.57
39:L2:169:ILE:HG22	39:L2:170:ALA:O	2.49	0.57
42:L5:40:HIS:CE1	42:L5:42:ALA:HB3	2.75	0.57
52:M6:36:VAL:HB	52:M6:108:ILE:HG22	4.98	0.57
54:M8:141:ARG:NH2	36:5:977:C:OP1	183.12	0.57
57:N1:78:LYS:HG2	57:N1:87:LYS:HD2	1.86	0.57
73:O7:65:ARG:HG3	73:O7:65:ARG:NH1	2.17	0.57
1:2:1064:G:O2'	3:S1:204:ILE:O	2.23	0.57
3:S1:88:VAL:HG11	3:S1:96:LEU:HD12	1.86	0.57
4:S2:132:ALA:O	4:S2:135:SER:OG	2.79	0.57
36:1:3001:C:H2'	36:1:3002:C:H6	1.70	0.57
36:1:3121:U:H1'	36:1:3122:A:H5''	1.86	0.57
36:1:3230:G:H4'	50:M4:132:LYS:HD3	1.87	0.57
36:1:3335:A:N7	36:1:3370:A:O2'	2.38	0.57
1:2:1482:C:OP2	1:2:1521:G:N2	2.37	0.57
1:2:1798:U:H2'	28:D6:38:ARG:HH12	1.69	0.57
1:2:275:C:N3	1:2:276:C:N4	2.52	0.57
36:5:2676:A:H4'	36:5:2677:G:O5'	2.04	0.57
1:6:1081:A:H1'	1:6:1082:C:C5	2.40	0.57
1:6:363:G:OP1	85:6:2075:OHX:N1	2.38	0.57
13:C1:37:ASN:O	1:6:247:A:O2'	319.60	0.57
1:2:1073:G:H4'	15:C3:10:GLY:HA2	1.87	0.57
21:C9:115:GLU:OE1	21:C9:123:ARG:NH1	5.28	0.57
39:L2:45:VAL:HG22	39:L2:84:THR:HA	2.02	0.57
45:L8:163:VAL:HG22	45:L8:166:LEU:HD12	1.86	0.57
47:M0:201:SER:C	47:M0:203:LYS:H	2.09	0.57
48:M1:101:ASN:HB3	48:M1:130:VAL:HA	2.51	0.57
54:M8:58:ASN:HB3	54:M8:144:ARG:NH2	2.82	0.57
63:N7:81:LEU:HD11	70:O4:90:ILE:HG23	1.86	0.57
65:N9:26:THR:HG23	36:5:1065:A:N1	216.07	0.57
67:O1:98:VAL:HG21	67:O1:104:LEU:HD11	1.85	0.57
68:O2:19:ARG:HH11	68:O2:28:VAL:HG13	2.05	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:175:GLN:NE2	1:6:332:U:OP2	286.25	0.57
34:SR:85:TRP:HA	34:SR:109:ASP:HB3	1.86	0.57
36:1:156:G:OP2	72:O6:25:LYS:HB3	2.05	0.56
36:1:3231:U:H2'	36:1:3232:G:C8	2.39	0.56
1:2:717:C:H42	1:2:720:G:H22	1.53	0.56
38:4:45:C:H2'	38:4:46:G:O4'	2.05	0.56
36:5:3191:G:O6	85:5:3979:OHX:N6	2.38	0.56
85:5:3854:OHX:N3	85:5:4037:OHX:N1	2.53	0.56
33:E1:146:SER:HB3	1:6:1234:A:H4'	434.40	0.56
1:6:140:A:H4'	1:6:140:A:OP2	2.04	0.56
17:C5:22:LEU:HA	17:C5:25:LEU:HD12	1.92	0.56
23:D1:17:CYS:HB2	23:D1:56:SER:HB3	1.87	0.56
30:D8:15:VAL:HA	30:D8:28:VAL:HG22	1.86	0.56
40:L3:19:ARG:HB3	40:L3:232:ARG:NH1	2.42	0.56
40:L3:68:HIS:CE1	40:L3:69:LYS:HG3	2.40	0.56
56:N0:13:ARG:NH1	56:N0:13:ARG:HG3	4.38	0.56
36:1:2338:C:H1'	59:N3:49:LEU:HD12	1.87	0.56
64:N8:12:ARG:HH22	36:5:661:G:P	150.96	0.56
67:O1:11:GLU:OE2	67:O1:74:ARG:NH2	2.37	0.56
68:O2:32:TRP:CZ2	68:O2:53:PRO:HD2	2.39	0.56
3:S1:123:ALA:HB2	3:S1:165:ARG:HG2	1.87	0.56
9:S7:12:ALA:HB3	9:S7:13:PRO:HD3	1.92	0.56
34:SR:95:ALA:O	34:SR:97:GLY:N	4.66	0.56
85:1:3832:OHX:N3	85:1:4009:OHX:N4	2.53	0.56
1:2:1349:G:H1	1:2:1376:C:N4	2.03	0.56
1:2:142:G:H22	1:2:173:A:H2	1.53	0.56
36:5:2225:U:H2'	36:5:2226:U:C6	2.40	0.56
36:5:2754:G:O2'	36:5:2755:C:OP1	2.21	0.56
30:D8:22:ARG:NH1	1:6:1619:C:H1'	338.99	0.56
30:D8:26:THR:O	30:D8:44:VAL:HG22	2.64	0.56
1:2:478:A:OP1	32:E0:37:ARG:NH1	2.38	0.56
32:E0:50:VAL:HA	32:E0:53:LYS:O	2.04	0.56
39:L2:149:ARG:NH2	39:L2:252:THR:O	3.49	0.56
44:L7:216:VAL:HG11	44:L7:227:GLY:HA3	4.36	0.56
46:L9:8:GLN:NE2	46:L9:69:ARG:HG2	6.28	0.56
47:M0:142:ASP:OD1	47:M0:178:ARG:NH2	2.37	0.56
54:M8:86:THR:HG22	54:M8:105:ARG:HB2	1.87	0.56
56:N0:2:ALA:HB3	56:N0:32:SER:HB3	1.87	0.56
58:N2:59:ASP:OD1	58:N2:60:GLY:N	4.45	0.56
78:Q2:69:VAL:HG22	78:Q2:84:THR:HB	1.86	0.56
3:S1:180:THR:HG22	3:S1:181:LEU:H	1.69	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:168:ILE:HD12	5:S3:187:LYS:HD3	5.65	0.56
34:SR:132:LYS:HG2	34:SR:143:THR:HG23	2.14	0.56
36:1:1103:A:H4'	36:1:1103:A:OP2	2.04	0.56
1:2:1229:G:HO2'	1:2:1255:G:N2	2.03	0.56
1:2:1280:C:H2'	1:2:1281:G:C8	2.38	0.56
1:2:38:C:C2'	1:2:39:A:H5'	2.35	0.56
36:5:1573:G:C6	36:5:1574:C:H1'	2.40	0.56
36:5:3155:U:H4'	36:5:3156:U:OP2	2.06	0.56
19:C7:23:LYS:HB3	19:C7:34:LEU:HD11	2.04	0.56
20:C8:134:ARG:O	20:C8:136:GLN:NE2	6.24	0.56
39:L2:172:GLY:HA3	79:Q3:68:ALA:H	3.91	0.56
41:L4:26:PHE:HD1	41:L4:130:ALA:HB2	3.61	0.56
41:L4:309:ARG:NH2	41:L4:312:VAL:HB	2.20	0.56
49:M3:140:SER:OG	49:M3:143:ALA:N	2.30	0.56
72:O6:40:VAL:O	72:O6:44:VAL:HG23	2.05	0.56
8:S6:67:VAL:HG23	8:S6:68:LEU:O	3.14	0.56
9:S7:50:ASP:HA	9:S7:56:LYS:HA	1.86	0.56
36:5:1899:G:N7	85:5:3789:OHX:N6	2.54	0.56
40:L3:261:MET:HG2	52:M6:64:PHE:HA	1.87	0.56
42:L5:178:ASN:HA	42:L5:183:TRP:CG	2.92	0.56
45:L8:24:ASN:N	45:L8:25:PRO:HD2	2.20	0.56
45:L8:67:ILE:HG23	45:L8:237:ILE:HB	1.86	0.56
48:M1:141:ARG:O	48:M1:145:LYS:HE2	2.05	0.56
50:M4:77:ARG:O	50:M4:81:VAL:HG23	2.05	0.56
53:M7:109:ALA:HA	53:M7:112:LEU:HD22	1.87	0.56
3:S1:103:MET:HB3	3:S1:215:VAL:HG12	2.57	0.56
6:S4:155:LYS:N	6:S4:158:ASP:OD2	2.29	0.56
8:S6:163:THR:HA	8:S6:168:THR:HA	1.87	0.56
36:1:3112:G:N7	85:1:3751:OHX:N3	2.53	0.56
36:1:3308:C:O2	53:M7:69:ARG:HD3	2.05	0.56
36:1:1599:G:OP1	85:1:3944:OHX:N5	2.38	0.56
36:1:439:C:H3'	36:1:440:A:C8	2.40	0.56
36:1:685:G:OP1	49:M3:35:ARG:HD2	2.05	0.56
71:O5:95:PHE:CD2	36:5:136:G:H5'	63.81	0.56
36:5:2209:U:H4'	36:5:2210:G:OP1	2.05	0.56
36:5:2924:U:O4	85:5:3902:OHX:N2	2.38	0.56
1:6:348:U:O4	85:6:2126:OHX:N4	2.38	0.56
1:6:852:C:H2'	1:6:853:G:H8	1.70	0.56
38:8:78:G:H2'	38:8:79:A:O4'	2.06	0.56
19:C7:34:LEU:O	19:C7:38:ILE:HG22	2.06	0.56
28:D6:5:ARG:O	28:D6:8:ASN:N	2.37	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:911:C:H42	39:L2:3:ARG:HD3	1.71	0.56
40:L3:76:VAL:HG21	40:L3:323:MET:HE3	2.40	0.56
42:L5:208:MET:HG2	42:L5:223:PHE:CZ	2.41	0.56
2:S0:84:ARG:HE	2:S0:88:LYS:HZ1	3.76	0.56
11:S9:54:ARG:HA	11:S9:57:ARG:HE	1.69	0.56
36:1:1638:A:O3'	70:O4:52:GLN:NE2	2.39	0.56
1:2:1238:A:OP2	85:2:2006:OHX:N2	2.38	0.56
1:2:1536:G:C6	1:2:1538:U:H1'	2.40	0.56
1:2:1738:U:H2'	1:2:1739:C:C6	2.41	0.56
36:5:1194:G:OP1	85:5:3857:OHX:N6	2.38	0.56
36:5:2180:G:H2'	36:5:2181:C:C6	2.40	0.56
36:5:601:U:H2'	36:5:602:A:C8	2.41	0.56
51:M5:176:LYS:HE2	36:5:66:A:N3	97.23	0.56
36:5:776:U:H5	36:5:2719:U:O2	1.87	0.56
1:6:158:U:O2'	1:6:159:U:H3'	2.05	0.56
1:6:355:G:OP1	85:6:2030:OHX:N5	2.39	0.56
21:C9:10:ALA:HB3	21:C9:13:ASP:HB2	4.70	0.56
25:D3:56:LYS:NZ	25:D3:96:VAL:O	5.77	0.56
42:L5:290:ILE:O	42:L5:294:ALA:N	4.14	0.56
46:L9:3:TYR:HA	56:N0:142:GLN:OE1	2.05	0.56
52:M6:38:ALA:O	52:M6:41:LEU:HB2	2.05	0.56
62:N6:106:ILE:HG21	62:N6:109:LEU:HD23	2.64	0.56
2:S0:69:ASN:N	2:S0:69:ASN:OD1	2.89	0.56
3:S1:111:ARG:HB3	28:D6:68:TYR:CD2	2.41	0.56
4:S2:90:THR:O	4:S2:92:ALA:N	2.50	0.56
6:S4:199:GLU:HB3	6:S4:207:LEU:HB2	3.11	0.56
17:C5:130:ARG:NH2	35:SM:65:THR:O	2.38	0.56
36:1:2120:A:OP2	85:1:3869:OHX:N2	2.39	0.56
36:1:3060:C:OP2	85:1:3899:OHX:N6	2.38	0.56
36:1:562:C:H2'	36:1:563:U:H6	1.70	0.56
1:2:1291:G:H22	1:2:1324:G:H22	1.52	0.56
1:2:38:C:H2'	1:2:39:A:H5'	1.88	0.56
1:2:503:G:O2'	1:2:504:U:OP1	2.17	0.56
1:2:514:G:O2'	1:2:515:A:H5'	2.06	0.56
36:5:2997:G:N7	85:5:4020:OHX:N4	2.53	0.56
36:5:3026:G:N7	85:5:3784:OHX:N3	2.54	0.56
51:M5:172:ARG:HD2	36:5:30:G:O5'	111.38	0.56
1:6:1690:G:H1	1:6:1711:C:H42	1.54	0.56
16:C4:126:THR:O	16:C4:126:THR:OG1	2.24	0.56
18:C6:114:ARG:O	18:C6:115:THR:OG1	2.22	0.56
39:L2:62:VAL:HG21	39:L2:71:LEU:HD23	1.87	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:95:SER:OG	39:L2:96:LEU:N	2.37	0.56
42:L5:105:ILE:O	42:L5:109:THR:HG23	2.05	0.56
44:L7:197:GLN:OE1	44:L7:197:GLN:N	2.32	0.56
48:M1:17:LEU:HD21	48:M1:19:LEU:HD21	2.16	0.56
36:1:1213:G:H4'	56:N0:90:MET:HG2	1.88	0.56
64:N8:82:ILE:HB	64:N8:87:ARG:HG3	1.86	0.56
2:S0:83:GLN:HE21	2:S0:99:ALA:HB1	1.69	0.56
8:S6:164:LYS:O	8:S6:166:GLU:N	2.39	0.56
36:1:1196:C:O2	85:1:3854:OHX:N2	2.38	0.56
36:1:2510:U:O2'	36:1:2511:A:H8	1.89	0.56
36:1:2636:A:H5''	36:1:2637:A:C5'	2.36	0.56
1:2:1600:A:H4'	1:2:1601:G:OP1	2.06	0.56
1:2:855:A:C2	1:2:857:U:H1'	2.40	0.56
36:5:2193:U:H5''	36:5:2194:G:H5'	1.87	0.56
36:5:80:G:H2'	36:5:81:C:C6	2.41	0.56
33:E1:149:LYS:HD3	1:6:1235:C:H1'	437.87	0.56
1:6:1432:U:H4'	1:6:1433:G:H5''	1.87	0.56
42:L5:33:ARG:NH2	37:7:7:G:O3'	271.15	0.56
22:D0:118:VAL:HG13	22:D0:119:ALA:H	2.56	0.56
28:D6:87:ARG:NH2	28:D6:94:ASN:O	2.72	0.56
42:L5:107:ARG:NH2	42:L5:119:TYR:O	2.38	0.56
44:L7:239:LEU:O	44:L7:242:SER:OG	2.20	0.56
49:M3:59:ARG:NH1	36:5:73:C:N3	95.30	0.56
56:N0:141:LYS:HA	56:N0:144:LEU:HD12	2.51	0.56
58:N2:37:LEU:HD23	58:N2:41:ILE:HD11	1.88	0.56
6:S4:11:ARG:H	6:S4:27:TYR:HA	1.71	0.56
10:S8:184:LEU:HB3	10:S8:189:LEU:HD13	2.39	0.56
10:S8:122:GLY:O	85:S8:301:OHX:N6	2.38	0.56
36:1:2229:A:OP1	85:1:4036:OHX:N3	2.38	0.56
36:1:2772:C:H4'	36:1:2773:C:H5'	1.88	0.56
36:1:2853:A:O3'	47:M0:64:ALA:HB2	2.05	0.56
36:1:1443:G:N7	85:1:3837:OHX:N4	2.54	0.56
36:1:160:G:O6	85:1:4038:OHX:N6	2.39	0.56
1:2:1357:A:H2'	1:2:1358:G:H8	1.71	0.56
36:5:1597:C:H5'	36:5:1696:A:H1'	1.88	0.56
36:5:1192:C:C5	85:5:3933:OHX:N5	2.74	0.56
36:5:655:C:H2'	36:5:656:A:C8	2.41	0.56
36:5:789:A:H2'	36:5:790:U:C6	2.39	0.56
1:6:230:C:H42	1:6:235:G:H1	1.52	0.56
38:8:100:U:OP2	85:8:213:OHX:N2	2.39	0.56
38:8:77:A:H2'	38:8:78:G:O4'	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C1:127:GLN:HB2	13:C1:137:PHE:CE1	2.41	0.56
13:C1:99:ARG:HG2	25:D3:9:LEU:HD22	1.88	0.56
18:C6:34:SER:HB3	18:C6:38:LEU:HD12	1.87	0.56
18:C6:20:ALA:HB2	18:C6:67:VAL:HG13	1.88	0.56
41:L4:156:LEU:HD22	41:L4:215:ILE:HD13	1.88	0.56
42:L5:234:ASP:OD2	42:L5:234:ASP:N	2.39	0.56
47:M0:9:TYR:CG	47:M0:97:LEU:HD13	2.40	0.56
49:M3:174:ARG:HG3	72:O6:9:ILE:HD12	2.31	0.56
58:N2:29:ASP:O	58:N2:32:SER:N	4.67	0.56
67:O1:55:LEU:HB2	67:O1:95:PRO:HD3	1.87	0.56
2:S0:80:THR:O	2:S0:82:GLY:N	2.84	0.56
6:S4:23:LEU:HG	11:S9:6:ARG:HH12	1.70	0.56
6:S4:23:LEU:HD22	6:S4:23:LEU:H	2.13	0.56
36:1:594:U:H2'	36:1:609:G:O6	2.06	0.56
1:2:730:G:H21	1:2:731:C:H5'	1.71	0.56
36:5:1409:G:N7	85:5:3998:OHX:N6	2.54	0.56
36:5:3276:G:OP2	36:5:3276:G:H2'	2.06	0.56
85:5:3898:OHX:N3	85:5:4036:OHX:N6	2.54	0.56
1:6:235:G:H2'	1:6:236:A:C8	2.40	0.56
1:6:386:G:H2'	1:6:387:A:C8	2.40	0.56
1:6:906:A:H2'	1:6:907:A:C8	2.41	0.56
37:7:112:G:H2'	37:7:113:C:C6	2.41	0.56
17:C5:69:GLU:OE1	85:C5:201:OHX:N4	2.39	0.56
18:C6:39:VAL:HG12	18:C6:41:PRO:HD2	5.77	0.56
17:C5:19:GLY:N	20:C8:93:THR:O	2.39	0.56
43:L6:69:PHE:CZ	36:5:3267:A:H2'	259.03	0.56
47:M0:210:ILE:HA	47:M0:217:PHE:HE2	1.70	0.56
48:M1:96:PHE:HB3	48:M1:156:LYS:HG3	2.51	0.56
41:L4:299:ILE:HG23	54:M8:39:ARG:HB3	2.00	0.56
57:N1:7:TYR:OH	57:N1:54:HIS:HB2	2.25	0.56
59:N3:93:LEU:H	59:N3:93:LEU:HD23	1.92	0.56
64:N8:73:LEU:HD13	64:N8:109:TYR:CE1	2.41	0.56
63:N7:4:PHE:CZ	66:O0:35:ARG:HA	2.41	0.56
77:Q1:9:ARG:HB2	77:Q1:9:ARG:HH11	4.67	0.56
5:S3:103:GLU:OE1	5:S3:173:ARG:NH2	2.28	0.56
7:S5:159:ALA:HB3	7:S5:225:ARG:HB3	3.47	0.56
8:S6:135:PRO:HB2	8:S6:141:ILE:HG12	1.93	0.56
1:2:1727:G:H21	10:S8:32:GLN:NE2	2.01	0.56
36:1:1204:A:N6	36:1:1300:G:O2'	2.35	0.56
36:1:2592:G:H4'	36:1:2594:C:C2	2.41	0.56
1:2:1460:A:OP2	35:SM:68:ARG:HD3	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1564:U:H2'	1:2:1565:C:C6	2.40	0.56
1:2:614:C:OP2	25:D3:5:LYS:NZ	2.31	0.56
1:2:848:C:H2'	1:2:849:C:C6	2.41	0.56
36:5:3299:A:H61	36:5:3315:G:H1	1.53	0.56
36:5:550:A:H2'	36:5:551:A:C8	2.41	0.56
1:6:1508:U:O4	85:6:2017:OHX:N4	2.39	0.56
1:6:75:U:O2'	1:6:76:A:O5'	2.18	0.56
1:6:846:G:H2'	1:6:847:A:C8	2.41	0.56
37:7:64:A:H5'	37:7:65:G:H5''	1.87	0.56
15:C3:63:ALA:O	15:C3:67:THR:OG1	2.51	0.56
28:D6:79:ILE:HG23	28:D6:84:VAL:HG21	1.88	0.56
39:L2:36:GLU:OE1	39:L2:163:ARG:NH1	2.38	0.56
40:L3:81:THR:HG23	40:L3:205:VAL:HG21	4.05	0.56
46:L9:86:TYR:CE2	46:L9:151:VAL:HG22	2.53	0.56
50:M4:72:LEU:HD23	50:M4:73:PRO:HD2	3.49	0.56
72:O6:56:ARG:O	72:O6:60:LEU:HD22	4.26	0.56
79:Q3:49:ARG:HB2	79:Q3:55:TRP:CH2	4.12	0.56
8:S6:102:VAL:HG13	8:S6:106:LEU:HD12	1.88	0.56
9:S7:141:ARG:NH2	9:S7:143:LEU:HD21	3.02	0.56
20:C8:145:ARG:HB2	35:SM:68:ARG:NH2	2.21	0.56
36:1:627:U:H2'	36:1:628:A:C8	2.41	0.55
1:2:1541:G:O2'	1:2:1570:A:N6	2.37	0.55
1:2:480:G:N2	1:2:509:G:H1'	2.21	0.55
1:2:645:C:H2'	1:2:646:C:H6	1.72	0.55
1:2:858:G:H4'	9:S7:113:PRO:HG3	1.88	0.55
54:M8:93:ILE:HG23	36:5:784:A:C6	150.27	0.55
13:C1:21:ASN:ND2	13:C1:31:THR:HA	2.54	0.55
17:C5:81:ARG:NH1	17:C5:97:TYR:O	2.39	0.55
18:C6:113:ASP:HA	18:C6:116:LEU:HD23	1.86	0.55
22:D0:70:THR:HG23	1:6:1280:C:O2'	389.52	0.55
24:D2:41:MET:HG2	24:D2:129:VAL:HG11	1.87	0.55
27:D5:38:HIS:HA	27:D5:70:LYS:HG2	9.17	0.55
28:D6:34:LYS:NZ	1:6:1793:G:N7	323.68	0.55
49:M3:153:ASP:OD1	49:M3:157:ARG:NH2	2.43	0.55
56:N0:74:ASN:HD21	56:N0:144:LEU:HD21	1.71	0.55
67:O1:17:HIS:CG	67:O1:69:TYR:HD1	2.24	0.55
2:S0:31:VAL:HG12	2:S0:33:GLN:H	1.70	0.55
3:S1:27:LYS:HD2	3:S1:47:LEU:HD22	4.04	0.55
4:S2:67:GLN:HA	4:S2:70:ASP:HB2	2.16	0.55
5:S3:140:GLY:HA3	5:S3:182:LEU:HD22	5.30	0.55
7:S5:144:GLU:CD	30:D8:57:MET:HG3	5.44	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:138:ASN:HA	10:S8:141:ARG:HD3	4.59	0.55
34:SR:197:SER:OG	34:SR:217:ASP:N	2.92	0.55
34:SR:282:SER:H	34:SR:285:ALA:HB3	1.71	0.55
36:1:1320:C:O2	56:N0:115:ARG:NH2	2.40	0.55
36:1:2534:G:H2'	36:1:2535:A:H8	1.71	0.55
36:1:3082:C:H2'	36:1:3083:G:C8	2.41	0.55
36:5:1847:A:O2'	36:5:1848:G:H5''	2.05	0.55
21:C9:122:ARG:NH1	1:6:1499:G:OP1	422.15	0.55
15:C3:99:ARG:O	15:C3:103:GLU:HG2	2.06	0.55
18:C6:55:VAL:HG21	18:C6:105:LEU:HG	2.21	0.55
20:C8:63:GLN:HA	20:C8:66:LEU:HG	2.65	0.55
41:L4:362:ASP:OD1	41:L4:362:ASP:N	2.39	0.55
42:L5:177:GLU:O	42:L5:179:ARG:N	3.01	0.55
36:1:1333:C:H5'	44:L7:111:ILE:HG23	1.88	0.55
60:N4:38:SER:O	60:N4:42:GLN:HG3	2.23	0.55
62:N6:115:ARG:O	62:N6:119:ILE:HG13	2.07	0.55
69:O3:75:HIS:HB3	69:O3:80:VAL:HG12	1.89	0.55
5:S3:42:THR:OG1	5:S3:44:THR:O	4.39	0.55
8:S6:131:LYS:O	60:N4:82:ILE:HA	2.06	0.55
36:1:3111:U:H2'	36:1:3112:G:O4'	2.07	0.55
36:1:518:G:O6	85:1:3970:OHX:N6	2.38	0.55
1:2:851:U:H2'	1:2:852:C:C6	2.41	0.55
38:4:122:U:H2'	38:4:123:G:H8	1.72	0.55
55:M9:128:LYS:NZ	36:5:1721:U:O4	232.43	0.55
36:5:192:C:H2'	36:5:193:C:C6	2.42	0.55
36:5:2746:A:H2'	36:5:2747:A:O4'	2.06	0.55
36:5:2936:A:H2'	36:5:2937:G:C8	2.41	0.55
36:5:1940:G:N2	36:5:3362:A:H8	1.99	0.55
1:6:1173:C:H2'	1:6:1174:C:H6	1.71	0.55
1:6:751:G:H2'	1:6:752:A:H8	1.71	0.55
53:M7:120:ASN:HB3	38:8:13:A:O2'	140.77	0.55
29:D7:67:THR:O	1:6:871:G:O2'	328.05	0.55
40:L3:266:ARG:HH22	36:5:2392:C:HO2'	208.81	0.55
36:1:1429:G:C5	41:L4:99:MET:HE1	2.41	0.55
42:L5:211:LEU:HD21	42:L5:218:ARG:HG2	6.73	0.55
48:M1:21:ILE:HG13	48:M1:37:LEU:HD11	1.86	0.55
62:N6:52:ARG:HA	62:N6:70:ILE:HG22	2.74	0.55
6:S4:193:GLY:O	6:S4:210:ILE:HG23	2.06	0.55
7:S5:20:PHE:O	7:S5:21:THR:OG1	2.21	0.55
8:S6:121:LEU:O	8:S6:123:GLY:N	3.48	0.55
9:S7:98:ILE:HG13	9:S7:121:VAL:HG21	1.89	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:284:A:H4'	36:1:285:A:C2	2.41	0.55
85:1:3832:OHX:N6	85:1:4009:OHX:N2	2.55	0.55
36:1:863:C:OP1	85:1:3743:OHX:N2	2.40	0.55
1:2:1358:G:H2'	1:2:1359:C:C6	2.41	0.55
1:2:97:C:H2'	1:2:98:U:C6	2.40	0.55
36:5:129:U:H2'	36:5:130:A:H8	1.69	0.55
68:O2:61:LYS:NZ	36:5:1339:C:OP1	194.41	0.55
36:5:2322:C:OP1	85:5:3996:OHX:N6	2.39	0.55
36:5:795:G:O2'	36:5:796:U:H5'	2.07	0.55
36:5:901:G:H2'	36:5:902:G:H8	1.70	0.55
1:6:16:G:H2'	1:6:17:C:C6	2.42	0.55
1:6:492:A:H1'	1:6:496:G:H1	1.72	0.55
1:6:898:A:N1	1:6:911:U:O2'	2.32	0.55
43:L6:41:ILE:HB	43:L6:85:ILE:HB	2.16	0.55
44:L7:102:VAL:HG13	44:L7:126:LEU:HD22	1.88	0.55
49:M3:71:ALA:HA	49:M3:147:ILE:HD12	1.89	0.55
53:M7:111:LYS:HE2	53:M7:152:GLU:HB3	5.43	0.55
54:M8:158:HIS:H	54:M8:186:VAL:CG1	2.18	0.55
61:N5:86:VAL:HG21	61:N5:95:ILE:HG12	2.20	0.55
2:S0:169:SER:O	2:S0:173:ILE:HG12	2.07	0.55
3:S1:131:ASP:O	3:S1:133:TYR:N	2.39	0.55
6:S4:26:CYS:SG	1:6:461:G:H5''	364.96	0.55
11:S9:122:VAL:HG23	11:S9:123:HIS:CD2	2.41	0.55
36:1:549:U:H2'	36:1:550:A:C8	2.42	0.55
36:1:789:A:H2'	36:1:790:U:H6	1.71	0.55
36:1:799:G:O6	85:1:3841:OHX:N5	2.39	0.55
36:5:1560:G:O2'	36:5:1561:G:OP1	2.21	0.55
36:5:284:A:H4'	36:5:285:A:N3	2.22	0.55
36:5:3306:U:O2'	36:5:3308:C:OP2	2.17	0.55
36:5:979:U:H1'	36:5:980:A:C4	2.41	0.55
1:6:373:G:N7	85:6:2150:OHX:N3	2.54	0.55
18:C6:99:GLU:O	18:C6:102:LYS:N	2.60	0.55
28:D6:28:LYS:HG2	28:D6:29:SER:H	3.40	0.55
42:L5:99:TYR:CD2	42:L5:199:ILE:HG12	2.93	0.55
44:L7:193:PRO:HB2	44:L7:194:HIS:CE1	4.48	0.55
36:1:73:C:C2	49:M3:59:ARG:HD3	2.41	0.55
54:M8:165:ILE:HD12	54:M8:166:LEU:H	4.82	0.55
61:N5:49:LYS:O	61:N5:51:VAL:N	2.35	0.55
62:N6:45:ILE:HD11	62:N6:122:LYS:HB2	1.89	0.55
36:1:1278:A:O2'	36:1:1279:C:O5'	2.19	0.55
36:1:817:A:H2'	36:1:920:A:C2	2.41	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1353:U:H2'	1:2:1354:G:H8	1.72	0.55
1:2:1595:U:N3	1:2:1600:A:H2	1.99	0.55
36:5:600:G:N2	36:5:603:A:OP2	2.40	0.55
12:C0:51:SER:OG	1:6:1219:A:N3	432.92	0.55
21:C9:72:GLY:HA3	1:6:1498:G:H5''	421.07	0.55
1:6:1533:C:H4'	1:6:1539:G:C6	2.41	0.55
1:6:250:C:H2'	1:6:251:A:C8	2.42	0.55
1:6:852:C:H2'	1:6:853:G:C8	2.42	0.55
22:D0:20:ILE:HG22	22:D0:21:LYS:H	5.26	0.55
27:D5:47:TYR:CZ	27:D5:51:LEU:HD11	3.30	0.55
29:D7:36:LYS:HB3	29:D7:42:ASN:O	4.64	0.55
39:L2:113:VAL:HG12	39:L2:166:ILE:HD13	1.89	0.55
39:L2:183:GLY:HA2	36:5:896:A:H5'	201.74	0.55
44:L7:25:GLN:N	44:L7:28:ALA:HB3	2.22	0.55
38:4:142:C:H5''	51:M5:60:VAL:HG21	1.89	0.55
56:N0:84:ARG:HG3	36:5:1295:G:OP1	295.04	0.55
3:S1:180:THR:O	3:S1:184:LEU:HB2	2.07	0.55
3:S1:82:ARG:HH22	3:S1:191:GLU:HG2	1.71	0.55
3:S1:36:SER:HA	3:S1:41:ARG:HE	3.98	0.55
5:S3:21:LEU:HD22	5:S3:25:PHE:CE2	2.42	0.55
6:S4:117:GLU:O	6:S4:120:SER:OG	2.24	0.55
6:S4:9:LEU:HD12	6:S4:30:ARG:HA	1.87	0.55
10:S8:36:THR:OG1	10:S8:96:LEU:O	3.29	0.55
36:1:1340:G:H2'	36:1:1341:U:H6	1.72	0.55
36:1:3257:C:H2'	36:1:3258:U:O4'	2.07	0.55
36:1:3335:A:H2'	36:1:3336:A:C8	2.41	0.55
36:1:2402:A:OP2	85:1:3948:OHX:N6	2.39	0.55
36:1:964:G:OP1	85:1:3824:OHX:N2	2.40	0.55
1:2:485:A:H2'	1:2:486:G:O4'	2.06	0.55
1:2:539:G:OP2	1:2:539:G:H8	1.89	0.55
1:2:717:C:H2'	1:2:718:U:H5''	1.89	0.55
36:5:528:U:H2'	36:5:529:A:H8	1.70	0.55
36:5:835:G:O2'	36:5:857:G:N2	2.26	0.55
1:6:1537:C:O2'	1:6:1540:G:O6	2.24	0.55
36:5:3:U:H3	38:8:156:U:H3	1.54	0.55
14:C2:29:LYS:HE2	14:C2:100:TRP:CD1	2.41	0.55
28:D6:26:CYS:HB2	28:D6:28:LYS:HB2	4.16	0.55
41:L4:269:SER:O	41:L4:269:SER:OG	2.25	0.55
46:L9:20:ILE:HG12	46:L9:25:VAL:HG22	2.62	0.55
46:L9:7:GLU:OE2	46:L9:54:LYS:NZ	2.38	0.55
53:M7:51:VAL:HG12	53:M7:52:LEU:HD13	1.88	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:N0:91:TYR:HD1	56:N0:137:ARG:HH11	1.54	0.55
64:N8:22:ILE:H	64:N8:22:ILE:HD12	4.08	0.55
74:O8:14:LEU:HA	74:O8:17:ARG:HB2	1.89	0.55
2:S0:190:ASP:C	2:S0:192:THR:H	4.48	0.55
6:S4:95:THR:HG22	26:D4:16:PRO:HB2	1.87	0.55
9:S7:48:GLU:OE2	9:S7:88:ARG:NH2	2.39	0.55
9:S7:9:LEU:HD21	9:S7:17:GLU:HB3	1.89	0.55
35:SM:23:LYS:HE3	35:SM:24:GLU:H	6.84	0.55
35:SM:32:SER:OG	35:SM:33:LYS:N	4.10	0.55
34:SR:22:SER:OG	34:SR:70:ASP:HA	2.81	0.55
34:SR:84:SER:OG	34:SR:85:TRP:N	2.75	0.55
36:1:1211:U:H2'	36:1:1212:A:C8	2.42	0.55
36:1:1353:U:H2'	43:L6:9:TRP:HE3	1.72	0.55
36:1:1447:G:H3'	53:M7:67:ILE:HD11	1.89	0.55
36:1:2232:A:H2'	36:1:2233:A:C8	2.42	0.55
36:1:2660:G:O2'	36:1:2744:U:O2	2.25	0.55
1:2:1480:G:H3'	1:2:1481:C:C6	2.42	0.55
1:2:836:U:OP1	85:2:2119:OHX:N2	2.39	0.55
1:6:647:G:N2	1:6:687:G:H1	2.04	0.55
20:C8:84:TRP:HA	20:C8:89:GLN:OE1	2.07	0.55
25:D3:42:PRO:HB3	25:D3:83:VAL:HG21	1.89	0.55
28:D6:37:LYS:O	28:D6:38:ARG:NH1	2.39	0.55
28:D6:88:SER:H	28:D6:91:ASP:HB2	1.95	0.55
33:E1:82:LYS:O	33:E1:84:VAL:N	4.98	0.55
40:L3:277:SER:HB3	40:L3:280:HIS:NE2	2.21	0.55
41:L4:77:VAL:HB	41:L4:86:GLY:H	2.32	0.55
48:M1:109:HIS:CD2	48:M1:114:ILE:HG21	2.70	0.55
46:L9:19:SER:HB3	50:M4:6:ILE:HB	2.83	0.55
51:M5:68:ARG:HA	51:M5:98:LEU:HD21	2.11	0.55
36:1:2992:U:H1'	53:M7:69:ARG:HH21	1.72	0.55
66:O0:9:SER:OG	66:O0:10:ILE:N	2.40	0.55
70:O4:8:ARG:HH21	70:O4:31:ARG:HD2	2.21	0.55
71:O5:85:THR:O	71:O5:89:ARG:HD3	2.07	0.55
79:Q3:73:THR:HG22	79:Q3:75:ALA:H	3.21	0.55
2:S0:144:ILE:HG23	2:S0:158:VAL:HG13	1.88	0.55
4:S2:137:ILE:HG12	4:S2:138:PRO:HD2	1.88	0.55
36:1:2102:U:H2'	36:1:2103:U:C6	2.42	0.55
36:1:2897:A:H2'	36:1:2899:C:H5''	1.88	0.55
36:1:899:U:O4	85:1:3797:OHX:N4	2.40	0.55
1:2:1149:G:H1'	1:2:1765:A:C4	2.42	0.55
1:2:1291:G:H2'	1:2:1292:G:H8	1.71	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:802:G:O6	85:2:2013:OHX:N3	2.40	0.55
1:2:939:A:H2'	1:2:940:A:C8	2.41	0.55
36:5:1815:U:O2'	36:5:1816:A:OP2	2.23	0.55
1:6:1357:A:H2'	1:6:1358:G:H8	1.72	0.55
1:6:1533:C:H4'	1:6:1539:G:N1	2.22	0.55
11:S9:9:SER:OG	1:6:771:A:OP1	391.34	0.55
12:C0:2:LEU:HD22	1:6:1258:U:H4'	434.34	0.55
15:C3:129:TYR:HB3	15:C3:134:VAL:HG22	1.87	0.55
25:D3:97:ASP:O	25:D3:100:ASP:HB2	2.23	0.55
25:D3:134:ALA:HB1	25:D3:140:LYS:HB2	1.89	0.55
25:D3:51:GLY:HA2	25:D3:77:ILE:HG13	1.88	0.55
30:D8:49:ARG:HG2	30:D8:52:ASP:OD1	2.27	0.55
40:L3:107:ALA:HA	40:L3:199:PHE:CD2	2.42	0.55
44:L7:145:ARG:HA	44:L7:185:ILE:HD13	2.16	0.55
47:M0:174:THR:OG1	47:M0:175:ASN:O	5.60	0.55
53:M7:108:ASP:HB3	53:M7:111:LYS:HD3	3.74	0.55
58:N2:26:GLY:O	58:N2:28:PHE:N	2.98	0.55
51:M5:15:GLN:HG2	72:O6:52:PRO:HG2	2.96	0.55
36:1:1257:C:H42	36:1:1261:G:H22	1.53	0.55
36:1:2567:C:H2'	36:1:2568:C:H5'	1.88	0.55
36:5:2360:C:OP1	85:5:4007:OHX:N1	2.40	0.55
36:5:3074:G:O6	85:5:3947:OHX:N4	2.40	0.55
36:5:3285:C:H3'	36:5:3286:G:H5''	1.88	0.55
36:5:2573:G:N7	85:5:4029:OHX:N6	2.54	0.55
12:C0:21:VAL:HB	12:C0:66:TYR:HB2	2.50	0.55
12:C0:88:UNK:O	12:C0:90:UNK:N	2.40	0.55
21:C9:113:ILE:C	21:C9:125:SER:HB3	2.28	0.55
25:D3:111:GLY:O	25:D3:121:ARG:HD2	5.01	0.55
25:D3:42:PRO:O	25:D3:79:ASN:ND2	2.40	0.55
28:D6:10:ARG:NH1	28:D6:36:ILE:HG13	5.57	0.55
42:L5:194:LEU:O	42:L5:197:SER:HB3	2.06	0.55
51:M5:84:PRO:HA	51:M5:87:GLN:HG3	1.89	0.55
56:N0:83:SER:OG	56:N0:86:GLY:O	2.18	0.55
59:N3:18:PRO:HA	59:N3:51:ALA:HA	2.03	0.55
67:O1:80:ASN:OD1	67:O1:81:GLU:N	2.40	0.55
2:S0:112:THR:OG1	2:S0:113:ARG:N	2.40	0.55
2:S0:193:GLN:C	2:S0:195:TRP:H	2.11	0.55
7:S5:166:ARG:NH2	1:6:1163:A:O3'	347.84	0.55
34:SR:300:THR:HG23	34:SR:314:GLN:HG3	1.89	0.55
34:SR:63:GLY:HA3	34:SR:90:ARG:HH12	1.71	0.55
36:1:269:G:H5'	51:M5:120:TRP:CE3	2.41	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1149:G:C5	85:1:4017:OHX:N6	2.75	0.54
1:2:649:U:O2'	1:2:650:U:O5'	2.25	0.54
36:5:2697:A:H2'	36:5:2698:G:H8	1.71	0.54
36:5:3362:A:H2'	36:5:3363:U:O4'	2.08	0.54
41:L4:93:MET:HB2	36:5:658:G:N2	145.69	0.54
36:5:830:A:O2'	36:5:1866:C:H2'	2.07	0.54
68:O2:33:ARG:NH1	36:5:944:C:H4'	161.87	0.54
15:C3:15:ALA:O	1:6:959:U:H5''	352.52	0.54
38:8:82:U:O2	38:8:87:G:H4'	2.06	0.54
23:D1:71:ARG:HG3	23:D1:83:TRP:CZ2	2.41	0.54
45:L8:180:VAL:HG11	45:L8:186:LEU:HD21	2.49	0.54
45:L8:75:ILE:HG22	45:L8:76:ALA:H	1.72	0.54
45:L8:81:THR:OG1	45:L8:181:LYS:HB2	4.15	0.54
47:M0:161:GLY:O	47:M0:163:GLN:NE2	2.40	0.54
47:M0:86:HIS:HB3	47:M0:139:ARG:CG	2.54	0.54
49:M3:115:ARG:NH1	49:M3:147:ILE:HG12	2.22	0.54
52:M6:159:LYS:NZ	36:5:3243:A:OP1	267.47	0.54
36:1:784:A:C2	54:M8:93:ILE:HG22	2.42	0.54
2:S0:63:ILE:HG12	23:D1:36:VAL:HG22	3.26	0.54
3:S1:39:GLU:O	3:S1:41:ARG:HG3	4.06	0.54
5:S3:60:GLY:O	5:S3:62:ASN:N	3.11	0.54
7:S5:99:MET:O	7:S5:100:ASN:HB2	2.07	0.54
7:S5:222:LYS:HA	7:S5:225:ARG:HH11	4.21	0.54
36:1:1355:A:H5'	36:1:1357:G:H1'	1.88	0.54
36:1:2187:G:OP2	85:1:3862:OHX:N5	2.41	0.54
36:1:2207:A:C2'	36:1:2208:A:H5'	2.36	0.54
36:1:246:U:H2'	36:1:247:C:C6	2.43	0.54
10:S8:162:ALA:HA	36:1:3353:G:C5'	2.37	0.54
1:2:1157:A:H2'	1:2:1160:A:N7	2.22	0.54
1:2:12:U:H2'	1:2:13:C:C6	2.42	0.54
39:L2:69:TYR:OH	36:5:2557:A:OP1	191.97	0.54
41:L4:46:LYS:NZ	36:5:691:A:OP1	92.03	0.54
1:6:486:G:H22	1:6:501:U:H3	1.54	0.54
18:C6:18:ALA:HB2	18:C6:69:VAL:HG13	1.89	0.54
16:C4:114:ARG:NH1	28:D6:59:TYR:OH	4.80	0.54
31:D9:25:SER:HB3	85:D9:103:OHX:N4	2.23	0.54
42:L5:148:ILE:HD11	42:L5:160:PHE:CE1	2.41	0.54
44:L7:229:PHE:CD1	44:L7:229:PHE:C	2.98	0.54
53:M7:31:GLU:CG	53:M7:60:PHE:HA	3.47	0.54
58:N2:49:ASN:O	58:N2:51:GLY:N	2.73	0.54
6:S4:126:VAL:HG13	6:S4:158:ASP:O	2.24	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:72:HIS:ND1	18:C6:79:TYR:OH	2.47	0.54
9:S7:162:ILE:HA	9:S7:165:LYS:HD2	1.89	0.54
36:1:2403:G:H5'	36:1:2872:A:N7	2.22	0.54
1:2:260:U:H5'	10:S8:41:LYS:NZ	2.22	0.54
1:2:393:C:H2'	1:2:394:C:C6	2.42	0.54
1:2:894:U:H2'	1:2:895:G:C8	2.42	0.54
38:4:52:A:H4'	75:O9:19:GLN:HA	1.89	0.54
36:5:1313:G:O6	85:5:3999:OHX:N6	2.40	0.54
36:5:1329:U:O2'	36:5:1330:A:OP1	2.24	0.54
53:M7:25:SER:OG	36:5:1447:G:N7	150.59	0.54
57:N1:68:THR:OG1	36:5:2737:C:H4'	223.79	0.54
36:5:3274:A:H3'	36:5:3275:U:C5'	2.37	0.54
36:5:920:A:OP1	36:5:922:U:H5	1.90	0.54
6:S4:187:ARG:HH22	1:6:753:A:H62	376.41	0.54
42:L5:256:THR:HG23	37:7:119:U:OP1	293.55	0.54
15:C3:12:SER:HB3	1:6:956:C:OP2	335.02	0.54
2:S0:200:ASP:HB2	19:C7:85:VAL:HG13	1.89	0.54
22:D0:87:HIS:ND1	1:6:1383:G:OP1	442.15	0.54
25:D3:125:VAL:HG12	25:D3:126:LYS:HG3	1.88	0.54
33:E1:144:CYS:O	33:E1:146:SER:N	2.44	0.54
39:L2:116:VAL:HG13	39:L2:126:LEU:HB2	1.88	0.54
40:L3:55:THR:O	40:L3:56:ILE:HD12	2.07	0.54
42:L5:289:LYS:O	42:L5:293:LEU:HB2	2.07	0.54
46:L9:166:ARG:NH2	46:L9:168:ARG:HH12	11.77	0.54
47:M0:175:ASN:OD1	47:M0:176:LEU:N	5.16	0.54
57:N1:12:ARG:HD2	57:N1:13:TYR:CE1	2.42	0.54
61:N5:92:LYS:HD2	36:5:1830:G:H5''	103.42	0.54
62:N6:40:ARG:O	62:N6:44:GLY:N	2.39	0.54
70:O4:81:CYS:O	70:O4:83:ASN:N	2.40	0.54
74:O8:24:THR:HG23	74:O8:44:LYS:HB2	2.53	0.54
79:Q3:49:ARG:HB2	79:Q3:55:TRP:CZ3	3.87	0.54
2:S0:63:ILE:HD12	2:S0:158:VAL:HG11	2.94	0.54
5:S3:5:ILE:HG23	5:S3:9:ARG:HH11	1.70	0.54
7:S5:73:THR:O	7:S5:75:GLY:N	3.37	0.54
1:2:577:G:C2	35:SM:99:LYS:HG2	2.42	0.54
34:SR:150:TRP:HB2	34:SR:174:ASN:HB2	1.90	0.54
36:1:1675:G:H2'	36:1:1676:A:C8	2.42	0.54
36:1:3096:C:H2'	36:1:3097:C:C6	2.42	0.54
36:1:1674:G:OP2	85:1:3808:OHX:N2	2.40	0.54
1:2:918:U:H2'	1:2:919:A:C8	2.42	0.54
36:5:279:U:H2'	36:5:280:U:C6	2.43	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:822:U:H2'	1:6:823:G:H5''	1.89	0.54
17:C5:127:ARG:CZ	35:SM:66:ALA:HB2	5.04	0.54
1:2:1597:A:OP1	31:D9:19:ARG:NH2	2.40	0.54
1:2:1235:C:C2	33:E1:138:ARG:NH2	2.76	0.54
41:L4:170:LYS:HG3	41:L4:175:HIS:HB2	5.12	0.54
50:M4:94:TRP:CE2	50:M4:100:ALA:HB2	2.43	0.54
53:M7:173:ARG:HA	53:M7:176:ILE:HD12	1.88	0.54
68:O2:12:LYS:HD3	68:O2:57:TYR:HA	2.00	0.54
2:S0:88:LYS:O	2:S0:92:HIS:ND1	3.99	0.54
6:S4:11:ARG:HB2	6:S4:27:TYR:C	2.35	0.54
36:1:2320:A:H2	79:Q3:16:VAL:HG12	1.71	0.54
1:2:1628:U:H2'	1:2:1629:G:C8	2.43	0.54
1:2:1695:G:H21	1:2:1706:C:H41	1.54	0.54
1:2:1367:G:N7	85:2:2068:OHX:N6	2.55	0.54
36:5:437:G:N7	85:5:4068:OHX:N6	2.55	0.54
50:M4:77:ARG:NH2	36:5:524:U:OP1	341.58	0.54
12:C0:58:GLN:O	12:C0:65:TYR:N	2.88	0.54
30:D8:44:VAL:HG12	30:D8:54:LEU:HD21	1.89	0.54
40:L3:21:ARG:HD3	40:L3:269:GLN:OE1	2.96	0.54
47:M0:3:ARG:CZ	47:M0:63:GLU:HG3	2.38	0.54
48:M1:53:THR:HG23	48:M1:60:ARG:HA	2.10	0.54
55:M9:5:ARG:HH11	55:M9:5:ARG:HG3	2.67	0.54
71:O5:31:LEU:HD13	71:O5:47:VAL:HG11	1.89	0.54
6:S4:43:PRO:HA	6:S4:82:TYR:O	2.16	0.54
10:S8:117:TYR:CE1	10:S8:150:ALA:HB2	2.43	0.54
36:1:2162:U:OP1	39:L2:234:LYS:NZ	2.40	0.54
36:1:2536:A:H2'	36:1:2537:U:C5	2.43	0.54
36:1:3251:U:H2'	36:1:3252:G:C8	2.42	0.54
36:1:994:G:H3'	57:N1:13:TYR:HD2	1.72	0.54
1:2:339:C:OP2	10:S8:10:LYS:NZ	2.32	0.54
36:5:1462:A:C6	36:5:1463:U:C4	2.96	0.54
58:N2:42:LYS:NZ	36:5:1687:U:OP2	176.15	0.54
36:5:2569:A:H4'	36:5:2570:U:H5'	1.88	0.54
1:6:1208:A:N1	1:6:1455:G:N2	2.53	0.54
1:6:1716:C:O2'	1:6:1717:G:H5''	2.08	0.54
85:6:2023:OHX:N5	85:6:2109:OHX:N3	2.56	0.54
1:6:542:A:C8	1:6:543:C:H2'	2.42	0.54
61:N5:56:ARG:NH2	38:8:135:G:OP2	82.55	0.54
18:C6:16:ALA:HB2	18:C6:72:GLY:HA3	1.89	0.54
41:L4:304:GLN:O	41:L4:306:THR:N	2.84	0.54
45:L8:246:MET:HE3	45:L8:249:ARG:HH21	1.72	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:16:LYS:HG2	48:M1:130:VAL:HG13	2.47	0.54
52:M6:78:ARG:HG3	52:M6:78:ARG:NH1	3.51	0.54
36:1:1722:U:H5''	55:M9:99:LEU:HD12	1.89	0.54
45:L8:230:LYS:NZ	72:O6:46:GLU:O	2.26	0.54
36:1:1492:G:N7	75:O9:2:ALA:HB1	2.23	0.54
77:Q1:16:LYS:O	77:Q1:20:VAL:HG23	2.91	0.54
2:S0:134:LYS:HG2	2:S0:138:TYR:HE2	1.72	0.54
4:S2:103:VAL:HG23	4:S2:113:LEU:HD23	1.89	0.54
6:S4:181:VAL:HG22	6:S4:227:VAL:HA	2.46	0.54
7:S5:163:SER:HB2	30:D8:48:VAL:HG22	3.42	0.54
10:S8:197:THR:HA	10:S8:200:LYS:HB2	1.90	0.54
11:S9:163:PRO:HB3	11:S9:169:PRO:HA	3.02	0.54
36:1:1688:U:H2'	36:1:1689:U:C6	2.43	0.54
36:1:2525:G:O2'	36:1:2526:C:OP2	2.23	0.54
36:1:3169:U:O2'	36:1:3170:A:OP1	2.24	0.54
36:1:270:U:O2'	36:1:318:A:H1'	2.07	0.54
36:1:662:U:OP1	64:N8:8:THR:HG21	2.07	0.54
36:1:986:U:H2'	36:1:987:U:H6	1.73	0.54
1:2:734:A:H5''	1:2:735:C:OP1	2.06	0.54
1:2:864:U:C5	29:D7:22:LYS:HG2	2.42	0.54
1:2:894:U:H3	1:2:918:U:H3	1.56	0.54
36:5:1454:A:OP1	85:5:4030:OHX:N4	2.41	0.54
36:5:1807:G:C6	36:5:1808:G:N1	2.76	0.54
36:5:679:U:OP2	85:5:4031:OHX:N5	2.40	0.54
1:6:73:U:H2'	1:6:74:U:C6	2.43	0.54
1:6:886:U:H2'	1:6:887:A:H8	1.72	0.54
85:5:3980:OHX:N3	38:8:43:A:OP1	2.40	0.54
38:8:83:C:H4'	38:8:85:G:N3	2.23	0.54
13:C1:109:VAL:HG21	13:C1:125:VAL:HG11	2.23	0.54
15:C3:136:PRO:O	15:C3:138:ASN:N	2.51	0.54
40:L3:10:ARG:NH2	40:L3:263:SER:O	2.41	0.54
42:L5:258:LYS:O	42:L5:258:LYS:HG2	4.70	0.54
44:L7:208:SER:OG	44:L7:209:ASN:N	2.88	0.54
50:M4:36:VAL:HG11	50:M4:55:ARG:NH2	2.23	0.54
50:M4:32:LEU:HD11	50:M4:94:TRP:CG	2.42	0.54
52:M6:61:ALA:HA	52:M6:70:PRO:HD2	1.89	0.54
54:M8:96:PHE:CD2	54:M8:97:PRO:HD2	2.42	0.54
2:S0:186:GLY:O	2:S0:188:LEU:N	2.40	0.54
4:S2:103:VAL:HG12	4:S2:190:LEU:HD12	1.88	0.54
7:S5:117:THR:HG21	7:S5:194:LEU:HD13	2.93	0.54
36:1:1093:A:O2'	36:1:1094:U:O5'	2.26	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1535:A:OP2	85:1:3736:OHX:N4	2.41	0.54
36:1:1881:A:H2'	36:1:1882:G:C8	2.40	0.54
36:1:2209:U:O2'	36:1:2210:G:OP1	2.24	0.54
36:1:437:G:H2'	36:1:438:A:O4'	2.08	0.54
1:2:130:C:H2'	1:2:131:C:C6	2.43	0.54
1:2:327:U:H4'	13:C1:14:GLN:HE22	1.73	0.54
36:5:3343:G:H21	36:5:3362:A:H2	1.51	0.54
85:5:3898:OHX:N5	85:5:4036:OHX:N2	2.54	0.54
36:5:748:U:H2'	36:5:749:C:C6	2.43	0.54
1:6:404:G:H2'	1:6:405:C:C6	2.43	0.54
17:C5:14:THR:HB	17:C5:22:LEU:HB2	1.90	0.54
25:D3:130:VAL:O	25:D3:131:SER:HB3	2.08	0.54
39:L2:79:ASN:O	39:L2:82:VAL:HG13	2.08	0.54
42:L5:113:LEU:HB3	42:L5:115:LEU:HD22	2.14	0.54
51:M5:153:ASP:OD2	51:M5:155:VAL:HG23	3.30	0.54
61:N5:103:TYR:HB3	61:N5:135:ILE:HD11	2.32	0.54
3:S1:61:LEU:HD23	3:S1:62:LYS:H	1.73	0.54
6:S4:105:VAL:HG11	6:S4:245:LYS:H	2.28	0.54
7:S5:64:VAL:HG22	7:S5:89:ILE:HD11	2.30	0.54
36:1:1785:U:H2'	36:1:1786:G:C8	2.43	0.54
36:1:955:U:H2'	36:1:956:U:C6	2.43	0.54
36:5:999:G:C6	36:5:1000:C:N4	2.76	0.54
36:5:1614:C:H2'	36:5:1615:C:H6	1.73	0.54
36:5:2732:G:OP2	85:5:4052:OHX:N1	2.41	0.54
34:SR:282:SER:N	1:6:1394:G:OP1	417.46	0.54
1:6:1526:A:N1	1:6:1608:U:O2'	2.38	0.54
1:6:454:U:H5''	1:6:455:C:H5	1.72	0.54
22:D0:57:ARG:HG3	22:D0:89:ARG:CZ	2.38	0.54
28:D6:43:ASN:HA	28:D6:66:LYS:HA	1.89	0.54
22:D0:82:TYR:HB3	31:D9:52:PHE:HB3	1.90	0.54
40:L3:25:ILE:CD1	40:L3:25:ILE:H	2.20	0.54
61:N5:73:MET:HA	61:N5:73:MET:HE3	3.19	0.54
67:O1:11:GLU:HG2	67:O1:74:ARG:HB2	1.89	0.54
71:O5:86:ARG:HA	71:O5:89:ARG:NH1	2.23	0.54
9:S7:43:PHE:HB2	9:S7:61:PHE:O	2.08	0.54
11:S9:38:ASN:HB2	11:S9:41:GLU:HG3	1.90	0.54
34:SR:131:ILE:O	34:SR:144:LEU:HB2	2.08	0.54
34:SR:133:VAL:HB	34:SR:141:LEU:HB2	4.91	0.54
34:SR:40:LYS:HA	34:SR:68:VAL:HG23	1.90	0.54
34:SR:82:SER:OG	34:SR:92:TRP:NE1	2.96	0.54
36:1:2356:A:N6	36:1:2983:C:H5	2.02	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1345:G:N7	85:1:3820:OHX:N4	2.55	0.54
1:2:1045:C:H42	1:2:1073:G:H1	1.55	0.54
1:2:1490:C:H4'	1:2:1491:U:OP1	2.06	0.54
36:5:1232:C:C5	36:5:1261:G:H2'	2.43	0.54
36:5:1887:A:OP1	85:5:3953:OHX:N6	2.41	0.54
36:5:2656:A:O2'	85:5:3751:OHX:N4	2.41	0.54
36:5:273:A:N7	85:5:3908:OHX:N3	2.56	0.54
36:5:2975:U:OP1	85:5:3930:OHX:N3	2.41	0.54
36:5:3269:U:H4'	36:5:3270:U:O5'	2.08	0.54
1:6:1243:G:N3	1:6:1243:G:H5''	2.23	0.54
1:6:1688:U:H3	1:6:1713:G:H1	1.55	0.54
12:C0:23:ALA:HB3	12:C0:64:TYR:HB2	1.89	0.54
17:C5:18:ARG:NH2	17:C5:38:PRO:HG3	2.94	0.54
19:C7:41:ILE:HD13	19:C7:50:ILE:HD12	2.44	0.54
24:D2:119:LYS:HG2	1:6:687:G:H5''	394.04	0.54
26:D4:21:LYS:HB2	26:D4:75:VAL:HG13	1.90	0.54
40:L3:360:ASP:OD1	40:L3:361:THR:N	2.41	0.54
67:O1:20:LEU:HD22	67:O1:31:ARG:HB3	2.50	0.54
70:O4:81:CYS:SG	70:O4:84:CYS:SG	3.18	0.54
36:1:256:G:H4'	71:O5:111:PHE:HZ	1.73	0.54
78:Q2:3:ASN:HA	78:Q2:92:GLU:O	2.08	0.54
2:S0:125:ASP:O	2:S0:128:SER:N	2.41	0.54
3:S1:173:THR:O	3:S1:177:GLN:NE2	2.40	0.54
3:S1:36:SER:HB2	3:S1:231:LEU:HD13	1.89	0.54
1:2:472:U:H5''	11:S9:11:THR:HG23	1.90	0.54
34:SR:74:THR:HG23	34:SR:79:TYR:HB2	1.89	0.54
36:1:114:A:OP1	51:M5:54:LYS:NZ	2.34	0.53
36:1:1951:C:N4	36:1:2095:G:H1	1.97	0.53
36:1:2971:A:N3	36:1:2971:A:H3'	2.22	0.53
36:1:3231:U:H2'	36:1:3232:G:H8	1.73	0.53
1:2:153:G:H2'	1:2:154:G:C8	2.43	0.53
36:5:1239:C:N3	36:5:1249:G:N2	2.56	0.53
36:5:2985:C:H2'	36:5:2986:U:H6	1.73	0.53
1:6:1018:U:H2'	1:6:1019:A:H8	1.73	0.53
1:6:1600:A:H4'	1:6:1601:G:OP1	2.07	0.53
1:6:180:A:H2'	1:6:181:A:O4'	2.08	0.53
38:8:68:G:O6	85:8:221:OHX:N6	2.41	0.53
12:C0:56:LYS:N	12:C0:67:THR:O	2.85	0.53
13:C1:6:THR:O	13:C1:8:GLN:N	2.33	0.53
33:E1:90:LYS:HB2	33:E1:93:HIS:CE1	9.36	0.53
39:L2:68:LYS:HG3	39:L2:69:TYR:N	3.44	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:50:LYS:HG2	43:L6:74:VAL:HG21	2.12	0.53
47:M0:193:ASP:OD1	47:M0:198:LYS:HE3	2.08	0.53
49:M3:119:TYR:O	49:M3:123:ILE:HG23	2.08	0.53
49:M3:25:HIS:CD2	51:M5:200:TRP:CE2	3.36	0.53
56:N0:5:LYS:HB2	56:N0:7:TYR:CE2	2.43	0.53
62:N6:14:LYS:HE3	36:5:335:G:OP2	75.78	0.53
54:M8:178:ARG:HE	64:N8:50:PRO:HG2	1.74	0.53
64:N8:6:THR:HG23	64:N8:8:THR:H	2.07	0.53
36:1:2314:U:O2'	36:1:2315:G:OP1	2.26	0.53
36:1:3358:U:H2'	36:1:3359:A:O4'	2.09	0.53
36:1:1887:A:OP2	85:1:3752:OHX:N4	2.41	0.53
1:2:181:A:H2'	1:2:182:A:O4'	2.08	0.53
1:2:789:A:O2'	6:S4:106:LYS:NZ	2.37	0.53
36:5:2440:G:O2'	36:5:2441:A:OP1	2.25	0.53
36:5:2897:A:H2'	36:5:2899:C:H5''	1.88	0.53
85:5:3822:OHX:N6	85:5:4035:OHX:N5	2.56	0.53
1:6:703:G:H2'	1:6:704:C:C6	2.44	0.53
37:7:3:U:H2'	37:7:4:U:C6	2.42	0.53
24:D2:89:TRP:O	24:D2:93:LEU:HD23	2.08	0.53
41:L4:188:ARG:O	41:L4:193:LYS:HE3	2.08	0.53
42:L5:85:ARG:HH12	42:L5:254:LYS:H	1.54	0.53
45:L8:108:ARG:O	45:L8:112:GLU:N	2.89	0.53
45:L8:121:SER:O	45:L8:123:GLN:N	2.39	0.53
50:M4:73:PRO:HG2	50:M4:76:ALA:HB2	1.88	0.53
51:M5:110:ALA:HB1	51:M5:113:LEU:HD23	1.89	0.53
2:S0:133:ILE:O	2:S0:137:SER:OG	2.26	0.53
7:S5:29:ILE:HG22	7:S5:34:GLN:HG3	1.90	0.53
35:SM:58:GLU:O	35:SM:62:ARG:HB2	2.66	0.53
36:1:2705:A:OP2	85:1:3730:OHX:N1	2.41	0.53
36:1:1389:G:OP2	85:1:3832:OHX:N4	2.40	0.53
1:2:136:C:H4'	1:2:137:U:OP1	2.09	0.53
1:2:1657:U:N3	85:2:2048:OHX:N2	2.55	0.53
1:2:545:A:H4'	1:2:546:U:OP1	2.09	0.53
1:2:553:G:OP2	1:2:554:C:O2'	2.19	0.53
1:2:856:A:N6	9:S7:96:ARG:HB3	2.23	0.53
36:5:2993:G:H2'	36:5:3142:A:N6	2.23	0.53
36:5:595:G:H1	36:5:609:G:H5''	1.74	0.53
1:6:1003:A:H4'	1:6:1004:U:O5'	2.09	0.53
1:6:1078:C:H2'	1:6:1079:U:H6	1.74	0.53
19:C7:8:THR:HG21	1:6:1330:G:H21	420.07	0.53
1:6:518:A:O2'	1:6:534:A:N6	2.40	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:152:VAL:HG22	41:L4:172:VAL:HG21	1.90	0.53
45:L8:91:PHE:CZ	45:L8:185:ARG:HB3	2.86	0.53
47:M0:29:SER:HB2	47:M0:125:LEU:HD12	2.05	0.53
48:M1:164:LYS:HE3	48:M1:171:VAL:HB	1.90	0.53
49:M3:124:ILE:HD11	49:M3:126:PHE:CZ	2.43	0.53
51:M5:73:ARG:HG2	51:M5:75:VAL:HG22	2.28	0.53
53:M7:178:ALA:HA	53:M7:181:ARG:HH21	1.73	0.53
59:N3:74:MET:HE3	59:N3:102:ILE:HB	1.90	0.53
63:N7:25:ILE:HG23	63:N7:41:ALA:HB1	2.03	0.53
63:N7:47:GLU:OE1	63:N7:69:LYS:NZ	2.30	0.53
71:O5:90:ARG:NH1	36:5:20:A:OP2	86.40	0.53
74:O8:5:ILE:HG22	74:O8:54:LEU:HB2	1.97	0.53
5:S3:74:GLN:HA	5:S3:79:TYR:HB2	2.78	0.53
6:S4:121:TYR:OH	6:S4:235:TYR:O	2.17	0.53
35:SM:41:SER:C	35:SM:43:ASP:H	2.11	0.53
36:1:651:G:O2'	36:1:1435:A:OP1	2.24	0.53
36:1:2666:C:OP2	36:1:2687:G:N1	2.30	0.53
36:1:2247:G:OP1	85:1:3924:OHX:N6	2.42	0.53
36:1:561:C:H2'	36:1:562:C:H6	1.71	0.53
1:2:1537:C:O2'	1:2:1540:G:O6	2.26	0.53
1:2:452:A:H3'	1:2:453:U:C6	2.43	0.53
1:2:986:G:H2'	1:2:987:G:O4'	2.08	0.53
36:5:1863:G:N1	36:5:1866:C:OP2	2.36	0.53
36:5:2537:U:O2	36:5:2543:U:N3	2.41	0.53
36:5:2896:A:H8	36:5:2896:A:H5'	1.73	0.53
36:5:314:U:H2'	36:5:315:C:C6	2.43	0.53
36:5:1650:G:N7	85:5:4018:OHX:N3	2.57	0.53
85:5:3898:OHX:N5	85:5:4036:OHX:N6	2.56	0.53
36:5:47:C:OP2	36:5:48:A:O2'	2.16	0.53
1:6:1776:A:H2'	1:6:1777:G:C8	2.43	0.53
1:6:336:G:OP2	85:6:2117:OHX:N4	2.42	0.53
37:7:114:U:H2'	37:7:115:G:H8	1.73	0.53
36:5:408:A:N6	38:8:15:G:H1'	2.23	0.53
17:C5:15:HIS:O	17:C5:21:ASP:HA	2.09	0.53
16:C4:114:ARG:HA	28:D6:62:TYR:CZ	2.43	0.53
40:L3:81:THR:HG22	40:L3:321:PHE:CA	5.88	0.53
41:L4:226:GLU:OE1	41:L4:237:GLN:NE2	2.33	0.53
42:L5:211:LEU:O	42:L5:215:ASP:N	3.52	0.53
45:L8:79:GLN:HG2	45:L8:80:TYR:N	2.24	0.53
46:L9:189:GLU:O	46:L9:191:LEU:N	2.41	0.53
48:M1:17:LEU:HB3	48:M1:76:ALA:HB1	3.23	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:161:GLU:OE1	51:M5:26:ARG:NH1	2.72	0.53
51:M5:53:TYR:HB2	51:M5:133:ILE:HG21	3.29	0.53
58:N2:34:ALA:HA	58:N2:37:LEU:HB2	3.02	0.53
62:N6:112:ASP:HB2	62:N6:115:ARG:H	1.73	0.53
68:O2:24:ARG:HG2	68:O2:25:TYR:CZ	2.66	0.53
6:S4:118:GLU:HA	6:S4:121:TYR:CE1	3.11	0.53
8:S6:58:LYS:HG2	8:S6:105:ASP:O	2.08	0.53
34:SR:49:GLY:O	34:SR:51:ASP:N	2.39	0.53
36:1:718:G:OP2	36:1:718:G:H8	1.91	0.53
36:1:979:U:C2	36:1:980:A:C4	2.96	0.53
1:2:1079:U:H2'	1:2:1080:U:C6	2.43	0.53
1:2:1619:C:H2'	1:2:1620:C:H6	1.73	0.53
1:2:733:A:H4'	1:2:734:A:C5	2.43	0.53
36:5:1661:G:H2'	36:5:1662:G:C8	2.43	0.53
36:5:1796:G:O6	85:5:4057:OHX:N5	2.41	0.53
36:5:2130:G:OP2	85:5:3840:OHX:N1	2.41	0.53
36:5:1752:A:OP2	85:5:3922:OHX:N6	2.42	0.53
36:5:917:A:OP2	85:5:4054:OHX:N3	2.42	0.53
1:6:1714:A:H2'	1:6:1715:G:O4'	2.09	0.53
13:C1:77:SER:HB3	13:C1:85:VAL:HB	2.56	0.53
15:C3:132:VAL:HG23	15:C3:134:VAL:HG13	1.91	0.53
36:1:1103:A:C8	44:L7:158:LYS:HD3	2.43	0.53
45:L8:186:LEU:HA	45:L8:189:LEU:HD23	1.89	0.53
71:O5:62:GLN:O	71:O5:66:VAL:HG23	2.09	0.53
72:O6:97:SER:C	72:O6:99:ARG:H	2.12	0.53
5:S3:34:TYR:HE2	5:S3:37:VAL:HG13	1.86	0.53
9:S7:62:VAL:HB	9:S7:94:ALA:HA	1.90	0.53
11:S9:39:LYS:HB3	11:S9:43:TYR:CZ	2.43	0.53
34:SR:255:ALA:HB2	34:SR:292:LEU:HD22	1.89	0.53
36:1:1720:U:OP2	55:M9:110:ARG:NH1	2.40	0.53
36:1:180:C:H2'	36:1:181:U:C6	2.43	0.53
36:1:2655:U:H4'	36:1:2656:A:O4'	2.08	0.53
36:1:3214:U:OP2	50:M4:128:ARG:NH2	2.35	0.53
1:2:1229:G:O2'	1:2:1255:G:N2	2.42	0.53
1:2:328:A:N3	10:S8:86:SER:OG	2.35	0.53
1:2:618:U:OP1	1:2:1030:A:O2'	2.24	0.53
36:5:1063:G:H2'	36:5:1097:G:N2	2.24	0.53
36:5:166:C:H2'	36:5:167:U:H6	1.73	0.53
36:5:3295:A:H2'	36:5:3296:A:C8	2.43	0.53
1:6:1783:C:H2'	1:6:1784:C:C6	2.43	0.53
28:D6:41:ILE:HD13	28:D6:41:ILE:H	1.74	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:C2:73:LYS:HZ1	33:E1:108:VAL:HG13	1.73	0.53
41:L4:142:VAL:HB	41:L4:145:ILE:HD13	3.19	0.53
41:L4:341:SER:O	41:L4:342:LYS:HB3	4.59	0.53
42:L5:52:VAL:HG21	42:L5:65:ILE:HD12	1.91	0.53
46:L9:7:GLU:OE1	46:L9:54:LYS:HD2	2.09	0.53
47:M0:194:GLY:O	47:M0:196:PHE:N	4.14	0.53
61:N5:110:VAL:HG22	61:N5:124:VAL:HG13	3.10	0.53
1:2:788:A:OP2	6:S4:108:ARG:NH1	2.41	0.53
6:S4:160:VAL:HG13	6:S4:169:ILE:HG23	2.08	0.53
10:S8:32:GLN:HG2	10:S8:33:PRO:HD2	3.98	0.53
14:C2:55:GLY:N	35:SM:172:UNK:O	2.29	0.53
36:1:1412:G:OP1	68:O2:105:ARG:NH2	2.41	0.53
36:1:1554:U:C4	36:1:1582:C:H2'	2.44	0.53
36:1:1947:G:H1	36:1:2101:C:H42	1.57	0.53
36:1:420:G:O2'	36:1:2384:A:N3	2.35	0.53
36:1:2960:C:H2'	36:1:2961:G:C8	2.43	0.53
1:2:487:G:H3'	1:2:488:G:H5''	1.90	0.53
1:2:992:A:C2	1:2:1012:U:N3	2.75	0.53
36:5:1615:C:H2'	36:5:1616:U:C6	2.44	0.53
36:5:1915:A:H2'	36:5:1916:U:C6	2.44	0.53
36:5:2095:G:H2'	36:5:2096:A:H8	1.74	0.53
78:Q2:46:LYS:HE2	36:5:92:G:OP1	164.00	0.53
36:5:956:U:H2'	36:5:957:C:C6	2.44	0.53
1:6:1114:G:O2'	1:6:1130:G:O6	2.23	0.53
1:6:1357:A:H2'	1:6:1358:G:C8	2.44	0.53
21:C9:69:LYS:NZ	1:6:1369:U:OP2	438.23	0.53
1:6:1118:G:N7	85:6:2138:OHX:N2	2.56	0.53
1:6:486:G:O6	1:6:488:G:N2	2.37	0.53
1:6:219:A:H2'	1:6:831:U:O2	2.08	0.53
14:C2:66:VAL:HG11	14:C2:71:ILE:HD13	1.90	0.53
21:C9:57:ARG:NH2	21:C9:80:TYR:HB3	2.24	0.53
24:D2:42:GLN:NE2	24:D2:48:GLY:O	3.55	0.53
27:D5:59:TYR:HD2	27:D5:60:VAL:N	2.06	0.53
49:M3:89:TYR:CE1	49:M3:93:ILE:HD11	4.06	0.53
52:M6:182:ASN:O	52:M6:185:ALA:N	3.88	0.53
61:N5:42:ARG:O	61:N5:44:PRO:HD3	3.10	0.53
66:O0:74:ASN:OD1	66:O0:74:ASN:N	3.20	0.53
68:O2:16:LYS:HD3	68:O2:18:LYS:HE2	3.74	0.53
73:O7:2:GLY:N	36:5:2138:A:HO2'	174.08	0.53
79:Q3:35:ALA:HB3	79:Q3:37:TYR:CE2	3.80	0.53
2:S0:120:LEU:HD11	2:S0:144:ILE:HG13	1.89	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:137:LYS:O	10:S8:141:ARG:N	2.96	0.53
34:SR:197:SER:HB2	34:SR:216:LYS:HB3	2.39	0.53
36:1:124:U:H2'	36:1:125:C:H6	1.73	0.53
36:1:1278:A:HO2'	36:1:1279:C:C5'	2.22	0.53
36:1:1785:U:H2'	36:1:1786:G:H8	1.73	0.53
36:1:263:C:H2'	36:1:264:G:O4'	2.09	0.53
36:1:776:U:C5	36:1:2719:U:O2	2.62	0.53
36:1:2984:C:H2'	36:1:2985:C:H6	1.74	0.53
36:1:3116:G:N2	36:1:3116:G:OP1	2.41	0.53
36:1:2107:A:H2	36:1:3344:A:C8	2.27	0.53
36:1:2258:U:OP1	85:1:3793:OHX:N5	2.42	0.53
36:1:239:G:N7	85:1:3894:OHX:N4	2.57	0.53
36:1:708:G:N2	36:1:711:A:OP2	2.41	0.53
36:1:786:A:H4'	36:1:787:G:H5'	1.90	0.53
1:2:1546:G:OP1	20:C8:123:ARG:HD2	2.09	0.53
1:2:274:G:H3'	1:2:275:C:C6	2.43	0.53
36:5:409:A:OP2	85:5:3944:OHX:N3	2.42	0.53
1:6:1081:A:H1'	1:6:1082:C:H5	1.74	0.53
17:C5:43:ARG:NH1	1:6:1553:G:N7	401.32	0.53
85:6:2023:OHX:N5	85:6:2109:OHX:N6	2.56	0.53
1:6:489:C:O2'	1:6:490:C:O4'	2.26	0.53
36:5:22:G:O2'	38:8:40:A:N1	2.34	0.53
51:M5:110:ALA:HB1	51:M5:113:LEU:HB2	1.91	0.53
53:M7:168:LEU:HD13	53:M7:172:GLN:HB3	1.89	0.53
55:M9:172:ARG:O	55:M9:176:ARG:HG2	2.38	0.53
66:O0:75:ASN:HA	66:O0:86:ARG:HB2	2.67	0.53
69:O3:72:THR:HG23	69:O3:83:ALA:HA	1.90	0.53
73:O7:28:HIS:HB3	73:O7:31:LYS:HB2	1.90	0.53
5:S3:68:GLU:OE2	12:C0:67:THR:OG1	4.24	0.53
34:SR:37:SER:OG	34:SR:38:ARG:N	3.36	0.53
36:1:1103:A:N6	36:1:1363:A:H1'	2.23	0.53
36:1:29:C:H4'	36:1:62:A:H4'	1.90	0.53
36:1:789:A:H2'	36:1:790:U:C6	2.44	0.53
1:2:324:U:OP1	13:C1:133:LYS:NZ	2.38	0.53
36:5:2964:G:N7	85:5:3826:OHX:N6	2.57	0.53
39:L2:213:GLY:CA	36:5:2967:A:H5''	205.99	0.53
36:5:3275:U:O2'	36:5:3276:G:OP1	2.25	0.53
1:6:1041:G:H2'	1:6:1042:G:C8	2.44	0.53
15:C3:33:VAL:HG11	15:C3:66:ILE:HD11	2.67	0.53
18:C6:114:ARG:O	18:C6:115:THR:HB	3.82	0.53
20:C8:35:ILE:HB	20:C8:38:VAL:HG22	3.54	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:C9:52:GLY:HA2	21:C9:55:TYR:HD2	2.51	0.53
24:D2:15:ASN:ND2	24:D2:72:CYS:O	2.41	0.53
24:D2:73:GLY:HA3	24:D2:128:PHE:CZ	2.81	0.53
40:L3:49:TYR:OH	40:L3:177:HIS:ND1	3.21	0.53
46:L9:103:ILE:HG13	46:L9:136:PHE:CZ	2.44	0.53
47:M0:76:MET:HE2	47:M0:148:VAL:HA	1.91	0.53
47:M0:171:TRP:O	47:M0:174:THR:HG22	2.09	0.53
47:M0:175:ASN:CG	47:M0:176:LEU:H	4.85	0.53
47:M0:24:ARG:HG3	47:M0:24:ARG:HH11	1.74	0.53
47:M0:31:ILE:HA	47:M0:66:GLU:OE1	2.09	0.53
47:M0:80:SER:O	47:M0:84:ALA:HB2	2.08	0.53
49:M3:109:PHE:O	49:M3:113:VAL:HG23	2.62	0.53
49:M3:57:VAL:N	49:M3:112:ASN:OD1	2.40	0.53
63:N7:62:VAL:O	63:N7:66:THR:OG1	2.17	0.53
78:Q2:8:ARG:HB2	78:Q2:8:ARG:HH11	4.40	0.53
2:S0:66:ALA:HB2	23:D1:37:ALA:HB2	2.39	0.53
6:S4:104:ASP:HB3	6:S4:106:LYS:H	1.74	0.53
6:S4:159:THR:HG22	6:S4:173:ILE:HB	1.91	0.53
36:1:1752:A:OP2	85:1:3907:OHX:N3	2.42	0.53
36:1:2947:G:H4'	36:1:2947:G:OP2	2.09	0.53
36:1:3000:A:H2'	36:1:3001:C:C6	2.44	0.53
36:1:3066:U:H2'	36:1:3067:C:C6	2.44	0.53
1:2:1234:A:H4'	33:E1:146:SER:HB3	1.90	0.53
36:5:1481:A:O2'	36:5:1858:A:C2	2.60	0.53
36:5:3302:U:H3	36:5:3312:U:H3	1.55	0.53
36:5:3358:U:H2'	36:5:3359:A:C8	2.44	0.53
85:5:3854:OHX:N4	85:5:4037:OHX:N2	2.57	0.53
85:5:3898:OHX:N1	85:5:4036:OHX:N4	2.57	0.53
36:5:873:C:H5''	36:5:874:U:O5'	2.09	0.53
1:6:1119:G:O6	85:6:2138:OHX:N5	2.42	0.53
1:6:407:A:H2'	1:6:408:C:C6	2.43	0.53
1:6:984:G:H2'	1:6:985:G:O4'	2.09	0.53
13:C1:99:ARG:HD3	25:D3:8:GLY:O	2.09	0.53
16:C4:115:ILE:HD11	28:D6:44:ILE:HD13	1.90	0.53
32:E0:18:THR:HG21	1:6:584:C:H1'	390.12	0.53
41:L4:259:ASP:HB3	41:L4:267:VAL:HG11	4.15	0.53
49:M3:166:ALA:N	64:N8:135:GLU:OE2	4.45	0.53
36:1:1307:G:OP1	52:M6:59:ARG:NH1	2.41	0.53
79:Q3:38:ASP:HA	79:Q3:45:LYS:HA	1.91	0.53
2:S0:177:LEU:O	2:S0:181:VAL:HG13	2.09	0.53
3:S1:70:LEU:HA	3:S1:73:LEU:HG	1.90	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:208:ILE:HD12	19:C7:16:LEU:HD21	1.89	0.53
6:S4:34:GLY:HA3	6:S4:83:PRO:HG3	1.89	0.53
10:S8:26:LYS:O	10:S8:29:LEU:HB3	2.09	0.53
36:1:1230:G:H1	36:1:1279:C:N4	2.06	0.52
36:1:1919:G:N7	85:1:3874:OHX:N5	2.56	0.52
1:2:1592:A:H2'	1:2:1593:A:C8	2.44	0.52
1:2:246:G:H1'	13:C1:40:LEU:HD13	1.91	0.52
1:2:730:G:O6	85:2:2114:OHX:N4	2.42	0.52
36:5:173:G:HO2'	36:5:174:C:H6	1.56	0.52
36:5:2837:A:H8	36:5:2837:A:OP2	1.91	0.52
36:5:3113:A:OP2	85:5:3853:OHX:N4	2.42	0.52
1:6:1537:C:N3	85:6:2121:OHX:N6	2.57	0.52
1:6:219:A:C6	1:6:843:U:H1'	2.43	0.52
20:C8:90:ASN:O	20:C8:95:GLY:HA2	2.10	0.52
20:C8:99:HIS:HD2	20:C8:101:LEU:HD21	1.74	0.52
25:D3:53:VAL:HG23	25:D3:100:ASP:O	2.08	0.52
29:D7:56:CYS:HB3	29:D7:61:THR:HG21	1.91	0.52
41:L4:111:VAL:HG12	41:L4:112:LYS:H	1.75	0.52
44:L7:136:TYR:CZ	44:L7:231:ASN:HB2	2.44	0.52
52:M6:68:ARG:NH1	36:5:2988:C:P	216.56	0.52
56:N0:11:GLY:HA2	56:N0:59:VAL:HG23	2.40	0.52
65:N9:23:LYS:HB3	65:N9:24:PRO:CD	3.45	0.52
66:O0:99:ASP:O	66:O0:101:LEU:N	3.11	0.52
36:1:1145:G:OP1	68:O2:44:ARG:NH1	2.41	0.52
8:S6:176:GLN:HG3	8:S6:177:ARG:H	1.76	0.52
11:S9:53:ARG:O	11:S9:57:ARG:HB2	4.39	0.52
36:1:1029:G:H2'	36:1:1030:A:C8	2.44	0.52
36:1:1069:C:H2'	36:1:1070:U:C6	2.44	0.52
36:1:564:G:H2'	36:1:565:U:C6	2.44	0.52
36:1:929:A:H2'	36:1:930:U:H6	1.74	0.52
1:2:763:G:OP2	11:S9:79:ARG:NH1	2.42	0.52
38:4:78:G:H2'	38:4:79:A:C8	2.45	0.52
85:5:3877:OHX:N3	85:5:3923:OHX:N4	2.57	0.52
1:6:463:U:H2'	1:6:464:A:C8	2.44	0.52
1:6:625:C:H2'	1:6:626:U:C6	2.44	0.52
1:6:914:G:H8	1:6:914:G:OP2	1.92	0.52
18:C6:122:ARG:HB3	1:6:1584:G:H5''	396.72	0.52
20:C8:23:ASP:OD1	20:C8:24:GLY:N	2.71	0.52
25:D3:95:PHE:O	25:D3:142:LYS:NZ	2.30	0.52
26:D4:124:ARG:O	26:D4:127:LYS:HG3	2.08	0.52
26:D4:60:PHE:O	1:6:523:G:H5'	413.58	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D7:63:LEU:O	29:D7:74:SER:N	2.59	0.52
41:L4:39:PHE:CD2	41:L4:242:ALA:HB2	2.66	0.52
42:L5:34:LYS:O	42:L5:38:THR:HG23	2.09	0.52
49:M3:157:ARG:HG2	49:M3:158:ALA:N	2.24	0.52
55:M9:15:VAL:HG11	55:M9:52:LYS:HB2	3.09	0.52
56:N0:87:THR:O	56:N0:88:HIS:ND1	2.41	0.52
59:N3:19:VAL:HG13	59:N3:37:ILE:HA	2.38	0.52
63:N7:83:THR:HG23	63:N7:85:TYR:N	2.15	0.52
7:S5:92:ARG:HH11	7:S5:92:ARG:HG2	2.39	0.52
9:S7:89:HIS:CD2	9:S7:165:LYS:HG2	3.66	0.52
85:1:3836:OHX:N5	85:1:4008:OHX:N2	2.58	0.52
36:1:860:G:C6	39:L2:181:LYS:HB2	2.45	0.52
1:2:1222:C:H42	1:2:1261:G:H1	1.57	0.52
1:2:1492:A:HO2'	1:2:1493:A:H8	1.57	0.52
1:2:1654:G:O6	85:2:2045:OHX:N6	2.42	0.52
1:2:372:G:H1'	1:2:612:U:O2	2.10	0.52
1:2:701:U:H3	1:2:737:A:N6	1.96	0.52
1:2:876:G:H1'	1:2:944:A:O4'	2.09	0.52
36:5:982:C:H42	36:5:1101:G:H1	1.57	0.52
85:5:3898:OHX:N3	85:5:4036:OHX:N4	2.56	0.52
1:6:1614:A:C6	1:6:1615:C:N4	2.78	0.52
1:6:25:C:H4'	1:6:25:C:OP2	2.08	0.52
1:6:881:A:OP2	85:6:2072:OHX:N5	2.42	0.52
13:C1:21:ASN:HD22	13:C1:31:THR:HA	1.78	0.52
17:C5:29:SER:OG	17:C5:32:ASP:OD2	3.40	0.52
22:D0:67:THR:HG21	31:D9:40:ARG:HB2	1.91	0.52
41:L4:181:VAL:O	41:L4:182:LEU:HB2	2.10	0.52
45:L8:130:TYR:CD1	45:L8:202:GLU:HB3	2.44	0.52
46:L9:137:SER:HB3	46:L9:143:GLU:HB3	1.91	0.52
68:O2:26:HIS:O	68:O2:28:VAL:N	2.42	0.52
70:O4:84:CYS:O	70:O4:88:ARG:HG2	2.09	0.52
36:1:3118:C:O2'	76:Q0:106:ARG:NH2	2.42	0.52
4:S2:140:ARG:HD3	4:S2:222:TYR:CE1	2.45	0.52
9:S7:29:ASN:O	9:S7:30:SER:OG	2.26	0.52
10:S8:110:ARG:NH2	36:5:3354:U:O4	239.66	0.52
36:1:373:A:N1	36:1:394:G:H4'	2.25	0.52
36:1:980:A:H2'	36:1:981:U:N1	2.24	0.52
37:3:79:A:C2	37:3:102:A:C4	2.98	0.52
36:5:1070:U:O4	85:5:3950:OHX:N6	2.43	0.52
36:5:1284:C:O2'	36:5:1285:G:H5'	2.10	0.52
36:5:407:A:O2'	36:5:1397:C:OP1	2.28	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2663:G:H2'	36:5:2664:C:O4'	2.10	0.52
4:S2:200:SER:HG	1:6:4:C:P	384.27	0.52
1:6:9:U:O4	85:6:2108:OHX:N3	2.41	0.52
17:C5:130:ARG:H	35:SM:74:LYS:HD3	4.81	0.52
18:C6:78:VAL:O	18:C6:81:ILE:HG12	2.10	0.52
19:C7:50:ILE:O	19:C7:54:THR:OG1	2.24	0.52
26:D4:47:VAL:HG13	26:D4:48:TYR:CD2	5.79	0.52
32:E0:14:VAL:HA	32:E0:17:GLN:HG2	2.22	0.52
40:L3:47:LEU:HG	40:L3:335:ILE:HD11	2.11	0.52
41:L4:42:VAL:HG12	41:L4:236:LEU:HD21	1.91	0.52
51:M5:23:GLN:HG2	51:M5:122:ASN:ND2	2.24	0.52
55:M9:58:HIS:HE1	36:5:1860:G:H1'	171.06	0.52
66:O0:98:SER:OG	66:O0:99:ASP:N	2.41	0.52
71:O5:24:LEU:HA	71:O5:27:GLU:HB2	2.26	0.52
51:M5:143:ARG:HE	71:O5:92:LEU:CD2	2.21	0.52
3:S1:171:ILE:HD12	3:S1:197:ILE:HD13	1.90	0.52
4:S2:144:TRP:CZ2	4:S2:173:PRO:HG3	2.44	0.52
36:1:2789:U:H2'	36:1:2790:A:H8	1.75	0.52
1:2:1492:A:O2'	1:2:1493:A:H8	1.93	0.52
1:2:1681:A:H1'	8:S6:66:GLY:HA2	1.91	0.52
1:2:1518:C:OP2	85:2:2079:OHX:N2	2.43	0.52
36:5:1258:U:O2	36:5:1260:A:H8	1.92	0.52
36:5:1500:G:H2'	36:5:1501:U:O4'	2.08	0.52
36:5:644:G:H2'	36:5:2372:A:N7	2.25	0.52
36:5:171:G:H1	36:5:247:C:H42	1.57	0.52
36:5:621:A:H2'	36:5:622:A:C8	2.45	0.52
1:6:66:U:O2'	1:6:67:A:H5''	2.10	0.52
1:6:74:U:C2	1:6:76:A:H5''	2.44	0.52
1:6:828:U:H2'	1:6:829:A:H5''	1.91	0.52
12:C0:15:LEU:HD13	12:C0:68:LEU:HD22	4.64	0.52
20:C8:117:LYS:HE2	20:C8:128:PHE:HB2	2.24	0.52
21:C9:28:LEU:HB2	21:C9:30:VAL:HG13	1.92	0.52
21:C9:6:VAL:HG11	21:C9:132:LEU:HD23	1.90	0.52
22:D0:95:ALA:HB1	22:D0:99:ILE:HG13	4.23	0.52
53:M7:120:ASN:ND2	36:5:412:G:H1'	143.79	0.52
54:M8:145:ASN:HD22	54:M8:150:VAL:HG21	1.74	0.52
72:O6:57:LEU:O	72:O6:61:ILE:HG12	3.61	0.52
3:S1:119:THR:HB	3:S1:143:THR:HG23	1.92	0.52
10:S8:44:HIS:O	10:S8:56:ARG:N	2.90	0.52
11:S9:125:ALA:O	11:S9:129:ILE:HG13	2.09	0.52
35:SM:34:LYS:NZ	36:1:2707:C:OP1	2.33	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:25:U:O4	85:1:3731:OHX:N3	2.42	0.52
1:2:1169:G:N1	1:2:1575:G:OP2	2.38	0.52
1:2:1578:U:O2'	1:2:1579:U:H5'	2.09	0.52
36:5:1238:C:H2'	36:5:1239:C:O4'	2.09	0.52
39:L2:37:ARG:HH12	36:5:2525:G:P	190.63	0.52
56:N0:161:LYS:NZ	36:5:3209:A:OP2	277.84	0.52
1:6:1699:G:H2'	1:6:1700:C:H5'	1.92	0.52
85:6:2023:OHX:N2	85:6:2109:OHX:N6	2.57	0.52
1:6:658:C:H5'	1:6:659:C:OP2	2.09	0.52
12:C0:8:ARG:HD2	12:C0:12:HIS:CE1	2.45	0.52
28:D6:84:VAL:HG13	28:D6:85:ARG:N	2.24	0.52
30:D8:36:THR:HG1	30:D8:37:SER:H	1.56	0.52
36:1:3369:G:N1	40:L3:380:MET:O	2.42	0.52
51:M5:172:ARG:O	51:M5:183:THR:OG1	2.27	0.52
56:N0:170:THR:HG1	36:5:3185:U:HO2'	306.48	0.52
64:N8:75:LEU:O	64:N8:77:LYS:N	2.66	0.52
64:N8:94:ALA:HB1	64:N8:121:VAL:HA	1.91	0.52
75:O9:9:ILE:HD11	75:O9:51:ILE:HD13	1.91	0.52
77:Q1:21:ARG:HD2	1:6:1653:C:O3'	284.53	0.52
6:S4:49:ARG:HG3	6:S4:50:ASN:N	4.17	0.52
7:S5:206:SER:OG	7:S5:206:SER:O	2.23	0.52
8:S6:24:ILE:O	8:S6:26:VAL:N	2.42	0.52
36:1:1222:G:N2	36:1:1285:G:O2'	2.40	0.52
36:1:1638:A:N3	36:1:1709:C:H1'	2.25	0.52
36:1:603:A:H2'	36:1:604:G:O4'	2.08	0.52
1:2:1494:C:H2'	1:2:1495:C:H6	1.73	0.52
1:2:72:A:O2'	1:2:73:U:H5''	2.10	0.52
36:1:409:A:H61	38:4:15:G:H1'	1.74	0.52
36:5:1276:U:OP2	85:5:3850:OHX:N1	2.43	0.52
1:6:1087:A:H2'	1:6:1088:A:C8	2.44	0.52
1:6:1138:A:H2'	1:6:1139:A:H8	1.75	0.52
1:6:760:A:OP2	85:6:2047:OHX:N5	2.43	0.52
37:7:23:A:H2'	37:7:24:A:C8	2.45	0.52
27:D5:60:VAL:HG13	27:D5:101:TYR:HB2	4.43	0.52
39:L2:177:LYS:NZ	79:Q3:33:GLN:OE1	2.43	0.52
44:L7:88:ARG:NH1	44:L7:91:GLY:O	2.74	0.52
45:L8:83:ASP:OD2	45:L8:86:THR:N	2.83	0.52
47:M0:47:PRO:HB3	47:M0:171:TRP:CE2	2.58	0.52
47:M0:31:ILE:O	47:M0:32:ARG:HD3	2.09	0.52
51:M5:118:SER:HB3	51:M5:132:VAL:HG13	1.92	0.52
54:M8:122:ILE:HG23	54:M8:126:GLN:HB2	1.91	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:N9:46:ALA:O	65:N9:50:THR:HG22	2.09	0.52
71:O5:89:ARG:HH11	71:O5:89:ARG:HG2	2.00	0.52
3:S1:137:ILE:HG12	3:S1:172:LEU:HD13	3.66	0.52
3:S1:70:LEU:HB3	3:S1:79:HIS:HB3	5.18	0.52
8:S6:39:GLU:HG3	8:S6:46:LYS:HG3	2.60	0.52
34:SR:232:TYR:H	34:SR:232:TYR:HD2	3.20	0.52
36:1:1470:U:H2'	36:1:1471:U:H6	1.75	0.52
36:1:1763:U:H5'	36:1:1764:U:OP2	2.10	0.52
36:1:3278:C:H2'	36:1:3278:C:O2	2.10	0.52
1:2:1095:U:O4	85:2:2111:OHX:N3	2.43	0.52
1:2:1291:G:H8	1:2:1291:G:O5'	1.92	0.52
1:2:1701:A:H3'	1:2:1702:A:H5''	1.90	0.52
1:2:705:U:H2'	1:2:706:A:C8	2.44	0.52
1:2:700:C:N4	1:2:738:G:H1	2.00	0.52
36:5:2732:G:H2'	36:5:2733:A:O4'	2.10	0.52
40:L3:129:ALA:O	36:5:3150:A:H5'	211.67	0.52
36:5:3159:C:H2'	36:5:3160:U:C6	2.45	0.52
36:5:3228:C:H4'	36:5:3229:G:O5'	2.10	0.52
36:5:770:G:N7	85:5:3937:OHX:N6	2.57	0.52
36:5:543:C:H42	36:5:548:G:H1	1.58	0.52
33:E1:143:LYS:HD3	1:6:1254:U:OP1	456.44	0.52
19:C7:52:GLY:HA3	1:6:1389:C:O2'	423.50	0.52
1:6:1590:G:H2'	1:6:1591:C:C6	2.45	0.52
1:6:1621:U:H2'	1:6:1622:G:C8	2.44	0.52
37:7:112:G:OP2	85:7:215:OHX:N4	2.43	0.52
36:5:407:A:C2	38:8:17:A:H1'	2.44	0.52
18:C6:60:PHE:HA	18:C6:63:ILE:HG13	2.72	0.52
20:C8:45:LEU:HD11	21:C9:36:ILE:HG22	2.45	0.52
41:L4:287:THR:O	41:L4:291:ASN:ND2	4.90	0.52
46:L9:70:THR:O	46:L9:74:LEU:HG	2.44	0.52
46:L9:93:VAL:HG22	76:Q0:82:LEU:HD13	1.92	0.52
49:M3:186:ARG:O	49:M3:190:LYS:HB3	2.09	0.52
52:M6:26:GLN:HB3	52:M6:33:ILE:HD13	1.92	0.52
36:1:388:G:H4'	53:M7:18:ARG:O	2.10	0.52
59:N3:21:ALA:HB3	59:N3:36:ILE:HD12	1.91	0.52
2:S0:71:GLU:O	2:S0:96:THR:HG22	2.19	0.52
7:S5:161:ASP:OD2	30:D8:42:ARG:NH1	3.91	0.52
35:SM:107:ASN:HB3	35:SM:112:ASP:HB3	1.90	0.52
34:SR:301:LEU:N	34:SR:313:TRP:O	2.87	0.52
36:1:1060:U:H2'	36:1:1061:A:H8	1.75	0.52
36:1:255:A:H2'	36:1:256:G:C8	2.45	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2401:A:C5	36:1:2872:A:N6	2.78	0.52
36:1:3298:C:OP1	53:M7:74:LYS:NZ	2.33	0.52
36:1:835:G:O2'	36:1:857:G:N2	2.32	0.52
1:2:1140:G:OP2	85:2:2024:OHX:N6	2.43	0.52
36:5:1335:C:H2'	36:5:1336:U:H6	1.74	0.52
36:5:1547:G:H2'	36:5:1548:C:C6	2.45	0.52
58:N2:42:LYS:HB2	36:5:1687:U:C5	175.34	0.52
36:5:2406:C:H2'	36:5:2407:C:C6	2.45	0.52
36:5:2927:C:H2'	36:5:2928:C:C6	2.44	0.52
36:5:2970:C:H4'	36:5:2971:A:N1	2.25	0.52
53:M7:69:ARG:NH2	36:5:2992:U:H1'	191.90	0.52
16:C4:132:ARG:HB3	1:6:1787:C:OP2	293.38	0.52
85:6:2023:OHX:N1	85:6:2109:OHX:N4	2.58	0.52
38:8:27:U:H6	38:8:27:U:O5'	1.93	0.52
13:C1:64:VAL:HG11	13:C1:131:ILE:HD11	1.92	0.52
24:D2:122:SER:OG	24:D2:123:GLY:N	2.39	0.52
28:D6:82:ARG:O	28:D6:84:VAL:HG12	2.10	0.52
39:L2:207:VAL:HG11	36:5:916:G:C6	185.36	0.52
40:L3:41:VAL:CA	40:L3:185:GLY:HA3	2.39	0.52
40:L3:4:ARG:HD3	40:L3:7:GLU:OE1	5.81	0.52
45:L8:81:THR:HG21	45:L8:181:LYS:HD2	1.91	0.52
36:1:3122:A:N1	46:L9:70:THR:HG21	2.25	0.52
49:M3:94:GLY:HA3	49:M3:119:TYR:OH	3.19	0.52
41:L4:30:ILE:N	54:M8:25:TYR:OH	2.78	0.52
61:N5:57:LEU:HA	61:N5:61:LYS:HG2	3.77	0.52
62:N6:4:GLN:HB2	36:5:229:G:H5''	69.40	0.52
63:N7:46:ILE:HD11	63:N7:49:TYR:HA	1.91	0.52
46:L9:180:TYR:HB2	76:Q0:85:LEU:HD13	1.92	0.52
4:S2:227:PRO:HA	4:S2:230:TRP:CD1	2.69	0.52
11:S9:118:LEU:HD23	11:S9:158:PHE:CE1	2.93	0.52
36:1:255:A:H2'	36:1:256:G:H8	1.75	0.52
36:1:3318:G:H2'	36:1:3318:G:OP2	2.10	0.52
1:2:1695:G:N2	1:2:1706:C:H41	2.08	0.52
1:2:1665:U:O4	85:2:2095:OHX:N4	2.43	0.52
1:2:76:A:H5'	1:2:77:U:OP2	2.10	0.52
1:2:818:C:N4	1:2:819:G:O6	2.36	0.52
36:5:1239:C:N4	36:5:1249:G:H1	2.00	0.52
36:5:148:G:O2'	36:5:149:U:OP2	2.27	0.52
36:5:2113:A:N7	36:5:2114:C:C4	2.78	0.52
36:5:2344:U:H2'	36:5:2345:A:C8	2.45	0.52
36:5:2413:A:H2'	36:5:2414:G:H8	1.75	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:C5:128:HIS:HA	1:6:1180:C:O2'	334.79	0.52
38:8:74:U:O2	85:8:215:OHX:N5	2.42	0.52
16:C4:23:PHE:HE2	16:C4:91:THR:HG21	1.74	0.52
18:C6:82:ARG:NH1	18:C6:114:ARG:HB2	4.16	0.52
36:1:911:C:N4	39:L2:3:ARG:HD3	2.24	0.52
40:L3:199:PHE:O	40:L3:200:GLU:HB3	2.10	0.52
40:L3:60:LEU:HD23	40:L3:67:PHE:HB3	1.92	0.52
42:L5:55:PHE:CE1	42:L5:60:ILE:HG12	2.45	0.52
42:L5:52:VAL:HG21	42:L5:65:ILE:HG13	3.02	0.52
45:L8:75:ILE:O	45:L8:77:GLN:N	2.36	0.52
57:N1:105:PHE:O	57:N1:109:VAL:HG23	2.68	0.52
69:O3:52:VAL:HG21	69:O3:99:ARG:NH1	3.36	0.52
79:Q3:56:THR:HB	79:Q3:63:THR:HG23	1.92	0.52
6:S4:120:SER:O	6:S4:164:LEU:HB2	3.08	0.52
7:S5:222:LYS:HG3	7:S5:225:ARG:CZ	2.39	0.52
9:S7:25:VAL:HA	9:S7:28:GLU:HB2	2.99	0.52
1:2:381:C:OP1	11:S9:2:PRO:HA	2.09	0.52
36:1:2544:U:H2'	36:1:2545:C:C6	2.44	0.51
36:1:386:A:H2'	36:1:387:A:O4'	2.09	0.51
85:1:3832:OHX:N5	85:1:4009:OHX:N1	2.59	0.51
36:1:997:A:H2'	36:1:998:A:O4'	2.10	0.51
1:2:1579:U:O2'	18:C6:139:GLN:HG3	2.10	0.51
1:2:1748:G:O6	85:2:2064:OHX:N4	2.43	0.51
1:2:329:G:H5''	10:S8:98:LYS:HB3	1.93	0.51
1:2:647:G:N2	1:2:687:G:H22	2.07	0.51
1:2:768:C:C2	11:S9:143:ILE:HG12	2.45	0.51
36:5:1716:U:O2'	36:5:1717:U:O5'	2.24	0.51
52:M6:156:LEU:HB3	36:5:3243:A:N7	267.51	0.51
1:6:1175:U:H2'	1:6:1176:G:C8	2.46	0.51
1:6:187:G:H4'	1:6:188:A:OP1	2.10	0.51
1:6:353:A:OP2	85:6:2014:OHX:N5	2.43	0.51
18:C6:31:VAL:O	18:C6:33:GLY:N	2.40	0.51
24:D2:38:LEU:HD23	24:D2:41:MET:HE3	1.91	0.51
29:D7:59:CYS:O	29:D7:61:THR:N	2.79	0.51
41:L4:33:ASP:OD1	41:L4:34:ILE:HG13	2.09	0.51
41:L4:64:SER:HA	41:L4:75:PRO:HA	1.92	0.51
42:L5:244:HIS:O	42:L5:248:ARG:HG3	2.09	0.51
46:L9:90:MET:HG2	46:L9:181:VAL:HA	2.07	0.51
46:L9:147:SER:HB2	46:L9:187:ILE:HD11	1.92	0.51
47:M0:210:ILE:HG23	47:M0:217:PHE:CD2	2.53	0.51
48:M1:90:GLN:NE2	48:M1:170:ASP:OD1	2.81	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:38:GLU:C	48:M1:40:LEU:H	2.81	0.51
36:1:1364:C:H5"	54:M8:3:ILE:HD13	1.92	0.51
36:1:1186:G:N3	56:N0:112:ALA:HB1	2.24	0.51
56:N0:10:ILE:N	56:N0:60:SER:O	2.33	0.51
57:N1:57:TYR:CG	57:N1:89:LEU:HD21	2.46	0.51
71:O5:105:ARG:O	71:O5:109:ILE:HG13	2.33	0.51
72:O6:79:SER:HB3	72:O6:82:ARG:HG3	1.91	0.51
73:O7:84:SER:O	73:O7:85:LYS:HB2	4.67	0.51
7:S5:48:PHE:O	7:S5:65:ARG:NH1	5.91	0.51
7:S5:76:ARG:HB3	7:S5:79:ASN:OD1	2.10	0.51
9:S7:132:PRO:O	9:S7:133:THR:OG1	4.82	0.51
10:S8:84:HIS:CE1	10:S8:86:SER:HB2	2.44	0.51
35:SM:79:SER:OG	35:SM:79:SER:O	3.36	0.51
36:1:2767:U:O2'	78:Q2:30:ALA:O	2.28	0.51
36:1:929:A:H2'	36:1:930:U:C6	2.45	0.51
36:1:994:G:H3'	57:N1:13:TYR:CD2	2.46	0.51
1:2:1228:G:H22	14:C2:67:THR:HB	1.74	0.51
1:2:588:U:OP2	32:E0:26:LYS:NZ	2.43	0.51
53:M7:138:LYS:NZ	36:5:2356:A:OP1	147.51	0.51
47:M0:3:ARG:HH22	36:5:2854:U:P	291.70	0.51
36:5:3155:U:HO2'	36:5:3156:U:H6	1.56	0.51
36:5:595:G:N1	36:5:609:G:H5"	2.24	0.51
54:M8:142:GLY:O	36:5:744:A:H4'	168.50	0.51
1:6:853:G:H2'	1:6:854:U:H6	1.75	0.51
14:C2:30:VAL:HB	14:C2:132:GLU:HG3	2.22	0.51
14:C2:60:VAL:HG22	14:C2:122:VAL:HG22	2.16	0.51
18:C6:126:PRO:O	18:C6:128:LYS:NZ	2.37	0.51
19:C7:41:ILE:HD13	19:C7:47:ARG:HA	1.91	0.51
21:C9:33:TYR:O	21:C9:36:ILE:HG12	2.09	0.51
24:D2:86:ILE:HD11	24:D2:117:ARG:HD3	1.93	0.51
25:D3:56:LYS:HG2	25:D3:93:LEU:HD11	3.10	0.51
39:L2:29:LEU:O	39:L2:123:ARG:NE	3.09	0.51
45:L8:26:LEU:H	45:L8:26:LEU:HD12	1.75	0.51
46:L9:22:SER:HG	46:L9:23:ARG:H	1.53	0.51
51:M5:10:LEU:HD23	72:O6:44:VAL:HG13	3.85	0.51
52:M6:85:ARG:HD3	52:M6:90:HIS:ND1	3.36	0.51
53:M7:50:GLN:OE1	53:M7:56:ARG:NH2	2.39	0.51
62:N6:89:LYS:NZ	36:5:375:A:OP2	74.70	0.51
79:Q3:11:THR:HG21	79:Q3:27:LYS:HB2	4.00	0.51
2:S0:84:ARG:HD3	2:S0:203:PHE:O	4.74	0.51
5:S3:21:LEU:HD22	5:S3:25:PHE:HE2	1.75	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:31:PRO:HB2	6:S4:38:LEU:HD22	1.92	0.51
6:S4:64:ILE:HG12	26:D4:17:LEU:HD13	1.92	0.51
36:1:1166:G:N7	85:1:3726:OHX:N4	2.59	0.51
36:1:211:A:OP1	41:L4:220:ARG:NH1	2.39	0.51
36:1:1019:G:N7	85:1:3918:OHX:N4	2.58	0.51
1:2:1148:C:H2'	1:2:1149:G:H8	1.75	0.51
1:2:1756[A]:A:OP2	1:2:1756[A]:A:H8	1.93	0.51
37:3:48:U:O4	42:L5:58:LYS:HE2	2.10	0.51
38:4:52:A:H62	75:O9:27:ILE:HD13	1.75	0.51
36:5:196:G:C2	36:5:199:A:C8	2.99	0.51
36:5:26:A:N3	36:5:328:U:O2'	2.37	0.51
36:5:2209:U:O4	85:5:3806:OHX:N6	2.44	0.51
85:5:3822:OHX:N4	85:5:4035:OHX:N1	2.58	0.51
36:5:846:A:H8	36:5:846:A:OP1	1.92	0.51
1:6:1091:A:OP1	85:6:2146:OHX:N6	2.43	0.51
1:6:225:A:N1	1:6:226:A:N6	2.58	0.51
1:6:25:C:O2	85:6:2071:OHX:N5	2.43	0.51
23:D1:39:VAL:HA	23:D1:45:ALA:HA	1.91	0.51
30:D8:21:SER:H	30:D8:67:ARG:HA	3.38	0.51
40:L3:56:ILE:HD11	40:L3:359:ILE:HG12	1.93	0.51
41:L4:120:TYR:O	41:L4:120:TYR:HD1	2.15	0.51
43:L6:69:PHE:HB2	43:L6:138:GLN:NE2	2.87	0.51
46:L9:57:VAL:HG23	46:L9:68:LEU:HG	2.08	0.51
48:M1:73:GLY:O	48:M1:75:LYS:N	2.43	0.51
51:M5:112:ASN:N	51:M5:112:ASN:OD1	2.42	0.51
51:M5:27:VAL:HB	51:M5:122:ASN:ND2	2.25	0.51
56:N0:12:ARG:HG3	56:N0:13:ARG:O	2.42	0.51
56:N0:91:TYR:OH	56:N0:93:GLU:OE2	2.20	0.51
59:N3:3:GLY:HA2	59:N3:40:LYS:HB3	5.62	0.51
62:N6:36:SER:OG	62:N6:39:LEU:HD23	5.63	0.51
67:O1:13:THR:HG22	67:O1:72:ARG:HH21	5.16	0.51
67:O1:53:PRO:O	67:O1:57:GLN:HG3	2.11	0.51
73:O7:52:LYS:HA	73:O7:55:ARG:HD2	2.17	0.51
11:S9:110:GLN:HE22	11:S9:126:ARG:N	2.08	0.51
34:SR:123:ILE:HG21	34:SR:169:ILE:HG21	2.47	0.51
36:1:1103:A:H1'	36:1:1104:G:OP1	2.11	0.51
36:1:3242:G:N2	36:1:3245:A:H5''	2.25	0.51
1:2:1521:G:O2'	1:2:1523:G:OP2	2.09	0.51
1:2:475:A:OP2	11:S9:126:ARG:NH1	2.44	0.51
1:2:567:A:H1'	32:E0:14:VAL:HG23	1.92	0.51
1:2:808:U:H2'	1:2:809:A:C8	2.45	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1340:G:H2'	36:5:1341:U:C6	2.45	0.51
36:5:1895:A:N6	36:5:2335:G:O2'	2.43	0.51
36:5:2875:U:H2'	36:5:2876:C:O5'	2.10	0.51
36:5:1696:A:OP2	85:5:4022:OHX:N6	2.43	0.51
1:6:699:U:O4	85:6:2037:OHX:N1	2.43	0.51
1:6:333:A:C6	1:6:334:G:C6	2.98	0.51
1:6:523:G:O6	85:6:2046:OHX:N5	2.43	0.51
1:6:909:U:H2'	1:6:910:C:C6	2.46	0.51
13:C1:14:GLN:HB3	13:C1:54:ILE:HG13	3.94	0.51
16:C4:127:ARG:HD3	1:6:990:C:O2'	282.98	0.51
17:C5:30:THR:O	17:C5:34:VAL:HG13	2.10	0.51
30:D8:8:THR:HB	30:D8:56:LEU:HB2	1.92	0.51
11:S9:123:HIS:CG	32:E0:37:ARG:HD2	4.59	0.51
33:E1:91:ILE:HG12	33:E1:92:LYS:HG2	6.04	0.51
46:L9:173:ARG:NH1	46:L9:173:ARG:HB2	2.93	0.51
51:M5:63:ARG:NH2	51:M5:131:GLU:OE2	2.35	0.51
52:M6:98:ALA:HA	52:M6:101:ARG:HH11	2.21	0.51
53:M7:29:THR:HG22	53:M7:87:SER:OG	2.22	0.51
74:O8:42:LYS:HG3	74:O8:55:VAL:HG22	1.91	0.51
79:Q3:11:THR:O	79:Q3:13:LYS:N	2.43	0.51
2:S0:74:VAL:HG22	2:S0:96:THR:HG23	2.31	0.51
3:S1:63:GLY:HA2	3:S1:88:VAL:O	2.11	0.51
4:S2:38:VAL:O	4:S2:39:THR:OG1	2.23	0.51
9:S7:14:THR:OG1	9:S7:15:GLU:N	2.39	0.51
34:SR:114:ASP:HB3	34:SR:156:VAL:HG23	1.92	0.51
34:SR:44:SER:OG	34:SR:59:ARG:HB2	2.10	0.51
36:1:1944:U:H2'	36:1:1945:A:C8	2.45	0.51
36:1:2726:C:O2'	36:1:2727:A:H2'	2.10	0.51
36:1:3279:A:H8	36:1:3279:A:OP2	1.93	0.51
36:1:439:C:H5'	36:1:440:A:OP2	2.11	0.51
36:1:698:U:H2'	36:1:699:A:O4'	2.11	0.51
1:2:1642:G:O6	85:2:1983:OHX:N6	2.43	0.51
1:2:448:C:OP1	6:S4:29:PRO:HD3	2.11	0.51
38:4:106:C:O2'	85:4:228:OHX:N4	2.43	0.51
38:4:136:G:P	61:N5:48:SER:HG	2.34	0.51
1:6:1350:U:H2'	1:6:1351:G:H8	1.74	0.51
13:C1:133:LYS:NZ	1:6:324:U:OP1	292.49	0.51
10:S8:54:LYS:NZ	1:6:334:G:OP2	296.09	0.51
12:C0:58:GLN:HB3	12:C0:65:TYR:HB2	2.95	0.51
13:C1:98:ASN:HD22	24:D2:79:PHE:HD1	1.59	0.51
26:D4:94:TYR:HD2	26:D4:96:LEU:HD12	3.01	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:44:LYS:HB3	41:L4:47:ARG:NH1	3.30	0.51
47:M0:48:LEU:HD11	47:M0:145:LYS:HB2	1.93	0.51
54:M8:64:VAL:HG11	54:M8:113:LYS:HD2	3.78	0.51
58:N2:104:ARG:NH2	36:5:1758:G:H5'	120.13	0.51
59:N3:19:VAL:HG23	59:N3:50:PRO:O	2.67	0.51
62:N6:39:LEU:HD22	62:N6:43:TYR:HE2	1.76	0.51
63:N7:48:ARG:HB3	63:N7:69:LYS:HB3	1.95	0.51
67:O1:51:LEU:HD22	67:O1:55:LEU:HD12	1.97	0.51
36:1:3173:G:C2	69:O3:96:ALA:HB2	2.45	0.51
36:1:1821:U:C4	70:O4:67:LYS:HD2	2.46	0.51
2:S0:179:ARG:HD3	2:S0:183:ARG:CZ	3.87	0.51
3:S1:168:ILE:O	3:S1:172:LEU:HG	2.87	0.51
6:S4:116:ASP:OD1	6:S4:116:ASP:N	2.41	0.51
6:S4:100:ARG:NH2	6:S4:122:LYS:HA	2.66	0.51
11:S9:153:GLU:HA	11:S9:156:ILE:HD11	1.92	0.51
34:SR:144:LEU:HD21	34:SR:186:PHE:HB3	5.74	0.51
34:SR:52:GLN:HG2	34:SR:53:LYS:HG3	4.80	0.51
19:C7:29:GLN:HB3	34:SR:85:TRP:CZ3	2.95	0.51
36:1:1039:U:H2'	36:1:1040:A:C8	2.45	0.51
36:1:1605:A:O2'	36:1:1607:U:OP2	2.15	0.51
36:1:1643:A:OP2	70:O4:68:THR:HG21	2.10	0.51
1:2:329:G:H2'	1:2:330:G:H8	1.75	0.51
1:2:484:C:N4	1:2:503:G:H22	2.08	0.51
1:2:603:U:H2'	1:2:604:A:C8	2.44	0.51
1:2:67:A:N6	1:2:83:G:O2'	2.43	0.51
36:5:126:U:H2'	36:5:127:G:O4'	2.10	0.51
36:5:2960:C:OP1	85:5:3816:OHX:N5	2.44	0.51
36:5:945:C:H2'	36:5:946:U:C6	2.46	0.51
1:6:1358:G:H2'	1:6:1359:C:C6	2.46	0.51
1:6:861:U:H5''	1:6:862:A:OP2	2.10	0.51
36:5:406:G:H1'	38:8:16:G:N2	2.25	0.51
16:C4:125:SER:HB2	1:6:926:A:H2	282.68	0.51
25:D3:51:GLY:O	25:D3:101:GLU:HA	2.67	0.51
40:L3:346:THR:HG23	40:L3:351:LEU:HD11	3.31	0.51
41:L4:269:SER:C	41:L4:271:LYS:H	2.12	0.51
42:L5:78:ALA:HB3	42:L5:105:ILE:HG12	1.92	0.51
44:L7:193:PRO:HB2	44:L7:194:HIS:ND1	4.41	0.51
45:L8:148:ALA:HA	45:L8:201:THR:HG22	1.92	0.51
46:L9:7:GLU:HA	46:L9:68:LEU:HD11	2.19	0.51
49:M3:131:LYS:H	49:M3:131:LYS:HD3	4.16	0.51
36:1:1447:G:H3'	53:M7:67:ILE:CD1	2.40	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:123:THR:OG1	54:M8:125:ASP:OD2	2.23	0.51
57:N1:68:THR:HG22	57:N1:71:SER:O	2.35	0.51
62:N6:34:PRO:HA	62:N6:47:ALA:HB2	1.93	0.51
66:O0:24:THR:HG22	66:O0:91:SER:HB3	2.14	0.51
66:O0:16:LEU:HB2	66:O0:98:SER:HB2	2.91	0.51
69:O3:90:PRO:O	69:O3:92:LYS:N	2.42	0.51
2:S0:110:TYR:HA	2:S0:115:PHE:CZ	2.45	0.51
3:S1:131:ASP:HB3	3:S1:180:THR:HG23	1.93	0.51
7:S5:35:GLN:C	7:S5:37:GLN:H	2.80	0.51
7:S5:97:LEU:O	7:S5:99:MET:N	2.53	0.51
8:S6:136:LYS:O	8:S6:175:ILE:HA	2.33	0.51
9:S7:78:THR:HG23	9:S7:92:PHE:HE1	2.83	0.51
36:1:1362:G:H4'	44:L7:159:GLN:O	2.10	0.51
36:1:3228:C:H4'	36:1:3229:G:O5'	2.10	0.51
1:2:1498:G:H5''	21:C9:72:GLY:HA3	1.93	0.51
1:2:594:A:N3	1:2:595:G:H1'	2.26	0.51
36:5:3218:A:H5''	36:5:3219:G:C5	2.46	0.51
1:6:352:A:OP2	1:6:352:A:H8	1.93	0.51
85:5:3844:OHX:N4	37:7:86:U:O2	2.43	0.51
20:C8:4:VAL:HG21	27:D5:82:HIS:CG	2.79	0.51
26:D4:124:ARG:O	26:D4:127:LYS:HB3	4.59	0.51
27:D5:71:ILE:CG2	27:D5:76:ALA:HB2	3.21	0.51
40:L3:37:ARG:O	40:L3:186:GLY:HA2	2.11	0.51
46:L9:20:ILE:HD13	46:L9:45:PHE:CD1	2.46	0.51
53:M7:50:GLN:OE1	53:M7:56:ARG:HD3	2.10	0.51
57:N1:17:ARG:CZ	57:N1:17:ARG:HB3	5.11	0.51
71:O5:12:LYS:HB2	71:O5:17:LEU:HG	1.93	0.51
36:1:1492:G:O3'	75:O9:48:LYS:NZ	2.43	0.51
4:S2:144:TRP:CE2	4:S2:173:PRO:HG3	2.45	0.51
5:S3:211:PRO:HG3	19:C7:20:TYR:CZ	2.46	0.51
7:S5:90:ILE:HD11	7:S5:130:ILE:HG13	1.93	0.51
9:S7:42:GLN:HG2	9:S7:43:PHE:N	2.25	0.51
1:2:209:U:H5'	10:S8:171:SER:HB3	1.93	0.51
20:C8:145:ARG:HB3	35:SM:68:ARG:HH12	5.86	0.51
34:SR:267:PRO:HD2	34:SR:269:TYR:CE1	4.52	0.51
34:SR:5:GLU:HA	34:SR:317:THR:HA	2.61	0.51
34:SR:70:ASP:HB3	34:SR:113:VAL:HG12	1.93	0.51
36:1:2960:C:H2'	36:1:2961:G:H8	1.76	0.51
1:2:1531:G:H5'	27:D5:81:ARG:HH21	1.76	0.51
36:5:1152:G:H22	36:5:1200:A:H61	1.58	0.51
36:5:1231:A:H5''	36:5:1232:C:H5'	1.92	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:22:G:H1'	38:8:104:A:N3	2.25	0.51
36:5:1536:G:N7	85:5:3766:OHX:N2	2.58	0.51
85:5:3898:OHX:N1	85:5:4036:OHX:N2	2.58	0.51
1:6:1537:C:C2	85:6:2121:OHX:N6	2.79	0.51
1:6:517:U:O4	85:6:2065:OHX:N4	2.43	0.51
56:N0:50:LYS:NZ	37:7:76:A:O2'	302.02	0.51
13:C1:125:VAL:HG12	13:C1:139:VAL:HA	2.27	0.51
15:C3:65:VAL:O	15:C3:67:THR:N	3.23	0.51
17:C5:56:PHE:CE1	17:C5:60:LEU:HD11	6.37	0.51
20:C8:36:LYS:HB3	20:C8:105:VAL:HG21	4.25	0.51
21:C9:61:VAL:O	21:C9:65:ILE:HG13	2.24	0.51
26:D4:23:PHE:HE2	26:D4:75:VAL:HG12	1.74	0.51
27:D5:102:THR:HG22	27:D5:103:ARG:H	3.17	0.51
27:D5:37:GLN:N	27:D5:70:LYS:HZ3	10.86	0.51
39:L2:33:ASP:O	39:L2:37:ARG:HB3	2.11	0.51
51:M5:35:VAL:O	51:M5:64:VAL:HA	2.11	0.51
62:N6:118:LEU:O	62:N6:122:LYS:HG3	2.11	0.51
62:N6:83:ASP:O	62:N6:84:LYS:HB2	2.33	0.51
63:N7:100:THR:HG22	63:N7:106:GLN:HB3	4.26	0.51
67:O1:10:ARG:HH12	67:O1:44:MET:CG	4.49	0.51
3:S1:176:VAL:HG12	3:S1:177:GLN:H	1.76	0.51
9:S7:14:THR:HG22	9:S7:17:GLU:OE1	3.46	0.51
36:1:2155:G:O2'	39:L2:227:ARG:NH2	2.44	0.51
36:1:2898:G:H5''	36:1:2899:C:C5'	2.40	0.51
36:1:3389:U:O2'	36:1:3390:G:OP2	2.29	0.51
1:2:1657:U:C2	85:2:2048:OHX:N5	2.79	0.51
1:2:1680:G:O6	85:2:2069:OHX:N5	2.44	0.51
85:5:3877:OHX:N1	85:5:3923:OHX:N2	2.59	0.51
36:5:1840:U:OP2	85:5:3882:OHX:N4	2.44	0.51
11:S9:145:SER:HB3	1:6:474:A:OP1	419.67	0.51
15:C3:113:PHE:HA	15:C3:116:ILE:HD12	3.57	0.51
16:C4:11:SER:OG	16:C4:12:GLN:N	4.09	0.51
16:C4:18:ARG:N	16:C4:29:HIS:O	4.63	0.51
18:C6:68:ARG:C	18:C6:68:ARG:HE	5.39	0.51
19:C7:60:ARG:HG3	19:C7:66:VAL:HG21	1.92	0.51
19:C7:79:GLU:O	19:C7:82:ASP:HB2	2.11	0.51
23:D1:3:ASN:HD21	23:D1:7:GLN:HB3	2.84	0.51
20:C8:6:GLN:O	27:D5:42:LEU:HD13	2.11	0.51
27:D5:60:VAL:HG22	27:D5:101:TYR:HB2	1.92	0.51
39:L2:187:HIS:ND1	39:L2:190:ARG:NH2	2.59	0.51
41:L4:49:ALA:HA	41:L4:109:TRP:CZ2	2.45	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:110:LEU:HA	42:L5:113:LEU:HB2	3.12	0.51
45:L8:73:PRO:HD3	45:L8:233:TRP:CD2	2.46	0.51
54:M8:115:VAL:O	54:M8:118:GLY:N	2.79	0.51
5:S3:117:ARG:HE	35:SM:122:GLU:HB3	1.75	0.51
34:SR:249:ARG:NH1	34:SR:298:GLY:O	3.71	0.51
36:1:1238:C:H41	36:1:1245:A:P	2.33	0.51
36:1:2896:A:OP1	76:Q0:102:ARG:NE	2.32	0.51
36:1:2947:G:C2	40:L3:250:ALA:HB1	2.46	0.51
36:1:619:A:H5'	36:1:620:U:OP1	2.11	0.51
1:2:1132:A:H2'	1:2:1133:A:C8	2.46	0.51
1:2:1770:U:O2'	85:2:2051:OHX:N6	2.44	0.51
1:2:739:G:O6	85:2:2056:OHX:N4	2.43	0.51
1:2:482:U:H2'	1:2:483:A:C8	2.42	0.51
1:2:711:U:H1'	1:2:712:G:C8	2.46	0.51
37:3:71:G:H2'	37:3:72:A:C8	2.46	0.51
36:5:1064:A:H4'	36:5:1065:A:O5'	2.11	0.51
36:5:1157:G:H2'	36:5:1158:A:O4'	2.11	0.51
1:6:1638:G:C2	1:6:1639:C:H1'	2.46	0.51
18:C6:68:ARG:NH2	18:C6:70:THR:OG1	6.76	0.51
22:D0:58:LEU:HD12	22:D0:88:LYS:HB3	1.92	0.51
22:D0:18:GLN:O	22:D0:96:PRO:HA	2.10	0.51
25:D3:40:SER:OG	25:D3:41:SER:N	2.41	0.51
28:D6:23:CYS:HB2	28:D6:74:CYS:HB3	1.93	0.51
41:L4:148:ILE:HA	41:L4:149:PRO:C	2.50	0.51
41:L4:15:ALA:O	41:L4:16:THR:OG1	2.35	0.51
42:L5:51:LEU:HB2	42:L5:144:VAL:HG13	1.93	0.51
43:L6:58:LEU:HD12	43:L6:78:ARG:HD3	1.93	0.51
85:1:3818:OHX:N4	44:L7:217:PRO:HA	2.25	0.51
45:L8:225:LYS:O	45:L8:229:VAL:HG23	2.11	0.51
47:M0:53:VAL:HG13	47:M0:134:ILE:HG12	1.93	0.51
47:M0:84:ALA:O	47:M0:140:THR:HG22	2.11	0.51
48:M1:166:LYS:C	48:M1:168:ASP:H	2.54	0.51
53:M7:33:ALA:HB1	53:M7:117:ILE:HG12	1.93	0.51
53:M7:40:GLU:HB3	53:M7:43:LYS:HB2	1.93	0.51
54:M8:64:VAL:HG22	54:M8:96:PHE:CE2	2.46	0.51
42:L5:69:ILE:HG22	57:N1:31:LEU:HB2	1.93	0.51
68:O2:21:HIS:CD2	68:O2:24:ARG:HD2	2.65	0.51
68:O2:46:PHE:CE1	36:5:1145:G:H5'	210.97	0.51
79:Q3:87:ARG:O	79:Q3:90:VAL:HG22	4.39	0.51
10:S8:110:ARG:NH1	10:S8:160:PHE:HB3	3.44	0.51
36:1:1661:G:H2'	36:1:1662:G:C8	2.46	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1940:G:H2'	36:1:1941:C:O4'	2.10	0.50
36:1:2807:U:O3'	36:1:2808:A:H3'	2.11	0.50
1:2:1252:C:O4'	33:E1:133:ALA:HB2	2.11	0.50
1:2:1370:U:O4	85:2:2079:OHX:N3	2.44	0.50
36:5:1262:G:H5''	36:5:1263:A:OP2	2.11	0.50
68:O2:45:ARG:NH2	36:5:1367:G:OP1	198.02	0.50
42:L5:23:ARG:NH2	36:5:2703:A:OP2	284.24	0.50
36:5:3231:U:H2'	36:5:3232:G:H8	1.76	0.50
85:5:3877:OHX:N3	85:5:3923:OHX:N6	2.59	0.50
1:6:1164:G:H1	1:6:1581:C:N4	2.09	0.50
1:6:709:C:O2	1:6:730:G:N2	2.44	0.50
11:S9:146:PHE:HZ	1:6:765:G:N1	431.96	0.50
1:6:83:G:OP2	85:6:2061:OHX:N4	2.44	0.50
16:C4:17:ALA:HB3	16:C4:81:VAL:HA	1.93	0.50
16:C4:21:ALA:HA	16:C4:26:THR:HG22	1.93	0.50
1:2:1566:U:H5''	20:C8:39:GLY:H	1.76	0.50
22:D0:41:ILE:HG13	22:D0:107:THR:HG21	3.46	0.50
40:L3:256:HIS:HA	40:L3:257:PRO:C	2.44	0.50
57:N1:9:SER:OG	57:N1:10:ARG:HG3	2.50	0.50
36:1:3039:C:OP1	59:N3:88:ARG:NH2	2.45	0.50
62:N6:5:SER:HB3	62:N6:8:VAL:HG13	3.99	0.50
62:N6:73:VAL:HA	62:N6:80:VAL:HG23	1.93	0.50
63:N7:75:VAL:HG13	63:N7:80:LEU:HD11	2.64	0.50
6:S4:15:PRO:HA	6:S4:39:ARG:HH12	2.62	0.50
6:S4:45:ILE:HG13	6:S4:61:VAL:HG21	2.77	0.50
8:S6:5:ILE:HD13	8:S6:50:PHE:HE1	1.76	0.50
36:1:1724:U:H1'	36:1:1725:C:C6	2.46	0.50
36:1:3120:C:HO2'	36:1:3121:U:H6	1.59	0.50
85:1:3836:OHX:N1	85:1:4008:OHX:N4	2.59	0.50
36:1:618:C:H5'	53:M7:169:THR:HG22	1.93	0.50
1:2:993:A:H4'	1:2:1777:G:O2'	2.11	0.50
36:5:306:A:C2	36:5:2784:G:H1'	2.46	0.50
1:6:1097:U:C4'	1:6:1098:U:H5'	2.38	0.50
1:6:1417:A:OP1	85:6:2050:OHX:N4	2.44	0.50
10:S8:172:ARG:NH1	1:6:330:G:OP2	281.04	0.50
1:6:717:C:O2'	1:6:718:U:OP1	2.26	0.50
22:D0:22:ILE:HG22	22:D0:93:LEU:HB2	2.43	0.50
41:L4:48:GLN:OE1	36:5:336:A:O2'	92.35	0.50
42:L5:156:GLY:HA2	42:L5:181:PRO:HD3	1.94	0.50
42:L5:232:ASP:N	42:L5:232:ASP:OD2	2.44	0.50
45:L8:101:THR:HG22	45:L8:104:GLU:HB2	1.92	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:31:ARG:HG3	51:M5:129:TYR:OH	4.10	0.50
52:M6:114:LYS:HG2	36:5:3180:A:C6	271.82	0.50
54:M8:30:VAL:O	54:M8:34:THR:HG23	2.12	0.50
54:M8:43:PRO:HB2	36:5:728:G:H5''	190.98	0.50
61:N5:64:GLU:OE2	61:N5:87:SER:HA	3.25	0.50
70:O4:95:ILE:O	70:O4:99:LYS:HB2	2.11	0.50
71:O5:83:LYS:HA	38:8:38:U:C5	66.74	0.50
72:O6:62:ARG:HD3	72:O6:94:ILE:HD11	4.67	0.50
39:L2:172:GLY:HA3	79:Q3:67:GLY:HA2	3.62	0.50
2:S0:41:ARG:NE	2:S0:42:PRO:O	2.42	0.50
3:S1:189:ILE:HB	3:S1:190:PRO:HD3	2.25	0.50
7:S5:90:ILE:O	7:S5:94:THR:HG23	2.17	0.50
36:1:1571:A:H2'	36:1:1572:U:O4'	2.10	0.50
1:2:471:A:OP2	85:2:2035:OHX:N4	2.45	0.50
1:2:1657:U:C4	85:2:2048:OHX:N6	2.79	0.50
38:4:147:U:O2	61:N5:37:THR:OG1	2.30	0.50
38:4:19:C:H2'	38:4:20:U:O4'	2.12	0.50
60:N4:16:GLY:O	36:5:3050:U:O2'	246.67	0.50
36:5:1485:G:OP2	85:5:3877:OHX:N2	2.44	0.50
36:5:801:A:H4'	36:5:802:C:O5'	2.12	0.50
36:5:955:U:H2'	36:5:956:U:H6	1.77	0.50
25:D3:7:ARG:HD2	1:6:1102:G:OP2	350.96	0.50
33:E1:134:ASN:H	1:6:1251:U:H4'	443.24	0.50
1:6:1449:U:O4	85:6:2036:OHX:N2	2.44	0.50
1:6:629:U:H1'	1:6:971:A:N1	2.27	0.50
6:S4:187:ARG:NH1	1:6:753:A:N7	375.30	0.50
19:C7:106:THR:O	19:C7:110:VAL:HG23	2.11	0.50
20:C8:127:HIS:CD2	20:C8:133:VAL:HG11	3.62	0.50
20:C8:145:ARG:HB2	35:SM:68:ARG:HH21	1.76	0.50
26:D4:47:VAL:HG13	26:D4:48:TYR:HD2	5.27	0.50
29:D7:56:CYS:HB3	29:D7:61:THR:CG2	2.41	0.50
33:E1:126:CYS:O	33:E1:128:ALA:N	2.43	0.50
41:L4:283:THR:HG22	41:L4:285:ASP:N	2.23	0.50
41:L4:351:PRO:HA	44:L7:71:ALA:HA	1.93	0.50
44:L7:229:PHE:HD1	44:L7:229:PHE:C	2.48	0.50
62:N6:37:LYS:H	62:N6:37:LYS:CD	2.38	0.50
69:O3:74:THR:HA	69:O3:81:VAL:HG23	2.67	0.50
36:1:1327:C:O2'	69:O3:76:GLY:HA2	2.11	0.50
70:O4:65:VAL:HG12	70:O4:70:LYS:HE2	3.57	0.50
78:Q2:14:GLY:O	78:Q2:17:CYS:N	2.45	0.50
79:Q3:11:THR:HG21	79:Q3:23:ARG:HB3	1.92	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:3:ARG:HG2	1:6:399:A:H4'	320.87	0.50
36:1:22:G:H1'	38:4:104:A:N3	2.26	0.50
36:1:2746:A:C6	42:L5:148:ILE:HD12	2.47	0.50
85:1:3927:OHX:N5	85:1:3975:OHX:N2	2.59	0.50
36:1:535:G:O2'	36:1:554:A:N1	2.35	0.50
36:1:835:G:HO2'	36:1:857:G:H22	1.54	0.50
1:2:1557:U:O2'	1:2:1558:U:H2'	2.11	0.50
1:2:495:C:H3'	1:2:496:G:C4'	2.42	0.50
58:N2:103:TYR:OH	36:5:1677:G:OP2	147.24	0.50
36:5:645:A:N6	36:5:2869:U:OP1	2.38	0.50
1:6:140:A:H5''	1:6:140:A:N3	2.27	0.50
1:6:163:G:O5'	1:6:163:G:H8	1.94	0.50
1:6:918:U:H2'	1:6:919:A:C8	2.41	0.50
36:5:19:U:O4	85:8:219:OHX:N6	2.45	0.50
18:C6:89:LEU:HG	18:C6:105:LEU:HD23	2.67	0.50
21:C9:141:GLU:C	21:C9:143:ASP:H	3.19	0.50
8:S6:22:HIS:CE1	40:L3:300:ARG:HE	2.28	0.50
44:L7:27:ALA:O	44:L7:31:ALA:N	2.44	0.50
45:L8:101:THR:CG2	45:L8:104:GLU:H	2.25	0.50
47:M0:35:ASP:OD1	47:M0:88:ARG:NE	3.27	0.50
48:M1:37:LEU:HD13	48:M1:69:VAL:HG12	3.23	0.50
53:M7:70:THR:HG21	53:M7:81:ALA:HB3	2.49	0.50
53:M7:95:LEU:HD23	53:M7:148:LEU:HD13	1.94	0.50
64:N8:73:LEU:HB3	64:N8:112:ILE:HD13	2.22	0.50
4:S2:161:LYS:HG3	4:S2:166:THR:HG22	2.71	0.50
11:S9:110:GLN:NE2	11:S9:126:ARG:HG2	2.27	0.50
34:SR:38:ARG:HA	34:SR:67:ILE:HG23	1.94	0.50
36:1:1560:G:C2'	36:1:1561:G:H5'	2.41	0.50
36:1:2635:A:H4'	36:1:2636:A:O5'	2.11	0.50
36:1:305:U:C5	36:1:2776:C:H1'	2.46	0.50
36:1:3057:U:H5'	36:1:3086:A:H61	1.75	0.50
36:1:3112:G:O2'	46:L9:70:THR:HB	2.11	0.50
36:1:337:G:OP2	41:L4:196:ASN:ND2	2.41	0.50
36:1:679:U:O4	85:1:3833:OHX:N1	2.44	0.50
36:1:3246:G:O6	85:1:3969:OHX:N4	2.45	0.50
1:2:438:A:OP1	85:2:2000:OHX:N3	2.45	0.50
36:5:1165:A:H2'	36:5:1166:G:O4'	2.11	0.50
36:5:2213:A:H2'	36:5:2214:A:C8	2.46	0.50
39:L2:213:GLY:HA3	36:5:2967:A:H5''	205.66	0.50
36:5:93:C:OP2	36:5:2764:C:O2'	2.22	0.50
1:6:496:G:O6	1:6:497:G:N2	2.45	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:947:U:H2'	1:6:948:G:H8	1.76	0.50
14:C2:59:LEU:HA	14:C2:87:PRO:HB2	1.93	0.50
20:C8:20:THR:HG21	20:C8:35:ILE:HG23	2.46	0.50
20:C8:24:GLY:O	20:C8:26:ILE:N	2.43	0.50
24:D2:24:GLN:HA	24:D2:63:VAL:O	2.10	0.50
30:D8:50:GLU:O	30:D8:51:ASN:HB2	2.34	0.50
40:L3:211:GLN:NE2	40:L3:284:ARG:HA	2.26	0.50
41:L4:192:GLY:O	41:L4:195:ARG:N	2.85	0.50
41:L4:9:HIS:O	41:L4:153:SER:N	2.42	0.50
42:L5:86:TYR:CD1	42:L5:247:ILE:HG13	2.46	0.50
43:L6:52:VAL:HG21	43:L6:65:ILE:HD12	1.94	0.50
48:M1:137:ARG:HG3	48:M1:141:ARG:HD3	1.94	0.50
52:M6:15:LEU:HD21	52:M6:125:ARG:HG3	1.92	0.50
52:M6:140:LYS:NZ	52:M6:150:GLU:OE1	2.43	0.50
54:M8:44:PHE:CD1	54:M8:139:ILE:HD11	2.47	0.50
62:N6:57:LEU:HB3	62:N6:105:VAL:HG12	2.68	0.50
64:N8:73:LEU:HB2	64:N8:109:TYR:CD1	2.47	0.50
36:1:1654:A:O2'	70:O4:59:PRO:HD3	2.11	0.50
73:O7:55:ARG:HD3	36:5:353:G:N7	109.05	0.50
6:S4:19:LEU:HD11	6:S4:108:ARG:HD2	1.94	0.50
6:S4:52:LEU:HB3	6:S4:54:TYR:CD2	3.00	0.50
11:S9:65:LYS:HA	11:S9:70:LEU:HD11	2.58	0.50
36:1:1323:G:O3'	56:N0:2:ALA:HA	2.11	0.50
36:1:1647:A:H61	36:1:2559:U:H3	1.58	0.50
36:1:2225:U:H2'	36:1:2226:U:C6	2.46	0.50
1:2:1120:U:H2'	1:2:1121:C:C6	2.47	0.50
1:2:1413:U:O2	85:2:2030:OHX:N4	2.45	0.50
1:2:1449:U:H2'	1:2:1450:U:C6	2.47	0.50
1:2:218:A:O2'	1:2:219:A:OP1	2.19	0.50
38:4:155:A:H5'	45:L8:185:ARG:CZ	2.42	0.50
36:5:1313:G:H2'	36:5:1314:C:C6	2.47	0.50
36:5:1662:G:O6	85:5:3763:OHX:N1	2.45	0.50
36:5:225:C:H2'	36:5:226:C:H6	1.76	0.50
36:5:252:U:H4'	36:5:253:A:H5''	1.93	0.50
36:5:2636:A:H5''	36:5:2637:A:H5'	1.94	0.50
36:5:2882:U:H2'	36:5:2883:U:C6	2.47	0.50
36:5:3279:A:H2'	36:5:3280:U:H5'	1.93	0.50
36:5:626:U:O4	85:5:3827:OHX:N4	2.44	0.50
36:5:731:U:H2'	36:5:732:C:H6	1.77	0.50
36:5:945:C:H2'	36:5:946:U:H6	1.77	0.50
1:6:1395:G:H1	1:6:1403:C:H42	1.60	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:SM:68:ARG:NH2	1:6:1460:A:OP2	333.64	0.50
38:8:149:A:H2'	38:8:150:G:C8	2.47	0.50
14:C2:36:LEU:HG	14:C2:41:LEU:HD12	4.08	0.50
16:C4:104:ALA:HA	16:C4:107:ARG:HB3	2.93	0.50
17:C5:16:SER:HA	17:C5:20:VAL:O	2.11	0.50
20:C8:30:TYR:O	20:C8:33:THR:OG1	2.44	0.50
21:C9:77:ASN:HB3	21:C9:95:ASP:HB3	2.20	0.50
40:L3:313:HIS:O	40:L3:333:LYS:HE3	2.18	0.50
41:L4:71:VAL:HG22	41:L4:72:ALA:H	1.77	0.50
45:L8:91:PHE:HZ	45:L8:185:ARG:HB3	2.49	0.50
47:M0:38:LYS:NZ	47:M0:45:GLU:OE1	2.93	0.50
62:N6:47:ALA:O	62:N6:48:LEU:HD23	2.11	0.50
71:O5:83:LYS:HG2	73:O7:73:ARG:HH12	1.76	0.50
76:Q0:77:ILE:HG13	76:Q0:78:ILE:N	3.87	0.50
2:S0:183:ARG:NH2	2:S0:191:ARG:O	2.42	0.50
5:S3:150:MET:HB3	5:S3:152:PHE:HE2	1.76	0.50
6:S4:185:GLY:N	6:S4:189:LEU:HD13	2.27	0.50
7:S5:225:ARG:NH1	30:D8:58:GLU:OE1	4.32	0.50
36:1:1064:A:H5''	36:1:1066:G:O4'	2.12	0.50
36:1:1134:G:C2	36:1:1135:A:C8	2.99	0.50
36:1:715:A:H4'	36:1:716:A:OP1	2.12	0.50
1:2:1533:C:H4'	1:2:1539:G:C6	2.46	0.50
1:2:1735:U:O4	85:2:2095:OHX:N2	2.45	0.50
36:5:508:U:O4	85:5:3864:OHX:N1	2.45	0.50
36:5:655:C:H2'	36:5:656:A:H8	1.77	0.50
41:L4:92:ASN:O	36:5:659:G:H4'	139.95	0.50
34:SR:102:ARG:NH2	1:6:1341:A:O2'	459.83	0.50
13:C1:132:SER:O	13:C1:132:SER:OG	3.69	0.50
16:C4:31:THR:HB	16:C4:38:THR:HA	1.93	0.50
25:D3:79:ASN:HB3	25:D3:81:LYS:H	1.76	0.50
27:D5:59:TYR:HE2	27:D5:61:SER:HB3	1.76	0.50
28:D6:36:ILE:HD12	28:D6:36:ILE:H	4.63	0.50
39:L2:109:GLU:H	39:L2:109:GLU:CD	4.16	0.50
8:S6:25:ARG:NH2	40:L3:298:PHE:O	2.37	0.50
40:L3:339:ARG:HG2	40:L3:340:LYS:O	2.66	0.50
42:L5:226:TYR:HE1	42:L5:236:LEU:HD11	6.94	0.50
45:L8:75:ILE:C	45:L8:77:GLN:H	2.13	0.50
46:L9:166:ARG:NH2	46:L9:168:ARG:NH1	11.66	0.50
46:L9:47:LYS:NZ	50:M4:5:SER:HB2	2.27	0.50
46:L9:48:VAL:HG11	46:L9:52:LEU:HD13	1.94	0.50
47:M0:174:THR:HG23	47:M0:176:LEU:H	1.77	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:M0:96:VAL:HA	47:M0:125:LEU:HD23	1.94	0.50
54:M8:83:VAL:O	54:M8:83:VAL:HG12	2.58	0.50
61:N5:67:ILE:HD12	61:N5:121:LYS:HG3	2.02	0.50
63:N7:24:VAL:HG11	63:N7:87:LEU:HB3	1.94	0.50
65:N9:20:GLY:HA2	65:N9:22:LYS:HD2	1.93	0.50
71:O5:89:ARG:HD2	38:8:38:U:O4	67.75	0.50
4:S2:162:CYS:H	4:S2:213:ALA:HB2	2.16	0.50
36:1:1352:A:N3	36:1:1352:A:H2'	2.27	0.50
36:1:1498:A:H2'	36:1:1499:C:H6	1.73	0.50
36:1:1559:A:H4'	36:1:1560:G:OP2	2.11	0.50
36:1:2910:A:O2'	36:1:3130:A:N1	2.40	0.50
36:1:391:A:C5	36:1:392:G:C8	3.00	0.50
36:1:531:G:H2'	36:1:532:A:C8	2.47	0.50
1:2:1528:U:H2'	1:2:1529:C:H6	1.76	0.50
1:2:377:G:O6	85:2:2037:OHX:N5	2.44	0.50
1:2:5:U:H2'	1:2:6:G:C8	2.47	0.50
38:4:104:A:C8	38:4:105:A:C8	3.00	0.50
36:5:1128:U:H2'	36:5:1129:A:O4'	2.12	0.50
36:5:198:A:N3	36:5:218:G:O2'	2.42	0.50
36:5:532:A:N6	36:5:555:U:O2	2.45	0.50
64:N8:67:HIS:NE2	36:5:71:A:OP2	119.41	0.50
1:6:560:U:H2'	1:6:561:G:C8	2.47	0.50
1:6:947:U:H2'	1:6:948:G:C8	2.47	0.50
38:8:69:U:OP2	85:8:212:OHX:N5	2.45	0.50
14:C2:60:VAL:HG23	14:C2:87:PRO:HG2	1.94	0.50
14:C2:97:LEU:HD11	14:C2:121:VAL:HG22	1.94	0.50
20:C8:88:ARG:NH1	20:C8:112:ASP:OD2	3.59	0.50
39:L2:70:ARG:HD2	39:L2:72:ARG:NE	4.83	0.50
40:L3:123:TYR:CZ	40:L3:124:LYS:HG3	2.46	0.50
40:L3:23:ALA:O	85:L3:402:OHX:N6	2.45	0.50
42:L5:256:THR:OG1	42:L5:258:LYS:NZ	2.44	0.50
46:L9:129:ARG:O	46:L9:132:VAL:HG13	2.31	0.50
46:L9:88:TYR:CE2	46:L9:184:LYS:HG2	2.46	0.50
49:M3:36:ARG:O	49:M3:39:ARG:N	3.08	0.50
63:N7:105:SER:O	63:N7:109:GLU:N	3.23	0.50
64:N8:73:LEU:HB2	64:N8:109:TYR:CD2	3.28	0.50
65:N9:25:LYS:HB2	65:N9:25:LYS:NZ	2.26	0.50
69:O3:49:ILE:N	69:O3:69:GLY:O	2.34	0.50
71:O5:6:ALA:HB1	71:O5:10:ARG:NH2	2.61	0.50
72:O6:5:THR:OG1	72:O6:7:ILE:HG12	2.11	0.50
73:O7:21:ARG:HD2	73:O7:37:CYS:SG	2.52	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
74:O8:73:LEU:O	74:O8:75:VAL:HG23	2.82	0.50
2:S0:175:TYR:HE1	2:S0:197:ILE:HG22	1.77	0.50
3:S1:38:PHE:HB3	3:S1:73:LEU:HD13	1.94	0.50
4:S2:168:ARG:HD2	1:6:1097:U:O2'	383.22	0.50
5:S3:192:PRO:O	5:S3:195:SER:OG	3.95	0.50
6:S4:23:LEU:O	6:S4:24:SER:OG	2.77	0.50
7:S5:20:PHE:CD2	7:S5:35:GLN:HG3	2.47	0.50
7:S5:37:GLN:HG2	18:C6:53:LEU:HD13	1.94	0.50
8:S6:32:ILE:HG12	8:S6:52:ILE:HG22	1.93	0.50
11:S9:36:LEU:HD11	11:S9:105:LEU:HD21	3.18	0.50
11:S9:166:GLY:O	11:S9:168:ARG:N	2.42	0.50
11:S9:171:ARG:HH11	11:S9:174:ARG:HB3	5.42	0.50
34:SR:109:ASP:N	34:SR:109:ASP:OD1	2.43	0.50
36:1:1560:G:N1	36:1:1580:A:N1	2.59	0.50
36:1:2561:A:HO2'	36:1:2562:A:H8	1.58	0.50
36:1:2697:A:H2'	36:1:2698:G:C8	2.46	0.50
36:1:2875:U:O4'	87:1:3401:ANM:H10	2.11	0.50
36:1:2699:G:OP2	85:1:3767:OHX:N1	2.45	0.50
36:1:562:C:H2'	36:1:563:U:C6	2.47	0.50
1:2:45:U:HO2'	1:2:46:A:H2'	1.77	0.50
36:5:1071:U:O4	85:5:3950:OHX:N6	2.45	0.50
76:Q0:113:ARG:NH2	36:5:1190:A:H4'	290.84	0.50
36:5:1420:C:OP1	38:8:20:U:H5''	2.12	0.50
36:5:80:G:H2'	36:5:81:C:H6	1.76	0.50
1:6:1640:C:O5'	1:6:1640:C:H6	1.93	0.50
1:6:1111:G:O6	85:6:2033:OHX:N3	2.45	0.50
1:6:560:U:H2'	1:6:561:G:H8	1.75	0.50
1:6:871:G:H2'	1:6:872:G:C8	2.47	0.50
38:8:56:G:H2'	38:8:57:C:O4'	2.12	0.50
12:C0:23:ALA:O	12:C0:24:LYS:HB3	4.62	0.50
12:C0:46:LEU:O	12:C0:50:THR:HG23	2.11	0.50
20:C8:5:VAL:O	20:C8:6:GLN:NE2	2.45	0.50
20:C8:89:GLN:NE2	1:6:1548:G:H1'	375.82	0.50
23:D1:3:ASN:ND2	23:D1:7:GLN:HB3	3.18	0.50
26:D4:14:SER:O	26:D4:16:PRO:HD3	2.12	0.50
41:L4:157:GLU:HG2	41:L4:209:TYR:HB2	1.93	0.50
43:L6:31:ARG:O	43:L6:33:SER:N	2.95	0.50
44:L7:47:ARG:NH1	44:L7:183:ASP:OD2	2.43	0.50
44:L7:219:LYS:O	44:L7:228:SER:HB2	2.57	0.50
45:L8:238:LEU:HB3	45:L8:242:ALA:HB3	2.89	0.50
47:M0:10:ARG:HG2	47:M0:11:TYR:CE1	2.46	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:M3:168:ARG:CZ	49:M3:172:LEU:HD21	3.68	0.50
50:M4:17:VAL:HG21	50:M4:74:ARG:HB2	1.94	0.50
52:M6:171:LYS:O	52:M6:175:THR:HG22	3.91	0.50
52:M6:188:SER:O	52:M6:192:LYS:HG2	2.12	0.50
53:M7:51:VAL:HG11	53:M7:88:VAL:HG21	1.94	0.50
79:Q3:7:LYS:O	79:Q3:27:LYS:NZ	2.58	0.50
9:S7:33:GLU:O	9:S7:35:LYS:N	3.18	0.50
9:S7:33:GLU:C	9:S7:35:LYS:H	2.68	0.50
36:1:1803:C:O3'	70:O4:70:LYS:NZ	2.38	0.49
36:1:2267:C:H2'	36:1:2268:U:O4'	2.12	0.49
1:2:1518:C:OP1	85:2:2079:OHX:N5	2.45	0.49
1:2:1619:C:H2'	1:2:1620:C:C6	2.47	0.49
1:2:556:A:N3	1:2:590:C:H1'	2.27	0.49
1:2:786:C:O2'	6:S4:255:ARG:HD3	2.11	0.49
37:3:52:G:C6	37:3:53:U:C4	3.00	0.49
37:3:91:G:C6	37:3:92:A:C6	2.99	0.49
36:5:1831:U:H2'	36:5:1832:C:C6	2.46	0.49
36:5:2561:A:O2'	36:5:2562:A:H5''	2.11	0.49
36:5:3131:U:H2'	36:5:3132:C:C6	2.47	0.49
40:L3:384:LYS:HD2	36:5:3370:A:H5'	206.00	0.49
36:5:985:U:H2'	36:5:986:U:H6	1.77	0.49
1:6:1078:C:H2'	1:6:1079:U:C6	2.47	0.49
11:S9:172:VAL:HG22	1:6:511:A:H5''	459.65	0.49
85:5:3844:OHX:N3	85:7:219:OHX:N4	2.60	0.49
12:C0:32:HIS:NE2	12:C0:35:ILE:HB	2.27	0.49
17:C5:16:SER:HA	17:C5:21:ASP:HA	2.83	0.49
18:C6:30:LYS:HZ3	1:6:1366:U:P	428.05	0.49
24:D2:104:LEU:HB2	24:D2:124:LYS:O	2.12	0.49
20:C8:5:VAL:O	27:D5:42:LEU:HB2	4.46	0.49
28:D6:11:ASN:HB3	1:6:934:C:H6	332.05	0.49
41:L4:288:ARG:O	41:L4:291:ASN:N	2.91	0.49
41:L4:290:ILE:HG23	54:M8:35:PHE:CE2	2.57	0.49
36:1:343:U:O2	41:L4:95:ARG:HD2	2.12	0.49
42:L5:54:ARG:NH1	42:L5:147:ASP:O	2.51	0.49
42:L5:257:GLU:C	42:L5:258:LYS:HD3	5.05	0.49
51:M5:192:LYS:O	51:M5:196:THR:OG1	3.27	0.49
52:M6:39:GLU:HG2	52:M6:40:GLU:HG2	1.94	0.49
52:M6:61:ALA:HB1	52:M6:66:LYS:HG3	2.05	0.49
53:M7:41:LEU:HD23	53:M7:95:LEU:HD22	1.94	0.49
66:O0:56:LEU:O	66:O0:60:ALA:N	2.40	0.49
72:O6:57:LEU:O	72:O6:61:ILE:HG13	2.10	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Q2:43:TYR:CZ	78:Q2:47:GLN:NE2	2.80	0.49
4:S2:69:ILE:HG12	4:S2:133:LYS:HB3	2.74	0.49
6:S4:11:ARG:O	6:S4:12:LEU:HB2	2.11	0.49
8:S6:59:GLN:OE1	8:S6:72:ARG:NH1	2.45	0.49
9:S7:41:LEU:HB3	9:S7:70:PHE:HE1	1.77	0.49
36:1:1069:C:H2'	36:1:1070:U:H6	1.77	0.49
36:1:1470:U:H2'	36:1:1471:U:C6	2.47	0.49
36:1:621:A:H8	36:1:623:U:O4	1.95	0.49
1:2:1483:A:H2'	1:2:1484:G:C8	2.48	0.49
1:2:1795:U:O2	28:D6:10:ARG:HD2	2.12	0.49
35:SM:46:LYS:HA	36:5:1018:G:H4'	324.98	0.49
36:5:1070:U:C4	36:5:1071:U:C4	3.01	0.49
36:5:1595:U:C2	36:5:1596:C:C5	3.00	0.49
36:5:1616:U:H2'	36:5:1617:G:C8	2.47	0.49
46:L9:170:LYS:HE3	36:5:2902:A:OP1	319.33	0.49
36:5:1552:G:OP2	85:5:3849:OHX:N3	2.45	0.49
36:5:629:U:H2'	36:5:630:A:C8	2.47	0.49
36:5:857:G:O2'	36:5:858:A:OP2	2.28	0.49
1:6:1691:A:H2'	1:6:1692:G:C8	2.47	0.49
1:6:1699:G:N1	1:6:1701:A:H5''	2.27	0.49
42:L5:276:LYS:HB2	37:7:61:G:H5''	326.59	0.49
13:C1:69:LYS:HB3	13:C1:71:LEU:HD21	2.75	0.49
20:C8:2:SER:HB2	20:C8:3:LEU:HD13	1.94	0.49
24:D2:77:PRO:O	24:D2:79:PHE:N	2.45	0.49
1:2:359:A:C2	25:D3:38:PHE:HB3	2.47	0.49
28:D6:37:LYS:HA	28:D6:71:LEU:O	2.11	0.49
30:D8:13:ILE:HG13	30:D8:30:VAL:HA	1.94	0.49
40:L3:25:ILE:HD13	40:L3:25:ILE:N	2.24	0.49
41:L4:26:PHE:CD1	41:L4:130:ALA:HB2	3.82	0.49
42:L5:164:LYS:HG2	42:L5:180:PHE:CZ	2.47	0.49
42:L5:242:SER:O	42:L5:245:GLU:HB2	4.28	0.49
43:L6:131:LYS:O	43:L6:135:VAL:HG23	3.36	0.49
44:L7:144:ILE:O	44:L7:148:VAL:HG23	2.19	0.49
51:M5:172:ARG:HD2	36:5:30:G:P	110.58	0.49
52:M6:121:PRO:HA	52:M6:124:LEU:HD22	2.19	0.49
59:N3:120:LYS:HB2	59:N3:137:VAL:CG2	3.71	0.49
61:N5:132:ALA:O	61:N5:135:ILE:HG22	2.20	0.49
72:O6:7:ILE:HG13	72:O6:9:ILE:O	2.13	0.49
78:Q2:104:LEU:HD22	78:Q2:104:LEU:H	3.75	0.49
2:S0:119:ARG:NH1	2:S0:119:ARG:HB3	2.38	0.49
3:S1:222:LYS:HD3	3:S1:223:PHE:H	1.76	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:30:PHE:HB3	3:S1:96:LEU:HD22	3.55	0.49
6:S4:129:VAL:HB	6:S4:139:VAL:HG12	1.93	0.49
34:SR:70:ASP:OD1	34:SR:71:CYS:N	2.41	0.49
36:1:1025:A:C2	36:1:1026:A:H1'	2.48	0.49
36:1:1582:C:O2'	36:1:1583:A:O5'	2.28	0.49
36:1:2539:C:H5'	36:1:2541:U:O4	2.12	0.49
1:2:1589:C:H2'	1:2:1590:G:C8	2.48	0.49
1:2:1590:G:OP1	21:C9:91:TYR:HB2	2.12	0.49
1:2:1139:A:OP2	85:2:2024:OHX:N5	2.45	0.49
1:2:733:A:H4'	1:2:734:A:C6	2.46	0.49
37:3:67:G:H2'	37:3:68:C:O4'	2.12	0.49
39:L2:241:ARG:HG2	36:5:2155:G:OP1	220.94	0.49
36:5:721:G:O6	85:5:3855:OHX:N3	2.44	0.49
36:5:709:A:O5'	36:5:709:A:H8	1.95	0.49
1:6:1228:G:H2'	1:6:1228:G:N3	2.27	0.49
1:6:433:C:H5''	1:6:434:G:OP2	2.13	0.49
1:6:926:A:H1'	1:6:988:A:C2	2.47	0.49
1:2:1556:A:H3'	17:C5:40:ARG:HD3	1.94	0.49
18:C6:79:TYR:HA	18:C6:82:ARG:HD3	1.93	0.49
20:C8:100:THR:HG21	20:C8:108:LYS:HG3	1.94	0.49
25:D3:43:PHE:CE1	25:D3:49:ALA:HB3	2.48	0.49
29:D7:47:PHE:CE1	29:D7:49:HIS:HB2	2.47	0.49
40:L3:142:ALA:O	40:L3:146:ARG:N	2.94	0.49
40:L3:159:ARG:HG2	40:L3:182:GLN:HA	1.94	0.49
40:L3:4:ARG:HG3	40:L3:6:TYR:O	4.91	0.49
42:L5:260:PHE:CE2	37:7:121:U:H5'	321.19	0.49
36:1:2563:G:H5''	45:L8:27:THR:HG23	1.93	0.49
57:N1:130:ARG:HD3	36:5:1098:A:OP2	254.65	0.49
62:N6:39:LEU:HD22	62:N6:43:TYR:CE2	2.47	0.49
76:Q0:127:LEU:HD23	76:Q0:128:LYS:H	1.77	0.49
4:S2:114:GLY:HA3	4:S2:132:ALA:HB2	1.94	0.49
9:S7:143:LEU:HB2	9:S7:147:ASN:HB2	1.94	0.49
9:S7:51:VAL:HG23	9:S7:53:GLY:H	1.77	0.49
36:1:199:A:C4	36:1:201:A:C8	3.01	0.49
36:1:3169:U:H2'	36:1:3170:A:O4'	2.12	0.49
85:1:3832:OHX:N5	85:1:4009:OHX:N2	2.60	0.49
36:1:385:A:H2'	36:1:386:A:C8	2.47	0.49
36:1:2749:G:N7	85:1:3976:OHX:N4	2.61	0.49
1:2:1183:A:C6	1:2:1184:A:N1	2.81	0.49
1:2:1523:G:OP1	1:2:1523:G:H2'	2.12	0.49
1:2:550:A:OP2	85:2:1986:OHX:N4	2.46	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:O2:33:ARG:HH22	36:5:1408:G:P	160.22	0.49
36:5:2111:G:H4'	36:5:2112:U:OP2	2.12	0.49
36:5:2298:U:O4	36:5:2923:U:H5	1.95	0.49
46:L9:168:ARG:NH2	36:5:2894:C:OP1	304.85	0.49
85:5:3854:OHX:N6	85:5:4037:OHX:N5	2.60	0.49
36:5:720:A:C2	36:5:784:A:H5'	2.46	0.49
36:5:789:A:H2'	36:5:790:U:H6	1.77	0.49
36:5:901:G:H2'	36:5:902:G:C8	2.47	0.49
18:C6:30:LYS:HZ1	1:6:1366:U:H5'	425.04	0.49
1:6:647:G:O5'	1:6:647:G:H8	1.94	0.49
29:D7:20:LYS:NZ	1:6:958:U:OP2	348.03	0.49
12:C0:8:ARG:O	12:C0:12:HIS:ND1	2.88	0.49
19:C7:58:MET:O	19:C7:62:GLN:NE2	2.45	0.49
24:D2:104:LEU:HD22	24:D2:125:ILE:HA	5.14	0.49
40:L3:50:LYS:HG2	40:L3:332:ARG:HA	2.12	0.49
40:L3:56:ILE:HG22	40:L3:74:GLU:HB2	2.54	0.49
46:L9:115:ARG:HG3	46:L9:123:ILE:HG23	1.94	0.49
47:M0:96:VAL:HG22	47:M0:125:LEU:HD21	1.94	0.49
48:M1:109:HIS:O	48:M1:112:LEU:HD23	3.14	0.49
36:1:77:A:H5'	49:M3:100:ARG:NH1	2.27	0.49
36:1:1546:A:N7	51:M5:71:ARG:NH1	2.60	0.49
62:N6:47:ALA:O	62:N6:122:LYS:NZ	2.51	0.49
36:1:943:U:H3'	64:N8:13:GLY:HA2	1.93	0.49
72:O6:58:ILE:O	72:O6:61:ILE:HB	2.73	0.49
6:S4:71:LYS:HB3	6:S4:76:VAL:HA	1.93	0.49
8:S6:109:LEU:HD13	8:S6:111:LEU:HD21	1.94	0.49
8:S6:2:LYS:O	8:S6:109:LEU:N	2.93	0.49
34:SR:238:ASP:N	34:SR:238:ASP:OD1	2.44	0.49
36:1:1393:A:N3	36:1:1419:A:O2'	2.44	0.49
36:1:2771:U:H2'	36:1:2772:C:C2	2.48	0.49
36:1:772:U:H2'	36:1:773:G:C8	2.47	0.49
1:2:1482:C:OP2	1:2:1521:G:N1	2.44	0.49
1:2:365:G:O6	85:2:2065:OHX:N5	2.46	0.49
36:5:1122:U:H2'	36:5:1123:U:H6	1.76	0.49
36:5:197:G:H2'	36:5:198:A:C8	2.47	0.49
36:5:3022:G:O2'	36:5:3031:G:O6	2.21	0.49
36:5:3163:A:O2'	36:5:3164:C:H5'	2.13	0.49
36:5:518:G:N2	36:5:518:G:OP2	2.36	0.49
1:6:1354:G:H5'	1:6:1355:C:OP2	2.12	0.49
1:6:151:G:N2	1:6:163:G:N2	2.60	0.49
1:6:595:G:H2'	1:6:596:C:C6	2.48	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:77:ARG:HA	12:C0:82:LEU:HD12	1.95	0.49
14:C2:126:TRP:O	14:C2:128:ALA:N	2.46	0.49
16:C4:114:ARG:HE	28:D6:62:TYR:HE1	1.61	0.49
16:C4:25:ASP:N	16:C4:55:SER:HB3	2.26	0.49
19:C7:30:THR:HG22	34:SR:127:ARG:HH22	5.53	0.49
19:C7:7:LYS:N	1:6:1316:G:OP1	410.86	0.49
20:C8:140:THR:HA	20:C8:143:ARG:NH1	2.75	0.49
26:D4:50:ALA:HB1	26:D4:54:ALA:HB3	3.36	0.49
30:D8:19:THR:HG21	30:D8:65:ARG:HA	2.20	0.49
40:L3:284:ARG:NH2	40:L3:295:ALA:O	2.42	0.49
40:L3:375:GLU:OE1	60:N4:14:TYR:OH	3.22	0.49
41:L4:140:HIS:HA	41:L4:177:ASP:OD1	2.12	0.49
46:L9:48:VAL:HG23	46:L9:52:LEU:HB3	4.77	0.49
48:M1:83:GLY:O	48:M1:86:VAL:N	3.11	0.49
55:M9:115:ILE:HD12	55:M9:142:ILE:HD13	1.94	0.49
59:N3:13:ILE:HD12	59:N3:85:TRP:CG	3.11	0.49
64:N8:125:VAL:HG21	64:N8:138:ILE:HD13	1.93	0.49
77:Q1:4:LYS:HD3	77:Q1:5:TRP:CZ3	2.84	0.49
78:Q2:34:SER:OG	78:Q2:35:LEU:O	2.26	0.49
6:S4:139:VAL:HG13	6:S4:150:PRO:HG3	1.94	0.49
1:2:66:U:C5	8:S6:173:PRO:HG3	2.44	0.49
36:1:670:C:P	54:M8:147:ARG:HH22	2.36	0.49
36:1:860:G:C5	39:L2:181:LYS:HB2	2.47	0.49
1:2:117:U:H2'	1:2:118:U:O4'	2.13	0.49
1:2:1239:U:OP1	85:2:2101:OHX:N5	2.45	0.49
1:2:1500:C:H5'	21:C9:106:GLN:NE2	2.28	0.49
1:2:336:G:H5'	13:C1:130:PRO:O	2.12	0.49
62:N6:12:ARG:HD3	36:5:215:G:H5''	88.09	0.49
36:5:3155:U:H3'	36:5:3156:U:H5''	1.95	0.49
36:5:996:A:C2	36:5:1054:A:C4	3.00	0.49
1:6:1700:C:O2'	1:6:1701:A:OP1	2.30	0.49
1:6:591:A:H2'	1:6:592:A:C8	2.48	0.49
1:6:74:U:N3	1:6:76:A:H5''	2.27	0.49
37:7:47:C:H2'	37:7:48:U:C6	2.47	0.49
36:5:408:A:H61	38:8:15:G:H1'	1.77	0.49
12:C0:50:THR:HG22	12:C0:55:VAL:HG22	1.99	0.49
15:C3:19:SER:O	15:C3:19:SER:OG	2.28	0.49
16:C4:54:GLU:CD	1:6:901:G:H22	283.09	0.49
23:D1:33:GLN:HG3	23:D1:53:TYR:O	3.20	0.49
25:D3:62:LYS:HG3	25:D3:118:PRO:HG3	2.90	0.49
28:D6:87:ARG:NH2	28:D6:91:ASP:O	3.76	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:29:PRO:HG3	41:L4:279:HIS:CD2	2.88	0.49
50:M4:20:VAL:HG13	50:M4:68:LEU:O	2.12	0.49
52:M6:65:ASN:HB3	52:M6:68:ARG:HD3	2.19	0.49
61:N5:105:VAL:HG13	61:N5:130:TYR:CG	2.47	0.49
68:O2:124:GLY:O	68:O2:126:LEU:N	2.57	0.49
36:1:1821:U:N3	70:O4:67:LYS:HD2	2.27	0.49
2:S0:70:PRO:O	2:S0:95:ALA:N	2.94	0.49
3:S1:120:LEU:HD23	3:S1:121:ILE:N	2.28	0.49
7:S5:94:THR:OG1	7:S5:95:ASN:N	2.45	0.49
10:S8:25:ARG:NH1	1:6:385:A:OP1	319.09	0.49
35:SM:84:LYS:C	35:SM:86:ASN:H	2.16	0.49
34:SR:29:GLN:HE21	34:SR:32:LEU:HD22	1.77	0.49
36:1:1724:U:H4'	36:1:1725:C:OP1	2.12	0.49
36:1:1591:G:O2'	36:1:1799:A:N1	2.36	0.49
1:2:412:A:H2'	1:2:413:U:C6	2.47	0.49
1:2:789:A:OP1	6:S4:108:ARG:NH2	2.43	0.49
1:2:929:A:C8	16:C4:123:SER:HA	2.47	0.49
37:3:11:A:H4'	37:3:13:A:C8	2.46	0.49
38:4:70:G:H8	38:4:70:G:OP2	1.96	0.49
36:5:123:A:C6	36:5:150:A:C5	3.00	0.49
36:5:787:G:H2'	36:5:788:C:C6	2.48	0.49
15:C3:24:ALA:O	15:C3:27:LYS:HE2	7.17	0.49
26:D4:44:LEU:HA	26:D4:47:VAL:HG12	5.87	0.49
30:D8:12:VAL:HG22	30:D8:28:VAL:HG11	1.93	0.49
40:L3:232:ARG:HG2	40:L3:233:TRP:CD1	2.83	0.49
41:L4:295:ILE:O	41:L4:299:ILE:HG12	2.12	0.49
42:L5:107:ARG:HH22	42:L5:120:LYS:HA	1.78	0.49
42:L5:115:LEU:HD22	42:L5:115:LEU:H	1.77	0.49
42:L5:97:ALA:O	42:L5:101:THR:OG1	2.29	0.49
51:M5:143:ARG:HH21	71:O5:92:LEU:HA	2.09	0.49
51:M5:48:ALA:C	51:M5:53:TYR:HB3	2.50	0.49
46:L9:4:ILE:HG23	56:N0:142:GLN:CD	3.52	0.49
67:O1:15:ASN:O	67:O1:19:ARG:HD2	3.24	0.49
72:O6:30:LYS:HE3	36:5:266:A:H2'	103.18	0.49
77:Q1:22:ALA:C	77:Q1:24:SER:H	2.15	0.49
5:S3:62:ASN:O	5:S3:62:ASN:ND2	4.69	0.49
6:S4:18:TRP:HH2	6:S4:31:PRO:HD3	2.37	0.49
1:2:169:A:OP1	8:S6:137:ARG:HG3	2.12	0.49
34:SR:134:TRP:HA	34:SR:140:CYS:HA	1.95	0.49
34:SR:182:ASN:HD21	34:SR:184:ASN:HB2	1.78	0.49
34:SR:240:VAL:HA	34:SR:255:ALA:O	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1274:A:H2'	36:1:1275:C:C6	2.48	0.49
36:1:993:G:N3	36:1:2637:A:H2'	2.28	0.49
36:1:650:C:H2'	36:1:651:G:C8	2.48	0.49
36:1:655:C:H2'	36:1:656:A:C8	2.47	0.49
36:1:735:A:O5'	36:1:735:A:H8	1.96	0.49
1:2:1214:U:OP1	1:2:1246:C:H1'	2.13	0.49
1:2:54:C:O2'	1:2:459:G:N7	2.36	0.49
1:2:583:C:H2'	1:2:584:C:H6	1.77	0.49
1:2:867:G:O6	85:2:1992:OHX:N2	2.46	0.49
36:5:142:C:H2'	36:5:143:G:O4'	2.12	0.49
1:6:1698:G:H1'	1:6:1699:G:OP1	2.13	0.49
10:S8:176:SER:HB3	1:6:208:U:H4'	286.47	0.49
1:6:626:U:H2'	1:6:627:C:H6	1.77	0.49
1:6:832:U:OP2	85:6:2129:OHX:N6	2.45	0.49
13:C1:46:LYS:HE2	1:6:846:G:N2	311.73	0.49
20:C8:29:VAL:HB	20:C8:30:TYR:CD1	2.99	0.49
28:D6:88:SER:OG	28:D6:89:ARG:N	2.45	0.49
42:L5:34:LYS:HD2	57:N1:30:TYR:CZ	2.47	0.49
44:L7:93:ASN:N	44:L7:93:ASN:OD1	2.39	0.49
47:M0:210:ILE:HA	47:M0:217:PHE:CE2	2.53	0.49
35:SM:39:PRO:HD3	48:M1:52:TYR:CZ	3.82	0.49
56:N0:155:ARG:NH2	56:N0:172:TYR:HA	4.02	0.49
57:N1:122:GLN:HB3	57:N1:124:VAL:HG23	7.08	0.49
59:N3:48:ARG:NH1	59:N3:48:ARG:HG3	2.89	0.49
61:N5:34:LEU:HD22	61:N5:35:PRO:HD2	1.95	0.49
62:N6:55:GLU:HG2	62:N6:69:LYS:HB2	1.95	0.49
66:O0:40:LYS:HB3	66:O0:101:LEU:HD21	1.95	0.49
3:S1:114:VAL:HG11	1:6:930:A:H2'	310.53	0.49
1:2:144:U:H5	8:S6:137:ARG:NH1	2.11	0.49
8:S6:67:VAL:HG21	8:S6:99:GLY:HA2	2.04	0.49
36:1:118:U:H3	36:1:122:A:H5'	1.78	0.49
36:1:1404:G:N7	85:1:3895:OHX:N3	2.61	0.49
36:1:2403:G:N7	36:1:2870:C:H4'	2.28	0.49
36:1:2882:U:H2'	36:1:2883:U:C6	2.48	0.49
1:2:1165:G:C6	1:2:1166:A:C6	3.00	0.49
1:2:1409:G:N1	1:2:1412:G:OP2	2.45	0.49
1:2:330:G:C6	1:2:331:A:C6	3.01	0.49
1:2:827:C:H2'	1:2:828:U:C6	2.48	0.49
65:N9:5:LYS:NZ	36:5:1135:A:OP2	228.31	0.49
36:5:1313:G:H2'	36:5:1314:C:H6	1.78	0.49
36:5:1614:C:H2'	36:5:1615:C:C6	2.47	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1789:G:O6	85:5:4032:OHX:N1	2.46	0.49
1:6:17:C:H2'	1:6:18:C:C6	2.48	0.49
1:6:27:U:H2'	1:6:28:A:C8	2.48	0.49
1:6:542:A:H1'	1:6:543:C:OP1	2.12	0.49
85:5:3844:OHX:N5	85:7:219:OHX:N4	2.61	0.49
20:C8:72:ILE:HG12	20:C8:79:TYR:CD1	2.97	0.49
27:D5:90:LYS:HG3	27:D5:91:PRO:HD2	4.62	0.49
40:L3:215:ILE:HD13	40:L3:282:ILE:HD11	1.95	0.49
41:L4:209:TYR:O	41:L4:230:VAL:HG22	2.13	0.49
41:L4:82:THR:OG1	36:5:365:A:H1'	121.87	0.49
42:L5:259:LYS:HG2	42:L5:260:PHE:CD2	2.48	0.49
45:L8:128:LYS:HG3	36:5:120:G:N7	99.37	0.49
47:M0:16:PRO:HG3	47:M0:128:ARG:NH1	2.28	0.49
49:M3:114:GLN:O	49:M3:118:GLU:HG3	2.13	0.49
58:N2:43:VAL:HB	58:N2:49:ASN:HB3	1.94	0.49
58:N2:36:TYR:OH	58:N2:82:LYS:HG2	2.12	0.49
63:N7:46:ILE:HD11	63:N7:49:TYR:CD2	3.74	0.49
75:O9:28:ARG:HA	75:O9:33:ASN:ND2	2.28	0.49
4:S2:153:SER:OG	4:S2:195:ASP:O	2.97	0.49
7:S5:37:GLN:OE1	18:C6:53:LEU:HD22	2.73	0.49
34:SR:198:ASN:O	34:SR:215:GLY:HA3	2.23	0.49
36:1:1321:G:O3'	56:N0:117:ARG:NH2	2.46	0.49
36:1:3317:U:H4'	36:1:3318:G:O5'	2.13	0.49
85:1:3836:OHX:N5	85:1:4008:OHX:N6	2.61	0.49
85:1:3880:OHX:N6	85:1:3916:OHX:N2	2.61	0.49
36:1:58:G:OP1	51:M5:157:LYS:NZ	2.43	0.49
1:2:1474:G:H2'	1:2:1475:A:C8	2.48	0.49
1:2:1550:A:C6	1:2:1562:G:C6	3.01	0.49
1:2:1385:G:N7	85:2:2090:OHX:N3	2.61	0.49
1:2:278:U:H4'	1:2:279:G:O5'	2.13	0.49
1:2:998:A:H2'	1:2:999:U:O4'	2.13	0.49
36:5:1309:U:OP1	85:5:3999:OHX:N3	2.46	0.49
36:5:1390:A:N3	36:5:1390:A:H5'	2.28	0.49
36:5:1770:G:H5'	36:5:1771:C:OP2	2.13	0.49
57:N1:57:TYR:OH	36:5:2724:U:OP1	223.24	0.49
36:5:3289:G:H2'	36:5:3290:G:C8	2.47	0.49
36:5:825:U:O4	85:5:3807:OHX:N6	2.46	0.49
36:5:976:U:H2'	36:5:977:C:O4'	2.12	0.49
1:6:138:A:N6	1:6:266:A:H61	2.11	0.49
20:C8:123:ARG:NH1	1:6:1546:G:OP1	358.59	0.49
85:6:2023:OHX:N1	85:6:2109:OHX:N3	2.60	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D4:61:ARG:NH2	1:6:530:C:O2	410.20	0.49
1:6:978:A:H2'	1:6:979:A:O4'	2.13	0.49
24:D2:42:GLN:NE2	24:D2:49:GLU:HA	3.30	0.49
39:L2:149:ARG:NH1	39:L2:155:LYS:HD3	2.28	0.49
39:L2:207:VAL:HG11	36:5:916:G:O6	185.90	0.49
39:L2:95:SER:OG	39:L2:97:ASN:OD1	2.30	0.49
42:L5:236:LEU:HD13	42:L5:239:ILE:HD12	1.94	0.49
45:L8:41:GLN:HG3	45:L8:44:ARG:NH1	2.28	0.49
49:M3:14:PHE:CZ	36:5:665:A:H1'	132.63	0.49
50:M4:72:LEU:HD22	50:M4:73:PRO:HD2	1.95	0.49
53:M7:169:THR:O	53:M7:173:ARG:HG2	2.12	0.49
85:1:3964:OHX:N1	54:M8:146:SER:OG	2.46	0.49
54:M8:40:THR:C	54:M8:42:ALA:H	2.17	0.49
56:N0:137:ARG:HG2	56:N0:139:TYR:CZ	2.55	0.49
66:O0:17:VAL:HG11	66:O0:92:ILE:HD12	1.94	0.49
67:O1:29:ALA:HB3	67:O1:30:PRO:HD3	2.32	0.49
69:O3:13:HIS:O	69:O3:95:GLY:N	2.32	0.49
69:O3:47:LYS:HA	69:O3:104:PRO:HD2	2.65	0.49
2:S0:137:SER:HB3	2:S0:155:PHE:CD1	2.48	0.49
4:S2:133:LYS:HA	4:S2:136:VAL:HG23	2.45	0.49
4:S2:139:ILE:HD12	4:S2:191:ALA:HB1	1.97	0.49
7:S5:73:THR:HG23	18:C6:114:ARG:HG3	1.95	0.49
8:S6:39:GLU:HB2	8:S6:46:LYS:HG3	1.95	0.49
1:2:260:U:H5'	10:S8:41:LYS:HZ2	1.77	0.49
11:S9:23:ARG:NH1	11:S9:27:GLU:OE2	2.41	0.49
35:SM:52:PRO:O	35:SM:54:PRO:HD3	5.31	0.49
34:SR:44:SER:O	34:SR:58:VAL:HG22	2.13	0.49
36:1:1014:U:C2'	36:1:1015:U:H5''	2.43	0.48
36:1:669:U:HO2'	36:1:1109:U:HO2'	1.60	0.48
36:1:1624:G:H1	36:1:1819:U:H3	1.61	0.48
85:1:3836:OHX:N1	85:1:4008:OHX:N2	2.61	0.48
1:2:1450:U:H2'	1:2:1451:C:C6	2.48	0.48
1:2:1517:U:OP2	1:2:1518:C:N4	2.46	0.48
1:2:217:A:OP1	1:2:217:A:H2'	2.13	0.48
36:5:1373:A:H2'	36:5:1374:G:C8	2.48	0.48
36:5:2533:G:H2'	36:5:2534:G:C8	2.48	0.48
1:6:1255:G:H4'	1:6:1256:A:OP1	2.12	0.48
1:6:826:U:O4	85:6:2029:OHX:N3	2.45	0.48
13:C1:18:HIS:O	85:6:2087:OHX:N3	294.46	0.48
37:7:23:A:C6	37:7:24:A:C6	3.00	0.48
20:C8:41:ARG:NE	21:C9:46:PRO:HD3	2.28	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:112:ILE:HG22	39:L2:135:ILE:HG23	5.25	0.48
36:1:1794:G:H4'	39:L2:191:LEU:HD13	1.94	0.48
41:L4:52:VAL:HG11	41:L4:99:MET:HE3	1.95	0.48
42:L5:22:ARG:HH21	42:L5:28:THR:HG1	1.56	0.48
36:1:2854:U:P	47:M0:3:ARG:HH22	2.36	0.48
53:M7:116:HIS:HB3	53:M7:149:VAL:HB	1.94	0.48
54:M8:44:PHE:CZ	54:M8:82:VAL:HG21	2.87	0.48
59:N3:25:CYS:HB3	59:N3:31:ALA:O	2.63	0.48
68:O2:11:LYS:O	68:O2:13:HIS:N	2.40	0.48
68:O2:123:LYS:HG2	68:O2:126:LEU:HD12	3.25	0.48
72:O6:30:LYS:HG2	36:5:316:U:O2	104.58	0.48
72:O6:97:SER:O	72:O6:99:ARG:N	2.45	0.48
36:1:3118:C:H4'	76:Q0:106:ARG:HH22	1.78	0.48
4:S2:59:HIS:CD2	4:S2:238:SER:HA	2.47	0.48
5:S3:134:CYS:SG	5:S3:135:GLU:N	2.85	0.48
5:S3:70:THR:HG22	5:S3:86:LEU:HB2	2.05	0.48
11:S9:134:ILE:N	11:S9:134:ILE:HD12	5.00	0.48
34:SR:95:ALA:C	34:SR:97:GLY:H	3.61	0.48
36:1:2320:A:C2	79:Q3:16:VAL:HG12	2.48	0.48
36:1:2601:A:H2'	36:1:2602:G:C8	2.48	0.48
36:1:742:G:O6	85:1:3835:OHX:N1	2.46	0.48
36:1:900:G:H1'	36:1:1589:A:H61	1.78	0.48
1:2:399:A:H4'	6:S4:3:ARG:HG2	1.96	0.48
38:4:87:G:O2'	38:4:88:A:OP2	2.30	0.48
36:5:1573:G:C5	36:5:1574:C:H1'	2.48	0.48
36:5:180:C:H2'	36:5:181:U:H6	1.78	0.48
36:5:1952:G:H1	36:5:2094:C:H42	1.61	0.48
36:5:2439:A:H4'	36:5:2439:A:OP1	2.12	0.48
36:5:2815:G:H5''	36:5:2816:G:OP2	2.13	0.48
40:L3:232:ARG:NH2	36:5:2989:U:O2'	215.61	0.48
40:L3:20:LYS:HD3	36:5:3139:A:H4'	222.71	0.48
36:5:3281:U:C4	36:5:3282:U:C4	3.01	0.48
36:5:541:U:O4	85:5:3856:OHX:N3	2.46	0.48
36:5:650:C:H2'	36:5:651:G:C8	2.48	0.48
1:6:1159:C:N3	85:6:2099:OHX:N5	2.62	0.48
14:C2:44:GLY:HA3	1:6:1227:A:O2'	462.54	0.48
18:C6:45:ARG:O	18:C6:48:VAL:HG12	2.31	0.48
18:C6:97:VAL:HG12	18:C6:98:ASP:H	2.02	0.48
1:2:1400:A:H4'	19:C7:60:ARG:HH22	1.78	0.48
28:D6:37:LYS:C	28:D6:38:ARG:HD2	2.34	0.48
29:D7:41:LEU:H	29:D7:41:LEU:HD23	3.27	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:E0:28:LYS:HD2	1:6:542:A:N1	430.20	0.48
40:L3:117:ARG:HA	40:L3:175:LYS:HG3	1.94	0.48
41:L4:338:LYS:HA	41:L4:338:LYS:HD2	1.40	0.48
42:L5:184:ASP:OD1	42:L5:187:THR:HG22	2.12	0.48
42:L5:187:THR:HG22	42:L5:189:GLU:HB2	4.76	0.48
43:L6:98:VAL:HA	43:L6:101:PHE:CD2	2.48	0.48
48:M1:34:SER:HB2	48:M1:67:VAL:HG11	1.94	0.48
36:1:291:C:OP1	51:M5:68:ARG:HB3	2.12	0.48
53:M7:69:ARG:HD3	36:5:3308:C:O2	185.35	0.48
60:N4:50:ALA:HA	60:N4:55:PHE:CD1	2.48	0.48
68:O2:121:ASN:OD1	68:O2:121:ASN:N	2.45	0.48
69:O3:16:TYR:CD2	69:O3:25:PRO:HA	2.92	0.48
70:O4:98:GLN:HA	70:O4:101:VAL:HG23	1.94	0.48
76:Q0:97:ARG:HB2	76:Q0:120:GLN:O	2.13	0.48
77:Q1:6:ARG:HA	77:Q1:9:ARG:HB2	1.95	0.48
78:Q2:41:ARG:HH21	36:5:2785:A:H4'	163.34	0.48
7:S5:23:VAL:O	7:S5:34:GLN:NE2	3.03	0.48
8:S6:52:ILE:HD13	8:S6:102:VAL:HG21	2.42	0.48
9:S7:50:ASP:N	9:S7:50:ASP:OD1	2.41	0.48
11:S9:110:GLN:HA	11:S9:129:ILE:HD11	1.94	0.48
36:1:1063:G:N7	36:1:1097:G:H2'	2.29	0.48
36:1:1445:U:H5''	36:1:1446:A:OP2	2.12	0.48
36:1:1889:G:OP1	40:L3:247:ARG:HG3	2.14	0.48
36:1:1940:G:OP1	55:M9:75:HIS:ND1	2.44	0.48
36:1:2232:A:OP2	85:1:3904:OHX:N5	2.46	0.48
36:1:2416:U:H2'	36:1:2417:U:C6	2.49	0.48
36:1:2850:G:O6	85:1:3935:OHX:N6	2.46	0.48
36:1:3218:A:H4'	36:1:3219:G:O5'	2.13	0.48
36:1:549:U:H2'	36:1:550:A:H8	1.78	0.48
1:2:1132:A:H2'	1:2:1133:A:H8	1.78	0.48
1:2:1168:U:OP1	85:2:2075:OHX:N2	2.46	0.48
1:2:639:U:H5''	9:S7:101:LYS:HB2	1.96	0.48
1:2:694:U:H3	9:S7:98:ILE:HD12	1.77	0.48
1:2:848:C:H2'	1:2:849:C:H6	1.77	0.48
36:5:1355:A:H1'	36:5:1356:U:OP2	2.13	0.48
70:O4:10:ARG:NH1	36:5:1489:A:OP1	130.53	0.48
36:5:1808:G:O6	85:5:3868:OHX:N3	2.46	0.48
36:5:3106:A:H2'	36:5:3107:U:O4'	2.13	0.48
36:5:3287:U:N3	36:5:3288:G:N7	2.62	0.48
36:5:333:G:H1	38:8:30:C:H42	1.61	0.48
85:5:3877:OHX:N1	85:5:3923:OHX:N4	2.61	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:400:G:H4'	36:5:401:U:O5'	2.13	0.48
36:5:992:A:O2'	36:5:993:G:H5'	2.13	0.48
1:6:282:C:H2'	1:6:283:U:O4'	2.13	0.48
1:6:493:U:H2'	1:6:494:U:H5''	1.95	0.48
1:6:491:C:N4	1:6:497:G:H21	2.09	0.48
1:6:922:G:H2'	1:6:923:A:H8	1.78	0.48
21:C9:117:SER:HB2	21:C9:123:ARG:CB	2.44	0.48
27:D5:43:ASP:HB2	27:D5:46:LYS:HD2	1.94	0.48
28:D6:18:VAL:HG11	28:D6:33:ASP:HB3	1.95	0.48
1:2:1253:U:H5''	33:E1:130:VAL:HB	1.95	0.48
40:L3:106:TRP:HB2	40:L3:133:TYR:CE2	2.48	0.48
46:L9:91:ARG:HG2	46:L9:182:SER:HB3	2.60	0.48
47:M0:76:MET:HE1	47:M0:148:VAL:HG22	1.94	0.48
50:M4:122:VAL:O	50:M4:125:LYS:HG2	2.13	0.48
54:M8:154:GLY:O	54:M8:159:LYS:NZ	2.46	0.48
59:N3:87:ARG:HH12	59:N3:137:VAL:CG1	2.44	0.48
64:N8:2:PRO:HG2	64:N8:5:PHE:CD2	2.97	0.48
68:O2:32:TRP:CE2	68:O2:53:PRO:HD2	2.49	0.48
69:O3:40:ASP:O	69:O3:42:GLN:N	3.28	0.48
8:S6:27:PHE:HB3	8:S6:102:VAL:HG11	2.30	0.48
34:SR:115:ILE:HG13	34:SR:122:ILE:HG12	2.72	0.48
36:1:1902:G:C6	36:1:1903:U:C2	3.02	0.48
36:1:3112:G:O6	36:1:3120:C:H5''	2.14	0.48
36:1:3165:A:H2'	36:1:3166:C:C6	2.48	0.48
36:1:3282:U:H2'	36:1:3283:U:H6	1.78	0.48
36:1:3019:U:O4	85:1:3849:OHX:N4	2.46	0.48
36:1:422:A:C2	36:1:2363:A:H4'	2.49	0.48
36:1:733:G:O2'	36:1:735:A:N6	2.39	0.48
1:2:105:A:OP1	10:S8:18:ARG:NH1	2.47	0.48
1:2:373:G:N7	85:2:2116:OHX:N6	2.61	0.48
69:O3:76:GLY:HA2	36:5:1327:C:O2'	258.08	0.48
36:5:2425:G:H2'	36:5:2426:U:O4'	2.13	0.48
1:6:1511:U:H2'	1:6:1512:G:C8	2.48	0.48
1:6:1531:G:H2'	1:6:1532:U:C6	2.49	0.48
1:6:27:U:H2'	1:6:28:A:H8	1.78	0.48
6:S4:187:ARG:NH2	1:6:753:A:H62	375.63	0.48
1:6:897:C:HO2'	1:6:898:A:H8	1.60	0.48
12:C0:24:LYS:HB2	12:C0:63:TYR:CE1	3.28	0.48
13:C1:93:TYR:HB2	13:C1:100:TYR:CE1	2.49	0.48
18:C6:131:GLY:HA3	18:C6:136:SER:O	2.67	0.48
25:D3:48:HIS:CD2	25:D3:105:ALA:HB2	2.48	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2989:U:O2'	40:L3:267:ALA:O	2.21	0.48
41:L4:178:LEU:O	41:L4:182:LEU:HD23	6.07	0.48
42:L5:120:LYS:O	42:L5:248:ARG:NH2	2.89	0.48
47:M0:56:GLU:HB2	47:M0:58:GLU:OE1	2.79	0.48
48:M1:9:MET:O	48:M1:11:ASP:N	3.81	0.48
51:M5:8:GLU:O	51:M5:12:ARG:HD2	4.25	0.48
52:M6:19:LEU:O	52:M6:23:VAL:HG23	2.14	0.48
56:N0:40:ARG:HD2	56:N0:40:ARG:HA	1.86	0.48
61:N5:40:LEU:HB3	61:N5:41:ALA:H	3.49	0.48
68:O2:34:LYS:HG3	68:O2:35:GLN:N	2.29	0.48
72:O6:9:ILE:HD13	72:O6:10:GLY:N	5.04	0.48
78:Q2:3:ASN:O	36:5:2655:U:H2'	239.09	0.48
2:S0:172:LEU:HD22	2:S0:176:LEU:HG	2.33	0.48
6:S4:141:THR:OG1	6:S4:145:ARG:HB2	2.99	0.48
9:S7:173:TYR:CE2	9:S7:177:THR:HG21	2.47	0.48
34:SR:193:ILE:HD12	34:SR:193:ILE:H	4.85	0.48
36:1:79:U:OP2	85:1:3779:OHX:N5	2.47	0.48
36:1:763:G:H2'	36:1:764:U:O4'	2.14	0.48
1:2:1682:U:O2'	1:2:1683:C:H5'	2.13	0.48
1:2:42:G:H4'	1:2:43:A:O5'	2.13	0.48
37:3:22:A:H1'	42:L5:272:TYR:CE1	2.48	0.48
36:5:118:U:O2	36:5:121:A:H5'	2.13	0.48
36:5:2426:U:H2'	36:5:2427:U:C6	2.48	0.48
40:L3:5:LYS:HE3	36:5:2878:G:OP1	245.44	0.48
36:5:3151:U:H4'	36:5:3294:A:H1'	1.95	0.48
55:M9:87:ALA:O	85:5:3848:OHX:N5	204.81	0.48
36:5:507:U:H2'	36:5:508:U:C6	2.48	0.48
36:5:652:G:P	85:5:4007:OHX:N6	2.86	0.48
38:8:26:U:H2'	38:8:27:U:C6	2.49	0.48
22:D0:34:LEU:HD21	22:D0:89:ARG:NH1	6.34	0.48
25:D3:132:LEU:HD23	25:D3:132:LEU:HA	3.38	0.48
40:L3:266:ARG:NH1	36:5:2988:C:O2	211.31	0.48
45:L8:156:ASP:OD2	45:L8:156:ASP:N	2.46	0.48
45:L8:185:ARG:HG3	38:8:154:C:O2'	140.50	0.48
36:1:2899:C:H41	46:L9:172:ILE:HG23	1.79	0.48
48:M1:131:MET:O	48:M1:154:THR:HG21	2.14	0.48
36:1:1874:A:N7	55:M9:20:ARG:NH1	2.62	0.48
59:N3:87:ARG:HH12	59:N3:137:VAL:HG11	1.94	0.48
63:N7:86:THR:OG1	63:N7:87:LEU:N	2.45	0.48
64:N8:82:ILE:HD11	64:N8:102:ILE:HG12	3.34	0.48
64:N8:42:ARG:NH2	36:5:2799:A:H1'	193.33	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:N8:6:THR:CG2	64:N8:8:THR:HG23	2.41	0.48
64:N8:86:LYS:O	64:N8:89:GLN:HB3	2.14	0.48
70:O4:38:LEU:HD23	36:5:1741:A:H4'	174.77	0.48
70:O4:8:ARG:NH2	36:5:1597:C:OP1	137.20	0.48
72:O6:89:GLU:O	72:O6:93:ILE:HG12	2.14	0.48
74:O8:62:ALA:O	74:O8:66:ILE:HG13	2.14	0.48
2:S0:84:ARG:HE	2:S0:88:LYS:NZ	3.02	0.48
7:S5:25:LEU:H	7:S5:25:LEU:HD22	1.79	0.48
7:S5:32:GLU:OE2	7:S5:33:VAL:HG23	2.13	0.48
36:1:1004:U:C4	36:1:1005:G:N7	2.81	0.48
36:1:2373:A:OP2	36:1:2373:A:H3'	2.13	0.48
36:1:1814:A:OP1	85:1:3950:OHX:N2	2.47	0.48
85:1:3940:OHX:N4	85:1:4004:OHX:N1	2.62	0.48
1:2:1291:G:H22	1:2:1324:G:N2	2.11	0.48
1:2:138:A:N6	1:2:266:A:H61	2.12	0.48
1:2:1:U:C4	11:S9:54:ARG:HG3	2.49	0.48
1:2:322:G:OP1	85:2:2050:OHX:N4	2.46	0.48
1:2:1035:G:O6	85:2:2111:OHX:N4	2.47	0.48
1:2:286:C:H2'	1:2:287:G:H5'	1.95	0.48
1:2:870:C:H2'	1:2:871:G:C8	2.49	0.48
1:2:938:G:N7	85:2:2046:OHX:N6	2.62	0.48
36:5:1024:G:N7	36:5:1027:A:N6	2.62	0.48
36:5:1786:G:H2'	36:5:1787:A:C8	2.48	0.48
36:5:210:U:HO2'	36:5:229:G:HO2'	1.54	0.48
36:5:3289:G:H2'	36:5:3290:G:H8	1.78	0.48
37:7:3:U:H2'	37:7:4:U:H6	1.79	0.48
12:C0:73:VAL:O	12:C0:77:ARG:HG3	4.81	0.48
1:2:1312:A:N7	19:C7:2:GLY:HA3	2.28	0.48
2:S0:4:PRO:HG3	23:D1:39:VAL:HG21	1.94	0.48
27:D5:49:ARG:O	27:D5:53:GLU:HB2	2.35	0.48
28:D6:62:TYR:CG	28:D6:63:ALA:N	2.89	0.48
28:D6:66:LYS:HB2	28:D6:68:TYR:CE1	2.49	0.48
39:L2:204:MET:CE	39:L2:209:HIS:HB2	2.39	0.48
47:M0:176:LEU:HD22	47:M0:180:GLU:HG3	1.95	0.48
55:M9:108:LYS:HA	55:M9:111:ASP:HB2	1.94	0.48
58:N2:67:SER:OG	58:N2:68:THR:N	2.46	0.48
38:4:150:G:OP1	61:N5:27:ARG:NH2	2.44	0.48
63:N7:23:VAL:HB	63:N7:43:VAL:HB	1.95	0.48
73:O7:14:LYS:HD2	75:O9:51:ILE:HD11	3.61	0.48
2:S0:120:LEU:HD12	2:S0:121:VAL:H	1.86	0.48
3:S1:114:VAL:HG13	3:S1:120:LEU:HD12	1.96	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:143:ARG:HB3	5:S3:143:ARG:HE	4.56	0.48
7:S5:61:TYR:HE2	7:S5:164:PRO:HG2	3.51	0.48
9:S7:73:VAL:O	9:S7:75:THR:N	2.39	0.48
36:1:1597:C:H42	36:1:1610:G:H1	1.62	0.48
1:2:139:C:O2'	8:S6:187:LYS:NZ	2.42	0.48
1:2:1592:A:H2'	1:2:1593:A:H8	1.79	0.48
1:2:1767:G:P	1:2:1770:U:H4'	2.54	0.48
1:2:190:C:O2'	1:2:191:C:H5'	2.12	0.48
1:2:94:U:H2'	1:2:95:G:O4'	2.14	0.48
38:4:125:U:O2	38:4:125:U:H2'	2.13	0.48
36:5:119:U:H4'	36:5:120:G:H3'	1.96	0.48
36:5:1481:A:H2'	36:5:1481:A:N3	2.27	0.48
36:5:2221:G:N2	36:5:2224:A:OP2	2.38	0.48
36:5:3357:U:O2'	36:5:3358:U:OP1	2.30	0.48
36:5:712:G:H2'	36:5:713:U:C6	2.48	0.48
36:5:996:A:H2'	36:5:997:A:O4'	2.13	0.48
1:6:1273:G:H4'	1:6:1274:C:H5''	1.95	0.48
1:6:417:A:H4'	1:6:418:G:O5'	2.13	0.48
1:6:780:A:H3'	1:6:781:U:H5'	1.96	0.48
38:8:2:A:H3'	38:8:3:A:H8	1.78	0.48
22:D0:57:ARG:HG3	22:D0:89:ARG:NE	2.29	0.48
39:L2:177:LYS:HE2	79:Q3:69:TYR:CE1	2.48	0.48
47:M0:54:SER:HB2	47:M0:135:ILE:HD11	1.95	0.48
47:M0:73:ASN:O	47:M0:77:THR:HG23	2.13	0.48
57:N1:117:ALA:C	57:N1:119:ALA:H	2.88	0.48
59:N3:86:ARG:HB2	59:N3:92:PHE:CE1	2.48	0.48
70:O4:21:LYS:HD2	70:O4:23:VAL:HG22	1.94	0.48
2:S0:83:GLN:HG2	2:S0:99:ALA:HB1	1.96	0.48
5:S3:150:MET:HB3	5:S3:152:PHE:CE2	2.48	0.48
9:S7:143:LEU:HB2	9:S7:147:ASN:O	2.92	0.48
36:1:2366:C:H2'	36:1:2367:A:H8	1.78	0.48
36:1:2726:C:OP1	85:1:3987:OHX:N3	2.47	0.48
1:2:1338:C:H1'	1:2:1410:A:C4	2.48	0.48
1:2:1766:A:H5''	85:2:2051:OHX:N3	2.28	0.48
36:5:998:A:O2'	36:5:999:G:H5'	2.14	0.48
1:6:1499:G:C6	1:6:1500:C:C4	3.02	0.48
7:S5:185:ARG:HH12	1:6:1572:G:H1'	330.65	0.48
1:6:891:A:H2'	1:6:892:A:C8	2.49	0.48
26:D4:92:VAL:HG21	26:D4:99:LYS:HG2	1.96	0.48
40:L3:82:PRO:HG3	40:L3:319:ASN:ND2	2.29	0.48
41:L4:299:ILE:HG22	41:L4:300:ARG:O	2.13	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:109:THR:OG1	42:L5:110:LEU:N	2.46	0.48
45:L8:94:PHE:CE2	45:L8:200:LEU:HG	2.49	0.48
47:M0:33:ILE:HD11	47:M0:69:ARG:CZ	2.44	0.48
48:M1:96:PHE:CD1	48:M1:102:PHE:HB3	2.49	0.48
51:M5:97:SER:O	51:M5:100:ALA:N	2.78	0.48
58:N2:42:LYS:HA	58:N2:46:ALA:O	2.51	0.48
71:O5:86:ARG:HG3	71:O5:90:ARG:NH2	2.71	0.48
7:S5:35:GLN:O	7:S5:37:GLN:N	2.98	0.48
34:SR:172:ALA:HB2	34:SR:202:LEU:HD13	1.95	0.48
1:2:1123:C:H2'	1:2:1124:A:O4'	2.14	0.48
1:2:1248:C:H2'	1:2:1249:U:H6	1.78	0.48
1:2:1504:G:C6	1:2:1505:A:C6	3.01	0.48
1:2:1683:C:O2'	1:2:1684:U:O5'	2.30	0.48
1:2:329:G:H2'	1:2:330:G:C8	2.48	0.48
1:2:794:U:O2'	1:2:795:U:O2	2.24	0.48
36:5:1152:G:N2	36:5:1200:A:H61	2.12	0.48
36:5:2201:G:H2'	36:5:2202:C:C6	2.49	0.48
36:5:2310:U:OP1	85:5:4035:OHX:N2	2.47	0.48
1:6:1518:C:OP2	85:6:2105:OHX:N1	2.47	0.48
1:6:570:A:H5''	1:6:571:G:OP2	2.13	0.48
1:6:700:C:H2'	1:6:701:U:C6	2.49	0.48
38:8:83:C:C4'	38:8:85:G:H21	2.27	0.48
18:C6:38:LEU:C	18:C6:40:GLU:H	2.15	0.48
20:C8:145:ARG:HG3	35:SM:68:ARG:NH2	3.90	0.48
24:D2:104:LEU:HB2	24:D2:125:ILE:HA	1.95	0.48
27:D5:64:VAL:O	27:D5:68:ARG:HG2	2.14	0.48
3:S1:111:ARG:HB3	28:D6:68:TYR:HD2	1.77	0.48
29:D7:34:ASP:O	29:D7:79:PHE:HA	2.14	0.48
42:L5:67:SER:HA	42:L5:72:ASP:HA	1.95	0.48
46:L9:163:GLN:O	46:L9:166:ARG:HG3	4.03	0.48
46:L9:1:MET:HB3	36:5:1212:A:OP1	320.81	0.48
48:M1:166:LYS:HD3	48:M1:167:TYR:CD1	2.49	0.48
49:M3:168:ARG:NH2	49:M3:172:LEU:HD21	3.70	0.48
53:M7:26:PHE:CE1	53:M7:120:ASN:HA	2.49	0.48
55:M9:134:HIS:CD2	36:5:1947:G:H5'	235.77	0.48
55:M9:90:PRO:HG2	55:M9:93:VAL:CG2	3.03	0.48
36:1:1065:A:H1'	65:N9:28:LYS:HE3	1.95	0.48
66:O0:12:GLN:O	66:O0:15:ALA:HB3	2.29	0.48
66:O0:95:ALA:HB2	66:O0:101:LEU:HD23	1.94	0.48
68:O2:6:HIS:O	68:O2:6:HIS:ND1	3.12	0.48
75:O9:48:LYS:O	85:O9:101:OHX:N2	2.46	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:Q3:56:THR:HB	79:Q3:63:THR:OG1	2.60	0.48
2:S0:179:ARG:HD3	2:S0:183:ARG:NE	3.80	0.48
2:S0:189:VAL:HG22	2:S0:190:ASP:H	1.78	0.48
2:S0:55:GLU:OE2	23:D1:80:LYS:N	2.93	0.48
8:S6:65:GLN:HG3	1:6:1681:A:H8	279.25	0.48
9:S7:76:LYS:HA	9:S7:79:ARG:HD2	1.96	0.48
10:S8:76:THR:HG22	10:S8:105:ASP:HB3	3.03	0.48
11:S9:41:GLU:OE1	11:S9:126:ARG:NH2	2.46	0.48
34:SR:90:ARG:HG2	34:SR:102:ARG:HG2	4.98	0.48
36:1:1306:G:O2'	36:1:1307:G:H5''	2.14	0.48
36:1:1942:U:HO2'	36:1:3345:G:HO2'	1.60	0.48
36:1:2103:U:H2'	36:1:2104:A:H8	1.79	0.48
36:1:2616:C:H2'	36:1:2617:U:H5'	1.96	0.48
36:1:2808:A:H4'	36:1:2809:C:O5'	2.14	0.48
36:1:3255:U:H2'	36:1:3256:G:C8	2.49	0.48
36:1:3269:U:H4'	36:1:3270:U:O5'	2.13	0.48
36:1:664:U:H5'	41:L4:107:ARG:HA	1.96	0.48
36:1:984:G:C8	65:N9:17:HIS:CD2	3.01	0.48
1:2:1196:A:C8	1:2:1602:C:H4'	2.48	0.48
1:2:304:U:H2'	1:2:305:C:H6	1.79	0.48
1:2:740:A:C2'	1:2:741:C:H5''	2.43	0.48
1:2:932:U:H4'	1:2:933:A:O4'	2.14	0.48
38:4:154:C:H2'	38:4:155:A:O4'	2.13	0.48
38:4:62:C:H4'	38:4:63:G:O5'	2.14	0.48
36:5:1236:G:N2	36:5:1244:A:OP1	2.46	0.48
36:5:1519:G:H2'	36:5:1520:G:H8	1.79	0.48
36:5:1594:A:H1'	36:5:1615:C:H1'	1.96	0.48
36:5:2249:G:OP1	85:5:4035:OHX:N6	2.47	0.48
39:L2:230:VAL:HG21	36:5:2424:A:N1	183.86	0.48
36:5:3284:G:OP2	36:5:3284:G:H8	1.97	0.48
36:5:585:A:H2'	36:5:586:C:C6	2.49	0.48
36:5:65:A:H4'	36:5:66:A:O5'	2.13	0.48
1:6:1140:G:OP2	85:6:2035:OHX:N3	2.47	0.48
1:6:1561:U:H4'	1:6:1599:C:H4'	1.95	0.48
1:6:1696:G:H2'	1:6:1698:G:O6	2.13	0.48
1:6:482:U:H3	1:6:505:A:N6	2.10	0.48
15:C3:65:VAL:C	15:C3:67:THR:H	2.76	0.48
16:C4:64:ALA:HB1	16:C4:105:LEU:HD23	3.53	0.48
20:C8:54:LEU:C	20:C8:56:LYS:H	2.81	0.48
7:S5:161:ASP:O	30:D8:44:VAL:HA	2.13	0.48
33:E1:133:ALA:O	33:E1:139:LEU:HA	2.13	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:112:ILE:HD12	79:Q3:79:VAL:HG22	1.95	0.48
37:3:27:A:O5'	42:L5:57:ASN:ND2	2.47	0.48
43:L6:43:LEU:HD21	43:L6:85:ILE:HG13	2.04	0.48
46:L9:75:VAL:HA	46:L9:78:MET:CE	2.44	0.48
47:M0:202:LYS:HG2	37:7:64:A:C6	342.25	0.48
49:M3:89:TYR:O	49:M3:92:THR:OG1	2.31	0.48
50:M4:47:ASP:CG	50:M4:55:ARG:HB2	3.04	0.48
51:M5:150:TRP:CH2	51:M5:151:ILE:HG12	2.49	0.48
36:1:3185:U:O2	56:N0:169:SER:HA	2.13	0.48
57:N1:50:LYS:HB3	57:N1:92:ARG:NH1	2.28	0.48
58:N2:18:ASP:HB3	58:N2:104:ARG:HA	2.87	0.48
58:N2:47:VAL:O	58:N2:49:ASN:N	3.53	0.48
62:N6:40:ARG:HG2	62:N6:45:ILE:O	2.14	0.48
67:O1:72:ARG:O	67:O1:96:VAL:HG13	2.14	0.48
75:O9:26:TRP:HA	75:O9:29:LEU:HD23	2.83	0.48
3:S1:206:PRO:O	3:S1:207:LEU:HB2	2.20	0.48
5:S3:125:TYR:O	5:S3:129:SER:OG	3.34	0.48
4:S2:121:VAL:HG11	35:SM:117:LEU:HB2	1.96	0.48
34:SR:108:SER:OG	34:SR:109:ASP:N	2.61	0.48
34:SR:192:PHE:HD1	34:SR:223:TRP:CD2	2.32	0.48
36:1:1253:U:H3	36:1:1263:A:H3'	1.79	0.47
36:1:1742:U:H2'	36:1:1743:G:C8	2.49	0.47
36:1:2101:C:O2'	36:1:2102:U:O5'	2.23	0.47
36:1:317:A:C2	36:1:318:A:C4	3.01	0.47
36:1:3190:C:H2'	36:1:3191:G:H8	1.79	0.47
85:1:3912:OHX:N6	85:1:4012:OHX:N4	2.62	0.47
36:1:440:A:OP2	36:1:440:A:H8	1.96	0.47
1:2:1132:A:OP1	25:D3:30:LYS:NZ	2.35	0.47
1:2:1388:A:H5''	19:C7:48:ASN:ND2	2.29	0.47
1:2:229:U:H2'	1:2:230:C:H6	1.79	0.47
1:2:926:A:H1'	1:2:988:A:C2	2.48	0.47
36:5:999:G:H2'	36:5:1000:C:C6	2.49	0.47
36:5:230:U:H2'	36:5:231:G:O4'	2.13	0.47
36:5:264:G:O6	85:5:4066:OHX:N2	2.47	0.47
36:5:283:G:O6	36:5:304:G:H1'	2.13	0.47
36:5:510:G:O6	85:5:3867:OHX:N2	2.47	0.47
1:6:1681:A:H2	1:6:1720:G:H21	1.62	0.47
1:6:845:G:H2'	1:6:846:G:C8	2.44	0.47
1:6:922:G:H2'	1:6:923:A:C8	2.49	0.47
12:C0:11:ILE:HD13	12:C0:35:ILE:HG21	1.95	0.47
28:D6:87:ARG:NH1	1:6:1796:C:OP1	346.03	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:E1:146:SER:HB2	1:6:1235:C:H5'	434.06	0.47
39:L2:177:LYS:HB2	79:Q3:29:LEU:HD13	1.96	0.47
41:L4:264:SER:OG	41:L4:267:VAL:HG12	3.20	0.47
53:M7:67:ILE:HG13	53:M7:82:ARG:CZ	2.44	0.47
54:M8:150:VAL:HA	54:M8:153:PHE:CD1	2.49	0.47
36:1:1323:G:H5'	56:N0:1:MET:N	2.29	0.47
57:N1:38:ASP:O	57:N1:64:VAL:HG23	2.14	0.47
58:N2:89:LEU:HD22	58:N2:93:ILE:HD11	1.96	0.47
66:O0:40:LYS:HB3	66:O0:101:LEU:HD11	1.96	0.47
66:O0:87:VAL:HB	36:5:1728:G:O2'	250.55	0.47
71:O5:21:LEU:HA	71:O5:24:LEU:HD12	3.84	0.47
73:O7:28:HIS:CE1	73:O7:31:LYS:HE2	4.92	0.47
1:2:1098:U:C5	4:S2:224:PHE:HE2	2.32	0.47
34:SR:52:GLN:OE1	34:SR:53:LYS:HG2	2.14	0.47
19:C7:29:GLN:HB3	34:SR:85:TRP:HZ3	2.32	0.47
36:1:2505:U:H2'	36:1:2506:U:C6	2.48	0.47
36:1:3186:A:O2'	46:L9:42:ASP:HA	2.14	0.47
36:1:437:G:O2'	36:1:438:A:H5'	2.14	0.47
1:2:1107:G:O2'	1:2:1108:G:H5'	2.14	0.47
1:2:1229:G:OP1	33:E1:101:ALA:HA	2.14	0.47
1:2:150:U:OP1	26:D4:123:LYS:NZ	2.25	0.47
85:2:2054:OHX:N4	85:2:2068:OHX:N2	2.62	0.47
36:5:2101:C:H2'	36:5:2102:U:C6	2.49	0.47
36:5:622:A:H2'	36:5:623:U:O4'	2.13	0.47
36:5:8:C:H2'	36:5:9:U:O4'	2.14	0.47
19:C7:45:ARG:NH2	1:6:1331:A:OP1	413.16	0.47
1:6:683:C:H3'	1:6:684:A:H5''	1.94	0.47
8:S6:160:ARG:NH2	1:6:68:A:OP1	346.36	0.47
1:6:938:G:N2	1:6:941:A:OP2	2.38	0.47
37:7:1:G:C2	37:7:2:G:C8	3.02	0.47
38:8:111:A:H3'	38:8:112:U:H5'	1.96	0.47
38:8:15:G:C6	38:8:16:G:N1	2.83	0.47
14:C2:42:ALA:HB2	14:C2:124:LYS:HD2	2.88	0.47
17:C5:114:HIS:ND1	17:C5:118:GLU:OE1	2.41	0.47
18:C6:127:LYS:HA	18:C6:134:ALA:HA	1.95	0.47
19:C7:5:ARG:HD3	19:C7:5:ARG:N	2.30	0.47
29:D7:34:ASP:HB3	29:D7:43:ILE:HD12	1.96	0.47
1:2:1253:U:H4'	33:E1:143:LYS:N	2.30	0.47
40:L3:53:MET:HE2	40:L3:77:THR:CG2	2.43	0.47
42:L5:61:ILE:HG23	42:L5:79:TYR:CE1	2.65	0.47
44:L7:123:THR:O	44:L7:126:LEU:HB2	2.25	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:162:LEU:HD23	51:M5:7:LEU:HD11	1.96	0.47
45:L8:97:TYR:O	45:L8:132:VAL:HG12	2.14	0.47
47:M0:89:VAL:HG22	47:M0:136:PHE:CE1	2.49	0.47
52:M6:10:ASP:HA	52:M6:36:VAL:HG23	1.95	0.47
52:M6:128:ARG:HD2	52:M6:128:ARG:HA	3.17	0.47
53:M7:141:SER:O	53:M7:143:PRO:HD3	2.39	0.47
53:M7:30:ARG:HA	53:M7:119:VAL:CG1	2.76	0.47
55:M9:138:LEU:O	55:M9:138:LEU:HD22	2.83	0.47
76:Q0:106:ARG:NH1	76:Q0:106:ARG:HB2	3.28	0.47
2:S0:147:THR:O	2:S0:161:PRO:HA	2.41	0.47
4:S2:228:ASN:H	4:S2:228:ASN:ND2	3.59	0.47
9:S7:173:TYR:HE1	9:S7:179:LYS:HB2	2.31	0.47
11:S9:39:LYS:HB3	11:S9:43:TYR:CE2	2.80	0.47
34:SR:38:ARG:HG2	34:SR:67:ILE:HG23	2.00	0.47
36:1:126:U:H2'	36:1:127:G:O4'	2.14	0.47
36:1:2103:U:H2'	36:1:2104:A:C8	2.48	0.47
36:1:250:U:H5''	36:1:251:G:H5''	1.96	0.47
36:1:2878:G:H8	36:1:2878:G:O5'	1.97	0.47
36:1:3008:A:OP2	52:M6:74:ARG:NH1	2.38	0.47
85:1:3836:OHX:N3	85:1:4008:OHX:N4	2.63	0.47
85:1:3940:OHX:N2	85:1:4004:OHX:N5	2.62	0.47
36:1:792:G:H2'	36:1:793:C:C6	2.48	0.47
1:2:1147:A:H2'	1:2:1148:C:C6	2.49	0.47
1:2:1438:G:H2'	1:2:1439:C:C6	2.49	0.47
1:2:1483:A:C6	1:2:1484:G:C6	3.02	0.47
1:2:1497:U:C2	1:2:1498:G:C8	3.02	0.47
1:2:511:A:N6	1:2:539:G:O6	2.47	0.47
1:2:720:G:H1'	1:2:721:U:C5'	2.44	0.47
1:2:891:A:H2'	1:2:892:A:C8	2.49	0.47
36:5:1597:C:H2'	36:5:1598:G:C8	2.47	0.47
36:5:2507:C:O2'	36:5:2508:U:OP1	2.25	0.47
57:N1:22:HIS:ND1	36:5:2701:U:OP2	270.93	0.47
36:5:3110:C:H2'	36:5:3111:U:C6	2.49	0.47
1:6:1586:A:H2'	1:6:1587:A:O4'	2.14	0.47
28:D6:11:ASN:HB3	1:6:934:C:C6	332.94	0.47
21:C9:115:GLU:HG3	21:C9:123:ARG:HD3	5.28	0.47
25:D3:103:LEU:HB3	25:D3:126:LYS:HB2	1.97	0.47
25:D3:12:ALA:O	25:D3:16:ARG:HG3	2.14	0.47
40:L3:194:TRP:CE2	40:L3:198:HIS:CE1	3.02	0.47
41:L4:205:PRO:HG2	41:L4:225:VAL:HG13	1.95	0.47
42:L5:152:ARG:HG3	42:L5:152:ARG:NH1	2.29	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:M0:174:THR:HG23	47:M0:176:LEU:N	2.29	0.47
48:M1:90:GLN:HA	48:M1:170:ASP:O	2.54	0.47
49:M3:121:SER:OG	49:M3:122:LYS:N	2.47	0.47
61:N5:108:LEU:HA	61:N5:108:LEU:HD23	1.79	0.47
75:O9:10:LYS:HA	75:O9:13:MET:HE3	2.14	0.47
77:Q1:2:ARG:HB3	77:Q1:5:TRP:CD1	2.49	0.47
4:S2:90:THR:HB	4:S2:93:GLY:O	2.14	0.47
36:1:2514:U:H5'	45:L8:68:ARG:HG3	1.96	0.47
36:1:3068:U:OP2	55:M9:62:ARG:NH1	2.42	0.47
85:1:3927:OHX:N1	85:1:3975:OHX:N4	2.62	0.47
36:1:685:G:OP2	49:M3:35:ARG:NH1	2.47	0.47
36:1:871:U:H2'	36:1:872:U:C6	2.49	0.47
1:2:1165:G:C6	1:2:1166:A:N6	2.82	0.47
1:2:322:G:O4'	1:2:323:A:H8	1.97	0.47
1:2:495:C:H3'	1:2:496:G:O4'	2.15	0.47
37:3:45:A:H2'	37:3:46:A:C8	2.49	0.47
36:5:1012:G:H2'	36:5:1013:G:O4'	2.14	0.47
36:5:1597:C:H2'	36:5:1598:G:H8	1.80	0.47
36:5:1856:C:H2'	36:5:1857:C:C6	2.49	0.47
36:5:2770:G:N7	85:5:3992:OHX:N5	2.62	0.47
36:5:2528:G:N7	85:5:4044:OHX:N3	2.62	0.47
85:5:4049:OHX:N1	85:5:4054:OHX:N3	2.63	0.47
36:5:430:U:OP2	85:5:3827:OHX:N5	2.47	0.47
36:5:658:G:OP1	85:8:218:OHX:N3	2.47	0.47
36:5:899:U:O4	85:5:3807:OHX:N5	2.47	0.47
36:5:953:G:O2'	36:5:1116:G:H5'	2.14	0.47
1:6:737:A:H2'	1:6:738:G:C8	2.48	0.47
38:8:62:C:H4'	38:8:63:G:O5'	2.14	0.47
16:C4:122:PRO:C	16:C4:124:ASP:H	2.61	0.47
2:S0:185:ARG:CB	23:D1:45:ALA:H	2.27	0.47
23:D1:9:VAL:O	23:D1:10:GLU:HB3	2.29	0.47
31:D9:21:CYS:HB2	31:D9:39:CYS:HB3	2.11	0.47
39:L2:21:ARG:HD3	36:5:824:C:H5"	171.03	0.47
41:L4:10:SER:OG	41:L4:14:GLU:HG2	5.30	0.47
41:L4:283:THR:HB	41:L4:289:ILE:HD11	2.46	0.47
47:M0:142:ASP:OD2	47:M0:178:ARG:NH2	4.45	0.47
52:M6:78:ARG:HH11	52:M6:78:ARG:CG	2.62	0.47
41:L4:295:ILE:HD11	54:M8:129:VAL:HA	2.87	0.47
55:M9:92:GLN:NE2	36:5:856:G:OP1	219.27	0.47
58:N2:53:ALA:O	58:N2:68:THR:HG22	2.15	0.47
59:N3:120:LYS:HB3	59:N3:137:VAL:CG2	2.43	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:N7:58:GLY:O	63:N7:62:VAL:HG23	2.57	0.47
70:O4:107:GLU:HA	70:O4:110:GLU:OE1	4.72	0.47
2:S0:28:ASN:O	2:S0:150:ASP:HB3	6.32	0.47
2:S0:71:GLU:HA	2:S0:95:ALA:N	3.12	0.47
4:S2:140:ARG:HB3	4:S2:221:THR:HB	1.97	0.47
4:S2:98:PHE:CZ	35:SM:116:GLU:HG3	2.49	0.47
7:S5:63:GLN:HB3	7:S5:64:VAL:H	1.48	0.47
8:S6:139:ASN:HA	8:S6:142:ARG:HB2	1.97	0.47
9:S7:49:ILE:HD12	9:S7:172:VAL:HA	2.75	0.47
36:1:1168:U:H1'	44:L7:209:ASN:ND2	2.29	0.47
36:1:1798:A:H2'	36:1:1799:A:C8	2.49	0.47
36:1:1854:C:OP2	85:1:3893:OHX:N5	2.47	0.47
36:1:2777:G:H5'	36:1:2779:A:OP2	2.14	0.47
36:1:2992:U:H1'	53:M7:69:ARG:NH2	2.29	0.47
85:1:3927:OHX:N5	85:1:3975:OHX:N6	2.62	0.47
36:1:511:G:H2'	36:1:512:U:O4'	2.15	0.47
1:2:1498:G:C2'	1:2:1499:G:H5'	2.44	0.47
1:2:1533:C:H4'	1:2:1539:G:N1	2.29	0.47
1:2:1591:C:H2'	1:2:1592:A:H8	1.79	0.47
1:2:1597:A:C8	31:D9:14:TYR:CD2	3.02	0.47
1:2:17:C:H4'	1:2:1109:G:C8	2.50	0.47
1:2:417:A:H4'	1:2:418:G:O5'	2.14	0.47
1:2:542:A:H2'	1:2:543:C:H5'	1.97	0.47
1:2:704:C:OP2	1:2:704:C:H3'	2.15	0.47
38:4:107:G:OP2	85:4:228:OHX:N2	2.47	0.47
36:5:2509:U:H2'	36:5:2510:U:H5''	1.95	0.47
36:5:2586:G:O2'	36:5:2588:U:OP1	2.31	0.47
40:L3:7:GLU:HG2	36:5:2915:U:H5	256.52	0.47
1:6:197:A:H2'	1:6:198:A:C8	2.50	0.47
1:6:901:G:N1	1:6:902:G:C6	2.82	0.47
13:C1:109:VAL:HG23	13:C1:137:PHE:O	4.05	0.47
14:C2:82:PRO:O	14:C2:83:GLU:HB2	2.14	0.47
17:C5:96:ILE:HB	17:C5:120:SER:HB2	2.32	0.47
20:C8:28:ILE:HA	20:C8:58:ALA:HB2	1.97	0.47
33:E1:143:LYS:O	33:E1:145:HIS:N	2.47	0.47
42:L5:59:ASP:OD2	42:L5:60:ILE:N	2.99	0.47
45:L8:101:THR:HG22	45:L8:104:GLU:H	1.78	0.47
45:L8:94:PHE:HB3	45:L8:189:LEU:HD13	1.96	0.47
46:L9:94:TYR:CE2	46:L9:98:PRO:HA	2.50	0.47
57:N1:56:PHE:CZ	57:N1:78:LYS:HD3	3.55	0.47
60:N4:1:MET:HG3	60:N4:1:MET:O	3.89	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:N4:27:LYS:HB3	60:N4:29:PHE:CE1	2.50	0.47
68:O2:123:LYS:HA	68:O2:126:LEU:HD12	1.96	0.47
71:O5:101:THR:HG22	71:O5:104:GLN:HB2	3.02	0.47
71:O5:10:ARG:NH2	38:8:65:A:O3'	33.58	0.47
4:S2:228:ASN:ND2	4:S2:228:ASN:N	4.06	0.47
6:S4:33:ALA:O	1:6:121:U:O2'	353.85	0.47
7:S5:225:ARG:NH2	30:D8:58:GLU:HB2	5.86	0.47
36:1:2104:A:H2'	36:1:2105:G:H8	1.80	0.47
36:1:2294:U:OP1	59:N3:70:ARG:NH2	2.35	0.47
36:1:2554:A:C8	36:1:2554:A:H5'	2.49	0.47
36:1:282:G:C8	36:1:282:G:H3'	2.49	0.47
36:1:2885:C:N4	36:1:2886:U:O4	2.48	0.47
36:1:3338:C:H2'	36:1:3339:A:C8	2.49	0.47
36:1:3353:G:HO2'	36:1:3354:U:P	2.35	0.47
36:1:2767:U:O4	85:1:3898:OHX:N6	2.48	0.47
36:1:38:U:H2'	36:1:39:A:O4'	2.15	0.47
1:2:1345:A:H2'	1:2:1348:A:H62	1.79	0.47
36:5:2947:G:N2	36:5:2948:C:C2	2.83	0.47
36:5:3136:G:C5	36:5:3137:C:C5	3.02	0.47
36:5:372:A:H2'	36:5:373:A:C8	2.50	0.47
36:5:1414:G:O6	85:5:3983:OHX:N1	2.48	0.47
53:M7:30:ARG:NH2	36:5:413:U:OP1	158.52	0.47
36:5:63:A:H8	36:5:63:A:O5'	1.98	0.47
49:M3:35:ARG:NH1	36:5:685:G:OP2	83.93	0.47
1:6:1207:C:H42	1:6:1456:C:H5	1.63	0.47
1:6:1263:G:C2	1:6:1264:G:H1'	2.49	0.47
1:6:1670:G:N7	85:6:2154:OHX:N4	2.63	0.47
1:6:680:U:H2'	1:6:682:C:H41	1.80	0.47
1:6:648:G:C2	1:6:687:G:C2	3.03	0.47
1:6:789:A:C2	1:6:790:U:H1'	2.50	0.47
38:8:141:C:H2'	38:8:142:C:H6	1.79	0.47
19:C7:5:ARG:O	19:C7:10:LYS:HE3	2.14	0.47
19:C7:77:GLU:O	19:C7:81:LYS:HB2	2.14	0.47
28:D6:75:VAL:O	28:D6:79:ILE:N	2.42	0.47
11:S9:28:LEU:HD13	32:E0:40:TYR:HA	2.80	0.47
39:L2:46:LYS:HB2	39:L2:62:VAL:HG12	2.76	0.47
43:L6:105:TYR:CE1	43:L6:134:ARG:HD2	2.50	0.47
47:M0:76:MET:HE1	47:M0:138:VAL:HG11	1.97	0.47
47:M0:66:GLU:CD	47:M0:69:ARG:HH21	2.18	0.47
50:M4:128:ARG:HD3	50:M4:132:LYS:HD2	2.96	0.47
52:M6:111:PRO:HG2	52:M6:112:TYR:CE2	4.13	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:M7:31:GLU:HG3	53:M7:60:PHE:HA	3.20	0.47
63:N7:41:ALA:O	63:N7:43:VAL:HG13	3.34	0.47
63:N7:78:ASN:OD1	66:O0:35:ARG:NH2	2.43	0.47
70:O4:107:GLU:O	70:O4:110:GLU:HB2	2.74	0.47
70:O4:83:ASN:OD1	70:O4:83:ASN:N	3.13	0.47
76:Q0:77:ILE:HB	76:Q0:78:ILE:H	1.44	0.47
79:Q3:44:LYS:HD2	79:Q3:59:CYS:SG	3.01	0.47
3:S1:142:PHE:O	3:S1:207:LEU:HA	2.50	0.47
3:S1:81:PHE:HB2	3:S1:82:ARG:H	1.55	0.47
5:S3:7:LYS:HD2	5:S3:7:LYS:HA	1.63	0.47
8:S6:58:LYS:HB2	8:S6:59:GLN:NE2	2.29	0.47
10:S8:97:THR:O	10:S8:100:ALA:HB2	2.86	0.47
11:S9:109:LEU:HD13	11:S9:129:ILE:HD13	2.74	0.47
11:S9:66:ASP:HA	11:S9:67:PRO:HD2	2.04	0.47
11:S9:92:LYS:HA	11:S9:92:LYS:HE3	1.95	0.47
36:1:1204:A:H2	36:1:2834:G:N3	2.12	0.47
36:1:1347:U:H4'	41:L4:305:ALA:HB2	1.97	0.47
36:1:1390:A:N6	36:1:1418:A:O2'	2.47	0.47
36:1:189:G:C2	36:1:191:U:C4	3.02	0.47
36:1:2228:A:H2'	36:1:2229:A:C8	2.49	0.47
36:1:255:A:O2'	36:1:256:G:H5'	2.14	0.47
36:1:2789:U:H2'	36:1:2790:A:C8	2.50	0.47
36:1:3243:A:C8	52:M6:156:LEU:HD22	2.50	0.47
36:1:3255:U:H2'	36:1:3256:G:H8	1.79	0.47
85:1:3880:OHX:N3	85:1:3916:OHX:N1	2.63	0.47
1:2:1248:C:H2'	1:2:1249:U:C6	2.50	0.47
1:2:1591:C:H2'	1:2:1592:A:C8	2.50	0.47
1:2:452:A:H3'	1:2:453:U:C5	2.49	0.47
1:2:629:U:H2'	1:2:630:A:H8	1.79	0.47
1:2:795:U:C5	1:2:796:A:C8	3.02	0.47
1:2:826:U:H2'	1:2:827:C:H6	1.80	0.47
37:3:71:G:H2'	37:3:72:A:H8	1.80	0.47
38:4:122:U:H2'	38:4:123:G:C8	2.49	0.47
43:L6:26:ARG:NH2	36:5:607:A:OP1	249.92	0.47
1:6:1255:G:O2'	1:6:1256:A:O5'	2.30	0.47
3:S1:152:ARG:NH1	1:6:1799:U:O2'	343.46	0.47
6:S4:187:ARG:NH2	1:6:753:A:N7	375.08	0.47
1:6:823:G:H2'	1:6:824:G:O4'	2.15	0.47
1:6:964:U:H4'	1:6:965:U:O4'	2.15	0.47
1:6:995:A:H2'	1:6:996:U:O4'	2.14	0.47
17:C5:75:PRO:HA	17:C5:93:VAL:HB	2.23	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:C6:91:ALA:O	18:C6:94:GLN:HB3	2.15	0.47
21:C9:108:LEU:HA	21:C9:108:LEU:HD23	2.06	0.47
21:C9:126:GLU:HA	21:C9:129:GLN:HG3	1.97	0.47
21:C9:89:ARG:HB3	21:C9:90:PRO:HD2	1.97	0.47
22:D0:35:GLU:HA	22:D0:38:SER:HB3	1.97	0.47
2:S0:55:GLU:HG2	23:D1:79:LEU:HD22	5.06	0.47
24:D2:23:ARG:NH1	24:D2:66:ASN:HA	2.67	0.47
27:D5:60:VAL:CG2	27:D5:101:TYR:HB2	2.44	0.47
28:D6:88:SER:O	28:D6:92:ARG:HG3	2.15	0.47
32:E0:38:LEU:O	32:E0:42:ARG:HB2	2.18	0.47
36:1:2178:A:H5''	39:L2:129:ALA:HB3	1.97	0.47
40:L3:290:ASP:OD2	40:L3:292:ALA:N	3.75	0.47
41:L4:339:LEU:HA	41:L4:342:LYS:HB2	3.12	0.47
45:L8:134:TYR:CG	45:L8:190:VAL:HG21	2.50	0.47
45:L8:84:ARG:H	45:L8:84:ARG:NE	2.02	0.47
47:M0:52:LEU:HB2	47:M0:136:PHE:HB2	1.97	0.47
52:M6:124:LEU:HD23	56:N0:168:PRO:HG3	2.62	0.47
54:M8:148:GLU:O	54:M8:150:VAL:N	2.47	0.47
57:N1:131:GLN:HG3	57:N1:132:PRO:HD2	1.96	0.47
58:N2:33:TYR:CE1	58:N2:80:THR:HG23	4.53	0.47
61:N5:115:ARG:NH1	61:N5:119:THR:OG1	2.70	0.47
69:O3:8:TYR:HB3	69:O3:101:PHE:CD1	2.84	0.47
74:O8:54:LEU:HG	74:O8:56:ILE:HD11	2.81	0.47
2:S0:167:LYS:HB3	2:S0:168:HIS:H	1.42	0.47
4:S2:228:ASN:OD1	4:S2:229:LEU:N	2.47	0.47
6:S4:32:SER:OG	6:S4:81:THR:OG1	2.33	0.47
1:2:1473:U:H5''	7:S5:190:ILE:HG13	1.96	0.47
7:S5:136:ALA:HA	7:S5:201:ALA:O	2.15	0.47
8:S6:155:ASP:OD1	85:S6:301:OHX:N4	2.48	0.47
34:SR:48:THR:OG1	34:SR:49:GLY:N	2.45	0.47
18:C6:94:GLN:OE1	34:SR:60:SER:HB3	4.19	0.47
36:1:1498:A:H5'	36:1:1602:A:H1'	1.97	0.47
36:1:2556:C:O2'	63:N7:135:ARG:NE	2.42	0.47
36:1:274:G:H2'	36:1:275:U:O4'	2.15	0.47
1:2:1014:G:H2'	1:2:1015:U:O4'	2.15	0.47
1:2:1556:A:C5	1:2:1560:U:C2	3.03	0.47
1:2:301:A:H2'	1:2:302:U:O4'	2.15	0.47
1:2:478:A:O2'	11:S9:124:HIS:ND1	2.41	0.47
1:2:516:G:OP2	85:2:2029:OHX:N6	2.47	0.47
36:5:1104:G:H2'	36:5:1105:A:H8	1.80	0.47
36:5:1465:A:N6	36:5:1466:G:C2	2.83	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1901:A:O3'	36:5:2918:G:H5'	2.14	0.47
36:5:2436:U:H3	36:5:2511:A:H62	1.61	0.47
66:O0:57:GLU:OE2	36:5:2552:C:N4	242.34	0.47
48:M1:57:PHE:HB3	36:5:2680:A:C2	309.48	0.47
51:M5:179:LYS:O	36:5:287:G:H5'	125.04	0.47
36:5:3231:U:H2'	36:5:3232:G:C8	2.49	0.47
36:5:413:U:H2'	36:5:414:U:C6	2.49	0.47
36:5:439:C:C4'	36:5:440:A:H5'	2.45	0.47
10:S8:142:LYS:NZ	1:6:187:G:OP2	273.91	0.47
1:6:1766:A:H5''	85:6:2088:OHX:N3	2.29	0.47
1:6:502:U:H3'	1:6:503:G:H8	1.80	0.47
24:D2:107:SER:HA	1:6:804:A:C8	367.76	0.47
12:C0:55:VAL:HA	12:C0:69:THR:HG23	1.95	0.47
1:2:866:G:OP1	15:C3:2:GLY:HA3	2.15	0.47
16:C4:42:VAL:HG23	16:C4:63:ALA:HB1	1.97	0.47
17:C5:78:THR:OG1	17:C5:79:HIS:N	2.99	0.47
18:C6:95:LYS:O	34:SR:59:ARG:NH2	2.47	0.47
2:S0:198:MET:SD	19:C7:85:VAL:HG11	2.54	0.47
39:L2:96:LEU:HD21	39:L2:107:VAL:HG12	2.93	0.47
40:L3:188:ILE:O	40:L3:192:VAL:HG12	2.15	0.47
42:L5:21:ARG:HA	42:L5:24:ARG:NH2	2.30	0.47
45:L8:151:VAL:HG13	45:L8:199:ALA:HB2	3.18	0.47
52:M6:57:PHE:O	52:M6:72:HIS:CE1	4.45	0.47
53:M7:39:TRP:O	53:M7:114:VAL:HG12	2.26	0.47
36:1:744:A:H1'	54:M8:141:ARG:HH11	1.80	0.47
67:O1:19:ARG:HD3	67:O1:35:GLU:CG	2.42	0.47
51:M5:16:SER:HB2	72:O6:48:ALA:HB1	1.95	0.47
2:S0:102:PHE:CZ	2:S0:106:SER:HB2	2.50	0.47
2:S0:66:ALA:HB1	23:D1:50:TYR:CD1	3.04	0.47
3:S1:35:PRO:HG3	3:S1:231:LEU:HD11	6.49	0.47
6:S4:246:LEU:H	6:S4:246:LEU:HD12	1.79	0.47
36:1:2577:C:H2'	36:1:2578:U:O4'	2.15	0.47
36:1:3237:U:H2'	36:1:3238:G:C8	2.50	0.47
1:2:1291:G:C2	1:2:1325:A:C2	3.03	0.47
1:2:1696:G:H21	1:2:1705:C:H5	1.63	0.47
1:2:432:G:H2'	1:2:433:C:O4'	2.14	0.47
1:2:894:U:H2'	1:2:895:G:H8	1.80	0.47
36:5:1121:U:C4	36:5:1122:U:C4	3.03	0.47
36:5:1131:G:C4	36:5:2373:A:C2	3.03	0.47
36:5:238:A:H2'	36:5:239:G:C8	2.50	0.47
36:5:2608:G:H2'	36:5:2609:A:H8	1.80	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:71:A:C2	36:5:2778:G:H1'	2.50	0.47
36:5:2976:A:OP1	85:5:3989:OHX:N3	2.48	0.47
40:L3:334:ARG:NH2	36:5:3304:U:O2'	213.09	0.47
85:5:3773:OHX:N4	85:5:4007:OHX:N5	2.63	0.47
1:6:1451:C:H2'	1:6:1452:U:C6	2.50	0.47
1:6:8:U:O2'	85:6:2035:OHX:N2	2.48	0.47
71:O5:49:LYS:NZ	38:8:63:G:O2'	53.20	0.47
21:C9:57:ARG:HH11	21:C9:57:ARG:HG3	2.50	0.47
27:D5:95:HIS:CG	27:D5:96:SER:N	2.81	0.47
40:L3:21:ARG:HG3	36:5:2991:A:OP1	210.37	0.47
40:L3:53:MET:HE2	40:L3:77:THR:HG22	1.96	0.47
41:L4:327:LEU:HA	44:L7:166:ASN:ND2	2.25	0.47
42:L5:158:ARG:HD2	37:7:47:C:OP2	284.94	0.47
42:L5:282:ARG:HD3	37:7:63:A:OP2	334.71	0.47
43:L6:64:LEU:HD11	43:L6:76:LEU:HD23	3.19	0.47
44:L7:158:LYS:HD3	44:L7:203:TRP:HH2	4.40	0.47
46:L9:92:TYR:HB2	46:L9:142:ASP:HB3	2.05	0.47
47:M0:50:VAL:HG22	47:M0:167:LEU:HA	1.97	0.47
49:M3:61:PRO:HD2	49:M3:70:ARG:HH21	2.54	0.47
51:M5:70:ASN:HB3	51:M5:92:LEU:O	2.15	0.47
52:M6:110:PRO:HA	52:M6:113:ASP:OD2	2.14	0.47
55:M9:123:LEU:O	55:M9:127:SER:N	2.31	0.47
68:O2:21:HIS:CG	68:O2:24:ARG:HD2	2.50	0.47
68:O2:2:ALA:O	68:O2:90:LYS:HA	2.85	0.47
79:Q3:9:GLY:O	36:5:836:A:O2'	235.75	0.47
4:S2:159:THR:HG21	1:6:1097:U:O3'	384.28	0.47
6:S4:100:ARG:O	6:S4:102:VAL:HG12	2.41	0.47
36:1:1165:A:H2'	36:1:1166:G:O4'	2.15	0.47
36:1:1171:G:C5	85:1:3818:OHX:N2	2.83	0.47
36:1:2828:G:O2'	47:M0:4:ARG:NH1	2.39	0.47
36:1:3115:C:O2'	36:1:3117:C:N4	2.40	0.47
36:1:3163:A:C6	36:1:3164:C:N4	2.83	0.47
36:1:1753:G:O6	85:1:3907:OHX:N6	2.48	0.47
36:1:595:G:N1	36:1:609:G:H5''	2.30	0.47
1:2:1145:U:C4	1:2:1146:G:N7	2.83	0.47
1:2:1564:U:H2'	1:2:1565:C:H6	1.79	0.47
1:2:1615:C:OP1	7:S5:81:ARG:NH2	2.48	0.47
1:2:1793:G:H1'	1:2:1794:A:H2'	1.97	0.47
1:2:206:A:H1'	1:2:262:U:C2	2.50	0.47
1:2:271:A:H5'	1:2:272:U:OP2	2.15	0.47
1:2:306:U:H2'	1:2:307:G:C8	2.50	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:522:U:O3'	26:D4:60:PHE:HB2	2.15	0.47
38:4:93:U:H2'	38:4:94:C:O4'	2.14	0.47
41:L4:180:LYS:HA	36:5:1386:A:N3	118.63	0.47
36:5:1690:C:C4	36:5:1691:U:C4	3.03	0.47
36:5:2440:G:H2'	36:5:2441:A:C8	2.49	0.47
36:5:1861:G:OP2	85:5:3839:OHX:N2	2.48	0.47
1:6:1133:A:H2'	1:6:1134:C:O4'	2.15	0.47
1:6:150:U:H2'	1:6:151:G:O4'	2.15	0.47
1:6:191:C:O2'	1:6:192:U:O5'	2.30	0.47
38:8:104:A:C8	38:8:105:A:C8	3.02	0.47
12:C0:44:LYS:HD3	12:C0:44:LYS:HA	1.71	0.47
12:C0:59:PHE:CZ	12:C0:62:GLN:HA	2.49	0.47
14:C2:61:VAL:HA	14:C2:89:ILE:HG22	1.96	0.47
15:C3:11:ILE:O	15:C3:13:SER:N	4.81	0.47
15:C3:130:ARG:HA	15:C3:135:LEU:HB2	1.96	0.47
27:D5:50:ILE:O	27:D5:54:VAL:HG23	2.14	0.47
39:L2:104:LEU:HD12	39:L2:104:LEU:HA	1.74	0.47
44:L7:233:GLU:OE1	56:N0:35:VAL:HG22	2.14	0.47
44:L7:59:GLU:O	44:L7:63:ILE:HG13	2.14	0.47
45:L8:41:GLN:HG3	45:L8:42:PRO:HD2	1.96	0.47
48:M1:143:ARG:NH2	37:7:5:G:OP1	292.21	0.47
51:M5:21:PHE:O	51:M5:25:VAL:HG23	2.22	0.47
52:M6:62:THR:HA	36:5:1306:G:C6	233.43	0.47
52:M6:72:HIS:HD2	36:5:3008:A:OP1	247.44	0.47
53:M7:172:GLN:NE2	69:O3:60:ARG:O	2.48	0.47
54:M8:112:ALA:O	54:M8:115:VAL:N	2.98	0.47
54:M8:24:VAL:HG23	54:M8:25:TYR:CD2	2.49	0.47
59:N3:72:LYS:HB2	59:N3:72:LYS:HE2	1.66	0.47
49:M3:2:ALA:N	64:N8:31:GLY:O	4.48	0.47
75:O9:9:ILE:HD11	75:O9:51:ILE:HG23	1.96	0.47
2:S0:48:ILE:HG21	2:S0:161:PRO:HB2	2.74	0.47
3:S1:99:ASN:OD1	3:S1:100:PHE:N	2.54	0.47
3:S1:144:ARG:HB3	3:S1:208:GLN:HB3	1.98	0.47
3:S1:70:LEU:HD12	3:S1:82:ARG:HB2	1.96	0.47
5:S3:64:ARG:HG2	5:S3:65:ARG:H	3.44	0.47
6:S4:127:LYS:HA	6:S4:127:LYS:HE2	4.59	0.47
7:S5:77:TYR:HB3	7:S5:84:LYS:HA	1.96	0.47
36:1:2444:C:H3'	36:1:2445:A:H5''	1.96	0.47
36:1:309:U:OP1	72:O6:84:LYS:NZ	2.48	0.47
85:2:2048:OHX:N4	77:Q1:25:LYS:O	2.48	0.47
85:2:2054:OHX:N3	85:2:2068:OHX:N5	2.63	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:330:G:H2'	1:2:331:A:C8	2.50	0.47
1:2:702:G:C4	1:2:703:G:C8	3.03	0.47
36:5:1757:A:H2'	36:5:1758:G:C8	2.50	0.47
36:5:1908:A:O5'	36:5:1908:A:H8	1.98	0.47
36:5:2213:A:H2	36:5:2601:A:N3	2.13	0.47
36:5:3160:U:H3	36:5:3290:G:H1	1.63	0.47
1:6:139:C:H4'	1:6:140:A:O5'	2.14	0.47
1:6:1688:U:H2'	1:6:1689:A:C8	2.50	0.47
1:6:826:U:H2'	1:6:827:C:C6	2.50	0.47
38:8:151:C:H4'	38:8:153:U:O4	2.15	0.47
12:C0:54:TYR:CE2	12:C0:75:TYR:HB2	3.58	0.47
15:C3:20:ARG:HH11	15:C3:20:ARG:CG	3.57	0.47
17:C5:86:VAL:HB	17:C5:87:PRO:HD2	3.41	0.47
26:D4:117:LYS:HG2	1:6:159:U:H5'	331.90	0.47
26:D4:59:GLY:O	26:D4:71:GLY:HA2	2.98	0.47
27:D5:66:VAL:HG22	27:D5:71:ILE:HG22	4.80	0.47
39:L2:5:ILE:HG12	39:L2:8:GLN:HG2	1.96	0.47
40:L3:56:ILE:HD12	40:L3:358:TRP:O	4.11	0.47
41:L4:138:ARG:HE	41:L4:240:PRO:HD2	3.49	0.47
42:L5:197:SER:OG	42:L5:202:GLY:HA3	2.76	0.47
42:L5:50:ARG:NH1	42:L5:72:ASP:OD2	2.48	0.47
43:L6:152:THR:HA	43:L6:153:PRO:HD3	1.76	0.47
44:L7:198:ALA:O	44:L7:201:PHE:HB3	2.42	0.47
44:L7:96:PRO:HB2	44:L7:99:PRO:HD2	1.97	0.47
46:L9:93:VAL:HG22	76:Q0:82:LEU:HB3	1.95	0.47
47:M0:21:ARG:HG2	47:M0:21:ARG:H	1.55	0.47
49:M3:42:ARG:HH21	49:M3:51:LEU:HD22	5.32	0.47
52:M6:102:LEU:HD12	52:M6:103:LYS:H	1.80	0.47
52:M6:148:LYS:HB2	52:M6:149:TYR:CD2	2.50	0.47
53:M7:14:SER:HA	53:M7:151:THR:HA	1.96	0.47
55:M9:89:LEU:HD12	55:M9:90:PRO:HD2	2.46	0.47
52:M6:12:LYS:O	56:N0:167:ARG:NH2	2.55	0.47
57:N1:65:TYR:HB3	57:N1:75:ILE:HG13	5.37	0.47
63:N7:64:LYS:HD3	63:N7:64:LYS:HA	1.82	0.47
64:N8:47:LYS:HE2	64:N8:48:TYR:CZ	3.01	0.47
71:O5:101:THR:HG22	71:O5:104:GLN:H	3.99	0.47
71:O5:6:ALA:O	71:O5:10:ARG:HG3	3.30	0.47
71:O5:76:GLN:HG2	71:O5:77:PRO:HD2	4.94	0.47
49:M3:180:ARG:HD2	72:O6:11:LEU:HD21	3.06	0.47
76:Q0:127:LEU:HD22	76:Q0:128:LYS:HD3	1.97	0.47
7:S5:29:ILE:O	7:S5:34:GLN:NE2	2.43	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:59:VAL:HG12	7:S5:60:ASP:H	1.92	0.47
9:S7:14:THR:HG22	9:S7:17:GLU:CD	2.70	0.47
9:S7:82:GLU:OE2	9:S7:89:HIS:HA	2.57	0.47
34:SR:90:ARG:HD3	34:SR:99:THR:OG1	2.53	0.47
36:1:1615:C:OP1	85:1:4025:OHX:N3	2.48	0.46
36:1:2108:C:H1'	36:1:3344:A:H8	1.78	0.46
36:1:2513:U:H2'	36:1:2592:G:H1	1.80	0.46
36:1:2660:G:N3	36:1:2744:U:O2'	2.46	0.46
1:2:524:U:H1'	1:2:527:A:N7	2.30	0.46
38:4:124:G:H1	38:4:129:C:N4	2.01	0.46
36:5:1232:C:H2'	36:5:1233:G:H8	1.79	0.46
36:5:1238:C:HO2'	36:5:1239:C:P	2.30	0.46
36:5:175:C:H2'	36:5:176:G:H8	1.79	0.46
36:5:2204:C:H4'	36:5:2205:U:OP1	2.15	0.46
36:5:2211:U:H5	36:5:2234:G:C6	2.33	0.46
36:5:3047:U:O2'	36:5:3048:A:H5'	2.15	0.46
36:5:90:C:H2'	36:5:91:G:H5'	1.95	0.46
1:6:1313:A:O2'	1:6:1315:U:OP1	2.22	0.46
1:6:53:G:H2'	1:6:54:C:O4'	2.15	0.46
51:M5:38:ARG:NH2	38:8:143:U:OP1	109.57	0.46
13:C1:3:THR:OG1	13:C1:82:ARG:NE	2.40	0.46
1:2:886:U:O2'	16:C4:121:VAL:O	2.33	0.46
24:D2:93:LEU:O	24:D2:94:LEU:HD23	3.03	0.46
25:D3:27:ASN:O	25:D3:31:LYS:HB2	2.15	0.46
27:D5:51:LEU:H	27:D5:51:LEU:HD12	3.32	0.46
40:L3:18:PRO:HG2	40:L3:20:LYS:HD2	1.97	0.46
41:L4:26:PHE:HE2	41:L4:258:LEU:HD23	2.85	0.46
42:L5:85:ARG:HH12	42:L5:253:PHE:HA	1.80	0.46
42:L5:261:THR:O	42:L5:264:GLN:HB2	2.16	0.46
45:L8:97:TYR:HE1	45:L8:204:ARG:HD3	1.80	0.46
46:L9:101:VAL:HG12	46:L9:136:PHE:CE1	2.48	0.46
52:M6:142:SER:HB3	52:M6:147:TRP:HB2	2.67	0.46
54:M8:126:GLN:O	54:M8:130:ARG:HG3	2.15	0.46
56:N0:17:GLU:O	56:N0:20:PRO:HD3	2.53	0.46
59:N3:48:ARG:NH2	36:5:3043:C:OP2	251.79	0.46
67:O1:8:VAL:CG2	67:O1:77:ARG:HH21	3.35	0.46
68:O2:27:ARG:HB3	36:5:655:C:OP1	161.97	0.46
72:O6:45:ARG:NH2	72:O6:54:GLU:OE1	3.44	0.46
75:O9:23:LEU:HA	75:O9:24:PRO:HD3	1.79	0.46
79:Q3:29:LEU:O	79:Q3:33:GLN:HG2	3.02	0.46
2:S0:119:ARG:HH11	2:S0:119:ARG:HB3	1.79	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:106:LYS:O	5:S3:110:LEU:HB2	2.15	0.46
11:S9:83:VAL:HG23	11:S9:85:VAL:H	3.09	0.46
34:SR:63:GLY:HA2	1:6:1341:A:OP1	450.26	0.46
36:1:1009:A:OP2	85:1:3952:OHX:N1	2.49	0.46
36:1:1349:G:N3	36:1:1349:G:H3'	2.30	0.46
36:1:1915:A:H2'	36:1:1916:U:C6	2.49	0.46
36:1:2416:U:H2'	36:1:2417:U:H6	1.80	0.46
36:1:259:C:H2'	36:1:260:C:H6	1.79	0.46
36:1:2689:A:H2'	36:1:2689:A:N3	2.31	0.46
36:1:2747:A:H5'	42:L5:175:HIS:HA	1.97	0.46
36:1:2881:C:H2'	36:1:2882:U:C6	2.50	0.46
36:1:2895:G:H5''	76:Q0:102:ARG:NH2	2.30	0.46
36:1:3095:U:H2'	36:1:3096:C:H6	1.80	0.46
36:1:3216:G:O6	36:1:3259:U:H2'	2.15	0.46
36:1:855:U:H2'	36:1:856:G:O4'	2.16	0.46
36:5:1307:G:H1'	36:5:1308:A:C8	2.50	0.46
36:5:169:U:H4'	36:5:170:G:OP1	2.16	0.46
36:5:2434:U:H4'	36:5:2435:G:H5''	1.95	0.46
36:5:2441:A:C2	36:5:2442:G:H1'	2.50	0.46
36:5:2910:A:O2'	36:5:3130:A:N1	2.34	0.46
2:S0:101:ARG:NH2	1:6:1321:A:OP2	401.89	0.46
1:6:1671:A:H2'	1:6:1672:G:O4'	2.16	0.46
1:6:52:U:H2'	1:6:53:G:C8	2.50	0.46
16:C4:125:SER:HB2	1:6:926:A:C2	282.10	0.46
38:8:71:A:H4'	38:8:72:A:O5'	2.15	0.46
12:C0:15:LEU:HD11	12:C0:68:LEU:HD13	3.83	0.46
18:C6:99:GLU:HG2	34:SR:57:PRO:HB2	2.34	0.46
23:D1:54:ALA:O	23:D1:55:LEU:HD23	2.15	0.46
24:D2:126:LEU:HD23	24:D2:126:LEU:HA	1.73	0.46
1:2:531:C:O2	26:D4:62:THR:HG23	2.15	0.46
41:L4:316:ASN:ND2	44:L7:150:LYS:HD2	2.31	0.46
42:L5:238:ASP:O	42:L5:242:SER:HB3	3.00	0.46
42:L5:86:TYR:CG	42:L5:247:ILE:HG13	2.50	0.46
48:M1:7:ASN:OD1	48:M1:10:ARG:HD2	2.15	0.46
58:N2:79:LEU:O	58:N2:82:LYS:HB3	2.16	0.46
75:O9:2:ALA:N	75:O9:5:LYS:HE2	7.78	0.46
3:S1:105:PHE:HB3	3:S1:110:LEU:HD11	1.98	0.46
3:S1:116:LYS:HE2	3:S1:117:TRP:HZ3	1.80	0.46
4:S2:125:ILE:HG22	4:S2:129:ILE:HD11	3.86	0.46
5:S3:127:MET:HE2	5:S3:155:GLY:HA3	1.97	0.46
5:S3:64:ARG:NH1	5:S3:68:GLU:OE1	3.20	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:195:ILE:HG22	6:S4:196:VAL:N	2.68	0.46
8:S6:20:ASP:HB2	8:S6:23:ARG:HG3	1.97	0.46
8:S6:25:ARG:HA	8:S6:28:PHE:CD2	3.75	0.46
11:S9:112:GLN:HG3	11:S9:148:VAL:HB	1.97	0.46
34:SR:258:THR:HB	34:SR:275:ARG:HH12	1.81	0.46
36:1:1040:A:N3	47:M0:198:LYS:NZ	2.50	0.46
36:1:2094:C:H2'	36:1:2095:G:C8	2.50	0.46
36:1:2264:U:OP2	85:1:3846:OHX:N5	2.49	0.46
36:1:844:G:N7	85:1:3782:OHX:N5	2.64	0.46
36:1:396:A:C6	36:1:399:A:C6	3.03	0.46
1:2:1450:U:H2'	1:2:1451:C:H6	1.80	0.46
1:2:1573:A:H4'	1:2:1574:G:OP2	2.15	0.46
1:2:526:A:C6	1:2:527:A:C5	3.03	0.46
1:2:720:G:O2'	1:2:721:U:H5'	2.15	0.46
1:2:72:A:H4'	1:2:72:A:OP1	2.15	0.46
1:2:912:U:H4'	1:2:913:G:H2'	1.96	0.46
36:5:1017:C:H42	36:5:2671:A:P	2.38	0.46
36:5:2314:U:OP2	36:5:2314:U:H4'	2.14	0.46
36:5:2592:G:H4'	36:5:2594:C:C2	2.51	0.46
36:5:759:U:H1'	36:5:773:G:N2	2.30	0.46
1:6:1230:A:H8	1:6:1258:U:C5	2.33	0.46
31:D9:24:CYS:HB2	1:6:1434:U:H4'	410.79	0.46
1:6:1542:G:N2	1:6:1568:C:H1'	2.30	0.46
1:6:489:C:O2'	1:6:490:C:O5'	2.32	0.46
14:C2:42:ALA:HB1	14:C2:47:GLU:HB3	2.05	0.46
17:C5:100:LYS:HA	1:6:1211:A:H1'	375.08	0.46
21:C9:57:ARG:HH21	21:C9:80:TYR:HB3	1.80	0.46
26:D4:57:VAL:HG13	26:D4:60:PHE:HE2	1.80	0.46
20:C8:11:PHE:CE1	27:D5:41:ILE:HG12	2.50	0.46
28:D6:53:LEU:O	28:D6:57:SER:HB3	4.12	0.46
32:E0:48:THR:OG1	32:E0:49:LEU:HD22	3.21	0.46
39:L2:130:SER:HA	39:L2:169:ILE:HG22	1.97	0.46
40:L3:266:ARG:HD2	36:5:2988:C:O2'	217.55	0.46
40:L3:293:ASN:HB2	40:L3:304:THR:HG22	1.96	0.46
40:L3:335:ILE:HG13	40:L3:336:VAL:N	2.48	0.46
37:3:7:G:O3'	42:L5:33:ARG:NH2	2.48	0.46
43:L6:73:GLY:O	36:5:3267:A:O2'	257.48	0.46
45:L8:195:SER:O	45:L8:197:VAL:N	3.23	0.46
46:L9:14:GLU:H	46:L9:14:GLU:CD	2.19	0.46
49:M3:108:ILE:O	49:M3:112:ASN:HB2	2.77	0.46
50:M4:27:GLN:H	50:M4:27:GLN:HG2	1.55	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:138:GLN:HA	51:M5:143:ARG:HD2	2.42	0.46
51:M5:172:ARG:HH11	36:5:30:G:P	108.15	0.46
51:M5:71:ARG:NH2	36:5:32:U:O3'	140.11	0.46
52:M6:73:PHE:CD1	52:M6:78:ARG:HD3	2.51	0.46
60:N4:17:ARG:HD3	60:N4:17:ARG:HA	1.69	0.46
63:N7:6:LYS:O	63:N7:8:GLY:N	2.63	0.46
64:N8:132:LYS:O	64:N8:136:GLU:HG3	2.67	0.46
68:O2:15:LYS:HE3	68:O2:15:LYS:HB3	4.14	0.46
68:O2:61:LYS:HZ3	68:O2:61:LYS:HB2	2.95	0.46
69:O3:6:ARG:HG3	69:O3:8:TYR:CD1	2.93	0.46
70:O4:5:VAL:HG22	70:O4:6:THR:H	2.09	0.46
72:O6:60:LEU:HD13	72:O6:64:SER:HB3	1.97	0.46
36:1:137:G:H2'	36:1:138:U:C6	2.50	0.46
36:1:2214:A:N1	36:1:2429:G:O2'	2.38	0.46
36:1:2838:A:C2	36:1:2839:G:H1'	2.50	0.46
36:1:3279:A:C6	36:1:3280:U:C4	3.04	0.46
36:1:627:U:H4'	36:1:1399:A:O2'	2.16	0.46
1:2:1034:C:HO2'	24:D2:2:THR:N	2.13	0.46
1:2:1291:G:N2	1:2:1324:G:N2	2.60	0.46
36:5:1190:A:C8	36:5:1193:A:H1'	2.50	0.46
36:5:1214:U:H2'	36:5:1215:U:C6	2.51	0.46
36:5:1560:G:C6	36:5:1580:A:N6	2.83	0.46
36:5:283:G:OP2	36:5:285:A:O2'	2.27	0.46
36:5:374:A:N3	36:5:376:G:H5''	2.30	0.46
36:5:980:A:H2'	36:5:981:U:N1	2.30	0.46
1:6:1594:G:C6	1:6:1595:U:N3	2.83	0.46
1:6:1701:A:H3'	1:6:1702:A:H5''	1.97	0.46
1:6:868:G:O6	85:6:2021:OHX:N5	2.48	0.46
1:6:794:U:H4'	1:6:795:U:OP2	2.13	0.46
5:S3:76:ARG:HG3	12:C0:65:TYR:OH	2.68	0.46
18:C6:23:LYS:HG3	18:C6:64:ASP:HB2	1.96	0.46
21:C9:16:ASN:HA	21:C9:56:LYS:NZ	4.42	0.46
2:S0:185:ARG:H	23:D1:44:ARG:HA	1.79	0.46
36:1:2174:G:P	39:L2:193:ARG:HH11	2.35	0.46
39:L2:49:VAL:O	39:L2:58:LEU:N	2.57	0.46
41:L4:143:GLU:O	85:L4:401:OHX:N5	2.49	0.46
44:L7:111:ILE:O	44:L7:112:ASN:HB2	2.15	0.46
46:L9:105:GLU:OE2	46:L9:108:GLY:HA2	2.14	0.46
46:L9:89:LYS:HB2	46:L9:183:HIS:HB3	1.96	0.46
47:M0:10:ARG:HG2	47:M0:11:TYR:CD1	2.51	0.46
49:M3:124:ILE:HD11	49:M3:126:PHE:CE1	2.50	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:178:ARG:HG2	64:N8:51:GLY:CA	3.24	0.46
55:M9:175:GLN:HA	55:M9:178:ALA:HB3	1.97	0.46
58:N2:30:PRO:HA	58:N2:33:TYR:HB3	1.98	0.46
63:N7:85:TYR:HE2	63:N7:129:TRP:CE2	4.03	0.46
64:N8:74:ASN:HB3	64:N8:115:LYS:HB2	1.97	0.46
66:O0:11:ASN:O	66:O0:15:ALA:N	2.44	0.46
78:Q2:88:CYS:HA	36:5:2653:C:OP2	233.65	0.46
79:Q3:32:GLN:HG2	79:Q3:70:THR:HB	1.96	0.46
2:S0:148:ASP:OD2	2:S0:165:ARG:NH1	2.49	0.46
3:S1:175:GLU:HG3	3:S1:193:ILE:HD12	1.97	0.46
7:S5:62:VAL:HG11	7:S5:134:VAL:HG13	3.08	0.46
10:S8:25:ARG:O	10:S8:28:GLU:HG2	2.47	0.46
20:C8:128:PHE:HD2	35:SM:61:ILE:HG22	1.80	0.46
34:SR:116:ASP:HB3	34:SR:121:MET:HB3	1.97	0.46
36:1:1019:G:H2'	36:1:1020:G:O4'	2.15	0.46
36:1:1033:U:H2'	36:1:1034:U:C6	2.51	0.46
36:1:1230:G:H2'	36:1:1231:A:C8	2.50	0.46
36:1:1274:A:H2'	36:1:1275:C:H6	1.79	0.46
36:1:1504:A:C5	36:1:1505:C:C5	3.04	0.46
36:1:2443:A:N6	36:1:2504:U:C4	2.83	0.46
36:1:284:A:OP2	78:Q2:41:ARG:NH1	2.48	0.46
36:1:32:U:O3'	51:M5:71:ARG:NH2	2.48	0.46
85:1:3912:OHX:N5	85:1:4012:OHX:N1	2.64	0.46
36:1:975:C:H2'	36:1:976:U:C6	2.51	0.46
1:2:1078:C:H2'	1:2:1079:U:H6	1.81	0.46
1:2:1488:G:H5'	1:2:1489:U:OP1	2.16	0.46
1:2:391:A:O2'	1:2:1730:A:H4'	2.16	0.46
1:2:83:G:OP2	85:2:2025:OHX:N5	2.49	0.46
1:2:328:A:H2'	1:2:329:G:O4'	2.16	0.46
1:2:552:G:C6	1:2:553:G:C6	3.04	0.46
1:2:780:A:H8	26:D4:8:ARG:HB2	1.80	0.46
36:5:1525:G:C6	36:5:1526:U:O4	2.69	0.46
36:5:1760:A:H5'	36:5:1761:C:OP2	2.14	0.46
36:5:1816:A:O2'	36:5:1817:G:OP1	2.22	0.46
36:5:271:C:H2'	36:5:272:G:O4'	2.15	0.46
36:5:2874:G:O2'	36:5:2875:U:C6	2.68	0.46
85:5:3844:OHX:N4	37:7:86:U:O2'	2.48	0.46
1:6:1541:G:C6	1:6:1542:G:N1	2.84	0.46
1:6:271:A:H5'	1:6:272:U:OP2	2.16	0.46
11:S9:133:HIS:CE1	1:6:512:A:O2'	447.71	0.46
1:6:848:C:H2'	1:6:849:C:C6	2.50	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:C5:83:MET:HE2	17:C5:83:MET:HB2	1.87	0.46
23:D1:1:MET:HE3	23:D1:10:GLU:HG3	1.98	0.46
24:D2:114:GLU:O	24:D2:117:ARG:HB3	2.71	0.46
39:L2:183:GLY:HA2	39:L2:186:PHE:HB3	1.97	0.46
39:L2:68:LYS:HD3	39:L2:70:ARG:HH21	2.50	0.46
47:M0:87:LEU:HA	47:M0:138:VAL:HG22	1.98	0.46
47:M0:52:LEU:HD23	47:M0:165:ILE:HG12	6.00	0.46
52:M6:34:VAL:HG11	52:M6:112:TYR:CE1	2.77	0.46
52:M6:62:THR:HG21	52:M6:68:ARG:HG3	1.98	0.46
54:M8:102:ALA:HA	54:M8:122:ILE:O	2.16	0.46
61:N5:38:LEU:O	61:N5:39:LYS:HB2	4.25	0.46
62:N6:32:SER:HA	62:N6:49:PRO:HA	1.98	0.46
62:N6:59:VAL:HG22	62:N6:103:LYS:O	6.39	0.46
66:O0:26:GLY:O	66:O0:30:THR:HG23	2.90	0.46
66:O0:42:ILE:HG13	66:O0:67:VAL:HG13	2.78	0.46
69:O3:13:HIS:HB3	69:O3:93:THR:O	2.16	0.46
73:O7:5:THR:HA	73:O7:8:PHE:CD2	2.50	0.46
74:O8:23:ALA:HB3	74:O8:73:LEU:HD21	1.96	0.46
77:Q1:2:ARG:NH1	77:Q1:4:LYS:HD2	3.45	0.46
78:Q2:3:ASN:HB2	78:Q2:92:GLU:OE2	2.15	0.46
2:S0:110:TYR:CE1	2:S0:111:ILE:HD13	2.50	0.46
2:S0:139:VAL:HG13	2:S0:141:ILE:HG13	2.27	0.46
4:S2:238:SER:C	4:S2:240:LEU:H	2.19	0.46
7:S5:61:TYR:HD1	7:S5:165:LEU:HD13	1.80	0.46
7:S5:68:ILE:HD13	7:S5:69:PHE:H	5.16	0.46
10:S8:36:THR:HB	10:S8:57:ALA:O	2.16	0.46
11:S9:53:ARG:NH2	11:S9:97:LEU:O	2.49	0.46
36:1:1035:G:H2'	36:1:1036:A:C8	2.50	0.46
36:1:1245:A:C3'	36:1:1246:G:H5''	2.45	0.46
36:1:147:U:H3	45:L8:159:PRO:HD2	1.80	0.46
36:1:1500:G:H2'	36:1:1501:U:O4'	2.16	0.46
36:1:1815:U:O2'	36:1:1816:A:P	2.74	0.46
36:1:3296:A:H2'	36:1:3297:U:O4'	2.16	0.46
36:1:600:G:H5''	36:1:600:G:H8	1.80	0.46
36:1:848:A:H2'	36:1:849:C:O4'	2.16	0.46
1:2:1142:A:H2'	1:2:1143:A:C8	2.50	0.46
1:2:1217:A:H5'	1:2:1217:A:H8	1.81	0.46
1:2:1225:U:H2'	1:2:1226:A:O4'	2.15	0.46
1:2:1308:G:C2	1:2:1309:C:C2	3.04	0.46
1:2:154:G:H5'	8:S6:108:VAL:HG21	1.97	0.46
1:2:1582:U:OP1	18:C6:135:ARG:HD2	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:17:C:H2'	1:2:18:C:C6	2.50	0.46
1:2:330:G:OP2	10:S8:172:ARG:NH1	2.49	0.46
38:4:10:A:H2'	38:4:11:C:C6	2.51	0.46
36:5:1301:A:OP1	36:5:1301:A:H8	1.98	0.46
41:L4:197:ARG:NH1	36:5:1381:A:OP1	109.40	0.46
36:5:1554:U:H4'	36:5:1555:U:OP1	2.14	0.46
36:5:238:A:O2'	36:5:239:G:OP1	2.32	0.46
48:M1:105:GLY:HA3	36:5:2674:A:H5''	333.32	0.46
36:5:3112:G:O6	36:5:3120:C:H5''	2.16	0.46
36:5:3340:G:H4'	36:5:3341:U:OP1	2.15	0.46
36:5:3054:U:OP2	85:5:3749:OHX:N6	2.49	0.46
85:5:3835:OHX:N4	38:8:112:U:O2	2.49	0.46
49:M3:59:ARG:HD3	36:5:73:C:O2	93.15	0.46
85:6:2116:OHX:N6	85:6:2152:OHX:N4	2.63	0.46
1:6:872:G:H2'	1:6:873:U:O4'	2.15	0.46
61:N5:56:ARG:HG2	38:8:134:G:OP1	78.80	0.46
15:C3:23:PRO:HD2	15:C3:26:PHE:HB3	1.97	0.46
21:C9:28:LEU:HB3	21:C9:29:GLU:H	3.75	0.46
21:C9:76:LEU:HB3	21:C9:101:ASN:ND2	4.03	0.46
29:D7:2:VAL:O	29:D7:3:LEU:HB2	2.77	0.46
39:L2:143:GLU:O	39:L2:145:LYS:HG2	2.14	0.46
41:L4:23:PRO:O	41:L4:24:ALA:HB3	2.30	0.46
41:L4:77:VAL:HB	41:L4:85:SER:HA	2.31	0.46
49:M3:44:ALA:O	49:M3:46:ILE:N	3.20	0.46
56:N0:148:LEU:HD12	56:N0:149:LYS:H	1.80	0.46
58:N2:33:TYR:CE2	58:N2:63:VAL:HG21	2.51	0.46
63:N7:81:LEU:HA	63:N7:81:LEU:HD22	3.06	0.46
70:O4:66:SER:HB2	70:O4:69:HIS:CE1	2.50	0.46
78:Q2:10:THR:HA	78:Q2:20:HIS:CD2	2.70	0.46
3:S1:104:ASP:HA	3:S1:214:LYS:HE2	1.97	0.46
4:S2:165:VAL:HG11	4:S2:210:THR:HA	2.50	0.46
1:2:138:A:O2'	8:S6:149:LYS:NZ	2.49	0.46
9:S7:11:GLN:HG3	9:S7:13:PRO:HD2	1.98	0.46
9:S7:56:LYS:O	9:S7:88:ARG:HA	2.15	0.46
9:S7:89:HIS:ND1	9:S7:168:SER:OG	2.32	0.46
11:S9:78:ARG:HG3	11:S9:79:ARG:N	2.35	0.46
34:SR:33:LEU:O	34:SR:44:SER:HA	2.16	0.46
36:1:1282:G:C6	36:1:1283:C:C4	3.03	0.46
36:1:1638:A:HO2'	36:1:1708:C:HO2'	1.50	0.46
36:1:1743:G:H2'	36:1:1744:G:C8	2.50	0.46
36:1:1861:G:OP2	85:1:3812:OHX:N1	2.48	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2727:A:H4'	36:1:2728:G:OP2	2.15	0.46
36:1:695:C:O2'	36:1:696:C:H5'	2.16	0.46
1:2:1194:A:OP2	22:D0:75:GLY:N	2.46	0.46
1:2:1228:G:OP2	14:C2:119:SER:OG	2.32	0.46
1:2:1672:G:H2'	1:2:1673:G:C8	2.51	0.46
1:2:1783:C:OP2	77:Q1:5:TRP:HD1	1.99	0.46
1:2:195:G:H2'	1:2:196:G:H5''	1.98	0.46
1:2:46:A:N6	1:2:433:C:H4'	2.31	0.46
1:2:516:G:H22	1:2:537:G:H1'	1.80	0.46
1:2:58:U:O4	85:2:2005:OHX:N1	2.49	0.46
37:3:8:G:OP1	42:L5:33:ARG:NE	2.38	0.46
36:5:2520:A:H2'	36:5:2521:U:H6	1.81	0.46
36:5:2801:A:O2'	36:5:2802:A:H2'	2.16	0.46
36:5:381:U:H2'	36:5:382:U:C6	2.50	0.46
1:6:1765:A:OP2	85:6:2088:OHX:N4	2.49	0.46
1:6:452:A:H3'	1:6:453:U:C5	2.50	0.46
1:6:542:A:H1'	1:6:543:C:H5'	1.96	0.46
13:C1:22:ASN:HA	13:C1:23:PRO:HD3	1.75	0.46
14:C2:32:LEU:O	14:C2:36:LEU:N	2.49	0.46
16:C4:117:ASP:OD1	16:C4:119:THR:HG23	2.15	0.46
19:C7:7:LYS:O	19:C7:11:ARG:HB2	3.22	0.46
21:C9:132:LEU:O	21:C9:136:ALA:N	2.88	0.46
1:2:1525:A:H5'	21:C9:93:HIS:HB2	1.97	0.46
23:D1:40:ASP:HB3	23:D1:46:ILE:HD11	1.96	0.46
24:D2:17:ALA:HB2	24:D2:25:VAL:HG13	1.97	0.46
27:D5:39:ALA:HB1	27:D5:71:ILE:N	2.30	0.46
27:D5:57:TYR:N	27:D5:57:TYR:CD2	3.17	0.46
28:D6:79:ILE:O	28:D6:84:VAL:HG11	2.16	0.46
31:D9:20:GLN:HB2	31:D9:25:SER:HA	2.99	0.46
39:L2:19:HIS:CD2	39:L2:19:HIS:N	3.04	0.46
42:L5:155:THR:HG22	42:L5:179:ARG:NH1	2.31	0.46
42:L5:219:PHE:HE1	42:L5:227:LEU:HD11	1.81	0.46
44:L7:125:GLU:OE1	44:L7:128:LYS:HD2	4.53	0.46
45:L8:106:LYS:HE2	45:L8:106:LYS:C	2.36	0.46
47:M0:95:HIS:C	47:M0:95:HIS:CD2	3.95	0.46
49:M3:91:ARG:NH2	49:M3:97:VAL:HB	2.76	0.46
50:M4:109:ARG:HD3	52:M6:199:TYR:CZ	2.50	0.46
53:M7:64:ASN:O	53:M7:67:ILE:HG12	3.95	0.46
54:M8:2:GLY:C	54:M8:3:ILE:HG13	2.35	0.46
55:M9:40:ALA:O	55:M9:44:LEU:HG	4.90	0.46
46:L9:1:MET:SD	56:N0:138:GLN:HG2	2.56	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:N6:74:TYR:CZ	62:N6:77:LYS:HD2	4.48	0.46
65:N9:43:HIS:CE1	65:N9:47:LEU:HD11	3.11	0.46
66:O0:18:ILE:HG12	66:O0:81:VAL:O	2.16	0.46
70:O4:8:ARG:NH2	70:O4:31:ARG:HH11	2.82	0.46
72:O6:45:ARG:NH2	72:O6:54:GLU:OE2	2.49	0.46
75:O9:24:PRO:HB2	75:O9:27:ILE:HG13	5.54	0.46
73:O7:18:LEU:HD12	75:O9:8:ARG:HD2	1.97	0.46
2:S0:205:ARG:C	2:S0:207:PRO:HA	4.85	0.46
3:S1:175:GLU:HG3	3:S1:193:ILE:HG23	1.96	0.46
3:S1:35:PRO:HB2	3:S1:36:SER:H	1.59	0.46
4:S2:153:SER:HB3	4:S2:154:LEU:H	2.47	0.46
4:S2:139:ILE:CD1	4:S2:191:ALA:HB1	2.46	0.46
5:S3:177:MET:SD	5:S3:182:LEU:HD11	2.56	0.46
6:S4:26:CYS:HB2	6:S4:27:TYR:CE2	5.23	0.46
6:S4:37:LYS:HB2	6:S4:40:GLU:HG2	1.96	0.46
7:S5:42:LEU:HB2	7:S5:46:TRP:O	2.15	0.46
7:S5:51:VAL:HG13	7:S5:131:GLN:HB2	2.57	0.46
8:S6:173:PRO:HB2	8:S6:174:LYS:H	1.56	0.46
8:S6:70:PRO:O	8:S6:98:ARG:NH1	2.59	0.46
8:S6:98:ARG:HD3	8:S6:99:GLY:N	2.31	0.46
10:S8:151:LYS:HA	10:S8:151:LYS:HD2	4.34	0.46
36:1:1062:A:H5''	36:1:1063:G:H5'	1.97	0.46
36:1:137:G:H2'	36:1:138:U:H6	1.81	0.46
36:1:147:U:OP2	45:L8:136:LEU:N	2.46	0.46
36:1:1577:G:H2'	36:1:1578:C:O4'	2.16	0.46
36:1:1701:C:H2'	36:1:1702:U:O4'	2.16	0.46
36:1:204:A:H2'	36:1:205:C:C6	2.51	0.46
36:1:2207:A:C6	36:1:2208:A:N7	2.84	0.46
36:1:2714:G:H4'	36:1:2715:A:H5''	1.98	0.46
36:1:3018:C:H2'	36:1:3019:U:O4'	2.15	0.46
85:1:3940:OHX:N6	85:1:4004:OHX:N3	2.63	0.46
36:1:641:C:H2'	36:1:642:U:O4'	2.16	0.46
1:2:460:A:H3'	1:2:461:G:H8	1.80	0.46
36:5:1103:A:H3'	36:5:1104:G:C5'	2.42	0.46
85:5:4049:OHX:N1	85:5:4054:OHX:N5	2.63	0.46
36:5:51:A:H2'	36:5:52:A:O4'	2.15	0.46
68:O2:37:GLY:HA2	36:5:640:U:OP1	183.52	0.46
1:6:1451:C:H2'	1:6:1452:U:H6	1.81	0.46
1:6:1491:U:H5'	1:6:1492:A:OP1	2.16	0.46
22:D0:88:LYS:NZ	1:6:1516:A:OP1	445.77	0.46
1:6:555:A:H2'	1:6:556:A:C8	2.51	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:88:U:H4'	1:6:171:A:O4'	2.16	0.46
1:6:982:U:O4	1:6:983:A:N6	2.49	0.46
42:L5:272:TYR:CZ	37:7:22:A:H1'	333.60	0.46
37:7:55:A:H2'	37:7:56:A:O4'	2.16	0.46
17:C5:20:VAL:HG13	17:C5:24:LYS:HD2	1.98	0.46
18:C6:31:VAL:HG13	18:C6:67:VAL:HB	1.97	0.46
7:S5:72:HIS:CE1	18:C6:79:TYR:HH	2.33	0.46
19:C7:21:TYR:OH	19:C7:62:GLN:OE1	2.32	0.46
20:C8:110:ARG:NH1	20:C8:114:GLU:HG3	2.31	0.46
20:C8:50:ALA:HB2	20:C8:72:ILE:HD12	2.08	0.46
21:C9:25:GLN:C	21:C9:27:LYS:H	3.07	0.46
23:D1:20:THR:O	24:D2:67:GLY:HA3	2.16	0.46
23:D1:36:VAL:HG11	23:D1:78:LEU:HD13	1.95	0.46
25:D3:108:GLY:HA2	1:6:600:U:OP2	358.33	0.46
26:D4:122:GLY:O	26:D4:125:LEU:N	2.68	0.46
28:D6:19:LYS:HE3	28:D6:19:LYS:HB2	1.76	0.46
39:L2:79:ASN:HD21	39:L2:114:SER:HB3	2.32	0.46
37:3:7:G:OP2	42:L5:22:ARG:NH2	2.48	0.46
48:M1:96:PHE:CE1	48:M1:160:VAL:HG23	4.53	0.46
49:M3:25:HIS:CD2	51:M5:200:TRP:CD2	3.30	0.46
50:M4:17:VAL:HG22	50:M4:36:VAL:O	2.15	0.46
51:M5:53:TYR:CD1	51:M5:61:ILE:HD11	2.50	0.46
58:N2:36:TYR:CD2	58:N2:83:TYR:HB2	3.49	0.46
63:N7:64:LYS:HD2	36:5:1812:G:O6	187.43	0.46
73:O7:25:ARG:HG3	75:O9:51:ILE:HD12	3.71	0.46
79:Q3:18:TYR:H	36:5:2131:A:H61	227.48	0.46
2:S0:120:LEU:HD21	2:S0:144:ILE:HD11	1.97	0.46
2:S0:87:LEU:HD13	2:S0:87:LEU:HA	2.67	0.46
3:S1:89:ASP:HB3	3:S1:223:PHE:CE2	2.47	0.46
4:S2:212:LYS:HB3	4:S2:212:LYS:HE2	1.76	0.46
4:S2:41:LEU:O	4:S2:45:VAL:HG23	2.79	0.46
5:S3:211:PRO:HG2	19:C7:19:ARG:HB2	1.99	0.46
6:S4:106:LYS:HB2	6:S4:108:ARG:HG3	1.98	0.46
8:S6:57:ASP:OD1	8:S6:72:ARG:NH1	3.19	0.46
9:S7:63:PRO:O	9:S7:64:VAL:HB	2.26	0.46
35:SM:43:ASP:HA	35:SM:44:PRO:HD3	2.42	0.46
34:SR:110:VAL:HA	34:SR:126:SER:HB2	1.97	0.46
36:1:1073:U:H1'	65:N9:50:THR:HB	1.98	0.46
36:1:1108:U:H2'	36:1:1109:U:C6	2.50	0.46
36:1:1176:C:H2'	36:1:1177:G:N2	2.31	0.46
36:1:1856:C:H2'	36:1:1857:C:H6	1.81	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2227:C:P	78:Q2:32:LYS:HZ1	2.38	0.46
36:1:2294:U:O2	36:1:2296:A:H8	1.98	0.46
36:1:2509:U:C4	36:1:2510:U:C4	3.04	0.46
36:1:898:U:H2'	36:1:899:U:O4'	2.16	0.46
1:2:1091:A:H5''	1:2:1091:A:N3	2.31	0.46
1:2:1101:G:O3'	24:D2:76:SER:OG	2.29	0.46
1:2:1570:A:H2'	1:2:1571:C:O4'	2.16	0.46
1:2:916:U:OP2	85:2:2103:OHX:N6	2.48	0.46
1:2:341:A:H2'	1:2:342:C:C6	2.51	0.46
1:2:61:A:H8	1:2:269:G:HO2'	1.64	0.46
36:5:1055:A:H4'	37:7:100:C:O2	2.16	0.46
36:5:2256:A:OP2	36:5:2256:A:H2'	2.15	0.46
36:5:255:A:H2'	36:5:256:G:C8	2.51	0.46
36:5:2587:U:H2'	36:5:2588:U:C6	2.51	0.46
36:5:2910:A:N1	85:5:3745:OHX:N4	2.64	0.46
36:5:2169:G:O6	85:5:3798:OHX:N1	2.49	0.46
85:5:4025:OHX:N1	85:5:4027:OHX:N4	2.64	0.46
36:5:707:U:H2'	36:5:708:G:H5''	1.97	0.46
49:M3:58:VAL:CG1	36:5:75:G:H5''	87.88	0.46
36:5:953:G:N2	36:5:1116:G:H2'	2.30	0.46
1:6:1000:C:N4	1:6:1003:A:OP2	2.41	0.46
1:6:194:U:H2'	1:6:194:U:O2	2.16	0.46
1:6:703:G:H1	1:6:735:C:H42	1.62	0.46
1:6:906:A:H2'	1:6:907:A:H8	1.81	0.46
13:C1:49:ILE:C	13:C1:51:GLY:H	2.19	0.46
13:C1:59:PRO:HG2	13:C1:60:PHE:CE2	2.51	0.46
17:C5:45:PHE:CE2	17:C5:84:ILE:HD12	2.51	0.46
21:C9:14:PHE:CE2	21:C9:63:ARG:HD3	2.51	0.46
25:D3:69:ARG:NH1	25:D3:116:ASP:OD1	2.48	0.46
26:D4:57:VAL:HB	26:D4:60:PHE:CE2	4.86	0.46
26:D4:57:VAL:HB	26:D4:60:PHE:HE2	4.12	0.46
26:D4:58:PHE:CE2	26:D4:72:PHE:HB3	2.98	0.46
27:D5:54:VAL:HG11	27:D5:83:LEU:HD13	2.81	0.46
28:D6:87:ARG:HD2	1:6:1797:A:C6	345.14	0.46
39:L2:179:LEU:HD12	39:L2:184:ARG:HB3	1.97	0.46
39:L2:45:VAL:HA	39:L2:61:VAL:HA	2.17	0.46
40:L3:128:LYS:HB3	40:L3:128:LYS:HZ3	1.81	0.46
41:L4:330:TYR:CZ	44:L7:49:ALA:HA	2.51	0.46
42:L5:227:LEU:O	42:L5:230:ASP:N	2.35	0.46
43:L6:129:GLU:HG2	43:L6:130:ILE:N	3.84	0.46
44:L7:154:GLY:N	44:L7:161:VAL:O	2.71	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:184:LEU:HD23	44:L7:184:LEU:HA	1.66	0.46
48:M1:91:LEU:O	48:M1:171:VAL:HA	4.33	0.46
51:M5:104:GLU:O	51:M5:108:ARG:HG3	2.68	0.46
51:M5:90:ASN:ND2	36:5:2424:A:OP1	167.01	0.46
67:O1:82:GLU:O	67:O1:82:GLU:HG2	2.15	0.46
69:O3:60:ARG:HB2	69:O3:60:ARG:HH21	1.81	0.46
51:M5:144:ARG:O	71:O5:99:GLN:HG2	2.16	0.46
77:Q1:6:ARG:O	77:Q1:10:THR:HG23	2.15	0.46
79:Q3:59:CYS:O	79:Q3:60:CYS:HB3	2.16	0.46
7:S5:146:THR:CG2	7:S5:157:ARG:HB3	2.68	0.46
9:S7:157:LYS:O	9:S7:159:VAL:HG13	2.15	0.46
9:S7:177:THR:OG1	9:S7:178:GLY:N	2.49	0.46
10:S8:83:TYR:HB3	10:S8:101:ILE:HB	1.98	0.46
36:1:900:G:H1'	36:1:1589:A:N6	2.30	0.46
36:1:1595:U:C2	36:1:1596:C:C5	3.04	0.46
36:1:1917:C:P	55:M9:85:ARG:HH12	2.39	0.46
36:1:303:G:C2	36:1:313:A:C2	3.04	0.46
36:1:541:U:H2'	36:1:542:G:C8	2.50	0.46
36:1:800:G:H2'	36:1:801:A:N7	2.30	0.46
1:2:158:U:O2'	1:2:160:C:OP2	2.24	0.46
1:2:239:C:H2'	1:2:240:U:C6	2.51	0.46
1:2:445:A:H61	1:2:462:G:H1'	1.80	0.46
36:5:1471:U:H2'	36:5:1472:U:C6	2.51	0.46
36:5:1796:G:H5''	36:5:1797:A:OP1	2.16	0.46
36:5:2584:G:H5'	36:5:2585:G:OP2	2.16	0.46
36:5:2752:U:O2	85:5:4062:OHX:N3	2.48	0.46
36:5:715:A:H4'	36:5:716:A:OP1	2.16	0.46
36:5:850:U:H2'	36:5:851:C:C6	2.51	0.46
12:C0:14:TYR:CE1	12:C0:18:GLU:HG3	2.55	0.46
17:C5:102:PHE:HZ	1:6:1241:G:H5''	385.97	0.46
17:C5:33:PHE:O	17:C5:36:LEU:HD23	2.16	0.46
21:C9:76:LEU:O	21:C9:80:TYR:HD2	2.23	0.46
23:D1:5:LYS:HG2	23:D1:5:LYS:H	1.59	0.46
23:D1:69:LEU:O	23:D1:73:ALA:N	2.87	0.46
25:D3:135:LEU:HA	25:D3:135:LEU:HD23	2.31	0.46
27:D5:40:VAL:HA	27:D5:75:LEU:HD13	3.77	0.46
32:E0:20:LYS:HD2	32:E0:20:LYS:HA	3.85	0.46
39:L2:79:ASN:HD22	39:L2:165:VAL:HG22	1.81	0.46
40:L3:116:ARG:HG2	40:L3:175:LYS:HA	1.97	0.46
36:1:3002:C:O2'	40:L3:180:GLU:OE2	2.25	0.46
42:L5:122:VAL:C	42:L5:124:GLU:H	3.61	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:203:TRP:CD1	44:L7:204:PRO:HD2	2.51	0.46
44:L7:76:TYR:HE2	44:L7:78:GLU:HG2	1.81	0.46
45:L8:147:LYS:O	45:L8:201:THR:HB	2.16	0.46
45:L8:72:PRO:HA	45:L8:73:PRO:HD3	1.77	0.46
36:1:1543:G:OP1	51:M5:35:VAL:HG23	2.16	0.46
60:N4:49:ILE:O	60:N4:52:THR:OG1	2.79	0.46
68:O2:31:ASN:N	68:O2:31:ASN:OD1	3.36	0.46
69:O3:10:LYS:O	69:O3:33:GLU:HB3	4.49	0.46
78:Q2:98:LYS:HD2	36:5:2656:A:H4'	251.69	0.46
7:S5:133:VAL:HG22	7:S5:198:LEU:HD13	2.37	0.46
36:1:1635:G:O6	63:N7:17:ARG:HB2	2.17	0.45
36:1:2418:G:H4'	36:1:2419:A:OP1	2.16	0.45
36:1:256:G:H2'	36:1:257:U:C6	2.50	0.45
36:1:2633:U:H2'	36:1:2634:U:O4'	2.16	0.45
36:1:2795:U:OP1	78:Q2:62:ALA:N	2.42	0.45
36:1:3013:U:H2'	36:1:3014:U:C6	2.52	0.45
36:1:1192:C:O2	85:1:3910:OHX:N3	2.48	0.45
36:1:863:C:H2'	36:1:864:G:O4'	2.16	0.45
85:2:2042:OHX:N6	85:2:2044:OHX:N2	2.64	0.45
1:2:840:U:O2'	1:2:841:U:H5''	2.16	0.45
37:3:46:A:OP1	42:L5:158:ARG:HG2	2.16	0.45
38:4:55:U:O2	85:4:222:OHX:N2	2.49	0.45
38:4:85:G:C8	38:4:85:G:H3'	2.51	0.45
36:5:1335:C:H2'	36:5:1336:U:C6	2.51	0.45
36:5:2220:A:N6	36:5:2221:G:C6	2.84	0.45
36:5:2341:A:O3'	36:5:3090:U:H4'	2.15	0.45
53:M7:139:TYR:CE2	36:5:2355:G:H4'	147.78	0.45
36:5:2922:G:H8	36:5:2922:G:O5'	1.99	0.45
36:5:297:G:N2	36:5:297:G:OP2	2.39	0.45
36:5:3276:G:O2'	36:5:3277:U:OP2	2.28	0.45
36:5:3246:G:O6	85:5:4051:OHX:N5	2.50	0.45
36:5:498:A:H2'	36:5:499:G:C8	2.51	0.45
73:O7:13:ASN:O	36:5:817:A:C4	140.17	0.45
6:S4:33:ALA:O	1:6:121:U:H1'	351.88	0.45
1:6:1592:A:C2	1:6:1605:G:C2	3.03	0.45
1:6:702:G:N7	85:6:2062:OHX:N4	2.64	0.45
13:C1:109:VAL:HA	13:C1:135:VAL:HG13	1.97	0.45
39:L2:125:ALA:O	39:L2:128:ARG:HD2	2.16	0.45
39:L2:15:ILE:HD12	39:L2:15:ILE:HA	4.73	0.45
42:L5:290:ILE:O	42:L5:293:LEU:N	5.04	0.45
44:L7:121:LYS:O	44:L7:121:LYS:HD3	2.22	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:L8:105:LYS:HG2	45:L8:109:LEU:HD23	4.84	0.45
46:L9:112:ILE:N	46:L9:126:VAL:O	2.64	0.45
46:L9:171:ASP:OD1	46:L9:173:ARG:HD3	2.16	0.45
48:M1:31:THR:HA	48:M1:34:SER:HB3	1.98	0.45
48:M1:94:ARG:C	48:M1:96:PHE:H	2.18	0.45
49:M3:3:ILE:HD12	64:N8:41:HIS:HB3	2.49	0.45
52:M6:23:VAL:HG13	52:M6:33:ILE:HG21	1.99	0.45
52:M6:39:GLU:N	52:M6:39:GLU:OE1	2.36	0.45
56:N0:86:GLY:O	56:N0:88:HIS:NE2	2.49	0.45
58:N2:97:SER:HB2	58:N2:103:TYR:CE1	2.73	0.45
59:N3:74:MET:CE	59:N3:102:ILE:HB	2.45	0.45
64:N8:133:LEU:O	64:N8:133:LEU:HD22	2.40	0.45
65:N9:23:LYS:HD3	65:N9:23:LYS:HA	2.82	0.45
67:O1:16:LEU:HD12	67:O1:16:LEU:HA	1.79	0.45
74:O8:66:ILE:HA	74:O8:69:LEU:HD23	1.98	0.45
78:Q2:22:GLN:O	78:Q2:75:VAL:HG22	4.22	0.45
3:S1:172:LEU:O	3:S1:176:VAL:HG23	2.16	0.45
4:S2:83:ILE:HA	4:S2:99:LYS:O	2.41	0.45
5:S3:113:LEU:HD23	5:S3:113:LEU:HA	1.70	0.45
6:S4:19:LEU:HD11	6:S4:108:ARG:HD3	3.34	0.45
7:S5:43:PHE:CG	7:S5:44:ASN:N	2.94	0.45
9:S7:46:ILE:HA	9:S7:59:ALA:O	2.71	0.45
11:S9:14:THR:HA	11:S9:15:PRO:HD2	1.59	0.45
36:1:1157:G:C2	36:1:1158:A:H1'	2.52	0.45
36:1:1170:A:H2'	36:1:1171:G:O4'	2.16	0.45
36:1:1863:G:N1	36:1:1866:C:OP2	2.46	0.45
36:1:2118:C:H2'	36:1:2119:A:O4'	2.15	0.45
36:1:3082:C:H2'	36:1:3083:G:H8	1.81	0.45
1:2:1237:G:H1	1:2:1248:C:H42	1.64	0.45
1:2:1360:A:O2'	21:C9:2:PRO:O	2.34	0.45
1:2:185:U:H5'	1:2:186:C:OP2	2.16	0.45
1:2:457:G:H2'	1:2:458:G:O4'	2.16	0.45
1:2:72:A:O2'	1:2:73:U:O4'	2.32	0.45
36:5:1213:G:N2	36:5:1293:U:C2	2.84	0.45
36:5:1773:C:H2'	36:5:1774:C:C6	2.51	0.45
36:5:2568:C:HO2'	36:5:2569:A:P	2.36	0.45
47:M0:8:CYS:SG	36:5:2828:G:H5'	270.27	0.45
36:5:3160:U:C2	36:5:3291:G:C2	3.04	0.45
1:6:1031:U:H4'	1:6:1032:G:OP2	2.15	0.45
1:6:1166:A:H2'	1:6:1167:G:O4'	2.17	0.45
1:6:1458:G:H5"	1:6:1459:C:OP2	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1564:U:H2'	1:6:1565:C:H6	1.79	0.45
42:L5:14:SER:OG	37:7:68:C:OP1	300.48	0.45
38:8:39:G:N3	38:8:105:A:C2	2.85	0.45
14:C2:75:VAL:HG21	14:C2:120:VAL:HG21	2.03	0.45
15:C3:94:LYS:HG2	15:C3:118:ILE:HD13	1.98	0.45
15:C3:52:VAL:HG22	15:C3:55:ARG:NH2	2.30	0.45
16:C4:86:THR:HG21	16:C4:90:ARG:HD2	1.97	0.45
18:C6:103:ASN:O	18:C6:107:LYS:HB2	2.78	0.45
18:C6:48:VAL:HG23	18:C6:82:ARG:HB3	1.98	0.45
20:C8:11:PHE:HB2	20:C8:60:GLU:HA	1.98	0.45
20:C8:82:PRO:HG3	21:C9:36:ILE:HD12	2.24	0.45
24:D2:27:ILE:HB	24:D2:61:ILE:HB	4.51	0.45
24:D2:67:GLY:O	24:D2:69:LEU:N	3.31	0.45
25:D3:5:LYS:HA	25:D3:6:PRO:HD2	1.74	0.45
39:L2:238:ILE:C	39:L2:240:ALA:H	2.90	0.45
41:L4:258:LEU:HA	41:L4:258:LEU:HD12	1.84	0.45
48:M1:96:PHE:CD1	48:M1:160:VAL:HG23	4.13	0.45
54:M8:34:THR:HG22	54:M8:49:LEU:HD21	1.99	0.45
56:N0:23:LYS:HD2	56:N0:25:PHE:CZ	2.52	0.45
61:N5:100:LYS:NZ	61:N5:107:VAL:H	2.14	0.45
62:N6:39:LEU:HA	62:N6:39:LEU:HD23	1.80	0.45
79:Q3:3:LYS:HE2	79:Q3:3:LYS:HB3	1.75	0.45
2:S0:106:SER:O	2:S0:115:PHE:HD2	2.29	0.45
2:S0:146:LEU:HB3	2:S0:162:CYS:SG	2.93	0.45
2:S0:153:SER:O	2:S0:156:VAL:HG22	2.47	0.45
2:S0:51:GLY:O	2:S0:55:GLU:HG3	2.17	0.45
5:S3:18:TYR:HE1	5:S3:37:VAL:HG23	1.82	0.45
7:S5:158:GLN:HG2	30:D8:66:LEU:HD11	1.98	0.45
7:S5:222:LYS:HG3	7:S5:225:ARG:NH2	2.31	0.45
7:S5:27:THR:O	7:S5:29:ILE:HG13	4.35	0.45
9:S7:126:LEU:HD13	9:S7:173:TYR:CD2	3.06	0.45
9:S7:154:LEU:HD21	9:S7:183:PHE:HD1	1.81	0.45
34:SR:41:THR:HG22	34:SR:62:LYS:HG2	1.97	0.45
36:1:1038:C:H4'	42:L5:5:LYS:NZ	2.32	0.45
36:1:129:U:H2'	36:1:130:A:C8	2.51	0.45
36:1:1723:A:OP1	55:M9:128:LYS:NZ	2.43	0.45
36:1:2152:A:H2'	36:1:2153:U:H6	1.81	0.45
36:1:2367:A:H2'	36:1:2368:A:C8	2.51	0.45
36:1:2655:U:H2'	78:Q2:3:ASN:O	2.16	0.45
36:1:2916:U:H1'	59:N3:44:SER:CB	2.46	0.45
36:1:3022:G:O2'	36:1:3031:G:O6	2.30	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:595:G:C8	36:1:609:G:C6	3.04	0.45
36:1:72:C:C2	36:1:74:G:H1'	2.50	0.45
36:1:872:U:H2'	36:1:873:C:C6	2.50	0.45
1:2:1201:G:H22	1:2:1600:A:H5''	1.82	0.45
1:2:288:A:H2'	1:2:289:U:C6	2.51	0.45
1:2:463:U:H2'	1:2:464:A:H8	1.80	0.45
1:2:843:U:H2'	1:2:844:A:H8	1.80	0.45
38:4:140:G:H2'	38:4:141:C:O4'	2.17	0.45
36:5:1152:G:OP2	36:5:1152:G:C8	2.69	0.45
36:5:174:C:H2'	36:5:175:C:O4'	2.16	0.45
36:5:1921:A:H2'	36:5:1922:A:H8	1.81	0.45
36:5:2768:U:H2'	36:5:2769:A:C8	2.51	0.45
36:5:2875:U:C2'	36:5:2876:C:O5'	2.64	0.45
85:5:3877:OHX:N5	85:5:3923:OHX:N2	2.64	0.45
1:6:1234:A:HO2'	1:6:1235:C:H6	1.60	0.45
1:6:1334:U:H2'	1:6:1335:U:C6	2.51	0.45
1:6:1398:U:H3'	1:6:1399:C:H4'	1.99	0.45
56:N0:52:LYS:HD3	37:7:77:G:N7	290.94	0.45
14:C2:40:GLY:O	14:C2:124:LYS:N	2.78	0.45
14:C2:64:SER:OG	14:C2:65:SER:N	2.49	0.45
15:C3:16:ILE:HA	15:C3:16:ILE:HD12	4.52	0.45
15:C3:16:ILE:HA	15:C3:17:PRO:HD3	1.76	0.45
1:2:887:A:C1'	16:C4:122:PRO:HB3	2.44	0.45
19:C7:8:THR:HG21	1:6:1330:G:N2	420.01	0.45
20:C8:15:LEU:HD11	20:C8:58:ALA:O	3.60	0.45
29:D7:73:LEU:H	29:D7:73:LEU:HD12	1.80	0.45
11:S9:123:HIS:CD2	32:E0:33:ARG:HE	3.16	0.45
39:L2:214:GLY:O	39:L2:215:ASN:HB2	4.60	0.45
40:L3:252:ILE:HG12	36:5:2393:G:H4'	213.81	0.45
42:L5:119:TYR:HE1	42:L5:134:ALA:HA	2.53	0.45
44:L7:159:GLN:O	44:L7:160:ARG:C	2.54	0.45
52:M6:108:ILE:HG12	52:M6:160:ARG:HD2	5.08	0.45
36:1:974:G:H5'	54:M8:16:ARG:HG3	1.98	0.45
41:L4:280:ILE:O	54:M8:29:LEU:HD11	2.21	0.45
54:M8:38:ARG:NH2	36:5:1347:U:H3'	189.96	0.45
55:M9:43:LYS:N	55:M9:43:LYS:HD2	4.71	0.45
61:N5:105:VAL:HG12	61:N5:106:ASP:N	2.32	0.45
61:N5:109:LYS:HB2	61:N5:109:LYS:HE3	1.72	0.45
38:4:24:G:OP2	62:N6:13:ARG:HD3	2.17	0.45
49:M3:64:LYS:HE3	64:N8:69:TRP:CD1	2.51	0.45
66:O0:15:ALA:O	66:O0:18:ILE:HG22	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:O2:21:HIS:HB3	68:O2:24:ARG:HB3	1.98	0.45
36:1:1145:G:H5'	68:O2:46:PHE:CE1	2.50	0.45
70:O4:51:LEU:HD23	70:O4:51:LEU:H	1.81	0.45
79:Q3:84:ARG:HA	79:Q3:87:ARG:NH1	2.51	0.45
79:Q3:8:VAL:HG23	79:Q3:9:GLY:H	2.71	0.45
2:S0:165:ARG:HD3	2:S0:165:ARG:HA	1.67	0.45
3:S1:81:PHE:HD2	3:S1:82:ARG:H	2.94	0.45
6:S4:21:ASP:OD2	6:S4:24:SER:OG	3.21	0.45
1:2:144:U:H5	8:S6:137:ARG:HH12	1.62	0.45
8:S6:141:ILE:HG21	8:S6:153:VAL:HG13	1.98	0.45
8:S6:216:LEU:HD23	8:S6:216:LEU:HA	2.60	0.45
11:S9:38:ASN:HB3	11:S9:40:LYS:H	1.81	0.45
35:SM:61:ILE:HG13	35:SM:61:ILE:H	1.56	0.45
36:1:1221:A:H3'	36:1:1222:G:H5''	1.98	0.45
36:1:1384:U:H2'	36:1:1385:C:C6	2.51	0.45
36:1:2146:C:OP1	39:L2:200:ARG:NH1	2.49	0.45
36:1:2207:A:C5	36:1:2208:A:N7	2.85	0.45
36:1:3147:G:OP1	85:1:3969:OHX:N6	2.50	0.45
85:1:3851:OHX:N1	85:1:3891:OHX:N2	2.65	0.45
36:1:971:G:H2'	36:1:972:A:O4'	2.16	0.45
1:2:698:U:O4	85:2:2056:OHX:N3	2.50	0.45
1:2:948:G:H2'	1:2:949:C:O4'	2.16	0.45
36:5:1234:G:H2'	36:5:1235:U:C5	2.52	0.45
36:5:1530:U:OP1	85:5:3835:OHX:N1	2.50	0.45
36:5:2702:A:H5'	36:5:2704:A:O4'	2.17	0.45
36:5:2710:C:H2'	36:5:2711:C:H6	1.82	0.45
36:5:3011:A:N3	36:5:3012:A:H1'	2.30	0.45
36:5:3341:U:H5''	36:5:3342:A:OP2	2.17	0.45
1:6:1491:U:H4'	1:6:1492:A:C5'	2.47	0.45
1:6:138:A:H61	1:6:266:A:H61	1.64	0.45
37:7:44:C:C2'	37:7:45:A:H5'	2.46	0.45
38:8:145:U:H2'	38:8:146:U:H6	1.81	0.45
13:C1:53:TYR:CG	13:C1:113:PRO:HG2	2.52	0.45
15:C3:34:ILE:O	15:C3:38:VAL:HG23	2.17	0.45
21:C9:16:ASN:HA	21:C9:56:LYS:HZ3	3.88	0.45
28:D6:73:TYR:HB3	28:D6:78:ALA:HB2	1.99	0.45
31:D9:21:CYS:C	31:D9:23:VAL:H	2.43	0.45
40:L3:152:LYS:HE3	40:L3:192:VAL:HG22	3.84	0.45
41:L4:222:VAL:HA	41:L4:223:PRO:HD3	1.76	0.45
42:L5:122:VAL:O	42:L5:124:GLU:N	4.27	0.45
50:M4:60:LEU:HA	50:M4:60:LEU:HD23	2.00	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:M5:38:ARG:HD2	51:M5:39:ALA:N	2.31	0.45
52:M6:106:GLU:HG2	52:M6:106:GLU:H	1.99	0.45
52:M6:18:ARG:O	52:M6:22:VAL:HG13	2.15	0.45
58:N2:19:VAL:O	58:N2:23:THR:OG1	2.30	0.45
59:N3:90:GLY:O	60:N4:16:GLY:HA2	2.65	0.45
62:N6:88:GLU:HA	62:N6:94:SER:HA	1.99	0.45
65:N9:58:LYS:HA	65:N9:58:LYS:HD2	1.65	0.45
71:O5:5:LYS:O	71:O5:9:LEU:HG	2.32	0.45
73:O7:19:CYS:HB3	73:O7:23:GLY:N	2.30	0.45
4:S2:168:ARG:HE	1:6:1098:U:P	384.92	0.45
5:S3:220:PRO:O	5:S3:221:SER:OG	2.49	0.45
5:S3:53:THR:HG21	5:S3:94:ARG:HB3	2.54	0.45
5:S3:64:ARG:O	5:S3:66:ILE:N	3.29	0.45
6:S4:194:THR:O	6:S4:195:ILE:HB	2.16	0.45
6:S4:211:LYS:NZ	6:S4:215:ASP:HA	2.32	0.45
7:S5:217:LEU:HA	7:S5:217:LEU:HD23	1.98	0.45
1:2:338:C:H1'	10:S8:5:ARG:HB3	1.99	0.45
11:S9:129:ILE:C	11:S9:131:GLN:H	2.76	0.45
34:SR:278:PHE:HB3	34:SR:281:TYR:CE1	2.51	0.45
36:1:1709:C:H2'	36:1:1710:C:C6	2.52	0.45
36:1:1953:G:N2	36:1:2093:A:N7	2.64	0.45
36:1:2601:A:H2'	36:1:2602:G:H8	1.82	0.45
36:1:3027:A:H2'	36:1:3028:G:O4'	2.17	0.45
36:1:3133:C:C2	36:1:3134:A:C8	3.04	0.45
36:1:3298:C:C2	36:1:3299:A:C8	3.04	0.45
36:1:3362:A:H2'	36:1:3363:U:O4'	2.16	0.45
36:1:2234:G:N7	85:1:3904:OHX:N1	2.65	0.45
36:1:532:A:H2	36:1:560:G:H22	1.64	0.45
1:2:1182:U:H4'	17:C5:124:THR:OG1	2.17	0.45
1:2:1225:U:O2	1:2:1230:A:H4'	2.16	0.45
1:2:1387:G:O2'	1:2:1410:A:N6	2.49	0.45
1:2:144:U:O2'	1:2:145:A:H8	2.00	0.45
1:2:51:A:OP2	85:2:2031:OHX:N3	2.50	0.45
1:2:488:G:OP1	1:2:488:G:H4'	2.17	0.45
1:2:776:G:N7	26:D4:11:LYS:HE2	2.30	0.45
37:3:58:C:H2'	37:3:59:U:H6	1.82	0.45
38:4:127:U:C2'	38:4:128:U:H5'	2.46	0.45
36:5:1686:U:O2	36:5:1688:U:H1'	2.17	0.45
36:5:1750:A:H4'	36:5:1751:G:H5'	1.98	0.45
36:5:1948:G:C2	36:5:1949:G:C8	3.04	0.45
36:5:2716:U:O4	36:5:2752:U:N3	2.50	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:287:G:H2'	36:5:288:C:H6	1.82	0.45
36:5:59:G:H4'	36:5:60:A:H4'	1.97	0.45
1:6:1491:U:H4'	1:6:1492:A:H5''	1.98	0.45
1:6:427:C:C4	1:6:428:A:N7	2.84	0.45
32:E0:13:LYS:NZ	1:6:566:C:O2	376.56	0.45
1:6:814:A:C8	1:6:816:G:C8	3.04	0.45
1:6:961:U:H2'	1:6:962:C:H6	1.77	0.45
14:C2:74:LEU:HD11	33:E1:106:TYR:HD1	1.80	0.45
14:C2:89:ILE:HD13	14:C2:91:VAL:HG23	1.98	0.45
19:C7:57:LEU:HA	19:C7:60:ARG:HG2	1.99	0.45
25:D3:55:GLU:HA	25:D3:98:GLU:OE2	3.20	0.45
27:D5:41:ILE:HG23	27:D5:42:LEU:N	2.32	0.45
28:D6:87:ARG:HD3	1:6:1796:C:OP1	346.05	0.45
30:D8:54:LEU:HD12	30:D8:55:VAL:H	4.61	0.45
39:L2:225:ILE:HG21	39:L2:234:LYS:HA	1.99	0.45
39:L2:82:VAL:HA	39:L2:86:GLN:OE1	2.42	0.45
40:L3:386:ASP:HB3	40:L3:387:LEU:H	1.55	0.45
41:L4:141:ARG:O	41:L4:144:LYS:NZ	9.61	0.45
42:L5:51:LEU:HB2	42:L5:144:VAL:CG1	2.45	0.45
43:L6:50:LYS:HG2	43:L6:74:VAL:CG2	2.52	0.45
45:L8:231:LYS:HB2	45:L8:231:LYS:HE3	4.51	0.45
46:L9:113:GLU:HA	46:L9:124:ARG:O	2.64	0.45
47:M0:61:SER:HB2	47:M0:63:GLU:HG2	1.98	0.45
48:M1:89:TYR:O	48:M1:169:ALA:HB1	2.16	0.45
51:M5:140:LYS:O	51:M5:144:ARG:HG3	2.20	0.45
52:M6:43:ILE:HD11	52:M6:138:LEU:HD13	2.40	0.45
68:O2:64:LYS:O	68:O2:65:PHE:HB2	2.16	0.45
74:O8:56:ILE:HG13	74:O8:65:LEU:HD12	1.99	0.45
75:O9:5:LYS:HB3	75:O9:5:LYS:HE2	4.91	0.45
79:Q3:2:ALA:HB2	36:5:853:G:N7	252.46	0.45
2:S0:82:GLY:O	2:S0:86:VAL:HG22	2.17	0.45
3:S1:181:LEU:HB2	3:S1:182:ALA:H	1.65	0.45
4:S2:150:GLN:HA	4:S2:151:PRO:HD3	1.75	0.45
4:S2:168:ARG:NH1	4:S2:170:ILE:HD11	2.31	0.45
5:S3:133:GLY:HA3	5:S3:156:PHE:O	2.15	0.45
7:S5:94:THR:O	7:S5:97:LEU:N	2.50	0.45
9:S7:91:ILE:HD12	9:S7:92:PHE:H	2.05	0.45
11:S9:150:LEU:HB3	11:S9:151:ASP:H	1.60	0.45
5:S3:144:ALA:HB1	35:SM:101:ASP:OD2	2.16	0.45
35:SM:85:SER:O	35:SM:87:THR:N	2.50	0.45
36:1:1018:G:H2'	36:1:1019:G:O4'	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1304:A:OP1	85:1:4026:OHX:N5	2.49	0.45
36:1:156:G:O2'	36:1:157:A:H4'	2.16	0.45
36:1:1719:G:H4'	36:1:1732:U:H4'	1.98	0.45
36:1:2208:A:N1	85:1:3904:OHX:N4	2.64	0.45
36:1:697:A:O2'	36:1:698:U:H5'	2.16	0.45
1:2:538:A:H8	1:2:543:C:N4	2.15	0.45
1:2:912:U:H4'	1:2:913:G:O5'	2.17	0.45
36:5:890:C:O2'	36:5:2324:A:N3	2.47	0.45
36:5:2662:G:H2'	36:5:2663:G:C8	2.52	0.45
36:5:3160:U:H2'	36:5:3161:C:C6	2.51	0.45
36:5:3164:C:C2	36:5:3165:A:C8	3.05	0.45
40:L3:315:GLY:HA2	36:5:3379:C:H4'	214.69	0.45
1:6:1490:C:C4	1:6:1492:A:N7	2.85	0.45
1:6:1491:U:H4'	1:6:1492:A:O5'	2.17	0.45
1:6:1657:U:O2'	1:6:1658:G:OP2	2.32	0.45
1:6:1756[A]:A:H2'	1:6:1757:G:H8	1.81	0.45
1:6:1298:U:OP1	85:6:2013:OHX:N3	2.50	0.45
1:6:393:C:H2'	1:6:394:C:C6	2.51	0.45
1:6:542:A:H1'	1:6:543:C:P	2.57	0.45
1:6:624:G:H2'	1:6:625:C:C6	2.51	0.45
9:S7:148:LYS:NZ	1:6:641:G:H5'	386.88	0.45
1:6:717:C:O2	1:6:722:G:N2	2.49	0.45
1:6:778:G:N2	1:6:780:A:H5'	2.31	0.45
1:6:950:C:H2'	1:6:951:A:C8	2.51	0.45
42:L5:50:ARG:NH2	37:7:6:C:O2'	271.22	0.45
10:S8:188:GLU:HG2	13:C1:13:PHE:CD2	2.51	0.45
13:C1:46:LYS:HA	13:C1:46:LYS:HD2	2.79	0.45
13:C1:46:LYS:O	13:C1:50:GLU:HG2	4.04	0.45
14:C2:31:VAL:HG23	14:C2:132:GLU:HB2	1.99	0.45
15:C3:151:ASN:O	85:C3:201:OHX:N3	3.00	0.45
16:C4:107:ARG:O	16:C4:109:GLY:N	2.97	0.45
16:C4:44:GLY:O	16:C4:59:ALA:HB1	2.81	0.45
20:C8:118:LYS:O	20:C8:120:ARG:NH2	4.84	0.45
20:C8:136:GLN:HE21	20:C8:136:GLN:HB3	1.52	0.45
22:D0:43:LYS:HA	22:D0:43:LYS:HD2	1.80	0.45
24:D2:36:LYS:HB2	24:D2:110:ILE:HD12	1.99	0.45
26:D4:15:ASN:N	26:D4:20:ARG:O	2.92	0.45
1:2:1530:C:OP1	27:D5:95:HIS:HB2	2.17	0.45
32:E0:13:LYS:HB2	1:6:567:A:H4'	371.26	0.45
40:L3:169:THR:HG21	40:L3:171:LEU:HD12	1.98	0.45
41:L4:291:ASN:ND2	36:5:1350:A:OP1	178.45	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:40:HIS:HB3	42:L5:43:LYS:HD2	1.98	0.45
41:L4:355:PHE:CE2	44:L7:70:LYS:HD2	2.51	0.45
49:M3:164:GLU:O	49:M3:166:ALA:N	2.46	0.45
51:M5:73:ARG:O	51:M5:75:VAL:N	3.84	0.45
36:1:3180:A:C6	52:M6:114:LYS:HD2	2.52	0.45
52:M6:131:PRO:HG3	56:N0:154:HIS:CD2	2.51	0.45
62:N6:34:PRO:HA	62:N6:47:ALA:CB	2.47	0.45
64:N8:7:LYS:HA	64:N8:7:LYS:HD3	1.74	0.45
65:N9:32:LEU:O	65:N9:35:VAL:HB	2.17	0.45
66:O0:13:LYS:NZ	66:O0:99:ASP:OD2	2.37	0.45
68:O2:77:ALA:HB3	68:O2:81:ASP:OD2	2.20	0.45
69:O3:89:LEU:HA	69:O3:90:PRO:HD3	2.01	0.45
79:Q3:33:GLN:HB3	79:Q3:69:TYR:HB3	1.98	0.45
3:S1:113:MET:SD	3:S1:209:ASN:ND2	3.96	0.45
4:S2:67:GLN:OE1	4:S2:67:GLN:N	3.05	0.45
6:S4:130:GLN:HB2	6:S4:138:TYR:CE2	2.51	0.45
7:S5:166:ARG:HA	7:S5:169:ASN:HB2	2.71	0.45
7:S5:57:SER:O	7:S5:59:VAL:HG23	2.16	0.45
8:S6:7:TYR:HD2	8:S6:8:PRO:HD2	1.82	0.45
9:S7:96:ARG:CZ	9:S7:124:LYS:HB3	2.47	0.45
9:S7:78:THR:HG23	9:S7:92:PHE:CE1	3.57	0.45
10:S8:10:LYS:HD3	1:6:338:C:H5''	289.92	0.45
11:S9:28:LEU:HD23	11:S9:28:LEU:HA	2.05	0.45
11:S9:91:LYS:O	11:S9:92:LYS:HG2	2.16	0.45
34:SR:222:LEU:O	34:SR:231:MET:HB2	2.17	0.45
34:SR:84:SER:HB3	34:SR:86:ASP:OD1	2.17	0.45
36:1:1404:G:N1	36:1:1407:A:OP2	2.49	0.45
36:1:2186:U:OP2	39:L2:200:ARG:NH2	2.46	0.45
36:1:2688:U:OP1	42:L5:12:TYR:OH	2.19	0.45
36:1:2736:A:O2'	57:N1:68:THR:HG21	2.17	0.45
36:1:3159:C:H2'	36:1:3160:U:C6	2.52	0.45
1:2:1065:A:H4'	3:S1:205:PHE:CE2	2.51	0.45
1:2:1277:G:H2'	1:2:1278:G:O4'	2.17	0.45
1:2:95:G:C2	1:2:96:G:H1'	2.52	0.45
36:5:1109:U:H2'	36:5:1110:U:O4'	2.17	0.45
36:5:1222:G:H1'	36:5:1285:G:N2	2.32	0.45
44:L7:151:ARG:NH2	36:5:1334:U:O2'	241.43	0.45
36:5:1502:C:OP1	85:5:3756:OHX:N3	2.50	0.45
36:5:1596:C:H2'	36:5:1597:C:C6	2.51	0.45
36:5:1818:U:H2'	36:5:1819:U:H6	1.80	0.45
36:5:1506:A:H1'	36:5:1848:G:O6	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:188:U:H1'	36:5:208:C:C1'	2.45	0.45
36:5:289:A:H2'	36:5:290:G:H8	1.82	0.45
36:5:65:A:O5'	36:5:65:A:H8	1.99	0.45
1:6:1274:C:O2	1:6:1274:C:H2'	2.17	0.45
1:6:1390:U:HO2'	1:6:1391:A:H8	1.65	0.45
1:6:1553:G:N2	1:6:1555:A:H3'	2.32	0.45
1:6:219:A:N6	1:6:843:U:C2	2.85	0.45
1:6:228:G:H1	1:6:236:A:H61	1.65	0.45
1:6:107:C:N4	1:6:307:G:H1	2.13	0.45
1:6:884:A:H2'	1:6:885:G:C8	2.52	0.45
14:C2:38:HIS:O	14:C2:125:ASN:ND2	2.50	0.45
16:C4:105:LEU:HD23	16:C4:105:LEU:HA	4.48	0.45
20:C8:119:ILE:O	20:C8:120:ARG:HB2	2.17	0.45
22:D0:63:LEU:HD22	31:D9:34:TYR:CZ	2.52	0.45
26:D4:20:ARG:NH1	26:D4:22:GLN:OE1	2.65	0.45
27:D5:60:VAL:HA	27:D5:64:VAL:HG11	2.22	0.45
31:D9:19:ARG:NH2	1:6:1597:A:OP1	407.33	0.45
39:L2:227:ARG:HB2	39:L2:239:ALA:HB2	3.43	0.45
41:L4:170:LYS:HE3	41:L4:175:HIS:ND1	5.24	0.45
41:L4:91:GLY:O	41:L4:97:GLY:HA3	2.16	0.45
42:L5:55:PHE:CZ	42:L5:158:ARG:HB3	4.43	0.45
42:L5:183:TRP:CZ2	42:L5:188:GLU:HA	2.52	0.45
46:L9:90:MET:HB2	46:L9:144:ILE:HG22	2.20	0.45
47:M0:9:TYR:O	47:M0:59:GLN:NE2	2.50	0.45
48:M1:38:GLU:O	48:M1:40:LEU:N	3.20	0.45
48:M1:59:ILE:HB	48:M1:65:ILE:HD11	1.99	0.45
52:M6:162:VAL:O	52:M6:166:GLU:HG3	4.88	0.45
54:M8:64:VAL:HG22	54:M8:96:PHE:CZ	2.52	0.45
55:M9:160:GLU:O	55:M9:164:LEU:N	2.43	0.45
57:N1:95:HIS:O	57:N1:96:ILE:HD12	2.17	0.45
59:N3:39:VAL:HG22	59:N3:52:ALA:HB2	1.99	0.45
64:N8:103:ASP:OD1	64:N8:106:ALA:HB2	2.17	0.45
36:1:1375:G:O6	64:N8:10:LYS:HE2	2.17	0.45
72:O6:21:THR:O	72:O6:21:THR:OG1	2.34	0.45
3:S1:137:ILE:HD12	3:S1:172:LEU:HD22	1.98	0.45
3:S1:193:ILE:O	3:S1:197:ILE:HG12	2.16	0.45
3:S1:103:MET:O	3:S1:214:LYS:HA	2.71	0.45
3:S1:48:VAL:HG11	3:S1:57:ALA:HB1	1.99	0.45
6:S4:180:LEU:HB3	6:S4:228:ILE:HG13	1.98	0.45
7:S5:69:PHE:HD2	18:C6:50:GLU:HG3	1.82	0.45
8:S6:158:ILE:HD12	8:S6:158:ILE:HA	1.60	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:S8:87:ASN:ND2	10:S8:89:GLU:HB2	2.31	0.45
36:1:1121:U:H2'	36:1:1122:U:C6	2.52	0.45
36:1:1230:G:H2'	36:1:1231:A:H8	1.82	0.45
36:1:1741:A:C2	36:1:1742:U:C4	3.05	0.45
36:1:1750:A:H4'	36:1:1751:G:H5'	1.99	0.45
36:1:2376:G:C6	36:1:2377:G:O6	2.70	0.45
36:1:1580:A:H5'	36:1:2522:G:C5	2.52	0.45
36:1:2772:C:H4'	36:1:2773:C:C5'	2.46	0.45
36:1:3084:C:H2'	36:1:3085:G:O4'	2.17	0.45
85:1:3927:OHX:N1	85:1:3975:OHX:N2	2.65	0.45
1:2:1122:G:N2	1:2:1125:A:OP2	2.47	0.45
1:2:1512:G:C6	1:2:1513:G:C6	3.05	0.45
1:2:1535:U:O2'	1:2:1536:G:H5''	2.16	0.45
1:2:267:U:OP1	8:S6:183:ARG:NE	2.47	0.45
1:2:47:A:N7	1:2:98:U:O2'	2.47	0.45
36:5:1255:C:H2'	36:5:1256:G:H8	1.82	0.45
36:5:1717:U:H2'	36:5:1718:G:C8	2.51	0.45
36:5:2807:U:O3'	36:5:2808:A:H3'	2.17	0.45
36:5:3362:A:C2	36:5:3363:U:C2	3.05	0.45
36:5:529:A:H2'	36:5:530:G:O4'	2.16	0.45
1:6:1026:A:N7	1:6:1772:C:O2'	2.31	0.45
1:6:93:A:C6	1:6:398:G:C6	3.05	0.45
1:6:624:G:H2'	1:6:625:C:H6	1.82	0.45
12:C0:16:PHE:O	12:C0:88:UNK:HA	2.17	0.45
14:C2:35:ALA:HA	14:C2:126:TRP:HA	2.46	0.45
25:D3:64:PRO:O	85:6:2120:OHX:N1	360.58	0.45
1:2:1530:C:P	27:D5:95:HIS:HB2	2.57	0.45
33:E1:86:THR:O	33:E1:87:THR:OG1	2.65	0.45
41:L4:145:ILE:O	41:L4:145:ILE:HG13	2.16	0.45
41:L4:330:TYR:O	41:L4:333:VAL:HG13	2.70	0.45
41:L4:332:LYS:HD2	36:5:599:C:OP1	272.54	0.45
42:L5:178:ASN:HA	42:L5:183:TRP:CD1	3.53	0.45
42:L5:218:ARG:NH2	42:L5:221:GLU:OE1	5.04	0.45
45:L8:81:THR:OG1	45:L8:82:LEU:N	2.80	0.45
46:L9:172:ILE:O	46:L9:172:ILE:HG12	2.16	0.45
47:M0:12:GLN:HA	47:M0:59:GLN:OE1	2.55	0.45
48:M1:109:HIS:HA	48:M1:112:LEU:HD21	1.99	0.45
52:M6:117:ARG:HG2	52:M6:117:ARG:H	2.11	0.45
56:N0:148:LEU:HD12	56:N0:149:LYS:N	2.32	0.45
56:N0:26:ARG:HB3	57:N1:150:THR:HB	4.79	0.45
57:N1:42:ILE:HG12	57:N1:96:ILE:HD11	1.99	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:N2:99:LYS:HB2	58:N2:99:LYS:HE3	1.81	0.45
59:N3:75:PRO:HG2	59:N3:105:PRO:HD3	1.98	0.45
60:N4:6:ASP:OD1	60:N4:31:PHE:HA	2.17	0.45
49:M3:157:ARG:HH12	64:N8:146:GLU:CD	2.42	0.45
64:N8:7:LYS:O	64:N8:10:LYS:N	2.48	0.45
65:N9:23:LYS:HA	65:N9:23:LYS:HD2	1.48	0.45
65:N9:25:LYS:HZ2	65:N9:25:LYS:HB2	1.82	0.45
69:O3:59:VAL:HG23	69:O3:60:ARG:H	1.82	0.45
72:O6:53:TYR:CD1	72:O6:76:ARG:HG2	2.51	0.45
79:Q3:38:ASP:OD1	79:Q3:45:LYS:HB3	2.17	0.45
2:S0:118:PRO:HG2	2:S0:141:ILE:HD13	1.99	0.45
5:S3:167:PHE:CE1	5:S3:192:PRO:HB3	2.97	0.45
6:S4:102:VAL:HG23	6:S4:182:TYR:HE1	1.81	0.45
7:S5:57:SER:HA	30:D8:53:ILE:HB	2.51	0.45
9:S7:103:SER:HB3	9:S7:106:SER:HB3	1.99	0.45
36:1:1103:A:H2'	36:1:1103:A:N3	2.32	0.45
36:1:155:G:H5''	36:1:156:G:N7	2.32	0.45
36:1:1561:G:O2'	36:1:1562:C:OP2	2.34	0.45
36:1:1573:G:C2	36:1:1574:C:H1'	2.52	0.45
36:1:2616:C:C2'	36:1:2617:U:H5'	2.47	0.45
36:1:2916:U:C2'	36:1:2917:G:H5'	2.47	0.45
36:1:1502:C:OP2	85:1:3739:OHX:N6	2.50	0.45
36:1:621:A:O2'	85:1:4015:OHX:N1	2.50	0.45
1:2:1096:C:O2'	1:2:1097:U:OP2	2.32	0.45
1:2:1290:U:H2'	1:2:1291:G:C8	2.51	0.45
1:2:1451:C:H2'	1:2:1452:U:H6	1.81	0.45
1:2:153:G:H2'	1:2:154:G:H8	1.80	0.45
1:2:1687:U:H1'	1:2:1715:G:N2	2.32	0.45
1:2:1767:G:OP1	1:2:1770:U:H4'	2.17	0.45
1:2:179:A:C6	1:2:180:A:C5	3.05	0.45
1:2:294:C:C2	1:2:295:A:C8	3.04	0.45
1:2:87:C:H1'	1:2:168:A:N1	2.32	0.45
37:3:28:C:H1'	37:3:55:A:H61	1.82	0.45
36:1:345:G:O2'	38:4:25:G:N3	2.49	0.45
57:N1:127:GLN:HG2	36:5:1095:U:H3	261.24	0.45
56:N0:90:MET:CG	36:5:1213:G:H4'	317.85	0.45
36:5:209:A:H4'	36:5:211:A:C8	2.52	0.45
36:5:3167:A:H2'	36:5:3168:A:O4'	2.17	0.45
36:5:3354:U:H4'	36:5:3355:U:H5''	1.97	0.45
4:S2:168:ARG:HD2	1:6:1097:U:H1'	381.99	0.45
1:6:223:U:H2'	1:6:224:C:C6	2.52	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:546:U:H2'	1:6:547:U:H6	1.82	0.45
37:7:79:A:OP2	85:7:213:OHX:N3	2.50	0.45
38:8:141:C:H2'	38:8:142:C:C6	2.51	0.45
17:C5:68:PRO:HG2	17:C5:71:GLU:OE2	3.10	0.45
22:D0:53:LYS:HA	22:D0:53:LYS:HD3	2.68	0.45
1:2:434:G:H5'	25:D3:78:LYS:HB3	1.99	0.45
25:D3:92:CYS:O	25:D3:95:PHE:HB2	2.53	0.45
28:D6:40:ALA:HB3	28:D6:69:ASN:HB3	4.51	0.45
32:E0:17:GLN:OE1	1:6:563:U:H4'	383.62	0.45
33:E1:121:CYS:HB3	33:E1:130:VAL:HG11	5.04	0.45
39:L2:229:ALA:HB3	39:L2:234:LYS:HG2	1.97	0.45
36:1:3139:A:OP2	40:L3:28:ARG:NH2	2.50	0.45
41:L4:126:ILE:HG13	41:L4:238:LEU:HD13	1.99	0.45
42:L5:79:TYR:HB2	42:L5:81:HIS:CE1	2.52	0.45
43:L6:19:LYS:O	43:L6:21:THR:N	2.85	0.45
43:L6:55:LEU:HD12	43:L6:64:LEU:HD13	2.61	0.45
44:L7:127:LEU:O	44:L7:130:ILE:HG22	6.00	0.45
44:L7:92:ILE:HA	44:L7:92:ILE:HD12	1.66	0.45
49:M3:189:GLU:HA	49:M3:192:GLU:HB2	4.97	0.45
53:M7:181:ARG:HG2	53:M7:182:ILE:N	2.31	0.45
56:N0:155:ARG:HH21	56:N0:172:TYR:H	5.77	0.45
68:O2:64:LYS:HG2	68:O2:65:PHE:CD2	3.01	0.45
74:O8:16:ARG:O	74:O8:18:ALA:N	3.03	0.45
78:Q2:12:CYS:HB3	78:Q2:17:CYS:HB3	2.21	0.45
3:S1:193:ILE:H	3:S1:193:ILE:HG12	1.52	0.45
3:S1:214:LYS:HE3	3:S1:214:LYS:HB2	1.70	0.45
4:S2:58:LEU:HD11	4:S2:236:PRO:HG2	3.86	0.45
5:S3:113:LEU:HD21	5:S3:117:ARG:NH1	2.31	0.45
6:S4:62:LYS:CE	6:S4:66:MET:HE3	6.45	0.45
1:2:177:U:H1'	8:S6:191:ARG:NH1	2.32	0.45
9:S7:141:ARG:HH21	9:S7:143:LEU:HD21	3.75	0.45
10:S8:191:PHE:CE2	13:C1:8:GLN:HG3	2.51	0.45
36:1:1171:G:OP2	44:L7:218:ARG:HD2	2.17	0.45
36:1:1613:A:OP2	74:O8:46:ARG:NH2	2.50	0.45
36:1:1730:G:C6	66:O0:26:GLY:HA3	2.52	0.45
36:1:1777:U:H4'	36:1:2099:A:O2'	2.17	0.45
36:1:1488:G:H5''	36:1:1838:G:O6	2.16	0.45
36:1:1913:A:N3	36:1:2120:A:H2'	2.32	0.45
36:1:2298:U:O4	36:1:2923:U:H5	2.00	0.45
36:1:2798:C:H5''	36:1:2799:A:OP1	2.17	0.45
36:1:279:U:H2'	36:1:280:U:C6	2.52	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3110:C:O3'	46:L9:155:SER:HB2	2.18	0.45
36:1:2107:A:C2	36:1:3344:A:H8	2.35	0.45
36:1:355:A:N1	41:L4:82:THR:OG1	2.46	0.45
36:1:595:G:H1	36:1:609:G:H5''	1.81	0.45
36:1:913:A:H2	36:1:2134:G:N3	2.15	0.45
1:2:102:U:O4	1:2:360:A:H2'	2.17	0.45
1:2:1274:C:C5	35:SM:95:SER:HA	2.52	0.45
1:2:197:A:H61	10:S8:138:ASN:ND2	2.15	0.45
36:5:1072:G:H2'	36:5:1073:U:H6	1.81	0.45
36:5:21:G:OP2	38:8:36:G:N2	2.50	0.45
36:5:264:G:N7	85:5:4066:OHX:N2	2.64	0.45
36:5:3386:G:H2'	36:5:3387:U:H6	1.82	0.45
68:O2:26:HIS:HB2	36:5:655:C:H5''	160.16	0.45
1:6:1263:G:H2'	1:6:1264:G:O4'	2.17	0.45
1:6:1757:G:O6	85:6:2009:OHX:N4	2.50	0.45
1:6:475:A:H2'	1:6:476:U:O4'	2.17	0.45
1:6:733:A:H2'	1:6:734:A:O4'	2.17	0.45
1:6:919:A:H2'	1:6:920:U:C6	2.52	0.45
38:8:145:U:H2'	38:8:146:U:C6	2.52	0.45
19:C7:104:ASN:ND2	19:C7:105:GLN:OE1	4.55	0.45
19:C7:6:THR:OG1	19:C7:7:LYS:N	2.50	0.45
21:C9:33:TYR:CD1	21:C9:34:VAL:N	3.34	0.45
21:C9:74:GLY:O	21:C9:77:ASN:N	3.15	0.45
25:D3:133:LEU:HD22	25:D3:133:LEU:HA	2.68	0.45
27:D5:82:HIS:O	27:D5:85:LYS:HB3	2.17	0.45
1:2:1199:G:C5	31:D9:40:ARG:HD3	2.52	0.45
31:D9:45:GLU:CD	1:6:1433:G:H22	411.00	0.45
32:E0:14:VAL:HG23	1:6:567:A:H1'	376.74	0.45
33:E1:86:THR:HG23	33:E1:87:THR:H	4.52	0.45
39:L2:136:ILE:HG13	39:L2:148:VAL:HG12	1.99	0.45
40:L3:17:LEU:HD11	40:L3:233:TRP:HH2	1.82	0.45
41:L4:64:SER:OG	41:L4:73:ARG:O	2.31	0.45
46:L9:172:ILE:HG12	76:Q0:90:ASN:HB3	1.98	0.45
47:M0:99:ILE:HG22	47:M0:123:HIS:HB2	1.99	0.45
49:M3:60:ALA:HB3	49:M3:65:TYR:O	2.17	0.45
51:M5:42:PRO:HG3	51:M5:61:ILE:HG13	1.98	0.45
36:1:291:C:H5''	51:M5:68:ARG:HH12	1.82	0.45
53:M7:115:SER:N	53:M7:149:VAL:O	2.43	0.45
36:1:1720:U:P	55:M9:110:ARG:HH12	2.40	0.45
55:M9:94:VAL:O	55:M9:97:ARG:HB2	2.58	0.45
60:N4:6:ASP:HB3	60:N4:10:GLY:H	1.82	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:N4:63:ILE:HB	60:N4:64:THR:H	3.89	0.45
61:N5:61:LYS:NZ	38:8:59:A:O2'	70.42	0.45
49:M3:2:ALA:N	64:N8:33:GLY:O	4.84	0.45
67:O1:41:LYS:O	67:O1:45:GLY:HA2	2.86	0.45
74:O8:64:LYS:HG3	74:O8:65:LEU:N	5.07	0.45
75:O9:5:LYS:HD3	75:O9:13:MET:HE1	2.63	0.45
75:O9:6:SER:HB3	75:O9:9:ILE:HG12	4.85	0.45
2:S0:74:VAL:HG23	2:S0:118:PRO:HB3	1.99	0.45
3:S1:24:PHE:HA	3:S1:27:LYS:HG3	3.55	0.45
5:S3:141:LYS:HE3	5:S3:179:GLN:HG3	1.98	0.45
5:S3:142:LEU:O	5:S3:144:ALA:N	2.50	0.45
5:S3:168:ILE:HG23	5:S3:189:MET:SD	2.57	0.45
6:S4:36:HIS:NE2	6:S4:88:ASP:OD2	2.50	0.45
7:S5:120:ILE:O	7:S5:124:LEU:HD12	2.17	0.45
7:S5:93:LEU:HD23	7:S5:172:ILE:HG23	2.20	0.45
7:S5:30:PRO:HB2	7:S5:33:VAL:HG21	1.99	0.45
11:S9:170:GLY:O	11:S9:174:ARG:HG3	2.94	0.45
11:S9:53:ARG:O	11:S9:57:ARG:HG3	2.17	0.45
34:SR:255:ALA:HA	34:SR:260:ILE:HA	3.01	0.45
36:1:1454:A:H5''	36:1:1455:U:H5'	1.98	0.44
36:1:1468:A:N6	36:1:1508:C:O2	2.50	0.44
36:1:283:G:O6	36:1:304:G:H1'	2.17	0.44
36:1:608:A:H5''	36:1:609:G:OP2	2.17	0.44
36:1:661:G:N7	64:N8:19:LYS:HE3	2.33	0.44
1:2:130:C:O2'	1:2:131:C:OP1	2.32	0.44
1:2:1484:G:H2'	1:2:1485:C:C6	2.52	0.44
85:2:2054:OHX:N3	85:2:2068:OHX:N1	2.65	0.44
1:2:611:U:OP1	25:D3:19:ARG:NH2	2.49	0.44
85:1:3854:OHX:N2	85:3:217:OHX:N1	2.64	0.44
37:3:5:G:O3'	42:L5:54:ARG:HG3	2.16	0.44
36:5:1815:U:O2'	36:5:1816:A:P	2.75	0.44
36:5:2271:A:N7	36:5:2272:G:C6	2.85	0.44
36:5:3159:C:H2'	36:5:3160:U:H6	1.82	0.44
36:5:1213:G:O6	85:5:3891:OHX:N3	2.50	0.44
49:M3:59:ARG:HG2	36:5:73:C:O2'	94.54	0.44
36:5:873:C:H5''	36:5:874:U:H4'	1.99	0.44
36:5:912:G:H1'	36:5:917:A:C2	2.52	0.44
39:L2:247:ARG:NE	1:6:1012:U:O2'	253.69	0.44
1:6:1752:U:OP2	85:6:2024:OHX:N1	2.51	0.44
1:6:791:A:C2'	1:6:792:U:H5'	2.46	0.44
13:C1:76:VAL:HG12	13:C1:85:VAL:O	2.27	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:C7:46:LEU:O	19:C7:50:ILE:HG13	2.30	0.44
5:S3:40:ARG:HG2	22:D0:110:PRO:HB3	2.06	0.44
25:D3:41:SER:HA	25:D3:42:PRO:HD3	1.91	0.44
26:D4:104:SER:HB3	26:D4:107:GLN:NE2	2.31	0.44
26:D4:116:LYS:HE2	26:D4:116:LYS:HB3	1.71	0.44
25:D3:90:ASP:OD2	32:E0:12:GLY:HA2	2.56	0.44
40:L3:147:GLU:OE2	40:L3:150:ARG:NH1	2.64	0.44
40:L3:47:LEU:HD23	40:L3:164:THR:HG23	2.25	0.44
41:L4:193:LYS:HE3	41:L4:193:LYS:HB2	1.99	0.44
41:L4:214:GLY:O	41:L4:218:ALA:HB2	3.07	0.44
42:L5:183:TRP:CH2	42:L5:188:GLU:HA	2.53	0.44
41:L4:316:ASN:HD21	44:L7:150:LYS:HD2	1.81	0.44
45:L8:240:ASN:HA	45:L8:243:GLN:HB2	1.99	0.44
45:L8:246:MET:HA	45:L8:249:ARG:HB3	1.99	0.44
48:M1:20:ASN:HB3	48:M1:126:ASP:HB2	2.74	0.44
49:M3:149:GLN:HA	49:M3:150:PRO:HD2	2.22	0.44
50:M4:125:LYS:HE2	50:M4:125:LYS:HB3	1.70	0.44
50:M4:32:LEU:HD11	50:M4:94:TRP:CD1	2.52	0.44
52:M6:37:ARG:HH12	36:5:3183:A:P	286.32	0.44
55:M9:106:LEU:HD13	55:M9:138:LEU:HD11	2.31	0.44
56:N0:131:LYS:O	56:N0:134:ASP:HB2	2.30	0.44
56:N0:96:ASP:OD1	56:N0:97:VAL:HG23	2.17	0.44
36:1:992:A:H5''	57:N1:43:LYS:HD3	1.98	0.44
63:N7:110:ALA:O	63:N7:114:VAL:HG23	2.50	0.44
64:N8:2:PRO:HD3	36:5:792:G:H5''	138.37	0.44
66:O0:66:LYS:HD2	66:O0:66:LYS:H	3.36	0.44
71:O5:119:LYS:HD2	71:O5:119:LYS:HA	4.22	0.44
71:O5:70:TYR:O	71:O5:73:LYS:HG3	2.17	0.44
5:S3:16:VAL:HG11	31:D9:22:ARG:CZ	3.16	0.44
6:S4:230:GLU:O	6:S4:233:LYS:N	2.36	0.44
9:S7:111:LYS:O	9:S7:112:ARG:HB2	2.17	0.44
9:S7:56:LYS:HB2	9:S7:88:ARG:HH11	2.48	0.44
11:S9:176:ASN:HD22	1:6:511:A:P	467.19	0.44
34:SR:23:LEU:HG	34:SR:291:SER:HB2	2.96	0.44
36:1:191:U:H2'	36:1:192:C:H6	1.81	0.44
36:1:2123:G:N7	85:1:3967:OHX:N2	2.65	0.44
36:1:2229:A:H2'	36:1:2230:C:C6	2.52	0.44
36:1:2424:A:H2'	36:1:2425:G:O4'	2.18	0.44
36:1:3152:U:O2'	36:1:3153:U:H5'	2.17	0.44
36:1:3215:A:C5'	50:M4:121:MET:HE1	2.47	0.44
85:1:3993:OHX:N5	85:1:4015:OHX:N6	2.64	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1765:A:H5'	1:2:1767:G:N7	2.32	0.44
36:5:1205:A:H4'	36:5:2835:U:O2'	2.17	0.44
36:5:1536:G:O6	85:5:3766:OHX:N2	2.50	0.44
36:5:2567:C:N4	36:5:2568:C:H41	2.13	0.44
1:6:1175:U:H4'	1:6:1196:A:C6	2.52	0.44
1:6:1258:U:H5	1:6:1259:U:C2	2.34	0.44
1:6:1752:U:H2'	1:6:1753:A:C8	2.52	0.44
16:C4:103:ARG:HH12	28:D6:48:ALA:CB	4.53	0.44
16:C4:47:LYS:HE2	16:C4:62:LEU:O	5.38	0.44
20:C8:42:TYR:HA	20:C8:85:PHE:HE1	1.82	0.44
2:S0:158:VAL:H	23:D1:69:LEU:HD12	1.82	0.44
23:D1:70:ASN:N	23:D1:70:ASN:OD1	2.79	0.44
2:S0:59:LEU:HD12	23:D1:79:LEU:HD11	5.23	0.44
14:C2:73:LYS:NZ	33:E1:108:VAL:O	2.50	0.44
39:L2:211:HIS:CD2	39:L2:219:ILE:HG23	3.02	0.44
41:L4:205:PRO:HB3	41:L4:247:PHE:CD2	2.53	0.44
43:L6:159:LEU:HD23	43:L6:159:LEU:HA	2.15	0.44
43:L6:172:HIS:CD2	43:L6:173:MET:HG2	2.52	0.44
45:L8:230:LYS:HE3	45:L8:230:LYS:HB2	4.43	0.44
85:1:3772:OHX:N5	45:L8:54:GLU:OE2	2.50	0.44
47:M0:60:LEU:HD11	47:M0:135:ILE:HD13	3.51	0.44
50:M4:22:LEU:HD13	50:M4:32:LEU:HD23	1.99	0.44
41:L4:281:ILE:HG13	54:M8:125:ASP:HB3	1.99	0.44
56:N0:23:LYS:HB3	56:N0:25:PHE:CE2	2.53	0.44
57:N1:38:ASP:OD1	57:N1:38:ASP:N	2.49	0.44
58:N2:37:LEU:O	58:N2:41:ILE:HG13	2.31	0.44
59:N3:13:ILE:HD11	59:N3:81:GLN:OE1	3.28	0.44
60:N4:52:THR:O	60:N4:56:ARG:HG3	2.17	0.44
62:N6:23:PRO:O	62:N6:27:ARG:HG3	2.67	0.44
62:N6:57:LEU:HD13	62:N6:59:VAL:HG12	4.93	0.44
63:N7:3:LYS:O	63:N7:5:LEU:N	3.96	0.44
67:O1:10:ARG:HG2	67:O1:108:VAL:HG22	2.00	0.44
68:O2:16:LYS:O	68:O2:17:PHE:HB2	4.62	0.44
78:Q2:26:THR:OG1	78:Q2:71:ARG:HD3	2.93	0.44
39:L2:112:ILE:HD11	79:Q3:79:VAL:HG11	4.68	0.44
2:S0:41:ARG:HH11	2:S0:45:VAL:HG21	3.38	0.44
3:S1:157:GLN:O	3:S1:161:ILE:HG13	4.39	0.44
4:S2:169:LEU:HD23	4:S2:198:THR:HG22	2.80	0.44
5:S3:7:LYS:NZ	22:D0:27:THR:HG21	2.33	0.44
7:S5:149:VAL:HG12	7:S5:156:ARG:O	3.93	0.44
9:S7:41:LEU:HD13	9:S7:70:PHE:CD1	2.52	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:S7:98:ILE:HD13	9:S7:118:LEU:HA	3.42	0.44
34:SR:120:SER:HA	34:SR:136:ILE:HD12	1.99	0.44
36:1:1639:C:H5'	70:O4:52:GLN:HG3	1.98	0.44
36:1:1872:C:H2'	36:1:1873:U:H6	1.82	0.44
36:1:2184:U:C2	36:1:2185:G:C8	3.06	0.44
36:1:90:C:H4'	36:1:282:G:H5''	1.98	0.44
36:1:3121:U:C4	36:1:3124:G:O6	2.70	0.44
85:1:3944:OHX:N2	85:1:4007:OHX:N4	2.65	0.44
36:1:73:C:N3	49:M3:59:ARG:NH1	2.66	0.44
1:2:1011:G:HO2'	1:2:1012:U:H6	1.63	0.44
38:4:59:A:H5''	38:4:61:A:C8	2.52	0.44
36:5:1765:U:H2'	36:5:1766:G:O4'	2.17	0.44
36:5:2158:A:H5'	36:5:2160:G:O4'	2.17	0.44
36:5:2514:U:C6	36:5:2514:U:OP1	2.67	0.44
36:5:3279:A:N6	36:5:3280:U:C4	2.85	0.44
36:5:3358:U:H2'	36:5:3359:A:H8	1.81	0.44
36:5:5:G:C2	38:8:155:A:C2	3.05	0.44
36:5:602:A:H2'	36:5:603:A:C8	2.51	0.44
1:6:1478:G:C4	1:6:1479:A:C8	3.05	0.44
31:D9:34:TYR:OH	1:6:1487:A:OP1	420.02	0.44
1:6:521:A:H2'	1:6:522:U:O4'	2.18	0.44
1:6:721:U:O2'	1:6:722:G:O4'	2.33	0.44
11:S9:149:ARG:HD2	1:6:765:G:O6	430.77	0.44
15:C3:128:TYR:OH	1:6:964:U:OP1	324.83	0.44
37:7:92:A:C5	37:7:93:C:H1'	2.51	0.44
13:C1:94:ILE:HG12	25:D3:16:ARG:HD3	4.86	0.44
15:C3:92:ILE:O	15:C3:96:VAL:HG23	2.17	0.44
18:C6:30:LYS:NZ	1:6:1366:U:H5'	425.33	0.44
25:D3:128:SER:O	25:D3:143:PRO:HG2	2.17	0.44
26:D4:8:ARG:HG3	26:D4:8:ARG:H	1.64	0.44
28:D6:31:PRO:O	28:D6:34:LYS:N	3.09	0.44
11:S9:36:LEU:O	32:E0:33:ARG:HG3	2.16	0.44
39:L2:224:THR:HA	39:L2:237:LEU:O	2.43	0.44
39:L2:243:THR:OG1	36:5:2244:A:H5''	228.55	0.44
40:L3:274:SER:OG	36:5:3139:A:OP1	228.45	0.44
40:L3:300:ARG:CZ	40:L3:300:ARG:HB3	4.72	0.44
42:L5:51:LEU:HB3	42:L5:146:LEU:HA	1.99	0.44
44:L7:233:GLU:C	44:L7:235:PHE:H	2.60	0.44
45:L8:54:GLU:O	45:L8:58:VAL:HG23	2.23	0.44
48:M1:37:LEU:O	48:M1:41:SER:OG	2.21	0.44
57:N1:87:LYS:HD3	36:5:2723:U:OP1	217.51	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:N2:20:SER:O	58:N2:23:THR:N	2.50	0.44
63:N7:8:GLY:HA2	63:N7:25:ILE:O	4.30	0.44
64:N8:3:SER:O	64:N8:6:THR:HB	2.18	0.44
64:N8:71:PRO:HB2	64:N8:109:TYR:HD2	1.83	0.44
71:O5:78:LYS:HA	71:O5:81:ARG:CD	2.41	0.44
72:O6:74:LYS:HG2	72:O6:74:LYS:O	2.16	0.44
74:O8:4:GLU:OE1	36:5:1746:U:O2'	155.23	0.44
2:S0:88:LYS:HB3	2:S0:202:TYR:CZ	2.80	0.44
3:S1:70:LEU:HD13	3:S1:79:HIS:CG	3.81	0.44
4:S2:108:ASN:HA	4:S2:141:ARG:NH1	2.32	0.44
6:S4:166:SER:O	6:S4:168:LYS:HG2	5.00	0.44
6:S4:45:ILE:HB	6:S4:80:THR:HG23	2.79	0.44
10:S8:57:ALA:HB2	10:S8:177:GLY:HA2	2.03	0.44
36:1:1221:A:H3'	36:1:1222:G:C5'	2.47	0.44
36:1:1573:G:H2'	36:1:1573:G:N3	2.33	0.44
36:1:1621:A:H2'	36:1:1622:U:C6	2.53	0.44
36:1:3215:A:C4	36:1:3259:U:C2	3.06	0.44
36:1:3254:G:H2'	36:1:3255:U:O4'	2.17	0.44
36:1:3306:U:H2'	36:1:3307:A:H5''	2.00	0.44
36:1:591:G:H4'	36:1:592:A:OP1	2.16	0.44
36:1:817:A:O2'	73:O7:11:ARG:HG2	2.17	0.44
1:2:1146:G:C6	1:2:1147:A:C6	3.06	0.44
1:2:1231:U:C4	1:2:1255:G:N2	2.85	0.44
1:2:449:C:H2'	1:2:450:U:C6	2.52	0.44
1:2:916:U:HO2'	16:C4:27:PHE:HZ	1.63	0.44
38:4:121:U:H2'	38:4:122:U:C6	2.52	0.44
38:4:146:U:H2'	38:4:147:U:C6	2.52	0.44
36:5:172:G:N3	36:5:172:G:H2'	2.33	0.44
36:5:1132:C:H4'	36:5:2865:U:O2'	2.18	0.44
51:M5:172:ARG:NH1	36:5:29:C:O3'	106.27	0.44
40:L3:130:PHE:CE1	36:5:3149:G:H4'	221.49	0.44
36:5:3284:G:OP1	85:5:4019:OHX:N3	2.49	0.44
36:5:29:C:H4'	36:5:62:A:H4'	1.99	0.44
36:5:703:G:O2'	36:5:787:G:H4'	2.17	0.44
1:6:108:A:H2'	1:6:109:G:C8	2.52	0.44
22:D0:72:ASN:O	1:6:1198:G:H4'	386.15	0.44
1:6:1344:A:O2'	1:6:1345:A:OP1	2.31	0.44
1:6:1540:G:C6	1:6:1541:G:C4	3.05	0.44
1:6:1282:U:OP1	85:6:2099:OHX:N4	2.50	0.44
85:6:2116:OHX:N6	85:6:2152:OHX:N3	2.65	0.44
1:6:546:U:H2'	1:6:547:U:C6	2.53	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:7:48:U:O2	37:7:50:U:C4	2.70	0.44
12:C0:10:LYS:NZ	12:C0:36:ASP:HB3	2.94	0.44
14:C2:81:ASP:HA	14:C2:82:PRO:HD3	1.73	0.44
20:C8:46:VAL:HG11	20:C8:73:MET:HE3	5.73	0.44
21:C9:49:ASP:O	21:C9:51:GLU:N	2.51	0.44
1:2:1076:A:H4'	28:D6:13:LYS:HD3	1.98	0.44
39:L2:204:MET:HE3	39:L2:208:ASP:CB	2.46	0.44
41:L4:250:TRP:CH2	41:L4:258:LEU:HD21	2.53	0.44
41:L4:321:LYS:HB3	41:L4:321:LYS:HE2	3.45	0.44
41:L4:326:ARG:O	44:L7:41:ARG:NH2	4.39	0.44
47:M0:116:ARG:HH21	36:5:2618:G:P	229.38	0.44
47:M0:191:LYS:O	47:M0:197:VAL:HG22	2.47	0.44
51:M5:44:ARG:HH22	36:5:269:G:P	125.27	0.44
56:N0:16:THR:HG23	56:N0:19:VAL:HB	1.99	0.44
49:M3:94:GLY:HA3	71:O5:116:TYR:OH	2.17	0.44
74:O8:4:GLU:HG2	74:O8:5:ILE:N	2.31	0.44
7:S5:114:ILE:O	7:S5:117:THR:N	3.38	0.44
7:S5:149:VAL:HG13	7:S5:156:ARG:HD2	2.00	0.44
8:S6:29:ASP:N	8:S6:29:ASP:OD2	3.98	0.44
11:S9:122:VAL:O	11:S9:125:ALA:HB3	2.17	0.44
11:S9:40:LYS:HA	11:S9:43:TYR:HB2	2.16	0.44
5:S3:222:VAL:HG11	34:SR:229:LYS:HA	2.08	0.44
36:1:1118:C:O2	36:1:1154:A:H2	2.00	0.44
36:1:1103:A:N6	36:1:1363:A:N3	2.66	0.44
36:1:1915:A:H4'	55:M9:83:GLY:O	2.17	0.44
36:1:2197:C:C2	36:1:2241:U:C4	3.06	0.44
36:1:2412:G:H2'	36:1:2413:A:C8	2.52	0.44
36:1:770:G:N7	85:1:3955:OHX:N3	2.65	0.44
36:1:415:G:H2'	36:1:416:A:C8	2.53	0.44
1:2:1266:U:H2'	1:2:1267:G:C8	2.52	0.44
1:2:1475:A:H2'	1:2:1476:C:O4'	2.16	0.44
1:2:1731:A:H5''	1:2:1732:A:OP2	2.18	0.44
1:2:226:A:H2'	1:2:227:U:H5'	1.99	0.44
1:2:237:C:HO2'	1:2:238:U:H5	1.64	0.44
1:2:263:C:H4'	1:2:292:U:H5'	1.98	0.44
1:2:505:A:H3'	1:2:506:A:H5''	1.99	0.44
1:2:505:A:N6	1:2:507:U:O4	2.44	0.44
1:2:5:U:H2'	1:2:6:G:H8	1.81	0.44
1:2:639:U:H1'	1:2:640:U:C5	2.53	0.44
36:5:151:A:HO2'	36:5:152:U:P	2.38	0.44
44:L7:60:ARG:NH2	36:5:516:A:O3'	304.33	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1116:A:H62	1:6:1130:G:N2	2.15	0.44
1:6:1573:A:H4'	1:6:1574:G:H5'	2.00	0.44
1:6:15:U:C4	1:6:16:G:C5	3.06	0.44
1:6:1684:U:H2'	1:6:1685:G:C8	2.52	0.44
1:6:1756[A]:A:H8	1:6:1756[A]:A:O5'	2.00	0.44
1:6:525:A:C6	1:6:526:A:C6	3.06	0.44
1:6:567:A:N1	1:6:583:C:H1'	2.33	0.44
1:6:37:U:O2'	1:6:770:A:N1	2.34	0.44
36:5:59:G:H2'	38:8:33:A:O2'	2.16	0.44
18:C6:47:LYS:HZ1	18:C6:114:ARG:HG2	1.82	0.44
25:D3:108:GLY:O	25:D3:109:ARG:HG2	2.17	0.44
7:S5:123:VAL:O	27:D5:58:ARG:HD2	2.17	0.44
36:1:3003:G:P	40:L3:26:ARG:HH22	2.39	0.44
42:L5:235:SER:O	42:L5:239:ILE:HG13	2.18	0.44
43:L6:7:PRO:HG2	43:L6:10:TYR:CZ	2.52	0.44
44:L7:116:PHE:HB2	44:L7:199:ASN:OD1	2.68	0.44
44:L7:131:GLU:HG3	44:L7:230:GLY:HA2	4.47	0.44
36:1:2828:G:OP1	47:M0:7:ARG:NH1	2.50	0.44
50:M4:36:VAL:HG12	50:M4:75:GLY:HA2	2.28	0.44
52:M6:27:LEU:HD11	52:M6:102:LEU:HB2	2.34	0.44
53:M7:30:ARG:HD3	53:M7:30:ARG:C	2.40	0.44
56:N0:8:GLN:HG3	56:N0:8:GLN:O	2.16	0.44
57:N1:50:LYS:HB3	57:N1:92:ARG:HH11	1.83	0.44
59:N3:38:ALA:HB3	59:N3:59:MET:HB2	2.31	0.44
62:N6:120:GLN:CD	62:N6:126:LEU:HA	8.10	0.44
63:N7:12:VAL:HG22	63:N7:22:LYS:HG2	1.99	0.44
64:N8:73:LEU:HD23	64:N8:112:ILE:HD12	1.98	0.44
66:O0:75:ASN:HB2	66:O0:76:GLU:OE1	2.23	0.44
68:O2:55:ILE:HA	68:O2:55:ILE:HD12	1.88	0.44
71:O5:32:LYS:HG2	71:O5:44:ILE:HD11	1.99	0.44
71:O5:90:ARG:HG2	71:O5:90:ARG:H	1.45	0.44
75:O9:5:LYS:HD3	75:O9:13:MET:CE	2.79	0.44
78:Q2:12:CYS:CB	78:Q2:17:CYS:HB3	2.80	0.44
78:Q2:73:GLU:OE1	78:Q2:80:ARG:NH1	2.73	0.44
79:Q3:11:THR:C	79:Q3:13:LYS:H	2.20	0.44
2:S0:160:ILE:HA	2:S0:161:PRO:HD2	1.85	0.44
3:S1:129:THR:OG1	3:S1:130:SER:N	3.34	0.44
3:S1:32:ILE:HG22	3:S1:43:VAL:HB	2.00	0.44
3:S1:58:SER:O	3:S1:62:LYS:HD3	2.74	0.44
5:S3:162:GLN:N	5:S3:163:PRO:HD2	2.51	0.44
7:S5:87:CYS:HA	7:S5:88:PRO:HD2	1.84	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:132:ARG:HD2	1:6:150:U:H1'	327.34	0.44
10:S8:152:ILE:HB	10:S8:153:GLU:H	1.52	0.44
11:S9:117:GLY:O	11:S9:119:ALA:N	2.54	0.44
11:S9:129:ILE:HA	11:S9:134:ILE:HD11	3.19	0.44
1:2:767:U:H5	11:S9:142:ASN:OD1	2.00	0.44
11:S9:147:MET:O	11:S9:149:ARG:NH1	5.02	0.44
11:S9:64:GLU:O	11:S9:65:LYS:HB2	2.51	0.44
35:SM:57:ASN:O	35:SM:61:ILE:HG22	5.58	0.44
17:C5:127:ARG:NH2	35:SM:66:ALA:HB2	4.13	0.44
36:1:1808:G:OP2	63:N7:133:LYS:NZ	2.51	0.44
36:1:2513:U:H4'	36:1:2514:U:OP1	2.17	0.44
36:1:2538:U:O2'	36:1:2541:U:N3	2.35	0.44
36:1:2586:G:N7	45:L8:241:LYS:HB2	2.32	0.44
36:1:2874:G:H4'	87:1:3401:ANM:C6	2.48	0.44
36:1:3103:A:OP2	85:1:4018:OHX:N1	2.51	0.44
36:1:3282:U:H2'	36:1:3283:U:C6	2.52	0.44
36:1:341:G:N7	41:L4:195:ARG:NH2	2.57	0.44
36:1:2310:U:OP2	85:1:3997:OHX:N4	2.50	0.44
85:1:3836:OHX:N3	85:1:4008:OHX:N6	2.65	0.44
36:1:915:A:C5	36:1:917:A:H1'	2.52	0.44
1:2:1556:A:O2'	1:2:1560:U:OP2	2.28	0.44
1:2:542:A:H5''	1:2:544:A:C8	2.53	0.44
1:2:595:G:H2'	1:2:596:C:C6	2.53	0.44
1:2:736:C:C2'	1:2:737:A:H5'	2.47	0.44
37:3:13:A:C8	37:3:13:A:H5''	2.53	0.44
37:3:36:C:O2'	37:3:37:G:H5'	2.18	0.44
38:4:79:A:O3'	38:4:80:A:H4'	2.18	0.44
36:5:1463:U:H2'	36:5:1464:G:O4'	2.18	0.44
36:5:1696:A:H2'	36:5:1697:A:C8	2.53	0.44
36:5:1831:U:H2'	36:5:1832:C:H6	1.83	0.44
36:5:258:G:H2'	36:5:259:C:C6	2.52	0.44
51:M5:12:ARG:HG2	36:5:268:A:C5	127.99	0.44
36:5:32:U:H2'	36:5:33:G:O4'	2.16	0.44
36:5:781:G:N7	85:5:3836:OHX:N4	2.66	0.44
36:5:92:G:OP2	36:5:93:C:H5''	2.16	0.44
1:6:1050:G:O6	85:6:2157:OHX:N4	2.50	0.44
20:C8:138:THR:OG1	1:6:1459:C:OP2	350.35	0.44
85:6:2087:OHX:N2	85:6:2112:OHX:N4	2.66	0.44
1:6:231:U:H2'	1:6:232:U:H5''	2.00	0.44
38:8:6:U:H2'	38:8:7:U:C6	2.53	0.44
18:C6:47:LYS:NZ	18:C6:114:ARG:HG2	2.33	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:D1:74:GLN:OE1	23:D1:83:TRP:N	4.08	0.44
25:D3:60:GLU:HB3	32:E0:3:LYS:O	2.18	0.44
33:E1:99:LYS:O	33:E1:100:LEU:HB2	2.17	0.44
39:L2:113:VAL:HG12	39:L2:166:ILE:HA	2.62	0.44
41:L4:230:VAL:O	41:L4:232:SER:N	3.04	0.44
41:L4:316:ASN:HA	41:L4:317:PRO:HD2	2.40	0.44
47:M0:53:VAL:O	47:M0:164:LYS:N	2.61	0.44
48:M1:91:LEU:HB3	48:M1:92:ARG:H	1.62	0.44
53:M7:24:VAL:HG12	53:M7:86:LYS:HG2	2.00	0.44
64:N8:90:TYR:CG	64:N8:100:PRO:HG3	2.52	0.44
64:N8:91:LEU:HD13	64:N8:91:LEU:HA	1.83	0.44
68:O2:107:VAL:O	68:O2:110:ALA:HB3	2.17	0.44
68:O2:6:HIS:HA	68:O2:7:PRO:HD2	3.11	0.44
36:1:353:G:O6	73:O7:52:LYS:HE2	2.18	0.44
4:S2:169:LEU:HD11	4:S2:188:LEU:HD21	2.00	0.44
5:S3:29:LEU:HB2	5:S3:34:TYR:HB2	2.00	0.44
6:S4:87:MET:O	6:S4:122:LYS:HE3	2.17	0.44
8:S6:78:THR:HB	8:S6:79:LYS:HE3	1.99	0.44
8:S6:61:PHE:CE1	8:S6:96:SER:HB2	2.53	0.44
35:SM:23:LYS:HA	35:SM:23:LYS:NZ	6.02	0.44
36:1:1352:A:H4'	36:1:1353:U:OP1	2.16	0.44
36:1:1429:G:C4	41:L4:99:MET:HE1	2.53	0.44
36:1:1581:C:H2'	36:1:1582:C:C5'	2.48	0.44
36:1:1912:U:C4	36:1:1913:A:C6	3.06	0.44
1:2:240:U:H4'	1:2:241:U:OP2	2.16	0.44
1:2:541:A:O2'	1:2:542:A:H4'	2.18	0.44
1:2:740:A:N1	1:2:741:C:C4	2.85	0.44
1:2:868:G:C2	1:2:869:A:C8	3.05	0.44
37:3:41:G:H1'	37:3:44:C:N4	2.33	0.44
38:4:15:G:C6	38:4:16:G:N1	2.86	0.44
38:4:35:C:H5''	73:O7:70:VAL:HG11	2.00	0.44
36:5:1178:G:C6	36:5:1179:A:N1	2.85	0.44
36:5:1595:U:H1'	36:5:1596:C:C6	2.53	0.44
70:O4:41:ARG:NH1	36:5:1739:U:H1'	189.49	0.44
36:5:274:G:O6	85:5:3908:OHX:N1	2.50	0.44
36:5:912:G:H5''	36:5:913:A:P	2.58	0.44
1:6:1751:C:H2'	1:6:1752:U:O4'	2.18	0.44
1:6:1639:C:OP1	85:6:2118:OHX:N5	2.51	0.44
1:6:425:A:H5'	1:6:425:A:H8	1.82	0.44
1:6:486:G:N2	1:6:487:G:N7	2.66	0.44
1:6:548:G:H2'	1:6:549:G:O4'	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:683:C:OP2	1:6:683:C:H6	1.99	0.44
1:6:869:A:H2'	1:6:870:C:O4'	2.17	0.44
37:7:27:A:C2	37:7:28:C:C2	3.05	0.44
15:C3:115:LEU:HD22	15:C3:119:GLU:HG3	1.99	0.44
16:C4:115:ILE:HG21	28:D6:44:ILE:HG21	6.44	0.44
17:C5:51:SER:C	17:C5:53:PRO:HD2	4.54	0.44
18:C6:99:GLU:OE2	34:SR:60:SER:OG	2.26	0.44
19:C7:20:TYR:CD1	19:C7:38:ILE:HD12	3.62	0.44
21:C9:15:ILE:HD13	21:C9:60:SER:HA	2.58	0.44
26:D4:60:PHE:HA	26:D4:70:VAL:O	2.62	0.44
27:D5:47:TYR:CE2	27:D5:51:LEU:HD11	3.59	0.44
27:D5:54:VAL:HA	27:D5:57:TYR:CE1	2.94	0.44
28:D6:58:VAL:O	28:D6:59:TYR:HB2	2.45	0.44
33:E1:136:LYS:O	33:E1:138:ARG:N	3.33	0.44
40:L3:255:CYS:HB2	36:5:2941:A:OP2	225.42	0.44
40:L3:80:ASP:OD2	40:L3:314:TYR:OH	2.96	0.44
41:L4:20:LEU:HA	41:L4:21:PRO:HD3	1.86	0.44
41:L4:230:VAL:C	41:L4:232:SER:H	2.99	0.44
43:L6:89:THR:HG21	50:M4:115:PHE:HB2	2.00	0.44
44:L7:158:LYS:NZ	44:L7:159:GLN:H	2.16	0.44
36:1:121:A:C2	45:L8:129:PRO:HB3	2.52	0.44
48:M1:79:ILE:HG22	48:M1:127:PHE:HE2	1.82	0.44
48:M1:60:ARG:O	48:M1:63:GLU:HB2	2.18	0.44
48:M1:92:ARG:HB3	48:M1:94:ARG:HG2	1.99	0.44
49:M3:107:GLU:H	49:M3:107:GLU:HG2	1.67	0.44
36:1:685:G:P	49:M3:35:ARG:HH11	2.41	0.44
49:M3:93:ILE:HA	49:M3:93:ILE:HD13	1.70	0.44
52:M6:57:PHE:O	52:M6:72:HIS:HE1	4.95	0.44
53:M7:24:VAL:CG1	53:M7:86:LYS:HG2	2.48	0.44
54:M8:100:THR:HB	54:M8:120:GLU:HB3	4.52	0.44
54:M8:62:VAL:HB	54:M8:83:VAL:HG11	2.37	0.44
59:N3:17:LEU:O	59:N3:52:ALA:N	2.83	0.44
59:N3:13:ILE:CD1	59:N3:54:LEU:HB3	2.47	0.44
61:N5:130:TYR:N	61:N5:130:TYR:CD1	2.86	0.44
61:N5:57:LEU:HD23	61:N5:57:LEU:HA	4.26	0.44
38:4:131:A:H5''	61:N5:93:TYR:CE2	2.52	0.44
73:O7:28:HIS:ND1	73:O7:31:LYS:HB2	2.69	0.44
79:Q3:73:THR:CG2	79:Q3:76:ALA:H	2.27	0.44
79:Q3:75:ALA:O	79:Q3:79:VAL:HG23	2.18	0.44
3:S1:38:PHE:CG	3:S1:73:LEU:HD12	4.34	0.44
5:S3:99:VAL:HG13	5:S3:173:ARG:NH2	2.80	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:S4:35:PRO:HB3	6:S4:143:ASP:O	2.29	0.44
8:S6:139:ASN:O	8:S6:143:LYS:HD2	4.14	0.44
11:S9:92:LYS:HB2	11:S9:95:TYR:HD2	8.25	0.44
36:1:1231:A:H5''	36:1:1232:C:H5'	2.00	0.44
36:1:1565:G:N2	36:1:1574:C:C2	2.85	0.44
36:1:2812:C:H2'	36:1:2813:A:C8	2.53	0.44
85:1:3927:OHX:N3	85:1:3975:OHX:N4	2.66	0.44
1:2:1086:A:C6	1:2:1087:A:C6	3.06	0.44
1:2:1271:G:C6	1:2:1272:U:C4	3.05	0.44
1:2:1541:G:C5	1:2:1542:G:C6	3.06	0.44
1:2:1581:C:O2'	1:2:1582:U:H5'	2.18	0.44
1:2:1615:C:HO2'	1:2:1616:G:P	2.39	0.44
1:2:1788:G:OP2	16:C4:127:ARG:NH2	2.51	0.44
1:2:1793:G:O6	28:D6:34:LYS:NZ	2.46	0.44
1:2:616:G:C2	1:2:622:A:N7	2.85	0.44
1:2:641:G:H2'	1:2:642:G:H8	1.83	0.44
36:5:1064:A:N6	36:5:1096:U:H3	2.16	0.44
36:5:1729:A:H4'	36:5:1730:G:OP2	2.18	0.44
1:6:158:U:O2'	1:6:160:C:OP2	2.30	0.44
1:6:1654:G:C6	1:6:1745:G:C6	3.06	0.44
10:S8:98:LYS:HB3	1:6:329:G:H5''	275.47	0.44
1:6:538:A:C8	1:6:543:C:N4	2.78	0.44
32:E0:43:ARG:HH12	1:6:590:C:H5''	418.36	0.44
1:6:867:G:C4	1:6:868:G:C8	3.06	0.44
1:6:892:A:C6	1:6:893:U:C4	3.06	0.44
1:6:909:U:O2'	1:6:910:C:H5'	2.18	0.44
1:6:913:G:H3'	1:6:914:G:H5'	1.99	0.44
13:C1:107:VAL:HA	13:C1:108:PRO:HD2	2.05	0.44
19:C7:60:ARG:NH2	1:6:1400:A:H5'	411.07	0.44
23:D1:72:LEU:HA	23:D1:75:ASN:HD21	1.82	0.44
25:D3:107:PHE:CE2	25:D3:114:LYS:HB2	2.53	0.44
39:L2:116:VAL:CG1	39:L2:126:LEU:HB2	2.83	0.44
40:L3:154:TYR:CD1	36:5:3242:G:H2'	261.28	0.44
40:L3:37:ARG:HA	40:L3:185:GLY:O	2.17	0.44
42:L5:187:THR:O	42:L5:189:GLU:N	2.51	0.44
42:L5:269:SER:O	42:L5:270:LYS:HB2	4.66	0.44
42:L5:279:LYS:HE2	42:L5:282:ARG:HD2	1.99	0.44
36:1:597:G:OP1	44:L7:37:ASN:HB3	2.18	0.44
48:M1:166:LYS:O	48:M1:167:TYR:HB2	2.17	0.44
50:M4:113:THR:HG22	50:M4:114:ASP:N	2.63	0.44
50:M4:50:LYS:NZ	50:M4:86:ALA:HB2	2.33	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:143:THR:HG22	52:M6:147:TRP:O	5.96	0.44
54:M8:134:GLY:O	54:M8:137:THR:OG1	2.72	0.44
54:M8:89:ASP:OD1	54:M8:90:ASP:N	2.51	0.44
36:1:1098:A:O2'	57:N1:130:ARG:O	2.28	0.44
57:N1:14:MET:HE2	57:N1:15:PHE:CE2	2.52	0.44
57:N1:55:LYS:O	57:N1:58:GLN:HB3	2.18	0.44
59:N3:66:LYS:HD2	59:N3:68:GLU:OE1	4.95	0.44
62:N6:56:VAL:HG11	62:N6:104:LEU:HD13	2.02	0.44
64:N8:128:ARG:HG2	72:O6:8:ALA:HB2	2.00	0.44
65:N9:28:LYS:HD3	65:N9:28:LYS:HA	1.71	0.44
70:O4:41:ARG:O	70:O4:43:LYS:HD3	2.16	0.44
71:O5:73:LYS:HB3	71:O5:73:LYS:HE2	1.64	0.44
73:O7:45:ARG:NH1	73:O7:47:TYR:HE2	2.16	0.44
2:S0:79:ARG:O	2:S0:83:GLN:HG3	2.18	0.44
3:S1:59:ASP:O	3:S1:61:LEU:N	4.11	0.44
6:S4:142:HIS:CE1	6:S4:226:PHE:HE2	3.03	0.44
1:2:398:G:P	10:S8:47:ARG:HH12	2.40	0.44
11:S9:70:LEU:O	11:S9:74:ASN:HB2	2.18	0.44
35:SM:44:PRO:HA	36:1:2678:A:C4	2.52	0.44
35:SM:71:ASN:N	35:SM:71:ASN:OD1	2.49	0.44
18:C6:99:GLU:OE2	34:SR:60:SER:HB2	2.92	0.44
36:1:1615:C:H2'	36:1:1616:U:C6	2.53	0.44
36:1:1857:C:C4	36:1:1858:A:C6	3.06	0.44
36:1:1877:U:H5''	36:1:1878:G:O4'	2.18	0.44
36:1:2317:A:H2'	36:1:2318:U:O4'	2.18	0.44
36:1:259:C:H2'	36:1:260:C:C6	2.53	0.44
36:1:2659:G:C2	36:1:2712:U:O2	2.71	0.44
36:1:2933:A:C2	36:1:3014:U:H4'	2.52	0.44
36:1:3007:U:OP1	52:M6:73:PHE:HA	2.17	0.44
36:1:3106:A:H2'	36:1:3107:U:O4'	2.18	0.44
85:1:3944:OHX:N6	85:1:4007:OHX:N3	2.66	0.44
36:1:412:G:C6	36:1:413:U:C4	3.06	0.44
36:1:435:C:H2'	36:1:436:A:H8	1.83	0.44
36:1:952:A:N3	36:1:1114:U:O2'	2.41	0.44
1:2:1351:G:N1	1:2:1375:A:C2	2.86	0.44
1:2:1550:A:H2'	1:2:1551:U:C6	2.53	0.44
1:2:520:A:H2'	1:2:521:A:H8	1.83	0.44
1:2:563:U:H4'	32:E0:17:GLN:OE1	2.18	0.44
1:2:68:A:H5''	8:S6:162:VAL:HG21	2.00	0.44
1:2:861:U:H5'	1:2:862:A:OP2	2.17	0.44
36:5:1565:G:N2	36:5:1566:A:H1'	2.33	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:2407:C:H1'	36:5:2818:U:C2	2.52	0.44
36:5:767:U:H1'	36:5:768:C:C6	2.53	0.44
1:6:1777:G:H2'	1:6:1778:G:H8	1.82	0.44
1:6:655:G:H2'	1:6:656:G:C8	2.53	0.44
1:6:948:G:C2	1:6:949:C:C2	3.06	0.44
12:C0:71:GLU:H	12:C0:71:GLU:HG2	1.70	0.44
22:D0:108:ILE:H	22:D0:108:ILE:HG13	1.45	0.44
25:D3:19:ARG:O	25:D3:23:ARG:HG2	2.18	0.44
29:D7:23:THR:HG21	29:D7:29:ARG:NH2	3.22	0.44
32:E0:41:THR:HA	32:E0:45:VAL:HB	2.13	0.44
33:E1:96:LYS:HD2	33:E1:96:LYS:HA	1.69	0.44
39:L2:83:HIS:CE1	39:L2:86:GLN:HB2	2.70	0.44
39:L2:47:GLN:HA	39:L2:84:THR:HG22	2.28	0.44
40:L3:81:THR:HG23	40:L3:81:THR:O	3.75	0.44
41:L4:140:HIS:CD2	41:L4:247:PHE:H	2.60	0.44
41:L4:294:GLU:OE1	41:L4:294:GLU:N	2.44	0.44
41:L4:80:GLY:HA2	41:L4:85:SER:OG	2.79	0.44
42:L5:152:ARG:HG3	42:L5:152:ARG:HH11	1.82	0.44
42:L5:108:ARG:NH2	42:L5:253:PHE:HA	2.45	0.44
36:1:121:A:C6	45:L8:129:PRO:HG3	2.53	0.44
45:L8:156:ASP:HB2	45:L8:157:VAL:H	1.54	0.44
45:L8:68:ARG:O	45:L8:69:LEU:HB2	4.57	0.44
47:M0:210:ILE:HG23	47:M0:217:PHE:CE2	2.53	0.44
47:M0:75:TYR:CE2	47:M0:79:VAL:HG21	2.99	0.44
52:M6:177:LYS:O	52:M6:181:ALA:N	2.43	0.44
53:M7:41:LEU:O	53:M7:45:GLN:HG3	2.17	0.44
53:M7:59:PRO:HG3	53:M7:76:PHE:CD1	2.55	0.44
54:M8:96:PHE:CG	54:M8:97:PRO:HD2	2.63	0.44
59:N3:13:ILE:CG1	59:N3:53:SER:HB2	2.61	0.44
67:O1:79:ARG:NE	67:O1:79:ARG:H	2.16	0.44
71:O5:101:THR:HG23	71:O5:103:LYS:H	4.18	0.44
3:S1:48:VAL:HG13	3:S1:61:LEU:HD21	1.98	0.44
4:S2:54:GLU:O	4:S2:58:LEU:HB2	2.87	0.44
5:S3:212:LYS:HE2	5:S3:212:LYS:HB2	1.77	0.44
5:S3:34:TYR:CE2	5:S3:37:VAL:HG13	2.59	0.44
6:S4:184:THR:C	6:S4:189:LEU:HD13	2.74	0.44
7:S5:113:ILE:HG21	7:S5:190:ILE:HG22	2.00	0.44
11:S9:9:SER:OG	11:S9:10:LYS:N	2.51	0.44
34:SR:29:GLN:C	34:SR:31:ASN:H	2.21	0.44
36:1:1127:G:O5'	36:1:1127:G:H8	2.01	0.43
36:1:1722:U:H1'	55:M9:96:ILE:HG12	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2952:G:H2'	36:1:2953:U:O4'	2.18	0.43
36:1:3182:G:C6	36:1:3183:A:C5	3.06	0.43
36:1:559:A:H4'	36:1:559:A:OP1	2.17	0.43
1:2:1341:A:OP1	34:SR:63:GLY:HA2	2.18	0.43
1:2:420:A:H2'	1:2:421:A:O4'	2.18	0.43
1:2:505:A:N3	1:2:505:A:H2'	2.33	0.43
1:2:637:C:OP1	24:D2:32:LYS:HG3	2.18	0.43
1:2:959:U:O2	1:2:959:U:H2'	2.17	0.43
1:2:987:G:C2	39:L2:249:SER:HB2	2.53	0.43
38:4:79:A:H2'	38:4:80:A:H1'	1.99	0.43
36:5:1366:A:C2	36:5:1367:G:C4	3.05	0.43
55:M9:64:ARG:NE	36:5:1672:U:OP1	175.43	0.43
36:5:2505:U:H2'	36:5:2506:U:C4	2.53	0.43
36:5:3153:U:H1'	36:5:3154:C:C6	2.53	0.43
36:5:3288:G:C4	36:5:3289:G:C8	3.06	0.43
85:5:4049:OHX:N4	85:5:4054:OHX:N3	2.65	0.43
36:5:65:A:C4	36:5:110:G:N7	2.85	0.43
15:C3:123:HIS:CE1	36:5:847:A:H5'	291.04	0.43
36:5:916:G:H5'	36:5:917:A:OP1	2.17	0.43
1:6:1046:G:C2	1:6:1073:G:C2	3.05	0.43
1:6:615:A:H1'	1:6:1107:G:N2	2.32	0.43
17:C5:122:THR:CG2	1:6:1558:U:H3	367.08	0.43
18:C6:139:GLN:HA	1:6:1579:U:O2'	361.25	0.43
1:6:1450:U:OP2	85:6:2090:OHX:N4	2.51	0.43
1:6:424:C:O2'	1:6:426:G:OP1	2.30	0.43
1:6:827:C:H2'	1:6:828:U:H6	1.83	0.43
13:C1:67:ARG:N	13:C1:67:ARG:HD3	2.34	0.43
14:C2:45:LEU:O	14:C2:49:THR:HG23	2.43	0.43
17:C5:26:LEU:HA	17:C5:26:LEU:HD12	1.79	0.43
7:S5:37:GLN:HB3	18:C6:53:LEU:HD22	2.00	0.43
20:C8:94:ASP:OD1	20:C8:96:LYS:HG3	3.53	0.43
23:D1:56:SER:OG	23:D1:59:VAL:HG23	2.36	0.43
23:D1:21:ASN:OD1	24:D2:23:ARG:NH2	2.51	0.43
24:D2:30:SER:HB3	24:D2:59:GLY:HA3	2.30	0.43
1:2:1102:G:OP1	24:D2:76:SER:OG	2.35	0.43
28:D6:59:TYR:HA	28:D6:60:PRO:HD3	2.53	0.43
29:D7:59:CYS:O	29:D7:61:THR:HG22	2.18	0.43
39:L2:136:ILE:HD12	39:L2:136:ILE:H	2.53	0.43
39:L2:140:ASN:OD1	39:L2:142:ASP:HB3	4.78	0.43
39:L2:144:ASN:O	39:L2:160:SER:N	3.12	0.43
42:L5:265:TYR:O	42:L5:269:SER:N	3.72	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:10:TYR:HA	43:L6:11:PRO:HD3	2.12	0.43
44:L7:140:SER:O	44:L7:144:ILE:HG13	2.51	0.43
48:M1:9:MET:HG2	37:7:55:A:C2	327.14	0.43
53:M7:112:LEU:HA	53:M7:112:LEU:HD12	1.86	0.43
57:N1:89:LEU:HD23	57:N1:91:LEU:HD11	2.00	0.43
58:N2:16:THR:HG22	58:N2:64:THR:OG1	3.15	0.43
62:N6:12:ARG:O	62:N6:16:ARG:HG3	2.18	0.43
65:N9:39:PHE:O	65:N9:43:HIS:N	2.92	0.43
66:O0:44:ILE:HG23	66:O0:48:THR:HG21	2.00	0.43
68:O2:97:ALA:HB3	68:O2:100:ILE:HG12	1.99	0.43
3:S1:70:LEU:HB3	3:S1:79:HIS:CB	6.08	0.43
4:S2:205:ARG:HD2	1:6:6:G:OP2	379.87	0.43
5:S3:90:ARG:HB3	5:S3:91:VAL:H	3.02	0.43
6:S4:170:THR:O	6:S4:170:THR:OG1	3.64	0.43
6:S4:107:GLY:HA2	6:S4:189:LEU:HG	2.04	0.43
6:S4:208:VAL:HG11	6:S4:225:VAL:HG21	1.99	0.43
1:2:810:G:N7	9:S7:111:LYS:HE3	2.33	0.43
9:S7:116:ARG:NH2	1:6:858:G:OP1	352.06	0.43
9:S7:20:VAL:O	9:S7:24:PHE:N	2.90	0.43
36:1:1400:G:C2	36:1:1401:A:C8	3.06	0.43
36:1:1723:A:N1	36:1:1788:C:O2'	2.42	0.43
36:1:1734:G:H2'	36:1:1735:G:O4'	2.18	0.43
36:1:2168:A:C6	36:1:2170:U:H1'	2.53	0.43
36:1:2265:C:H2'	36:1:2266:U:C6	2.53	0.43
36:1:2321:A:H2'	36:1:2322:C:O4'	2.18	0.43
36:1:2534:G:H2'	36:1:2535:A:C8	2.53	0.43
36:1:3192:U:H2'	36:1:3193:C:C6	2.54	0.43
36:1:3200:G:C6	36:1:3201:C:C4	3.06	0.43
36:1:662:U:O4	36:1:801:A:H1'	2.18	0.43
1:2:1339:C:O2'	1:2:1341:A:C8	2.69	0.43
1:2:1497:U:OP2	85:2:1991:OHX:N1	2.51	0.43
1:2:229:U:H2'	1:2:230:C:C6	2.52	0.43
1:2:525:A:C6	1:2:526:A:C6	3.06	0.43
37:3:13:A:H8	37:3:13:A:H5''	1.81	0.43
36:5:1249:G:H2'	36:5:1250:G:H8	1.84	0.43
36:5:1345:G:O6	85:5:3909:OHX:N2	2.51	0.43
36:5:1352:A:H1'	36:5:1353:U:O5'	2.17	0.43
36:5:1355:A:H4'	36:5:1356:U:O5'	2.18	0.43
36:5:1740:U:H1'	36:5:1741:A:N7	2.32	0.43
36:5:2655:U:H4'	36:5:2656:A:O4'	2.19	0.43
40:L3:250:ALA:HB1	36:5:2947:G:C2	220.42	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:3078:U:O5'	36:5:3078:U:O2	2.37	0.43
36:5:312:C:H2'	36:5:313:A:H8	1.84	0.43
36:5:340:C:O2'	36:5:341:G:H5'	2.18	0.43
1:6:154:G:H1	1:6:160:C:N4	2.12	0.43
1:6:151:G:H22	1:6:163:G:N2	2.16	0.43
25:D3:38:PHE:HB3	1:6:359:A:C2	326.01	0.43
1:6:587:C:H2'	1:6:588:U:O4'	2.18	0.43
1:6:862:A:H4'	1:6:863:A:O5'	2.19	0.43
6:S4:3:ARG:HB3	1:6:93:A:H1'	326.86	0.43
37:7:30:G:C6	37:7:31:U:C4	3.06	0.43
38:8:62:C:O2	85:8:216:OHX:N1	2.51	0.43
12:C0:14:TYR:CZ	12:C0:18:GLU:HG3	2.53	0.43
24:D2:5:SER:HB2	1:6:1101:G:O2'	353.65	0.43
31:D9:30:LEU:HA	31:D9:39:CYS:HA	2.39	0.43
32:E0:10:ARG:HD2	1:6:566:C:O2'	367.34	0.43
40:L3:258:ALA:O	40:L3:259:HIS:CD2	2.87	0.43
36:1:209:A:OP1	41:L4:161:LYS:NZ	2.51	0.43
41:L4:5:GLN:HA	41:L4:20:LEU:O	2.17	0.43
42:L5:224:LYS:HB2	42:L5:224:LYS:HE3	2.02	0.43
42:L5:88:ILE:HD12	42:L5:240:TYR:CE1	4.40	0.43
45:L8:166:LEU:O	45:L8:169:LEU:N	3.24	0.43
47:M0:208:ASN:HA	47:M0:211:ARG:HB2	2.00	0.43
48:M1:30:LEU:O	48:M1:34:SER:N	2.48	0.43
51:M5:101:THR:O	51:M5:105:ARG:HG3	2.17	0.43
53:M7:62:ARG:O	53:M7:64:ASN:N	2.93	0.43
54:M8:102:ALA:HB1	54:M8:124:LEU:HD23	2.78	0.43
54:M8:178:ARG:HE	64:N8:50:PRO:CG	2.30	0.43
54:M8:58:ASN:HB3	54:M8:144:ARG:HH21	3.05	0.43
60:N4:42:GLN:O	60:N4:43:ARG:HB2	2.41	0.43
64:N8:119:PRO:C	64:N8:121:VAL:H	2.59	0.43
66:O0:53:LYS:HD2	66:O0:69:TYR:CE2	2.53	0.43
69:O3:60:ARG:NH2	69:O3:60:ARG:HB2	2.32	0.43
70:O4:94:LEU:HA	70:O4:94:LEU:HD23	2.19	0.43
39:L2:80:GLU:CD	79:Q3:66:GLY:HA2	3.65	0.43
2:S0:101:ARG:NH2	2:S0:104:PRO:HD3	2.33	0.43
2:S0:110:TYR:CD1	2:S0:111:ILE:HD13	2.52	0.43
3:S1:58:SER:O	3:S1:62:LYS:HG3	2.18	0.43
5:S3:25:PHE:HE1	5:S3:69:LEU:HD13	1.82	0.43
7:S5:45:LYS:HA	7:S5:45:LYS:HD3	1.64	0.43
7:S5:63:GLN:HE22	7:S5:66:GLN:H	3.00	0.43
7:S5:89:ILE:HG13	7:S5:89:ILE:H	1.44	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:64:LYS:O	8:S6:67:VAL:HG22	2.18	0.43
10:S8:194:ARG:HB3	10:S8:195:ARG:NH1	4.02	0.43
11:S9:126:ARG:O	11:S9:130:THR:HG22	2.17	0.43
11:S9:33:GLU:O	11:S9:122:VAL:HG11	2.18	0.43
35:SM:59:GLY:O	35:SM:63:ASP:N	2.63	0.43
34:SR:295:SER:HB2	34:SR:300:THR:HB	2.00	0.43
36:1:1060:U:H2'	36:1:1061:A:C8	2.54	0.43
36:1:1286:A:N3	36:1:1287:A:H1'	2.33	0.43
36:1:2148:U:H2'	36:1:2149:A:C4	2.52	0.43
36:1:2766:U:H2'	36:1:2767:U:O4'	2.18	0.43
36:1:2943:G:C8	40:L3:2:SER:N	2.86	0.43
36:1:3030:G:C5	36:1:3031:G:C5	3.06	0.43
36:1:3217:C:C4	53:M7:182:ILE:HG23	2.53	0.43
36:1:705:A:N3	36:1:715:A:C6	2.86	0.43
1:2:1164:G:H2'	1:2:1165:G:C8	2.54	0.43
1:2:1414:U:H3'	1:2:1415:U:H5''	2.00	0.43
1:2:698:U:O4'	9:S7:107:ARG:HD3	2.18	0.43
1:2:704:C:N4	1:2:735:C:N3	2.67	0.43
1:2:868:G:H1	1:2:960:U:H3	1.65	0.43
37:3:39:C:N3	48:M1:70:THR:HG23	2.32	0.43
36:5:1354:G:C6	36:5:1358:C:H5'	2.53	0.43
75:O9:42:ARG:HH22	36:5:1494:U:P	107.65	0.43
36:5:2211:U:H5	36:5:2234:G:O6	2.01	0.43
36:5:2587:U:H2'	36:5:2588:U:H6	1.84	0.43
36:5:2560:C:O2	85:5:3875:OHX:N2	2.51	0.43
36:5:48:A:O4'	36:5:50:U:C6	2.71	0.43
36:5:361:A:N3	36:5:814:U:H1'	2.33	0.43
36:5:985:U:H2'	36:5:986:U:C6	2.53	0.43
1:6:1087:A:H2'	1:6:1088:A:H8	1.82	0.43
1:6:485:A:C5	1:6:486:G:H1'	2.53	0.43
1:6:72:A:H5'	1:6:73:U:OP2	2.18	0.43
55:M9:172:ARG:NH1	1:6:852:C:OP1	321.42	0.43
1:6:902:G:H2'	1:6:903:U:C6	2.54	0.43
15:C3:148:ALA:O	85:C3:201:OHX:N4	6.35	0.43
15:C3:34:ILE:HG13	15:C3:67:THR:HG21	1.99	0.43
15:C3:73:ARG:HD3	1:6:859:A:C5	331.78	0.43
17:C5:107:ILE:HA	17:C5:111:MET:SD	3.18	0.43
1:2:1549:C:P	17:C5:39:ALA:H	2.40	0.43
18:C6:100:GLN:OE1	34:SR:56:VAL:HG11	2.18	0.43
22:D0:117:VAL:O	22:D0:118:VAL:HB	2.18	0.43
25:D3:92:CYS:SG	25:D3:132:LEU:HD12	2.58	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:140:ASN:O	39:L2:144:ASN:HA	2.18	0.43
40:L3:87:VAL:HB	40:L3:110:LEU:HD11	1.99	0.43
41:L4:26:PHE:HA	41:L4:127:ALA:HA	1.99	0.43
42:L5:25:GLU:O	42:L5:27:LYS:HG3	2.19	0.43
51:M5:143:ARG:NH2	71:O5:92:LEU:HD23	2.34	0.43
36:1:3181:C:O2'	52:M6:164:SER:OG	2.25	0.43
53:M7:23:ARG:HE	53:M7:125:GLN:HG3	2.18	0.43
56:N0:66:GLU:OE2	56:N0:73:LYS:HE3	2.17	0.43
62:N6:35:LEU:HG	62:N6:47:ALA:HA	2.00	0.43
63:N7:12:VAL:HB	63:N7:81:LEU:HB3	3.54	0.43
63:N7:27:LYS:HE3	63:N7:29:HIS:HE1	1.83	0.43
63:N7:5:LEU:HD22	63:N7:77:TYR:CE2	5.24	0.43
63:N7:73:LYS:HE2	36:5:1636:U:H5''	212.20	0.43
69:O3:35:VAL:HG13	69:O3:40:ASP:HB2	2.00	0.43
70:O4:108:GLN:O	70:O4:112:ALA:N	2.51	0.43
49:M3:123:ILE:HG22	71:O5:118:ILE:HG12	2.77	0.43
72:O6:5:THR:HG23	72:O6:12:ASN:O	2.17	0.43
2:S0:113:ARG:C	2:S0:115:PHE:H	2.21	0.43
2:S0:71:GLU:HA	2:S0:94:GLY:O	2.17	0.43
3:S1:157:GLN:HB2	3:S1:160:HIS:ND1	2.33	0.43
3:S1:29:TRP:NE1	3:S1:47:LEU:HG	2.33	0.43
4:S2:94:GLN:HG2	4:S2:95:ARG:H	4.65	0.43
6:S4:49:ARG:NH1	6:S4:50:ASN:OD1	2.43	0.43
7:S5:117:THR:HG22	7:S5:121:ILE:HD11	2.00	0.43
8:S6:21:GLU:O	8:S6:25:ARG:HB2	2.17	0.43
9:S7:39:ARG:N	9:S7:40:PRO:HD2	2.33	0.43
9:S7:41:LEU:HD13	9:S7:70:PHE:HD1	1.82	0.43
10:S8:138:ASN:O	10:S8:142:LYS:HG3	2.19	0.43
11:S9:80:LEU:HB3	11:S9:86:LEU:HB2	2.44	0.43
34:SR:227:ALA:O	34:SR:229:LYS:HD2	2.19	0.43
36:1:1257:C:N4	36:1:1261:G:H22	2.15	0.43
36:1:2225:U:H2'	36:1:2226:U:H6	1.83	0.43
36:1:2443:A:O2'	36:1:2444:C:OP2	2.28	0.43
36:1:2533:G:H3'	36:1:2534:G:C8	2.54	0.43
36:1:2703:A:OP2	42:L5:23:ARG:NH1	2.48	0.43
36:1:3380:U:H2'	36:1:3381:U:C6	2.54	0.43
36:1:342:A:C6	36:1:349:A:C8	3.06	0.43
36:1:1171:G:O6	85:1:3818:OHX:N2	2.52	0.43
85:1:3940:OHX:N4	85:1:4004:OHX:N3	2.66	0.43
36:1:2641:U:OP1	85:1:3987:OHX:N4	2.50	0.43
36:1:435:C:H2'	36:1:436:A:C8	2.54	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:552:G:C2	36:1:553:U:C2	3.07	0.43
36:1:966:U:H2'	36:1:967:A:C8	2.53	0.43
36:1:968:G:H21	65:N9:15:LYS:HZ2	1.67	0.43
1:2:1282:U:OP1	85:2:2074:OHX:N5	2.52	0.43
1:2:1535:U:H6	1:2:1535:U:H2'	1.67	0.43
1:2:154:G:H1'	8:S6:56:ASN:ND2	2.34	0.43
1:2:1613:U:OP2	7:S5:84:LYS:HE3	2.18	0.43
1:2:273:G:N2	1:2:283:U:O2	2.40	0.43
1:2:904:G:H2'	1:2:905:A:O4'	2.18	0.43
36:5:1479:U:C3'	36:5:1480:G:H5'	2.48	0.43
36:5:166:C:H2'	36:5:167:U:C6	2.53	0.43
36:5:229:G:C6	36:5:230:U:C4	3.06	0.43
36:5:2523:A:H4'	36:5:2524:A:OP2	2.17	0.43
36:5:2526:C:H1'	36:5:2588:U:H5''	2.00	0.43
36:5:2541:U:H4'	36:5:2542:U:OP1	2.19	0.43
36:5:2576:G:C6	36:5:2577:C:C4	3.07	0.43
36:5:335:G:C6	36:5:336:A:N7	2.86	0.43
85:5:3934:OHX:N5	85:5:4038:OHX:N2	2.67	0.43
36:5:736:A:N6	36:5:737:G:N3	2.67	0.43
1:6:1208:A:H4'	1:6:1270:G:OP1	2.18	0.43
1:6:147:A:H2'	1:6:148:A:O4'	2.17	0.43
13:C1:40:LEU:HD22	1:6:246:G:N3	328.36	0.43
12:C0:10:LYS:HD3	12:C0:36:ASP:HB3	2.00	0.43
12:C0:49:LEU:O	12:C0:54:TYR:HB2	2.19	0.43
17:C5:115:TYR:OH	1:6:1556:A:H5''	385.58	0.43
18:C6:20:ALA:HB2	18:C6:84:ALA:HB1	3.17	0.43
21:C9:23:GLN:HG3	21:C9:55:TYR:CE2	4.38	0.43
23:D1:9:VAL:HG22	23:D1:10:GLU:H	2.01	0.43
9:S7:142:TYR:HE1	24:D2:39:GLN:HE21	1.66	0.43
1:2:1251:U:H4'	33:E1:133:ALA:HB1	2.00	0.43
39:L2:137:ILE:HD11	39:L2:147:ARG:HG2	2.00	0.43
39:L2:201:GLY:CA	39:L2:204:MET:HG3	2.47	0.43
39:L2:242:ARG:O	36:5:2154:U:H5''	225.41	0.43
40:L3:92:TYR:HA	40:L3:100:ARG:O	2.41	0.43
36:1:2814:G:OP1	41:L4:73:ARG:NH2	2.51	0.43
42:L5:279:LYS:HD3	42:L5:282:ARG:HB2	1.99	0.43
43:L6:102:ASN:HD21	43:L6:104:GLU:HB2	1.83	0.43
45:L8:94:PHE:CD2	45:L8:189:LEU:HD21	4.58	0.43
53:M7:135:ARG:O	53:M7:136:ILE:HG12	2.99	0.43
53:M7:25:SER:CB	53:M7:28:ASN:HB2	3.06	0.43
53:M7:89:LYS:HA	53:M7:92:GLN:HG2	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:81:VAL:HG22	54:M8:101:VAL:HG22	2.00	0.43
55:M9:134:HIS:CE1	55:M9:137:ALA:HB2	2.62	0.43
36:1:1472:U:H5'	55:M9:4:LEU:HB2	2.01	0.43
56:N0:10:ILE:O	56:N0:59:VAL:N	2.46	0.43
56:N0:12:ARG:HD2	56:N0:22:PRO:HG2	3.91	0.43
64:N8:92:LYS:O	64:N8:93:SER:HB3	2.19	0.43
66:O0:14:LEU:HD21	66:O0:43:ILE:HD13	2.80	0.43
70:O4:46:ASP:HB2	70:O4:84:CYS:SG	2.58	0.43
78:Q2:55:LYS:HB3	78:Q2:55:LYS:HE3	1.88	0.43
2:S0:7:PHE:HZ	23:D1:43:GLY:HA2	2.23	0.43
10:S8:184:LEU:HD12	10:S8:184:LEU:HA	1.75	0.43
35:SM:79:SER:HA	35:SM:82:THR:HG23	2.00	0.43
34:SR:276:PRO:HB2	34:SR:278:PHE:CE1	4.58	0.43
36:1:2265:C:H2'	36:1:2266:U:H6	1.84	0.43
36:1:2875:U:P	87:1:3401:ANM:H11	2.58	0.43
36:1:300:G:O6	85:1:4004:OHX:N2	2.51	0.43
36:1:3047:U:O2'	36:1:3048:A:H5'	2.19	0.43
85:1:3880:OHX:N6	85:1:3916:OHX:N5	2.66	0.43
36:1:1623:G:OP2	85:1:3901:OHX:N1	2.52	0.43
36:1:650:C:O5'	36:1:650:C:H6	2.01	0.43
36:1:999:G:N3	36:1:1002:A:N6	2.67	0.43
1:2:1681:A:H2'	1:2:1682:U:H5'	1.99	0.43
85:2:2054:OHX:N6	85:2:2068:OHX:N2	2.66	0.43
1:2:515:A:OP2	85:2:2029:OHX:N3	2.52	0.43
58:N2:74:LYS:HE3	36:5:1677:G:N7	150.53	0.43
36:5:3046:A:H2'	36:5:3047:U:O4'	2.18	0.43
36:5:3257:C:H2'	36:5:3258:U:O4'	2.17	0.43
67:O1:19:ARG:NH1	36:5:3324:C:OP1	173.72	0.43
85:5:3986:OHX:N2	85:5:4042:OHX:N6	2.66	0.43
36:5:567:G:H2'	36:5:568:G:C8	2.54	0.43
36:5:94:G:H2'	36:5:95:A:C8	2.54	0.43
1:6:1482:C:OP2	1:6:1521:G:N2	2.52	0.43
10:S8:2:GLY:N	1:6:393:C:OP2	292.72	0.43
1:6:602:U:H2'	1:6:603:U:C6	2.54	0.43
1:6:868:G:C2	1:6:869:A:C8	3.07	0.43
38:8:73:U:H2'	38:8:74:U:O4'	2.19	0.43
14:C2:67:THR:C	14:C2:69:ALA:H	2.21	0.43
19:C7:29:GLN:O	19:C7:32:LYS:HB3	2.18	0.43
29:D7:67:THR:OG1	29:D7:70:LYS:O	2.47	0.43
30:D8:40:ILE:HG22	30:D8:41:VAL:H	1.83	0.43
40:L3:146:ARG:HA	40:L3:146:ARG:NE	3.14	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:299:ASP:O	40:L3:301:THR:N	2.50	0.43
40:L3:347:SER:HB3	40:L3:350:ALA:H	2.60	0.43
42:L5:59:ASP:OD1	42:L5:81:HIS:ND1	4.68	0.43
43:L6:56:LYS:HG2	43:L6:58:LEU:HD23	3.30	0.43
44:L7:132:PRO:HA	44:L7:229:PHE:CG	2.53	0.43
45:L8:101:THR:HG22	45:L8:104:GLU:CB	2.48	0.43
45:L8:65:LEU:C	45:L8:67:ILE:H	2.22	0.43
46:L9:31:ARG:HG2	46:L9:149:ASN:ND2	2.33	0.43
47:M0:63:GLU:O	47:M0:65:LEU:N	2.52	0.43
48:M1:24:GLY:HA2	48:M1:65:ILE:HG23	2.88	0.43
49:M3:190:LYS:HE2	49:M3:190:LYS:HB2	1.75	0.43
49:M3:17:HIS:HB3	49:M3:20:GLU:HG3	1.99	0.43
51:M5:44:ARG:HH12	36:5:269:G:P	126.56	0.43
52:M6:115:LYS:HD3	36:5:3178:A:C2	260.35	0.43
53:M7:48:LEU:O	53:M7:52:LEU:HD22	2.19	0.43
54:M8:94:PHE:CZ	64:N8:119:PRO:HD3	2.98	0.43
57:N1:103:GLN:NE2	57:N1:107:GLU:OE2	2.51	0.43
59:N3:54:LEU:HD21	59:N3:119:GLY:HA3	2.03	0.43
66:O0:50:VAL:HB	36:5:2553:U:O4'	230.16	0.43
69:O3:52:VAL:HG13	69:O3:66:VAL:HG22	1.99	0.43
71:O5:59:ASN:O	71:O5:63:ARG:HG2	3.86	0.43
5:S3:113:LEU:HD21	5:S3:117:ARG:HH11	1.84	0.43
5:S3:12:VAL:HG21	31:D9:34:TYR:HB3	2.01	0.43
5:S3:203:PRO:HB3	1:6:1332:C:H4'	428.47	0.43
6:S4:257:ALA:O	6:S4:259:GLN:N	2.51	0.43
7:S5:100:ASN:O	7:S5:102:ARG:N	2.59	0.43
9:S7:23:ALA:O	9:S7:27:LEU:HG	2.19	0.43
10:S8:27:PHE:CD2	1:6:301:A:H4'	313.56	0.43
11:S9:129:ILE:HG12	11:S9:134:ILE:HD11	2.01	0.43
35:SM:24:GLU:HG2	48:M1:47:GLN:OE1	2.19	0.43
36:1:1544:G:O6	85:1:3916:OHX:N4	2.52	0.43
36:1:1581:C:H2'	36:1:1582:C:H5'	2.00	0.43
36:1:1680:G:H2'	36:1:1681:U:H6	1.84	0.43
36:1:1706:C:H2'	36:1:1707:A:O4'	2.18	0.43
36:1:1716:U:O2'	36:1:1717:U:O5'	2.35	0.43
36:1:2254:U:H2'	36:1:2261:G:N2	2.33	0.43
36:1:3274:A:H2'	53:M7:171:ARG:NH1	2.32	0.43
36:1:428:A:H2'	36:1:429:U:C6	2.53	0.43
36:1:551:A:C2	36:1:552:G:C4	3.07	0.43
36:1:604:G:C2	36:1:605:U:C2	3.06	0.43
36:1:692:A:C4	36:1:693:A:C8	3.07	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:787:G:H2'	36:1:788:C:C6	2.53	0.43
1:2:1068:C:H2'	1:2:1069:A:C8	2.54	0.43
1:2:1078:C:H2'	1:2:1079:U:C6	2.54	0.43
1:2:1424:A:H2'	1:2:1425:A:O4'	2.18	0.43
1:2:1528:U:H2'	1:2:1529:C:C6	2.52	0.43
1:2:1586:A:H1'	1:2:1611:A:N6	2.34	0.43
1:2:1645:G:H22	1:2:1756[A]:A:H2	1.66	0.43
1:2:602:U:H2'	1:2:603:U:C6	2.53	0.43
1:2:768:C:H3'	1:2:769:A:C8	2.53	0.43
36:1:2995:A:H1'	38:4:1:A:N6	2.33	0.43
36:5:112:U:O2'	36:5:113:C:OP2	2.30	0.43
36:5:2101:C:H2'	36:5:2102:U:H6	1.82	0.43
36:5:2192:C:H2'	36:5:2193:U:O4'	2.18	0.43
36:5:3089:C:H2'	36:5:3090:U:O4'	2.18	0.43
36:5:3299:A:N6	36:5:3315:G:H1	2.14	0.43
36:5:3383:G:H2'	36:5:3384:U:C6	2.54	0.43
85:5:4025:OHX:N3	85:5:4027:OHX:N6	2.66	0.43
36:5:541:U:H2'	36:5:542:G:H8	1.79	0.43
39:L2:21:ARG:NH1	36:5:825:U:OP1	172.18	0.43
1:6:1382:A:O2'	1:6:1383:G:H5''	2.19	0.43
1:6:1650:U:H2'	1:6:1651:A:C8	2.53	0.43
1:6:1754:A:H4'	1:6:1755:A:O5'	2.16	0.43
85:6:2087:OHX:N5	85:6:2112:OHX:N3	2.67	0.43
1:6:655:G:H2'	1:6:656:G:H8	1.83	0.43
13:C1:150:UNK:C	13:C1:152:UNK:N	2.81	0.43
14:C2:136:ILE:HA	14:C2:139:HIS:HB3	2.01	0.43
17:C5:85:ILE:HG22	17:C5:112:LEU:HD23	2.01	0.43
19:C7:96:SER:HA	19:C7:97:ASN:HA	1.75	0.43
20:C8:54:LEU:O	20:C8:56:LYS:N	3.04	0.43
22:D0:36:ASN:HA	22:D0:39:SER:HB3	5.45	0.43
22:D0:47:GLN:O	22:D0:47:GLN:HG2	2.18	0.43
22:D0:99:ILE:HG12	22:D0:99:ILE:H	4.51	0.43
4:S2:149:GLY:N	23:D1:4:ASP:HB2	2.99	0.43
24:D2:28:ARG:HA	24:D2:29:PRO:HA	1.81	0.43
24:D2:66:ASN:HB2	24:D2:67:GLY:H	1.56	0.43
27:D5:57:TYR:CZ	27:D5:68:ARG:HD3	5.06	0.43
31:D9:8:PHE:O	31:D9:9:SER:OG	2.30	0.43
39:L2:20:THR:HG22	39:L2:23:ARG:CZ	7.08	0.43
39:L2:73:GLU:O	39:L2:73:GLU:HG3	2.18	0.43
40:L3:209:PHE:HE1	40:L3:340:LYS:HG2	2.97	0.43
40:L3:41:VAL:HG22	40:L3:185:GLY:HA3	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:74:ILE:HG22	41:L4:75:PRO:HD2	1.99	0.43
45:L8:97:TYR:OH	45:L8:204:ARG:N	2.48	0.43
46:L9:19:SER:HA	50:M4:6:ILE:O	2.47	0.43
49:M3:16:LYS:O	49:M3:17:HIS:HB2	4.62	0.43
56:N0:155:ARG:HH21	56:N0:172:TYR:N	4.95	0.43
60:N4:2:LYS:HG2	60:N4:3:VAL:H	2.49	0.43
60:N4:41:LYS:HB2	60:N4:41:LYS:HE3	2.52	0.43
68:O2:19:ARG:NH1	68:O2:28:VAL:HG13	2.34	0.43
68:O2:4:LEU:HD12	68:O2:5:PRO:HD2	2.02	0.43
71:O5:50:SER:O	71:O5:54:VAL:HG23	2.18	0.43
71:O5:83:LYS:O	71:O5:85:THR:N	3.09	0.43
2:S0:35:PRO:C	2:S0:37:VAL:H	2.21	0.43
3:S1:128:LYS:HE3	3:S1:132:ASP:OD1	2.18	0.43
3:S1:145:LYS:HG2	3:S1:154:SER:HB3	2.01	0.43
5:S3:43:PRO:O	5:S3:44:THR:HG22	4.61	0.43
6:S4:211:LYS:HE3	6:S4:211:LYS:HB2	3.62	0.43
9:S7:78:THR:O	9:S7:82:GLU:N	2.89	0.43
34:SR:274:LEU:O	34:SR:276:PRO:HD3	4.05	0.43
18:C6:99:GLU:N	34:SR:58:VAL:O	3.72	0.43
36:1:1807:G:C6	36:1:1808:G:N1	2.87	0.43
36:1:2338:C:H4'	59:N3:47:ASN:O	2.18	0.43
36:1:503:C:OP1	43:L6:26:ARG:NH1	2.50	0.43
36:1:543:C:H3'	36:1:544:C:C6	2.53	0.43
1:2:1174:C:H2'	1:2:1175:U:O4'	2.18	0.43
1:2:1460:A:O2'	35:SM:72:ARG:NH2	2.52	0.43
1:2:1752:U:OP2	85:2:2017:OHX:N2	2.51	0.43
1:2:1769:U:OP2	85:2:2102:OHX:N1	2.52	0.43
1:2:452:A:H3'	1:2:453:U:H6	1.83	0.43
1:2:216:U:H5''	1:2:830:U:H4'	1.99	0.43
36:5:2836:C:H5	36:5:2852:C:N4	2.00	0.43
36:5:304:G:N3	36:5:304:G:H5'	2.34	0.43
85:5:3934:OHX:N6	85:5:4038:OHX:N2	2.67	0.43
49:M3:68:LYS:HE2	36:5:699:A:OP1	98.46	0.43
1:6:100:A:C6	1:6:101:U:C4	3.06	0.43
1:6:1092:A:O2'	1:6:1093:A:H3'	2.18	0.43
1:6:1146:G:C6	1:6:1147:A:C6	3.07	0.43
26:D4:121:THR:OG1	1:6:149:C:OP1	335.99	0.43
13:C1:109:VAL:HG12	13:C1:137:PHE:HB2	2.01	0.43
15:C3:102:LEU:HA	15:C3:102:LEU:HD23	2.08	0.43
15:C3:116:ILE:O	15:C3:120:SER:OG	2.36	0.43
16:C4:128:LYS:HZ3	16:C4:128:LYS:HG2	1.70	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:C5:107:ILE:H	17:C5:107:ILE:HG12	2.11	0.43
17:C5:33:PHE:CZ	17:C5:112:LEU:HD22	3.58	0.43
1:2:1410:A:H5''	18:C6:118:ILE:HD11	2.00	0.43
18:C6:50:GLU:OE1	18:C6:112:TYR:OH	2.61	0.43
20:C8:11:PHE:CZ	20:C8:59:GLY:HA3	4.26	0.43
22:D0:104:THR:HG22	22:D0:116:VAL:HG11	4.17	0.43
39:L2:149:ARG:HH12	39:L2:155:LYS:HD3	1.82	0.43
41:L4:184:SER:CB	41:L4:202:ARG:HG2	2.49	0.43
41:L4:191:LYS:HG3	41:L4:194:TYR:OH	4.03	0.43
41:L4:286:VAL:O	41:L4:288:ARG:N	3.22	0.43
42:L5:40:HIS:HE1	42:L5:42:ALA:HB3	2.19	0.43
36:1:591:G:O2'	43:L6:17:ALA:O	2.28	0.43
43:L6:5:LYS:HE3	43:L6:5:LYS:HA	1.99	0.43
44:L7:156:ILE:O	44:L7:159:GLN:HB2	2.18	0.43
44:L7:51:TYR:O	44:L7:54:GLU:HG2	2.19	0.43
45:L8:143:ILE:HD11	45:L8:151:VAL:HG11	2.95	0.43
45:L8:165:PHE:O	45:L8:169:LEU:HB2	2.18	0.43
46:L9:94:TYR:HB3	46:L9:99:ILE:HG13	2.00	0.43
47:M0:93:PRO:HA	47:M0:126:ALA:O	2.40	0.43
47:M0:12:GLN:OE1	47:M0:128:ARG:HB3	3.20	0.43
47:M0:81:GLY:O	47:M0:83:ASP:N	2.84	0.43
48:M1:173:ASP:HB3	48:M1:174:LYS:H	1.65	0.43
48:M1:54:VAL:HG11	48:M1:57:PHE:CG	2.53	0.43
48:M1:9:MET:O	48:M1:9:MET:HG3	2.18	0.43
50:M4:72:LEU:HD11	50:M4:81:VAL:HG22	2.85	0.43
52:M6:27:LEU:HD22	52:M6:101:ARG:HB2	2.12	0.43
53:M7:132:ALA:O	53:M7:133:HIS:HB2	2.73	0.43
55:M9:23:TRP:O	55:M9:50:ILE:HA	2.19	0.43
56:N0:38:LYS:HE3	56:N0:38:LYS:HB2	1.71	0.43
57:N1:117:ALA:O	57:N1:119:ALA:N	3.12	0.43
61:N5:87:SER:O	61:N5:120:LYS:HD2	4.59	0.43
61:N5:47:ALA:HB3	71:O5:77:PRO:HG3	2.00	0.43
63:N7:10:VAL:HG22	63:N7:24:VAL:HG13	1.99	0.43
64:N8:91:LEU:HD12	64:N8:91:LEU:HA	2.72	0.43
64:N8:93:SER:OG	64:N8:93:SER:O	2.33	0.43
65:N9:14:ARG:HH12	65:N9:18:ARG:HH11	2.30	0.43
36:1:1433:A:O4'	68:O2:27:ARG:HD2	2.19	0.43
68:O2:61:LYS:NZ	68:O2:61:LYS:HB2	3.38	0.43
74:O8:65:LEU:HD23	74:O8:68:SER:HB2	2.64	0.43
1:2:1782:A:H5'	77:Q1:1:MET:HE3	2.01	0.43
79:Q3:26:VAL:HG13	79:Q3:30:GLU:HG3	2.00	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S0:49:ASN:HB3	2:S0:52:LYS:HG3	1.99	0.43
3:S1:71:ALA:HB2	3:S1:79:HIS:C	2.38	0.43
3:S1:86:LEU:HB3	3:S1:98:THR:OG1	2.18	0.43
4:S2:238:SER:HA	4:S2:239:PRO:HD3	1.90	0.43
5:S3:162:GLN:HG3	1:6:1333:C:C4'	428.33	0.43
7:S5:91:GLU:HG2	7:S5:95:ASN:ND2	3.30	0.43
9:S7:61:PHE:HA	9:S7:93:LEU:O	2.18	0.43
34:SR:171:SER:OG	34:SR:179:LYS:HB2	2.19	0.43
34:SR:36:ALA:HB2	34:SR:71:CYS:HB3	2.01	0.43
36:1:1113:G:O5'	36:1:1113:G:H8	2.01	0.43
36:1:1480:G:H4'	36:1:1481:A:OP1	2.18	0.43
36:1:2302:G:H2'	36:1:2303:A:O4'	2.19	0.43
36:1:2540:A:O2'	36:1:2541:U:H5''	2.19	0.43
36:1:2656:A:C4	36:1:2658:G:N7	2.87	0.43
36:1:2737:C:H4'	57:N1:68:THR:OG1	2.19	0.43
36:1:2881:C:H2'	36:1:2882:U:H6	1.82	0.43
36:1:3351:U:O2'	36:1:3352:U:OP1	2.34	0.43
85:1:3880:OHX:N4	85:1:3916:OHX:N2	2.66	0.43
36:1:664:U:H2'	36:1:665:A:C8	2.53	0.43
36:1:760:G:H1'	36:1:770:G:N2	2.34	0.43
1:2:1163:A:N6	1:2:1164:G:C6	2.87	0.43
1:2:1208:A:N1	1:2:1455:G:N2	2.64	0.43
1:2:1370:U:H4'	1:2:1371:A:H5''	1.99	0.43
1:2:1394:G:OP1	34:SR:282:SER:OG	2.32	0.43
1:2:1397:U:H2'	1:2:1398:U:H5''	2.01	0.43
1:2:86:A:O2'	1:2:147:A:N3	2.42	0.43
1:2:1565:C:OP1	20:C8:41:ARG:HG3	2.19	0.43
1:2:68:A:H5'	8:S6:160:ARG:HH12	1.84	0.43
1:2:73:U:O2'	1:2:74:U:C4	2.70	0.43
1:2:824:G:N2	1:2:849:C:O2	2.51	0.43
1:2:892:A:C6	1:2:893:U:C4	3.07	0.43
36:5:1072:G:H2'	36:5:1073:U:C6	2.54	0.43
36:5:10:C:O2'	36:5:1558:A:N6	2.45	0.43
36:5:1329:U:O2'	36:5:1330:A:H5''	2.19	0.43
36:5:132:C:C2'	36:5:133:U:H5''	2.45	0.43
36:5:1581:C:OP2	36:5:1581:C:H4'	2.17	0.43
36:5:1715:A:H4'	36:5:1716:U:OP1	2.19	0.43
36:5:1817:G:HO2'	36:5:1818:U:H6	1.63	0.43
36:5:2413:A:H2'	36:5:2414:G:C8	2.52	0.43
36:5:3025:C:H2'	36:5:3026:G:O4'	2.19	0.43
36:5:3045:G:H2'	36:5:3046:A:O4'	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
85:5:3908:OHX:N6	85:5:3917:OHX:N5	2.66	0.43
85:5:4025:OHX:N5	85:5:4027:OHX:N6	2.66	0.43
36:5:1790:G:O6	85:5:4032:OHX:N4	2.51	0.43
36:5:422:A:N1	36:5:2362:C:O2'	2.43	0.43
36:5:549:U:H2'	36:5:550:A:H8	1.84	0.43
41:L4:315:LYS:NZ	36:5:609:G:OP2	240.10	0.43
1:6:1065:A:H2'	1:6:1066:C:O4'	2.19	0.43
1:6:1171:A:H2'	1:6:1172:G:C8	2.53	0.43
1:6:1563:C:H2'	1:6:1564:U:C6	2.54	0.43
1:6:542:A:OP1	1:6:544:A:C5	2.72	0.43
1:6:747:C:C4	1:6:748:U:C4	3.07	0.43
15:C3:22:ALA:HB1	15:C3:23:PRO:CA	2.48	0.43
16:C4:107:ARG:HH21	16:C4:107:ARG:HB2	2.05	0.43
20:C8:28:ILE:O	20:C8:32:LEU:HG	2.18	0.43
22:D0:96:PRO:HB2	22:D0:97:VAL:H	1.72	0.43
4:S2:140:ARG:HA	23:D1:10:GLU:OE1	2.19	0.43
28:D6:38:ARG:HH21	28:D6:83:ILE:HG21	1.82	0.43
33:E1:135:HIS:HB2	33:E1:138:ARG:CB	2.48	0.43
33:E1:90:LYS:H	33:E1:90:LYS:HG3	4.66	0.43
40:L3:45:SER:HB2	40:L3:181:ILE:HD13	2.01	0.43
41:L4:22:LEU:HD23	41:L4:22:LEU:HA	1.73	0.43
42:L5:122:VAL:HG23	42:L5:123:GLU:N	3.95	0.43
42:L5:58:LYS:HD2	42:L5:93:THR:HG21	2.01	0.43
44:L7:176:TYR:CZ	44:L7:197:GLN:HG2	2.54	0.43
45:L8:78:PHE:C	45:L8:80:TYR:H	2.35	0.43
46:L9:2:LYS:HA	46:L9:60:GLY:O	2.19	0.43
48:M1:8:PRO:CG	48:M1:9:MET:H	2.82	0.43
49:M3:32:LYS:HA	49:M3:35:ARG:NH1	2.48	0.43
49:M3:54:LEU:HD12	49:M3:75:PHE:CZ	2.54	0.43
52:M6:102:LEU:HD12	52:M6:103:LYS:N	2.34	0.43
44:L7:75:TYR:HB2	57:N1:141:VAL:HG22	2.00	0.43
57:N1:57:TYR:OH	57:N1:87:LYS:HD3	2.18	0.43
59:N3:86:ARG:HG3	59:N3:92:PHE:CE2	2.53	0.43
61:N5:132:ALA:O	61:N5:136:ALA:N	2.90	0.43
67:O1:17:HIS:CG	67:O1:69:TYR:CD1	3.05	0.43
67:O1:36:ILE:HD12	67:O1:59:ILE:HD11	2.00	0.43
68:O2:124:GLY:C	68:O2:126:LEU:H	2.22	0.43
70:O4:8:ARG:HH21	70:O4:31:ARG:CD	2.31	0.43
71:O5:76:GLN:O	71:O5:81:ARG:NH1	2.92	0.43
36:1:22:G:H5''	73:O7:43:LYS:HG2	2.00	0.43
74:O8:42:LYS:HE2	74:O8:55:VAL:HG22	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Q2:100:LYS:HA	78:Q2:100:LYS:HE3	2.01	0.43
2:S0:88:LYS:HB3	2:S0:202:TYR:CE1	2.54	0.43
3:S1:113:MET:HB3	3:S1:142:PHE:CE2	2.52	0.43
5:S3:70:THR:CG2	5:S3:86:LEU:HB2	2.49	0.43
6:S4:21:ASP:HB2	1:6:773:C:OP1	388.64	0.43
7:S5:94:THR:CG2	7:S5:114:ILE:HG13	2.45	0.43
7:S5:126:ASP:HB3	7:S5:127:GLN:H	1.60	0.43
7:S5:163:SER:HB2	30:D8:48:VAL:HG23	2.01	0.43
9:S7:30:SER:O	9:S7:34:LEU:HB2	2.19	0.43
1:2:323:A:OP2	10:S8:10:LYS:HG3	2.18	0.43
10:S8:6:ASP:OD1	10:S8:8:ARG:HB2	4.12	0.43
35:SM:113:ASP:O	35:SM:116:GLU:HB2	2.19	0.43
20:C8:145:ARG:CG	35:SM:68:ARG:HH22	3.44	0.43
34:SR:7:LEU:HD11	34:SR:251:TRP:CZ3	2.53	0.43
34:SR:256:THR:HG21	34:SR:261:LYS:HD2	2.51	0.43
34:SR:38:ARG:HG2	34:SR:67:ILE:CG2	2.49	0.43
34:SR:52:GLN:HG2	34:SR:53:LYS:H	2.45	0.43
36:1:1063:G:C6	36:1:1097:G:C5	3.07	0.43
36:1:1120:A:H2'	36:1:1121:U:C6	2.54	0.43
36:1:1702:U:H2'	36:1:1703:U:O4'	2.19	0.43
36:1:1903:U:H6	36:1:1903:U:O5'	2.00	0.43
36:1:3200:G:C5	36:1:3201:C:C5	3.07	0.43
1:2:1178:G:H2'	1:2:1179:G:O4'	2.19	0.43
1:2:123:G:P	6:S4:77:ARG:HH22	2.42	0.43
1:2:1353:U:H2'	1:2:1354:G:C8	2.53	0.43
1:2:1561:U:H2'	1:2:1562:G:H8	1.84	0.43
1:2:1147:A:O2'	1:2:1635:A:H2'	2.19	0.43
1:2:1695:G:H21	1:2:1706:C:N4	2.15	0.43
1:2:25:C:O2	85:2:2043:OHX:N3	2.52	0.43
1:2:239:C:H2'	1:2:240:U:H6	1.82	0.43
1:2:265:A:C2	1:2:267:U:C4	3.07	0.43
1:2:25:C:O2'	1:2:366:A:O2'	2.33	0.43
1:2:823:G:H5'	1:2:824:G:OP2	2.18	0.43
37:3:80:G:OP2	85:3:219:OHX:N6	2.52	0.43
36:5:1104:G:H2'	36:5:1105:A:C8	2.53	0.43
36:5:1282:G:H2'	36:5:1283:C:O4'	2.19	0.43
36:5:2947:G:H4'	36:5:2947:G:OP2	2.18	0.43
36:5:3288:G:O2'	36:5:3289:G:H8	2.02	0.43
1:6:1004:U:O4	85:5:3800:OHX:N2	2.52	0.43
36:5:652:G:H8	85:5:4007:OHX:N6	2.17	0.43
1:6:621:A:N3	1:6:1107:G:H1'	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:1209:C:H42	1:6:1454:G:H1	1.67	0.43
1:6:1595:U:N3	1:6:1600:A:H2	2.09	0.43
37:7:80:G:H2'	37:7:81:U:O4'	2.19	0.43
37:7:91:G:H2'	37:7:92:A:C8	2.53	0.43
36:5:419:G:N2	38:8:5:U:C2	2.87	0.43
12:C0:74:GLU:O	12:C0:77:ARG:HB3	2.18	0.43
19:C7:41:ILE:HG22	19:C7:43:SER:H	1.84	0.43
19:C7:71:PHE:CZ	19:C7:74:GLN:HB2	5.25	0.43
20:C8:123:ARG:CG	20:C8:133:VAL:HG21	2.49	0.43
23:D1:38:LYS:HE3	23:D1:51:VAL:HG23	2.58	0.43
24:D2:16:ASN:OD1	1:6:1095:U:O2'	371.87	0.43
30:D8:42:ARG:CZ	30:D8:56:LEU:HD22	3.19	0.43
40:L3:226:PHE:CE1	40:L3:268:GLY:HA2	3.20	0.43
41:L4:115:HIS:CD2	41:L4:119:ARG:CZ	3.02	0.43
42:L5:148:ILE:HG22	42:L5:149:GLY:O	2.18	0.43
42:L5:279:LYS:HA	42:L5:282:ARG:HB2	1.99	0.43
43:L6:65:ILE:O	43:L6:76:LEU:HA	2.25	0.43
45:L8:60:ARG:O	45:L8:64:ILE:HG13	2.97	0.43
46:L9:16:VAL:HA	46:L9:28:VAL:O	2.19	0.43
48:M1:162:TRP:CZ2	48:M1:166:LYS:HD2	2.54	0.43
36:1:31:C:OP2	51:M5:188:ARG:NH2	2.49	0.43
51:M5:19:LEU:HD12	51:M5:19:LEU:HA	1.66	0.43
51:M5:93:LYS:O	51:M5:94:TYR:HB3	2.19	0.43
52:M6:84:LEU:O	52:M6:87:MET:N	2.48	0.43
55:M9:103:ARG:HD2	55:M9:124:TYR:CE1	2.53	0.43
55:M9:171:ASP:N	55:M9:171:ASP:OD1	2.50	0.43
56:N0:28:ARG:HH11	56:N0:99:ARG:NE	2.17	0.43
56:N0:7:TYR:CE1	56:N0:34:GLU:HG2	2.54	0.43
61:N5:103:TYR:O	61:N5:138:ARG:NH1	2.66	0.43
61:N5:136:ALA:O	61:N5:139:ILE:HG23	2.19	0.43
62:N6:38:GLU:O	62:N6:42:GLN:HG3	4.59	0.43
72:O6:79:SER:HB3	72:O6:82:ARG:HB2	2.77	0.43
3:S1:119:THR:HB	3:S1:143:THR:CG2	2.48	0.43
4:S2:75:GLY:O	4:S2:77:GLN:NE2	2.51	0.43
7:S5:183:ALA:HB2	7:S5:193:THR:OG1	2.18	0.43
7:S5:211:ILE:HA	7:S5:211:ILE:HD13	1.91	0.43
36:1:1035:G:H2'	36:1:1036:A:H8	1.84	0.43
36:1:1560:G:H2'	36:1:1561:G:H5'	2.01	0.43
36:1:1767:C:H2'	36:1:1768:U:C6	2.54	0.43
36:1:2278:C:H2'	36:1:2279:A:H5''	2.01	0.43
36:1:2444:C:H42	36:1:2503:G:H21	1.66	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2444:C:H42	36:1:2503:G:N2	2.17	0.43
36:1:279:U:H2'	36:1:280:U:H6	1.84	0.43
36:1:2944:U:H1'	40:L3:251:CYS:SG	2.59	0.43
36:1:3096:C:H1'	40:L3:327:CYS:SG	2.59	0.43
36:1:3155:U:H3'	36:1:3156:U:H4'	2.01	0.43
36:1:3181:C:H2'	36:1:3182:G:O4'	2.19	0.43
36:1:3268:A:OP1	43:L6:46:ARG:NH2	2.51	0.43
36:1:3313:U:C2'	36:1:3314:A:H5'	2.48	0.43
36:1:439:C:H5'	36:1:440:A:P	2.59	0.43
36:1:716:A:N7	64:N8:116:GLY:HA2	2.34	0.43
36:1:72:C:H5'	49:M3:63:VAL:HG22	2.01	0.43
36:1:824:C:OP1	39:L2:21:ARG:NE	2.52	0.43
1:2:867:G:C4	1:2:868:G:C8	3.07	0.43
36:5:1069:C:H2'	36:5:1070:U:H6	1.84	0.43
36:5:982:C:N3	36:5:1102:A:C2	2.86	0.43
36:5:2186:U:H2'	36:5:2187:G:O4'	2.19	0.43
36:5:255:A:H2'	36:5:256:G:H8	1.84	0.43
36:5:2651:G:H4'	36:5:2652:U:OP2	2.18	0.43
78:Q2:19:LYS:HA	36:5:2741:C:H4'	208.62	0.43
36:5:312:C:H1'	36:5:2778:G:N2	2.34	0.43
36:5:701:G:H2'	36:5:702:C:C6	2.54	0.43
1:6:328:A:C2	1:6:329:G:C4	3.07	0.43
12:C0:15:LEU:HD23	12:C0:21:VAL:HG23	5.18	0.43
13:C1:46:LYS:HG3	13:C1:50:GLU:CD	5.76	0.43
16:C4:75:GLY:O	16:C4:76:ILE:HD12	2.19	0.43
18:C6:120:ASP:OD1	18:C6:122:ARG:HG3	3.04	0.43
20:C8:143:ARG:O	20:C8:144:ARG:HB2	4.60	0.43
20:C8:35:ILE:HB	20:C8:38:VAL:CG2	2.74	0.43
20:C8:91:ASP:HB3	20:C8:95:GLY:H	2.11	0.43
21:C9:23:GLN:HG2	21:C9:55:TYR:CD2	2.54	0.43
26:D4:52:LYS:C	26:D4:54:ALA:H	2.32	0.43
25:D3:60:GLU:CD	32:E0:3:LYS:HB2	2.59	0.43
39:L2:28:LYS:HB3	39:L2:123:ARG:HB3	3.63	0.43
39:L2:227:ARG:HG2	39:L2:239:ALA:HB2	2.00	0.43
39:L2:248:GLY:O	39:L2:250:GLN:N	3.52	0.43
40:L3:212:ASN:HB3	40:L3:281:LYS:HZ2	1.84	0.43
36:1:3312:U:H5''	40:L3:25:ILE:HD12	2.01	0.43
40:L3:347:SER:HB3	40:L3:350:ALA:N	3.25	0.43
40:L3:361:THR:HG22	40:L3:371:GLN:OE1	4.58	0.43
36:1:3369:G:N2	40:L3:380:MET:O	2.51	0.43
41:L4:282:SER:HB3	54:M8:126:GLN:HE21	5.24	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:58:HIS:O	41:L4:60:THR:N	3.03	0.43
44:L7:160:ARG:HG3	44:L7:203:TRP:CD2	2.54	0.43
44:L7:27:ALA:HA	44:L7:30:ARG:HB3	2.00	0.43
46:L9:92:TYR:N	46:L9:92:TYR:CD1	2.86	0.43
47:M0:66:GLU:O	47:M0:69:ARG:N	2.80	0.43
48:M1:65:ILE:HG22	48:M1:66:ALA:HB2	2.30	0.43
50:M4:102:LYS:HE3	50:M4:102:LYS:HB2	1.85	0.43
53:M7:112:LEU:HA	53:M7:151:THR:O	2.35	0.43
36:1:412:G:H1'	53:M7:120:ASN:HB3	2.01	0.43
53:M7:95:LEU:HA	53:M7:95:LEU:HD23	2.16	0.43
56:N0:78:TRP:CE3	56:N0:125:LYS:HG2	3.97	0.43
59:N3:40:LYS:HG3	36:5:2932:U:OP1	282.43	0.43
72:O6:26:ILE:H	72:O6:26:ILE:HG13	1.43	0.43
75:O9:9:ILE:HG22	75:O9:13:MET:HE2	2.01	0.43
79:Q3:3:LYS:HD2	79:Q3:5:THR:O	3.67	0.43
2:S0:10:THR:O	2:S0:10:THR:OG1	3.03	0.43
2:S0:139:VAL:O	2:S0:140:ASN:HB2	2.19	0.43
6:S4:126:VAL:HA	6:S4:141:THR:HA	2.00	0.43
6:S4:191:ARG:HD3	6:S4:245:LYS:HB3	2.28	0.43
7:S5:91:GLU:OE2	7:S5:107:LYS:NZ	2.42	0.43
7:S5:92:ARG:NH1	7:S5:92:ARG:HG2	2.86	0.43
11:S9:51:LYS:HB3	11:S9:54:ARG:HH11	1.83	0.43
11:S9:96:VAL:HA	11:S9:99:LEU:HD22	2.00	0.43
1:2:1274:C:H41	35:SM:95:SER:HA	1.83	0.43
34:SR:214:ALA:HB2	34:SR:220:ILE:HA	2.20	0.43
34:SR:6:VAL:HG12	34:SR:316:MET:O	4.36	0.43
36:1:1071:U:O2'	36:1:1072:G:OP2	2.31	0.42
36:1:987:U:C2	36:1:1098:A:C2	3.07	0.42
36:1:132:C:H2'	36:1:133:U:H5''	2.00	0.42
36:1:1944:U:H2'	36:1:1945:A:H8	1.84	0.42
36:1:225:C:H2'	36:1:226:C:C6	2.54	0.42
36:1:3001:C:H2'	36:1:3002:C:C6	2.52	0.42
36:1:3218:A:H5''	36:1:3219:G:C5	2.54	0.42
36:1:655:C:H5''	68:O2:26:HIS:HB2	2.00	0.42
36:1:943:U:C2	36:1:1432:C:C5	3.07	0.42
1:2:1087:A:H2'	1:2:1088:A:C8	2.54	0.42
1:2:1500:C:H5'	21:C9:106:GLN:HE21	1.84	0.42
1:2:512:A:H5''	11:S9:163:PRO:HG3	2.00	0.42
1:2:889:U:H2'	1:2:890:C:O4'	2.18	0.42
37:3:7:G:H5''	42:L5:22:ARG:HD3	2.01	0.42
36:5:1560:G:HO2'	36:5:1561:G:P	2.41	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1563:C:H2'	36:5:1564:U:O4'	2.19	0.42
36:5:1719:G:H2'	36:5:1720:U:O4'	2.19	0.42
36:5:1741:A:C6	36:5:1742:U:C2	3.06	0.42
36:5:247:C:N3	36:5:248:U:H1'	2.33	0.42
47:M0:119:TRP:CG	36:5:2646:C:H5''	256.64	0.42
36:5:2726:C:O2'	36:5:2727:A:H2'	2.19	0.42
36:5:3306:U:H2'	36:5:3307:A:H5''	2.00	0.42
36:5:394:G:N2	36:5:396:A:H3'	2.34	0.42
36:5:662:U:H2'	36:5:663:C:C6	2.54	0.42
36:5:727:G:OP2	36:5:742:G:N2	2.52	0.42
1:6:1054:U:H2'	1:6:1055:U:O4'	2.18	0.42
1:6:1151:A:O3'	1:6:1766:A:N6	2.52	0.42
1:6:719:U:C4	1:6:721:U:H5	2.37	0.42
37:7:79:A:N6	37:7:101:G:O2'	2.47	0.42
42:L5:260:PHE:HE2	37:7:121:U:H5'	321.04	0.42
38:8:83:C:H4'	38:8:85:G:H21	1.83	0.42
18:C6:129:PHE:CE1	22:D0:78:THR:HA	3.27	0.42
20:C8:36:LYS:HB3	20:C8:105:VAL:CG2	4.75	0.42
20:C8:18:LEU:HD21	20:C8:70:VAL:HG13	2.01	0.42
22:D0:38:SER:O	22:D0:42:VAL:HG23	2.36	0.42
1:2:1382:A:H5'	22:D0:59:PRO:HA	2.00	0.42
22:D0:42:VAL:HG22	22:D0:91:ILE:HD13	2.21	0.42
24:D2:31:SER:HB3	24:D2:34:ILE:HG13	3.73	0.42
25:D3:117:ILE:HA	25:D3:118:PRO:HD3	2.19	0.42
40:L3:296:THR:HG22	40:L3:297:SER:N	4.36	0.42
42:L5:88:ILE:HD12	42:L5:240:TYR:CD1	4.48	0.42
47:M0:48:LEU:O	47:M0:139:ARG:HA	2.18	0.42
48:M1:16:LYS:HG2	48:M1:130:VAL:CG1	2.49	0.42
49:M3:70:ARG:NH1	36:5:76:G:OP1	88.10	0.42
50:M4:62:GLN:HG2	50:M4:62:GLN:H	3.24	0.42
51:M5:65:ARG:HG2	51:M5:127:TYR:CD1	4.71	0.42
52:M6:113:ASP:OD1	52:M6:114:LYS:HG2	2.19	0.42
53:M7:101:ASN:O	53:M7:105:LYS:HG3	2.18	0.42
53:M7:2:ALA:O	53:M7:3:ARG:HB2	2.18	0.42
57:N1:14:MET:CE	57:N1:55:LYS:HB2	2.72	0.42
59:N3:26:ALA:O	59:N3:115:THR:N	2.41	0.42
69:O3:16:TYR:CG	69:O3:25:PRO:HA	2.87	0.42
69:O3:45:LEU:HA	69:O3:71:VAL:HG12	2.32	0.42
70:O4:8:ARG:NH2	70:O4:31:ARG:HD3	2.29	0.42
71:O5:63:ARG:O	71:O5:67:ARG:HB2	2.69	0.42
72:O6:98:ARG:HB3	72:O6:99:ARG:H	4.39	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
74:O8:2:ALA:HB2	36:5:1613:A:O5'	139.41	0.42
74:O8:70:PRO:HA	74:O8:71:PRO:HD2	1.96	0.42
3:S1:143:THR:O	3:S1:208:GLN:HG2	2.84	0.42
5:S3:132:LYS:HB3	5:S3:189:MET:HG3	2.00	0.42
6:S4:136:VAL:HG11	6:S4:148:ARG:NH2	2.34	0.42
7:S5:157:ARG:HB2	7:S5:224:ASN:OD1	2.18	0.42
7:S5:36:ALA:HB1	7:S5:42:LEU:HD12	5.38	0.42
9:S7:166:LEU:HA	9:S7:166:LEU:HD12	2.12	0.42
9:S7:24:PHE:HD1	9:S7:38:LEU:HD11	4.40	0.42
11:S9:129:ILE:HG12	11:S9:134:ILE:HG12	3.91	0.42
11:S9:172:VAL:HG13	1:6:512:A:OP2	456.03	0.42
11:S9:94:ASP:N	11:S9:94:ASP:OD1	2.51	0.42
34:SR:129:LYS:HG2	34:SR:149:ASP:O	2.35	0.42
36:1:3021:A:C8	36:1:3023:U:C2	3.06	0.42
36:1:3061:G:N1	36:1:3083:G:C6	2.86	0.42
36:1:3183:A:H2'	36:1:3184:A:H8	1.84	0.42
36:1:2998:U:O4	85:1:3971:OHX:N1	2.52	0.42
36:1:587:U:H2'	36:1:588:G:H5'	2.01	0.42
36:1:700:C:OP1	49:M3:65:TYR:OH	2.26	0.42
1:2:1060:U:H2'	1:2:1061:A:O4'	2.19	0.42
1:2:1665:U:O4	85:2:2095:OHX:N3	2.52	0.42
36:5:1338:C:H2'	36:5:1339:C:H6	1.84	0.42
36:5:2590:A:C6	36:5:2591:A:C5	3.07	0.42
36:5:2656:A:C4	36:5:2658:G:N7	2.88	0.42
50:M4:121:MET:HE1	36:5:3215:A:H5'	275.06	0.42
85:5:3934:OHX:N3	85:5:4038:OHX:N1	2.67	0.42
54:M8:12:ARG:HH12	36:5:973:A:P	179.57	0.42
1:6:1014:G:H2'	1:6:1015:U:O4'	2.19	0.42
1:6:1138:A:C4	1:6:1139:A:C8	3.07	0.42
21:C9:47:PRO:HA	1:6:1477:G:O2'	375.56	0.42
1:6:1125:A:O2'	1:6:1776:A:OP1	2.30	0.42
13:C1:73:GLY:HA3	13:C1:86:ILE:HD12	2.00	0.42
14:C2:29:LYS:O	14:C2:33:ARG:HB2	2.19	0.42
15:C3:53:LEU:HD12	29:D7:52:THR:HG21	3.19	0.42
18:C6:102:LYS:HB3	18:C6:102:LYS:HE2	1.97	0.42
20:C8:28:ILE:HG13	20:C8:28:ILE:H	4.37	0.42
21:C9:6:VAL:HG22	21:C9:66:TYR:HE1	1.83	0.42
22:D0:46:GLU:HB2	22:D0:52:LYS:NZ	2.34	0.42
26:D4:13:ILE:HD13	26:D4:13:ILE:HA	4.50	0.42
32:E0:39:LEU:HD12	32:E0:43:ARG:NH2	2.34	0.42
39:L2:117:GLU:HG2	39:L2:124:GLY:H	2.26	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:L2:202:VAL:HG23	39:L2:211:HIS:HB3	2.02	0.42
42:L5:270:LYS:HG3	42:L5:273:ARG:CB	6.18	0.42
42:L5:270:LYS:O	42:L5:273:ARG:HB3	2.94	0.42
42:L5:277:LEU:HD12	37:7:62:U:H5''	337.23	0.42
43:L6:106:PHE:HD1	43:L6:134:ARG:HH12	1.67	0.42
43:L6:109:GLU:CD	43:L6:109:GLU:H	3.76	0.42
45:L8:73:PRO:HD3	45:L8:233:TRP:CG	2.68	0.42
46:L9:106:LYS:HA	46:L9:106:LYS:HD2	4.15	0.42
46:L9:112:ILE:HD11	46:L9:134:ILE:HD13	2.01	0.42
46:L9:67:ALA:HA	46:L9:70:THR:HG23	2.01	0.42
47:M0:168:SER:OG	47:M0:170:LYS:HB2	2.42	0.42
49:M3:64:LYS:HG3	64:N8:69:TRP:CD2	2.53	0.42
45:L8:162:LEU:HA	51:M5:7:LEU:HD11	2.78	0.42
36:1:1507:G:N7	53:M7:129:THR:HG22	2.35	0.42
53:M7:168:LEU:HB2	53:M7:172:GLN:HB3	2.01	0.42
53:M7:32:THR:O	53:M7:35:ALA:HB3	2.58	0.42
57:N1:100:LYS:HB3	36:5:990:U:H4'	259.55	0.42
57:N1:26:HIS:CE1	57:N1:28:SER:OG	2.72	0.42
57:N1:84:TYR:O	57:N1:85:LEU:HD23	2.18	0.42
59:N3:80:ARG:HD3	59:N3:117:PRO:O	2.72	0.42
62:N6:91:ASN:C	62:N6:93:ALA:H	2.21	0.42
65:N9:36:ASP:HA	65:N9:37:PRO:HD3	1.99	0.42
66:O0:13:LYS:HB3	66:O0:100:ILE:CG2	2.91	0.42
67:O1:84:ASP:O	67:O1:86:LYS:N	4.03	0.42
76:Q0:82:LEU:C	76:Q0:84:ALA:H	2.23	0.42
79:Q3:8:VAL:O	79:Q3:11:THR:HB	2.19	0.42
3:S1:112:SER:OG	3:S1:113:MET:N	2.52	0.42
6:S4:206:ASP:N	6:S4:206:ASP:OD1	2.52	0.42
6:S4:71:LYS:HA	6:S4:76:VAL:O	2.20	0.42
8:S6:178:LEU:HA	8:S6:178:LEU:HD12	2.32	0.42
11:S9:54:ARG:HE	11:S9:54:ARG:HB3	1.64	0.42
36:1:126:U:OP1	51:M5:144:ARG:NH1	2.52	0.42
36:1:1712:G:O6	66:O0:28:LYS:NZ	2.51	0.42
36:1:1826:C:OP1	74:O8:48:SER:OG	2.37	0.42
36:1:2282:U:O2	36:1:2310:U:H4'	2.19	0.42
36:1:2315:G:OP2	85:1:3862:OHX:N3	2.53	0.42
36:1:2421:U:H2'	36:1:2422:C:O4'	2.18	0.42
36:1:2213:A:N1	36:1:2429:G:H1'	2.34	0.42
36:1:2569:A:H8	36:1:2569:A:OP2	2.02	0.42
36:1:2694:A:C6	36:1:2695:A:C6	3.07	0.42
36:1:26:A:C4	36:1:330:G:C8	3.07	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3024:A:C6	36:1:3032:A:C8	3.08	0.42
36:1:3049:A:H5'	36:1:3049:A:H8	1.84	0.42
36:1:54:C:O2'	36:1:1547:G:H1'	2.20	0.42
36:1:592:A:C5	36:1:593:C:C5	3.08	0.42
36:1:851:C:H2'	36:1:852:U:H6	1.84	0.42
1:2:1017:U:H2'	1:2:1018:U:C6	2.54	0.42
1:2:1244:A:N3	1:2:1244:A:H3'	2.34	0.42
1:2:1346:A:H2'	1:2:1346:A:N3	2.34	0.42
1:2:874:C:OP1	85:2:1993:OHX:N2	2.52	0.42
1:2:833:U:OP2	85:2:2099:OHX:N4	2.52	0.42
1:2:412:A:H2'	1:2:413:U:H6	1.84	0.42
1:2:583:C:H2'	1:2:584:C:C6	2.54	0.42
38:4:99:C:OP1	61:N5:53:HIS:NE2	2.42	0.42
36:5:1345:G:N2	36:5:1360:C:C2	2.88	0.42
36:5:1536:G:N2	36:5:1537:A:H1'	2.34	0.42
36:5:1549:U:H2'	36:5:1550:C:C6	2.55	0.42
36:5:2167:A:H2'	36:5:2168:A:C8	2.55	0.42
36:5:2765:C:H2'	36:5:2766:U:C6	2.54	0.42
36:5:874:U:H5''	36:5:2950:G:OP1	2.20	0.42
52:M6:65:ASN:ND2	36:5:2988:C:OP1	220.66	0.42
46:L9:163:GLN:NE2	36:5:3108:G:N3	315.58	0.42
85:5:3844:OHX:N5	85:7:219:OHX:N6	2.67	0.42
36:5:383:G:N7	85:5:3912:OHX:N5	2.67	0.42
36:5:773:G:O6	85:5:3782:OHX:N3	2.52	0.42
36:5:92:G:H5'	36:5:93:C:H5''	2.01	0.42
1:6:1143:A:O2'	1:6:1300:A:N1	2.43	0.42
1:6:1429:G:C5	1:6:1430:U:C4	3.08	0.42
1:6:1429:G:H2'	1:6:1430:U:H6	1.84	0.42
1:6:706:A:H2'	1:6:707:A:O4'	2.19	0.42
38:8:41:A:H61	38:8:103:G:C2'	2.32	0.42
38:8:155:A:H2'	38:8:156:U:O4'	2.19	0.42
12:C0:31:LYS:H	12:C0:38:LYS:HA	3.83	0.42
12:C0:46:LEU:HA	12:C0:46:LEU:HD13	1.84	0.42
13:C1:101:GLU:OE1	13:C1:103:ARG:NH2	2.75	0.42
13:C1:131:ILE:HG22	13:C1:132:SER:HB3	2.62	0.42
20:C8:119:ILE:HD12	20:C8:119:ILE:HA	2.15	0.42
20:C8:121:ALA:O	20:C8:125:ILE:HG13	2.82	0.42
20:C8:14:ILE:HD11	20:C8:21:ASN:HB3	5.97	0.42
20:C8:52:VAL:HG21	20:C8:69:ILE:HD11	2.41	0.42
21:C9:66:TYR:HA	21:C9:124:ILE:HB	2.00	0.42
21:C9:30:VAL:HA	21:C9:54:PHE:CE2	2.55	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D6:2:PRO:HB2	28:D6:3:LYS:H	1.69	0.42
29:D7:75:GLU:HB3	29:D7:76:GLY:H	1.58	0.42
40:L3:146:ARG:HA	40:L3:146:ARG:CZ	3.51	0.42
41:L4:209:TYR:HD2	41:L4:211:GLU:N	2.17	0.42
41:L4:93:MET:H	41:L4:93:MET:CE	3.84	0.42
44:L7:169:ILE:O	44:L7:173:LEU:N	2.80	0.42
45:L8:137:ASN:OD1	51:M5:3:ALA:N	3.15	0.42
46:L9:109:ALA:O	46:L9:110:LYS:HB2	2.19	0.42
46:L9:12:VAL:HG13	46:L9:16:VAL:HG23	2.01	0.42
47:M0:200:LEU:HD12	47:M0:213:PHE:HB2	4.21	0.42
48:M1:109:HIS:HD2	48:M1:114:ILE:HG21	1.94	0.42
49:M3:24:VAL:O	49:M3:26:PHE:N	2.78	0.42
53:M7:147:GLU:HG3	53:M7:147:GLU:O	2.84	0.42
41:L4:286:VAL:HG11	54:M8:31:LYS:HE2	2.44	0.42
57:N1:25:VAL:HG23	57:N1:30:TYR:HE2	1.83	0.42
59:N3:79:VAL:HG23	59:N3:80:ARG:HG3	2.01	0.42
62:N6:50:ILE:HD13	62:N6:51:ARG:N	3.06	0.42
63:N7:24:VAL:HG23	63:N7:44:ALA:O	2.29	0.42
65:N9:39:PHE:O	65:N9:43:HIS:HB2	2.91	0.42
67:O1:70:ARG:O	67:O1:71:LEU:HD23	3.34	0.42
68:O2:81:ASP:O	68:O2:84:THR:HG23	2.19	0.42
69:O3:69:GLY:HA3	69:O3:85:PHE:HA	2.19	0.42
70:O4:98:GLN:O	70:O4:102:LYS:HD3	2.19	0.42
4:S2:180:ALA:HB2	4:S2:198:THR:HG21	2.00	0.42
6:S4:192:ILE:HG22	6:S4:193:GLY:N	2.72	0.42
8:S6:126:ASP:OD2	8:S6:127:THR:HG22	2.19	0.42
8:S6:19:ASP:OD1	8:S6:19:ASP:N	2.52	0.42
9:S7:78:THR:HA	9:S7:81:LEU:HB2	2.01	0.42
11:S9:130:THR:HA	11:S9:142:ASN:HB2	2.57	0.42
34:SR:184:ASN:OD1	34:SR:185:GLN:N	4.86	0.42
34:SR:256:THR:OG1	34:SR:259:GLY:O	2.15	0.42
34:SR:95:ALA:O	34:SR:96:THR:HG22	4.70	0.42
36:1:2565:U:H2'	36:1:2566:C:H6	1.85	0.42
36:1:2746:A:H2	42:L5:146:LEU:HB3	1.84	0.42
36:1:2812:C:H2'	36:1:2813:A:H8	1.84	0.42
36:1:2883:U:H2'	36:1:2884:C:C6	2.55	0.42
36:1:3024:A:C2	36:1:3032:A:C4	3.07	0.42
36:1:3113:A:H2'	36:1:3114:A:O4'	2.20	0.42
36:1:2208:A:H2	85:1:3904:OHX:N6	2.17	0.42
36:1:2201:G:OP2	85:1:3979:OHX:N1	2.52	0.42
36:1:543:C:N4	36:1:548:G:H1	2.17	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:616:G:N2	1:2:622:A:C8	2.87	0.42
1:2:792:U:H3'	1:2:793:A:C8	2.46	0.42
37:3:97:A:H2'	37:3:98:C:H6	1.84	0.42
38:4:1:A:C2	38:4:2:A:C4	3.07	0.42
36:5:1222:G:O6	85:5:3966:OHX:N1	2.52	0.42
36:5:1659:U:H2'	36:5:1660:C:C6	2.55	0.42
36:5:1728:G:H4'	36:5:1729:A:H5''	2.01	0.42
36:5:1792:C:H5''	36:5:1793:C:P	2.59	0.42
36:5:2846:U:O2'	85:5:3895:OHX:N5	2.52	0.42
36:5:2895:G:C2'	36:5:2896:A:H5''	2.45	0.42
52:M6:114:LYS:HA	36:5:3180:A:C4	273.70	0.42
85:5:4025:OHX:N5	85:5:4027:OHX:N2	2.68	0.42
85:5:3986:OHX:N1	85:5:4042:OHX:N3	2.67	0.42
36:5:503:C:H2'	36:5:504:A:H8	1.83	0.42
36:5:686:G:C2	36:5:695:C:C2	3.08	0.42
36:5:104:G:O2'	36:5:698:U:O2	2.31	0.42
36:5:777:U:H2'	36:5:778:U:O4'	2.18	0.42
40:L3:241:LYS:HE2	36:5:874:U:P	212.54	0.42
1:6:1362:U:H1'	1:6:1363:U:C4	2.55	0.42
19:C7:29:GLN:NE2	1:6:1388:A:OP1	435.02	0.42
1:6:1591:C:H2'	1:6:1592:A:C8	2.54	0.42
1:6:1746:A:O2'	36:5:2290:C:O2'	2.36	0.42
10:S8:10:LYS:HE3	1:6:339:C:OP2	284.29	0.42
1:6:485:A:C6	1:6:486:G:H1'	2.54	0.42
1:6:515:A:H2'	1:6:516:G:O4'	2.18	0.42
1:6:623:A:N6	1:6:970:A:OP1	2.45	0.42
38:8:81:U:O2'	38:8:82:U:H5''	2.19	0.42
12:C0:52:LYS:HE3	1:6:1220:C:H5'	443.45	0.42
13:C1:20:PHE:CZ	13:C1:22:ASN:HA	2.99	0.42
15:C3:27:LYS:HB2	15:C3:28:LEU:H	1.43	0.42
19:C7:81:LYS:HE3	19:C7:81:LYS:HB2	1.77	0.42
25:D3:42:PRO:HG2	25:D3:122:PHE:HE2	1.84	0.42
26:D4:54:ALA:O	26:D4:75:VAL:HA	2.19	0.42
30:D8:16:LEU:HD23	30:D8:16:LEU:HA	2.32	0.42
39:L2:220:GLY:O	39:L2:221:LYS:HG3	2.19	0.42
39:L2:21:ARG:HH21	39:L2:22:LEU:HD11	2.28	0.42
40:L3:139:GLN:H	40:L3:139:GLN:HG3	1.51	0.42
47:M0:68:ALA:HA	47:M0:158:LYS:HG3	2.01	0.42
47:M0:77:THR:HG22	47:M0:85:PHE:HZ	1.84	0.42
48:M1:59:ILE:HG21	48:M1:65:ILE:HD11	2.38	0.42
54:M8:166:LEU:HA	54:M8:166:LEU:HD22	2.69	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:L7:80:GLN:OE1	57:N1:136:ARG:HB2	3.63	0.42
57:N1:79:MET:HB3	57:N1:84:TYR:CD2	2.54	0.42
60:N4:32:GLN:OE1	60:N4:33:ASN:ND2	3.12	0.42
64:N8:117:ARG:HG2	64:N8:117:ARG:H	1.48	0.42
36:1:716:A:O2'	64:N8:117:ARG:NH2	2.52	0.42
65:N9:7:HIS:CG	65:N9:8:THR:N	2.98	0.42
67:O1:57:GLN:HG2	36:5:1475:A:H4'	147.25	0.42
68:O2:35:GLN:NE2	68:O2:35:GLN:HA	2.72	0.42
68:O2:82:LEU:HD11	68:O2:112:ALA:HA	2.01	0.42
72:O6:53:TYR:HB2	72:O6:76:ARG:HG2	2.00	0.42
36:1:359:U:O2'	73:O7:16:HIS:ND1	2.52	0.42
2:S0:195:TRP:CE2	2:S0:197:ILE:HD13	3.35	0.42
3:S1:124:ASN:N	3:S1:124:ASN:OD1	2.53	0.42
4:S2:81:MET:HB2	4:S2:101:VAL:O	2.18	0.42
5:S3:191:ASP:OD2	5:S3:193:ALA:HB3	2.72	0.42
6:S4:109:PHE:HD1	6:S4:109:PHE:HA	1.77	0.42
6:S4:15:PRO:HG2	6:S4:18:TRP:CE2	2.53	0.42
7:S5:69:PHE:CE2	18:C6:53:LEU:HD12	2.54	0.42
8:S6:78:THR:O	8:S6:81:VAL:HG12	2.18	0.42
9:S7:154:LEU:HD11	9:S7:183:PHE:HB3	2.00	0.42
10:S8:76:THR:HB	10:S8:77:ARG:H	2.37	0.42
11:S9:57:ARG:HG2	11:S9:97:LEU:HD21	2.01	0.42
35:SM:32:SER:HB3	36:5:2666:C:O2'	282.32	0.42
34:SR:245:PHE:CD1	34:SR:252:LEU:HD13	2.54	0.42
34:SR:37:SER:HB3	34:SR:39:ASP:OD1	3.03	0.42
36:1:1128:U:H2'	36:1:1129:A:O4'	2.20	0.42
36:1:1277:C:O2'	36:1:1278:A:H8	2.01	0.42
36:1:1481:A:H2'	36:1:1858:A:H1'	2.02	0.42
36:1:1517:G:H2'	36:1:1518:U:C6	2.55	0.42
36:1:1748:G:C6	36:1:1749:A:C6	3.08	0.42
36:1:2532:U:H3	36:1:2547:A:H61	1.67	0.42
36:1:2761:G:C4	36:1:2795:U:C5	3.07	0.42
36:1:2659:G:N7	85:1:3740:OHX:N5	2.67	0.42
36:1:415:G:H2'	36:1:416:A:H8	1.83	0.42
1:2:1291:G:H1	1:2:1324:G:H1	1.67	0.42
1:2:1402:G:H2'	1:2:1403:C:C6	2.55	0.42
1:2:18:C:H2'	1:2:19:A:H8	1.84	0.42
1:2:45:U:C2	1:2:436:A:N6	2.87	0.42
37:3:36:C:O2	37:3:45:A:H1'	2.19	0.42
37:3:61:G:H2'	37:3:62:U:H6	1.83	0.42
36:5:1011:A:H2'	36:5:1012:G:C8	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:N1:129:LYS:HB3	36:5:1098:A:O5'	252.43	0.42
36:5:1599:G:OP1	85:5:3919:OHX:N3	2.53	0.42
36:5:1613:A:H2'	36:5:1614:C:C6	2.55	0.42
36:5:1804:A:H2'	36:5:1805:C:C6	2.54	0.42
36:5:183:G:C2	36:5:184:U:C2	3.07	0.42
36:5:2562:A:N6	36:5:2579:G:O2'	2.52	0.42
36:5:2653:C:H1'	36:5:2694:A:C2	2.54	0.42
36:5:26:A:C4	36:5:330:G:C8	3.07	0.42
36:5:352:A:H61	36:5:365:A:H5''	1.84	0.42
36:5:1336:U:OP2	85:5:4036:OHX:N5	2.52	0.42
1:6:1104:U:H2'	1:6:1105:C:O4'	2.19	0.42
18:C6:30:LYS:NZ	1:6:1365:C:O3'	427.05	0.42
1:6:1725:U:H2'	1:6:1726:G:O4'	2.20	0.42
85:6:2116:OHX:N5	85:6:2152:OHX:N1	2.67	0.42
1:6:359:A:OP1	85:6:2140:OHX:N2	2.52	0.42
1:6:555:A:H3'	1:6:555:A:C8	2.54	0.42
37:7:46:A:C5	37:7:47:C:C5	3.07	0.42
12:C0:52:LYS:HD3	12:C0:54:TYR:HE1	7.45	0.42
18:C6:52:LEU:HA	18:C6:60:PHE:CE1	3.22	0.42
21:C9:57:ARG:NH1	21:C9:57:ARG:HG3	2.83	0.42
22:D0:109:GLU:HA	22:D0:110:PRO:HD2	1.94	0.42
22:D0:118:VAL:HG22	22:D0:119:ALA:H	1.84	0.42
25:D3:102:VAL:HG12	25:D3:127:VAL:HA	2.58	0.42
27:D5:54:VAL:N	27:D5:55:PRO:HD2	2.35	0.42
33:E1:98:VAL:O	33:E1:99:LYS:HG2	4.49	0.42
40:L3:278:ILE:HG13	40:L3:279:ASN:HD22	1.83	0.42
40:L3:290:ASP:HB3	40:L3:293:ASN:OD1	4.08	0.42
40:L3:370:PHE:HZ	40:L3:379:PHE:CD1	2.38	0.42
41:L4:59:GLN:OE1	73:O7:55:ARG:NH2	2.45	0.42
45:L8:214:LEU:HA	45:L8:214:LEU:HD12	1.86	0.42
45:L8:242:ALA:O	45:L8:245:LYS:HD3	4.55	0.42
45:L8:63:LYS:O	45:L8:67:ILE:HG12	4.63	0.42
45:L8:73:PRO:HG3	45:L8:232:HIS:C	2.88	0.42
46:L9:166:ARG:HD2	46:L9:168:ARG:HH11	13.65	0.42
47:M0:77:THR:HG22	47:M0:85:PHE:CZ	2.54	0.42
48:M1:80:LEU:HD22	48:M1:84:LEU:HG	2.02	0.42
51:M5:5:LYS:HE3	51:M5:8:GLU:OE2	2.18	0.42
53:M7:119:VAL:HA	53:M7:145:HIS:O	2.58	0.42
53:M7:64:ASN:O	53:M7:67:ILE:HB	2.20	0.42
61:N5:132:ALA:HA	61:N5:135:ILE:HG22	2.05	0.42
62:N6:108:LYS:HA	62:N6:108:LYS:HD3	4.72	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:O1:88:PRO:C	67:O1:89:LEU:HD12	2.55	0.42
70:O4:74:ARG:HG2	70:O4:75:ALA:H	2.36	0.42
78:Q2:54:THR:HG22	36:5:44:U:H4'	167.29	0.42
2:S0:178:ALA:O	2:S0:181:VAL:HG22	2.18	0.42
2:S0:185:ARG:HB3	2:S0:186:GLY:H	4.29	0.42
1:2:1514:U:O2'	5:S3:5:ILE:O	2.28	0.42
6:S4:212:ASP:C	6:S4:214:LEU:H	2.21	0.42
7:S5:188:LYS:HA	27:D5:63:SER:HB3	2.02	0.42
7:S5:64:VAL:O	7:S5:65:ARG:HB2	2.20	0.42
8:S6:52:ILE:HA	8:S6:111:LEU:HD23	2.02	0.42
8:S6:5:ILE:HD13	8:S6:50:PHE:CE1	2.54	0.42
9:S7:74:GLN:NE2	9:S7:92:PHE:HD1	3.02	0.42
10:S8:29:LEU:C	10:S8:29:LEU:HD23	2.40	0.42
10:S8:36:THR:OG1	10:S8:96:LEU:HB2	2.19	0.42
34:SR:134:TRP:N	34:SR:134:TRP:CD1	2.88	0.42
34:SR:36:ALA:HB1	34:SR:68:VAL:HB	3.50	0.42
36:1:1415:U:H2'	36:1:1416:C:O4'	2.20	0.42
36:1:1483:G:C8	36:1:1485:G:C8	3.07	0.42
36:1:2173:U:H2'	36:1:2174:G:N7	2.34	0.42
36:1:2239:G:N3	36:1:2239:G:H2'	2.34	0.42
36:1:2185:G:O2'	36:1:2314:U:OP2	2.28	0.42
36:1:2873:U:C2'	87:1:3401:ANM:H2	2.46	0.42
36:1:980:A:H2'	36:1:981:U:C1'	2.50	0.42
1:2:1203:A:C6	1:2:1556:A:C5	3.08	0.42
1:2:1226:A:O2'	1:2:1227:A:OP1	2.33	0.42
1:2:1375:A:C2	1:2:1376:C:C2	3.08	0.42
38:4:46:G:N2	38:4:58:G:C4	2.88	0.42
36:5:1404:G:N2	36:5:1407:A:OP2	2.45	0.42
67:O1:26:LYS:NZ	36:5:1455:U:O2	170.84	0.42
36:5:2772:C:H4'	36:5:2773:C:O5'	2.20	0.42
36:5:3186:A:H4'	36:5:3187:A:O5'	2.19	0.42
36:5:2718:U:C4	85:5:4062:OHX:N6	2.85	0.42
36:5:759:U:O4	36:5:760:G:C6	2.72	0.42
32:E0:26:LYS:NZ	1:6:588:U:OP2	419.50	0.42
1:6:708:C:H2'	1:6:709:C:O4'	2.19	0.42
1:6:823:G:C5	1:6:850:A:C2	3.08	0.42
13:C1:124:THR:O	13:C1:140:VAL:HG12	2.19	0.42
14:C2:118:ALA:O	14:C2:120:VAL:N	2.52	0.42
16:C4:12:GLN:HB2	16:C4:78:ALA:HB2	2.00	0.42
18:C6:53:LEU:HG	18:C6:53:LEU:H	1.56	0.42
19:C7:50:ILE:O	19:C7:54:THR:HG23	4.77	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:C9:134:ARG:O	21:C9:138:GLN:HG3	2.31	0.42
22:D0:29:THR:OG1	22:D0:30:LYS:HE3	2.37	0.42
26:D4:63:GLN:HB3	26:D4:68:LYS:HB3	2.02	0.42
30:D8:42:ARG:NH1	30:D8:56:LEU:HD22	2.34	0.42
33:E1:109:ASP:O	33:E1:111:GLU:N	2.51	0.42
39:L2:216:HIS:O	39:L2:218:HIS:HD2	2.35	0.42
40:L3:36:ASP:OD1	40:L3:38:SER:OG	2.34	0.42
41:L4:111:VAL:HG12	41:L4:112:LYS:N	2.34	0.42
41:L4:181:VAL:HG12	41:L4:182:LEU:N	2.35	0.42
41:L4:262:TRP:O	41:L4:276:LEU:HD11	3.22	0.42
41:L4:99:MET:CE	41:L4:103:THR:H	3.40	0.42
42:L5:106:ALA:O	42:L5:110:LEU:HD22	4.28	0.42
42:L5:110:LEU:O	42:L5:116:ASP:HB3	4.73	0.42
42:L5:259:LYS:HG2	42:L5:260:PHE:HD2	1.85	0.42
45:L8:143:ILE:HG23	45:L8:175:VAL:HG21	2.68	0.42
46:L9:96:HIS:O	46:L9:98:PRO:HD3	2.30	0.42
49:M3:57:VAL:HG23	49:M3:115:ARG:HD2	2.19	0.42
52:M6:85:ARG:C	52:M6:87:MET:H	2.22	0.42
53:M7:92:GLN:O	53:M7:95:LEU:N	3.38	0.42
54:M8:42:ALA:HA	54:M8:43:PRO:HD3	1.88	0.42
46:L9:4:ILE:CD1	56:N0:148:LEU:HD11	2.50	0.42
57:N1:35:LYS:HD2	36:5:1085:A:OP1	231.66	0.42
57:N1:88:ARG:HH21	65:N9:33:LYS:HB3	2.76	0.42
61:N5:93:TYR:CE2	38:8:131:A:H5"	106.09	0.42
63:N7:53:VAL:HA	63:N7:57:HIS:HD2	1.83	0.42
64:N8:70:LYS:N	64:N8:71:PRO:HD3	2.45	0.42
65:N9:23:LYS:HE3	65:N9:24:PRO:HD3	2.01	0.42
68:O2:8:LYS:HE2	68:O2:8:LYS:HB3	3.67	0.42
70:O4:41:ARG:HE	70:O4:41:ARG:HB3	1.97	0.42
71:O5:41:LEU:HD12	71:O5:43:LYS:HG3	2.01	0.42
73:O7:45:ARG:HH11	73:O7:47:TYR:HE2	1.78	0.42
3:S1:29:TRP:HE1	3:S1:47:LEU:HG	1.85	0.42
3:S1:94:LYS:HB3	3:S1:94:LYS:HE3	1.92	0.42
5:S3:164:VAL:O	5:S3:168:ILE:HG12	3.46	0.42
9:S7:130:VAL:HG11	9:S7:154:LEU:HD21	3.13	0.42
11:S9:109:LEU:HD11	11:S9:134:ILE:HD11	2.01	0.42
20:C8:128:PHE:CD2	35:SM:61:ILE:HG22	2.55	0.42
36:1:1073:U:H2'	36:1:1074:U:C6	2.55	0.42
36:1:1266:G:N2	36:1:1276:U:H1'	2.35	0.42
36:1:1295:G:C5	36:1:1296:C:C4	3.07	0.42
36:1:1517:G:OP1	75:O9:41:ARG:NH2	2.47	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:1770:G:H5'	36:1:1771:C:OP2	2.20	0.42
36:1:1817:G:OP1	85:1:3950:OHX:N1	2.53	0.42
36:1:2167:A:OP1	51:M5:72:LYS:NZ	2.52	0.42
36:1:2185:G:C6	36:1:2186:U:C4	3.08	0.42
36:1:2223:A:OP2	36:1:2223:A:H8	2.02	0.42
36:1:2366:C:H2'	36:1:2367:A:C8	2.54	0.42
36:1:2732:G:H2'	36:1:2733:A:O4'	2.20	0.42
36:1:304:G:H2'	36:1:304:G:N3	2.34	0.42
36:1:3055:U:C2	36:1:3085:G:N1	2.88	0.42
36:1:3343:G:C6	36:1:3361:G:C6	3.07	0.42
85:1:3824:OHX:N3	85:1:3932:OHX:N4	2.68	0.42
36:1:86:G:O2'	49:M3:11:LYS:HD3	2.20	0.42
1:2:1365:C:N4	1:2:1366:U:O4	2.52	0.42
1:2:1435:G:O6	12:C0:64:TYR:OH	2.31	0.42
1:2:1594:G:N2	1:2:1603:U:O2	2.53	0.42
1:2:1760:G:C2'	1:2:1761:U:H5'	2.50	0.42
85:2:2054:OHX:N6	85:2:2068:OHX:N5	2.67	0.42
1:2:312:A:C2	1:2:314:C:H2'	2.54	0.42
1:2:66:U:H5'	8:S6:173:PRO:HA	2.00	0.42
36:5:141:C:H2'	36:5:142:C:H6	1.85	0.42
36:5:3278:C:O2'	36:5:3279:A:OP2	2.30	0.42
36:5:495:G:H2'	36:5:496:C:O4'	2.20	0.42
1:6:1648:A:H2'	1:6:1649:G:C8	2.55	0.42
1:6:1570:A:OP1	85:6:2121:OHX:N4	2.52	0.42
1:6:563:U:C4	1:6:564:G:C6	3.08	0.42
38:8:19:C:C4	38:8:20:U:C4	3.08	0.42
13:C1:4:GLU:O	13:C1:5:LEU:HB2	2.20	0.42
18:C6:49:TYR:O	18:C6:53:LEU:HG	2.20	0.42
20:C8:46:VAL:HG11	20:C8:73:MET:CE	4.92	0.42
22:D0:105:GLN:HG3	22:D0:106:ILE:N	2.33	0.42
22:D0:27:THR:HG23	22:D0:113:ASP:HB3	2.01	0.42
22:D0:23:ARG:NH1	22:D0:92:ASP:OD2	2.52	0.42
23:D1:78:LEU:HD12	23:D1:78:LEU:HA	4.22	0.42
26:D4:82:ALA:O	26:D4:85:PHE:N	2.88	0.42
1:2:937:C:N4	28:D6:14:GLY:O	2.47	0.42
15:C3:53:LEU:CD1	29:D7:52:THR:HG21	3.34	0.42
32:E0:46:ASN:O	32:E0:47:VAL:HG12	2.20	0.42
33:E1:120:GLU:HA	33:E1:131:PHE:HA	2.02	0.42
40:L3:154:TYR:CD2	36:5:3242:G:H8	258.51	0.42
41:L4:128:ALA:HB1	41:L4:134:LEU:HD12	2.01	0.42
42:L5:279:LYS:HD3	42:L5:282:ARG:NH1	4.22	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:L5:282:ARG:O	42:L5:286:VAL:HG23	2.55	0.42
42:L5:41:LYS:HA	42:L5:41:LYS:HD2	1.64	0.42
44:L7:35:ALA:O	44:L7:39:GLU:HG3	2.19	0.42
44:L7:86:VAL:HA	44:L7:136:TYR:HB3	2.01	0.42
45:L8:247:ASP:C	45:L8:248:LYS:HD2	2.39	0.42
47:M0:101:LYS:HA	47:M0:101:LYS:HD2	3.17	0.42
47:M0:206:LEU:HD13	37:7:64:A:C8	343.25	0.42
49:M3:116:LEU:HD23	49:M3:116:LEU:HA	1.86	0.42
49:M3:64:LYS:HD2	64:N8:66:ALA:HB1	3.67	0.42
52:M6:182:ASN:HD21	52:M6:186:ALA:HB2	7.25	0.42
52:M6:182:ASN:ND2	52:M6:186:ALA:HB2	7.13	0.42
53:M7:116:HIS:O	53:M7:148:LEU:HA	2.19	0.42
55:M9:21:LYS:NZ	55:M9:55:VAL:HA	2.34	0.42
55:M9:96:ILE:O	55:M9:100:ARG:HG3	2.20	0.42
62:N6:103:LYS:HA	62:N6:103:LYS:HD3	1.91	0.42
66:O0:22:LYS:HD3	66:O0:94:GLU:HG3	2.02	0.42
67:O1:19:ARG:O	67:O1:20:LEU:HD23	3.17	0.42
68:O2:111:ARG:NH2	68:O2:115:LEU:HD21	2.35	0.42
73:O7:39:TYR:CD2	73:O7:40:PRO:HA	2.55	0.42
78:Q2:32:LYS:O	78:Q2:33:ALA:HB3	4.48	0.42
79:Q3:7:LYS:HE2	79:Q3:7:LYS:HB3	1.81	0.42
2:S0:31:VAL:HG12	2:S0:33:GLN:N	2.33	0.42
3:S1:126:THR:CG2	3:S1:136:ARG:HE	2.78	0.42
4:S2:60:SER:OG	23:D1:15:ARG:NH2	3.06	0.42
6:S4:31:PRO:HG2	6:S4:38:LEU:HD13	2.01	0.42
6:S4:31:PRO:HD2	6:S4:38:LEU:HD13	2.77	0.42
9:S7:164:TYR:CE1	9:S7:165:LYS:HG3	2.69	0.42
9:S7:21:ALA:O	9:S7:25:VAL:HG23	2.42	0.42
11:S9:133:HIS:O	11:S9:134:ILE:HG12	2.19	0.42
1:2:512:A:OP2	11:S9:172:VAL:HG13	2.20	0.42
34:SR:169:ILE:CG1	34:SR:181:TRP:HB2	2.47	0.42
34:SR:197:SER:CB	34:SR:216:LYS:HB3	3.00	0.42
34:SR:288:HIS:O	34:SR:306:THR:HG23	2.20	0.42
36:1:1899:G:N7	85:1:3791:OHX:N3	2.67	0.42
36:1:2371:G:O6	85:1:3733:OHX:N3	2.53	0.42
36:1:2573:G:N7	85:1:3859:OHX:N4	2.68	0.42
36:1:993:G:C5	36:1:2637:A:C2	3.08	0.42
36:1:304:G:N3	36:1:304:G:H5'	2.35	0.42
36:1:1486:G:O6	85:1:3836:OHX:N5	2.52	0.42
36:1:426:G:H5'	68:O2:50:ILE:HG22	2.01	0.42
1:2:926:A:H5'	1:2:1016:C:O2'	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1281:G:H2'	1:2:1282:U:H6	1.85	0.42
1:2:1357:A:H61	1:2:1366:U:H3	1.67	0.42
1:2:1568:C:H6	1:2:1568:C:H2'	1.69	0.42
1:2:407:A:H2'	1:2:408:C:C6	2.55	0.42
1:2:413:U:H2'	1:2:414:C:C6	2.55	0.42
1:2:442:C:H2'	1:2:443:C:H6	1.85	0.42
36:5:2333:C:H2'	36:5:2334:U:O4'	2.20	0.42
36:5:2798:C:H5''	36:5:2799:A:OP1	2.20	0.42
36:5:2971:A:H5''	36:5:2972:G:C5'	2.50	0.42
36:5:652:G:OP2	85:5:4007:OHX:N4	2.53	0.42
36:5:651:G:C6	36:5:652:G:C6	3.08	0.42
36:5:750:G:H2'	36:5:751:A:H8	1.85	0.42
36:5:781:G:C2	36:5:782:U:C6	3.08	0.42
36:5:847:A:H2'	36:5:848:A:C8	2.54	0.42
1:6:1015:U:H5''	1:6:1016:C:OP2	2.20	0.42
1:6:137:U:H2'	1:6:137:U:H6	1.60	0.42
1:6:1637:C:H6	1:6:1637:C:H5''	1.84	0.42
1:6:550:A:OP2	85:6:2012:OHX:N6	2.52	0.42
26:D4:10:ARG:NH1	1:6:778:G:N7	432.45	0.42
1:6:811:A:N3	1:6:858:G:H1'	2.35	0.42
36:5:409:A:H61	38:8:15:G:H1'	1.85	0.42
38:8:81:U:H1'	38:8:82:U:C6	2.55	0.42
14:C2:40:GLY:HA3	14:C2:125:ASN:HB3	2.01	0.42
15:C3:102:LEU:HD12	15:C3:115:LEU:HD12	3.17	0.42
18:C6:22:VAL:HG22	18:C6:65:ILE:HD12	2.97	0.42
1:2:1390:U:OP1	19:C7:5:ARG:HD2	2.20	0.42
21:C9:108:LEU:HB3	21:C9:114:VAL:HG22	6.08	0.42
21:C9:41:SER:C	21:C9:43:ASN:H	2.23	0.42
22:D0:80:GLU:HG3	31:D9:54:LYS:NZ	2.35	0.42
22:D0:34:LEU:HD11	22:D0:89:ARG:HD2	2.02	0.42
24:D2:106:THR:HG22	24:D2:122:SER:C	3.03	0.42
24:D2:53:ILE:HB	24:D2:60:LYS:HB2	4.55	0.42
30:D8:25:VAL:HG13	30:D8:44:VAL:O	2.19	0.42
32:E0:46:ASN:OD1	32:E0:47:VAL:N	2.75	0.42
39:L2:138:GLY:O	39:L2:146:THR:HG23	2.19	0.42
40:L3:93:VAL:HG11	40:L3:102:LEU:HD22	2.69	0.42
40:L3:56:ILE:HD12	40:L3:56:ILE:HA	2.41	0.42
42:L5:132:THR:HG21	42:L5:170:GLY:CA	2.48	0.42
43:L6:20:LYS:HE3	43:L6:20:LYS:HA	4.47	0.42
43:L6:55:LEU:HA	43:L6:55:LEU:HD23	1.82	0.42
43:L6:66:SER:O	43:L6:68:PRO:HA	3.77	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:L6:98:VAL:HA	43:L6:101:PHE:HD2	1.84	0.42
45:L8:87:ALA:O	45:L8:90:THR:N	2.51	0.42
46:L9:52:LEU:HA	46:L9:52:LEU:HD23	1.89	0.42
46:L9:99:ILE:HG22	46:L9:101:VAL:HG23	2.75	0.42
36:1:2645:G:OP2	47:M0:117:GLY:HA2	2.19	0.42
47:M0:206:LEU:O	47:M0:210:ILE:HG13	2.20	0.42
47:M0:77:THR:O	47:M0:81:GLY:N	2.47	0.42
48:M1:97:SER:O	48:M1:156:LYS:HB2	2.82	0.42
49:M3:46:ILE:O	49:M3:46:ILE:HG22	2.19	0.42
50:M4:106:ARG:HD3	36:5:3209:A:C4	293.81	0.42
51:M5:98:LEU:HD23	51:M5:128:LYS:HD2	4.77	0.42
53:M7:70:THR:CG2	53:M7:81:ALA:HB3	2.83	0.42
54:M8:178:ARG:CD	64:N8:50:PRO:HB2	3.26	0.42
58:N2:37:LEU:HD12	58:N2:41:ILE:HD11	5.17	0.42
62:N6:95:VAL:HA	62:N6:96:PRO:HD3	1.92	0.42
65:N9:14:ARG:CZ	65:N9:18:ARG:HD3	2.49	0.42
65:N9:7:HIS:O	36:5:1135:A:H5'	227.14	0.42
67:O1:84:ASP:OD1	67:O1:84:ASP:N	3.15	0.42
77:Q1:25:LYS:HB2	77:Q1:25:LYS:HE3	1.75	0.42
3:S1:29:TRP:CD1	3:S1:47:LEU:HG	2.55	0.42
4:S2:157:LYS:HG2	4:S2:170:ILE:HG23	3.49	0.42
4:S2:172:ALA:HA	4:S2:173:PRO:HD3	1.92	0.42
4:S2:88:LYS:N	4:S2:95:ARG:O	2.85	0.42
7:S5:203:LYS:O	7:S5:205:SER:N	2.92	0.42
7:S5:25:LEU:HB2	7:S5:26:ALA:H	1.61	0.42
7:S5:59:VAL:C	7:S5:61:TYR:H	2.22	0.42
11:S9:151:ASP:O	11:S9:154:LYS:NZ	5.09	0.42
11:S9:54:ARG:HA	11:S9:57:ARG:NE	2.35	0.42
34:SR:301:LEU:HB3	34:SR:313:TRP:HB2	2.95	0.42
36:1:2718:U:H2'	36:1:2719:U:C6	2.54	0.42
36:1:2660:G:H1'	36:1:2744:U:H1'	2.02	0.42
36:1:297:G:O6	51:M5:12:ARG:NH1	2.51	0.42
36:1:3133:C:H2'	36:1:3134:A:H8	1.84	0.42
36:1:3267:A:H2'	43:L6:69:PHE:CZ	2.55	0.42
36:1:1600:U:OP2	85:1:3944:OHX:N3	2.53	0.42
36:1:551:A:H2'	36:1:551:A:OP2	2.20	0.42
1:2:1531:G:H5'	27:D5:81:ARG:NH2	2.34	0.42
1:2:196:G:O2'	1:2:197:A:P	2.78	0.42
85:2:2054:OHX:N4	85:2:2068:OHX:N1	2.67	0.42
42:L5:140:ARG:NH2	36:5:1080:A:P	229.35	0.42
54:M8:38:ARG:NH2	36:5:1348:U:OP2	188.55	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5:1397:C:O2'	36:5:1398:U:H5'	2.19	0.42
64:N8:60:TYR:CE1	36:5:2777:G:C4	137.77	0.42
46:L9:170:LYS:HE3	36:5:2902:A:P	320.13	0.42
36:5:3288:G:O2'	36:5:3289:G:OP2	2.31	0.42
85:5:3934:OHX:N3	85:5:4038:OHX:N4	2.68	0.42
36:5:742:G:H5'	36:5:743:C:OP1	2.19	0.42
36:5:765:C:H4'	36:5:766:U:OP2	2.18	0.42
1:6:1271:G:H2'	1:6:1272:U:O4'	2.20	0.42
1:6:1275:A:H8	1:6:1275:A:OP2	2.03	0.42
1:6:1317:C:H2'	1:6:1318:G:O4'	2.19	0.42
1:6:151:G:N2	1:6:163:G:H22	2.18	0.42
25:D3:90:ASP:HA	1:6:568:G:O5'	370.81	0.42
1:6:653:C:N3	1:6:677:G:N2	2.55	0.42
85:5:3844:OHX:N6	85:7:219:OHX:N6	2.68	0.42
37:7:57:G:C8	37:7:58:C:C5	3.08	0.42
13:C1:13:PHE:CE2	13:C1:15:LYS:HB3	2.55	0.42
17:C5:43:ARG:HD3	1:6:1553:G:O6	396.46	0.42
21:C9:126:GLU:H	21:C9:126:GLU:CD	2.22	0.42
22:D0:101:LYS:HD3	22:D0:101:LYS:HA	4.63	0.42
22:D0:33:GLN:N	22:D0:33:GLN:OE1	2.55	0.42
1:2:687:G:H5'	24:D2:119:LYS:HG2	2.02	0.42
24:D2:25:VAL:HG22	24:D2:65:LEU:HD21	4.53	0.42
25:D3:137:LYS:HB2	25:D3:139:LYS:HG3	2.01	0.42
25:D3:33:LEU:HD13	25:D3:33:LEU:HA	4.07	0.42
7:S5:166:ARG:HD3	30:D8:45:LYS:HG2	2.02	0.42
32:E0:44:PHE:O	32:E0:44:PHE:HD1	4.35	0.42
33:E1:88:PRO:HA	33:E1:89:LYS:HA	4.76	0.42
39:L2:144:ASN:HB2	39:L2:160:SER:HB2	2.02	0.42
39:L2:36:GLU:HG2	39:L2:90:ALA:O	2.39	0.42
40:L3:139:GLN:OE1	40:L3:142:ALA:HB3	2.40	0.42
42:L5:254:LYS:HA	42:L5:255:PRO:HD2	1.86	0.42
44:L7:90:LYS:HD2	44:L7:91:GLY:H	1.84	0.42
45:L8:166:LEU:HD23	45:L8:166:LEU:HA	2.03	0.42
46:L9:48:VAL:HG23	46:L9:52:LEU:O	6.05	0.42
46:L9:81:GLY:HA2	46:L9:85:GLY:HA2	3.36	0.42
46:L9:83:THR:OG1	46:L9:84:LYS:N	2.85	0.42
47:M0:76:MET:HB3	47:M0:85:PHE:CE2	2.53	0.42
51:M5:154:PRO:O	51:M5:157:LYS:HD2	2.20	0.42
36:1:291:C:H5"	51:M5:68:ARG:NH1	2.35	0.42
51:M5:93:LYS:HD3	51:M5:93:LYS:HA	1.95	0.42
52:M6:41:LEU:HD12	52:M6:41:LEU:HA	1.84	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M8:54:LEU:HD13	54:M8:58:ASN:HB2	2.51	0.42
54:M8:98:LYS:HB3	54:M8:99:THR:H	1.57	0.42
56:N0:132:THR:O	56:N0:133:ALA:HB3	2.30	0.42
61:N5:80:ASN:HD21	61:N5:126:LEU:HB2	1.84	0.42
66:O0:53:LYS:HD2	66:O0:69:TYR:HE2	1.85	0.42
75:O9:21:ARG:HD3	75:O9:22:PRO:O	2.19	0.42
78:Q2:33:ALA:O	78:Q2:34:SER:HB3	2.20	0.42
7:S5:190:ILE:O	7:S5:194:LEU:HB2	2.30	0.42
7:S5:197:GLU:OE1	7:S5:209:TYR:N	3.34	0.42
11:S9:128:LEU:O	11:S9:133:HIS:HB2	2.61	0.42
11:S9:4:ALA:HA	11:S9:5:PRO:HD3	1.90	0.42
36:1:1237:G:N3	36:1:1237:G:H2'	2.35	0.42
36:1:1277:C:O2'	36:1:1278:A:C8	2.72	0.42
36:1:1496:C:C2	36:1:1521:G:N2	2.88	0.42
36:1:1579:C:N4	36:1:1580:A:N6	2.68	0.42
36:1:2191:U:H2'	36:1:2192:C:O4'	2.19	0.42
36:1:2331:C:H2'	36:1:2332:A:O4'	2.20	0.42
36:1:2611:U:H2'	36:1:2612:U:H6	1.82	0.42
36:1:2777:G:H5''	36:1:2778:G:OP1	2.20	0.42
36:1:1152:G:N2	85:1:4017:OHX:N6	2.67	0.42
1:2:1278:G:H2'	1:2:1279:C:O4'	2.20	0.42
1:2:1357:A:C6	1:2:1367:G:C6	3.08	0.42
1:2:1446:A:O2'	1:2:1448:G:N7	2.47	0.42
1:2:74:U:O2'	1:2:75:U:H5'	2.20	0.42
1:2:755:A:HO2'	1:2:756:A:P	2.42	0.42
1:2:800:U:H2'	1:2:801:G:C8	2.55	0.42
1:2:82:U:H2'	1:2:83:G:O4'	2.20	0.42
36:5:1013:G:H2'	36:5:1014:U:O4'	2.20	0.42
36:5:200:C:H5'	36:5:221:A:C2	2.55	0.42
66:O0:53:LYS:HE3	36:5:2552:C:H5	242.89	0.42
36:5:2689:A:H2'	36:5:2689:A:N3	2.35	0.42
57:N1:12:ARG:HG3	36:5:2698:G:O2'	259.58	0.42
36:5:2775:U:H2'	36:5:2776:C:H6	1.84	0.42
1:6:370:A:H2'	1:6:371:G:O4'	2.20	0.42
1:6:739:G:C4	1:6:740:A:C8	3.08	0.42
1:6:855:A:O2'	1:6:856:A:H3'	2.20	0.42
12:C0:54:TYR:O	12:C0:68:LEU:HD12	2.70	0.42
14:C2:131:ASP:OD1	14:C2:132:GLU:N	2.53	0.42
21:C9:124:ILE:HA	21:C9:124:ILE:HD12	2.24	0.42
2:S0:36:TYR:OH	23:D1:66:ASP:OD1	3.19	0.42
25:D3:59:ILE:HG21	25:D3:118:PRO:HD2	2.40	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D6:74:CYS:O	28:D6:76:SER:N	2.53	0.42
30:D8:10:ALA:HB1	30:D8:30:VAL:HB	2.52	0.42
30:D8:32:PHE:HE1	30:D8:40:ILE:HD11	1.85	0.42
40:L3:140:ASP:OD2	40:L3:140:ASP:N	2.65	0.42
40:L3:46:PHE:CD2	40:L3:205:VAL:HG13	3.32	0.42
41:L4:201:GLN:HG3	41:L4:202:ARG:O	2.20	0.42
42:L5:131:LEU:HA	42:L5:131:LEU:HD13	4.55	0.42
42:L5:56:THR:HG21	37:7:26:C:H5"	295.94	0.42
44:L7:26:VAL:C	44:L7:28:ALA:H	2.76	0.42
45:L8:122:LYS:C	45:L8:124:ASP:H	2.71	0.42
45:L8:136:LEU:HD22	51:M5:3:ALA:HB2	2.02	0.42
47:M0:34:TYR:CD1	47:M0:34:TYR:N	2.88	0.42
47:M0:65:LEU:HA	47:M0:65:LEU:HD23	1.83	0.42
37:3:28:C:H5"	48:M1:137:ARG:HG2	2.02	0.42
48:M1:151:SER:O	48:M1:151:SER:OG	2.35	0.42
36:1:73:C:O2	49:M3:59:ARG:HD3	2.20	0.42
53:M7:26:PHE:HE1	53:M7:120:ASN:HA	1.85	0.42
55:M9:106:LEU:CD1	55:M9:138:LEU:HD11	3.13	0.42
57:N1:104:GLU:HG3	57:N1:105:PHE:N	2.35	0.42
62:N6:27:ARG:NH1	62:N6:76:LEU:O	2.85	0.42
64:N8:47:LYS:O	64:N8:48:TYR:HB2	2.20	0.42
70:O4:97:GLU:O	70:O4:100:ILE:N	2.52	0.42
71:O5:85:THR:HB	71:O5:88:LEU:HD12	2.02	0.42
71:O5:92:LEU:HB3	71:O5:96:GLU:O	2.20	0.42
74:O8:30:LYS:NZ	74:O8:40:GLN:HE22	4.26	0.42
2:S0:90:ALA:HA	2:S0:95:ALA:HB3	2.90	0.42
3:S1:178:GLY:O	3:S1:179:SER:OG	4.01	0.42
3:S1:140:ILE:O	3:S1:210:ILE:HA	2.34	0.42
3:S1:67:GLU:CD	3:S1:83:LYS:HE2	4.89	0.42
4:S2:67:GLN:O	4:S2:71:THR:HG23	2.19	0.42
7:S5:43:PHE:HD1	7:S5:68:ILE:O	2.30	0.42
7:S5:58:LEU:HD21	7:S5:167:ARG:CZ	2.50	0.42
8:S6:10:ASN:HB3	8:S6:128:THR:HA	2.42	0.42
11:S9:92:LYS:O	11:S9:96:VAL:HG13	5.33	0.42
34:SR:74:THR:HG22	34:SR:115:ILE:HG21	4.57	0.42
36:1:1121:U:C4	36:1:1122:U:C4	3.08	0.41
36:1:1462:A:C6	36:1:1463:U:C4	3.08	0.41
36:1:1458:U:C2	36:1:1475:A:C2	3.07	0.41
36:1:2623:G:C5	36:1:2624:G:C5	3.08	0.41
36:1:2724:U:OP1	57:N1:57:TYR:OH	2.23	0.41
36:1:3163:A:N1	36:1:3164:C:N4	2.68	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3189:G:C6	36:1:3190:C:C4	3.08	0.41
36:1:3330:A:H2'	36:1:3331:U:H6	1.85	0.41
36:1:2130:G:OP2	85:1:3929:OHX:N1	2.53	0.41
85:1:3912:OHX:N5	85:1:4012:OHX:N3	2.67	0.41
36:1:539:C:H2'	36:1:540:U:C6	2.55	0.41
36:1:92:G:OP2	36:1:93:C:H5''	2.19	0.41
1:2:10:G:H2'	1:2:11:A:C8	2.55	0.41
1:2:333:A:P	10:S8:48:THR:HB	2.60	0.41
1:2:862:A:H3'	15:C3:16:ILE:HD12	2.02	0.41
38:4:126:A:O2'	38:4:128:U:OP1	2.38	0.41
36:5:1611:G:H2'	36:5:1612:A:C8	2.55	0.41
45:L8:48:ARG:NH2	36:5:2526:C:O2	186.98	0.41
36:5:2734:A:OP1	85:5:3889:OHX:N6	2.52	0.41
36:5:3194:C:O2'	36:5:3195:U:H2'	2.20	0.41
36:5:586:C:H4'	36:5:1165:A:H5'	2.03	0.41
79:Q3:10:ILE:HD13	36:5:837:A:H1'	229.75	0.41
1:6:564:G:O2'	1:6:577:G:H4'	2.20	0.41
12:C0:2:LEU:HB3	12:C0:3:MET:H	4.24	0.41
10:S8:69:SER:HB2	13:C1:22:ASN:OD1	2.19	0.41
14:C2:57:ALA:HB3	14:C2:85:LYS:HE3	2.02	0.41
17:C5:77:ARG:HB3	17:C5:102:PHE:CE1	3.04	0.41
18:C6:47:LYS:NZ	18:C6:114:ARG:HD3	4.66	0.41
2:S0:11:PRO:HB3	19:C7:115:LEU:HD22	6.57	0.41
21:C9:26:GLY:O	21:C9:28:LEU:HG	2.20	0.41
22:D0:22:ILE:HG22	22:D0:93:LEU:O	2.20	0.41
25:D3:107:PHE:CD2	25:D3:114:LYS:HB3	4.24	0.41
29:D7:47:PHE:HE1	29:D7:49:HIS:HB2	1.94	0.41
1:2:1236:A:C1'	33:E1:138:ARG:HH22	2.32	0.41
33:E1:149:LYS:HE3	33:E1:149:LYS:HB2	3.28	0.41
39:L2:116:VAL:HG22	39:L2:117:GLU:O	2.56	0.41
40:L3:218:ILE:HD12	40:L3:218:ILE:H	4.96	0.41
41:L4:106:TRP:HA	49:M3:24:VAL:HG11	2.01	0.41
41:L4:138:ARG:HG3	41:L4:244:LEU:O	2.20	0.41
41:L4:157:GLU:OE2	41:L4:251:THR:OG1	2.25	0.41
41:L4:230:VAL:HG21	41:L4:257:LYS:HD3	2.63	0.41
42:L5:207:TYR:CD2	37:7:33:U:C2	294.11	0.41
45:L8:136:LEU:HD11	45:L8:162:LEU:O	2.20	0.41
45:L8:182:GLY:O	45:L8:186:LEU:HG	2.34	0.41
49:M3:50:PRO:HB2	49:M3:140:SER:O	2.19	0.41
51:M5:12:ARG:HG2	36:5:268:A:C6	129.16	0.41
52:M6:116:LYS:HG3	52:M6:117:ARG:N	2.38	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M6:14:HIS:HA	52:M6:123:ALA:O	2.20	0.41
53:M7:108:ASP:OD2	53:M7:110:THR:HG23	2.19	0.41
53:M7:32:THR:HG21	53:M7:87:SER:HB3	2.17	0.41
54:M8:44:PHE:CD2	54:M8:134:GLY:HA3	2.54	0.41
55:M9:119:LEU:O	55:M9:123:LEU:HG	2.20	0.41
55:M9:81:ARG:HG2	55:M9:88:ARG:CZ	2.50	0.41
56:N0:45:LEU:HD12	56:N0:51:VAL:HG21	2.02	0.41
57:N1:18:ASP:O	57:N1:21:LYS:N	3.04	0.41
59:N3:131:SER:C	59:N3:133:SER:H	2.22	0.41
36:1:2916:U:C1'	59:N3:44:SER:HB2	2.50	0.41
62:N6:126:LEU:HB3	62:N6:127:GLU:CD	8.68	0.41
64:N8:88:ASP:O	64:N8:92:LYS:HG2	2.20	0.41
64:N8:93:SER:O	64:N8:95:SER:N	3.54	0.41
65:N9:28:LYS:HB3	65:N9:29:TYR:HD1	1.84	0.41
69:O3:57:LYS:HB3	69:O3:57:LYS:HE2	3.34	0.41
74:O8:32:ASN:HD21	74:O8:34:ALA:HB3	8.03	0.41
79:Q3:81:SER:OG	79:Q3:82:THR:N	2.52	0.41
2:S0:188:LEU:HD12	2:S0:189:VAL:HG12	2.02	0.41
6:S4:240:LYS:CE	6:S4:240:LYS:H	2.30	0.41
6:S4:62:LYS:HD3	6:S4:80:THR:OG1	2.20	0.41
9:S7:75:THR:HG23	9:S7:161:GLN:OE1	3.98	0.41
9:S7:68:ALA:O	9:S7:72:LYS:HG3	2.20	0.41
10:S8:16:ALA:HB2	1:6:354:C:H5''	298.41	0.41
10:S8:193:LEU:HA	10:S8:193:LEU:HD23	1.88	0.41
10:S8:74:LYS:NZ	10:S8:112:TRP:HB2	2.35	0.41
36:1:124:U:H2'	36:1:125:C:C6	2.54	0.41
36:1:1353:U:H2'	43:L6:9:TRP:CE3	2.53	0.41
36:1:1789:G:O6	85:1:4019:OHX:N2	2.53	0.41
36:1:1556:C:H2'	36:1:2169:G:N1	2.35	0.41
36:1:2179:C:O3'	39:L2:174:ARG:NH2	2.50	0.41
36:1:199:A:C6	36:1:219:A:C6	3.08	0.41
36:1:2670:G:C6	36:1:2671:A:C6	3.09	0.41
36:1:2761:G:N1	36:1:2795:U:H3'	2.35	0.41
36:1:59:G:H2'	38:4:33:A:O2'	2.19	0.41
36:1:631:U:H2'	36:1:632:G:C8	2.55	0.41
36:1:718:G:N2	36:1:721:G:H1'	2.36	0.41
36:1:810:A:H2'	36:1:811:U:H6	1.85	0.41
1:2:1059:U:H6	1:2:1060:U:C5	2.38	0.41
1:2:1254:U:C4	1:2:1255:G:C6	3.08	0.41
1:2:1530:C:H2'	1:2:1531:G:H8	1.85	0.41
1:2:1486:G:H1'	1:2:1592:A:O2'	2.19	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:296:U:H2'	1:2:297:U:C6	2.55	0.41
1:2:517:U:H2'	1:2:518:A:H5'	2.01	0.41
38:4:85:G:OP2	62:N6:113:LYS:HE2	2.20	0.41
36:5:2144:A:H1'	36:5:2281:A:N6	2.35	0.41
36:5:1308:A:OP2	36:5:2368:A:H4'	2.19	0.41
36:5:2364:G:N2	36:5:2396:G:O2'	2.51	0.41
36:5:2665:U:H4'	36:5:2666:C:OP1	2.20	0.41
36:5:2759:U:H5''	36:5:2760:C:H5'	2.02	0.41
36:5:738:A:H2'	36:5:739:G:C8	2.55	0.41
36:5:920:A:OP1	36:5:922:U:C5	2.71	0.41
1:6:1582:U:C4	1:6:1614:A:C8	3.08	0.41
1:6:168:A:C6	1:6:169:A:C6	3.08	0.41
6:S4:108:ARG:NH2	1:6:789:A:OP1	391.86	0.41
15:C3:99:ARG:NH2	15:C3:119:GLU:OE1	2.52	0.41
16:C4:102:LEU:O	16:C4:105:LEU:HG	2.19	0.41
17:C5:75:PRO:HG3	17:C5:93:VAL:HG11	2.13	0.41
20:C8:20:THR:OG1	20:C8:21:ASN:N	2.54	0.41
23:D1:27:ASP:HA	23:D1:29:HIS:CE1	2.55	0.41
2:S0:66:ALA:HB1	23:D1:50:TYR:HD1	2.67	0.41
39:L2:96:LEU:O	79:Q3:87:ARG:HD3	2.54	0.41
41:L4:33:ASP:OD1	41:L4:33:ASP:N	2.93	0.41
41:L4:98:ARG:HB3	41:L4:98:ARG:HE	1.71	0.41
42:L5:261:THR:N	42:L5:264:GLN:HG3	2.33	0.41
43:L6:31:ARG:C	43:L6:33:SER:H	2.72	0.41
45:L8:46:LEU:HD22	45:L8:49:TYR:HD1	1.85	0.41
50:M4:32:LEU:HD21	50:M4:94:TRP:CE2	2.54	0.41
54:M8:69:ARG:NH1	36:5:720:A:H5''	162.23	0.41
55:M9:114:LYS:HB3	55:M9:114:LYS:HE2	1.75	0.41
55:M9:164:LEU:HD22	55:M9:164:LEU:HA	2.16	0.41
61:N5:67:ILE:HD12	61:N5:83:VAL:HG12	2.02	0.41
62:N6:125:LYS:O	62:N6:126:LEU:HG	2.42	0.41
65:N9:47:LEU:HA	65:N9:50:THR:HG22	2.35	0.41
66:O0:13:LYS:O	66:O0:17:VAL:HG23	2.20	0.41
67:O1:14:ILE:HG13	67:O1:19:ARG:NH1	2.35	0.41
36:1:3275:U:O4'	69:O3:66:VAL:HG21	2.20	0.41
72:O6:55:ARG:O	72:O6:58:ILE:HD13	2.21	0.41
39:L2:171:GLY:O	79:Q3:68:ALA:HB2	2.34	0.41
2:S0:175:TYR:CD1	2:S0:199:PRO:HA	2.55	0.41
2:S0:9:LEU:HD23	2:S0:54:TRP:CG	2.56	0.41
4:S2:39:THR:OG1	4:S2:65:GLU:OE2	2.99	0.41
5:S3:202:LEU:HA	5:S3:202:LEU:HD13	2.17	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S5:68:ILE:HD12	7:S5:70:VAL:O	2.30	0.41
7:S5:94:THR:O	7:S5:97:LEU:HB2	2.20	0.41
9:S7:110:GLN:HE21	9:S7:110:GLN:HB3	3.82	0.41
11:S9:162:SER:OG	11:S9:163:PRO:O	2.37	0.41
11:S9:64:GLU:OE1	11:S9:69:ARG:NH2	4.01	0.41
35:SM:27:LYS:HE2	36:5:2683:U:OP2	300.66	0.41
34:SR:90:ARG:HH21	34:SR:102:ARG:HE	3.62	0.41
36:1:1191:U:C2	52:M6:48:PHE:CE1	3.09	0.41
36:1:1394:A:H4'	36:1:1420:C:H4'	2.03	0.41
36:1:3160:U:H2'	36:1:3161:C:H6	1.84	0.41
36:1:3198:U:H4'	46:L9:21:LYS:NZ	2.34	0.41
36:1:3315:G:H2'	40:L3:123:TYR:CD1	2.54	0.41
36:1:3389:U:HO2'	36:1:3390:G:P	2.43	0.41
36:1:1313:G:O6	85:1:3951:OHX:N3	2.53	0.41
1:2:1235:C:H5'	33:E1:146:SER:HB2	2.02	0.41
1:2:1323:C:H2'	1:2:1324:G:O4'	2.21	0.41
1:2:1712:A:H3'	1:2:1713:G:H8	1.85	0.41
1:2:180:A:H2'	1:2:181:A:C8	2.55	0.41
1:2:193:U:H2'	1:2:194:U:H2'	2.02	0.41
1:2:333:A:C6	1:2:334:G:C6	3.08	0.41
1:2:514:G:N1	1:2:543:C:C5	2.89	0.41
1:2:702:G:O2'	1:2:703:G:H8	2.04	0.41
37:3:64:A:H3'	47:M0:204:GLY:O	2.20	0.41
37:3:97:A:H2'	37:3:98:C:C6	2.55	0.41
36:5:982:C:N4	36:5:1101:G:H1	2.17	0.41
51:M5:49:ARG:HH21	36:5:115:A:P	100.11	0.41
36:5:1376:C:H1'	36:5:1407:A:C4	2.55	0.41
36:5:1526:U:O2	36:5:1595:U:H5'	2.20	0.41
36:5:2147:A:H2'	36:5:2148:U:O4'	2.19	0.41
36:5:2294:U:C2	36:5:2297:U:C5	3.08	0.41
36:5:2393:G:O2'	36:5:2394:G:OP2	2.35	0.41
36:5:2902:A:H2'	36:5:2903:A:O4'	2.21	0.41
36:5:652:G:C8	85:5:4007:OHX:N6	2.89	0.41
36:5:621:A:H2'	36:5:622:A:H8	1.83	0.41
36:5:90:C:C2'	36:5:91:G:H5'	2.50	0.41
1:6:116:U:H2'	1:6:117:U:C6	2.54	0.41
1:6:1241:G:H2'	1:6:1242:A:O4'	2.19	0.41
1:6:1244:A:O2'	1:6:1245:G:O5'	2.30	0.41
1:6:1423:U:H2'	1:6:1424:A:O4'	2.20	0.41
1:6:1697:G:H2'	1:6:1697:G:N3	2.35	0.41
1:6:226:A:OP2	1:6:226:A:H8	2.04	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:846:G:H2'	1:6:847:A:H8	1.85	0.41
12:C0:55:VAL:HG23	12:C0:67:THR:O	2.54	0.41
1:2:1608:U:O3'	18:C6:73:GLY:HA3	2.20	0.41
18:C6:79:TYR:O	18:C6:82:ARG:HG2	2.20	0.41
2:S0:59:LEU:HD12	23:D1:79:LEU:HD21	4.74	0.41
25:D3:31:LYS:HA	25:D3:31:LYS:HD3	1.87	0.41
26:D4:84:LYS:HD2	26:D4:85:PHE:CE2	2.55	0.41
27:D5:85:LYS:HG3	27:D5:86:GLU:N	2.33	0.41
25:D3:59:ILE:CD1	32:E0:4:VAL:HG13	2.50	0.41
32:E0:50:VAL:HA	32:E0:54:ARG:HA	3.79	0.41
39:L2:215:ASN:ND2	39:L2:215:ASN:O	5.05	0.41
40:L3:227:GLU:OE1	40:L3:231:HIS:HB3	2.21	0.41
40:L3:284:ARG:H	40:L3:323:MET:HB3	2.57	0.41
41:L4:181:VAL:HG12	41:L4:182:LEU:H	1.85	0.41
41:L4:25:VAL:O	41:L4:127:ALA:HB2	2.77	0.41
41:L4:52:VAL:CG1	41:L4:99:MET:HE3	2.49	0.41
36:1:1101:G:OP2	44:L7:196:LYS:HE2	2.19	0.41
45:L8:87:ALA:O	45:L8:91:PHE:N	2.64	0.41
46:L9:110:LYS:HB2	46:L9:110:LYS:HE3	3.33	0.41
46:L9:13:PRO:O	46:L9:15:GLY:N	2.50	0.41
46:L9:80:THR:O	46:L9:84:LYS:N	2.90	0.41
47:M0:74:LYS:HB2	47:M0:74:LYS:HE3	1.64	0.41
48:M1:156:LYS:O	48:M1:160:VAL:HG23	2.21	0.41
49:M3:144:THR:C	49:M3:146:PRO:HD3	3.00	0.41
55:M9:27:ASN:O	85:M9:201:OHX:N6	2.53	0.41
56:N0:109:ASP:OD1	56:N0:113:ARG:HD2	2.68	0.41
58:N2:76:LEU:O	58:N2:80:THR:OG1	3.28	0.41
60:N4:54:LEU:HD13	60:N4:54:LEU:HA	3.05	0.41
63:N7:136:PHE:N	63:N7:136:PHE:CD1	2.87	0.41
63:N7:21:LYS:HD3	63:N7:47:GLU:HA	2.02	0.41
64:N8:27:LYS:O	64:N8:28:HIS:HB2	4.32	0.41
66:O0:100:ILE:HD12	66:O0:101:LEU:N	2.35	0.41
66:O0:103:THR:HB	66:O0:104:LEU:H	1.62	0.41
68:O2:9:ILE:HG12	68:O2:63:THR:HB	2.02	0.41
69:O3:19:SER:HB3	36:5:1330:A:OP1	233.60	0.41
72:O6:5:THR:N	72:O6:12:ASN:O	2.43	0.41
72:O6:91:ASN:O	72:O6:94:ILE:HG22	4.61	0.41
75:O9:8:ARG:O	75:O9:11:GLN:HB3	3.31	0.41
36:1:2150:G:H4'	79:Q3:22:LEU:HD21	2.01	0.41
5:S3:98:ALA:O	5:S3:101:GLN:N	2.52	0.41
8:S6:4:ASN:HB3	8:S6:110:ALA:HA	2.26	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:S6:164:LYS:HB3	8:S6:167:LYS:O	3.09	0.41
8:S6:68:LEU:HA	8:S6:68:LEU:HD13	2.29	0.41
35:SM:25:ILE:HG12	37:3:39:C:H5'	2.02	0.41
34:SR:154:VAL:HG12	34:SR:171:SER:HB3	2.61	0.41
34:SR:232:TYR:OH	34:SR:268:GLN:OE1	4.41	0.41
36:1:2426:U:H2'	36:1:2427:U:C6	2.56	0.41
36:1:355:A:H2'	36:1:356:C:O4'	2.21	0.41
36:1:378:A:H1'	62:N6:90:VAL:HG23	2.01	0.41
85:1:3944:OHX:N5	85:1:4007:OHX:N1	2.68	0.41
36:1:553:U:H5''	36:1:554:A:OP2	2.20	0.41
1:2:1059:U:O2'	1:2:1060:U:N3	2.54	0.41
1:2:107:C:H42	1:2:307:G:H1	1.69	0.41
1:2:1081:A:H2'	1:2:1083:G:N7	2.35	0.41
1:2:1241:G:C6	1:2:1242:A:C6	3.08	0.41
1:2:1357:A:C6	1:2:1358:G:C6	3.08	0.41
1:2:1371:A:OP1	1:2:1371:A:H2'	2.20	0.41
1:2:1399:C:HO2'	1:2:1400:A:P	2.44	0.41
1:2:1207:C:N4	1:2:1456:C:H5	2.18	0.41
1:2:1573:A:H4'	1:2:1574:G:H5'	2.02	0.41
1:2:1580:C:H2'	1:2:1581:C:C6	2.56	0.41
1:2:196:G:O2'	1:2:197:A:H8	2.03	0.41
1:2:463:U:C2	1:2:464:A:C8	3.08	0.41
1:2:609:U:H4'	1:2:610:G:O5'	2.20	0.41
1:2:720:G:H1'	1:2:721:U:H5''	2.01	0.41
1:2:731:C:H4'	1:2:732:G:OP1	2.20	0.41
36:5:1294:A:O2'	36:5:1295:G:H5''	2.20	0.41
36:5:1537:A:N6	36:5:1538:G:C6	2.88	0.41
36:5:253:A:O2'	36:5:254:A:H8	2.03	0.41
36:5:2623:G:H2'	36:5:2624:G:H8	1.86	0.41
36:5:2743:A:H2'	36:5:2744:U:O4'	2.21	0.41
36:5:2513:U:OP2	85:5:3809:OHX:N3	2.53	0.41
53:M7:101:ASN:OD1	36:5:388:G:N2	114.33	0.41
85:5:3964:OHX:N3	85:5:4039:OHX:N1	2.69	0.41
36:5:739:G:C2	36:5:740:G:C8	3.08	0.41
36:5:72:C:C2	36:5:74:G:H1'	2.55	0.41
1:6:1402:G:C6	1:6:1403:C:C4	3.08	0.41
1:6:1477:G:H2'	1:6:1478:G:H8	1.86	0.41
1:6:1657:U:H4'	1:6:1658:G:OP2	2.20	0.41
1:6:523:G:O5'	1:6:523:G:H8	2.03	0.41
1:6:71:A:C4	1:6:72:A:H1'	2.55	0.41
1:6:746:A:H2'	1:6:747:C:O4'	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:8:107:G:OP2	85:8:224:OHX:N1	2.54	0.41
14:C2:91:VAL:HG22	14:C2:92:ALA:H	4.45	0.41
16:C4:103:ARG:HH12	28:D6:48:ALA:HB3	3.68	0.41
17:C5:116:LEU:HD23	17:C5:116:LEU:HA	1.93	0.41
20:C8:15:LEU:HD22	20:C8:15:LEU:H	4.14	0.41
20:C8:28:ILE:HB	20:C8:58:ALA:HA	2.03	0.41
21:C9:105:LEU:HB3	21:C9:122:ARG:NE	2.54	0.41
25:D3:38:PHE:N	25:D3:38:PHE:CD1	2.88	0.41
26:D4:10:ARG:HD2	1:6:778:G:O6	429.88	0.41
26:D4:27:VAL:HG11	26:D4:35:VAL:HG11	2.02	0.41
28:D6:40:ALA:HB1	28:D6:42:ARG:HH22	4.08	0.41
28:D6:96:ALA:C	28:D6:98:PRO:HD2	2.40	0.41
40:L3:92:TYR:HB2	40:L3:157:VAL:HG22	2.01	0.41
41:L4:42:VAL:C	41:L4:44:LYS:H	2.26	0.41
42:L5:21:ARG:O	42:L5:25:GLU:HG3	2.42	0.41
44:L7:232:ARG:O	44:L7:235:PHE:HB2	2.55	0.41
46:L9:88:TYR:CZ	46:L9:184:LYS:HG2	2.56	0.41
46:L9:72:LYS:HG2	46:L9:76:ASP:OD2	2.46	0.41
36:1:1010:G:OP1	47:M0:39:LYS:NZ	2.54	0.41
48:M1:52:TYR:HB2	48:M1:53:THR:H	1.67	0.41
49:M3:91:ARG:CZ	49:M3:97:VAL:HB	2.57	0.41
51:M5:197:LEU:HD12	51:M5:197:LEU:HA	1.76	0.41
52:M6:138:LEU:HA	52:M6:138:LEU:HD12	1.62	0.41
53:M7:32:THR:HG21	53:M7:87:SER:CB	2.85	0.41
54:M8:176:ARG:HA	54:M8:182:LYS:O	2.21	0.41
57:N1:54:HIS:CE1	57:N1:55:LYS:HG2	3.19	0.41
58:N2:28:PHE:HE1	58:N2:83:TYR:HE2	1.70	0.41
36:1:213:A:OP1	62:N6:2:ALA:N	2.53	0.41
73:O7:28:HIS:ND1	73:O7:31:LYS:HE2	4.57	0.41
74:O8:66:ILE:HG13	74:O8:66:ILE:H	2.14	0.41
2:S0:163:ASN:C	2:S0:165:ARG:H	2.62	0.41
3:S1:35:PRO:HG3	3:S1:98:THR:O	2.20	0.41
3:S1:84:ILE:HG22	3:S1:86:LEU:HD22	2.00	0.41
7:S5:65:ARG:NE	7:S5:65:ARG:HA	4.83	0.41
8:S6:50:PHE:HB3	8:S6:111:LEU:HB3	3.03	0.41
8:S6:63:MET:HE1	8:S6:106:LEU:HD13	2.09	0.41
8:S6:66:GLY:HA3	1:6:1681:A:H1'	274.97	0.41
9:S7:77:LEU:HD22	9:S7:81:LEU:HD11	2.03	0.41
1:2:577:G:H2'	35:SM:99:LYS:NZ	2.35	0.41
34:SR:319:ASN:N	34:SR:319:ASN:OD1	2.68	0.41
36:1:1000:C:H2'	36:1:1000:C:H6	1.58	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2358:A:H2'	36:1:2359:C:O4'	2.21	0.41
36:1:3070:A:OP1	55:M9:62:ARG:NH2	2.49	0.41
36:1:3133:C:H2'	36:1:3134:A:O4'	2.21	0.41
36:1:3174:A:C6	36:1:3175:U:C4	3.08	0.41
36:1:502:U:OP1	85:1:3729:OHX:N3	2.53	0.41
1:2:1029:U:O4	85:2:2105:OHX:N5	2.54	0.41
1:2:1583:A:N1	1:2:1611:A:H5''	2.34	0.41
1:2:1622:G:H2'	1:2:1623:C:C6	2.55	0.41
85:2:2042:OHX:N4	85:2:2044:OHX:N1	2.69	0.41
1:2:289:U:H2'	1:2:290:G:O4'	2.20	0.41
1:2:992:A:H2'	1:2:993:A:H5'	2.02	0.41
37:3:80:G:H2'	37:3:81:U:O4'	2.21	0.41
36:5:1663:C:H1'	36:5:1722:U:O4	2.21	0.41
36:5:2960:C:H2'	36:5:2961:G:C8	2.55	0.41
36:5:3042:U:OP2	36:5:3092:C:N4	2.53	0.41
36:5:3121:U:H1'	36:5:3122:A:H5''	2.01	0.41
36:5:616:G:H2'	36:5:617:G:H8	1.86	0.41
36:5:734:C:H2'	36:5:735:A:O4'	2.20	0.41
36:5:980:A:N6	36:5:1102:A:C6	2.89	0.41
17:C5:115:TYR:OH	1:6:1556:A:OP1	387.78	0.41
1:6:1699:G:C2	1:6:1701:A:H5''	2.56	0.41
11:S9:37:LYS:HE2	1:6:594:A:OP2	412.96	0.41
1:6:686:C:H2'	1:6:687:G:C8	2.56	0.41
1:6:72:A:H2'	1:6:73:U:C1'	2.51	0.41
16:C4:18:ARG:HD2	1:6:918:U:H5''	277.20	0.41
38:8:63:G:N2	38:8:98:U:O2	2.53	0.41
12:C0:7:ASP:O	12:C0:11:ILE:HG12	2.21	0.41
17:C5:28:MET:HE3	17:C5:33:PHE:HB2	2.26	0.41
19:C7:25:THR:HB	19:C7:26:LEU:H	1.72	0.41
22:D0:22:ILE:HD12	22:D0:118:VAL:HA	2.03	0.41
31:D9:21:CYS:O	31:D9:23:VAL:N	2.78	0.41
39:L2:187:HIS:ND1	39:L2:190:ARG:NH1	4.61	0.41
40:L3:85:VAL:HG13	40:L3:163:HIS:CD2	2.56	0.41
41:L4:156:LEU:HA	41:L4:156:LEU:HD23	1.90	0.41
41:L4:325:LEU:HA	41:L4:325:LEU:HD23	2.06	0.41
36:1:1438:U:OP1	41:L4:76:ARG:NH2	2.54	0.41
44:L7:233:GLU:CD	56:N0:35:VAL:HG22	3.19	0.41
46:L9:87:LYS:HZ1	46:L9:191:LEU:HD21	17.42	0.41
46:L9:75:VAL:HA	46:L9:78:MET:HE3	2.03	0.41
48:M1:82:ARG:HB3	48:M1:112:LEU:HB2	3.71	0.41
48:M1:153:LYS:HG2	48:M1:153:LYS:O	5.05	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:M1:23:VAL:HB	48:M1:65:ILE:O	2.82	0.41
49:M3:110:ASP:O	49:M3:114:GLN:HB2	2.21	0.41
49:M3:93:ILE:HG22	49:M3:119:TYR:HE2	1.85	0.41
54:M8:18:ALA:HA	54:M8:53:PHE:CE1	2.56	0.41
58:N2:94:ARG:HD3	58:N2:108:TYR:HE1	5.93	0.41
65:N9:38:LYS:HG3	65:N9:38:LYS:O	4.39	0.41
72:O6:25:LYS:HG3	72:O6:28:TYR:CE2	2.56	0.41
72:O6:67:LYS:HE2	72:O6:67:LYS:HB3	1.68	0.41
49:M3:174:ARG:CZ	72:O6:9:ILE:HD13	2.51	0.41
3:S1:172:LEU:HA	3:S1:172:LEU:HD23	1.89	0.41
3:S1:40:ASN:N	3:S1:40:ASN:OD1	3.36	0.41
3:S1:61:LEU:CD2	3:S1:62:LYS:H	2.33	0.41
6:S4:180:LEU:HD23	6:S4:180:LEU:HA	1.79	0.41
6:S4:191:ARG:CZ	6:S4:245:LYS:HD2	3.72	0.41
6:S4:195:ILE:CG2	6:S4:196:VAL:H	3.31	0.41
8:S6:211:LEU:O	8:S6:215:ARG:HB2	2.20	0.41
9:S7:148:LYS:HB2	9:S7:148:LYS:HE3	1.86	0.41
11:S9:41:GLU:OE2	11:S9:126:ARG:NH2	3.14	0.41
34:SR:225:LEU:O	34:SR:228:LYS:HG3	2.64	0.41
36:1:1758:G:H1	36:1:1767:C:H42	1.68	0.41
36:1:1796:G:H5''	36:1:1797:A:OP1	2.21	0.41
36:1:2197:C:H4'	36:1:2198:A:C8	2.55	0.41
36:1:2693:C:H1'	36:1:2706:G:H5''	2.02	0.41
36:1:3109:G:C2	36:1:3126:C:C2	3.08	0.41
36:1:3280:U:O2'	36:1:3281:U:H5'	2.21	0.41
36:1:3321:C:H2'	36:1:3322:A:O4'	2.20	0.41
36:1:806:A:C8	36:1:936:A:C6	3.09	0.41
1:2:1284:C:O2	85:2:2100:OHX:N4	2.53	0.41
1:2:1041:G:P	85:2:2107:OHX:N5	2.93	0.41
1:2:320:U:H3'	1:2:321:C:C5'	2.49	0.41
1:2:819:G:O6	1:2:853:G:C6	2.74	0.41
36:5:1280:C:H2'	36:5:1281:G:O4'	2.21	0.41
36:5:1657:C:N4	36:5:1798:A:OP2	2.40	0.41
36:5:2211:U:H5	36:5:2234:G:N1	2.19	0.41
36:5:2400:G:HO2'	36:5:2401:A:P	2.42	0.41
36:5:2519:A:C6	36:5:2589:G:C6	3.09	0.41
36:5:2635:A:H4'	36:5:2636:A:O5'	2.21	0.41
1:6:1727:G:H2'	1:6:1728:A:C8	2.56	0.41
1:6:139:C:C2	1:6:176:C:C2	3.09	0.41
1:6:301:A:H2'	1:6:302:U:O4'	2.20	0.41
1:6:579:A:O2'	85:6:2152:OHX:N6	2.53	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:617:U:H2'	1:6:618:U:C6	2.56	0.41
1:6:819:G:C2	1:6:853:G:C2	3.09	0.41
14:C2:91:VAL:HG11	14:C2:97:LEU:HD23	3.35	0.41
19:C7:56:HIS:CD2	19:C7:57:LEU:HD23	4.29	0.41
20:C8:136:GLN:HG2	20:C8:136:GLN:H	1.19	0.41
20:C8:88:ARG:NH2	20:C8:91:ASP:OD2	2.53	0.41
22:D0:100:VAL:O	22:D0:104:THR:HG23	2.32	0.41
23:D1:13:VAL:HA	23:D1:14:PRO:HD3	1.85	0.41
24:D2:37:PHE:CD2	24:D2:103:ILE:HD12	2.56	0.41
26:D4:10:ARG:HB3	1:6:778:G:O6	428.45	0.41
27:D5:42:LEU:HD22	27:D5:47:TYR:HB2	6.98	0.41
28:D6:47:ALA:O	28:D6:50:VAL:HG12	2.30	0.41
28:D6:96:ALA:HA	28:D6:97:PRO:HD3	1.93	0.41
85:2:2021:OHX:N4	85:D9:103:OHX:N6	2.69	0.41
39:L2:90:ALA:HB2	39:L2:101:VAL:HG13	2.17	0.41
40:L3:76:VAL:HG21	40:L3:323:MET:CE	2.88	0.41
36:1:2401:A:O3'	41:L4:68:GLY:HA2	2.21	0.41
44:L7:111:ILE:HG13	44:L7:112:ASN:N	2.35	0.41
44:L7:218:ARG:NH1	36:5:1171:G:P	255.20	0.41
44:L7:228:SER:HA	44:L7:232:ARG:NH2	2.88	0.41
44:L7:65:ALA:HB1	44:L7:76:TYR:CD1	2.97	0.41
45:L8:109:LEU:HA	45:L8:109:LEU:HD23	1.78	0.41
46:L9:126:VAL:HG21	46:L9:161:LEU:HA	2.03	0.41
47:M0:63:GLU:O	47:M0:66:GLU:N	2.53	0.41
50:M4:114:ASP:HA	50:M4:117:ARG:NH1	2.36	0.41
50:M4:19:ARG:HA	50:M4:69:THR:HG22	3.46	0.41
51:M5:66:VAL:HG11	51:M5:101:THR:HG22	2.17	0.41
36:1:287:G:H5'	51:M5:179:LYS:O	2.21	0.41
52:M6:157:GLU:OE1	52:M6:160:ARG:NH1	2.76	0.41
54:M8:182:LYS:HA	54:M8:182:LYS:HD3	2.31	0.41
56:N0:47:LYS:O	56:N0:48:LEU:HD23	2.20	0.41
61:N5:121:LYS:HD3	61:N5:123:TYR:CZ	2.56	0.41
61:N5:28:THR:OG1	61:N5:29:SER:N	2.54	0.41
64:N8:115:LYS:HB3	64:N8:116:GLY:H	1.67	0.41
66:O0:19:LYS:HG2	66:O0:19:LYS:H	3.07	0.41
66:O0:78:GLY:HA2	66:O0:87:VAL:HG13	2.03	0.41
67:O1:10:ARG:HD2	67:O1:12:TYR:OH	2.84	0.41
73:O7:18:LEU:HA	73:O7:25:ARG:H	1.84	0.41
79:Q3:49:ARG:HG3	79:Q3:55:TRP:CZ2	3.12	0.41
79:Q3:84:ARG:NH1	79:Q3:88:GLU:OE1	2.53	0.41
3:S1:180:THR:H	3:S1:183:GLN:HB2	6.24	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S1:83:LYS:HD2	3:S1:106:THR:N	3.15	0.41
1:2:1098:U:OP1	4:S2:159:THR:HB	2.21	0.41
5:S3:28:GLU:HG2	5:S3:69:LEU:HD21	2.02	0.41
7:S5:27:THR:OG1	18:C6:28:LEU:HA	2.97	0.41
1:2:1610:G:O3'	7:S5:98:MET:HE1	2.20	0.41
1:2:79:C:H4'	8:S6:173:PRO:O	2.20	0.41
8:S6:28:PHE:HA	8:S6:102:VAL:O	2.71	0.41
8:S6:87:ARG:HD3	8:S6:87:ARG:HA	1.64	0.41
11:S9:99:LEU:HD12	11:S9:100:LYS:H	1.83	0.41
35:SM:38:PRO:HA	35:SM:39:PRO:HD2	1.65	0.41
34:SR:23:LEU:HD11	34:SR:304:GLY:N	2.99	0.41
36:1:104:G:H2'	36:1:105:C:O4'	2.21	0.41
36:1:1063:G:O2'	36:1:1097:G:N2	2.54	0.41
36:1:1367:G:OP1	68:O2:45:ARG:NH2	2.54	0.41
36:1:2421:U:O2'	78:Q2:52:GLY:HA3	2.21	0.41
36:1:2533:G:H3'	36:1:2534:G:H8	1.85	0.41
36:1:2529:A:C2	36:1:2582:C:C2	3.09	0.41
36:1:3106:A:N6	36:1:3128:G:O2'	2.54	0.41
85:1:3940:OHX:N6	85:1:4004:OHX:N5	2.69	0.41
36:1:535:G:C4	36:1:554:A:C6	3.09	0.41
36:1:623:U:O3'	69:O3:86:ARG:NH2	2.43	0.41
1:2:10:G:C2	1:2:11:A:C4	3.09	0.41
1:2:1499:G:C6	1:2:1500:C:C4	3.09	0.41
1:2:1504:G:C2	1:2:1505:A:C4	3.09	0.41
1:2:18:C:C2	1:2:19:A:C8	3.09	0.41
1:2:532:U:O2'	26:D4:33:ALA:HB1	2.20	0.41
1:2:952:A:H5'	15:C3:98:VAL:HG23	2.02	0.41
70:O4:59:PRO:HD3	36:5:1654:A:O2'	168.50	0.41
36:5:1658:G:H2'	36:5:1659:U:C6	2.55	0.41
70:O4:83:ASN:ND2	36:5:1709:C:OP1	215.47	0.41
36:5:1764:U:H3'	36:5:1765:U:C5'	2.51	0.41
47:M0:7:ARG:NH1	36:5:2828:G:P	269.48	0.41
36:5:3046:A:C2	36:5:3096:C:N3	2.88	0.41
1:6:1419:G:H2'	1:6:1420:C:O4'	2.20	0.41
1:6:1492:A:O2'	1:6:1493:A:O5'	2.39	0.41
1:6:1516:A:O2'	1:6:1517:U:H5'	2.20	0.41
1:6:413:U:H2'	1:6:414:C:C6	2.55	0.41
1:6:427:C:H2'	1:6:428:A:O4'	2.20	0.41
37:7:47:C:H2'	37:7:48:U:H6	1.82	0.41
13:C1:46:LYS:HE2	1:6:846:G:H21	311.66	0.41
15:C3:26:PHE:CE2	15:C3:28:LEU:HB2	2.81	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:C3:42:ARG:NH1	15:C3:42:ARG:HB2	2.35	0.41
1:2:896:U:C1'	16:C4:38:THR:HG21	2.51	0.41
16:C4:25:ASP:H	16:C4:55:SER:HB3	1.85	0.41
17:C5:47:ARG:NH2	17:C5:47:ARG:HB3	2.35	0.41
21:C9:131:ASP:O	21:C9:135:ILE:HG13	2.21	0.41
24:D2:79:PHE:O	24:D2:124:LYS:HA	2.46	0.41
24:D2:87:GLU:O	24:D2:90:THR:OG1	2.48	0.41
26:D4:12:VAL:HG13	26:D4:23:PHE:HB3	2.02	0.41
26:D4:3:ASP:O	26:D4:5:VAL:N	2.54	0.41
7:S5:120:ILE:HG23	27:D5:59:TYR:CE1	2.56	0.41
27:D5:88:ILE:HD13	27:D5:88:ILE:HA	4.13	0.41
40:L3:183:LEU:HA	40:L3:183:LEU:HD12	2.23	0.41
40:L3:55:THR:HG22	40:L3:56:ILE:H	1.85	0.41
41:L4:74:ILE:H	41:L4:74:ILE:HG13	1.64	0.41
42:L5:120:LYS:HG3	42:L5:120:LYS:H	2.74	0.41
44:L7:116:PHE:CZ	44:L7:144:ILE:HG23	2.55	0.41
44:L7:44:ILE:HG12	44:L7:180:SER:HB3	3.85	0.41
45:L8:71:VAL:HG13	45:L8:235:GLY:N	3.20	0.41
49:M3:47:ALA:HB1	49:M3:48:PRO:CD	2.47	0.41
51:M5:65:ARG:HG2	51:M5:127:TYR:CG	5.02	0.41
51:M5:37:HIS:NE2	51:M5:63:ARG:HB3	2.35	0.41
57:N1:12:ARG:HD3	57:N1:13:TYR:CE1	3.53	0.41
57:N1:132:PRO:O	57:N1:134:GLN:HG2	3.60	0.41
63:N7:97:SER:OG	63:N7:98:THR:N	3.94	0.41
64:N8:121:VAL:HA	64:N8:122:PRO:HD3	2.12	0.41
64:N8:9:ARG:NH2	36:5:1431:G:C8	148.58	0.41
65:N9:21:ILE:HG22	65:N9:22:LYS:O	5.66	0.41
68:O2:9:ILE:HG13	68:O2:9:ILE:H	2.31	0.41
70:O4:96:GLU:O	70:O4:99:LYS:HB2	3.15	0.41
73:O7:37:CYS:O	73:O7:45:ARG:N	2.81	0.41
75:O9:2:ALA:O	75:O9:3:ALA:HB3	2.21	0.41
1:2:1773:C:OP1	77:Q1:3:ALA:HB3	2.19	0.41
79:Q3:3:LYS:HE3	79:Q3:3:LYS:HB3	3.07	0.41
3:S1:54:LEU:O	3:S1:55:LYS:HB2	3.23	0.41
6:S4:248:ILE:HG12	6:S4:248:ILE:H	1.71	0.41
7:S5:23:VAL:HG11	18:C6:57:LEU:HB2	2.31	0.41
9:S7:122:HIS:O	9:S7:125:ILE:HB	2.19	0.41
10:S8:104:ILE:HG13	10:S8:165:LEU:HB2	2.03	0.41
10:S8:106:ALA:HB2	10:S8:165:LEU:HG	2.02	0.41
35:SM:54:PRO:HB2	35:SM:59:GLY:HA2	2.38	0.41
34:SR:176:LYS:HG2	34:SR:197:SER:O	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:SR:278:PHE:HB3	34:SR:281:TYR:CD1	2.55	0.41
36:1:1262:G:C6	36:1:1278:A:N6	2.89	0.41
36:1:1317:A:O2'	36:1:1318:A:H3'	2.21	0.41
36:1:1678:G:C4	36:1:1679:A:C8	3.08	0.41
36:1:1495:U:H5	36:1:1835:A:N1	2.18	0.41
36:1:2353:G:H5''	53:M7:86:LYS:HB2	2.02	0.41
36:1:372:A:H2'	36:1:373:A:O4'	2.21	0.41
36:1:40:A:C2	64:N8:40:HIS:CE1	3.08	0.41
1:2:1173:C:O2'	1:2:1174:C:H5'	2.21	0.41
1:2:1237:G:N2	1:2:1248:C:N3	2.68	0.41
1:2:1365:C:H6	1:2:1365:C:O5'	2.04	0.41
1:2:1439:C:H2'	1:2:1440:C:H6	1.86	0.41
1:2:17:C:O2'	1:2:1137:A:N6	2.51	0.41
1:2:287:G:O2'	1:2:288:A:OP2	2.34	0.41
1:2:676:G:O6	1:2:677:G:N1	2.53	0.41
1:2:693:U:C5'	1:2:694:U:H5'	2.49	0.41
37:3:27:A:C2	37:3:28:C:C2	3.09	0.41
36:5:1235:U:H4'	36:5:1236:G:H5'	2.03	0.41
36:5:1253:U:O2	36:5:1263:A:H5'	2.20	0.41
36:5:1257:C:H2'	36:5:1258:U:O4'	2.21	0.41
51:M5:49:ARG:HH11	36:5:149:U:P	102.62	0.41
36:5:1748:G:C6	36:5:1749:A:C6	3.09	0.41
36:5:1819:U:H2'	36:5:1820:U:C5'	2.50	0.41
36:5:1918:C:H2'	36:5:1919:G:O4'	2.20	0.41
36:5:2948:C:O2'	36:5:2949:U:H5'	2.21	0.41
36:5:3366:G:C6	36:5:3367:C:N4	2.88	0.41
36:5:368:G:OP1	85:5:3768:OHX:N4	2.54	0.41
36:5:433:A:H2'	36:5:434:U:O4'	2.21	0.41
54:M8:69:ARG:HH21	36:5:784:A:H2'	159.97	0.41
1:6:1531:G:H2'	1:6:1532:U:H6	1.85	0.41
1:6:1646:C:H2'	1:6:1647:U:C6	2.56	0.41
28:D6:5:ARG:HG2	1:6:1796:C:C2	343.90	0.41
1:6:192:U:O2'	1:6:193:U:O5'	2.38	0.41
38:8:157:U:H2'	38:8:158:U:C6	2.55	0.41
15:C3:132:VAL:HG23	15:C3:134:VAL:CG1	2.68	0.41
15:C3:55:ARG:HD2	29:D7:47:PHE:CD1	2.56	0.41
17:C5:43:ARG:CZ	17:C5:47:ARG:HD3	4.92	0.41
18:C6:47:LYS:HA	18:C6:47:LYS:HD2	1.88	0.41
26:D4:113:ASN:HA	26:D4:116:LYS:HG3	2.03	0.41
1:2:767:U:C4	26:D4:64:PHE:CZ	3.09	0.41
28:D6:36:ILE:HD13	28:D6:73:TYR:HB2	2.02	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:2:SER:OG	40:L3:2:SER:O	2.30	0.41
41:L4:345:GLU:HB3	41:L4:346:LYS:H	4.07	0.41
41:L4:93:MET:O	36:5:1438:U:H1'	142.09	0.41
42:L5:123:GLU:O	42:L5:125:VAL:HG23	2.21	0.41
42:L5:140:ARG:HB2	36:5:1080:A:OP1	228.91	0.41
44:L7:236:ILE:O	44:L7:240:VAL:HG23	2.37	0.41
46:L9:112:ILE:HB	46:L9:126:VAL:HB	2.31	0.41
46:L9:8:GLN:HE22	46:L9:69:ARG:HH11	4.37	0.41
48:M1:23:VAL:CG1	48:M1:29:ARG:HG2	2.50	0.41
49:M3:75:PHE:O	49:M3:76:THR:OG1	2.33	0.41
51:M5:158:HIS:ND1	51:M5:160:GLU:OE2	2.52	0.41
51:M5:194:GLN:H	51:M5:194:GLN:HG2	1.67	0.41
36:1:3178:A:C2	52:M6:115:LYS:HG2	2.55	0.41
52:M6:3:VAL:HG13	52:M6:4:GLU:HG3	2.02	0.41
53:M7:36:ILE:HD12	53:M7:48:LEU:HD21	2.03	0.41
54:M8:173:GLU:HA	64:N8:51:GLY:C	2.59	0.41
55:M9:13:SER:OG	55:M9:38:ARG:NH2	2.54	0.41
55:M9:41:ILE:HA	55:M9:41:ILE:HD13	3.82	0.41
57:N1:76:ILE:O	57:N1:87:LYS:HB2	3.07	0.41
54:M8:92:ARG:HG2	64:N8:76:ASP:O	3.08	0.41
66:O0:41:LEU:HD22	66:O0:66:LYS:O	2.20	0.41
67:O1:55:LEU:HD23	67:O1:55:LEU:HA	2.36	0.41
68:O2:80:LYS:NZ	36:5:1386:A:OP2	136.95	0.41
70:O4:20:ILE:HD13	70:O4:32:ALA:HB1	4.52	0.41
71:O5:20:GLN:HA	71:O5:23:ASP:HB2	2.03	0.41
64:N8:128:ARG:HB3	72:O6:8:ALA:CB	3.50	0.41
3:S1:28:GLU:C	3:S1:29:TRP:CD1	4.37	0.41
4:S2:169:LEU:HD22	4:S2:198:THR:HG22	2.02	0.41
6:S4:100:ARG:NH2	6:S4:121:TYR:O	2.58	0.41
6:S4:192:ILE:HG22	6:S4:193:GLY:H	2.47	0.41
6:S4:38:LEU:HB3	1:6:298:C:H5''	353.05	0.41
7:S5:144:GLU:HA	7:S5:161:ASP:HA	2.93	0.41
8:S6:157:VAL:HG22	8:S6:173:PRO:HD2	2.02	0.41
10:S8:72:ILE:H	10:S8:72:ILE:HG13	2.22	0.41
34:SR:128:ASP:O	34:SR:130:THR:HG23	2.20	0.41
34:SR:281:TYR:HB3	34:SR:285:ALA:HB3	2.74	0.41
34:SR:307:ASP:OD1	34:SR:307:ASP:N	2.78	0.41
36:1:1495:U:H2'	36:1:1496:C:H5'	2.03	0.41
36:1:1720:U:C4	55:M9:124:TYR:CE2	3.09	0.41
36:1:2376:G:O2'	36:1:2377:G:H5'	2.20	0.41
36:1:2406:C:H2'	36:1:2407:C:C6	2.56	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:958:C:OP1	36:1:2799:A:H3'	2.21	0.41
36:1:567:G:O6	85:1:3863:OHX:N1	2.54	0.41
36:1:542:G:H2'	36:1:543:C:O4'	2.21	0.41
36:1:54:C:H5''	36:1:1548:C:H1'	2.02	0.41
1:2:1147:A:C6	1:2:1148:C:C4	3.09	0.41
1:2:1251:U:H5'	33:E1:135:HIS:CD2	2.56	0.41
1:2:1467:C:C4	1:2:1468:U:C5	3.08	0.41
1:2:1489:U:H5'	1:2:1494:C:H1'	2.03	0.41
1:2:1536:G:N1	1:2:1538:U:C2	2.89	0.41
1:2:333:A:OP1	10:S8:31:ARG:NH2	2.53	0.41
1:2:911:U:O2'	1:2:915:A:H1'	2.21	0.41
1:2:968:U:HO2'	1:2:1103:U:HO2'	1.67	0.41
37:3:27:A:O4'	37:3:57:G:N2	2.54	0.41
38:4:38:U:O2'	71:O5:89:ARG:NH2	2.53	0.41
36:5:1084:A:C6	36:5:1085:A:C6	3.09	0.41
52:M6:133:ARG:HD2	36:5:1315:U:O2'	291.28	0.41
36:5:1495:U:H4'	36:5:1514:G:H4'	2.02	0.41
36:5:1564:U:H2'	36:5:1565:G:H8	1.82	0.41
36:5:1773:C:H2'	36:5:1774:C:H6	1.84	0.41
36:5:1822:C:H2'	36:5:1823:A:C8	2.55	0.41
36:5:1877:U:H5''	36:5:1878:G:H5'	2.03	0.41
36:5:2194:G:C6	36:5:2195:C:C4	3.09	0.41
36:5:2818:U:C6	36:5:2818:U:H5'	2.46	0.41
36:5:2921:U:H2'	36:5:2923:U:H5''	2.03	0.41
36:5:3298:C:C4	36:5:3299:A:N7	2.89	0.41
36:5:2242:A:OP2	85:5:4013:OHX:N5	2.54	0.41
36:5:794:U:C2	36:5:795:G:C8	3.08	0.41
36:5:956:U:H2'	36:5:957:C:H6	1.85	0.41
1:6:873:U:O2'	1:6:1047:G:OP1	2.37	0.41
1:6:1071:U:H2'	1:6:1072:C:C6	2.56	0.41
1:6:1388:A:C8	1:6:1389:C:N4	2.89	0.41
1:6:1506:G:C2	1:6:1507:G:C8	3.08	0.41
16:C4:136:ARG:HD2	1:6:1769:U:O2	303.78	0.41
1:6:485:A:N6	1:6:486:G:N3	2.68	0.41
1:6:486:G:H4'	1:6:486:G:OP1	2.19	0.41
1:6:526:A:N6	1:6:527:A:C6	2.89	0.41
1:6:820:U:H6	1:6:820:U:H2'	1.55	0.41
1:6:87:C:H1'	1:6:168:A:N1	2.36	0.41
12:C0:1:MET:HG2	12:C0:2:LEU:N	2.34	0.41
15:C3:118:ILE:O	15:C3:122:ILE:HG13	2.21	0.41
19:C7:28:PHE:O	19:C7:31:ASN:HB2	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:C7:44:LYS:HB2	19:C7:44:LYS:HE3	1.89	0.41
20:C8:24:GLY:C	20:C8:26:ILE:H	2.24	0.41
21:C9:135:ILE:O	21:C9:139:THR:OG1	2.38	0.41
2:S0:185:ARG:HG2	23:D1:45:ALA:O	5.76	0.41
24:D2:70:ASN:HB2	24:D2:130:TYR:O	2.49	0.41
25:D3:69:ARG:NH2	1:6:568:G:N7	365.95	0.41
40:L3:199:PHE:O	40:L3:200:GLU:HB2	3.20	0.41
36:1:3309:G:O6	40:L3:21:ARG:NH2	2.53	0.41
40:L3:57:VAL:O	40:L3:357:LYS:HB2	2.21	0.41
40:L3:92:TYR:HH	36:5:3003:G:HO2'	240.78	0.41
41:L4:145:ILE:HA	41:L4:146:PRO:HD3	2.51	0.41
41:L4:187:LEU:HD23	41:L4:198:ARG:O	2.21	0.41
41:L4:202:ARG:HA	41:L4:202:ARG:NE	2.36	0.41
41:L4:22:LEU:HA	41:L4:23:PRO:HD3	1.87	0.41
41:L4:290:ILE:O	41:L4:296:GLN:NE2	2.53	0.41
41:L4:51:ALA:O	38:8:27:U:H5'	110.24	0.41
42:L5:148:ILE:HG23	42:L5:151:GLN:HB3	2.19	0.41
42:L5:179:ARG:HA	42:L5:179:ARG:HD3	1.92	0.41
42:L5:183:TRP:CZ3	42:L5:185:PHE:HA	7.56	0.41
42:L5:68:THR:HG22	42:L5:70:THR:N	2.29	0.41
45:L8:136:LEU:HD23	45:L8:136:LEU:HA	2.28	0.41
45:L8:91:PHE:O	45:L8:95:ASN:HB2	2.20	0.41
47:M0:179:PRO:HA	47:M0:182:LEU:HD12	2.02	0.41
47:M0:42:THR:HG23	47:M0:45:GLU:HG3	4.41	0.41
50:M4:113:THR:HB	50:M4:116:GLU:HG3	2.27	0.41
52:M6:79:ILE:HG21	52:M6:138:LEU:HD11	2.06	0.41
52:M6:65:ASN:O	52:M6:68:ARG:HG2	2.21	0.41
53:M7:131:ARG:HG3	53:M7:137:ASN:OD1	2.21	0.41
54:M8:131:ALA:HB1	54:M8:135:GLN:N	2.35	0.41
54:M8:159:LYS:O	54:M8:161:LYS:HG2	2.21	0.41
62:N6:122:LYS:HE2	62:N6:122:LYS:HB3	1.90	0.41
63:N7:136:PHE:HB2	70:O4:88:ARG:O	2.21	0.41
63:N7:17:ARG:HB2	36:5:1635:G:O6	203.19	0.41
63:N7:67:LYS:HB3	63:N7:67:LYS:HE2	1.88	0.41
65:N9:20:GLY:O	65:N9:21:ILE:HB	2.68	0.41
66:O0:101:LEU:HD22	66:O0:101:LEU:H	3.39	0.41
36:1:3173:G:N1	69:O3:92:LYS:O	2.37	0.41
70:O4:71:THR:HG22	70:O4:78:GLY:H	1.86	0.41
70:O4:47:CYS:SG	70:O4:81:CYS:SG	3.32	0.41
72:O6:62:ARG:HB3	72:O6:63:ASN:OD1	2.21	0.41
76:Q0:110:CYS:SG	76:Q0:112:LYS:HB2	2.60	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:Q2:72:LEU:O	78:Q2:80:ARG:HA	2.21	0.41
2:S0:12:GLU:HG2	2:S0:12:GLU:H	2.26	0.41
3:S1:185:THR:O	3:S1:189:ILE:HG13	2.34	0.41
8:S6:21:GLU:HG2	8:S6:21:GLU:H	1.64	0.41
9:S7:116:ARG:HD3	1:6:856:A:N6	360.63	0.41
9:S7:173:TYR:CE1	9:S7:179:LYS:HB2	2.56	0.41
34:SR:105:GLY:O	34:SR:132:LYS:HE3	2.42	0.41
36:1:1158:A:O5'	36:1:1158:A:H8	2.03	0.41
36:1:1492:G:O2'	75:O9:48:LYS:NZ	2.48	0.41
36:1:2383:C:H5'	52:M6:71:PHE:CE2	2.56	0.41
36:1:587:U:C2'	36:1:588:G:H5'	2.51	0.41
36:1:718:G:O6	36:1:751:A:H1'	2.20	0.41
36:1:847:A:H2'	36:1:848:A:C8	2.55	0.41
1:2:1220:C:H5''	12:C0:52:LYS:HD2	2.02	0.41
1:2:1604:U:H2'	1:2:1605:G:O4'	2.21	0.41
1:2:1629:G:H2'	1:2:1630:U:C6	2.56	0.41
1:2:1678:A:OP1	10:S8:59:ARG:NH1	2.54	0.41
1:2:1759:C:H2'	1:2:1760:G:O4'	2.21	0.41
1:2:1417:A:OP1	85:2:2030:OHX:N5	2.54	0.41
1:2:738:G:O6	85:2:2056:OHX:N1	2.54	0.41
1:2:794:U:O2	1:2:794:U:O2'	2.39	0.41
1:2:872:G:H2'	1:2:873:U:O4'	2.21	0.41
85:1:3854:OHX:N6	85:3:217:OHX:N5	2.69	0.41
38:4:125:U:O2'	38:4:126:A:P	2.79	0.41
53:M7:127:ARG:NH2	36:5:1508:C:OP1	137.90	0.41
36:5:1921:A:H2'	36:5:1922:A:C8	2.56	0.41
36:5:1936:A:H2'	36:5:1937:U:O4'	2.20	0.41
36:5:2101:C:HO2'	36:5:2102:U:P	2.44	0.41
36:5:2165:G:N2	36:5:2170:U:C4	2.89	0.41
36:5:2171:G:O6	85:5:4033:OHX:N2	2.54	0.41
36:5:225:C:H2'	36:5:226:C:C6	2.56	0.41
36:5:2841:G:H2'	36:5:2844:C:H42	1.86	0.41
36:5:2943:G:H2'	36:5:2944:U:O4'	2.21	0.41
36:5:3095:U:H2'	36:5:3096:C:C6	2.56	0.41
36:5:527:A:H2'	36:5:528:U:O4'	2.21	0.41
51:M5:164:LEU:HD21	36:5:62:A:H5''	98.38	0.41
1:6:18:C:C2	1:6:19:A:C8	3.08	0.41
1:6:328:A:H2'	1:6:329:G:C8	2.55	0.41
1:6:692:C:H2'	1:6:693:U:O4'	2.21	0.41
11:S9:142:ASN:OD1	1:6:767:U:H5	425.15	0.41
12:C0:5:LYS:HG3	12:C0:6:GLU:N	2.76	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:C6:27:GLY:HA2	18:C6:63:ILE:O	2.21	0.41
25:D3:11:SER:O	25:D3:15:LEU:HG	2.48	0.41
25:D3:24:TRP:CE3	25:D3:30:LYS:HG3	2.56	0.41
26:D4:18:LEU:HD23	26:D4:18:LEU:HA	1.87	0.41
28:D6:23:CYS:HB3	28:D6:28:LYS:H	2.27	0.41
85:2:2021:OHX:N1	85:D9:103:OHX:N2	2.68	0.41
39:L2:116:VAL:CG1	39:L2:134:VAL:HG11	3.19	0.41
40:L3:128:LYS:HG3	36:5:3294:A:H5'	197.23	0.41
41:L4:126:ILE:HD11	41:L4:233:LEU:HD13	2.03	0.41
43:L6:37:GLY:N	43:L6:54:TYR:O	2.47	0.41
43:L6:68:PRO:HB2	43:L6:71:VAL:HG23	2.03	0.41
44:L7:159:GLN:HG2	44:L7:159:GLN:H	2.59	0.41
44:L7:202:LEU:HD13	44:L7:205:PHE:CZ	2.87	0.41
44:L7:208:SER:O	44:L7:243:MET:HB3	2.21	0.41
44:L7:89:ILE:HD12	44:L7:214:TRP:CH2	2.56	0.41
46:L9:122:LYS:HG2	46:L9:123:ILE:N	2.60	0.41
46:L9:94:TYR:CD2	46:L9:98:PRO:HA	2.62	0.41
47:M0:77:THR:OG1	47:M0:78:THR:N	2.53	0.41
49:M3:144:THR:O	49:M3:146:PRO:HD3	3.06	0.41
55:M9:105:LEU:HD21	55:M9:139:VAL:CG1	5.26	0.41
56:N0:47:LYS:HE2	56:N0:122:HIS:HE1	2.81	0.41
56:N0:87:THR:C	56:N0:88:HIS:CG	2.94	0.41
56:N0:82:ASP:OD1	56:N0:87:THR:HB	2.21	0.41
57:N1:75:ILE:HG12	57:N1:76:ILE:N	2.35	0.41
59:N3:27:ASP:HA	59:N3:113:ALA:O	2.32	0.41
38:4:136:G:OP1	61:N5:48:SER:HB3	2.21	0.41
63:N7:124:ALA:O	63:N7:126:LYS:N	3.16	0.41
63:N7:4:PHE:HE2	66:O0:63:SER:HB3	1.86	0.41
64:N8:79:TRP:CZ2	64:N8:121:VAL:HB	2.55	0.41
64:N8:83:PRO:HB2	64:N8:86:LYS:HG3	2.93	0.41
65:N9:31:SER:C	65:N9:33:LYS:H	2.24	0.41
69:O3:45:LEU:HA	69:O3:45:LEU:HD22	1.96	0.41
70:O4:3:GLN:HG2	70:O4:30:LEU:HB2	2.02	0.41
72:O6:67:LYS:HD2	72:O6:67:LYS:HA	4.44	0.41
72:O6:90:MET:O	72:O6:94:ILE:HG13	2.21	0.41
75:O9:48:LYS:HD3	75:O9:48:LYS:HA	3.45	0.41
48:M1:60:ARG:NH1	78:Q2:104:LEU:O	2.85	0.41
2:S0:56:LYS:HZ1	2:S0:159:ALA:H	1.68	0.41
2:S0:69:ASN:HB3	2:S0:71:GLU:OE1	2.20	0.41
2:S0:73:VAL:O	2:S0:95:ALA:HB1	2.21	0.41
3:S1:30:PHE:CZ	3:S1:94:LYS:HA	2.56	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:S3:164:VAL:O	5:S3:168:ILE:HG13	2.21	0.41
5:S3:88:ALA:O	5:S3:89:GLU:HB2	2.20	0.41
6:S4:242:LYS:N	6:S4:242:LYS:HE3	2.36	0.41
6:S4:69:HIS:CE1	26:D4:17:LEU:HA	2.56	0.41
10:S8:12:SER:HG	10:S8:14:THR:HG1	2.33	0.41
36:1:1246:G:H2'	36:1:1247:U:O4'	2.21	0.41
36:1:1786:G:H2'	36:1:1787:A:C8	2.56	0.41
36:1:1938:U:O4	85:1:3774:OHX:N2	2.54	0.41
36:1:2113:A:O2'	36:1:2116:G:N7	2.51	0.41
36:1:2123:G:O6	85:1:3967:OHX:N2	2.54	0.41
36:1:239:G:H4'	36:1:240:U:OP1	2.21	0.41
36:1:250:U:C5	36:1:251:G:N7	2.89	0.41
36:1:2631:U:OP2	57:N1:4:SER:OG	2.32	0.41
36:1:3009:G:C6	36:1:3010:U:C4	3.09	0.41
36:1:3242:G:OP2	40:L3:154:TYR:OH	2.29	0.41
36:1:3295:A:OP2	40:L3:126:LYS:N	2.47	0.41
36:1:410:U:O4	85:1:3915:OHX:N2	2.54	0.41
36:1:1220:U:O2	85:1:3974:OHX:N5	2.54	0.41
36:1:533:A:H4'	36:1:534:U:OP1	2.20	0.41
36:1:954:U:O4	36:1:1115:G:H1'	2.21	0.41
1:2:1365:C:C4	1:2:1366:U:C5	3.09	0.41
1:2:1698:G:H1'	1:2:1699:G:OP1	2.21	0.41
1:2:22:A:OP2	85:2:2078:OHX:N1	2.54	0.41
1:2:27:U:H2'	1:2:28:A:O4'	2.20	0.41
1:2:301:A:C6	1:2:302:U:C4	3.09	0.41
1:2:702:G:OP1	1:2:702:G:H4'	2.21	0.41
38:4:81:U:C2	38:4:82:U:C5	3.08	0.41
36:5:1070:U:H2'	36:5:1071:U:O4'	2.21	0.41
36:5:1668:G:H2'	36:5:1669:C:O4'	2.21	0.41
36:5:1728:G:H5''	36:5:1730:G:O4'	2.21	0.41
36:5:175:C:H2'	36:5:176:G:C8	2.56	0.41
50:M4:121:MET:HE1	36:5:3215:A:C5'	274.57	0.41
36:5:3242:G:N2	36:5:3245:A:H5''	2.35	0.41
36:5:366:A:H2'	36:5:367:A:O4'	2.21	0.41
36:5:936:A:H2'	36:5:938:C:C4	2.56	0.41
17:C5:122:THR:HG21	1:6:1455:G:OP1	370.14	0.41
1:6:15:U:H2'	1:6:16:G:O4'	2.21	0.41
1:6:189:C:C2'	1:6:190:C:H5'	2.50	0.41
85:6:2116:OHX:N2	85:6:2152:OHX:N1	2.69	0.41
1:6:647:G:N2	1:6:687:G:N2	2.68	0.41
1:6:704:C:H2'	1:6:705:U:O4'	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:C0:70:GLU:O	12:C0:73:VAL:HB	2.20	0.41
15:C3:114:ARG:O	15:C3:117:LEU:HB2	2.53	0.41
15:C3:28:LEU:O	15:C3:32:SER:HB3	6.36	0.41
17:C5:112:LEU:HA	17:C5:112:LEU:HD23	1.82	0.41
32:E0:49:LEU:H	32:E0:49:LEU:HD22	2.94	0.41
39:L2:116:VAL:HG11	39:L2:134:VAL:HG11	2.66	0.41
39:L2:182:ALA:HB2	36:5:2148:U:O2'	211.56	0.41
39:L2:43:GLY:O	39:L2:88:ILE:N	2.75	0.41
40:L3:78:VAL:HG22	40:L3:323:MET:HG3	2.03	0.41
44:L7:173:LEU:HD22	44:L7:201:PHE:CD1	2.56	0.41
44:L7:202:LEU:HA	44:L7:202:LEU:HD23	1.85	0.41
45:L8:170:CYS:HB3	45:L8:175:VAL:O	2.20	0.41
45:L8:73:PRO:HG3	45:L8:233:TRP:N	2.76	0.41
52:M6:72:HIS:O	52:M6:74:ARG:HD3	2.62	0.41
55:M9:41:ILE:O	55:M9:45:VAL:HG23	2.21	0.41
56:N0:162:THR:OG1	56:N0:163:PHE:N	2.54	0.41
58:N2:89:LEU:HD13	58:N2:93:ILE:HD12	2.02	0.41
59:N3:70:ARG:HH11	59:N3:70:ARG:HD3	1.88	0.41
61:N5:133:LEU:HD23	61:N5:133:LEU:HA	2.39	0.41
64:N8:126:LYS:HA	64:N8:146:GLU:O	2.37	0.41
67:O1:46:THR:HG21	67:O1:91:SER:N	2.35	0.41
68:O2:109:LEU:HD23	68:O2:109:LEU:HA	2.01	0.41
68:O2:57:TYR:O	68:O2:58:GLY:C	2.86	0.41
70:O4:24:LYS:HD3	70:O4:30:LEU:HD23	3.56	0.41
71:O5:68:GLN:HA	71:O5:71:LYS:HB2	2.03	0.41
79:Q3:74:ALA:O	79:Q3:78:THR:HG23	2.21	0.41
2:S0:29:VAL:HG12	2:S0:37:VAL:HG21	11.03	0.41
5:S3:31:GLU:HA	5:S3:107:PHE:HE2	1.86	0.41
5:S3:132:LYS:HB3	5:S3:189:MET:CG	2.50	0.41
7:S5:157:ARG:O	7:S5:224:ASN:HB3	2.21	0.41
1:2:78:A:H1'	8:S6:175:ILE:HG12	2.03	0.41
8:S6:67:VAL:O	8:S6:68:LEU:HB2	2.30	0.41
9:S7:21:ALA:O	9:S7:24:PHE:HB2	2.31	0.41
9:S7:46:ILE:HG12	9:S7:60:ILE:HA	3.15	0.41
10:S8:163:GLY:HA3	36:1:3354:U:H1'	2.02	0.41
10:S8:176:SER:HB2	10:S8:178:ARG:H	3.32	0.41
10:S8:67:TRP:HA	10:S8:183:ILE:HG23	5.36	0.41
11:S9:89:ASP:OD1	11:S9:90:LYS:HE2	2.21	0.41
34:SR:255:ALA:H	34:SR:292:LEU:HD11	3.48	0.41
36:1:1127:G:N2	36:1:1129:A:H3'	2.35	0.40
36:1:1874:A:H5''	55:M9:18:GLY:HA3	2.03	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2180:G:H2'	36:1:2181:C:C6	2.56	0.40
36:1:2393:G:O2'	36:1:2394:G:OP2	2.38	0.40
36:1:2714:G:H4'	36:1:2715:A:C5'	2.51	0.40
36:1:3259:U:C6	36:1:3259:U:H5'	2.44	0.40
36:1:3275:U:H5''	69:O3:68:TRP:HZ2	1.85	0.40
36:1:1853:U:O4	85:1:3838:OHX:N5	2.54	0.40
36:1:330:G:OP2	85:1:3903:OHX:N2	2.54	0.40
1:2:301:A:H2'	1:2:302:U:C1'	2.51	0.40
1:2:43:A:H5''	1:2:437:A:N1	2.35	0.40
36:1:6:A:C2	38:4:154:C:C2	3.09	0.40
36:5:1781:C:H2'	36:5:1782:U:C6	2.56	0.40
36:5:1902:G:C6	36:5:1903:U:C2	3.09	0.40
62:N6:60:ARG:NH1	36:5:200:C:OP1	86.19	0.40
36:5:2437:G:H2'	36:5:2438:A:O4'	2.21	0.40
36:5:2623:G:C5	36:5:2624:G:C5	3.09	0.40
36:5:3136:G:C6	36:5:3137:C:C4	3.09	0.40
36:5:3353:G:O2'	36:5:3356:G:OP2	2.36	0.40
36:5:653:A:OP1	85:5:3825:OHX:N2	2.54	0.40
36:5:979:U:O2'	36:5:980:A:C5	2.71	0.40
1:6:1257:U:O2'	1:6:1258:U:O4'	2.40	0.40
1:6:1230:A:C8	1:6:1258:U:C4	3.06	0.40
1:6:1334:U:H2'	1:6:1335:U:O4'	2.20	0.40
1:6:1459:C:OP2	1:6:1459:C:H6	2.04	0.40
1:6:1478:G:C6	1:6:1479:A:C5	3.09	0.40
13:C1:36:LYS:HD3	1:6:248:U:H4'	311.98	0.40
1:6:447:U:C4	1:6:448:C:C4	3.09	0.40
1:6:463:U:O2'	1:6:527:A:N1	2.54	0.40
5:S3:144:ALA:HB2	1:6:579:A:N1	391.62	0.40
1:6:616:G:C2	1:6:622:A:N7	2.89	0.40
13:C1:97:TYR:HB3	25:D3:15:LEU:HD12	2.96	0.40
16:C4:77:THR:O	16:C4:110:LEU:HD22	3.35	0.40
22:D0:93:LEU:HA	22:D0:93:LEU:HD23	1.85	0.40
22:D0:96:PRO:HG2	22:D0:99:ILE:HG22	2.03	0.40
25:D3:16:ARG:H	25:D3:16:ARG:HG3	1.70	0.40
25:D3:68:ILE:HG22	25:D3:70:LYS:HZ2	2.02	0.40
28:D6:44:ILE:H	28:D6:44:ILE:HG13	1.63	0.40
30:D8:29:ARG:HG3	30:D8:41:VAL:HG22	2.03	0.40
1:2:1647:U:O2	32:E0:2:ALA:N	2.54	0.40
39:L2:66:PRO:HB2	39:L2:67:TYR:CD2	2.71	0.40
40:L3:293:ASN:HB2	40:L3:304:THR:CA	2.72	0.40
41:L4:328:ASN:HA	41:L4:329:PRO:HD2	2.12	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:L4:333:VAL:O	41:L4:337:GLU:HG3	2.71	0.40
41:L4:346:LYS:HA	41:L4:346:LYS:HD2	4.69	0.40
42:L5:113:LEU:HD12	42:L5:113:LEU:HA	2.06	0.40
42:L5:150:LEU:HD23	42:L5:150:LEU:HA	1.77	0.40
42:L5:227:LEU:HD12	42:L5:227:LEU:HA	2.23	0.40
37:3:27:A:OP2	42:L5:57:ASN:HB2	2.21	0.40
42:L5:85:ARG:NH1	42:L5:86:TYR:OH	3.49	0.40
45:L8:54:GLU:HG2	45:L8:57:ARG:HH21	1.86	0.40
46:L9:89:LYS:O	46:L9:182:SER:N	2.43	0.40
47:M0:24:ARG:O	47:M0:25:ALA:HB3	4.62	0.40
49:M3:131:LYS:HG2	49:M3:131:LYS:H	1.60	0.40
52:M6:51:LYS:HE2	52:M6:144:SER:HB2	2.03	0.40
53:M7:52:LEU:HD21	53:M7:88:VAL:HG11	2.02	0.40
57:N1:14:MET:HE1	57:N1:55:LYS:CB	3.16	0.40
58:N2:22:PRO:HG3	58:N2:105:LEU:HB3	2.02	0.40
61:N5:51:VAL:HA	61:N5:52:PRO:HD3	1.92	0.40
64:N8:74:ASN:HA	64:N8:113:LEU:O	2.99	0.40
66:O0:45:ALA:HB2	66:O0:77:LEU:HD22	2.08	0.40
67:O1:70:ARG:HE	67:O1:102:LYS:HE2	7.48	0.40
70:O4:8:ARG:NH2	70:O4:31:ARG:HD2	3.06	0.40
70:O4:4:ARG:HD2	36:5:1485:G:N2	152.00	0.40
70:O4:71:THR:HG22	70:O4:78:GLY:N	2.36	0.40
71:O5:54:VAL:O	71:O5:58:ILE:HG13	2.35	0.40
72:O6:4:LYS:HD2	72:O6:13:LYS:O	2.21	0.40
36:1:929:A:O2'	73:O7:49:TRP:O	2.39	0.40
2:S0:87:LEU:HD12	2:S0:87:LEU:HA	1.80	0.40
3:S1:61:LEU:HD13	3:S1:61:LEU:H	1.86	0.40
3:S1:69:CYS:CB	16:C4:114:ARG:HD3	3.01	0.40
4:S2:63:VAL:HG12	4:S2:134:LEU:HD23	6.18	0.40
1:2:1625:C:OP1	4:S2:91:ARG:NH2	2.55	0.40
6:S4:93:ASP:C	6:S4:95:THR:H	4.48	0.40
1:2:1473:U:O2'	7:S5:103:ASN:OD1	2.39	0.40
7:S5:68:ILE:HD13	7:S5:69:PHE:N	5.23	0.40
8:S6:168:THR:OG1	8:S6:168:THR:O	2.37	0.40
9:S7:38:LEU:N	9:S7:40:PRO:HD2	2.36	0.40
11:S9:151:ASP:N	11:S9:151:ASP:OD1	3.06	0.40
34:SR:79:TYR:HE1	34:SR:100:TYR:HE1	2.65	0.40
36:1:1352:A:H1'	36:1:1353:U:H5'	2.03	0.40
36:1:1779:C:O2'	85:1:4031:OHX:N2	2.54	0.40
36:1:177:U:C4	36:1:178:U:C4	3.09	0.40
36:1:1823:A:H2'	36:1:1824:U:C6	2.56	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:2567:C:C2'	36:1:2568:C:H5'	2.51	0.40
36:1:2743:A:H2'	36:1:2744:U:O4'	2.21	0.40
36:1:3048:A:C8	36:1:3090:U:O4	2.74	0.40
36:1:1388:U:OP2	85:1:4009:OHX:N4	2.54	0.40
36:1:681:U:C2	41:L4:115:HIS:ND1	2.87	0.40
1:2:1059:U:O2'	1:2:1060:U:C2	2.75	0.40
1:2:1111:G:C2	1:2:1112:G:H1'	2.56	0.40
1:2:1609:U:H2'	1:2:1610:G:O4'	2.22	0.40
1:2:18:C:C4	1:2:19:A:N7	2.89	0.40
1:2:256:A:H2'	1:2:257:A:O4'	2.22	0.40
1:2:272:U:H2'	1:2:273:G:C8	2.56	0.40
1:2:566:C:H2'	1:2:567:A:H8	1.86	0.40
1:2:955:A:H2'	1:2:956:C:O4'	2.21	0.40
38:4:131:A:H2'	38:4:132:G:H8	1.87	0.40
38:4:59:A:H4'	38:4:60:U:H5''	2.02	0.40
36:5:2390:A:H2'	36:5:2391:G:O4'	2.21	0.40
36:5:2888:U:C5	36:5:2910:A:C6	3.09	0.40
36:5:3054:U:O2'	36:5:3055:U:H5'	2.21	0.40
54:M8:89:ASP:HB3	36:5:677:A:OP1	134.31	0.40
54:M8:146:SER:HB3	36:5:786:A:P	156.48	0.40
36:5:981:U:H2'	36:5:982:C:O4'	2.20	0.40
1:6:1110:G:N2	1:6:1136:U:H1'	2.36	0.40
1:6:775:G:C2	1:6:786:C:C4	3.10	0.40
1:6:78:A:C6	1:6:79:C:C4	3.09	0.40
15:C3:40:TYR:O	15:C3:43:LYS:HB3	2.21	0.40
19:C7:88:VAL:HG22	19:C7:89:SER:H	1.86	0.40
21:C9:53:TRP:O	21:C9:56:LYS:HB2	2.97	0.40
22:D0:104:THR:HG21	22:D0:116:VAL:HG21	2.03	0.40
25:D3:93:LEU:HD12	25:D3:93:LEU:HA	1.87	0.40
40:L3:361:THR:HG22	40:L3:371:GLN:HB3	2.29	0.40
40:L3:44:THR:CG2	40:L3:184:ASN:HB2	2.50	0.40
42:L5:270:LYS:HD2	42:L5:272:TYR:HB2	9.68	0.40
45:L8:220:ALA:HA	45:L8:224:ASP:OD2	2.43	0.40
46:L9:177:ASP:O	46:L9:180:TYR:OH	2.36	0.40
46:L9:52:LEU:HD22	46:L9:53:ILE:H	2.10	0.40
48:M1:36:VAL:O	48:M1:39:GLN:HG2	2.20	0.40
50:M4:121:MET:HE1	36:5:3215:A:O5'	275.19	0.40
50:M4:46:ILE:O	50:M4:55:ARG:HA	2.47	0.40
50:M4:53:VAL:HA	50:M4:54:PRO:HD3	1.64	0.40
36:1:1176:C:OP1	52:M6:25:LYS:HE3	2.21	0.40
54:M8:98:LYS:HE2	54:M8:118:GLY:O	2.20	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M9:4:LEU:O	55:M9:7:GLN:HG2	5.44	0.40
56:N0:50:LYS:O	56:N0:51:VAL:HG23	4.24	0.40
57:N1:127:GLN:HG2	36:5:1095:U:N3	260.53	0.40
59:N3:84:SER:HA	59:N3:94:TYR:HB3	2.03	0.40
63:N7:85:TYR:CE2	63:N7:129:TRP:CE2	3.99	0.40
66:O0:83:LYS:HG2	66:O0:85:PHE:CZ	2.83	0.40
66:O0:93:LEU:HA	66:O0:93:LEU:HD23	1.86	0.40
67:O1:36:ILE:O	67:O1:39:PHE:HB3	2.22	0.40
70:O4:22:VAL:HG12	70:O4:30:LEU:HD22	2.02	0.40
70:O4:38:LEU:H	70:O4:38:LEU:HD12	2.62	0.40
71:O5:101:THR:CG2	71:O5:104:GLN:H	3.18	0.40
38:4:41:A:O2'	73:O7:59:THR:HG22	2.21	0.40
74:O8:11:PHE:HD1	74:O8:12:LEU:HD22	2.94	0.40
76:Q0:98:LYS:HD3	76:Q0:115:CYS:HB2	2.93	0.40
79:Q3:86:LEU:O	79:Q3:89:MET:HB2	2.20	0.40
2:S0:41:ARG:NH1	2:S0:45:VAL:HG21	3.13	0.40
3:S1:134:VAL:O	3:S1:218:LEU:HD22	2.22	0.40
3:S1:61:LEU:HD12	3:S1:64:ARG:HD2	6.88	0.40
3:S1:87:ARG:NH2	3:S1:89:ASP:OD1	5.16	0.40
5:S3:21:LEU:HD23	5:S3:21:LEU:HA	1.88	0.40
5:S3:45:LYS:HE2	5:S3:45:LYS:HB2	1.85	0.40
6:S4:194:THR:OG1	6:S4:211:LYS:O	2.22	0.40
7:S5:184:PHE:HE1	7:S5:185:ARG:HH21	2.79	0.40
7:S5:41:LYS:HB3	7:S5:41:LYS:HE3	1.77	0.40
7:S5:57:SER:C	7:S5:59:VAL:H	2.18	0.40
8:S6:175:ILE:HG12	8:S6:175:ILE:H	1.84	0.40
10:S8:38:ILE:HG12	10:S8:96:LEU:HD11	2.47	0.40
36:1:1257:C:H42	36:1:1261:G:N2	2.19	0.40
36:1:1404:G:N2	36:1:1407:A:OP2	2.54	0.40
36:1:1517:G:H2'	36:1:1518:U:H6	1.86	0.40
36:1:1596:C:O2'	36:1:1696:A:N3	2.49	0.40
36:1:2565:U:H2'	36:1:2566:C:C6	2.56	0.40
36:1:2842:U:H2'	36:1:2842:U:O2	2.22	0.40
36:1:304:G:H3'	36:1:304:G:OP2	2.21	0.40
36:1:3169:U:H2'	36:1:3170:A:H8	1.85	0.40
36:1:3010:U:O4	85:1:3761:OHX:N2	2.54	0.40
36:1:384:A:H2'	36:1:385:A:O4'	2.21	0.40
85:1:3851:OHX:N5	85:1:3891:OHX:N6	2.69	0.40
36:1:979:U:H4'	36:1:980:A:O5'	2.21	0.40
1:2:1013:A:H2'	1:2:1014:G:O4'	2.21	0.40
1:2:1391:A:H2'	1:2:1392:U:H6	1.86	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1203:A:C5	1:2:1555:A:C6	3.09	0.40
1:2:87:C:O2'	1:2:169:A:N1	2.40	0.40
85:2:2042:OHX:N3	85:2:2044:OHX:N1	2.69	0.40
1:2:20:G:H5'	1:2:571:G:C5	2.56	0.40
1:2:542:A:H8	1:2:543:C:H5'	1.87	0.40
36:5:1176:C:H2'	36:5:1177:G:N2	2.37	0.40
36:5:1249:G:H2'	36:5:1250:G:C8	2.56	0.40
36:5:1284:C:O2'	36:5:1285:G:OP1	2.27	0.40
36:5:130:A:H61	36:5:138:U:H3	1.68	0.40
36:5:2294:U:H2'	36:5:2296:A:OP2	2.21	0.40
36:5:287:G:H2'	36:5:288:C:C6	2.56	0.40
51:M5:93:LYS:HG3	36:5:289:A:C2	146.59	0.40
36:5:2966:G:C6	36:5:2967:A:N6	2.89	0.40
36:5:3033:A:H2'	36:5:3034:C:C6	2.56	0.40
36:5:3195:U:O2	36:5:3195:U:H2'	2.21	0.40
36:5:578:A:H5''	36:5:579:G:O5'	2.21	0.40
1:6:1365:C:H2'	1:6:1366:U:O4'	2.21	0.40
1:6:1185:U:C2	1:6:1458:G:N7	2.89	0.40
1:6:1146:G:N3	1:6:1635:A:H2	2.18	0.40
1:6:492:A:H2'	1:6:493:U:H5''	2.04	0.40
1:6:794:U:H5''	1:6:795:U:O2	2.21	0.40
42:L5:33:ARG:HD2	37:7:7:G:OP1	271.68	0.40
14:C2:103:LEU:HD23	14:C2:115:VAL:HA	2.49	0.40
14:C2:57:ALA:HB3	14:C2:85:LYS:CE	2.51	0.40
15:C3:70:LYS:H	15:C3:70:LYS:HG2	3.14	0.40
3:S1:72:ASP:OD1	16:C4:114:ARG:NH1	4.18	0.40
17:C5:111:MET:HG2	20:C8:119:ILE:HG13	3.11	0.40
21:C9:102:ARG:O	21:C9:105:LEU:N	3.52	0.40
21:C9:6:VAL:HG22	21:C9:66:TYR:CE1	2.57	0.40
2:S0:52:LYS:NZ	23:D1:82:VAL:O	3.41	0.40
26:D4:53:ASP:OD1	26:D4:96:LEU:HD22	2.21	0.40
28:D6:10:ARG:HD3	28:D6:34:LYS:HA	2.47	0.40
28:D6:36:ILE:N	28:D6:36:ILE:HD12	4.69	0.40
30:D8:19:THR:HG23	30:D8:27:GLN:HE21	1.85	0.40
31:D9:31:ILE:HA	31:D9:31:ILE:HD13	1.97	0.40
42:L5:207:TYR:O	42:L5:211:LEU:HB2	2.95	0.40
43:L6:78:ARG:NH2	43:L6:106:PHE:HB2	2.36	0.40
44:L7:110:ARG:NH1	54:M8:3:ILE:HD12	5.40	0.40
36:L1:1363:A:OP1	44:L7:160:ARG:HD3	2.21	0.40
45:L8:81:THR:OG1	45:L8:181:LYS:HG3	2.22	0.40
46:L9:38:LEU:HD23	46:L9:38:LEU:HA	1.82	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:7:GLU:O	46:L9:8:GLN:HG2	2.68	0.40
47:M0:148:VAL:O	47:M0:151:GLY:N	2.52	0.40
47:M0:169:LYS:N	47:M0:169:LYS:HD2	2.35	0.40
48:M1:91:LEU:HD12	48:M1:163:PHE:CZ	2.56	0.40
48:M1:164:LYS:HE3	48:M1:171:VAL:HG12	3.13	0.40
48:M1:166:LYS:HB2	48:M1:166:LYS:HE2	1.88	0.40
48:M1:37:LEU:HD22	48:M1:69:VAL:HG12	2.03	0.40
50:M4:46:ILE:HD13	50:M4:58:ILE:HG21	2.38	0.40
50:M4:19:ARG:NH2	50:M4:66:THR:O	2.45	0.40
52:M6:67:THR:O	52:M6:71:PHE:HE1	2.32	0.40
53:M7:10:ASN:HD22	53:M7:13:LYS:NZ	2.19	0.40
53:M7:88:VAL:O	53:M7:92:GLN:HG3	3.89	0.40
59:N3:131:SER:HB2	59:N3:132:ASN:H	1.76	0.40
59:N3:74:MET:HE3	59:N3:74:MET:HB3	4.42	0.40
60:N4:31:PHE:HB3	60:N4:36:SER:OG	2.21	0.40
38:4:133:G:H4'	61:N5:55:ASN:CG	2.42	0.40
70:O4:41:ARG:O	70:O4:43:LYS:HE3	4.08	0.40
70:O4:8:ARG:HB2	70:O4:34:HIS:NE2	2.36	0.40
71:O5:102:GLU:O	71:O5:106:LYS:HG3	2.21	0.40
71:O5:7:TYR:CE1	71:O5:8:GLU:HG3	2.56	0.40
74:O8:11:PHE:CZ	74:O8:43:PHE:HB3	2.56	0.40
2:S0:147:THR:OG1	2:S0:159:ALA:HB1	2.22	0.40
3:S1:147:ALA:O	3:S1:148:ASN:HB3	2.22	0.40
4:S2:112:GLY:HA3	4:S2:132:ALA:O	2.21	0.40
4:S2:170:ILE:HG12	4:S2:197:TYR:O	4.94	0.40
5:S3:216:PRO:HB2	5:S3:217:ILE:H	1.64	0.40
5:S3:220:PRO:HB2	5:S3:221:SER:H	1.80	0.40
7:S5:128:ASN:O	7:S5:132:VAL:HG23	2.63	0.40
8:S6:12:SER:OG	8:S6:127:THR:O	2.38	0.40
8:S6:72:ARG:HG2	8:S6:98:ARG:HA	2.03	0.40
9:S7:35:LYS:HB3	9:S7:35:LYS:HE3	1.94	0.40
11:S9:123:HIS:HD2	32:E0:33:ARG:NE	3.46	0.40
34:SR:73:LEU:HD23	34:SR:73:LEU:HA	1.92	0.40
36:1:1077:U:H1'	36:1:1083:G:N2	2.36	0.40
36:1:1161:G:C6	36:1:1162:U:C4	3.09	0.40
36:1:1651:U:H5''	39:L2:71:LEU:HD13	2.02	0.40
36:1:2111:G:H4'	36:1:2112:U:OP2	2.21	0.40
36:1:2219:A:H2'	36:1:2220:A:C8	2.56	0.40
36:1:2227:C:O2'	36:1:2228:A:H5'	2.21	0.40
36:1:2270:A:H2'	36:1:2271:A:C8	2.55	0.40
36:1:2560:C:H5''	36:1:2561:A:H5'	2.03	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:67:A:O2'	36:1:315:C:O2	2.37	0.40
36:1:3258:U:O2'	36:1:3260:G:OP1	2.23	0.40
36:1:2208:A:C2	85:1:3904:OHX:N6	2.90	0.40
36:1:965:A:OP2	85:1:3932:OHX:N6	2.54	0.40
36:1:2309:A:H4'	85:1:3997:OHX:N1	2.37	0.40
36:1:501:A:H2'	36:1:502:U:H6	1.83	0.40
36:1:592:A:H2'	36:1:593:C:H6	1.86	0.40
1:2:107:C:H5''	1:2:383:G:O2'	2.22	0.40
1:2:1191:U:H5'	18:C6:143:ARG:CZ	2.51	0.40
1:2:1244:A:O2'	1:2:1245:G:OP1	2.34	0.40
1:2:1762:A:H1'	1:2:1783:C:H5'	2.02	0.40
1:2:280:U:H4'	1:2:281:G:O5'	2.20	0.40
1:2:741:C:HO2'	1:2:742:U:H6	1.69	0.40
1:2:811:A:C2	1:2:858:G:H1'	2.56	0.40
36:5:171:G:H1	36:5:247:C:N4	2.19	0.40
36:5:2257:C:H2'	36:5:2258:U:H6	1.87	0.40
36:5:2761:G:H1'	36:5:2800:G:H21	1.86	0.40
36:5:3013:U:H2'	36:5:3014:U:C6	2.55	0.40
36:5:3167:A:O5'	36:5:3167:A:H8	2.04	0.40
36:5:3343:G:O2'	36:5:3362:A:N6	2.54	0.40
36:5:413:U:H2'	36:5:414:U:H6	1.84	0.40
36:5:863:C:H2'	36:5:864:G:O4'	2.22	0.40
36:5:929:A:H2'	36:5:930:U:C6	2.56	0.40
1:6:1138:A:H2'	1:6:1139:A:C8	2.55	0.40
1:6:1698:G:N2	1:6:1699:G:C8	2.87	0.40
1:6:198:A:C2'	1:6:199:G:H5'	2.52	0.40
1:6:1626:U:O4	85:6:2136:OHX:N5	2.55	0.40
1:6:354:C:C2	1:6:355:G:C8	3.10	0.40
1:6:76:A:H2'	1:6:76:A:N3	2.36	0.40
38:8:111:A:H5''	38:8:111:A:H8	1.86	0.40
17:C5:47:ARG:HH21	1:6:1555:A:P	403.89	0.40
18:C6:115:THR:HB	18:C6:118:ILE:O	2.22	0.40
18:C6:32:ASN:OD1	18:C6:68:ARG:HA	3.57	0.40
20:C8:132:ARG:HB3	20:C8:136:GLN:HG3	2.03	0.40
1:2:1559:A:C6	20:C8:134:ARG:HD2	2.57	0.40
21:C9:118:PRO:C	21:C9:120:GLY:H	2.47	0.40
22:D0:108:ILE:HD12	22:D0:108:ILE:HA	3.96	0.40
25:D3:102:VAL:HG12	25:D3:127:VAL:HG12	2.04	0.40
27:D5:38:HIS:HB3	27:D5:39:ALA:H	4.13	0.40
27:D5:40:VAL:C	27:D5:75:LEU:HD11	2.41	0.40
1:2:584:C:H1'	32:E0:18:THR:HG21	2.02	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:L3:19:ARG:HG3	40:L3:273:HIS:CE1	2.56	0.40
36:1:3306:U:H5''	40:L3:21:ARG:NH1	2.37	0.40
40:L3:296:THR:HG22	40:L3:298:PHE:N	6.05	0.40
40:L3:305:ILE:HG12	40:L3:321:PHE:CE2	2.57	0.40
40:L3:308:MET:HE3	40:L3:370:PHE:O	5.63	0.40
41:L4:210:ALA:HB2	41:L4:254:ALA:HA	2.51	0.40
41:L4:7:THR:OG1	41:L4:9:HIS:HE1	2.05	0.40
45:L8:100:GLU:OE1	45:L8:108:ARG:HD3	2.21	0.40
46:L9:166:ARG:HD2	46:L9:168:ARG:NH1	13.11	0.40
36:1:3114:A:O2'	46:L9:62:ARG:NH1	2.55	0.40
46:L9:91:ARG:HH21	46:L9:91:ARG:HG3	1.86	0.40
48:M1:38:GLU:C	48:M1:40:LEU:N	3.10	0.40
49:M3:168:ARG:O	49:M3:172:LEU:HG	2.40	0.40
51:M5:37:HIS:CD2	51:M5:63:ARG:HB3	2.57	0.40
51:M5:68:ARG:HH21	51:M5:123:GLN:HG3	1.87	0.40
53:M7:111:LYS:CE	53:M7:152:GLU:HB3	4.98	0.40
57:N1:106:LEU:HD12	57:N1:106:LEU:HA	1.76	0.40
57:N1:97:LYS:HG2	57:N1:98:HIS:O	4.23	0.40
59:N3:13:ILE:HG13	59:N3:14:SER:N	2.58	0.40
59:N3:69:LEU:HA	59:N3:69:LEU:HD12	2.22	0.40
62:N6:55:GLU:HB2	62:N6:108:LYS:HB3	2.03	0.40
64:N8:112:ILE:HA	64:N8:112:ILE:HD13	1.96	0.40
64:N8:16:SER:HA	36:5:942:U:C4	170.65	0.40
72:O6:58:ILE:HA	72:O6:61:ILE:HG13	2.94	0.40
73:O7:18:LEU:HA	73:O7:24:ARG:O	4.79	0.40
74:O8:31:LEU:HD12	74:O8:35:GLY:HA2	4.12	0.40
2:S0:111:ILE:HA	2:S0:111:ILE:HD12	1.66	0.40
2:S0:193:GLN:HA	2:S0:194:PRO:HD3	2.56	0.40
3:S1:81:PHE:CE1	3:S1:109:LYS:HE2	2.56	0.40
3:S1:175:GLU:HG3	3:S1:187:LYS:HD3	4.64	0.40
3:S1:76:SER:OG	3:S1:78:ASP:OD2	2.39	0.40
4:S2:165:VAL:HG13	4:S2:204:THR:HG22	2.65	0.40
4:S2:235:LEU:HD22	4:S2:235:LEU:HA	1.93	0.40
5:S3:72:LEU:HD22	12:C0:65:TYR:CD1	2.95	0.40
6:S4:37:LYS:HD2	6:S4:40:GLU:OE1	5.04	0.40
8:S6:75:LEU:O	8:S6:94:ARG:HA	2.21	0.40
9:S7:168:SER:O	9:S7:172:VAL:HG23	2.24	0.40
34:SR:238:ASP:HB3	34:SR:257:ALA:HB3	2.02	0.40
36:1:1105:A:H2'	36:1:1106:G:C8	2.57	0.40
36:1:1940:G:H21	36:1:3362:A:H8	1.68	0.40
36:1:230:U:H2'	36:1:231:G:O4'	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:1:3182:G:H2'	36:1:3183:A:O4'	2.20	0.40
36:1:3299:A:C5	36:1:3300:U:C5	3.10	0.40
36:1:423:A:H2'	36:1:424:G:O4'	2.22	0.40
36:1:566:G:O2'	36:1:567:G:H5'	2.22	0.40
1:2:1057:U:H1'	1:2:1058:U:H2'	2.04	0.40
1:2:1391:A:H2'	1:2:1392:U:C6	2.56	0.40
1:2:553:G:H3'	1:2:554:C:H2'	2.03	0.40
1:2:682:C:H2'	1:2:683:C:O4'	2.22	0.40
1:2:704:C:N4	1:2:735:C:C2	2.90	0.40
37:3:109:G:N1	37:3:110:G:C5	2.89	0.40
37:3:112:G:H2'	37:3:113:C:H6	1.80	0.40
36:5:1098:A:C2	36:5:1099:A:C8	3.09	0.40
36:5:1692:U:C4	36:5:1693:C:N4	2.89	0.40
36:5:2297:U:C2	36:5:2299:A:C6	3.10	0.40
36:5:321:C:H2'	36:5:322:U:O4'	2.21	0.40
36:5:3383:G:H2'	36:5:3384:U:H6	1.85	0.40
85:5:4025:OHX:N1	85:5:4027:OHX:N2	2.69	0.40
85:5:3964:OHX:N6	85:5:4039:OHX:N4	2.70	0.40
85:5:4049:OHX:N4	85:5:4054:OHX:N6	2.68	0.40
36:5:627:U:H2'	36:5:628:A:C8	2.56	0.40
36:5:917:A:C5	36:5:918:C:C4	3.09	0.40
20:C8:135:GLY:CA	1:6:1559:A:H5''	365.39	0.40
1:6:1585:U:C2	1:6:1586:A:C8	3.10	0.40
1:6:487:G:H3'	1:6:488:G:C5'	2.51	0.40
1:6:680:U:C2	1:6:682:C:N4	2.89	0.40
1:6:853:G:H2'	1:6:854:U:C6	2.53	0.40
16:C4:112:ILE:HG21	28:D6:53:LEU:HD21	2.04	0.40
4:S2:235:LEU:HD11	23:D1:54:ALA:HB2	2.04	0.40
24:D2:24:GLN:OE1	29:D7:4:VAL:HA	2.49	0.40
24:D2:14:ILE:HG23	24:D2:65:LEU:HD11	4.68	0.40
26:D4:67:GLY:O	26:D4:68:LYS:HB2	2.75	0.40
27:D5:55:PRO:HG3	27:D5:88:ILE:HG23	5.79	0.40
36:1:1794:G:C6	39:L2:187:HIS:CD2	3.09	0.40
40:L3:148:LEU:HA	40:L3:148:LEU:HD12	1.99	0.40
40:L3:284:ARG:HB3	40:L3:323:MET:HB3	2.02	0.40
41:L4:138:ARG:NE	41:L4:240:PRO:HD2	3.01	0.40
41:L4:25:VAL:HG22	41:L4:262:TRP:HB2	2.04	0.40
41:L4:98:ARG:HG2	41:L4:99:MET:O	3.18	0.40
43:L6:171:PRO:C	43:L6:173:MET:H	2.25	0.40
44:L7:146:GLN:OE1	44:L7:241:LYS:HE2	2.22	0.40
45:L8:134:TYR:CE2	45:L8:190:VAL:HG11	5.14	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:L9:162:GLN:HG3	46:L9:163:GLN:N	2.63	0.40
46:L9:67:ALA:HA	46:L9:70:THR:CG2	2.51	0.40
46:L9:81:GLY:O	46:L9:85:GLY:HA2	2.58	0.40
47:M0:33:ILE:HG12	47:M0:33:ILE:O	2.21	0.40
48:M1:95:ASN:OD1	48:M1:95:ASN:N	4.36	0.40
49:M3:172:LEU:HD23	49:M3:172:LEU:HA	1.91	0.40
49:M3:62:THR:O	49:M3:64:LYS:N	2.55	0.40
49:M3:90:ALA:O	49:M3:95:ILE:HB	2.22	0.40
50:M4:127:LYS:O	50:M4:131:VAL:HG23	3.23	0.40
51:M5:136:ASP:O	51:M5:142:ILE:HD13	2.21	0.40
51:M5:45:PRO:O	51:M5:49:ARG:HB3	2.22	0.40
51:M5:79:ALA:HB1	51:M5:81:TYR:CZ	2.57	0.40
52:M6:94:ARG:O	52:M6:97:ALA:HB3	2.20	0.40
52:M6:81:TYR:OH	52:M6:99:LEU:HD13	2.21	0.40
53:M7:52:LEU:HD13	53:M7:52:LEU:HA	2.38	0.40
54:M8:144:ARG:HH12	36:5:976:U:H5'	177.89	0.40
55:M9:161:ALA:HB1	55:M9:165:LYS:HD2	2.04	0.40
57:N1:126:VAL:HB	57:N1:128:LEU:HG	2.40	0.40
57:N1:85:LEU:HD23	57:N1:85:LEU:HA	2.44	0.40
62:N6:39:LEU:HD11	62:N6:108:LYS:HD3	7.43	0.40
36:1:1389:G:H5"	68:O2:101:SER:HB3	2.04	0.40
68:O2:108:ILE:O	68:O2:112:ALA:N	2.39	0.40
68:O2:94:ALA:O	68:O2:119:VAL:HA	2.21	0.40
70:O4:8:ARG:HH21	70:O4:31:ARG:HH11	2.44	0.40
75:O9:43:ASN:O	75:O9:45:ARG:N	3.00	0.40
3:S1:181:LEU:O	3:S1:182:ALA:C	2.60	0.40
3:S1:70:LEU:HD13	3:S1:71:ALA:N	2.37	0.40
4:S2:141:ARG:H	4:S2:141:ARG:HG2	1.83	0.40
5:S3:64:ARG:NH2	5:S3:65:ARG:HD3	9.53	0.40
6:S4:72:VAL:N	6:S4:75:LYS:O	2.52	0.40
7:S5:183:ALA:HB3	7:S5:190:ILE:HD13	2.43	0.40
7:S5:27:THR:HA	7:S5:28:PRO:HD2	2.21	0.40
8:S6:175:ILE:HB	8:S6:178:LEU:HD22	2.45	0.40
10:S8:184:LEU:O	10:S8:189:LEU:HD22	3.20	0.40
35:SM:41:SER:O	35:SM:43:ASP:N	2.54	0.40
34:SR:248:ASN:ND2	34:SR:298:GLY:HA3	2.80	0.40
34:SR:62:LYS:O	34:SR:92:TRP:HH2	2.05	0.40
34:SR:94:VAL:HG23	34:SR:94:VAL:H	1.67	0.40

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

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:1353:U:O2'	36:5:3165:A:OP1[2_546]	2.08	0.12
36:1:3195:U:OP1	85:C8:201:OHX:N6[2_555]	2.17	0.03

## 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%)	157 (77%)	31 (15%)	16 (8%)	1	5
2	s0	204/251 (81%)	150 (74%)	39 (19%)	15 (7%)	1	6
3	S1	212/254 (84%)	155 (73%)	31 (15%)	26 (12%)	0	1
3	s1	214/254 (84%)	170 (79%)	28 (13%)	16 (8%)	1	6
4	S2	215/253 (85%)	180 (84%)	21 (10%)	14 (6%)	1	8
4	s2	215/253 (85%)	173 (80%)	32 (15%)	10 (5%)	2	14
5	S3	221/239 (92%)	187 (85%)	26 (12%)	8 (4%)	3	20
5	s3	221/239 (92%)	179 (81%)	29 (13%)	13 (6%)	1	10
6	S4	258/260 (99%)	205 (80%)	38 (15%)	15 (6%)	1	10
6	s4	258/260 (99%)	215 (83%)	23 (9%)	20 (8%)	1	5
7	S5	204/224 (91%)	155 (76%)	32 (16%)	17 (8%)	1	5
7	s5	204/224 (91%)	154 (76%)	37 (18%)	13 (6%)	1	8
8	S6	224/236 (95%)	187 (84%)	26 (12%)	11 (5%)	2	14
8	s6	216/236 (92%)	189 (88%)	18 (8%)	9 (4%)	3	16
9	S7	182/189 (96%)	133 (73%)	32 (18%)	17 (9%)	0	3
9	s7	184/189 (97%)	152 (83%)	22 (12%)	10 (5%)	2	12
10	S8	184/200 (92%)	158 (86%)	18 (10%)	8 (4%)	2	16
10	s8	184/200 (92%)	150 (82%)	29 (16%)	5 (3%)	5	25
11	S9	183/196 (93%)	142 (78%)	35 (19%)	6 (3%)	4	21
11	s9	183/196 (93%)	145 (79%)	32 (18%)	6 (3%)	4	21

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
12	C0	83/96 (86%)	71 (86%)	9 (11%)	3 (4%)	3	20
12	c0	82/96 (85%)	61 (74%)	11 (13%)	10 (12%)	0	1
13	C1	145/155 (94%)	121 (83%)	16 (11%)	8 (6%)	2	11
13	c1	144/155 (93%)	118 (82%)	21 (15%)	5 (4%)	3	20
14	C2	122/142 (86%)	72 (59%)	31 (25%)	19 (16%)	0	0
14	c2	122/142 (86%)	72 (59%)	33 (27%)	17 (14%)	0	1
15	C3	148/150 (99%)	130 (88%)	12 (8%)	6 (4%)	3	16
15	c3	148/150 (99%)	119 (80%)	21 (14%)	8 (5%)	2	12
16	C4	125/136 (92%)	99 (79%)	14 (11%)	12 (10%)	0	3
16	c4	126/136 (93%)	99 (79%)	17 (14%)	10 (8%)	1	5
17	C5	122/141 (86%)	89 (73%)	25 (20%)	8 (7%)	1	7
17	c5	133/141 (94%)	98 (74%)	17 (13%)	18 (14%)	0	1
18	C6	139/142 (98%)	111 (80%)	21 (15%)	7 (5%)	2	13
18	c6	140/142 (99%)	122 (87%)	10 (7%)	8 (6%)	1	10
19	C7	116/136 (85%)	83 (72%)	26 (22%)	7 (6%)	1	9
19	c7	113/136 (83%)	89 (79%)	16 (14%)	8 (7%)	1	6
20	C8	143/145 (99%)	116 (81%)	14 (10%)	13 (9%)	1	4
20	c8	143/145 (99%)	117 (82%)	15 (10%)	11 (8%)	1	5
21	C9	141/143 (99%)	114 (81%)	20 (14%)	7 (5%)	2	13
21	c9	141/143 (99%)	119 (84%)	17 (12%)	5 (4%)	3	20
22	D0	105/120 (88%)	89 (85%)	10 (10%)	6 (6%)	1	10
22	d0	108/120 (90%)	81 (75%)	20 (18%)	7 (6%)	1	8
23	D1	85/87 (98%)	60 (71%)	15 (18%)	10 (12%)	0	1
23	d1	85/87 (98%)	69 (81%)	13 (15%)	3 (4%)	3	20
24	D2	127/129 (98%)	108 (85%)	17 (13%)	2 (2%)	9	37
24	d2	127/129 (98%)	113 (89%)	12 (9%)	2 (2%)	9	37
25	D3	142/144 (99%)	110 (78%)	19 (13%)	13 (9%)	1	4
25	d3	142/144 (99%)	127 (89%)	12 (8%)	3 (2%)	7	30
26	D4	132/134 (98%)	101 (76%)	19 (14%)	12 (9%)	1	4
26	d4	132/134 (98%)	102 (77%)	20 (15%)	10 (8%)	1	5
27	D5	68/107 (64%)	48 (71%)	15 (22%)	5 (7%)	1	6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
27	d5	67/107 (63%)	54 (81%)	9 (13%)	4 (6%)	1	9
28	D6	95/97 (98%)	59 (62%)	23 (24%)	13 (14%)	0	1
28	d6	95/97 (98%)	71 (75%)	17 (18%)	7 (7%)	1	6
29	D7	79/81 (98%)	60 (76%)	16 (20%)	3 (4%)	3	19
29	d7	79/81 (98%)	65 (82%)	10 (13%)	4 (5%)	2	13
30	D8	61/66 (92%)	47 (77%)	10 (16%)	4 (7%)	1	7
30	d8	61/66 (92%)	48 (79%)	8 (13%)	5 (8%)	1	5
31	D9	51/55 (93%)	35 (69%)	12 (24%)	4 (8%)	1	5
31	d9	51/55 (93%)	43 (84%)	4 (8%)	4 (8%)	1	5
32	E0	58/62 (94%)	43 (74%)	12 (21%)	3 (5%)	2	12
32	e0	60/62 (97%)	46 (77%)	8 (13%)	6 (10%)	0	3
33	E1	69/76 (91%)	40 (58%)	13 (19%)	16 (23%)	0	0
33	e1	74/76 (97%)	34 (46%)	21 (28%)	19 (26%)	0	0
34	SR	316/318 (99%)	264 (84%)	38 (12%)	14 (4%)	2	15
34	sR	316/318 (99%)	266 (84%)	38 (12%)	12 (4%)	3	19
35	SM	131/182 (72%)	99 (76%)	18 (14%)	14 (11%)	0	2
35	sM	61/182 (34%)	39 (64%)	13 (21%)	9 (15%)	0	0
39	L2	250/253 (99%)	218 (87%)	24 (10%)	8 (3%)	4	22
39	l2	250/253 (99%)	213 (85%)	23 (9%)	14 (6%)	2	11
40	L3	384/386 (100%)	329 (86%)	48 (12%)	7 (2%)	8	34
40	l3	384/386 (100%)	346 (90%)	28 (7%)	10 (3%)	5	26
41	L4	359/361 (99%)	301 (84%)	38 (11%)	20 (6%)	2	11
41	l4	359/361 (99%)	289 (80%)	49 (14%)	21 (6%)	1	10
42	L5	294/296 (99%)	232 (79%)	41 (14%)	21 (7%)	1	6
42	l5	292/296 (99%)	249 (85%)	33 (11%)	10 (3%)	3	21
43	L6	152/175 (87%)	135 (89%)	15 (10%)	2 (1%)	12	42
43	l6	153/175 (87%)	130 (85%)	17 (11%)	6 (4%)	3	18
44	L7	220/243 (90%)	194 (88%)	20 (9%)	6 (3%)	5	25
44	l7	221/243 (91%)	199 (90%)	17 (8%)	5 (2%)	6	28
45	L8	231/255 (91%)	182 (79%)	34 (15%)	15 (6%)	1	8
45	l8	229/255 (90%)	178 (78%)	38 (17%)	13 (6%)	1	10

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
46	L9	189/191 (99%)	162 (86%)	23 (12%)	4 (2%)	7	30
46	l9	189/191 (99%)	170 (90%)	17 (9%)	2 (1%)	14	46
47	M0	207/220 (94%)	169 (82%)	28 (14%)	10 (5%)	2	14
47	m0	209/220 (95%)	168 (80%)	32 (15%)	9 (4%)	2	16
48	M1	167/173 (96%)	126 (75%)	24 (14%)	17 (10%)	0	3
48	m1	167/173 (96%)	142 (85%)	13 (8%)	12 (7%)	1	6
49	M3	191/198 (96%)	152 (80%)	26 (14%)	13 (7%)	1	7
49	m3	192/198 (97%)	157 (82%)	19 (10%)	16 (8%)	1	5
50	M4	134/137 (98%)	113 (84%)	14 (10%)	7 (5%)	2	12
50	m4	135/137 (98%)	116 (86%)	17 (13%)	2 (2%)	10	39
51	M5	201/203 (99%)	185 (92%)	10 (5%)	6 (3%)	4	23
51	m5	201/203 (99%)	179 (89%)	14 (7%)	8 (4%)	3	17
52	M6	195/198 (98%)	173 (89%)	17 (9%)	5 (3%)	5	26
52	m6	195/198 (98%)	183 (94%)	11 (6%)	1 (0%)	29	64
53	M7	181/183 (99%)	154 (85%)	20 (11%)	7 (4%)	3	18
53	m7	153/183 (84%)	134 (88%)	16 (10%)	3 (2%)	7	31
54	M8	183/185 (99%)	161 (88%)	17 (9%)	5 (3%)	5	25
54	m8	183/185 (99%)	149 (81%)	25 (14%)	9 (5%)	2	14
55	M9	186/188 (99%)	165 (89%)	20 (11%)	1 (0%)	29	64
55	m9	186/188 (99%)	165 (89%)	19 (10%)	2 (1%)	14	46
56	N0	170/172 (99%)	156 (92%)	10 (6%)	4 (2%)	6	27
56	n0	170/172 (99%)	154 (91%)	14 (8%)	2 (1%)	13	44
57	N1	157/159 (99%)	137 (87%)	17 (11%)	3 (2%)	8	33
57	n1	157/159 (99%)	141 (90%)	13 (8%)	3 (2%)	8	33
58	N2	98/120 (82%)	77 (79%)	18 (18%)	3 (3%)	4	23
58	n2	96/120 (80%)	80 (83%)	11 (12%)	5 (5%)	2	12
59	N3	134/136 (98%)	119 (89%)	12 (9%)	3 (2%)	6	29
59	n3	134/136 (98%)	123 (92%)	11 (8%)	0	100	100
60	N4	96/155 (62%)	68 (71%)	22 (23%)	6 (6%)	1	8
60	n4	133/155 (86%)	103 (77%)	23 (17%)	7 (5%)	2	12
61	N5	119/141 (84%)	99 (83%)	17 (14%)	3 (2%)	5	27

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
61	n5	118/141 (84%)	93 (79%)	16 (14%)	9 (8%)	1	5
62	N6	124/126 (98%)	106 (86%)	15 (12%)	3 (2%)	6	27
62	n6	124/126 (98%)	106 (86%)	13 (10%)	5 (4%)	3	17
63	N7	133/135 (98%)	109 (82%)	17 (13%)	7 (5%)	2	12
63	n7	133/135 (98%)	109 (82%)	13 (10%)	11 (8%)	1	5
64	N8	146/148 (99%)	121 (83%)	15 (10%)	10 (7%)	1	7
64	n8	146/148 (99%)	122 (84%)	17 (12%)	7 (5%)	2	14
65	N9	56/58 (97%)	47 (84%)	8 (14%)	1 (2%)	8	34
65	n9	56/58 (97%)	44 (79%)	6 (11%)	6 (11%)	0	2
66	O0	95/104 (91%)	84 (88%)	11 (12%)	0	100	100
66	o0	98/104 (94%)	84 (86%)	10 (10%)	4 (4%)	3	16
67	O1	107/112 (96%)	95 (89%)	7 (6%)	5 (5%)	2	14
67	o1	107/112 (96%)	92 (86%)	10 (9%)	5 (5%)	2	14
68	O2	125/129 (97%)	104 (83%)	14 (11%)	7 (6%)	2	11
68	o2	125/129 (97%)	105 (84%)	16 (13%)	4 (3%)	4	22
69	O3	104/106 (98%)	95 (91%)	8 (8%)	1 (1%)	15	49
69	o3	104/106 (98%)	94 (90%)	9 (9%)	1 (1%)	15	49
70	O4	110/120 (92%)	92 (84%)	16 (14%)	2 (2%)	8	34
70	o4	110/120 (92%)	96 (87%)	8 (7%)	6 (6%)	2	11
71	O5	117/119 (98%)	100 (86%)	12 (10%)	5 (4%)	2	16
71	o5	117/119 (98%)	100 (86%)	14 (12%)	3 (3%)	5	26
72	O6	97/99 (98%)	77 (79%)	12 (12%)	8 (8%)	1	5
72	o6	97/99 (98%)	82 (84%)	10 (10%)	5 (5%)	2	12
73	O7	85/87 (98%)	72 (85%)	13 (15%)	0	100	100
73	o7	85/87 (98%)	68 (80%)	12 (14%)	5 (6%)	1	10
74	O8	75/77 (97%)	64 (85%)	9 (12%)	2 (3%)	5	25
74	o8	75/77 (97%)	59 (79%)	13 (17%)	3 (4%)	3	17
75	O9	48/50 (96%)	41 (85%)	6 (12%)	1 (2%)	7	30
75	o9	48/50 (96%)	41 (85%)	6 (12%)	1 (2%)	7	30
76	Q0	50/52 (96%)	39 (78%)	9 (18%)	2 (4%)	3	17
76	q0	50/52 (96%)	48 (96%)	1 (2%)	1 (2%)	7	31

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
77	Q1	23/25 (92%)	20 (87%)	3 (13%)	0	100	100
77	q1	23/25 (92%)	23 (100%)	0	0	100	100
78	Q2	103/105 (98%)	82 (80%)	14 (14%)	7 (7%)	1	7
78	q2	103/105 (98%)	95 (92%)	6 (6%)	2 (2%)	8	33
79	Q3	89/91 (98%)	67 (75%)	15 (17%)	7 (8%)	1	5
79	q3	89/91 (98%)	78 (88%)	7 (8%)	4 (4%)	2	15
81	p0	139/311 (45%)	117 (84%)	16 (12%)	6 (4%)	2	16
All	All	22243/23945 (93%)	18323 (82%)	2769 (12%)	1151 (5%)	2	12

All (1151) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	158	VAL
2	S0	187	ALA
2	S0	191	ARG
2	S0	194	PRO
3	S1	37	THR
3	S1	132	ASP
3	S1	148	ASN
3	S1	158	SER
3	S1	181	LEU
3	S1	182	ALA
3	S1	213	ARG
3	S1	221	PRO
4	S2	48	GLY
4	S2	91	ARG
4	S2	147	ASN
5	S3	62	ASN
5	S3	93	ASP
5	S3	220	PRO
7	S5	31	GLU
7	S5	33	VAL
7	S5	35	GLN
7	S5	39	GLU
7	S5	100	ASN
8	S6	154	ARG
8	S6	165	GLY
8	S6	173	PRO
9	S7	30	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	S7	64	VAL
9	S7	67	LEU
9	S7	111	LYS
9	S7	112	ARG
9	S7	116	ARG
9	S7	131	PHE
9	S7	134	GLU
11	S9	98	ALA
11	S9	134	ILE
11	S9	152	SER
13	C1	7	VAL
13	C1	30	ARG
13	C1	55	ASP
14	C2	83	GLU
14	C2	91	VAL
14	C2	113	ARG
14	C2	127	GLY
15	C3	24	ALA
15	C3	27	LYS
16	C4	42	VAL
16	C4	124	ASP
17	C5	54	ALA
17	C5	80	MET
17	C5	125	PRO
18	C6	39	VAL
18	C6	41	PRO
18	C6	97	VAL
18	C6	114	ARG
18	C6	138	PHE
19	C7	23	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	144	ARG
21	C9	31	PRO
21	C9	53	TRP
22	D0	118	VAL
23	D1	4	ASP
24	D2	83	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	D3	128	SER
25	D3	131	SER
26	D4	53	ASP
27	D5	97	LYS
28	D6	45	VAL
28	D6	82	ARG
28	D6	84	VAL
28	D6	85	ARG
28	D6	86	VAL
29	D7	62	ILE
31	D9	25	SER
32	E0	47	VAL
33	E1	84	VAL
33	E1	98	VAL
33	E1	144	CYS
34	SR	50	ASP
34	SR	238	ASP
34	SR	318	ALA
35	SM	52	PRO
35	SM	68	ARG
35	SM	140	ASP
39	L2	14	SER
40	L3	5	LYS
40	L3	292	ALA
41	L4	4	PRO
41	L4	130	ALA
41	L4	131	VAL
41	L4	311	HIS
42	L5	221	GLU
42	L5	223	PHE
42	L5	233	ALA
42	L5	234	ASP
42	L5	252	ALA
42	L5	253	PHE
43	L6	98	VAL
44	L7	26	VAL
45	L8	25	PRO
45	L8	31	PRO
45	L8	255	SER
47	M0	218	ALA
48	M1	8	PRO
48	M1	11	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	M1	74	PRO
48	M1	94	ARG
48	M1	165	GLN
49	M3	141	ALA
49	M3	193	ALA
50	M4	8	LYS
50	M4	9	ALA
51	M5	75	VAL
52	M6	110	PRO
52	M6	111	PRO
53	M7	157	VAL
53	M7	163	LYS
56	N0	142	GLN
56	N0	167	ARG
57	N1	124	VAL
58	N2	11	ILE
59	N3	132	ASN
60	N4	81	PRO
61	N5	44	PRO
62	N6	84	LYS
63	N7	30	ASP
63	N7	128	GLN
64	N8	27	LYS
64	N8	76	ASP
64	N8	97	GLU
67	O1	5	LYS
67	O1	84	ASP
71	O5	97	ALA
72	O6	33	ALA
72	O6	77	LEU
74	O8	33	LYS
76	Q0	78	ILE
78	Q2	15	LYS
79	Q3	58	SER
2	s0	4	PRO
2	s0	68	PRO
2	s0	81	PHE
2	s0	95	ALA
2	s0	164	ASN
2	s0	189	VAL
2	s0	206	ASP
3	s1	26	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	s1	55	LYS
3	s1	206	PRO
3	s1	210	ILE
4	s2	91	ARG
4	s2	92	ALA
4	s2	107	SER
5	s3	61	GLU
5	s3	160	SER
5	s3	211	PRO
5	s3	216	PRO
5	s3	217	ILE
5	s3	220	PRO
6	s4	12	LEU
6	s4	24	SER
6	s4	104	ASP
6	s4	118	GLU
6	s4	163	ASP
6	s4	164	LEU
6	s4	195	ILE
6	s4	196	VAL
6	s4	205	PHE
7	s5	28	PRO
7	s5	39	GLU
7	s5	43	PHE
7	s5	101	GLY
7	s5	184	PHE
7	s5	204	GLY
8	s6	122	GLU
8	s6	153	VAL
8	s6	173	PRO
8	s6	174	LYS
9	s7	64	VAL
9	s7	66	SER
9	s7	67	LEU
9	s7	131	PHE
11	s9	91	LYS
12	c0	2	LEU
12	c0	83	PRO
13	c1	133	LYS
14	c2	101	ALA
15	c3	12	SER
15	c3	66	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	c4	126	THR
16	c4	132	ARG
17	c5	11	VAL
17	c5	17	TYR
17	c5	51	SER
17	c5	52	LYS
17	c5	126	VAL
17	c5	127	ARG
18	c6	39	VAL
18	c6	42	GLU
18	c6	116	LEU
19	c7	88	VAL
19	c7	103	ASP
20	c8	14	ILE
20	c8	55	HIS
21	c9	29	GLU
21	c9	34	VAL
22	d0	15	GLN
22	d0	49	ASN
22	d0	118	VAL
26	d4	30	PRO
26	d4	33	ALA
26	d4	35	VAL
27	d5	85	LYS
27	d5	87	GLY
28	d6	82	ARG
29	d7	60	SER
30	d8	32	PHE
31	d9	6	VAL
31	d9	7	TRP
32	e0	45	VAL
32	e0	60	PRO
33	e1	83	LYS
33	e1	87	THR
33	e1	92	LYS
33	e1	98	VAL
33	e1	102	VAL
33	e1	103	LEU
33	e1	137	ASP
34	sR	160	GLU
34	sR	163	ASP
34	sR	165	ASP

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
34	sR	318	ALA
39	l2	144	ASN
39	l2	215	ASN
39	l2	238	ILE
40	l3	23	ALA
40	l3	129	ALA
41	l4	15	ALA
41	l4	301	PRO
41	l4	311	HIS
41	l4	345	GLU
42	l5	178	ASN
42	l5	258	LYS
43	l6	98	VAL
44	l7	159	GLN
45	l8	25	PRO
45	l8	34	PHE
45	l8	122	LYS
45	l8	133	LYS
48	m1	8	PRO
48	m1	9	MET
48	m1	10	ARG
49	m3	44	ALA
49	m3	47	ALA
49	m3	93	ILE
49	m3	101	ARG
49	m3	134	GLU
49	m3	150	PRO
49	m3	152	THR
51	m5	76	PRO
54	m8	84	VAL
54	m8	99	THR
54	m8	112	ALA
54	m8	113	LYS
57	n1	118	GLU
57	n1	135	PRO
58	n2	27	VAL
58	n2	50	LEU
60	n4	26	SER
60	n4	63	ILE
61	n5	44	PRO
62	n6	83	ASP
62	n6	84	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
62	n6	125	LYS
63	n7	4	PHE
63	n7	7	ALA
63	n7	17	ARG
64	n8	47	LYS
64	n8	76	ASP
64	n8	120	ASN
65	n9	21	ILE
65	n9	23	LYS
65	n9	52	LYS
66	o0	100	ILE
67	o1	45	GLY
67	o1	84	ASP
68	o2	5	PRO
69	o3	88	ASN
70	o4	79	SER
71	o5	119	LYS
72	o6	4	LYS
72	o6	98	ARG
73	o7	84	SER
74	o8	17	ARG
74	o8	18	ALA
76	q0	78	ILE
81	p0	93	LEU
2	S0	5	ALA
2	S0	27	ARG
2	S0	39	ASN
2	S0	66	ALA
2	S0	190	ASP
2	S0	195	TRP
3	S1	35	PRO
3	S1	49	ASN
3	S1	60	ALA
3	S1	61	LEU
3	S1	62	LYS
3	S1	63	GLY
3	S1	177	GLN
4	S2	106	ASP
4	S2	247	ALA
5	S3	216	PRO
6	S4	12	LEU
6	S4	195	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	S4	258	GLN
7	S5	26	ALA
7	S5	43	PHE
7	S5	58	LEU
7	S5	63	GLN
7	S5	98	MET
7	S5	150	GLY
7	S5	153	GLY
8	S6	25	ARG
8	S6	118	GLU
8	S6	152	ASP
8	S6	174	LYS
9	S7	32	PRO
9	S7	98	ILE
10	S8	40	ALA
10	S8	120	THR
11	S9	118	LEU
12	C0	60	SER
13	C1	6	THR
14	C2	93	ASP
14	C2	101	ALA
14	C2	119	SER
14	C2	125	ASN
15	C3	22	ALA
15	C3	28	LEU
16	C4	126	THR
17	C5	126	VAL
19	C7	87	GLU
20	C8	7	GLU
20	C8	25	ASN
20	C8	91	ASP
20	C8	92	ILE
21	C9	69	LYS
23	D1	2	GLU
23	D1	15	ARG
23	D1	41	GLU
24	D2	66	ASN
25	D3	8	GLY
25	D3	46	SER
25	D3	70	LYS
25	D3	112	LYS
26	D4	4	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	D4	5	VAL
26	D4	35	VAL
26	D4	100	VAL
27	D5	43	ASP
27	D5	71	ILE
28	D6	5	ARG
28	D6	18	VAL
29	D7	57	GLU
30	D8	36	THR
31	D9	6	VAL
31	D9	8	PHE
33	E1	94	LYS
33	E1	111	GLU
33	E1	127	GLY
34	SR	237	GLN
35	SM	82	THR
35	SM	86	ASN
35	SM	111	GLY
39	L2	47	GLN
39	L2	251	LYS
40	L3	142	ALA
40	L3	291	GLU
41	L4	14	GLU
41	L4	15	ALA
41	L4	146	PRO
41	L4	232	SER
41	L4	268	ALA
41	L4	269	SER
41	L4	338	LYS
42	L5	57	ASN
42	L5	93	THR
42	L5	106	ALA
42	L5	137	ASP
44	L7	160	ARG
44	L7	163	LEU
45	L8	36	ILE
45	L8	39	ALA
45	L8	122	LYS
46	L9	190	ASP
47	M0	41	ALA
47	M0	63	GLU
47	M0	64	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	M0	194	GLY
48	M1	12	LEU
48	M1	24	GLY
48	M1	108	GLU
48	M1	115	LYS
48	M1	173	ASP
49	M3	47	ALA
49	M3	166	ALA
50	M4	28	SER
50	M4	29	ALA
50	M4	136	ALA
51	M5	74	PRO
51	M5	184	LYS
53	M7	161	ALA
53	M7	164	LYS
53	M7	182	ILE
54	M8	98	LYS
54	M8	149	ALA
55	M9	53	LYS
58	N2	31	ALA
58	N2	51	GLY
59	N3	131	SER
60	N4	97	LYS
61	N5	45	LYS
63	N7	35	SER
63	N7	102	GLU
64	N8	66	ALA
64	N8	96	LYS
64	N8	115	LYS
67	O1	6	ASP
68	O2	27	ARG
68	O2	40	SER
68	O2	125	ARG
70	O4	82	ALA
71	O5	119	LYS
72	O6	34	SER
72	O6	64	SER
72	O6	98	ARG
75	O9	4	GLN
78	Q2	17	CYS
78	Q2	30	ALA
78	Q2	94	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
78	Q2	100	LYS
79	Q3	12	GLY
2	s0	8	ASP
2	s0	30	GLN
3	s1	21	VAL
3	s1	93	GLY
3	s1	106	THR
3	s1	147	ALA
3	s1	223	PHE
4	s2	106	ASP
4	s2	163	GLY
5	s3	179	GLN
6	s4	11	ARG
6	s4	94	ALA
6	s4	95	THR
7	s5	36	ALA
7	s5	74	ALA
7	s5	153	GLY
8	s6	138	ALA
8	s6	154	ARG
9	s7	34	LEU
10	s8	122	GLY
12	c0	82	LEU
13	c1	7	VAL
14	c2	22	VAL
14	c2	89	ILE
15	c3	137	PRO
15	c3	140	LYS
16	c4	51	ASP
17	c5	6	ASN
17	c5	50	THR
17	c5	69	GLU
17	c5	80	MET
17	c5	132	GLY
17	c5	135	THR
19	c7	99	VAL
20	c8	61	LEU
20	c8	135	GLY
21	c9	28	LEU
26	d4	32	ARG
27	d5	38	HIS
27	d5	50	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	d6	28	LYS
30	d8	61	ARG
33	e1	81	LYS
33	e1	84	VAL
33	e1	100	LEU
33	e1	106	TYR
33	e1	127	GLY
35	sM	42	ALA
35	sM	47	ALA
39	l2	24	GLN
39	l2	56	ALA
39	l2	80	GLU
39	l2	143	GLU
39	l2	249	SER
40	l3	3	HIS
40	l3	385	LYS
40	l3	386	ASP
41	l4	142	VAL
41	l4	247	PHE
41	l4	342	LYS
42	l5	270	LYS
43	l6	20	LYS
43	l6	32	ALA
43	l6	97	ASN
45	l8	26	LEU
45	l8	39	ALA
45	l8	121	SER
45	l8	223	ALA
45	l8	237	ILE
45	l8	240	ASN
46	l9	144	ILE
47	m0	25	ALA
47	m0	82	ARG
48	m1	39	GLN
48	m1	94	ARG
48	m1	115	LYS
49	m3	51	LEU
49	m3	129	ASN
51	m5	183	THR
51	m5	184	LYS
52	m6	16	VAL
53	m7	63	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	m8	21	SER
55	m9	35	ALA
55	m9	112	ALA
56	n0	129	ILE
57	n1	136	ARG
58	n2	48	GLY
60	n4	64	THR
60	n4	76	VAL
60	n4	83	THR
61	n5	38	LEU
61	n5	40	LEU
61	n5	45	LYS
61	n5	47	ALA
61	n5	48	SER
63	n7	16	GLY
63	n7	33	SER
63	n7	125	GLY
65	n9	39	PHE
66	o0	10	ILE
67	o1	85	ALA
68	o2	6	HIS
73	o7	85	LYS
78	q2	74	CYS
81	p0	68	SER
81	p0	102	SER
2	S0	36	TYR
2	S0	49	ASN
2	S0	196	SER
3	S1	26	ARG
3	S1	58	SER
3	S1	147	ALA
3	S1	206	PRO
6	S4	96	ASN
6	S4	104	ASP
6	S4	231	GLN
7	S5	54	LYS
7	S5	127	GLN
8	S6	20	ASP
8	S6	69	LEU
9	S7	5	GLN
10	S8	59	ARG
10	S8	152	ILE

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
13	C1	145	ALA
13	C1	146	ALA
14	C2	89	ILE
14	C2	112	ALA
16	C4	18	ARG
16	C4	51	ASP
16	C4	75	GLY
16	C4	125	SER
17	C5	52	LYS
17	C5	101	ALA
18	C6	33	GLY
20	C8	8	GLN
20	C8	61	LEU
21	C9	29	GLU
21	C9	50	ALA
22	D0	21	LYS
22	D0	49	ASN
23	D1	10	GLU
23	D1	42	GLU
23	D1	44	ARG
25	D3	3	LYS
25	D3	92	CYS
25	D3	114	LYS
26	D4	34	ASN
26	D4	47	VAL
26	D4	54	ALA
28	D6	47	ALA
28	D6	63	ALA
31	D9	11	PRO
32	E0	60	PRO
33	E1	87	THR
34	SR	98	GLU
34	SR	194	GLY
34	SR	249	ARG
35	SM	12	VAL
35	SM	15	ALA
35	SM	42	ALA
35	SM	87	THR
35	SM	139	GLU
39	L2	127	ALA
39	L2	141	PRO
39	L2	143	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	L3	347	SER
41	L4	270	SER
41	L4	293	SER
42	L5	110	LEU
42	L5	176	SER
42	L5	215	ASP
42	L5	259	LYS
42	L5	260	PHE
43	L6	150	LYS
45	L8	97	TYR
45	L8	114	ALA
45	L8	254	ASP
46	L9	2	LYS
46	L9	15	GLY
47	M0	207	GLU
48	M1	114	ILE
49	M3	129	ASN
49	M3	134	GLU
49	M3	136	GLU
51	M5	8	GLU
59	N3	69	LEU
62	N6	126	LEU
67	O1	82	GLU
68	O2	127	ALA
74	O8	19	ASP
79	Q3	50	GLY
79	Q3	51	ALA
79	Q3	91	GLU
3	s1	82	ARG
5	s3	44	THR
5	s3	219	ALA
6	s4	57	ASN
6	s4	168	LYS
7	s5	56	ALA
8	s6	152	ASP
9	s7	30	SER
9	s7	74	GLN
10	s8	199	LYS
11	s9	167	ALA
12	c0	30	ALA
12	c0	35	ILE
13	c1	145	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	c2	54	ARG
14	c2	58	LEU
14	c2	108	ARG
14	c2	119	SER
14	c2	131	ASP
15	c3	29	SER
15	c3	139	TRP
17	c5	7	ALA
17	c5	14	THR
17	c5	68	PRO
18	c6	113	ASP
20	c8	18	LEU
20	c8	33	THR
20	c8	36	LYS
21	c9	33	TYR
22	d0	52	LYS
22	d0	96	PRO
23	d1	42	GLU
25	d3	70	LYS
26	d4	51	GLU
26	d4	53	ASP
26	d4	68	LYS
28	d6	13	LYS
28	d6	34	LYS
29	d7	75	GLU
32	e0	51	ASN
32	e0	54	ARG
32	e0	61	SER
33	e1	85	TYR
33	e1	136	LYS
33	e1	145	HIS
34	sR	96	THR
34	sR	161	LYS
34	sR	226	ALA
35	sM	33	LYS
35	sM	50	ASN
35	sM	65	THR
39	l2	96	LEU
39	l2	130	SER
39	l2	142	ASP
40	l3	187	SER
41	l4	14	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	l4	90	PHE
41	l4	144	LYS
41	l4	145	ILE
41	l4	233	LEU
41	l4	305	ALA
42	l5	123	GLU
42	l5	260	PHE
43	l6	10	TYR
44	l7	158	LYS
44	l7	229	PHE
45	l8	203	VAL
47	m0	3	ARG
47	m0	176	LEU
47	m0	207	GLU
47	m0	219	ALA
48	m1	167	TYR
49	m3	13	HIS
49	m3	37	ASN
49	m3	45	LYS
49	m3	50	PRO
49	m3	135	ALA
50	m4	136	ALA
51	m5	81	TYR
51	m5	187	ARG
53	m7	75	GLU
54	m8	127	LEU
63	n7	34	LYS
63	n7	134	LEU
64	n8	94	ALA
64	n8	129	PHE
65	n9	51	ALA
66	o0	104	LEU
67	o1	83	GLU
68	o2	122	PRO
68	o2	124	GLY
70	o4	14	ASN
70	o4	82	ALA
70	o4	93	PHE
71	o5	82	ALA
71	o5	84	LYS
72	o6	33	ALA
73	o7	67	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
73	o7	68	LYS
75	o9	44	TRP
79	q3	20	SER
81	p0	203	ASP
2	S0	103	THR
3	S1	38	PHE
3	S1	54	LEU
3	S1	210	ILE
4	S2	39	THR
4	S2	107	SER
4	S2	145	GLY
4	S2	150	GLN
4	S2	182	PRO
4	S2	208	GLU
4	S2	236	PRO
4	S2	248	SER
5	S3	89	GLU
5	S3	112	GLY
5	S3	217	ILE
6	S4	11	ARG
6	S4	26	CYS
6	S4	200	ARG
6	S4	213	SER
7	S5	51	VAL
7	S5	64	VAL
9	S7	29	ASN
9	S7	54	GLY
11	S9	16	LYS
11	S9	150	LEU
14	C2	39	ASP
14	C2	106	ILE
14	C2	107	ASP
14	C2	126	TRP
16	C4	50	ALA
16	C4	86	THR
17	C5	9	LYS
17	C5	69	GLU
18	C6	113	ASP
19	C7	115	LEU
20	C8	145	ARG
21	C9	116	ILE
22	D0	17	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
22	D0	96	PRO
23	D1	82	VAL
25	D3	40	SER
25	D3	115	GLY
26	D4	49	LYS
27	D5	38	HIS
30	D8	20	GLY
32	E0	13	LYS
33	E1	102	VAL
33	E1	118	ARG
34	SR	48	THR
34	SR	51	ASP
34	SR	105	GLY
34	SR	163	ASP
41	L4	138	ARG
41	L4	341	SER
42	L5	249	ALA
42	L5	258	LYS
42	L5	271	LYS
46	L9	96	HIS
48	M1	64	LYS
48	M1	117	ASP
48	M1	152	HIS
48	M1	167	TYR
49	M3	63	VAL
49	M3	165	SER
50	M4	10	SER
51	M5	81	TYR
53	M7	175	ARG
54	M8	162	ALA
56	N0	2	ALA
56	N0	24	LEU
60	N4	25	ASP
60	N4	77	LYS
61	N5	48	SER
62	N6	38	GLU
63	N7	103	GLN
64	N8	24	LYS
64	N8	47	LYS
64	N8	78	LEU
65	N9	25	LYS
68	O2	69	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
68	O2	70	GLY
71	O5	75	TYR
71	O5	96	GLU
78	Q2	33	ALA
79	Q3	7	LYS
79	Q3	28	LYS
2	s0	139	VAL
2	s0	191	ARG
3	s1	60	ALA
3	s1	209	ASN
4	s2	150	GLN
4	s2	217	ALA
4	s2	234	PRO
4	s2	235	LEU
4	s2	238	SER
5	s3	45	LYS
5	s3	93	ASP
6	s4	117	GLU
6	s4	245	LYS
7	s5	55	ASP
7	s5	98	MET
9	s7	15	GLU
9	s7	133	THR
11	s9	130	THR
11	s9	147	MET
11	s9	162	SER
12	c0	23	ALA
12	c0	31	LYS
12	c0	32	HIS
14	c2	26	ASP
14	c2	39	ASP
14	c2	66	VAL
14	c2	87	PRO
14	c2	106	ILE
16	c4	12	GLN
16	c4	37	GLU
16	c4	124	ASP
17	c5	130	ARG
18	c6	3	ALA
20	c8	7	GLU
20	c8	8	GLN
20	c8	91	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
20	c8	115	ARG
24	d2	56	HIS
24	d2	68	ARG
25	d3	101	GLU
26	d4	50	ALA
26	d4	52	LYS
30	d8	62	GLU
31	d9	11	PRO
32	e0	47	VAL
33	e1	112	GLY
33	e1	128	ALA
33	e1	146	SER
34	sR	186	PHE
35	sM	36	ASP
35	sM	43	ASP
35	sM	46	LYS
39	l2	125	ALA
39	l2	127	ALA
40	l3	140	ASP
41	l4	5	GLN
41	l4	16	THR
41	l4	132	ALA
41	l4	146	PRO
42	l5	224	LYS
44	l7	191	VAL
45	l8	69	LEU
47	m0	220	GLN
48	m1	95	ASN
48	m1	108	GLU
48	m1	153	LYS
49	m3	60	ALA
53	m7	25	SER
54	m8	155	MET
56	n0	2	ALA
58	n2	91	ASP
60	n4	125	ALA
60	n4	134	GLN
61	n5	24	LEU
61	n5	25	LYS
62	n6	126	LEU
63	n7	103	GLN
67	o1	86	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
70	o4	47	CYS
78	q2	33	ALA
81	p0	33	VAL
3	S1	51	SER
3	S1	176	VAL
5	S3	196	ARG
6	S4	77	ARG
6	S4	93	ASP
6	S4	150	PRO
6	S4	245	LYS
8	S6	146	GLY
9	S7	73	VAL
9	S7	132	PRO
10	S8	10	LYS
10	S8	22	ARG
10	S8	154	SER
12	C0	26	ASP
12	C0	81	ASN
13	C1	40	LEU
14	C2	130	THR
15	C3	3	ARG
16	C4	114	ARG
16	C4	131	GLY
20	C8	102	ALA
21	C9	23	GLN
26	D4	11	LYS
28	D6	62	TYR
28	D6	64	LEU
29	D7	75	GLU
30	D8	35	ASP
33	E1	83	LYS
33	E1	85	TYR
33	E1	99	LYS
33	E1	110	ALA
33	E1	148	TYR
34	SR	146	GLY
35	SM	39	PRO
35	SM	53	ARG
35	SM	101	ASP
39	L2	98	VAL
40	L3	4	ARG
40	L3	317	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	L4	5	GLN
41	L4	140	HIS
41	L4	292	SER
41	L4	339	LEU
45	L8	75	ILE
45	L8	157	VAL
47	M0	113	GLN
47	M0	202	LYS
49	M3	46	ILE
49	M3	51	LEU
49	M3	76	THR
50	M4	6	ILE
52	M6	16	VAL
52	M6	89	SER
54	M8	41	ASP
63	N7	36	HIS
64	N8	91	LEU
67	O1	7	VAL
69	O3	91	ALA
72	O6	21	THR
72	O6	78	GLY
76	Q0	79	GLU
2	s0	10	THR
2	s0	103	THR
2	s0	109	ASN
2	s0	194	PRO
3	s1	22	ASP
3	s1	59	ASP
3	s1	129	THR
3	s1	224	ASP
6	s4	30	ARG
6	s4	90	ILE
6	s4	213	SER
7	s5	29	ILE
8	s6	70	PRO
10	s8	62	THR
10	s8	78	ILE
10	s8	101	ILE
11	s9	150	LEU
13	c1	55	ASP
14	c2	90	LYS
15	c3	22	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	c4	39	ILE
16	c4	50	ALA
17	c5	71	GLU
18	c6	40	GLU
19	c7	62	GLN
19	c7	86	PRO
19	c7	96	SER
19	c7	98	GLY
22	d0	17	GLN
22	d0	51	VAL
23	d1	10	GLU
25	d3	41	SER
28	d6	8	ASN
28	d6	35	ALA
29	d7	58	SER
30	d8	33	LEU
34	sR	281	TYR
35	sM	63	ASP
39	l2	13	GLY
40	l3	333	LYS
41	l4	220	ARG
41	l4	339	LEU
42	l5	265	TYR
42	l5	296	GLN
45	l8	70	LYS
46	l9	167	VAL
47	m0	204	GLY
48	m1	12	LEU
48	m1	114	ILE
49	m3	62	THR
50	m4	135	LEU
51	m5	42	PRO
51	m5	68	ARG
51	m5	74	PRO
54	m8	43	PRO
63	n7	70	PRO
66	o0	101	LEU
73	o7	86	ALA
74	o8	37	PRO
79	q3	51	ALA
3	S1	129	THR
4	S2	239	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	S4	204	GLY
14	C2	131	ASP
20	C8	82	PRO
22	D0	55	PRO
23	D1	46	ILE
25	D3	41	SER
25	D3	96	VAL
26	D4	36	SER
33	E1	100	LEU
39	L2	246	LEU
41	L4	23	PRO
42	L5	107	ARG
42	L5	136	GLU
44	L7	178	ILE
45	L8	30	THR
45	L8	79	GLN
47	M0	24	ARG
48	M1	95	ASN
51	M5	94	TYR
54	M8	99	THR
57	N1	18	ASP
57	N1	123	GLY
63	N7	124	ALA
68	O2	12	LYS
72	O6	3	VAL
78	Q2	34	SER
5	s3	203	PRO
8	s6	69	LEU
12	c0	24	LYS
13	c1	129	ARG
14	c2	40	GLY
14	c2	82	PRO
16	c4	48	VAL
18	c6	4	VAL
18	c6	97	VAL
21	c9	51	GLU
26	d4	77	ASN
31	d9	22	ARG
33	e1	148	TYR
34	sR	97	GLY
41	l4	91	GLY
44	l7	178	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	m0	194	GLY
62	n6	49	PRO
64	n8	56	VAL
65	n9	24	PRO
70	o4	78	GLY
72	o6	12	ASN
79	q3	4	ARG
79	q3	17	ARG
3	S1	48	VAL
10	S8	186	GLY
13	C1	130	PRO
34	SR	49	GLY
47	M0	117	GLY
48	M1	65	ILE
49	M3	130	GLY
52	M6	145	VAL
70	O4	77	GLY
12	c0	3	MET
17	c5	125	PRO
23	d1	77	GLY
40	l3	141	GLY
41	l4	190	GLY
2	S0	139	VAL
14	C2	22	VAL
14	C2	66	VAL
16	C4	39	ILE
28	D6	59	TYR
34	SR	15	GLY
42	L5	139	PRO
44	L7	91	GLY
45	L8	218	ILE
9	s7	185	ILE
14	c2	63	VAL
15	c3	60	VAL
16	c4	131	GLY
42	l5	125	VAL
58	n2	30	PRO
61	n5	52	PRO
63	n7	36	HIS
8	S6	162	VAL
9	S7	144	VAL
9	S7	162	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	C2	87	PRO
20	C8	125	ILE
23	D1	6	GLY
27	D5	88	ILE
33	E1	91	ILE
53	M7	67	ILE
60	N4	76	VAL
6	s4	107	GLY
29	d7	62	ILE
34	sR	63	GLY
43	l6	171	PRO
54	m8	97	PRO
64	n8	28	HIS
72	o6	61	ILE
81	p0	80	VAL
7	S5	204	GLY
26	D4	95	GLY
30	D8	6	PRO
44	L7	191	VAL
45	L8	167	PRO
60	N4	90	ILE
5	s3	43	PRO
19	c7	9	VAL
30	d8	20	GLY
42	l5	255	PRO
15	C3	150	VAL
28	D6	58	VAL
71	O5	4	VAL
28	d6	59	TYR
34	sR	15	GLY
40	l3	186	GLY

### 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.

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	S0	164/209 (78%)	139 (85%)	25 (15%)	3	12
2	s0	173/209 (83%)	145 (84%)	28 (16%)	2	10
3	S1	191/223 (86%)	166 (87%)	25 (13%)	4	17
3	s1	192/223 (86%)	161 (84%)	31 (16%)	2	10
4	S2	176/204 (86%)	148 (84%)	28 (16%)	2	11
4	s2	176/204 (86%)	137 (78%)	39 (22%)	1	4
5	S3	182/194 (94%)	149 (82%)	33 (18%)	1	7
5	s3	182/194 (94%)	160 (88%)	22 (12%)	5	20
6	S4	221/221 (100%)	186 (84%)	35 (16%)	2	11
6	s4	221/221 (100%)	182 (82%)	39 (18%)	2	8
7	S5	173/190 (91%)	141 (82%)	32 (18%)	1	7
7	s5	173/190 (91%)	147 (85%)	26 (15%)	3	12
8	S6	188/201 (94%)	152 (81%)	36 (19%)	1	6
8	s6	187/201 (93%)	156 (83%)	31 (17%)	2	9
9	S7	165/169 (98%)	136 (82%)	29 (18%)	2	8
9	s7	166/169 (98%)	141 (85%)	25 (15%)	3	12
10	S8	150/161 (93%)	129 (86%)	21 (14%)	3	15
10	s8	150/161 (93%)	131 (87%)	19 (13%)	4	18
11	S9	158/165 (96%)	128 (81%)	30 (19%)	1	6
11	s9	158/165 (96%)	138 (87%)	20 (13%)	4	18
12	C0	77/78 (99%)	64 (83%)	13 (17%)	2	9
12	c0	73/78 (94%)	64 (88%)	9 (12%)	4	19
13	C1	129/129 (100%)	114 (88%)	15 (12%)	5	22
13	c1	129/129 (100%)	106 (82%)	23 (18%)	2	8
14	C2	88/118 (75%)	71 (81%)	17 (19%)	1	6
14	c2	88/118 (75%)	71 (81%)	17 (19%)	1	6
15	C3	127/127 (100%)	104 (82%)	23 (18%)	1	7
15	c3	127/127 (100%)	103 (81%)	24 (19%)	1	6
16	C4	81/104 (78%)	64 (79%)	17 (21%)	1	5
16	c4	97/104 (93%)	78 (80%)	19 (20%)	1	6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
17	C5	101/117 (86%)	87 (86%)	14 (14%)	3	15
17	c5	103/117 (88%)	90 (87%)	13 (13%)	4	18
18	C6	117/118 (99%)	98 (84%)	19 (16%)	2	10
18	c6	118/118 (100%)	101 (86%)	17 (14%)	3	14
19	C7	94/124 (76%)	75 (80%)	19 (20%)	1	5
19	c7	106/124 (86%)	91 (86%)	15 (14%)	3	14
20	C8	128/128 (100%)	102 (80%)	26 (20%)	1	5
20	c8	128/128 (100%)	102 (80%)	26 (20%)	1	5
21	C9	115/115 (100%)	93 (81%)	22 (19%)	1	6
21	c9	115/115 (100%)	98 (85%)	17 (15%)	3	13
22	D0	100/113 (88%)	83 (83%)	17 (17%)	2	9
22	d0	103/113 (91%)	79 (77%)	24 (23%)	1	3
23	D1	74/74 (100%)	62 (84%)	12 (16%)	2	10
23	d1	74/74 (100%)	64 (86%)	10 (14%)	4	16
24	D2	110/110 (100%)	91 (83%)	19 (17%)	2	9
24	d2	110/110 (100%)	95 (86%)	15 (14%)	3	16
25	D3	119/119 (100%)	103 (87%)	16 (13%)	4	16
25	d3	119/119 (100%)	103 (87%)	16 (13%)	4	16
26	D4	112/112 (100%)	96 (86%)	16 (14%)	3	14
26	d4	112/112 (100%)	96 (86%)	16 (14%)	3	14
27	D5	61/88 (69%)	45 (74%)	16 (26%)	0	1
27	d5	61/88 (69%)	56 (92%)	5 (8%)	11	38
28	D6	83/83 (100%)	63 (76%)	20 (24%)	0	2
28	d6	83/83 (100%)	73 (88%)	10 (12%)	5	20
29	D7	70/70 (100%)	58 (83%)	12 (17%)	2	9
29	d7	70/70 (100%)	61 (87%)	9 (13%)	4	18
30	D8	56/59 (95%)	45 (80%)	11 (20%)	1	6
30	d8	56/59 (95%)	47 (84%)	9 (16%)	2	10
31	D9	47/48 (98%)	39 (83%)	8 (17%)	2	9
31	d9	47/48 (98%)	42 (89%)	5 (11%)	6	26
32	E0	51/53 (96%)	45 (88%)	6 (12%)	5	21

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
32	e0	53/53 (100%)	41 (77%)	12 (23%)	1	3
33	E1	62/66 (94%)	48 (77%)	14 (23%)	1	3
33	e1	66/66 (100%)	54 (82%)	12 (18%)	1	7
34	SR	259/261 (99%)	226 (87%)	33 (13%)	4	18
34	sR	261/261 (100%)	238 (91%)	23 (9%)	10	36
35	SM	97/115 (84%)	77 (79%)	20 (21%)	1	5
35	sM	54/115 (47%)	43 (80%)	11 (20%)	1	5
39	L2	193/195 (99%)	152 (79%)	41 (21%)	1	5
39	l2	194/195 (100%)	160 (82%)	34 (18%)	2	8
40	L3	320/322 (99%)	256 (80%)	64 (20%)	1	5
40	l3	322/322 (100%)	270 (84%)	52 (16%)	2	10
41	L4	288/288 (100%)	237 (82%)	51 (18%)	2	8
41	l4	288/288 (100%)	244 (85%)	44 (15%)	2	12
42	L5	244/244 (100%)	207 (85%)	37 (15%)	3	12
42	l5	243/244 (100%)	202 (83%)	41 (17%)	2	9
43	L6	134/152 (88%)	115 (86%)	19 (14%)	3	14
43	l6	135/152 (89%)	112 (83%)	23 (17%)	2	9
44	L7	186/204 (91%)	169 (91%)	17 (9%)	9	33
44	l7	187/204 (92%)	163 (87%)	24 (13%)	4	18
45	L8	187/207 (90%)	163 (87%)	24 (13%)	4	18
45	l8	177/207 (86%)	146 (82%)	31 (18%)	2	8
46	L9	171/171 (100%)	134 (78%)	37 (22%)	1	4
46	l9	171/171 (100%)	133 (78%)	38 (22%)	1	4
47	M0	177/186 (95%)	146 (82%)	31 (18%)	2	8
47	m0	182/186 (98%)	151 (83%)	31 (17%)	2	9
48	M1	147/149 (99%)	117 (80%)	30 (20%)	1	5
48	m1	147/149 (99%)	119 (81%)	28 (19%)	1	6
49	M3	154/158 (98%)	133 (86%)	21 (14%)	3	16
49	m3	154/158 (98%)	134 (87%)	20 (13%)	4	18
50	M4	107/108 (99%)	91 (85%)	16 (15%)	3	12
50	m4	108/108 (100%)	93 (86%)	15 (14%)	3	15

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
51	M5	175/175 (100%)	144 (82%)	31 (18%)	2	8
51	m5	175/175 (100%)	154 (88%)	21 (12%)	5	20
52	M6	160/161 (99%)	138 (86%)	22 (14%)	3	16
52	m6	160/161 (99%)	138 (86%)	22 (14%)	3	16
53	M7	140/145 (97%)	119 (85%)	21 (15%)	3	12
53	m7	125/145 (86%)	110 (88%)	15 (12%)	5	20
54	M8	150/150 (100%)	127 (85%)	23 (15%)	2	12
54	m8	150/150 (100%)	129 (86%)	21 (14%)	3	15
55	M9	153/153 (100%)	134 (88%)	19 (12%)	4	19
55	m9	153/153 (100%)	122 (80%)	31 (20%)	1	5
56	N0	156/156 (100%)	131 (84%)	25 (16%)	2	11
56	n0	156/156 (100%)	127 (81%)	29 (19%)	1	7
57	N1	136/136 (100%)	110 (81%)	26 (19%)	1	6
57	n1	136/136 (100%)	108 (79%)	28 (21%)	1	5
58	N2	87/106 (82%)	78 (90%)	9 (10%)	7	27
58	n2	85/106 (80%)	71 (84%)	14 (16%)	2	10
59	N3	104/104 (100%)	88 (85%)	16 (15%)	2	11
59	n3	104/104 (100%)	93 (89%)	11 (11%)	6	26
60	N4	57/129 (44%)	51 (90%)	6 (10%)	7	26
60	n4	114/129 (88%)	99 (87%)	15 (13%)	4	17
61	N5	104/117 (89%)	81 (78%)	23 (22%)	1	4
61	n5	104/117 (89%)	88 (85%)	16 (15%)	2	11
62	N6	109/109 (100%)	91 (84%)	18 (16%)	2	10
62	n6	109/109 (100%)	92 (84%)	17 (16%)	2	11
63	N7	115/115 (100%)	97 (84%)	18 (16%)	2	11
63	n7	115/115 (100%)	93 (81%)	22 (19%)	1	6
64	N8	118/118 (100%)	93 (79%)	25 (21%)	1	5
64	n8	118/118 (100%)	96 (81%)	22 (19%)	1	7
65	N9	46/46 (100%)	37 (80%)	9 (20%)	1	6
65	n9	46/46 (100%)	38 (83%)	8 (17%)	2	9
66	O0	81/87 (93%)	63 (78%)	18 (22%)	1	4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
66	o0	84/87 (97%)	67 (80%)	17 (20%)	1	5
67	O1	92/96 (96%)	74 (80%)	18 (20%)	1	6
67	o1	96/96 (100%)	80 (83%)	16 (17%)	2	9
68	O2	109/110 (99%)	93 (85%)	16 (15%)	3	13
68	o2	109/110 (99%)	88 (81%)	21 (19%)	1	6
69	O3	90/90 (100%)	81 (90%)	9 (10%)	7	28
69	o3	90/90 (100%)	80 (89%)	10 (11%)	6	24
70	O4	95/102 (93%)	81 (85%)	14 (15%)	3	13
70	o4	95/102 (93%)	81 (85%)	14 (15%)	3	13
71	O5	104/104 (100%)	85 (82%)	19 (18%)	1	7
71	o5	104/104 (100%)	86 (83%)	18 (17%)	2	9
72	O6	81/81 (100%)	64 (79%)	17 (21%)	1	5
72	o6	81/81 (100%)	55 (68%)	26 (32%)	0	0
73	O7	70/70 (100%)	56 (80%)	14 (20%)	1	5
73	o7	70/70 (100%)	59 (84%)	11 (16%)	2	11
74	O8	68/68 (100%)	56 (82%)	12 (18%)	2	8
74	o8	68/68 (100%)	59 (87%)	9 (13%)	4	17
75	O9	45/45 (100%)	38 (84%)	7 (16%)	2	11
75	o9	45/45 (100%)	41 (91%)	4 (9%)	9	34
76	Q0	47/47 (100%)	40 (85%)	7 (15%)	3	13
76	q0	47/47 (100%)	35 (74%)	12 (26%)	0	1
77	Q1	23/23 (100%)	19 (83%)	4 (17%)	2	9
77	q1	23/23 (100%)	15 (65%)	8 (35%)	0	0
78	Q2	90/90 (100%)	74 (82%)	16 (18%)	2	8
78	q2	90/90 (100%)	76 (84%)	14 (16%)	2	11
79	Q3	71/71 (100%)	59 (83%)	12 (17%)	2	9
79	q3	71/71 (100%)	60 (84%)	11 (16%)	2	11
81	p0	105/253 (42%)	89 (85%)	16 (15%)	3	12
All	All	18777/19961 (94%)	15699 (84%)	3078 (16%)	2	10

All (3078) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	S0	6	THR
2	S0	18	LEU
2	S0	39	ASN
2	S0	49	ASN
2	S0	50	VAL
2	S0	57	LEU
2	S0	84	ARG
2	S0	87	LEU
2	S0	88	LYS
2	S0	96	THR
2	S0	101	ARG
2	S0	110	TYR
2	S0	111	ILE
2	S0	112	THR
2	S0	137	SER
2	S0	154	GLU
2	S0	157	ASP
2	S0	164	ASN
2	S0	168	HIS
2	S0	172	LEU
2	S0	177	LEU
2	S0	185	ARG
2	S0	188	LEU
2	S0	196	SER
2	S0	198	MET
3	S1	25	THR
3	S1	29	TRP
3	S1	30	PHE
3	S1	46	THR
3	S1	61	LEU
3	S1	65	VAL
3	S1	70	LEU
3	S1	74	GLN
3	S1	77	GLU
3	S1	78	ASP
3	S1	81	PHE
3	S1	83	LYS
3	S1	89	ASP
3	S1	97	LEU
3	S1	105	PHE
3	S1	137	ILE
3	S1	154	SER
3	S1	180	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	S1	181	LEU
3	S1	184	LEU
3	S1	193	ILE
3	S1	202	LYS
3	S1	218	LEU
3	S1	223	PHE
3	S1	225	VAL
4	S2	41	LEU
4	S2	53	ILE
4	S2	64	LYS
4	S2	72	LEU
4	S2	89	GLN
4	S2	94	GLN
4	S2	95	ARG
4	S2	96	THR
4	S2	97	ARG
4	S2	99	LYS
4	S2	103	VAL
4	S2	111	VAL
4	S2	117	THR
4	S2	137	ILE
4	S2	139	ILE
4	S2	141	ARG
4	S2	148	LEU
4	S2	159	THR
4	S2	170	ILE
4	S2	186	LYS
4	S2	208	GLU
4	S2	221	THR
4	S2	222	TYR
4	S2	225	LEU
4	S2	226	THR
4	S2	235	LEU
4	S2	237	VAL
4	S2	244	SER
5	S3	4	LEU
5	S3	7	LYS
5	S3	21	LEU
5	S3	23	GLU
5	S3	57	ASP
5	S3	61	GLU
5	S3	64	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	S3	65	ARG
5	S3	66	ILE
5	S3	76	ARG
5	S3	84	ILE
5	S3	93	ASP
5	S3	103	GLU
5	S3	105	MET
5	S3	111	ASN
5	S3	113	LEU
5	S3	117	ARG
5	S3	124	ARG
5	S3	128	GLU
5	S3	151	LYS
5	S3	158	ILE
5	S3	168	ILE
5	S3	172	THR
5	S3	175	VAL
5	S3	176	LEU
5	S3	177	MET
5	S3	178	ARG
5	S3	181	VAL
5	S3	182	LEU
5	S3	190	ARG
5	S3	195	SER
5	S3	217	ILE
5	S3	223	LYS
6	S4	6	LYS
6	S4	9	LEU
6	S4	12	LEU
6	S4	26	CYS
6	S4	38	LEU
6	S4	42	LEU
6	S4	45	ILE
6	S4	54	TYR
6	S4	62	LYS
6	S4	65	LEU
6	S4	77	ARG
6	S4	92	LEU
6	S4	93	ASP
6	S4	95	THR
6	S4	105	VAL
6	S4	109	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	S4	113	ARG
6	S4	115	THR
6	S4	116	ASP
6	S4	123	LEU
6	S4	131	LEU
6	S4	180	LEU
6	S4	182	TYR
6	S4	187	ARG
6	S4	192	ILE
6	S4	206	ASP
6	S4	211	LYS
6	S4	215	ASP
6	S4	221	ARG
6	S4	226	PHE
6	S4	227	VAL
6	S4	240	LYS
6	S4	242	LYS
6	S4	246	LEU
6	S4	259	GLN
7	S5	25	LEU
7	S5	32	GLU
7	S5	38	THR
7	S5	41	LYS
7	S5	43	PHE
7	S5	45	LYS
7	S5	47	SER
7	S5	48	PHE
7	S5	52	GLU
7	S5	53	VAL
7	S5	65	ARG
7	S5	66	GLN
7	S5	76	ARG
7	S5	79	ASN
7	S5	84	LYS
7	S5	89	ILE
7	S5	93	LEU
7	S5	98	MET
7	S5	119	ASP
7	S5	122	ASN
7	S5	126	ASP
7	S5	146	THR
7	S5	147	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	S5	156	ARG
7	S5	157	ARG
7	S5	160	VAL
7	S5	163	SER
7	S5	187	ILE
7	S5	194	LEU
7	S5	216	GLU
7	S5	223	SER
7	S5	225	ARG
8	S6	7	TYR
8	S6	15	THR
8	S6	19	ASP
8	S6	20	ASP
8	S6	21	GLU
8	S6	25	ARG
8	S6	43	ASP
8	S6	44	GLU
8	S6	67	VAL
8	S6	68	LEU
8	S6	69	LEU
8	S6	71	THR
8	S6	76	LEU
8	S6	79	LYS
8	S6	82	SER
8	S6	89	ASP
8	S6	91	GLU
8	S6	98	ARG
8	S6	109	LEU
8	S6	115	LYS
8	S6	120	GLU
8	S6	124	LEU
8	S6	125	THR
8	S6	126	ASP
8	S6	127	THR
8	S6	128	THR
8	S6	132	ARG
8	S6	133	LEU
8	S6	151	ASP
8	S6	154	ARG
8	S6	155	ASP
8	S6	158	ILE
8	S6	169	TYR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
8	S6	189	HIS
8	S6	201	GLN
8	S6	216	LEU
9	S7	15	GLU
9	S7	16	LEU
9	S7	28	GLU
9	S7	37	GLU
9	S7	38	LEU
9	S7	46	ILE
9	S7	49	ILE
9	S7	50	ASP
9	S7	55	LYS
9	S7	67	LEU
9	S7	70	PHE
9	S7	74	GLN
9	S7	76	LYS
9	S7	77	LEU
9	S7	85	PHE
9	S7	87	ASP
9	S7	91	ILE
9	S7	97	ARG
9	S7	104	ARG
9	S7	110	GLN
9	S7	114	ARG
9	S7	116	ARG
9	S7	122	HIS
9	S7	126	LEU
9	S7	136	VAL
9	S7	144	VAL
9	S7	158	ASP
9	S7	174	ASN
9	S7	185	ILE
10	S8	8	ARG
10	S8	20	GLN
10	S8	21	PHE
10	S8	29	LEU
10	S8	36	THR
10	S8	37	LYS
10	S8	46	VAL
10	S8	56	ARG
10	S8	58	LEU
10	S8	70	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
10	S8	72	ILE
10	S8	138	ASN
10	S8	151	LYS
10	S8	152	ILE
10	S8	155	SER
10	S8	158	SER
10	S8	164	ARG
10	S8	184	LEU
10	S8	185	GLU
10	S8	187	GLU
10	S8	196	LEU
11	S9	3	ARG
11	S9	6	ARG
11	S9	7	THR
11	S9	14	THR
11	S9	22	SER
11	S9	28	LEU
11	S9	39	LYS
11	S9	61	THR
11	S9	63	ASP
11	S9	78	ARG
11	S9	80	LEU
11	S9	88	GLU
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	110	GLN
11	S9	134	ILE
11	S9	138	LYS
11	S9	140	ILE
11	S9	149	ARG
11	S9	161	THR
11	S9	162	SER
11	S9	171	ARG
11	S9	172	VAL
11	S9	174	ARG
11	S9	182	GLU
11	S9	186	GLU
12	C0	1	MET

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	C0	8	ARG
12	C0	20	VAL
12	C0	27	PHE
12	C0	29	GLN
12	C0	32	HIS
12	C0	39	ASN
12	C0	46	LEU
12	C0	55	VAL
12	C0	56	LYS
12	C0	76	LEU
12	C0	81	ASN
12	C0	82	LEU
13	C1	4	GLU
13	C1	8	GLN
13	C1	16	GLN
13	C1	21	ASN
13	C1	37	ASN
13	C1	40	LEU
13	C1	44	THR
13	C1	67	ARG
13	C1	69	LYS
13	C1	72	THR
13	C1	80	MET
13	C1	83	THR
13	C1	91	LEU
13	C1	136	ARG
13	C1	140	VAL
14	C2	28	LEU
14	C2	33	ARG
14	C2	37	VAL
14	C2	41	LEU
14	C2	43	ARG
14	C2	52	LEU
14	C2	54	ARG
14	C2	61	VAL
14	C2	62	LEU
14	C2	66	VAL
14	C2	86	VAL
14	C2	89	ILE
14	C2	103	LEU
14	C2	126	TRP
14	C2	129	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
14	C2	132	GLU
14	C2	139	HIS
15	C3	3	ARG
15	C3	9	LYS
15	C3	19	SER
15	C3	21	ASN
15	C3	27	LYS
15	C3	33	VAL
15	C3	39	LYS
15	C3	56	ASP
15	C3	58	HIS
15	C3	64	ARG
15	C3	66	ILE
15	C3	76	LYS
15	C3	88	LEU
15	C3	98	VAL
15	C3	102	LEU
15	C3	105	ASN
15	C3	106	ARG
15	C3	114	ARG
15	C3	115	LEU
15	C3	120	SER
15	C3	125	LEU
15	C3	134	VAL
15	C3	140	LYS
16	C4	12	GLN
16	C4	20	TYR
16	C4	25	ASP
16	C4	26	THR
16	C4	39	ILE
16	C4	42	VAL
16	C4	81	VAL
16	C4	92	LYS
16	C4	99	GLN
16	C4	103	ARG
16	C4	107	ARG
16	C4	115	ILE
16	C4	123	SER
16	C4	125	SER
16	C4	126	THR
16	C4	133	ARG
16	C4	137	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
17	C5	11	VAL
17	C5	13	LYS
17	C5	14	THR
17	C5	22	LEU
17	C5	26	LEU
17	C5	31	GLU
17	C5	43	ARG
17	C5	44	ARG
17	C5	52	LYS
17	C5	60	LEU
17	C5	65	LEU
17	C5	84	ILE
17	C5	86	VAL
17	C5	110	GLU
18	C6	4	VAL
18	C6	26	LYS
18	C6	28	LEU
18	C6	29	ILE
18	C6	39	VAL
18	C6	43	ILE
18	C6	53	LEU
18	C6	57	LEU
18	C6	66	ARG
18	C6	69	VAL
18	C6	74	HIS
18	C6	106	LYS
18	C6	109	PHE
18	C6	114	ARG
18	C6	123	ARG
18	C6	127	LYS
18	C6	128	LYS
18	C6	137	ARG
18	C6	143	ARG
19	C7	5	ARG
19	C7	25	THR
19	C7	35	CYS
19	C7	38	ILE
19	C7	40	THR
19	C7	43	SER
19	C7	46	LEU
19	C7	62	GLN
19	C7	69	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
19	C7	72	LYS
19	C7	79	GLU
19	C7	83	GLN
19	C7	84	TYR
19	C7	88	VAL
19	C7	105	GLN
19	C7	107	SER
19	C7	109	LEU
19	C7	115	LEU
19	C7	119	LEU
20	C8	3	LEU
20	C8	5	VAL
20	C8	11	PHE
20	C8	12	GLN
20	C8	13	HIS
20	C8	14	ILE
20	C8	15	LEU
20	C8	16	ARG
20	C8	20	THR
20	C8	25	ASN
20	C8	26	ILE
20	C8	38	VAL
20	C8	40	ARG
20	C8	53	ASP
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	92	ILE
20	C8	105	VAL
20	C8	116	LEU
20	C8	132	ARG
20	C8	136	GLN
20	C8	138	THR
21	C9	4	VAL
21	C9	13	ASP
21	C9	18	TYR
21	C9	22	LEU
21	C9	28	LEU
21	C9	33	TYR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	C9	35	ASP
21	C9	36	ILE
21	C9	37	VAL
21	C9	57	ARG
21	C9	63	ARG
21	C9	67	MET
21	C9	70	GLN
21	C9	125	SER
21	C9	126	GLU
21	C9	130	ARG
21	C9	131	ASP
21	C9	132	LEU
21	C9	133	ASP
21	C9	134	ARG
21	C9	139	THR
21	C9	144	GLU
22	D0	18	GLN
22	D0	23	ARG
22	D0	27	THR
22	D0	35	GLU
22	D0	47	GLN
22	D0	50	LEU
22	D0	51	VAL
22	D0	57	ARG
22	D0	66	SER
22	D0	74	GLU
22	D0	76	SER
22	D0	81	THR
22	D0	85	ARG
22	D0	89	ARG
22	D0	105	GLN
22	D0	108	ILE
22	D0	121	ASN
23	D1	5	LYS
23	D1	7	GLN
23	D1	9	VAL
23	D1	11	LEU
23	D1	25	LYS
23	D1	33	GLN
23	D1	40	ASP
23	D1	49	GLU
23	D1	76	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	D1	78	LEU
23	D1	79	LEU
23	D1	87	ARG
24	D2	4	SER
24	D2	24	GLN
24	D2	25	VAL
24	D2	26	LEU
24	D2	27	ILE
24	D2	33	VAL
24	D2	43	LYS
24	D2	47	ILE
24	D2	53	ILE
24	D2	65	LEU
24	D2	66	ASN
24	D2	97	ARG
24	D2	103	ILE
24	D2	104	LEU
24	D2	105	THR
24	D2	111	MET
24	D2	121	VAL
24	D2	126	LEU
24	D2	129	VAL
25	D3	9	LEU
25	D3	19	ARG
25	D3	31	LYS
25	D3	47	SER
25	D3	72	VAL
25	D3	84	THR
25	D3	100	ASP
25	D3	107	PHE
25	D3	114	LYS
25	D3	117	ILE
25	D3	130	VAL
25	D3	132	LEU
25	D3	133	LEU
25	D3	138	GLU
25	D3	140	LYS
25	D3	144	ARG
26	D4	8	ARG
26	D4	21	LYS
26	D4	29	HIS
26	D4	32	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
26	D4	47	VAL
26	D4	51	GLU
26	D4	57	VAL
26	D4	62	THR
26	D4	84	LYS
26	D4	96	LEU
26	D4	99	LYS
26	D4	102	LYS
26	D4	104	SER
26	D4	124	ARG
26	D4	125	LEU
26	D4	127	LYS
27	D5	42	LEU
27	D5	51	LEU
27	D5	58	ARG
27	D5	59	TYR
27	D5	63	SER
27	D5	65	LEU
27	D5	67	ASP
27	D5	69	LEU
27	D5	75	LEU
27	D5	78	ILE
27	D5	85	LYS
27	D5	92	ILE
27	D5	95	HIS
27	D5	100	ILE
27	D5	102	THR
27	D5	103	ARG
28	D6	5	ARG
28	D6	33	ASP
28	D6	36	ILE
28	D6	38	ARG
28	D6	41	ILE
28	D6	45	VAL
28	D6	50	VAL
28	D6	55	GLU
28	D6	58	VAL
28	D6	61	GLU
28	D6	64	LEU
28	D6	66	LYS
28	D6	68	TYR
28	D6	69	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	D6	82	ARG
28	D6	83	ILE
28	D6	85	ARG
28	D6	87	ARG
28	D6	88	SER
28	D6	91	ASP
29	D7	3	LEU
29	D7	11	THR
29	D7	15	GLU
29	D7	23	THR
29	D7	33	LEU
29	D7	34	ASP
29	D7	41	LEU
29	D7	56	CYS
29	D7	60	SER
29	D7	61	THR
29	D7	77	THR
29	D7	78	SER
30	D8	19	THR
30	D8	31	GLU
30	D8	32	PHE
30	D8	33	LEU
30	D8	39	THR
30	D8	40	ILE
30	D8	48	VAL
30	D8	49	ARG
30	D8	52	ASP
30	D8	58	GLU
30	D8	64	ARG
31	D9	7	TRP
31	D9	8	PHE
31	D9	19	ARG
31	D9	21	CYS
31	D9	25	SER
31	D9	30	LEU
31	D9	32	ARG
31	D9	36	LEU
32	E0	20	LYS
32	E0	39	LEU
32	E0	42	ARG
32	E0	47	VAL
32	E0	50	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
32	E0	56	MET
33	E1	85	TYR
33	E1	86	THR
33	E1	89	LYS
33	E1	97	LYS
33	E1	98	VAL
33	E1	102	VAL
33	E1	108	VAL
33	E1	113	LYS
33	E1	130	VAL
33	E1	137	ASP
33	E1	138	ARG
33	E1	139	LEU
33	E1	147	VAL
33	E1	151	ASN
34	SR	6	VAL
34	SR	10	ARG
34	SR	37	SER
34	SR	45	TRP
34	SR	50	ASP
34	SR	52	GLN
34	SR	66	HIS
34	SR	74	THR
34	SR	76	ASP
34	SR	100	TYR
34	SR	102	ARG
34	SR	109	ASP
34	SR	116	ASP
34	SR	117	LYS
34	SR	131	ILE
34	SR	136	ILE
34	SR	141	LEU
34	SR	144	LEU
34	SR	148	ASN
34	SR	149	ASP
34	SR	154	VAL
34	SR	165	ASP
34	SR	196	ASN
34	SR	202	LEU
34	SR	222	LEU
34	SR	223	TRP
34	SR	229	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	SR	238	ASP
34	SR	245	PHE
34	SR	248	ASN
34	SR	266	ASP
34	SR	277	GLU
34	SR	308	ASN
35	SM	41	SER
35	SM	46	LYS
35	SM	48	ARG
35	SM	53	ARG
35	SM	55	SER
35	SM	61	ILE
35	SM	64	LYS
35	SM	68	ARG
35	SM	71	ASN
35	SM	73	SER
35	SM	77	THR
35	SM	78	ASP
35	SM	84	LYS
35	SM	91	THR
35	SM	92	ASP
35	SM	100	THR
35	SM	102	THR
35	SM	106	VAL
35	SM	108	GLN
35	SM	121	LYS
39	L2	8	GLN
39	L2	14	SER
39	L2	18	SER
39	L2	20	THR
39	L2	28	LYS
39	L2	32	LEU
39	L2	37	ARG
39	L2	44	ILE
39	L2	45	VAL
39	L2	46	LYS
39	L2	62	VAL
39	L2	70	ARG
39	L2	72	ARG
39	L2	73	GLU
39	L2	82	VAL
39	L2	95	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	L2	96	LEU
39	L2	97	ASN
39	L2	101	VAL
39	L2	104	LEU
39	L2	107	VAL
39	L2	111	THR
39	L2	116	VAL
39	L2	119	LYS
39	L2	128	ARG
39	L2	130	SER
39	L2	134	VAL
39	L2	143	GLU
39	L2	147	ARG
39	L2	157	VAL
39	L2	165	VAL
39	L2	179	LEU
39	L2	180	LEU
39	L2	197	PRO
39	L2	207	VAL
39	L2	227	ARG
39	L2	231	SER
39	L2	241	ARG
39	L2	247	ARG
39	L2	250	GLN
39	L2	252	THR
40	L3	3	HIS
40	L3	7	GLU
40	L3	17	LEU
40	L3	19	ARG
40	L3	25	ILE
40	L3	30	LYS
40	L3	37	ARG
40	L3	47	LEU
40	L3	53	MET
40	L3	55	THR
40	L3	56	ILE
40	L3	67	PHE
40	L3	70	ARG
40	L3	79	VAL
40	L3	84	VAL
40	L3	85	VAL
40	L3	97	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	L3	103	THR
40	L3	114	VAL
40	L3	116	ARG
40	L3	128	LYS
40	L3	134	SER
40	L3	139	GLN
40	L3	144	ILE
40	L3	146	ARG
40	L3	148	LEU
40	L3	156	SER
40	L3	157	VAL
40	L3	160	VAL
40	L3	161	LEU
40	L3	162	VAL
40	L3	169	THR
40	L3	183	LEU
40	L3	188	ILE
40	L3	192	VAL
40	L3	202	THR
40	L3	205	VAL
40	L3	208	VAL
40	L3	210	GLU
40	L3	212	ASN
40	L3	218	ILE
40	L3	232	ARG
40	L3	235	THR
40	L3	238	LEU
40	L3	241	LYS
40	L3	244	ARG
40	L3	252	ILE
40	L3	264	VAL
40	L3	274	SER
40	L3	277	SER
40	L3	290	ASP
40	L3	304	THR
40	L3	312	VAL
40	L3	320	ASP
40	L3	324	VAL
40	L3	328	ILE
40	L3	332	ARG
40	L3	337	THR
40	L3	351	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	L3	354	VAL
40	L3	355	SER
40	L3	364	LYS
40	L3	380	MET
40	L3	386	ASP
41	L4	4	PRO
41	L4	12	THR
41	L4	41	SER
41	L4	73	ARG
41	L4	74	ILE
41	L4	93	MET
41	L4	98	ARG
41	L4	99	MET
41	L4	112	LYS
41	L4	119	ARG
41	L4	120	TYR
41	L4	122	THR
41	L4	133	SER
41	L4	143	GLU
41	L4	156	LEU
41	L4	172	VAL
41	L4	177	ASP
41	L4	180	LYS
41	L4	187	LEU
41	L4	193	LYS
41	L4	203	ARG
41	L4	206	LEU
41	L4	220	ARG
41	L4	222	VAL
41	L4	225	VAL
41	L4	230	VAL
41	L4	232	SER
41	L4	246	ARG
41	L4	252	GLU
41	L4	256	THR
41	L4	258	LEU
41	L4	260	GLN
41	L4	261	VAL
41	L4	267	VAL
41	L4	282	SER
41	L4	284	SER
41	L4	287	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	L4	289	ILE
41	L4	297	SER
41	L4	307	GLN
41	L4	313	LEU
41	L4	321	LYS
41	L4	323	VAL
41	L4	327	LEU
41	L4	332	LYS
41	L4	338	LYS
41	L4	339	LEU
41	L4	343	LYS
41	L4	346	LYS
41	L4	356	THR
41	L4	362	ASP
42	L5	8	LYS
42	L5	23	ARG
42	L5	41	LYS
42	L5	66	SER
42	L5	69	ILE
42	L5	75	LEU
42	L5	80	SER
42	L5	81	HIS
42	L5	89	THR
42	L5	92	LEU
42	L5	101	THR
42	L5	105	ILE
42	L5	112	LYS
42	L5	113	LEU
42	L5	115	LEU
42	L5	124	GLU
42	L5	126	GLU
42	L5	131	LEU
42	L5	140	ARG
42	L5	146	LEU
42	L5	151	GLN
42	L5	152	ARG
42	L5	155	THR
42	L5	158	ARG
42	L5	159	VAL
42	L5	163	LEU
42	L5	177	GLU
42	L5	185	PHE

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
42	L5	205	SER
42	L5	214	ASP
42	L5	222	LEU
42	L5	223	PHE
42	L5	236	LEU
42	L5	259	LYS
42	L5	263	GLU
42	L5	273	ARG
42	L5	290	ILE
43	L6	5	LYS
43	L6	14	ASP
43	L6	21	THR
43	L6	35	VAL
43	L6	48	ARG
43	L6	64	LEU
43	L6	66	SER
43	L6	78	ARG
43	L6	79	VAL
43	L6	84	VAL
43	L6	88	SER
43	L6	89	THR
43	L6	98	VAL
43	L6	104	GLU
43	L6	109	GLU
43	L6	129	GLU
43	L6	134	ARG
43	L6	155	LEU
43	L6	160	SER
44	L7	25	GLN
44	L7	26	VAL
44	L7	60	ARG
44	L7	77	VAL
44	L7	80	GLN
44	L7	82	LYS
44	L7	93	ASN
44	L7	98	LYS
44	L7	100	ARG
44	L7	111	ILE
44	L7	121	LYS
44	L7	124	LEU
44	L7	173	LEU
44	L7	179	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
44	L7	184	LEU
44	L7	189	ILE
44	L7	239	LEU
45	L8	26	LEU
45	L8	27	THR
45	L8	63	LYS
45	L8	71	VAL
45	L8	74	THR
45	L8	79	GLN
45	L8	84	ARG
45	L8	90	THR
45	L8	92	LYS
45	L8	132	VAL
45	L8	136	LEU
45	L8	149	LYS
45	L8	156	ASP
45	L8	163	VAL
45	L8	169	LEU
45	L8	185	ARG
45	L8	189	LEU
45	L8	194	THR
45	L8	201	THR
45	L8	203	VAL
45	L8	204	ARG
45	L8	227	ASP
45	L8	238	LEU
45	L8	248	LYS
46	L9	1	MET
46	L9	4	ILE
46	L9	5	GLN
46	L9	6	THR
46	L9	9	GLN
46	L9	18	VAL
46	L9	19	SER
46	L9	20	ILE
46	L9	22	SER
46	L9	28	VAL
46	L9	31	ARG
46	L9	41	ILE
46	L9	44	THR
46	L9	48	VAL
46	L9	52	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	L9	65	VAL
46	L9	68	LEU
46	L9	70	THR
46	L9	78	MET
46	L9	82	VAL
46	L9	123	ILE
46	L9	138	THR
46	L9	139	ASN
46	L9	149	ASN
46	L9	151	VAL
46	L9	154	VAL
46	L9	157	ASN
46	L9	161	LEU
46	L9	162	GLN
46	L9	164	ILE
46	L9	166	ARG
46	L9	168	ARG
46	L9	172	ILE
46	L9	173	ARG
46	L9	177	ASP
46	L9	189	GLU
46	L9	190	ASP
47	M0	3	ARG
47	M0	4	ARG
47	M0	32	ARG
47	M0	33	ILE
47	M0	34	TYR
47	M0	39	LYS
47	M0	40	LYS
47	M0	42	THR
47	M0	44	ASP
47	M0	48	LEU
47	M0	52	LEU
47	M0	53	VAL
47	M0	63	GLU
47	M0	66	GLU
47	M0	87	LEU
47	M0	116	ARG
47	M0	139	ARG
47	M0	140	THR
47	M0	142	ASP
47	M0	143	SER

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
47	M0	156	ARG
47	M0	163	GLN
47	M0	165	ILE
47	M0	167	LEU
47	M0	169	LYS
47	M0	178	ARG
47	M0	185	ARG
47	M0	192	ASP
47	M0	197	VAL
47	M0	203	LYS
47	M0	208	ASN
48	M1	6	GLN
48	M1	10	ARG
48	M1	11	ASP
48	M1	12	LEU
48	M1	13	LYS
48	M1	19	LEU
48	M1	22	SER
48	M1	30	LEU
48	M1	44	THR
48	M1	46	VAL
48	M1	52	TYR
48	M1	56	THR
48	M1	61	ARG
48	M1	63	GLU
48	M1	65	ILE
48	M1	70	THR
48	M1	77	GLU
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	137	ARG
48	M1	138	VAL
48	M1	140	ARG
48	M1	159	THR
48	M1	166	LYS
48	M1	171	VAL
49	M3	17	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	M3	22	VAL
49	M3	42	ARG
49	M3	54	LEU
49	M3	55	ARG
49	M3	58	VAL
49	M3	59	ARG
49	M3	73	ARG
49	M3	100	ARG
49	M3	104	ARG
49	M3	114	GLN
49	M3	115	ARG
49	M3	117	LYS
49	M3	121	SER
49	M3	124	ILE
49	M3	131	LYS
49	M3	136	GLU
49	M3	164	GLU
49	M3	168	ARG
49	M3	182	ILE
49	M3	194	GLU
50	M4	8	LYS
50	M4	27	GLN
50	M4	38	ILE
50	M4	50	LYS
50	M4	53	VAL
50	M4	69	THR
50	M4	74	ARG
50	M4	90	VAL
50	M4	92	GLU
50	M4	93	LYS
50	M4	108	ARG
50	M4	125	LYS
50	M4	126	GLN
50	M4	130	THR
50	M4	133	LYS
50	M4	135	LEU
51	M5	7	LEU
51	M5	10	LEU
51	M5	15	GLN
51	M5	18	VAL
51	M5	19	LEU
51	M5	22	LEU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
51	M5	38	ARG
51	M5	46	ASP
51	M5	49	ARG
51	M5	50	ARG
51	M5	62	TYR
51	M5	68	ARG
51	M5	80	THR
51	M5	85	THR
51	M5	87	GLN
51	M5	96	ARG
51	M5	97	SER
51	M5	106	VAL
51	M5	123	GLN
51	M5	133	ILE
51	M5	138	GLN
51	M5	151	ILE
51	M5	155	VAL
51	M5	159	ARG
51	M5	167	THR
51	M5	182	ASN
51	M5	183	THR
51	M5	190	THR
51	M5	194	GLN
51	M5	201	ARG
51	M5	204	LYS
52	M6	22	VAL
52	M6	33	ILE
52	M6	34	VAL
52	M6	36	VAL
52	M6	41	LEU
52	M6	84	LEU
52	M6	85	ARG
52	M6	106	GLU
52	M6	110	PRO
52	M6	114	LYS
52	M6	117	ARG
52	M6	122	GLN
52	M6	124	LEU
52	M6	126	VAL
52	M6	142	SER
52	M6	143	THR
52	M6	160	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
52	M6	170	LYS
52	M6	180	SER
52	M6	184	THR
52	M6	187	GLU
52	M6	190	VAL
53	M7	18	ARG
53	M7	24	VAL
53	M7	29	THR
53	M7	32	THR
53	M7	36	ILE
53	M7	42	THR
53	M7	52	LEU
53	M7	53	ASP
53	M7	54	HIS
53	M7	56	ARG
53	M7	69	ARG
53	M7	91	VAL
53	M7	111	LYS
53	M7	112	LEU
53	M7	119	VAL
53	M7	142	SER
53	M7	144	SER
53	M7	152	GLU
53	M7	153	LYS
53	M7	175	ARG
53	M7	181	ARG
54	M8	7	SER
54	M8	11	LYS
54	M8	17	THR
54	M8	22	ASP
54	M8	26	LEU
54	M8	32	LEU
54	M8	41	ASP
54	M8	49	LEU
54	M8	64	VAL
54	M8	69	ARG
54	M8	80	THR
54	M8	81	VAL
54	M8	100	THR
54	M8	129	VAL
54	M8	135	GLN
54	M8	148	GLU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
54	M8	159	LYS
54	M8	168	THR
54	M8	171	LYS
54	M8	174	ARG
54	M8	178	ARG
54	M8	180	ARG
54	M8	181	SER
55	M9	19	LYS
55	M9	20	ARG
55	M9	25	ASP
55	M9	41	ILE
55	M9	42	ARG
55	M9	44	LEU
55	M9	55	VAL
55	M9	60	LYS
55	M9	69	SER
55	M9	74	ARG
55	M9	103	ARG
55	M9	104	ARG
55	M9	106	LEU
55	M9	138	LEU
55	M9	144	GLN
55	M9	155	LEU
55	M9	164	LEU
55	M9	175	GLN
55	M9	180	LYS
56	N0	16	THR
56	N0	21	GLU
56	N0	45	LEU
56	N0	51	VAL
56	N0	61	ILE
56	N0	71	LYS
56	N0	79	VAL
56	N0	80	ARG
56	N0	87	THR
56	N0	100	VAL
56	N0	105	THR
56	N0	115	ARG
56	N0	130	GLU
56	N0	131	LYS
56	N0	137	ARG
56	N0	145	THR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
56	N0	155	ARG
56	N0	156	VAL
56	N0	157	GLN
56	N0	160	THR
56	N0	161	LYS
56	N0	162	THR
56	N0	167	ARG
56	N0	169	SER
56	N0	172	TYR
57	N1	12	ARG
57	N1	16	GLN
57	N1	26	HIS
57	N1	27	LEU
57	N1	36	VAL
57	N1	38	ASP
57	N1	55	LYS
57	N1	71	SER
57	N1	75	ILE
57	N1	78	LYS
57	N1	79	MET
57	N1	80	VAL
57	N1	83	ARG
57	N1	88	ARG
57	N1	102	ARG
57	N1	104	GLU
57	N1	122	GLN
57	N1	126	VAL
57	N1	127	GLN
57	N1	128	LEU
57	N1	131	GLN
57	N1	139	ARG
57	N1	143	THR
57	N1	149	GLN
57	N1	158	THR
57	N1	159	PHE
58	N2	10	LYS
58	N2	16	THR
58	N2	39	ASP
58	N2	52	ASN
58	N2	66	VAL
58	N2	88	GLN
58	N2	93	ILE

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
58	N2	100	THR
58	N2	107	PHE
59	N3	13	ILE
59	N3	14	SER
59	N3	45	ARG
59	N3	46	LEU
59	N3	48	ARG
59	N3	63	LYS
59	N3	64	LYS
59	N3	72	LYS
59	N3	73	VAL
59	N3	83	LYS
59	N3	91	VAL
59	N3	102	ILE
59	N3	106	LYS
59	N3	115	THR
59	N3	125	LEU
59	N3	133	SER
60	N4	4	GLU
60	N4	5	ILE
60	N4	17	ARG
60	N4	19	THR
60	N4	39	LEU
60	N4	47	ARG
61	N5	27	ARG
61	N5	37	THR
61	N5	38	LEU
61	N5	39	LYS
61	N5	40	LEU
61	N5	45	LYS
61	N5	48	SER
61	N5	59	SER
61	N5	63	ILE
61	N5	71	THR
61	N5	73	MET
61	N5	75	LYS
61	N5	78	ASP
61	N5	92	LYS
61	N5	104	GLU
61	N5	108	LEU
61	N5	112	THR
61	N5	115	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
61	N5	125	ARG
61	N5	134	ASP
61	N5	135	ILE
61	N5	137	ASN
61	N5	139	ILE
62	N6	5	SER
62	N6	13	ARG
62	N6	16	ARG
62	N6	36	SER
62	N6	37	LYS
62	N6	42	GLN
62	N6	45	ILE
62	N6	50	ILE
62	N6	56	VAL
62	N6	57	LEU
62	N6	64	LYS
62	N6	69	LYS
62	N6	74	TYR
62	N6	86	THR
62	N6	105	VAL
62	N6	115	ARG
62	N6	125	LYS
62	N6	126	LEU
63	N7	14	VAL
63	N7	24	VAL
63	N7	26	VAL
63	N7	30	ASP
63	N7	33	SER
63	N7	46	ILE
63	N7	65	ARG
63	N7	72	ILE
63	N7	81	LEU
63	N7	83	THR
63	N7	86	THR
63	N7	94	SER
63	N7	97	SER
63	N7	102	GLU
63	N7	103	GLN
63	N7	109	GLU
63	N7	134	LEU
63	N7	136	PHE
64	N8	3	SER

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
64	N8	4	ARG
64	N8	6	THR
64	N8	8	THR
64	N8	10	LYS
64	N8	12	ARG
64	N8	16	SER
64	N8	26	ARG
64	N8	27	LYS
64	N8	32	ARG
64	N8	42	ARG
64	N8	47	LYS
64	N8	56	VAL
64	N8	60	TYR
64	N8	76	ASP
64	N8	78	LEU
64	N8	88	ASP
64	N8	91	LEU
64	N8	93	SER
64	N8	97	GLU
64	N8	115	LYS
64	N8	117	ARG
64	N8	120	ASN
64	N8	130	VAL
64	N8	133	LEU
65	N9	4	SER
65	N9	13	THR
65	N9	22	LYS
65	N9	23	LYS
65	N9	25	LYS
65	N9	28	LYS
65	N9	38	LYS
65	N9	50	THR
65	N9	59	LYS
66	O0	14	LEU
66	O0	16	LEU
66	O0	20	SER
66	O0	30	THR
66	O0	33	SER
66	O0	40	LYS
66	O0	43	ILE
66	O0	48	THR
66	O0	54	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
66	O0	61	MET
66	O0	66	LYS
66	O0	79	THR
66	O0	83	LYS
66	O0	87	VAL
66	O0	89	VAL
66	O0	98	SER
66	O0	101	LEU
66	O0	104	LEU
67	O1	6	ASP
67	O1	26	LYS
67	O1	27	LYS
67	O1	31	ARG
67	O1	46	THR
67	O1	47	ASP
67	O1	65	LYS
67	O1	73	LEU
67	O1	76	SER
67	O1	79	ARG
67	O1	82	GLU
67	O1	83	GLU
67	O1	93	VAL
67	O1	96	VAL
67	O1	98	VAL
67	O1	104	LEU
67	O1	106	THR
67	O1	107	VAL
68	O2	19	ARG
68	O2	24	ARG
68	O2	33	ARG
68	O2	41	VAL
68	O2	52	GLN
68	O2	59	SER
68	O2	61	LYS
68	O2	67	SER
68	O2	69	SER
68	O2	72	LYS
68	O2	73	THR
68	O2	75	LEU
68	O2	90	LYS
68	O2	91	THR
68	O2	103	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
68	O2	125	ARG
69	O3	15	SER
69	O3	31	LYS
69	O3	45	LEU
69	O3	58	GLU
69	O3	59	VAL
69	O3	60	ARG
69	O3	70	LYS
69	O3	81	VAL
69	O3	98	VAL
70	O4	20	ILE
70	O4	23	VAL
70	O4	24	LYS
70	O4	35	VAL
70	O4	49	SER
70	O4	58	ARG
70	O4	61	GLN
70	O4	65	VAL
70	O4	68	THR
70	O4	71	THR
70	O4	79	SER
70	O4	80	ARG
70	O4	101	VAL
70	O4	104	VAL
71	O5	15	GLU
71	O5	21	LEU
71	O5	27	GLU
71	O5	31	LEU
71	O5	36	LEU
71	O5	45	LYS
71	O5	46	THR
71	O5	47	VAL
71	O5	48	ARG
71	O5	49	LYS
71	O5	50	SER
71	O5	73	LYS
71	O5	85	THR
71	O5	89	ARG
71	O5	90	ARG
71	O5	101	THR
71	O5	104	GLN
71	O5	107	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
71	O5	119	LYS
72	O6	11	LEU
72	O6	21	THR
72	O6	25	LYS
72	O6	26	ILE
72	O6	36	ARG
72	O6	42	SER
72	O6	45	ARG
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	84	LYS
72	O6	90	MET
72	O6	99	ARG
73	O7	5	THR
73	O7	17	THR
73	O7	24	ARG
73	O7	25	ARG
73	O7	33	THR
73	O7	44	THR
73	O7	52	LYS
73	O7	55	ARG
73	O7	58	THR
73	O7	59	THR
73	O7	65	ARG
73	O7	67	LEU
73	O7	71	SER
73	O7	82	SER
74	O8	12	LEU
74	O8	22	THR
74	O8	24	THR
74	O8	45	VAL
74	O8	46	ARG
74	O8	53	THR
74	O8	64	LYS
74	O8	65	LEU
74	O8	67	GLN
74	O8	68	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
74	O8	73	LEU
74	O8	77	ARG
75	O9	4	GLN
75	O9	19	GLN
75	O9	21	ARG
75	O9	25	GLN
75	O9	27	ILE
75	O9	29	LEU
75	O9	51	ILE
76	Q0	78	ILE
76	Q0	85	LEU
76	Q0	97	ARG
76	Q0	112	LYS
76	Q0	113	ARG
76	Q0	114	LYS
76	Q0	127	LEU
77	Q1	5	TRP
77	Q1	6	ARG
77	Q1	9	ARG
77	Q1	11	ARG
78	Q2	3	ASN
78	Q2	8	ARG
78	Q2	9	LYS
78	Q2	21	THR
78	Q2	26	THR
78	Q2	35	LEU
78	Q2	38	GLN
78	Q2	47	GLN
78	Q2	75	VAL
78	Q2	78	LYS
78	Q2	83	LEU
78	Q2	84	THR
78	Q2	85	LEU
78	Q2	92	GLU
78	Q2	100	LYS
78	Q2	104	LEU
79	Q3	4	ARG
79	Q3	11	THR
79	Q3	25	GLN
79	Q3	42	CYS
79	Q3	45	LYS
79	Q3	46	THR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
79	Q3	49	ARG
79	Q3	73	THR
79	Q3	78	THR
79	Q3	82	THR
79	Q3	84	ARG
79	Q3	91	GLU
2	s0	6	THR
2	s0	12	GLU
2	s0	29	VAL
2	s0	30	GLN
2	s0	31	VAL
2	s0	32	HIS
2	s0	41	ARG
2	s0	45	VAL
2	s0	50	VAL
2	s0	57	LEU
2	s0	59	LEU
2	s0	69	ASN
2	s0	87	LEU
2	s0	88	LYS
2	s0	96	THR
2	s0	101	ARG
2	s0	110	TYR
2	s0	131	GLN
2	s0	144	ILE
2	s0	154	GLU
2	s0	157	ASP
2	s0	162	CYS
2	s0	172	LEU
2	s0	180	GLU
2	s0	185	ARG
2	s0	189	VAL
2	s0	198	MET
2	s0	205	ARG
3	s1	21	VAL
3	s1	25	THR
3	s1	37	THR
3	s1	40	ASN
3	s1	47	LEU
3	s1	51	SER
3	s1	55	LYS
3	s1	62	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	s1	68	VAL
3	s1	70	LEU
3	s1	74	GLN
3	s1	81	PHE
3	s1	83	LYS
3	s1	105	PHE
3	s1	110	LEU
3	s1	122	GLU
3	s1	124	ASN
3	s1	125	VAL
3	s1	129	THR
3	s1	135	LEU
3	s1	137	ILE
3	s1	159	SER
3	s1	169	SER
3	s1	177	GLN
3	s1	181	LEU
3	s1	193	ILE
3	s1	195	LYS
3	s1	206	PRO
3	s1	212	VAL
3	s1	222	LYS
3	s1	223	PHE
4	s2	41	LEU
4	s2	53	ILE
4	s2	54	GLU
4	s2	55	GLU
4	s2	58	LEU
4	s2	69	ILE
4	s2	72	LEU
4	s2	73	LEU
4	s2	76	LEU
4	s2	80	VAL
4	s2	81	MET
4	s2	83	ILE
4	s2	89	GLN
4	s2	91	ARG
4	s2	97	ARG
4	s2	106	ASP
4	s2	111	VAL
4	s2	113	LEU
4	s2	117	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	s2	137	ILE
4	s2	140	ARG
4	s2	141	ARG
4	s2	148	LEU
4	s2	150	GLN
4	s2	153	SER
4	s2	164	SER
4	s2	166	THR
4	s2	167	VAL
4	s2	170	ILE
4	s2	194	GLU
4	s2	195	ASP
4	s2	205	ARG
4	s2	218	ILE
4	s2	224	PHE
4	s2	228	ASN
4	s2	233	GLN
4	s2	237	VAL
4	s2	245	ASP
4	s2	248	SER
5	s3	4	LEU
5	s3	23	GLU
5	s3	44	THR
5	s3	55	THR
5	s3	57	ASP
5	s3	67	ASN
5	s3	69	LEU
5	s3	76	ARG
5	s3	84	ILE
5	s3	115	ILE
5	s3	124	ARG
5	s3	128	GLU
5	s3	142	LEU
5	s3	143	ARG
5	s3	158	ILE
5	s3	162	GLN
5	s3	164	VAL
5	s3	168	ILE
5	s3	212	LYS
5	s3	213	GLU
5	s3	215	GLU
5	s3	223	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	s4	12	LEU
6	s4	23	LEU
6	s4	30	ARG
6	s4	38	LEU
6	s4	39	ARG
6	s4	41	SER
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	81	THR
6	s4	104	ASP
6	s4	105	VAL
6	s4	113	ARG
6	s4	116	ASP
6	s4	123	LEU
6	s4	126	VAL
6	s4	128	LYS
6	s4	131	LEU
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	182	TYR
6	s4	196	VAL
6	s4	214	LEU
6	s4	221	ARG
6	s4	222	LEU
6	s4	223	ASN
6	s4	227	VAL
6	s4	236	ILE
6	s4	245	LYS
6	s4	246	LEU
6	s4	247	SER
7	s5	25	LEU
7	s5	27	THR
7	s5	31	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	s5	38	THR
7	s5	45	LYS
7	s5	59	VAL
7	s5	63	GLN
7	s5	68	ILE
7	s5	76	ARG
7	s5	93	LEU
7	s5	94	THR
7	s5	99	MET
7	s5	102	ARG
7	s5	112	ARG
7	s5	125	THR
7	s5	128	ASN
7	s5	146	THR
7	s5	147	THR
7	s5	148	ARG
7	s5	157	ARG
7	s5	163	SER
7	s5	166	ARG
7	s5	194	LEU
7	s5	203	LYS
7	s5	213	LYS
7	s5	216	GLU
8	s6	10	ASN
8	s6	17	GLU
8	s6	29	ASP
8	s6	57	ASP
8	s6	69	LEU
8	s6	71	THR
8	s6	73	ILE
8	s6	76	LEU
8	s6	78	THR
8	s6	93	LYS
8	s6	97	VAL
8	s6	108	VAL
8	s6	109	LEU
8	s6	115	LYS
8	s6	121	LEU
8	s6	126	ASP
8	s6	127	THR
8	s6	128	THR
8	s6	129	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	157	VAL
8	s6	175	ILE
8	s6	177	ARG
8	s6	193	LEU
8	s6	212	LEU
8	s6	215	ARG
9	s7	11	GLN
9	s7	28	GLU
9	s7	33	GLU
9	s7	38	LEU
9	s7	49	ILE
9	s7	50	ASP
9	s7	66	SER
9	s7	67	LEU
9	s7	75	THR
9	s7	77	LEU
9	s7	78	THR
9	s7	79	ARG
9	s7	80	GLU
9	s7	97	ARG
9	s7	108	GLN
9	s7	110	GLN
9	s7	114	ARG
9	s7	115	SER
9	s7	116	ARG
9	s7	117	THR
9	s7	118	LEU
9	s7	149	ILE
9	s7	160	GLN
9	s7	166	LEU
9	s7	185	ILE
10	s8	10	LYS
10	s8	20	GLN
10	s8	22	ARG
10	s8	25	ARG
10	s8	26	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
10	s8	29	LEU
10	s8	46	VAL
10	s8	59	ARG
10	s8	74	LYS
10	s8	76	THR
10	s8	82	VAL
10	s8	89	GLU
10	s8	135	LYS
10	s8	152	ILE
10	s8	153	GLU
10	s8	155	SER
10	s8	176	SER
10	s8	183	ILE
10	s8	184	LEU
11	s9	3	ARG
11	s9	6	ARG
11	s9	7	THR
11	s9	9	SER
11	s9	28	LEU
11	s9	39	LYS
11	s9	46	SER
11	s9	78	ARG
11	s9	82	ARG
11	s9	101	VAL
11	s9	109	LEU
11	s9	130	THR
11	s9	134	ILE
11	s9	140	ILE
11	s9	150	LEU
11	s9	151	ASP
11	s9	161	THR
11	s9	172	VAL
11	s9	180	LYS
11	s9	182	GLU
12	c0	2	LEU
12	c0	3	MET
12	c0	5	LYS
12	c0	15	LEU
12	c0	20	VAL
12	c0	22	VAL
12	c0	55	VAL
12	c0	57	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	c0	71	GLU
13	c1	5	LEU
13	c1	10	GLU
13	c1	21	ASN
13	c1	26	LYS
13	c1	30	ARG
13	c1	31	THR
13	c1	32	LYS
13	c1	33	ARG
13	c1	40	LEU
13	c1	44	THR
13	c1	47	THR
13	c1	56	LYS
13	c1	60	PHE
13	c1	64	VAL
13	c1	67	ARG
13	c1	74	THR
13	c1	76	VAL
13	c1	77	SER
13	c1	83	THR
13	c1	99	ARG
13	c1	109	VAL
13	c1	129	ARG
13	c1	138	ASN
14	c2	28	LEU
14	c2	39	ASP
14	c2	43	ARG
14	c2	45	LEU
14	c2	58	LEU
14	c2	61	VAL
14	c2	62	LEU
14	c2	71	ILE
14	c2	74	LEU
14	c2	83	GLU
14	c2	85	LYS
14	c2	89	ILE
14	c2	103	LEU
14	c2	121	VAL
14	c2	125	ASN
14	c2	132	GLU
14	c2	140	PHE
15	c3	12	SER

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
15	c3	14	SER
15	c3	16	ILE
15	c3	20	ARG
15	c3	21	ASN
15	c3	28	LEU
15	c3	29	SER
15	c3	30	SER
15	c3	46	THR
15	c3	60	VAL
15	c3	66	ILE
15	c3	70	LYS
15	c3	80	LEU
15	c3	84	ILE
15	c3	87	ASP
15	c3	97	SER
15	c3	102	LEU
15	c3	115	LEU
15	c3	120	SER
15	c3	125	LEU
15	c3	127	ARG
15	c3	131	THR
15	c3	134	VAL
15	c3	138	ASN
16	c4	13	VAL
16	c4	16	VAL
16	c4	31	THR
16	c4	43	THR
16	c4	79	VAL
16	c4	81	VAL
16	c4	83	ILE
16	c4	90	ARG
16	c4	92	LYS
16	c4	102	LEU
16	c4	107	ARG
16	c4	114	ARG
16	c4	118	VAL
16	c4	119	THR
16	c4	123	SER
16	c4	124	ASP
16	c4	132	ARG
16	c4	133	ARG
16	c4	136	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
17	c5	12	PHE
17	c5	21	ASP
17	c5	36	LEU
17	c5	49	MET
17	c5	52	LYS
17	c5	69	GLU
17	c5	71	GLU
17	c5	97	TYR
17	c5	107	ILE
17	c5	110	GLU
17	c5	121	ILE
17	c5	127	ARG
17	c5	128	HIS
18	c6	7	VAL
18	c6	17	THR
18	c6	23	LYS
18	c6	28	LEU
18	c6	37	THR
18	c6	38	LEU
18	c6	43	ILE
18	c6	53	LEU
18	c6	54	LEU
18	c6	57	LEU
18	c6	63	ILE
18	c6	68	ARG
18	c6	69	VAL
18	c6	70	THR
18	c6	100	GLN
18	c6	114	ARG
18	c6	137	ARG
19	c7	3	ARG
19	c7	5	ARG
19	c7	6	THR
19	c7	29	GLN
19	c7	34	LEU
19	c7	36	ASP
19	c7	46	LEU
19	c7	55	THR
19	c7	60	ARG
19	c7	69	ILE
19	c7	85	VAL
19	c7	88	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
19	c7	100	LEU
19	c7	103	ASP
19	c7	106	THR
20	c8	2	SER
20	c8	3	LEU
20	c8	4	VAL
20	c8	5	VAL
20	c8	6	GLN
20	c8	8	GLN
20	c8	13	HIS
20	c8	15	LEU
20	c8	25	ASN
20	c8	28	ILE
20	c8	29	VAL
20	c8	36	LYS
20	c8	38	VAL
20	c8	61	LEU
20	c8	63	GLN
20	c8	89	GLN
20	c8	94	ASP
20	c8	101	LEU
20	c8	103	ASN
20	c8	107	SER
20	c8	116	LEU
20	c8	136	GLN
20	c8	138	THR
20	c8	140	THR
20	c8	141	THR
20	c8	144	ARG
21	c9	6	VAL
21	c9	27	LYS
21	c9	28	LEU
21	c9	34	VAL
21	c9	37	VAL
21	c9	57	ARG
21	c9	68	ARG
21	c9	70	GLN
21	c9	86	ARG
21	c9	110	LYS
21	c9	116	ILE
21	c9	123	ARG
21	c9	126	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	c9	131	ASP
21	c9	135	ILE
21	c9	139	THR
21	c9	140	LEU
22	d0	16	GLN
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	51	VAL
22	d0	57	ARG
22	d0	60	THR
22	d0	63	LEU
22	d0	67	THR
22	d0	70	THR
22	d0	74	GLU
22	d0	77	LYS
22	d0	81	THR
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	115	GLU
23	d1	2	GLU
23	d1	5	LYS
23	d1	11	LEU
23	d1	12	TYR
23	d1	24	ILE
23	d1	32	VAL
23	d1	50	TYR
23	d1	52	THR
23	d1	66	ASP
23	d1	78	LEU
24	d2	2	THR
24	d2	3	ARG
24	d2	4	SER
24	d2	7	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	d2	15	ASN
24	d2	23	ARG
24	d2	25	VAL
24	d2	65	LEU
24	d2	68	ARG
24	d2	98	GLN
24	d2	103	ILE
24	d2	117	ARG
24	d2	124	LYS
24	d2	126	LEU
24	d2	129	VAL
25	d3	9	LEU
25	d3	16	ARG
25	d3	19	ARG
25	d3	33	LEU
25	d3	72	VAL
25	d3	73	ARG
25	d3	83	VAL
25	d3	84	THR
25	d3	99	ASN
25	d3	100	ASP
25	d3	107	PHE
25	d3	109	ARG
25	d3	125	VAL
25	d3	132	LEU
25	d3	133	LEU
25	d3	140	LYS
26	d4	5	VAL
26	d4	10	ARG
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	88	THR
26	d4	91	LEU
26	d4	121	THR
26	d4	125	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	d4	132	ARG
27	d5	41	ILE
27	d5	51	LEU
27	d5	57	TYR
27	d5	81	ARG
27	d5	92	ILE
28	d6	10	ARG
28	d6	18	VAL
28	d6	24	VAL
28	d6	41	ILE
28	d6	53	LEU
28	d6	54	SER
28	d6	61	GLU
28	d6	82	ARG
28	d6	85	ARG
28	d6	90	GLU
29	d7	14	SER
29	d7	34	ASP
29	d7	36	LYS
29	d7	43	ILE
29	d7	52	THR
29	d7	61	THR
29	d7	72	LYS
29	d7	77	THR
29	d7	81	ARG
30	d8	7	VAL
30	d8	28	VAL
30	d8	30	VAL
30	d8	32	PHE
30	d8	33	LEU
30	d8	39	THR
30	d8	64	ARG
30	d8	65	ARG
30	d8	67	ARG
31	d9	10	HIS
31	d9	21	CYS
31	d9	25	SER
31	d9	42	CYS
31	d9	54	LYS
32	e0	13	LYS
32	e0	26	LYS
32	e0	28	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
32	e0	29	LYS
32	e0	31	LYS
32	e0	39	LEU
32	e0	41	THR
32	e0	44	PHE
32	e0	46	ASN
32	e0	49	LEU
32	e0	55	ARG
32	e0	56	MET
33	e1	84	VAL
33	e1	86	THR
33	e1	90	LYS
33	e1	95	HIS
33	e1	96	LYS
33	e1	98	VAL
33	e1	100	LEU
33	e1	102	VAL
33	e1	106	TYR
33	e1	109	ASP
33	e1	113	LYS
33	e1	135	HIS
34	sR	29	GLN
34	sR	51	ASP
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	106	HIS
34	sR	145	LEU
34	sR	149	ASP
34	sR	176	LYS
34	sR	182	ASN
34	sR	183	LEU
34	sR	202	LEU
34	sR	232	TYR
34	sR	245	PHE
34	sR	256	THR
34	sR	266	ASP
34	sR	275	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	sR	286	GLU
34	sR	297	ASP
35	sM	25	ILE
35	sM	30	THR
35	sM	43	ASP
35	sM	48	ARG
35	sM	49	LYS
35	sM	64	LYS
35	sM	68	ARG
35	sM	71	ASN
35	sM	74	LYS
35	sM	77	THR
35	sM	79	SER
39	l2	15	ILE
39	l2	23	ARG
39	l2	32	LEU
39	l2	44	ILE
39	l2	45	VAL
39	l2	46	LYS
39	l2	48	ILE
39	l2	52	SER
39	l2	62	VAL
39	l2	71	LEU
39	l2	74	GLU
39	l2	82	VAL
39	l2	101	VAL
39	l2	107	VAL
39	l2	114	SER
39	l2	119	LYS
39	l2	122	ASP
39	l2	134	VAL
39	l2	137	ILE
39	l2	147	ARG
39	l2	155	LYS
39	l2	165	VAL
39	l2	179	LEU
39	l2	192	LYS
39	l2	193	ARG
39	l2	204	MET
39	l2	215	ASN
39	l2	224	THR
39	l2	227	ARG

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
39	12	230	VAL
39	12	241	ARG
39	12	242	ARG
39	12	243	THR
39	12	246	LEU
40	13	3	HIS
40	13	4	ARG
40	13	5	LYS
40	13	17	LEU
40	13	19	ARG
40	13	30	LYS
40	13	34	LYS
40	13	43	LEU
40	13	50	LYS
40	13	56	ILE
40	13	69	LYS
40	13	70	ARG
40	13	73	VAL
40	13	79	VAL
40	13	85	VAL
40	13	101	SER
40	13	103	THR
40	13	104	THR
40	13	110	LEU
40	13	114	VAL
40	13	120	LYS
40	13	139	GLN
40	13	145	GLU
40	13	148	LEU
40	13	150	ARG
40	13	157	VAL
40	13	160	VAL
40	13	167	ARG
40	13	169	THR
40	13	183	LEU
40	13	202	THR
40	13	205	VAL
40	13	208	VAL
40	13	211	GLN
40	13	213	GLU
40	13	222	LYS
40	13	227	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	l3	232	ARG
40	l3	235	THR
40	l3	238	LEU
40	l3	249	VAL
40	l3	252	ILE
40	l3	261	MET
40	l3	274	SER
40	l3	284	ARG
40	l3	300	ARG
40	l3	308	MET
40	l3	324	VAL
40	l3	327	CYS
40	l3	328	ILE
40	l3	332	ARG
40	l3	348	ARG
41	l4	2	SER
41	l4	33	ASP
41	l4	34	ILE
41	l4	35	VAL
41	l4	47	ARG
41	l4	52	VAL
41	l4	73	ARG
41	l4	93	MET
41	l4	99	MET
41	l4	120	TYR
41	l4	122	THR
41	l4	133	SER
41	l4	138	ARG
41	l4	144	LYS
41	l4	145	ILE
41	l4	148	ILE
41	l4	150	LEU
41	l4	156	LEU
41	l4	170	LYS
41	l4	179	LEU
41	l4	187	LEU
41	l4	203	ARG
41	l4	206	LEU
41	l4	217	LYS
41	l4	220	ARG
41	l4	222	VAL
41	l4	230	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	14	233	LEU
41	14	246	ARG
41	14	258	LEU
41	14	265	GLU
41	14	287	THR
41	14	289	ILE
41	14	292	SER
41	14	304	GLN
41	14	307	GLN
41	14	308	LYS
41	14	313	LEU
41	14	327	LEU
41	14	333	VAL
41	14	345	GLU
41	14	346	LYS
41	14	347	THR
41	14	356	THR
42	15	5	LYS
42	15	9	SER
42	15	34	LYS
42	15	35	ARG
42	15	51	LEU
42	15	61	ILE
42	15	70	THR
42	15	73	VAL
42	15	75	LEU
42	15	84	PRO
42	15	93	THR
42	15	110	LEU
42	15	112	LYS
42	15	113	LEU
42	15	115	LEU
42	15	118	THR
42	15	120	LYS
42	15	135	VAL
42	15	140	ARG
42	15	144	VAL
42	15	146	LEU
42	15	148	ILE
42	15	152	ARG
42	15	155	THR
42	15	158	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	15	164	LYS
42	15	183	TRP
42	15	185	PHE
42	15	194	LEU
42	15	211	LEU
42	15	218	ARG
42	15	222	LEU
42	15	227	LEU
42	15	242	SER
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
43	16	2	SER
43	16	8	LYS
43	16	18	LEU
43	16	20	LYS
43	16	21	THR
43	16	46	ARG
43	16	50	LYS
43	16	52	VAL
43	16	64	LEU
43	16	65	ILE
43	16	76	LEU
43	16	78	ARG
43	16	79	VAL
43	16	87	THR
43	16	89	THR
43	16	91	VAL
43	16	92	SER
43	16	98	VAL
43	16	108	LYS
43	16	109	GLU
43	16	131	LYS
43	16	152	THR
43	16	155	LEU
44	17	22	THR
44	17	24	GLU
44	17	39	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
44	17	54	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	110	ARG
44	17	130	ILE
44	17	156	ILE
44	17	158	LYS
44	17	159	GLN
44	17	163	LEU
44	17	175	LYS
44	17	179	LEU
44	17	184	LEU
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	41	GLN
45	18	46	LEU
45	18	50	VAL
45	18	71	VAL
45	18	74	THR
45	18	79	GLN
45	18	81	THR
45	18	89	GLU
45	18	90	THR
45	18	94	PHE
45	18	136	LEU
45	18	146	LYS
45	18	149	LYS
45	18	150	LEU
45	18	157	VAL
45	18	160	ILE
45	18	163	VAL
45	18	164	VAL
45	18	169	LEU
45	18	183	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	18	191	ASN
45	18	200	LEU
45	18	211	LEU
45	18	213	LYS
45	18	214	LEU
45	18	222	PHE
45	18	224	ASP
45	18	230	LYS
45	18	245	LYS
45	18	248	LYS
46	19	1	MET
46	19	4	ILE
46	19	5	GLN
46	19	6	THR
46	19	18	VAL
46	19	19	SER
46	19	33	THR
46	19	44	THR
46	19	48	VAL
46	19	52	LEU
46	19	55	VAL
46	19	62	ARG
46	19	68	LEU
46	19	69	ARG
46	19	70	THR
46	19	80	THR
46	19	82	VAL
46	19	105	GLU
46	19	113	GLU
46	19	115	ARG
46	19	118	LEU
46	19	132	VAL
46	19	133	THR
46	19	138	THR
46	19	143	GLU
46	19	144	ILE
46	19	147	SER
46	19	151	VAL
46	19	152	GLU
46	19	157	ASN
46	19	161	LEU
46	19	162	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	l9	163	GLN
46	l9	166	ARG
46	l9	173	ARG
46	l9	177	ASP
46	l9	179	ILE
46	l9	191	LEU
47	m0	7	ARG
47	m0	24	ARG
47	m0	31	ILE
47	m0	36	LEU
47	m0	38	LYS
47	m0	39	LYS
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	71	CYS
47	m0	74	LYS
47	m0	76	MET
47	m0	80	SER
47	m0	87	LEU
47	m0	91	VAL
47	m0	99	ILE
47	m0	139	ARG
47	m0	145	LYS
47	m0	154	ARG
47	m0	163	GLN
47	m0	169	LYS
47	m0	176	LEU
47	m0	197	VAL
47	m0	206	LEU
47	m0	211	ARG
47	m0	212	GLU
47	m0	215	GLU
47	m0	217	PHE
48	m1	6	GLN
48	m1	10	ARG
48	m1	11	ASP
48	m1	12	LEU
48	m1	13	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	m1	22	SER
48	m1	29	ARG
48	m1	30	LEU
48	m1	31	THR
48	m1	34	SER
48	m1	37	LEU
48	m1	44	THR
48	m1	80	LEU
48	m1	92	ARG
48	m1	101	ASN
48	m1	106	ILE
48	m1	107	ASP
48	m1	112	LEU
48	m1	115	LYS
48	m1	129	VAL
48	m1	130	VAL
48	m1	137	ARG
48	m1	140	ARG
48	m1	142	LYS
48	m1	145	LYS
48	m1	153	LYS
48	m1	155	THR
48	m1	160	VAL
49	m3	54	LEU
49	m3	59	ARG
49	m3	67	ARG
49	m3	69	VAL
49	m3	73	ARG
49	m3	91	ARG
49	m3	100	ARG
49	m3	107	GLU
49	m3	118	GLU
49	m3	121	SER
49	m3	122	LYS
49	m3	123	ILE
49	m3	131	LYS
49	m3	149	GLN
49	m3	152	THR
49	m3	165	SER
49	m3	168	ARG
49	m3	171	ARG
49	m3	184	GLU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
49	m3	194	GLU
50	m4	3	THR
50	m4	4	ASP
50	m4	20	VAL
50	m4	27	GLN
50	m4	43	LYS
50	m4	53	VAL
50	m4	62	GLN
50	m4	63	VAL
50	m4	64	VAL
50	m4	72	LEU
50	m4	98	SER
50	m4	124	ARG
50	m4	128	ARG
50	m4	130	THR
50	m4	135	LEU
51	m5	15	GLN
51	m5	22	LEU
51	m5	24	ARG
51	m5	43	THR
51	m5	46	ASP
51	m5	61	ILE
51	m5	76	PRO
51	m5	80	THR
51	m5	92	LEU
51	m5	96	ARG
51	m5	104	GLU
51	m5	106	VAL
51	m5	117	ASN
51	m5	138	GLN
51	m5	153	ASP
51	m5	165	THR
51	m5	171	SER
51	m5	176	LYS
51	m5	182	ASN
51	m5	190	THR
51	m5	204	LYS
52	m6	41	LEU
52	m6	58	LEU
52	m6	67	THR
52	m6	68	ARG
52	m6	74	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
52	m6	78	ARG
52	m6	85	ARG
52	m6	106	GLU
52	m6	108	ILE
52	m6	110	PRO
52	m6	116	LYS
52	m6	117	ARG
52	m6	124	LEU
52	m6	128	ARG
52	m6	129	LEU
52	m6	134	LYS
52	m6	159	LYS
52	m6	160	ARG
52	m6	171	LYS
52	m6	175	THR
52	m6	182	ASN
52	m6	190	VAL
53	m7	3	ARG
53	m7	7	THR
53	m7	9	THR
53	m7	24	VAL
53	m7	32	THR
53	m7	41	LEU
53	m7	52	LEU
53	m7	53	ASP
53	m7	79	THR
53	m7	112	LEU
53	m7	118	GLN
53	m7	119	VAL
53	m7	127	ARG
53	m7	150	VAL
53	m7	155	GLU
54	m8	3	ILE
54	m8	7	SER
54	m8	12	ARG
54	m8	17	THR
54	m8	22	ASP
54	m8	26	LEU
54	m8	32	LEU
54	m8	34	THR
54	m8	49	LEU
54	m8	57	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	m8	69	ARG
54	m8	74	GLU
54	m8	80	THR
54	m8	81	VAL
54	m8	86	THR
54	m8	93	ILE
54	m8	113	LYS
54	m8	135	GLN
54	m8	138	LEU
54	m8	166	LEU
54	m8	170	ARG
55	m9	7	GLN
55	m9	9	ARG
55	m9	17	VAL
55	m9	20	ARG
55	m9	29	THR
55	m9	39	ASN
55	m9	43	LYS
55	m9	49	THR
55	m9	57	VAL
55	m9	70	LYS
55	m9	71	ARG
55	m9	74	ARG
55	m9	88	ARG
55	m9	92	GLN
55	m9	99	LEU
55	m9	106	LEU
55	m9	111	ASP
55	m9	117	LYS
55	m9	126	GLU
55	m9	127	SER
55	m9	128	LYS
55	m9	133	LYS
55	m9	134	HIS
55	m9	138	LEU
55	m9	148	ASP
55	m9	152	GLU
55	m9	153	LYS
55	m9	156	ASN
55	m9	164	LEU
55	m9	173	ARG
55	m9	180	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
56	n0	8	GLN
56	n0	13	ARG
56	n0	17	GLU
56	n0	21	GLU
56	n0	23	LYS
56	n0	40	ARG
56	n0	45	LEU
56	n0	50	LYS
56	n0	52	LYS
56	n0	80	ARG
56	n0	87	THR
56	n0	92	LYS
56	n0	97	VAL
56	n0	100	VAL
56	n0	105	THR
56	n0	107	TYR
56	n0	117	ARG
56	n0	120	SER
56	n0	130	GLU
56	n0	136	LYS
56	n0	137	ARG
56	n0	148	LEU
56	n0	149	LYS
56	n0	155	ARG
56	n0	159	SER
56	n0	160	THR
56	n0	162	THR
56	n0	167	ARG
56	n0	172	TYR
57	n1	9	SER
57	n1	12	ARG
57	n1	17	ARG
57	n1	26	HIS
57	n1	27	LEU
57	n1	52	MET
57	n1	60	LYS
57	n1	68	THR
57	n1	71	SER
57	n1	72	VAL
57	n1	78	LYS
57	n1	80	VAL
57	n1	83	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
57	n1	86	GLU
57	n1	88	ARG
57	n1	96	ILE
57	n1	102	ARG
57	n1	104	GLU
57	n1	118	GLU
57	n1	126	VAL
57	n1	127	GLN
57	n1	129	LYS
57	n1	131	GLN
57	n1	135	PRO
57	n1	139	ARG
57	n1	143	THR
57	n1	150	THR
57	n1	154	VAL
58	n2	27	VAL
58	n2	28	PHE
58	n2	37	LEU
58	n2	38	ILE
58	n2	43	VAL
58	n2	47	VAL
58	n2	50	LEU
58	n2	54	VAL
58	n2	62	VAL
58	n2	66	VAL
58	n2	68	THR
58	n2	74	LYS
58	n2	75	TYR
58	n2	94	ARG
59	n3	13	ILE
59	n3	40	LYS
59	n3	45	ARG
59	n3	48	ARG
59	n3	72	LYS
59	n3	74	MET
59	n3	91	VAL
59	n3	102	ILE
59	n3	112	SER
59	n3	115	THR
59	n3	120	LYS
60	n4	1	MET
60	n4	4	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
60	n4	19	THR
60	n4	25	ASP
60	n4	39	LEU
60	n4	47	ARG
60	n4	54	LEU
60	n4	57	LYS
60	n4	63	ILE
60	n4	77	LYS
60	n4	89	LEU
60	n4	96	LEU
60	n4	100	VAL
60	n4	107	GLU
60	n4	127	LYS
61	n5	24	LEU
61	n5	27	ARG
61	n5	37	THR
61	n5	45	LYS
61	n5	56	ARG
61	n5	57	LEU
61	n5	63	ILE
61	n5	71	THR
61	n5	73	MET
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	8	VAL
62	n6	11	ASP
62	n6	12	ARG
62	n6	13	ARG
62	n6	14	LYS
62	n6	32	SER
62	n6	37	LYS
62	n6	40	ARG
62	n6	45	ILE
62	n6	50	ILE
62	n6	57	LEU
62	n6	66	GLN
62	n6	74	TYR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	n6	83	ASP
62	n6	89	LYS
62	n6	111	LEU
62	n6	120	GLN
63	n7	3	LYS
63	n7	14	VAL
63	n7	17	ARG
63	n7	24	VAL
63	n7	26	VAL
63	n7	33	SER
63	n7	34	LYS
63	n7	35	SER
63	n7	36	HIS
63	n7	46	ILE
63	n7	72	ILE
63	n7	81	LEU
63	n7	94	SER
63	n7	95	VAL
63	n7	98	THR
63	n7	99	GLU
63	n7	100	THR
63	n7	102	GLU
63	n7	103	GLN
63	n7	111	LYS
63	n7	121	ARG
63	n7	128	GLN
64	n8	4	ARG
64	n8	6	THR
64	n8	7	LYS
64	n8	8	THR
64	n8	10	LYS
64	n8	15	VAL
64	n8	26	ARG
64	n8	27	LYS
64	n8	42	ARG
64	n8	46	ASP
64	n8	58	MET
64	n8	60	TYR
64	n8	78	LEU
64	n8	85	ASP
64	n8	91	LEU
64	n8	97	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
64	n8	98	THR
64	n8	120	ASN
64	n8	128	ARG
64	n8	133	LEU
64	n8	135	GLU
64	n8	139	ARG
65	n9	19	ASN
65	n9	21	ILE
65	n9	22	LYS
65	n9	26	THR
65	n9	33	LYS
65	n9	38	LYS
65	n9	58	LYS
65	n9	59	LYS
66	o0	8	GLU
66	o0	12	GLN
66	o0	19	LYS
66	o0	32	LYS
66	o0	33	SER
66	o0	41	LEU
66	o0	48	THR
66	o0	50	VAL
66	o0	55	GLU
66	o0	61	MET
66	o0	74	ASN
66	o0	76	GLU
66	o0	81	VAL
66	o0	86	ARG
66	o0	87	VAL
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	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	90	PHE
67	o1	100	SER
67	o1	102	LYS
67	o1	106	THR
68	o2	4	LEU
68	o2	5	PRO
68	o2	6	HIS
68	o2	9	ILE
68	o2	19	ARG
68	o2	24	ARG
68	o2	31	ASN
68	o2	33	ARG
68	o2	34	LYS
68	o2	35	GLN
68	o2	51	SER
68	o2	54	LYS
68	o2	61	LYS
68	o2	68	PRO
68	o2	71	HIS
68	o2	73	THR
68	o2	75	LEU
68	o2	82	LEU
68	o2	91	THR
68	o2	125	ARG
68	o2	126	LEU
69	o3	4	SER
69	o3	15	SER
69	o3	28	SER
69	o3	37	THR
69	o3	59	VAL
69	o3	60	ARG
69	o3	70	LYS
69	o3	74	THR
69	o3	92	LYS
69	o3	98	VAL
70	o4	20	ILE
70	o4	24	LYS
70	o4	35	VAL
70	o4	41	ARG
70	o4	46	ASP
70	o4	47	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
70	o4	58	ARG
70	o4	65	VAL
70	o4	66	SER
70	o4	71	THR
70	o4	83	ASN
70	o4	85	VAL
70	o4	98	GLN
70	o4	104	VAL
71	o5	11	THR
71	o5	20	GLN
71	o5	27	GLU
71	o5	28	LEU
71	o5	30	GLU
71	o5	47	VAL
71	o5	48	ARG
71	o5	62	GLN
71	o5	67	ARG
71	o5	68	GLN
71	o5	69	LEU
71	o5	79	ASP
71	o5	81	ARG
71	o5	85	THR
71	o5	86	ARG
71	o5	89	ARG
71	o5	100	VAL
71	o5	101	THR
72	o6	3	VAL
72	o6	7	ILE
72	o6	9	ILE
72	o6	12	ASN
72	o6	15	LYS
72	o6	19	SER
72	o6	21	THR
72	o6	26	ILE
72	o6	29	LYS
72	o6	34	SER
72	o6	35	ASN
72	o6	36	ARG
72	o6	42	SER
72	o6	43	LEU
72	o6	45	ARG
72	o6	57	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
72	o6	58	ILE
72	o6	59	ASP
72	o6	60	LEU
72	o6	68	ARG
72	o6	75	LYS
72	o6	76	ARG
72	o6	88	GLU
72	o6	90	MET
72	o6	94	ILE
72	o6	98	ARG
73	o7	3	LYS
73	o7	15	SER
73	o7	17	THR
73	o7	21	ARG
73	o7	25	ARG
73	o7	33	THR
73	o7	35	SER
73	o7	44	THR
73	o7	55	ARG
73	o7	67	LEU
73	o7	80	THR
74	o8	24	THR
74	o8	31	LEU
74	o8	41	THR
74	o8	53	THR
74	o8	55	VAL
74	o8	61	LYS
74	o8	64	LYS
74	o8	65	LEU
74	o8	78	LEU
75	o9	4	GLN
75	o9	15	LYS
75	o9	21	ARG
75	o9	45	ARG
76	q0	77	ILE
76	q0	78	ILE
76	q0	80	PRO
76	q0	85	LEU
76	q0	87	SER
76	q0	88	LYS
76	q0	91	CYS
76	q0	106	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
76	q0	112	LYS
76	q0	113	ARG
76	q0	114	LYS
76	q0	127	LEU
77	q1	2	ARG
77	q1	6	ARG
77	q1	9	ARG
77	q1	13	LEU
77	q1	18	ARG
77	q1	19	LYS
77	q1	21	ARG
77	q1	23	ARG
78	q2	7	THR
78	q2	8	ARG
78	q2	34	SER
78	q2	35	LEU
78	q2	48	SER
78	q2	61	LYS
78	q2	78	LYS
78	q2	83	LEU
78	q2	84	THR
78	q2	85	LEU
78	q2	89	LYS
78	q2	93	LEU
78	q2	100	LYS
78	q2	105	GLN
79	q3	4	ARG
79	q3	20	SER
79	q3	24	ARG
79	q3	41	PHE
79	q3	49	ARG
79	q3	54	ILE
79	q3	56	THR
79	q3	58	SER
79	q3	64	VAL
79	q3	73	THR
79	q3	79	VAL
81	p0	4	ILE
81	p0	5	ARG
81	p0	10	GLU
81	p0	30	VAL
81	p0	39	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
81	p0	48	ARG
81	p0	55	LYS
81	p0	67	LEU
81	p0	68	SER
81	p0	70	LEU
81	p0	72	ASP
81	p0	76	LEU
81	p0	93	LEU
81	p0	97	LYS
81	p0	103	ASN
81	p0	104	ARG

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (42) such sidechains are listed below:

Mol	Chain	Res	Type
2	S0	83	GLN
3	S1	183	GLN
4	S2	89	GLN
5	S3	162	GLN
10	S8	32	GLN
11	S9	110	GLN
18	C6	83	GLN
20	C8	89	GLN
20	C8	99	HIS
22	D0	121	ASN
23	D1	75	ASN
30	D8	51	ASN
39	L2	8	GLN
39	L2	216	HIS
40	L3	279	ASN
41	L4	304	GLN
42	L5	32	GLN
43	L6	102	ASN
46	L9	156	GLN
51	M5	138	GLN
55	M9	175	GLN
64	N8	28	HIS
65	N9	17	HIS
74	O8	32	ASN
3	s1	209	ASN
4	s2	228	ASN
11	s9	123	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
20	c8	89	GLN
21	c9	25	GLN
22	d0	16	GLN
24	d2	56	HIS
34	sR	148	ASN
39	l2	194	ASN
46	l9	8	GLN
51	m5	156	HIS
52	m6	72	HIS
53	m7	120	ASN
55	m9	36	ASN
58	n2	101	ASN
61	n5	55	ASN
75	o9	50	ASN
81	p0	37	GLN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	1777/1800 (98%)	461 (25%)	48 (2%)
1	6	1792/1800 (99%)	448 (25%)	45 (2%)
36	1	3145/3396 (92%)	658 (20%)	62 (1%)
36	5	3146/3396 (92%)	650 (20%)	68 (2%)
37	3	120/121 (99%)	13 (10%)	2 (1%)
37	7	120/121 (99%)	19 (15%)	1 (0%)
38	4	157/158 (99%)	37 (23%)	3 (1%)
38	8	157/158 (99%)	38 (24%)	1 (0%)
All	All	10414/10950 (95%)	2324 (22%)	230 (2%)

All (2324) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	2	2	A
1	2	4	C
1	2	25	C
1	2	26	A
1	2	27	U
1	2	34	G
1	2	39	A
1	2	45	U
1	2	47	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	57	G
1	2	60	U
1	2	66	U
1	2	67	A
1	2	68	A
1	2	69	G
1	2	72	A
1	2	73	U
1	2	74	U
1	2	75	U
1	2	76	A
1	2	104	A
1	2	114	C
1	2	127	G
1	2	131	C
1	2	132	U
1	2	133	U
1	2	134	U
1	2	135	A
1	2	136	C
1	2	137	U
1	2	140	A
1	2	141	U
1	2	144	U
1	2	145	A
1	2	146	U
1	2	153	G
1	2	158	U
1	2	159	U
1	2	169	A
1	2	178	U
1	2	179	A
1	2	185	U
1	2	186	C
1	2	187	G
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	197	A
1	2	198	A
1	2	200	A
1	2	207	U
1	2	215	A
1	2	217	A
1	2	218	A
1	2	219	A
1	2	226	A
1	2	227	U
1	2	228	G
1	2	229	U
1	2	231	U
1	2	233	C
1	2	234	G
1	2	235	G
1	2	238	U
1	2	239	C
1	2	240	U
1	2	241	U
1	2	242	U
1	2	250	C
1	2	257	A
1	2	260	U
1	2	261	U
1	2	265	A
1	2	266	A
1	2	271	A
1	2	272	U
1	2	274	G
1	2	275	C
1	2	276	C
1	2	277	U
1	2	278	U
1	2	279	G
1	2	280	U
1	2	281	G
1	2	288	A
1	2	290	G
1	2	299	A
1	2	302	U
1	2	308	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	2	314	C
1	2	316	A
1	2	320	U
1	2	321	C
1	2	322	G
1	2	333	A
1	2	337	G
1	2	338	C
1	2	351	C
1	2	352	A
1	2	359	A
1	2	360	A
1	2	361	C
1	2	368	U
1	2	387	A
1	2	390	G
1	2	393	C
1	2	397	A
1	2	400	A
1	2	402	C
1	2	403	G
1	2	404	G
1	2	416	A
1	2	418	G
1	2	419	G
1	2	423	G
1	2	424	C
1	2	425	A
1	2	426	G
1	2	428	A
1	2	434	G
1	2	437	A
1	2	439	U
1	2	440	U
1	2	444	C
1	2	448	C
1	2	458	G
1	2	475	A
1	2	477	A
1	2	484	C
1	2	485	A
1	2	486	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	488	G
1	2	493	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	513	U
1	2	514	G
1	2	515	A
1	2	516	G
1	2	527	A
1	2	528	U
1	2	532	U
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	548	G
1	2	554	C
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	578	U
1	2	579	A
1	2	580	A
1	2	581	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	582	U
1	2	594	A
1	2	595	G
1	2	609	U
1	2	611	U
1	2	619	A
1	2	620	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	654	C
1	2	655	G
1	2	656	G
1	2	658	C
1	2	677	G
1	2	682	C
1	2	684	A
1	2	685	A
1	2	686	C
1	2	692	C
1	2	694	U
1	2	696	C
1	2	697	C
1	2	698	U
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	711	U
1	2	712	G
1	2	713	A
1	2	714	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	717	C
1	2	718	U
1	2	719	U
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	731	C
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	745	U
1	2	754	A
1	2	755	A
1	2	756	A
1	2	759	U
1	2	765	G
1	2	766	U
1	2	774	A
1	2	775	G
1	2	777	C
1	2	781	U
1	2	783	G
1	2	784	C
1	2	787	G
1	2	789	A
1	2	793	A
1	2	794	U
1	2	795	U
1	2	803	A
1	2	812	A
1	2	813	U
1	2	814	A
1	2	815	G
1	2	816	G
1	2	818	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	819	G
1	2	820	U
1	2	821	U
1	2	823	G
1	2	824	G
1	2	830	U
1	2	831	U
1	2	833	U
1	2	846	G
1	2	850	A
1	2	856	A
1	2	863	A
1	2	864	U
1	2	876	G
1	2	886	U
1	2	896	U
1	2	898	A
1	2	912	U
1	2	914	G
1	2	916	U
1	2	921	U
1	2	926	A
1	2	931	C
1	2	933	A
1	2	935	U
1	2	942	G
1	2	951	A
1	2	960	U
1	2	966	A
1	2	988	A
1	2	992	A
1	2	993	A
1	2	997	G
1	2	998	A
1	2	1002	G
1	2	1003	A
1	2	1004	U
1	2	1005	A
1	2	1026	A
1	2	1028	C
1	2	1029	U
1	2	1031	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1039	A
1	2	1040	G
1	2	1052	U
1	2	1053	G
1	2	1058	U
1	2	1061	A
1	2	1073	G
1	2	1075	C
1	2	1079	U
1	2	1080	U
1	2	1082	C
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	1138	A
1	2	1146	G
1	2	1149	G
1	2	1150	G
1	2	1151	A
1	2	1157	A
1	2	1158	C
1	2	1160	A
1	2	1164	G
1	2	1167	G
1	2	1168	U
1	2	1176	G
1	2	1185	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	1203	A
1	2	1207	C
1	2	1217	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1218	G
1	2	1227	A
1	2	1228	G
1	2	1229	G
1	2	1241	G
1	2	1243	G
1	2	1244	A
1	2	1245	G
1	2	1251	U
1	2	1256	A
1	2	1257	U
1	2	1258	U
1	2	1271	G
1	2	1285	U
1	2	1286	U
1	2	1291	G
1	2	1301	U
1	2	1307	U
1	2	1314	U
1	2	1315	U
1	2	1320	U
1	2	1321	A
1	2	1337	A
1	2	1339	C
1	2	1340	U
1	2	1341	A
1	2	1344	A
1	2	1345	A
1	2	1346	A
1	2	1355	C
1	2	1361	U
1	2	1363	U
1	2	1370	U
1	2	1371	A
1	2	1372	U
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1427	A
1	2	1428	G
1	2	1431	C
1	2	1446	A
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	1489	U
1	2	1490	C
1	2	1491	U
1	2	1492	A
1	2	1493	A
1	2	1499	G
1	2	1514	U
1	2	1516	A
1	2	1517	U
1	2	1518	C
1	2	1521	G
1	2	1523	G
1	2	1524	A
1	2	1526	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	1601	G
1	2	1614	A
1	2	1616	G
1	2	1626	U
1	2	1631	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1657	U
1	2	1658	G
1	2	1680	G
1	2	1683	C
1	2	1684	U
1	2	1686	C
1	2	1697	G
1	2	1698	G
1	2	1699	G
1	2	1700	C
1	2	1701	A
1	2	1702	A
1	2	1703	C
1	2	1704	U
1	2	1711	C
1	2	1712	A
1	2	1713	G
1	2	1715	G
1	2	1731	A
1	2	1760	G
1	2	1762	A
1	2	1766	A
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	44	U
36	1	45	A
36	1	49	A
36	1	59	G
36	1	60	A
36	1	65	A
36	1	66	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	75	G
36	1	83	U
36	1	92	G
36	1	99	A
36	1	109	A
36	1	110	G
36	1	111	C
36	1	116	A
36	1	121	A
36	1	122	A
36	1	128	G
36	1	133	U
36	1	135	C
36	1	136	G
36	1	147	U
36	1	156	G
36	1	157	A
36	1	161	G
36	1	165	A
36	1	166	C
36	1	187	A
36	1	190	U
36	1	191	U
36	1	200	C
36	1	210	U
36	1	218	G
36	1	219	A
36	1	220	G
36	1	224	C
36	1	237	G
36	1	240	U
36	1	243	G
36	1	245	U
36	1	246	U
36	1	247	C
36	1	249	U
36	1	250	U
36	1	252	U
36	1	256	G
36	1	269	G
36	1	283	G
36	1	286	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	288	C
36	1	295	A
36	1	298	U
36	1	299	G
36	1	315	C
36	1	323	A
36	1	329	U
36	1	339	C
36	1	349	A
36	1	350	C
36	1	370	U
36	1	376	G
36	1	398	A
36	1	399	A
36	1	401	U
36	1	402	A
36	1	403	C
36	1	421	G
36	1	422	A
36	1	438	A
36	1	440	A
36	1	495	G
36	1	498	A
36	1	507	U
36	1	520	U
36	1	521	A
36	1	527	A
36	1	535	G
36	1	536	U
36	1	543	C
36	1	544	C
36	1	546	C
36	1	547	G
36	1	548	G
36	1	549	U
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	558	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	559	A
36	1	578	A
36	1	579	G
36	1	592	A
36	1	593	C
36	1	600	G
36	1	603	A
36	1	604	G
36	1	609	G
36	1	611	A
36	1	620	U
36	1	621	A
36	1	622	A
36	1	636	C
36	1	649	A
36	1	651	G
36	1	658	G
36	1	660	A
36	1	667	C
36	1	677	A
36	1	681	U
36	1	691	A
36	1	705	A
36	1	712	G
36	1	715	A
36	1	716	A
36	1	718	G
36	1	725	G
36	1	763	G
36	1	764	U
36	1	765	C
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	787	G
36	1	806	A
36	1	816	A
36	1	817	A
36	1	826	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	828	A
36	1	830	A
36	1	837	A
36	1	849	C
36	1	861	C
36	1	866	A
36	1	871	U
36	1	874	U
36	1	876	A
36	1	879	U
36	1	890	C
36	1	896	A
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	925	A
36	1	936	A
36	1	937	G
36	1	938	C
36	1	943	U
36	1	944	C
36	1	959	C
36	1	960	U
36	1	963	G
36	1	979	U
36	1	980	A
36	1	981	U
36	1	982	C
36	1	994	G
36	1	1001	G
36	1	1002	A
36	1	1006	A
36	1	1010	G
36	1	1013	G
36	1	1017	C
36	1	1018	G
36	1	1020	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1024	G
36	1	1025	A
36	1	1029	G
36	1	1034	U
36	1	1036	A
36	1	1037	C
36	1	1047	A
36	1	1049	C
36	1	1063	G
36	1	1064	A
36	1	1065	A
36	1	1068	C
36	1	1071	U
36	1	1072	G
36	1	1081	U
36	1	1083	G
36	1	1087	G
36	1	1093	A
36	1	1094	U
36	1	1095	U
36	1	1096	U
36	1	1097	G
36	1	1098	A
36	1	1103	A
36	1	1104	G
36	1	1117	G
36	1	1131	G
36	1	1138	U
36	1	1153	A
36	1	1159	A
36	1	1160	C
36	1	1168	U
36	1	1178	G
36	1	1179	A
36	1	1180	A
36	1	1181	U
36	1	1182	A
36	1	1191	U
36	1	1192	C
36	1	1201	C
36	1	1202	A
36	1	1209	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1216	C
36	1	1217	A
36	1	1221	A
36	1	1222	G
36	1	1225	A
36	1	1226	G
36	1	1227	C
36	1	1232	C
36	1	1233	G
36	1	1235	U
36	1	1236	G
36	1	1237	G
36	1	1241	U
36	1	1243	G
36	1	1245	A
36	1	1246	G
36	1	1248	C
36	1	1249	G
36	1	1254	C
36	1	1258	U
36	1	1262	G
36	1	1263	A
36	1	1264	G
36	1	1265	U
36	1	1266	G
36	1	1269	U
36	1	1270	A
36	1	1271	A
36	1	1274	A
36	1	1277	C
36	1	1278	A
36	1	1279	C
36	1	1280	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	1329	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1330	A
36	1	1331	U
36	1	1348	U
36	1	1349	G
36	1	1350	A
36	1	1351	U
36	1	1352	A
36	1	1353	U
36	1	1355	A
36	1	1356	U
36	1	1357	G
36	1	1379	G
36	1	1386	A
36	1	1399	A
36	1	1400	G
36	1	1417	G
36	1	1419	A
36	1	1421	G
36	1	1425	U
36	1	1429	G
36	1	1434	G
36	1	1437	C
36	1	1446	A
36	1	1450	G
36	1	1452	A
36	1	1455	U
36	1	1465	A
36	1	1481	A
36	1	1482	A
36	1	1485	G
36	1	1488	G
36	1	1491	A
36	1	1495	U
36	1	1496	C
36	1	1508	C
36	1	1527	C
36	1	1533	U
36	1	1555	U
36	1	1556	C
36	1	1557	A
36	1	1560	G
36	1	1561	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1562	C
36	1	1563	C
36	1	1564	U
36	1	1566	A
36	1	1567	U
36	1	1568	U
36	1	1569	U
36	1	1570	U
36	1	1571	A
36	1	1576	G
36	1	1580	A
36	1	1583	A
36	1	1587	A
36	1	1589	A
36	1	1607	U
36	1	1620	U
36	1	1629	U
36	1	1633	C
36	1	1639	C
36	1	1641	U
36	1	1642	A
36	1	1643	A
36	1	1645	U
36	1	1657	C
36	1	1673	G
36	1	1683	A
36	1	1705	U
36	1	1716	U
36	1	1717	U
36	1	1724	U
36	1	1729	A
36	1	1736	G
36	1	1741	A
36	1	1742	U
36	1	1745	C
36	1	1749	A
36	1	1750	A
36	1	1751	G
36	1	1752	A
36	1	1761	C
36	1	1762	C
36	1	1763	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1765	U
36	1	1766	G
36	1	1769	G
36	1	1770	G
36	1	1775	G
36	1	1780	G
36	1	1797	A
36	1	1810	A
36	1	1814	A
36	1	1815	U
36	1	1816	A
36	1	1817	G
36	1	1819	U
36	1	1820	U
36	1	1821	U
36	1	1822	C
36	1	1835	A
36	1	1839	A
36	1	1841	A
36	1	1842	A
36	1	1846	C
36	1	1849	C
36	1	1866	C
36	1	1879	A
36	1	1880	U
36	1	1886	A
36	1	1901	A
36	1	1906	G
36	1	1912	U
36	1	1917	C
36	1	1935	G
36	1	1948	G
36	1	1951	C
36	1	1952	G
36	1	1954	G
36	1	2094	C
36	1	2098	C
36	1	2100	A
36	1	2101	C
36	1	2102	U
36	1	2112	U
36	1	2113	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2114	C
36	1	2121	G
36	1	2122	G
36	1	2131	A
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	2185	G
36	1	2188	A
36	1	2205	U
36	1	2208	A
36	1	2210	G
36	1	2213	A
36	1	2222	A
36	1	2223	A
36	1	2239	G
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	2301	U
36	1	2307	G
36	1	2309	A
36	1	2310	U
36	1	2313	A
36	1	2314	U
36	1	2315	G
36	1	2334	U
36	1	2335	G
36	1	2336	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2360	C
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	2394	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	2444	C
36	1	2445	A
36	1	2502	A
36	1	2503	G
36	1	2507	C
36	1	2514	U
36	1	2515	A
36	1	2521	U
36	1	2522	G
36	1	2523	A
36	1	2526	C
36	1	2532	U
36	1	2533	G
36	1	2534	G
36	1	2537	U
36	1	2538	U
36	1	2539	C
36	1	2540	A
36	1	2541	U
36	1	2542	U
36	1	2543	U
36	1	2547	A
36	1	2548	C
36	1	2549	G
36	1	2551	U
36	1	2552	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2554	A
36	1	2555	G
36	1	2560	C
36	1	2561	A
36	1	2568	C
36	1	2569	A
36	1	2570	U
36	1	2571	U
36	1	2572	C
36	1	2573	G
36	1	2581	U
36	1	2585	G
36	1	2586	G
36	1	2593	A
36	1	2594	C
36	1	2606	G
36	1	2607	G
36	1	2614	G
36	1	2629	U
36	1	2636	A
36	1	2637	A
36	1	2638	C
36	1	2652	U
36	1	2653	C
36	1	2656	A
36	1	2672	G
36	1	2674	A
36	1	2677	G
36	1	2689	A
36	1	2691	A
36	1	2694	A
36	1	2695	A
36	1	2696	A
36	1	2705	A
36	1	2706	G
36	1	2707	C
36	1	2712	U
36	1	2714	G
36	1	2728	G
36	1	2737	C
36	1	2749	G
36	1	2752	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2753	G
36	1	2754	G
36	1	2755	C
36	1	2762	A
36	1	2772	C
36	1	2777	G
36	1	2778	G
36	1	2796	G
36	1	2799	A
36	1	2800	G
36	1	2801	A
36	1	2810	C
36	1	2814	G
36	1	2817	A
36	1	2829	U
36	1	2836	C
36	1	2837	A
36	1	2842	U
36	1	2843	U
36	1	2845	A
36	1	2849	C
36	1	2854	U
36	1	2860	U
36	1	2870	C
36	1	2871	G
36	1	2872	A
36	1	2887	A
36	1	2889	C
36	1	2898	G
36	1	2899	C
36	1	2900	A
36	1	2914	G
36	1	2917	G
36	1	2923	U
36	1	2935	U
36	1	2936	A
36	1	2937	G
36	1	2939	G
36	1	2942	C
36	1	2943	G
36	1	2947	G
36	1	2983	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	2990	G
36	1	2992	U
36	1	2996	U
36	1	2997	G
36	1	3012	A
36	1	3025	C
36	1	3030	G
36	1	3044	G
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	3086	A
36	1	3090	U
36	1	3091	A
36	1	3092	C
36	1	3103	A
36	1	3104	U
36	1	3113	A
36	1	3114	A
36	1	3122	A
36	1	3129	A
36	1	3130	A
36	1	3131	U
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	3158	G
36	1	3164	C
36	1	3165	A
36	1	3169	U
36	1	3170	A
36	1	3171	U
36	1	3173	G
36	1	3174	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	3176	G
36	1	3179	U
36	1	3181	C
36	1	3187	A
36	1	3196	U
36	1	3197	G
36	1	3199	G
36	1	3207	U
36	1	3210	A
36	1	3217	C
36	1	3218	A
36	1	3219	G
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
36	1	3259	U
36	1	3270	U
36	1	3272	C
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	3314	A
36	1	3316	A
36	1	3318	G
36	1	3319	U
36	1	3320	A
36	1	3335	A
36	1	3341	U
36	1	3345	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	1	3346	U
36	1	3347	A
36	1	3349	C
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	3368	U
36	1	3369	G
36	1	3375	A
36	1	3376	A
36	1	3378	C
36	1	3382	U
36	1	3383	G
36	1	3389	U
36	1	3396	U
37	3	7	G
37	3	10	C
37	3	13	A
37	3	14	U
37	3	22	A
37	3	41	G
37	3	54	U
37	3	65	G
37	3	76	A
37	3	91	G
37	3	102	A
37	3	112	G
37	3	121	U
38	4	21	C
38	4	26	U
38	4	34	U
38	4	35	C
38	4	48	A
38	4	50	C
38	4	51	G
38	4	52	A
38	4	57	C
38	4	59	A
38	4	60	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	4	62	C
38	4	63	G
38	4	69	U
38	4	70	G
38	4	75	G
38	4	80	A
38	4	81	U
38	4	82	U
38	4	85	G
38	4	86	U
38	4	87	G
38	4	90	U
38	4	95	G
38	4	96	A
38	4	104	A
38	4	105	A
38	4	106	C
38	4	111	A
38	4	113	U
38	4	125	U
38	4	126	A
38	4	128	U
38	4	138	A
38	4	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	47	A
1	6	50	C
1	6	57	G
1	6	60	U
1	6	61	A
1	6	66	U
1	6	67	A
1	6	68	A
1	6	69	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	71	A
1	6	72	A
1	6	73	U
1	6	75	U
1	6	76	A
1	6	77	U
1	6	104	A
1	6	114	C
1	6	115	G
1	6	132	U
1	6	137	U
1	6	138	A
1	6	140	A
1	6	141	U
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	161	U
1	6	166	C
1	6	170	U
1	6	178	U
1	6	185	U
1	6	188	A
1	6	190	C
1	6	191	C
1	6	192	U
1	6	193	U
1	6	194	U
1	6	195	G
1	6	196	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	226	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	227	U
1	6	228	G
1	6	230	C
1	6	232	U
1	6	233	C
1	6	235	G
1	6	240	U
1	6	241	U
1	6	249	U
1	6	250	C
1	6	260	U
1	6	261	U
1	6	265	A
1	6	266	A
1	6	271	A
1	6	272	U
1	6	273	G
1	6	277	U
1	6	278	U
1	6	280	U
1	6	287	G
1	6	299	A
1	6	302	U
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	352	A
1	6	359	A
1	6	360	A
1	6	361	C
1	6	371	G
1	6	400	A
1	6	401	A
1	6	402	C
1	6	404	G
1	6	416	A
1	6	417	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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
1	6	448	C
1	6	454	U
1	6	468	A
1	6	469	C
1	6	475	A
1	6	477	A
1	6	484	C
1	6	485	A
1	6	486	G
1	6	487	G
1	6	488	G
1	6	489	C
1	6	490	C
1	6	492	A
1	6	493	U
1	6	494	U
1	6	496	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	534	A
1	6	536	C
1	6	538	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	539	G
1	6	540	G
1	6	541	A
1	6	542	A
1	6	543	C
1	6	544	A
1	6	548	G
1	6	555	A
1	6	556	A
1	6	557	G
1	6	558	U
1	6	559	C
1	6	564	G
1	6	565	C
1	6	570	A
1	6	574	G
1	6	578	U
1	6	579	A
1	6	580	A
1	6	594	A
1	6	595	G
1	6	609	U
1	6	611	U
1	6	616	G
1	6	617	U
1	6	619	A
1	6	620	A
1	6	622	A
1	6	623	A
1	6	624	G
1	6	630	A
1	6	634	G
1	6	639	U
1	6	645	C
1	6	648	G
1	6	650	U
1	6	652	G
1	6	653	C
1	6	654	C
1	6	661	A
1	6	662	U
1	6	665	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	667	U
1	6	668	C
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	696	C
1	6	697	C
1	6	698	U
1	6	709	C
1	6	710	U
1	6	711	U
1	6	714	G
1	6	715	U
1	6	718	U
1	6	719	U
1	6	720	G
1	6	721	U
1	6	722	G
1	6	730	G
1	6	742	U
1	6	744	U
1	6	751	G
1	6	754	A
1	6	755	A
1	6	756	A
1	6	765	G
1	6	767	U
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	789	A
1	6	792	U
1	6	793	A
1	6	794	U
1	6	811	A
1	6	812	A
1	6	814	A
1	6	815	G
1	6	816	G
1	6	821	U
1	6	822	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	873	U
1	6	876	G
1	6	898	A
1	6	906	A
1	6	910	C
1	6	912	U
1	6	913	G
1	6	914	G
1	6	916	U
1	6	933	A
1	6	935	U
1	6	942	G
1	6	944	A
1	6	959	U
1	6	960	U
1	6	969	C
1	6	970	A
1	6	971	A
1	6	992	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	6	993	A
1	6	997	G
1	6	1003	A
1	6	1004	U
1	6	1005	A
1	6	1018	U
1	6	1026	A
1	6	1028	C
1	6	1031	U
1	6	1039	A
1	6	1040	G
1	6	1052	U
1	6	1053	G
1	6	1057	U
1	6	1058	U
1	6	1059	U
1	6	1060	U
1	6	1063	U
1	6	1073	G
1	6	1082	C
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	1109	G
1	6	1111	G
1	6	1137	A
1	6	1138	A
1	6	1139	A
1	6	1151	A
1	6	1155	G
1	6	1158	C
1	6	1159	C
1	6	1160	A
1	6	1162	C
1	6	1167	G
1	6	1185	U
1	6	1194	A
1	6	1196	A
1	6	1199	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1200	G
1	6	1202	A
1	6	1207	C
1	6	1208	A
1	6	1217	A
1	6	1218	G
1	6	1219	A
1	6	1226	A
1	6	1227	A
1	6	1228	G
1	6	1229	G
1	6	1230	A
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	1252	C
1	6	1255	G
1	6	1256	A
1	6	1257	U
1	6	1258	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	1344	A
1	6	1345	A
1	6	1346	A
1	6	1354	G
1	6	1361	U
1	6	1362	U
1	6	1363	U
1	6	1364	G
1	6	1367	G
1	6	1370	U
1	6	1371	A
1	6	1383	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
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	1458	G
1	6	1459	C
1	6	1460	A
1	6	1461	C
1	6	1471	A
1	6	1473	U
1	6	1481	C
1	6	1482	C
1	6	1486	G
1	6	1489	U
1	6	1490	C
1	6	1491	U
1	6	1492	A
1	6	1493	A
1	6	1494	C
1	6	1496	U
1	6	1506	G
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	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	1557	U
1	6	1559	A
1	6	1569	A
1	6	1573	A
1	6	1574	G
1	6	1575	G
1	6	1582	U
1	6	1584	G
1	6	1600	A
1	6	1601	G
1	6	1615	C
1	6	1616	G
1	6	1621	U
1	6	1634	C
1	6	1637	C
1	6	1638	G
1	6	1639	C
1	6	1657	U
1	6	1658	G
1	6	1666	U
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	1712	A
1	6	1713	G
1	6	1715	G
1	6	1716	C
1	6	1717	G
1	6	1727	G
1	6	1730	A
1	6	1731	A
1	6	1735	U
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	1780	G
1	6	1782	A
1	6	1783	C
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	39	A
36	5	40	A
36	5	44	U
36	5	49	A
36	5	59	G
36	5	60	A
36	5	65	A
36	5	66	A
36	5	73	C
36	5	75	G
36	5	76	G
36	5	83	U
36	5	92	G
36	5	93	C
36	5	96	G
36	5	99	A
36	5	109	A
36	5	110	G
36	5	111	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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	150	A
36	5	152	U
36	5	156	G
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	173	G
36	5	174	C
36	5	180	C
36	5	182	U
36	5	183	G
36	5	184	U
36	5	187	A
36	5	190	U
36	5	191	U
36	5	210	U
36	5	218	G
36	5	219	A
36	5	221	A
36	5	231	G
36	5	234	G
36	5	237	G
36	5	238	A
36	5	239	G
36	5	240	U
36	5	244	G
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	269	G
36	5	284	A
36	5	286	U
36	5	295	A
36	5	299	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	316	U
36	5	323	A
36	5	329	U
36	5	339	C
36	5	349	A
36	5	350	C
36	5	351	A
36	5	352	A
36	5	370	U
36	5	376	G
36	5	397	A
36	5	398	A
36	5	399	A
36	5	401	U
36	5	402	A
36	5	403	C
36	5	420	G
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	440	A
36	5	441	U
36	5	442	G
36	5	492	U
36	5	495	G
36	5	515	C
36	5	521	A
36	5	535	G
36	5	539	C
36	5	546	C
36	5	547	G
36	5	548	G
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	594	U
36	5	600	G
36	5	603	A
36	5	604	G
36	5	609	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	651	G
36	5	660	A
36	5	677	A
36	5	681	U
36	5	683	U
36	5	691	A
36	5	692	A
36	5	705	A
36	5	708	G
36	5	712	G
36	5	715	A
36	5	716	A
36	5	722	G
36	5	725	G
36	5	727	G
36	5	735	A
36	5	736	A
36	5	758	C
36	5	763	G
36	5	766	U
36	5	767	U
36	5	768	C
36	5	776	U
36	5	777	U
36	5	781	G
36	5	785	G
36	5	786	A
36	5	806	A
36	5	816	A
36	5	817	A
36	5	830	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	5	837	A
36	5	851	C
36	5	853	G
36	5	861	C
36	5	874	U
36	5	877	C
36	5	879	U
36	5	895	A
36	5	896	A
36	5	907	G
36	5	908	G
36	5	910	G
36	5	913	A
36	5	914	A
36	5	916	G
36	5	917	A
36	5	921	A
36	5	923	C
36	5	937	G
36	5	944	C
36	5	953	G
36	5	959	C
36	5	960	U
36	5	962	A
36	5	963	G
36	5	974	G
36	5	979	U
36	5	984	G
36	5	993	G
36	5	994	G
36	5	1000	C
36	5	1001	G
36	5	1002	A
36	5	1006	A
36	5	1010	G
36	5	1015	U
36	5	1016	C
36	5	1017	C
36	5	1018	G
36	5	1019	G
36	5	1021	G
36	5	1024	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1025	A
36	5	1026	A
36	5	1027	A
36	5	1028	U
36	5	1029	G
36	5	1032	C
36	5	1035	G
36	5	1047	A
36	5	1049	C
36	5	1064	A
36	5	1065	A
36	5	1071	U
36	5	1072	G
36	5	1081	U
36	5	1082	U
36	5	1085	A
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	1144	U
36	5	1152	G
36	5	1153	A
36	5	1156	C
36	5	1159	A
36	5	1173	U
36	5	1180	A
36	5	1181	U
36	5	1182	A
36	5	1190	A
36	5	1191	U
36	5	1192	C
36	5	1193	A
36	5	1201	C
36	5	1202	A
36	5	1209	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1222	G
36	5	1223	A
36	5	1232	C
36	5	1235	U
36	5	1236	G
36	5	1237	G
36	5	1238	C
36	5	1239	C
36	5	1241	U
36	5	1242	G
36	5	1245	A
36	5	1246	G
36	5	1252	A
36	5	1254	C
36	5	1258	U
36	5	1262	G
36	5	1263	A
36	5	1264	G
36	5	1266	G
36	5	1281	G
36	5	1285	G
36	5	1295	G
36	5	1307	G
36	5	1308	A
36	5	1309	U
36	5	1311	G
36	5	1313	G
36	5	1330	A
36	5	1349	G
36	5	1351	U
36	5	1352	A
36	5	1353	U
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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1428	A
36	5	1431	G
36	5	1434	G
36	5	1437	C
36	5	1446	A
36	5	1450	G
36	5	1480	G
36	5	1481	A
36	5	1482	A
36	5	1502	C
36	5	1503	A
36	5	1508	C
36	5	1514	G
36	5	1515	A
36	5	1519	G
36	5	1536	G
36	5	1549	U
36	5	1554	U
36	5	1555	U
36	5	1556	C
36	5	1557	A
36	5	1560	G
36	5	1561	G
36	5	1562	C
36	5	1566	A
36	5	1567	U
36	5	1569	U
36	5	1570	U
36	5	1571	A
36	5	1572	U
36	5	1574	C
36	5	1575	A
36	5	1576	G
36	5	1577	G
36	5	1578	C
36	5	1579	C
36	5	1581	C
36	5	1583	A
36	5	1587	A
36	5	1589	A
36	5	1593	A
36	5	1605	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1607	U
36	5	1620	U
36	5	1629	U
36	5	1639	C
36	5	1643	A
36	5	1644	C
36	5	1645	U
36	5	1683	A
36	5	1685	C
36	5	1686	U
36	5	1716	U
36	5	1717	U
36	5	1724	U
36	5	1736	G
36	5	1750	A
36	5	1751	G
36	5	1760	A
36	5	1762	C
36	5	1764	U
36	5	1765	U
36	5	1766	G
36	5	1770	G
36	5	1780	G
36	5	1793	C
36	5	1797	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	1849	C
36	5	1850	A
36	5	1878	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	1879	A
36	5	1880	U
36	5	1893	A
36	5	1895	A
36	5	1906	G
36	5	1935	G
36	5	1952	G
36	5	1953	G
36	5	2101	C
36	5	2102	U
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	2187	G
36	5	2188	A
36	5	2192	C
36	5	2205	U
36	5	2208	A
36	5	2210	G
36	5	2215	A
36	5	2223	A
36	5	2228	A
36	5	2244	A
36	5	2250	G
36	5	2252	A
36	5	2253	G
36	5	2255	A
36	5	2256	A
36	5	2258	U
36	5	2272	G
36	5	2273	G
36	5	2279	A
36	5	2281	A
36	5	2288	G
36	5	2299	A
36	5	2307	G
36	5	2310	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2313	A
36	5	2315	G
36	5	2334	U
36	5	2335	G
36	5	2336	U
36	5	2360	C
36	5	2372	A
36	5	2373	A
36	5	2374	C
36	5	2375	G
36	5	2385	G
36	5	2392	C
36	5	2393	G
36	5	2396	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	2419	A
36	5	2435	G
36	5	2436	U
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	2508	U
36	5	2510	U
36	5	2511	A
36	5	2514	U
36	5	2515	A
36	5	2518	C
36	5	2523	A
36	5	2524	A
36	5	2525	G
36	5	2526	C
36	5	2530	G
36	5	2531	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2532	U
36	5	2537	U
36	5	2538	U
36	5	2539	C
36	5	2540	A
36	5	2541	U
36	5	2543	U
36	5	2549	G
36	5	2552	C
36	5	2555	G
36	5	2562	A
36	5	2565	U
36	5	2566	C
36	5	2567	C
36	5	2568	C
36	5	2569	A
36	5	2570	U
36	5	2571	U
36	5	2572	C
36	5	2573	G
36	5	2574	G
36	5	2584	G
36	5	2585	G
36	5	2589	G
36	5	2593	A
36	5	2594	C
36	5	2606	G
36	5	2607	G
36	5	2614	G
36	5	2618	G
36	5	2639	G
36	5	2652	U
36	5	2656	A
36	5	2667	A
36	5	2674	A
36	5	2675	C
36	5	2677	G
36	5	2678	A
36	5	2681	U
36	5	2683	U
36	5	2689	A
36	5	2690	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2694	A
36	5	2696	A
36	5	2707	C
36	5	2714	G
36	5	2719	U
36	5	2720	G
36	5	2727	A
36	5	2728	G
36	5	2729	U
36	5	2734	A
36	5	2752	U
36	5	2753	G
36	5	2762	A
36	5	2771	U
36	5	2772	C
36	5	2773	C
36	5	2777	G
36	5	2778	G
36	5	2779	A
36	5	2796	G
36	5	2799	A
36	5	2800	G
36	5	2801	A
36	5	2802	A
36	5	2810	C
36	5	2814	G
36	5	2817	A
36	5	2818	U
36	5	2828	G
36	5	2837	A
36	5	2838	A
36	5	2839	G
36	5	2843	U
36	5	2845	A
36	5	2847	A
36	5	2853	A
36	5	2855	U
36	5	2866	U
36	5	2870	C
36	5	2871	G
36	5	2872	A
36	5	2873	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2874	G
36	5	2875	U
36	5	2876	C
36	5	2886	U
36	5	2887	A
36	5	2896	A
36	5	2899	C
36	5	2904	U
36	5	2918	G
36	5	2923	U
36	5	2935	U
36	5	2936	A
36	5	2942	C
36	5	2947	G
36	5	2956	A
36	5	2971	A
36	5	2972	G
36	5	2983	C
36	5	2990	G
36	5	2996	U
36	5	2997	G
36	5	3012	A
36	5	3029	A
36	5	3030	G
36	5	3049	A
36	5	3056	U
36	5	3059	G
36	5	3069	G
36	5	3078	U
36	5	3079	U
36	5	3084	C
36	5	3086	A
36	5	3092	C
36	5	3119	U
36	5	3122	A
36	5	3127	A
36	5	3130	A
36	5	3131	U
36	5	3139	A
36	5	3142	A
36	5	3143	C
36	5	3150	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	3153	U
36	5	3154	C
36	5	3155	U
36	5	3156	U
36	5	3157	U
36	5	3158	G
36	5	3164	C
36	5	3165	A
36	5	3167	A
36	5	3168	A
36	5	3171	U
36	5	3172	A
36	5	3173	G
36	5	3174	A
36	5	3176	G
36	5	3179	U
36	5	3180	A
36	5	3181	C
36	5	3187	A
36	5	3195	U
36	5	3196	U
36	5	3207	U
36	5	3209	A
36	5	3214	U
36	5	3217	C
36	5	3218	A
36	5	3219	G
36	5	3227	A
36	5	3229	G
36	5	3239	G
36	5	3243	A
36	5	3245	A
36	5	3246	G
36	5	3247	G
36	5	3249	C
36	5	3253	G
36	5	3259	U
36	5	3265	C
36	5	3270	U
36	5	3273	A
36	5	3275	U
36	5	3276	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	3277	U
36	5	3279	A
36	5	3281	U
36	5	3282	U
36	5	3284	G
36	5	3285	C
36	5	3286	G
36	5	3288	G
36	5	3289	G
36	5	3290	G
36	5	3294	A
36	5	3304	U
36	5	3313	U
36	5	3316	A
36	5	3317	U
36	5	3319	U
36	5	3320	A
36	5	3341	U
36	5	3342	A
36	5	3345	G
36	5	3351	U
36	5	3353	G
36	5	3354	U
36	5	3356	G
36	5	3358	U
36	5	3368	U
36	5	3369	G
36	5	3378	C
36	5	3383	G
36	5	3389	U
36	5	3390	G
36	5	3396	U
37	7	7	G
37	7	19	C
37	7	22	A
37	7	42	A
37	7	45	A
37	7	49	G
37	7	51	A
37	7	54	U
37	7	60	G
37	7	65	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	7	73	C
37	7	74	C
37	7	93	C
37	7	99	G
37	7	101	G
37	7	102	A
37	7	103	A
37	7	104	A
37	7	112	G
38	8	21	C
38	8	34	U
38	8	35	C
38	8	48	A
38	8	49	G
38	8	51	G
38	8	52	A
38	8	59	A
38	8	62	C
38	8	63	G
38	8	71	A
38	8	79	A
38	8	80	A
38	8	81	U
38	8	84	C
38	8	86	U
38	8	87	G
38	8	88	A
38	8	90	U
38	8	95	G
38	8	97	A
38	8	102	U
38	8	104	A
38	8	105	A
38	8	106	C
38	8	111	A
38	8	112	U
38	8	113	U
38	8	116	G
38	8	125	U
38	8	126	A
38	8	127	U
38	8	138	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	8	152	G
38	8	155	A
38	8	156	U
38	8	157	U
38	8	158	U

All (230) 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	114	C
1	2	130	C
1	2	131	C
1	2	139	C
1	2	158	U
1	2	218	A
1	2	240	U
1	2	277	U
1	2	278	U
1	2	280	U
1	2	417	A
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	685	A
1	2	704	C
1	2	720	G
1	2	721	U
1	2	755	A
1	2	794	U
1	2	811	A
1	2	1081	A
1	2	1150	G
1	2	1157	A
1	2	1196	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	2	1226	A
1	2	1244	A
1	2	1250	U
1	2	1344	A
1	2	1370	U
1	2	1481	C
1	2	1489	U
1	2	1490	C
1	2	1568	C
1	2	1573	A
1	2	1615	C
1	2	1657	U
1	2	1698	G
1	2	1711	C
1	2	1761	U
36	1	65	A
36	1	210	U
36	1	223	U
36	1	239	G
36	1	282	G
36	1	547	G
36	1	588	G
36	1	594	U
36	1	715	A
36	1	763	G
36	1	873	C
36	1	896	A
36	1	916	G
36	1	979	U
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	1317	A
36	1	1329	U
36	1	1352	A
36	1	1355	A
36	1	1481	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	1	1484	U
36	1	1554	U
36	1	1562	C
36	1	1582	C
36	1	1589	A
36	1	1716	U
36	1	1815	U
36	1	1820	U
36	1	1842	A
36	1	2101	C
36	1	2112	U
36	1	2209	U
36	1	2249	G
36	1	2281	A
36	1	2297	U
36	1	2372	A
36	1	2513	U
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	3078	U
36	1	3121	U
36	1	3157	U
36	1	3169	U
36	1	3218	A
36	1	3228	C
36	1	3269	U
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
38	4	85	G
38	4	111	A
38	4	125	U
1	6	25	C
1	6	66	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	6	76	A
1	6	114	C
1	6	136	C
1	6	139	C
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	277	U
1	6	417	A
1	6	512	A
1	6	542	A
1	6	555	A
1	6	651	G
1	6	678	A
1	6	697	C
1	6	717	C
1	6	755	A
1	6	829	A
1	6	834	G
1	6	1051	G
1	6	1058	U
1	6	1081	A
1	6	1097	U
1	6	1207	C
1	6	1227	A
1	6	1244	A
1	6	1255	G
1	6	1344	A
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	1657	U
1	6	1696	G
1	6	1698	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	6	1700	C
36	5	65	A
36	5	93	C
36	5	151	A
36	5	183	G
36	5	238	A
36	5	588	G
36	5	594	U
36	5	607	A
36	5	715	A
36	5	735	A
36	5	765	C
36	5	873	C
36	5	896	A
36	5	916	G
36	5	993	G
36	5	1027	A
36	5	1064	A
36	5	1081	U
36	5	1152	G
36	5	1192	C
36	5	1222	G
36	5	1238	C
36	5	1241	U
36	5	1284	C
36	5	1307	G
36	5	1308	A
36	5	1329	U
36	5	1331	U
36	5	1352	A
36	5	1355	A
36	5	1481	A
36	5	1554	U
36	5	1560	G
36	5	1580	A
36	5	1716	U
36	5	1816	A
36	5	1846	C
36	5	2101	C
36	5	2112	U
36	5	2204	C
36	5	2209	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	5	2255	A
36	5	2257	C
36	5	2372	A
36	5	2400	G
36	5	2440	G
36	5	2507	C
36	5	2513	U
36	5	2728	G
36	5	2772	C
36	5	2801	A
36	5	2818	U
36	5	2873	U
36	5	2874	G
36	5	2887	A
36	5	2896	A
36	5	2971	A
36	5	3078	U
36	5	3121	U
36	5	3154	C
36	5	3195	U
36	5	3207	U
36	5	3228	C
36	5	3269	U
36	5	3289	G
36	5	3340	G
36	5	3341	U
36	5	3357	U
37	7	49	G
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 2030 ligands modelled in this entry, 995 are monoatomic - leaving 1035 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	$\# Z  > 2$
85	OHX	1	3893	-	0,6,6	0.00	-	-		
85	OHX	2	2052	-	0,6,6	0.00	-	-		
85	OHX	5	3789	-	0,6,6	0.00	-	-		
85	OHX	1	3733	-	0,6,6	0.00	-	-		
85	OHX	5	3817	-	0,6,6	0.00	-	-		
85	OHX	2	2043	-	0,6,6	0.00	-	-		
85	OHX	2	2105	-	0,6,6	0.00	-	-		
85	OHX	6	2106	-	0,6,6	0.00	-	-		
85	OHX	6	2068	-	0,6,6	0.00	-	-		
85	OHX	1	3866	-	0,6,6	0.00	-	-		
85	OHX	m1	202	-	0,6,6	0.00	-	-		
85	OHX	5	3861	-	0,6,6	0.00	-	-		
85	OHX	5	3828	-	0,6,6	0.00	-	-		
85	OHX	5	4020	-	0,6,6	0.00	-	-		
85	OHX	5	3860	-	0,6,6	0.00	-	-		
85	OHX	6	2054	-	0,6,6	0.00	-	-		
85	OHX	6	2112	-	0,6,6	0.00	-	-		
85	OHX	5	3987	-	0,6,6	0.00	-	-		
85	OHX	5	3941	-	0,6,6	0.00	-	-		
85	OHX	4	218	-	0,6,6	0.00	-	-		
85	OHX	1	3942	-	0,6,6	0.00	-	-		
85	OHX	5	3771	-	0,6,6	0.00	-	-		
85	OHX	1	3774	-	0,6,6	0.00	-	-		
85	OHX	5	4068	-	0,6,6	0.00	-	-		
85	OHX	7	217	-	0,6,6	0.00	-	-		
85	OHX	4	228	-	0,6,6	0.00	-	-		
85	OHX	5	3927	-	0,6,6	0.00	-	-		
85	OHX	5	3772	-	0,6,6	0.00	-	-		
85	OHX	1	3858	-	0,6,6	0.00	-	-		
85	OHX	5	3930	-	0,6,6	0.00	-	-		
85	OHX	1	3811	-	0,6,6	0.00	-	-		
85	OHX	5	3757	-	0,6,6	0.00	-	-		
85	OHX	2	2028	-	0,6,6	0.00	-	-		
85	OHX	5	3818	-	0,6,6	0.00	-	-		
85	OHX	5	3812	-	0,6,6	0.00	-	-		
85	OHX	2	2118	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	1	3825	-	0,6,6	0.00	-	-		
85	OHX	8	211	-	0,6,6	0.00	-	-		
85	OHX	1	3813	-	0,6,6	0.00	-	-		
85	OHX	5	3881	-	0,6,6	0.00	-	-		
85	OHX	1	4028	-	0,6,6	0.00	-	-		
85	OHX	5	3911	-	0,6,6	0.00	-	-		
85	OHX	1	3863	-	0,6,6	0.00	-	-		
85	OHX	2	2076	-	0,6,6	0.00	-	-		
85	OHX	5	3815	-	0,6,6	0.00	-	-		
85	OHX	1	3872	-	0,6,6	0.00	-	-		
85	OHX	1	3950	-	0,6,6	0.00	-	-		
85	OHX	1	3989	-	0,6,6	0.00	-	-		
85	OHX	6	2009	-	0,6,6	0.00	-	-		
85	OHX	6	2145	-	0,6,6	0.00	-	-		
85	OHX	1	4024	-	0,6,6	0.00	-	-		
85	OHX	1	3756	-	0,6,6	0.00	-	-		
85	OHX	5	3973	-	0,6,6	0.00	-	-		
85	OHX	5	3893	-	0,6,6	0.00	-	-		
85	OHX	d4	201	-	0,6,6	0.00	-	-		
85	OHX	5	3765	-	0,6,6	0.00	-	-		
85	OHX	5	3923	-	0,6,6	0.00	-	-		
85	OHX	2	2085	-	0,6,6	0.00	-	-		
85	OHX	1	3920	-	0,6,6	0.00	-	-		
85	OHX	2	2108	-	0,6,6	0.00	-	-		
85	OHX	1	3895	-	0,6,6	0.00	-	-		
85	OHX	1	3775	-	0,6,6	0.00	-	-		
85	OHX	3	210	-	0,6,6	0.00	-	-		
85	OHX	6	2028	-	0,6,6	0.00	-	-		
85	OHX	5	3922	-	0,6,6	0.00	-	-		
85	OHX	5	3806	-	0,6,6	0.00	-	-		
85	OHX	1	3897	-	0,6,6	0.00	-	-		
85	OHX	1	3755	-	0,6,6	0.00	-	-		
85	OHX	6	2117	-	0,6,6	0.00	-	-		
85	OHX	5	3961	-	0,6,6	0.00	-	-		
85	OHX	1	3765	-	0,6,6	0.00	-	-		
85	OHX	6	2132	-	0,6,6	0.00	-	-		
85	OHX	6	2138	-	0,6,6	0.00	-	-		
85	OHX	1	3747	-	0,6,6	0.00	-	-		
85	OHX	1	3935	-	0,6,6	0.00	-	-		
85	OHX	2	2029	-	0,6,6	0.00	-	-		
85	OHX	1	3925	-	0,6,6	0.00	-	-		
85	OHX	2	1988	-	0,6,6	0.00	-	-		
85	OHX	1	3843	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	2	1992	-	0,6,6	0.00	-	-		
85	OHX	1	3918	-	0,6,6	0.00	-	-		
85	OHX	1	3739	-	0,6,6	0.00	-	-		
85	OHX	6	2044	-	0,6,6	0.00	-	-		
85	OHX	6	2085	-	0,6,6	0.00	-	-		
85	OHX	2	2062	-	0,6,6	0.00	-	-		
85	OHX	5	3879	-	0,6,6	0.00	-	-		
85	OHX	1	3750	-	0,6,6	0.00	-	-		
85	OHX	1	4001	-	0,6,6	0.00	-	-		
85	OHX	c3	201	-	0,6,6	0.00	-	-		
85	OHX	1	3766	-	0,6,6	0.00	-	-		
85	OHX	1	3763	-	0,6,6	0.00	-	-		
85	OHX	5	3844	-	0,6,6	0.00	-	-		
85	OHX	5	4032	-	0,6,6	0.00	-	-		
85	OHX	1	3799	-	0,6,6	0.00	-	-		
85	OHX	5	3932	-	0,6,6	0.00	-	-		
85	OHX	2	2058	-	0,6,6	0.00	-	-		
85	OHX	5	3993	-	0,6,6	0.00	-	-		
85	OHX	1	3792	-	0,6,6	0.00	-	-		
85	OHX	6	2144	-	0,6,6	0.00	-	-		
85	OHX	5	4021	-	0,6,6	0.00	-	-		
85	OHX	6	2039	-	0,6,6	0.00	-	-		
85	OHX	5	3986	-	0,6,6	0.00	-	-		
85	OHX	6	2022	-	0,6,6	0.00	-	-		
85	OHX	5	3891	-	0,6,6	0.00	-	-		
85	OHX	5	3769	-	0,6,6	0.00	-	-		
85	OHX	1	3840	-	0,6,6	0.00	-	-		
85	OHX	1	3815	-	0,6,6	0.00	-	-		
85	OHX	1	3865	-	0,6,6	0.00	-	-		
85	OHX	7	215	-	0,6,6	0.00	-	-		
85	OHX	1	3900	-	0,6,6	0.00	-	-		
85	OHX	3	216	-	0,6,6	0.00	-	-		
85	OHX	1	3979	-	0,6,6	0.00	-	-		
85	OHX	6	2089	-	0,6,6	0.00	-	-		
85	OHX	1	4009	-	0,6,6	0.00	-	-		
85	OHX	O7	105	-	0,6,6	0.00	-	-		
85	OHX	2	2001	-	0,6,6	0.00	-	-		
85	OHX	1	3945	-	0,6,6	0.00	-	-		
85	OHX	N1	201	-	0,6,6	0.00	-	-		
85	OHX	5	3942	-	0,6,6	0.00	-	-		
85	OHX	1	4026	-	0,6,6	0.00	-	-		
85	OHX	2	2067	-	0,6,6	0.00	-	-		
85	OHX	6	2091	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	8	215	-	0,6,6	0.00	-	-		
85	OHX	5	3778	-	0,6,6	0.00	-	-		
85	OHX	1	3791	-	0,6,6	0.00	-	-		
85	OHX	6	2108	-	0,6,6	0.00	-	-		
85	OHX	5	3880	-	0,6,6	0.00	-	-		
85	OHX	5	3799	-	0,6,6	0.00	-	-		
85	OHX	5	3899	-	0,6,6	0.00	-	-		
85	OHX	1	3912	-	0,6,6	0.00	-	-		
85	OHX	3	211	-	0,6,6	0.00	-	-		
85	OHX	2	2061	-	0,6,6	0.00	-	-		
85	OHX	6	2031	-	0,6,6	0.00	-	-		
85	OHX	6	2121	-	0,6,6	0.00	-	-		
85	OHX	1	4016	-	0,6,6	0.00	-	-		
85	OHX	1	4018	-	0,6,6	0.00	-	-		
85	OHX	2	2094	-	0,6,6	0.00	-	-		
85	OHX	5	4018	-	0,6,6	0.00	-	-		
85	OHX	5	3797	-	0,6,6	0.00	-	-		
85	OHX	1	3936	-	0,6,6	0.00	-	-		
85	OHX	2	2089	-	0,6,6	0.00	-	-		
85	OHX	3	212	-	0,6,6	0.00	-	-		
85	OHX	13	407	-	0,6,6	0.00	-	-		
85	OHX	5	3751	-	0,6,6	0.00	-	-		
85	OHX	5	3816	-	0,6,6	0.00	-	-		
85	OHX	1	3998	-	0,6,6	0.00	-	-		
85	OHX	2	2116	-	0,6,6	0.00	-	-		
85	OHX	2	1989	-	0,6,6	0.00	-	-		
85	OHX	2	1986	-	0,6,6	0.00	-	-		
85	OHX	1	3809	-	0,6,6	0.00	-	-		
85	OHX	5	3874	-	0,6,6	0.00	-	-		
85	OHX	1	3969	-	0,6,6	0.00	-	-		
85	OHX	6	2014	-	0,6,6	0.00	-	-		
85	OHX	5	3794	-	0,6,6	0.00	-	-		
85	OHX	5	3984	-	0,6,6	0.00	-	-		
85	OHX	1	3914	-	0,6,6	0.00	-	-		
85	OHX	5	3989	-	0,6,6	0.00	-	-		
85	OHX	1	3785	-	0,6,6	0.00	-	-		
85	OHX	1	4003	-	0,6,6	0.00	-	-		
85	OHX	1	3820	-	0,6,6	0.00	-	-		
85	OHX	6	2034	-	0,6,6	0.00	-	-		
85	OHX	1	3922	-	0,6,6	0.00	-	-		
85	OHX	1	3850	-	0,6,6	0.00	-	-		
85	OHX	5	4056	-	0,6,6	0.00	-	-		
85	OHX	1	3990	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	5	3836	-	0,6,6	0.00	-	-		
85	OHX	5	4062	-	0,6,6	0.00	-	-		
85	OHX	5	3768	-	0,6,6	0.00	-	-		
85	OHX	n3	203	-	0,6,6	0.00	-	-		
85	OHX	1	3937	-	0,6,6	0.00	-	-		
85	OHX	2	2098	-	0,6,6	0.00	-	-		
85	OHX	1	3948	-	0,6,6	0.00	-	-		
85	OHX	L4	401	-	0,6,6	0.00	-	-		
85	OHX	1	3752	-	0,6,6	0.00	-	-		
85	OHX	2	2097	-	0,6,6	0.00	-	-		
85	OHX	2	2037	-	0,6,6	0.00	-	-		
85	OHX	5	3996	-	0,6,6	0.00	-	-		
85	OHX	2	2030	-	0,6,6	0.00	-	-		
85	OHX	2	2009	-	0,6,6	0.00	-	-		
85	OHX	6	2064	-	0,6,6	0.00	-	-		
85	OHX	8	213	-	0,6,6	0.00	-	-		
85	OHX	2	2046	-	0,6,6	0.00	-	-		
85	OHX	2	2036	-	0,6,6	0.00	-	-		
85	OHX	5	3908	-	0,6,6	0.00	-	-		
85	OHX	1	3902	-	0,6,6	0.00	-	-		
85	OHX	O9	101	-	0,6,6	0.00	-	-		
85	OHX	5	3892	-	0,6,6	0.00	-	-		
85	OHX	5	3785	-	0,6,6	0.00	-	-		
85	OHX	6	2128	-	0,6,6	0.00	-	-		
85	OHX	2	2011	-	0,6,6	0.00	-	-		
85	OHX	5	3857	-	0,6,6	0.00	-	-		
85	OHX	5	3756	-	0,6,6	0.00	-	-		
85	OHX	1	3992	-	0,6,6	0.00	-	-		
85	OHX	1	3826	-	0,6,6	0.00	-	-		
85	OHX	1	3917	-	0,6,6	0.00	-	-		
85	OHX	5	4063	-	0,6,6	0.00	-	-		
85	OHX	1	4034	-	0,6,6	0.00	-	-		
85	OHX	1	3887	-	0,6,6	0.00	-	-		
85	OHX	2	2065	-	0,6,6	0.00	-	-		
85	OHX	5	3959	-	0,6,6	0.00	-	-		
85	OHX	1	3971	-	0,6,6	0.00	-	-		
85	OHX	6	2155	-	0,6,6	0.00	-	-		
85	OHX	1	3974	-	0,6,6	0.00	-	-		
85	OHX	6	2016	-	0,6,6	0.00	-	-		
85	OHX	6	2019	-	0,6,6	0.00	-	-		
85	OHX	2	2088	-	0,6,6	0.00	-	-		
85	OHX	1	3984	-	0,6,6	0.00	-	-		
85	OHX	6	2088	-	0,6,6	0.00	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	4	217	-	0,6,6	0.00	-	-		
85	OHX	1	4025	-	0,6,6	0.00	-	-		
85	OHX	5	3822	-	0,6,6	0.00	-	-		
85	OHX	5	4019	-	0,6,6	0.00	-	-		
85	OHX	5	3767	-	0,6,6	0.00	-	-		
85	OHX	5	3835	-	0,6,6	0.00	-	-		
85	OHX	1	3994	-	0,6,6	0.00	-	-		
85	OHX	1	3810	-	0,6,6	0.00	-	-		
85	OHX	1	3818	-	0,6,6	0.00	-	-		
85	OHX	5	3742	-	0,6,6	0.00	-	-		
85	OHX	5	4060	-	0,6,6	0.00	-	-		
85	OHX	6	2146	-	0,6,6	0.00	-	-		
85	OHX	6	2045	-	0,6,6	0.00	-	-		
85	OHX	5	4065	-	0,6,6	0.00	-	-		
85	OHX	6	2090	-	0,6,6	0.00	-	-		
85	OHX	3	215	-	0,6,6	0.00	-	-		
85	OHX	1	4007	-	0,6,6	0.00	-	-		
85	OHX	6	2080	-	0,6,6	0.00	-	-		
85	OHX	m0	301	-	0,6,6	0.00	-	-		
85	OHX	5	4038	-	0,6,6	0.00	-	-		
85	OHX	1	3973	-	0,6,6	0.00	-	-		
85	OHX	6	2157	-	0,6,6	0.00	-	-		
85	OHX	7	213	-	0,6,6	0.00	-	-		
85	OHX	1	3879	-	0,6,6	0.00	-	-		
85	OHX	1	3795	-	0,6,6	0.00	-	-		
85	OHX	6	2125	-	0,6,6	0.00	-	-		
85	OHX	5	3832	-	0,6,6	0.00	-	-		
85	OHX	1	3856	-	0,6,6	0.00	-	-		
85	OHX	5	3994	-	0,6,6	0.00	-	-		
85	OHX	5	3782	-	0,6,6	0.00	-	-		
85	OHX	6	2105	-	0,6,6	0.00	-	-		
85	OHX	6	2151	-	0,6,6	0.00	-	-		
85	OHX	8	216	-	0,6,6	0.00	-	-		
85	OHX	1	3946	-	0,6,6	0.00	-	-		
85	OHX	1	3943	-	0,6,6	0.00	-	-		
85	OHX	2	2091	-	0,6,6	0.00	-	-		
85	OHX	5	3854	-	0,6,6	0.00	-	-		
85	OHX	5	3976	-	0,6,6	0.00	-	-		
85	OHX	1	3823	-	0,6,6	0.00	-	-		
85	OHX	2	2063	-	0,6,6	0.00	-	-		
85	OHX	1	3958	-	0,6,6	0.00	-	-		
85	OHX	8	219	-	0,6,6	0.00	-	-		
85	OHX	6	2029	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	5	3800	-	0,6,6	0.00	-	-		
85	OHX	5	3755	-	0,6,6	0.00	-	-		
85	OHX	2	2075	-	0,6,6	0.00	-	-		
85	OHX	2	2093	-	0,6,6	0.00	-	-		
85	OHX	1	4002	-	0,6,6	0.00	-	-		
85	OHX	5	3975	-	0,6,6	0.00	-	-		
85	OHX	2	2077	-	0,6,6	0.00	-	-		
85	OHX	1	4015	-	0,6,6	0.00	-	-		
85	OHX	2	2104	-	0,6,6	0.00	-	-		
85	OHX	2	2024	-	0,6,6	0.00	-	-		
85	OHX	5	3843	-	0,6,6	0.00	-	-		
85	OHX	1	3736	-	0,6,6	0.00	-	-		
85	OHX	6	2041	-	0,6,6	0.00	-	-		
85	OHX	6	2095	-	0,6,6	0.00	-	-		
85	OHX	4	224	-	0,6,6	0.00	-	-		
85	OHX	5	4013	-	0,6,6	0.00	-	-		
85	OHX	1	3899	-	0,6,6	0.00	-	-		
85	OHX	1	3740	-	0,6,6	0.00	-	-		
85	OHX	5	3951	-	0,6,6	0.00	-	-		
85	OHX	6	2074	-	0,6,6	0.00	-	-		
85	OHX	5	3855	-	0,6,6	0.00	-	-		
85	OHX	5	3890	-	0,6,6	0.00	-	-		
85	OHX	5	4045	-	0,6,6	0.00	-	-		
85	OHX	4	219	-	0,6,6	0.00	-	-		
85	OHX	1	3746	-	0,6,6	0.00	-	-		
85	OHX	2	2022	-	0,6,6	0.00	-	-		
85	OHX	6	2021	-	0,6,6	0.00	-	-		
85	OHX	1	3857	-	0,6,6	0.00	-	-		
85	OHX	5	4054	-	0,6,6	0.00	-	-		
85	OHX	1	3876	-	0,6,6	0.00	-	-		
85	OHX	2	2100	-	0,6,6	0.00	-	-		
85	OHX	6	2070	-	0,6,6	0.00	-	-		
85	OHX	2	2102	-	0,6,6	0.00	-	-		
85	OHX	1	3985	-	0,6,6	0.00	-	-		
85	OHX	7	218	-	0,6,6	0.00	-	-		
85	OHX	6	2037	-	0,6,6	0.00	-	-		
85	OHX	1	3732	-	0,6,6	0.00	-	-		
85	OHX	2	2008	-	0,6,6	0.00	-	-		
85	OHX	5	3913	-	0,6,6	0.00	-	-		
85	OHX	sR	401	-	0,6,6	0.00	-	-		
85	OHX	5	3916	-	0,6,6	0.00	-	-		
85	OHX	4	226	-	0,6,6	0.00	-	-		
85	OHX	4	229	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	1	3836	-	0,6,6	0.00	-	-		
85	OHX	6	2111	-	0,6,6	0.00	-	-		
85	OHX	1	3875	-	0,6,6	0.00	-	-		
85	OHX	7	216	-	0,6,6	0.00	-	-		
85	OHX	5	3770	-	0,6,6	0.00	-	-		
85	OHX	19	202	-	0,6,6	0.00	-	-		
85	OHX	1	3898	-	0,6,6	0.00	-	-		
85	OHX	6	2065	-	0,6,6	0.00	-	-		
85	OHX	5	3950	-	0,6,6	0.00	-	-		
85	OHX	5	3958	-	0,6,6	0.00	-	-		
85	OHX	1	3874	-	0,6,6	0.00	-	-		
85	OHX	6	2062	-	0,6,6	0.00	-	-		
85	OHX	M7	205	-	0,6,6	0.00	-	-		
85	OHX	2	2014	-	0,6,6	0.00	-	-		
85	OHX	1	3735	-	0,6,6	0.00	-	-		
85	OHX	2	2096	-	0,6,6	0.00	-	-		
85	OHX	5	3952	-	0,6,6	0.00	-	-		
85	OHX	1	4033	-	0,6,6	0.00	-	-		
85	OHX	6	2073	-	0,6,6	0.00	-	-		
85	OHX	1	3929	-	0,6,6	0.00	-	-		
85	OHX	2	2053	-	0,6,6	0.00	-	-		
85	OHX	1	3997	-	0,6,6	0.00	-	-		
85	OHX	3	213	-	0,6,6	0.00	-	-		
85	OHX	Q2	503	-	0,6,6	0.00	-	-		
85	OHX	5	3870	-	0,6,6	0.00	-	-		
85	OHX	6	2120	-	0,6,6	0.00	-	-		
85	OHX	1	4022	-	0,6,6	0.00	-	-		
85	OHX	5	3945	-	0,6,6	0.00	-	-		
85	OHX	5	4055	-	0,6,6	0.00	-	-		
85	OHX	6	2081	-	0,6,6	0.00	-	-		
85	OHX	5	3997	-	0,6,6	0.00	-	-		
85	OHX	1	3770	-	0,6,6	0.00	-	-		
85	OHX	5	3753	-	0,6,6	0.00	-	-		
85	OHX	14	401	-	0,6,6	0.00	-	-		
85	OHX	5	3848	-	0,6,6	0.00	-	-		
85	OHX	6	2040	-	0,6,6	0.00	-	-		
85	OHX	5	3940	-	0,6,6	0.00	-	-		
85	OHX	1	3830	-	0,6,6	0.00	-	-		
85	OHX	5	3991	-	0,6,6	0.00	-	-		
85	OHX	1	3827	-	0,6,6	0.00	-	-		
85	OHX	5	4040	-	0,6,6	0.00	-	-		
85	OHX	6	2086	-	0,6,6	0.00	-	-		
85	OHX	6	2050	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	6	2140	-	0,6,6	0.00	-	-		
85	OHX	5	3924	-	0,6,6	0.00	-	-		
85	OHX	5	4049	-	0,6,6	0.00	-	-		
85	OHX	5	3791	-	0,6,6	0.00	-	-		
85	OHX	2	2106	-	0,6,6	0.00	-	-		
85	OHX	5	3776	-	0,6,6	0.00	-	-		
85	OHX	4	223	-	0,6,6	0.00	-	-		
85	OHX	5	3864	-	0,6,6	0.00	-	-		
85	OHX	1	3955	-	0,6,6	0.00	-	-		
85	OHX	6	2113	-	0,6,6	0.00	-	-		
85	OHX	1	3819	-	0,6,6	0.00	-	-		
85	OHX	6	2154	-	0,6,6	0.00	-	-		
85	OHX	1	3890	-	0,6,6	0.00	-	-		
85	OHX	5	3901	-	0,6,6	0.00	-	-		
85	OHX	2	2110	-	0,6,6	0.00	-	-		
85	OHX	2	2117	-	0,6,6	0.00	-	-		
85	OHX	6	2126	-	0,6,6	0.00	-	-		
85	OHX	1	3915	-	0,6,6	0.00	-	-		
85	OHX	1	4000	-	0,6,6	0.00	-	-		
85	OHX	1	3743	-	0,6,6	0.00	-	-		
85	OHX	5	3849	-	0,6,6	0.00	-	-		
85	OHX	8	220	-	0,6,6	0.00	-	-		
85	OHX	5	3834	-	0,6,6	0.00	-	-		
85	OHX	6	2057	-	0,6,6	0.00	-	-		
85	OHX	5	3936	-	0,6,6	0.00	-	-		
85	OHX	2	1997	-	0,6,6	0.00	-	-		
85	OHX	1	3957	-	0,6,6	0.00	-	-		
85	OHX	5	3968	-	0,6,6	0.00	-	-		
85	OHX	1	3835	-	0,6,6	0.00	-	-		
85	OHX	1	3773	-	0,6,6	0.00	-	-		
85	OHX	SR	401	-	0,6,6	0.00	-	-		
85	OHX	5	3969	-	0,6,6	0.00	-	-		
85	OHX	1	3751	-	0,6,6	0.00	-	-		
85	OHX	2	2031	-	0,6,6	0.00	-	-		
85	OHX	5	3833	-	0,6,6	0.00	-	-		
85	OHX	1	3744	-	0,6,6	0.00	-	-		
85	OHX	1	3841	-	0,6,6	0.00	-	-		
85	OHX	2	2090	-	0,6,6	0.00	-	-		
85	OHX	1	3760	-	0,6,6	0.00	-	-		
85	OHX	5	4014	-	0,6,6	0.00	-	-		
85	OHX	15	301	-	0,6,6	0.00	-	-		
85	OHX	6	2087	-	0,6,6	0.00	-	-		
85	OHX	5	3746	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	ANM	1	3401	-	20,20,20	2.93	9 (45%)	22,27,27	2.80	10 (45%)
85	OHX	2	1990	-	0,6,6	0.00	-	-		
85	OHX	5	3777	-	0,6,6	0.00	-	-		
85	OHX	5	4025	-	0,6,6	0.00	-	-		
85	OHX	2	2066	-	0,6,6	0.00	-	-		
85	OHX	1	3869	-	0,6,6	0.00	-	-		
85	OHX	1	4011	-	0,6,6	0.00	-	-		
85	OHX	1	3802	-	0,6,6	0.00	-	-		
85	OHX	1	3924	-	0,6,6	0.00	-	-		
85	OHX	6	2026	-	0,6,6	0.00	-	-		
85	OHX	5	3963	-	0,6,6	0.00	-	-		
85	OHX	5	3837	-	0,6,6	0.00	-	-		
85	OHX	2	2021	-	0,6,6	0.00	-	-		
85	OHX	5	3904	-	0,6,6	0.00	-	-		
85	OHX	2	2068	-	0,6,6	0.00	-	-		
85	OHX	6	2098	-	0,6,6	0.00	-	-		
85	OHX	6	2027	-	0,6,6	0.00	-	-		
85	OHX	n3	202	-	0,6,6	0.00	-	-		
85	OHX	m7	204	-	0,6,6	0.00	-	-		
85	OHX	6	2137	-	0,6,6	0.00	-	-		
85	OHX	6	2017	-	0,6,6	0.00	-	-		
85	OHX	5	3856	-	0,6,6	0.00	-	-		
85	OHX	1	4023	-	0,6,6	0.00	-	-		
85	OHX	5	3902	-	0,6,6	0.00	-	-		
85	OHX	1	3934	-	0,6,6	0.00	-	-		
85	OHX	5	3920	-	0,6,6	0.00	-	-		
85	OHX	5	3878	-	0,6,6	0.00	-	-		
85	OHX	1	3896	-	0,6,6	0.00	-	-		
85	OHX	2	2060	-	0,6,6	0.00	-	-		
85	OHX	6	2060	-	0,6,6	0.00	-	-		
85	OHX	5	4030	-	0,6,6	0.00	-	-		
85	OHX	1	3764	-	0,6,6	0.00	-	-		
85	OHX	5	3792	-	0,6,6	0.00	-	-		
85	OHX	2	2050	-	0,6,6	0.00	-	-		
85	OHX	1	3861	-	0,6,6	0.00	-	-		
85	OHX	2	2042	-	0,6,6	0.00	-	-		
85	OHX	5	4026	-	0,6,6	0.00	-	-		
85	OHX	6	2011	-	0,6,6	0.00	-	-		
85	OHX	2	2003	-	0,6,6	0.00	-	-		
85	OHX	6	2075	-	0,6,6	0.00	-	-		
85	OHX	2	2018	-	0,6,6	0.00	-	-		
85	OHX	1	3854	-	0,6,6	0.00	-	-		
85	OHX	6	2130	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	5	3781	-	0,6,6	0.00	-	-		
85	OHX	2	2087	-	0,6,6	0.00	-	-		
85	OHX	1	3931	-	0,6,6	0.00	-	-		
85	OHX	1	3965	-	0,6,6	0.00	-	-		
85	OHX	6	2101	-	0,6,6	0.00	-	-		
85	OHX	1	3853	-	0,6,6	0.00	-	-		
85	OHX	5	3748	-	0,6,6	0.00	-	-		
85	OHX	6	2124	-	0,6,6	0.00	-	-		
85	OHX	1	4005	-	0,6,6	0.00	-	-		
85	OHX	s8	302	-	0,6,6	0.00	-	-		
85	OHX	5	3793	-	0,6,6	0.00	-	-		
85	OHX	1	3821	-	0,6,6	0.00	-	-		
85	OHX	1	3767	-	0,6,6	0.00	-	-		
85	OHX	1	3803	-	0,6,6	0.00	-	-		
85	OHX	6	2148	-	0,6,6	0.00	-	-		
85	OHX	1	3978	-	0,6,6	0.00	-	-		
85	OHX	6	2058	-	0,6,6	0.00	-	-		
85	OHX	5	3935	-	0,6,6	0.00	-	-		
85	OHX	1	3982	-	0,6,6	0.00	-	-		
85	OHX	1	3880	-	0,6,6	0.00	-	-		
85	OHX	c8	201	-	0,6,6	0.00	-	-		
85	OHX	5	3883	-	0,6,6	0.00	-	-		
85	OHX	5	3909	-	0,6,6	0.00	-	-		
85	OHX	5	3867	-	0,6,6	0.00	-	-		
85	OHX	1	3877	-	0,6,6	0.00	-	-		
85	OHX	1	3907	-	0,6,6	0.00	-	-		
85	OHX	8	224	-	0,6,6	0.00	-	-		
85	OHX	1	4030	-	0,6,6	0.00	-	-		
85	OHX	1	4031	-	0,6,6	0.00	-	-		
85	OHX	5	3928	-	0,6,6	0.00	-	-		
85	OHX	5	3759	-	0,6,6	0.00	-	-		
85	OHX	1	3972	-	0,6,6	0.00	-	-		
85	OHX	1	3726	-	0,6,6	0.00	-	-		
85	OHX	6	2012	-	0,6,6	0.00	-	-		
85	OHX	5	3842	-	0,6,6	0.00	-	-		
85	OHX	5	3971	-	0,6,6	0.00	-	-		
85	OHX	6	2152	-	0,6,6	0.00	-	-		
85	OHX	1	3870	-	0,6,6	0.00	-	-		
85	OHX	5	3906	-	0,6,6	0.00	-	-		
85	OHX	5	3750	-	0,6,6	0.00	-	-		
85	OHX	1	3886	-	0,6,6	0.00	-	-		
85	OHX	1	3753	-	0,6,6	0.00	-	-		
85	OHX	5	3886	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	5	4002	-	0,6,6	0.00	-	-		
85	OHX	5	4008	-	0,6,6	0.00	-	-		
85	OHX	5	4007	36	0,6,6	0.00	-	-		
85	OHX	6	2093	-	0,6,6	0.00	-	-		
85	OHX	1	3954	-	0,6,6	0.00	-	-		
85	OHX	4	216	-	0,6,6	0.00	-	-		
85	OHX	2	2023	-	0,6,6	0.00	-	-		
85	OHX	1	3995	-	0,6,6	0.00	-	-		
85	OHX	5	3830	-	0,6,6	0.00	-	-		
85	OHX	4	225	-	0,6,6	0.00	-	-		
85	OHX	2	2054	-	0,6,6	0.00	-	-		
85	OHX	2	2035	-	0,6,6	0.00	-	-		
85	OHX	5	3743	-	0,6,6	0.00	-	-		
85	OHX	6	2158	-	0,6,6	0.00	-	-		
85	OHX	5	3838	-	0,6,6	0.00	-	-		
85	OHX	7	211	-	0,6,6	0.00	-	-		
85	OHX	2	2069	-	0,6,6	0.00	-	-		
85	OHX	6	2048	-	0,6,6	0.00	-	-		
85	OHX	5	3962	-	0,6,6	0.00	-	-		
85	OHX	5	4064	-	0,6,6	0.00	-	-		
85	OHX	5	3896	-	0,6,6	0.00	-	-		
85	OHX	1	3910	-	0,6,6	0.00	-	-		
85	OHX	1	3981	-	0,6,6	0.00	-	-		
85	OHX	5	4000	-	0,6,6	0.00	-	-		
85	OHX	5	3875	-	0,6,6	0.00	-	-		
85	OHX	1	3829	-	0,6,6	0.00	-	-		
85	OHX	1	3738	-	0,6,6	0.00	-	-		
85	OHX	6	2122	-	0,6,6	0.00	-	-		
85	OHX	5	4016	-	0,6,6	0.00	-	-		
85	OHX	5	3915	-	0,6,6	0.00	-	-		
85	OHX	6	2149	-	0,6,6	0.00	-	-		
85	OHX	5	4006	-	0,6,6	0.00	-	-		
85	OHX	4	231	-	0,6,6	0.00	-	-		
85	OHX	6	2025	-	0,6,6	0.00	-	-		
85	OHX	5	4027	-	0,6,6	0.00	-	-		
85	OHX	1	3777	-	0,6,6	0.00	-	-		
85	OHX	6	2020	-	0,6,6	0.00	-	-		
85	OHX	2	1985	-	0,6,6	0.00	-	-		
85	OHX	5	3978	-	0,6,6	0.00	-	-		
85	OHX	1	4004	-	0,6,6	0.00	-	-		
85	OHX	1	3986	-	0,6,6	0.00	-	-		
85	OHX	5	3900	-	0,6,6	0.00	-	-		
85	OHX	1	3961	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	5	3949	-	0,6,6	0.00	-	-		
85	OHX	2	1991	-	0,6,6	0.00	-	-		
85	OHX	1	3771	-	0,6,6	0.00	-	-		
85	OHX	1	4037	-	0,6,6	0.00	-	-		
85	OHX	5	3990	-	0,6,6	0.00	-	-		
85	OHX	2	2083	-	0,6,6	0.00	-	-		
85	OHX	5	3907	-	0,6,6	0.00	-	-		
85	OHX	1	3867	-	0,6,6	0.00	-	-		
85	OHX	5	4066	-	0,6,6	0.00	-	-		
85	OHX	1	3817	-	0,6,6	0.00	-	-		
85	OHX	1	3728	-	0,6,6	0.00	-	-		
85	OHX	6	2055	-	0,6,6	0.00	-	-		
85	OHX	5	4048	-	0,6,6	0.00	-	-		
85	OHX	1	4029	-	0,6,6	0.00	-	-		
85	OHX	1	3993	-	0,6,6	0.00	-	-		
85	OHX	2	2103	-	0,6,6	0.00	-	-		
85	OHX	1	3779	-	0,6,6	0.00	-	-		
85	OHX	6	2103	-	0,6,6	0.00	-	-		
85	OHX	5	3784	-	0,6,6	0.00	-	-		
85	OHX	1	3873	-	0,6,6	0.00	-	-		
85	OHX	5	4037	-	0,6,6	0.00	-	-		
85	OHX	2	2045	-	0,6,6	0.00	-	-		
85	OHX	1	3932	-	0,6,6	0.00	-	-		
85	OHX	6	2083	-	0,6,6	0.00	-	-		
85	OHX	2	2005	-	0,6,6	0.00	-	-		
85	OHX	5	3992	-	0,6,6	0.00	-	-		
85	OHX	1	3968	-	0,6,6	0.00	-	-		
85	OHX	2	2016	-	0,6,6	0.00	-	-		
85	OHX	1	3784	-	0,6,6	0.00	-	-		
85	OHX	1	3991	-	0,6,6	0.00	-	-		
85	OHX	2	2013	-	0,6,6	0.00	-	-		
85	OHX	2	2034	-	0,6,6	0.00	-	-		
85	OHX	1	3790	-	0,6,6	0.00	-	-		
85	OHX	5	4046	-	0,6,6	0.00	-	-		
85	OHX	13	406	-	0,6,6	0.00	-	-		
85	OHX	6	2114	-	0,6,6	0.00	-	-		
85	OHX	5	3803	-	0,6,6	0.00	-	-		
85	OHX	5	4024	-	0,6,6	0.00	-	-		
85	OHX	5	3744	-	0,6,6	0.00	-	-		
85	OHX	1	4020	-	0,6,6	0.00	-	-		
85	OHX	6	2056	-	0,6,6	0.00	-	-		
85	OHX	1	3960	-	0,6,6	0.00	-	-		
85	OHX	1	3838	-	0,6,6	0.00	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	5	3982	-	0,6,6	0.00	-	-		
85	OHX	6	2116	-	0,6,6	0.00	-	-		
85	OHX	1	3759	-	0,6,6	0.00	-	-		
85	OHX	5	3965	-	0,6,6	0.00	-	-		
85	OHX	1	3901	-	0,6,6	0.00	-	-		
85	OHX	5	3841	-	0,6,6	0.00	-	-		
85	OHX	S8	301	-	0,6,6	0.00	-	-		
85	OHX	5	4070	-	0,6,6	0.00	-	-		
85	OHX	5	3847	-	0,6,6	0.00	-	-		
85	OHX	1	3980	-	0,6,6	0.00	-	-		
85	OHX	5	3749	-	0,6,6	0.00	-	-		
85	OHX	6	2084	-	0,6,6	0.00	-	-		
85	OHX	5	4061	-	0,6,6	0.00	-	-		
85	OHX	1	3909	-	0,6,6	0.00	-	-		
85	OHX	L3	402	-	0,6,6	0.00	-	-		
85	OHX	1	4021	-	0,6,6	0.00	-	-		
85	OHX	2	2044	-	0,6,6	0.00	-	-		
85	OHX	2	2047	-	0,6,6	0.00	-	-		
85	OHX	5	3938	-	0,6,6	0.00	-	-		
85	OHX	6	2023	-	0,6,6	0.00	-	-		
85	OHX	1	3845	-	0,6,6	0.00	-	-		
85	OHX	1	3822	-	0,6,6	0.00	-	-		
85	OHX	2	2026	-	0,6,6	0.00	-	-		
85	OHX	5	3944	-	0,6,6	0.00	-	-		
85	OHX	6	2102	-	0,6,6	0.00	-	-		
85	OHX	5	3788	-	0,6,6	0.00	-	-		
85	OHX	5	4050	-	0,6,6	0.00	-	-		
85	OHX	2	2002	-	0,6,6	0.00	-	-		
85	OHX	2	2111	-	0,6,6	0.00	-	-		
85	OHX	5	3752	-	0,6,6	0.00	-	-		
85	OHX	1	3801	-	0,6,6	0.00	-	-		
85	OHX	6	2094	-	0,6,6	0.00	-	-		
85	OHX	1	3812	-	0,6,6	0.00	-	-		
85	OHX	1	3831	-	0,6,6	0.00	-	-		
85	OHX	5	3859	-	0,6,6	0.00	-	-		
85	OHX	N8	203	-	0,6,6	0.00	-	-		
85	OHX	1	3952	-	0,6,6	0.00	-	-		
85	OHX	1	3768	-	0,6,6	0.00	-	-		
85	OHX	5	3773	-	0,6,6	0.00	-	-		
85	OHX	5	3925	-	0,6,6	0.00	-	-		
85	OHX	1	3928	-	0,6,6	0.00	-	-		
85	OHX	m5	304	-	0,6,6	0.00	-	-		
85	OHX	5	4044	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	o9	101	-	0,6,6	0.00	-	-		
85	OHX	5	4003	-	0,6,6	0.00	-	-		
85	OHX	2	1996	-	0,6,6	0.00	-	-		
85	OHX	5	3863	-	0,6,6	0.00	-	-		
85	OHX	5	3981	-	0,6,6	0.00	-	-		
85	OHX	1	3783	-	0,6,6	0.00	-	-		
85	OHX	1	3891	-	0,6,6	0.00	-	-		
85	OHX	6	2010	-	0,6,6	0.00	-	-		
85	OHX	5	4036	-	0,6,6	0.00	-	-		
85	OHX	1	3983	-	0,6,6	0.00	-	-		
85	OHX	1	3832	-	0,6,6	0.00	-	-		
85	OHX	1	3837	-	0,6,6	0.00	-	-		
85	OHX	5	3829	-	0,6,6	0.00	-	-		
85	OHX	6	2067	-	0,6,6	0.00	-	-		
85	OHX	5	3921	-	0,6,6	0.00	-	-		
85	OHX	1	3793	-	0,6,6	0.00	-	-		
85	OHX	8	225	-	0,6,6	0.00	-	-		
85	OHX	1	3864	-	0,6,6	0.00	-	-		
85	OHX	6	2131	-	0,6,6	0.00	-	-		
85	OHX	1	3908	-	0,6,6	0.00	-	-		
85	OHX	2	2082	-	0,6,6	0.00	-	-		
85	OHX	6	2043	-	0,6,6	0.00	-	-		
85	OHX	5	3798	-	0,6,6	0.00	-	-		
85	OHX	5	4053	-	0,6,6	0.00	-	-		
85	OHX	c5	201	-	0,6,6	0.00	-	-		
85	OHX	1	3808	-	0,6,6	0.00	-	-		
85	OHX	6	2042	-	0,6,6	0.00	-	-		
85	OHX	2	2072	-	0,6,6	0.00	-	-		
85	OHX	5	3895	-	0,6,6	0.00	-	-		
85	OHX	5	3934	-	0,6,6	0.00	-	-		
85	OHX	5	3787	-	0,6,6	0.00	-	-		
85	OHX	1	3749	-	0,6,6	0.00	-	-		
85	OHX	8	212	-	0,6,6	0.00	-	-		
85	OHX	6	2143	-	0,6,6	0.00	-	-		
85	OHX	1	3996	-	0,6,6	0.00	-	-		
85	OHX	1	3947	-	0,6,6	0.00	-	-		
85	OHX	5	3898	-	0,6,6	0.00	-	-		
85	OHX	5	3912	-	0,6,6	0.00	-	-		
85	OHX	5	3905	-	0,6,6	0.00	-	-		
85	OHX	1	3988	-	0,6,6	0.00	-	-		
85	OHX	1	3987	-	0,6,6	0.00	-	-		
85	OHX	1	3906	-	0,6,6	0.00	-	-		
85	OHX	2	2000	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	1	4027	-	0,6,6	0.00	-	-		
85	OHX	5	3955	-	0,6,6	0.00	-	-		
85	OHX	5	3779	-	0,6,6	0.00	-	-		
85	OHX	1	3786	-	0,6,6	0.00	-	-		
85	OHX	7	212	-	0,6,6	0.00	-	-		
85	OHX	5	3821	-	0,6,6	0.00	-	-		
85	OHX	o3	202	-	0,6,6	0.00	-	-		
85	OHX	2	2057	-	0,6,6	0.00	-	-		
85	OHX	5	4058	-	0,6,6	0.00	-	-		
85	OHX	2	2032	-	0,6,6	0.00	-	-		
85	OHX	6	2038	-	0,6,6	0.00	-	-		
85	OHX	5	3851	-	0,6,6	0.00	-	-		
85	OHX	5	4009	-	0,6,6	0.00	-	-		
85	OHX	1	3964	-	0,6,6	0.00	-	-		
85	OHX	1	3780	-	0,6,6	0.00	-	-		
85	OHX	5	3790	-	0,6,6	0.00	-	-		
85	OHX	6	2153	-	0,6,6	0.00	-	-		
85	OHX	2	2038	-	0,6,6	0.00	-	-		
85	OHX	5	3903	-	0,6,6	0.00	-	-		
85	OHX	5	4015	-	0,6,6	0.00	-	-		
85	OHX	5	3840	-	0,6,6	0.00	-	-		
85	OHX	1	3903	-	0,6,6	0.00	-	-		
85	OHX	6	2036	-	0,6,6	0.00	-	-		
85	OHX	2	2119	-	0,6,6	0.00	-	-		
85	OHX	2	1993	-	0,6,6	0.00	-	-		
85	OHX	1	3849	-	0,6,6	0.00	-	-		
85	OHX	5	4069	-	0,6,6	0.00	-	-		
85	OHX	1	3889	-	0,6,6	0.00	-	-		
85	OHX	q2	502	-	0,6,6	0.00	-	-		
85	OHX	2	2051	-	0,6,6	0.00	-	-		
85	OHX	6	2076	-	0,6,6	0.00	-	-		
85	OHX	8	218	-	0,6,6	0.00	-	-		
85	OHX	6	2035	-	0,6,6	0.00	-	-		
85	OHX	5	4034	-	0,6,6	0.00	-	-		
85	OHX	l5	302	-	0,6,6	0.00	-	-		
85	OHX	5	3988	-	0,6,6	0.00	-	-		
85	OHX	2	2064	-	0,6,6	0.00	-	-		
85	OHX	1	4006	-	0,6,6	0.00	-	-		
85	OHX	5	3917	-	0,6,6	0.00	-	-		
85	OHX	5	3918	-	0,6,6	0.00	-	-		
85	OHX	2	2019	-	0,6,6	0.00	-	-		
85	OHX	O7	104	-	0,6,6	0.00	-	-		
85	OHX	5	3795	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	2	2033	-	0,6,6	0.00	-	-		
85	OHX	1	3916	-	0,6,6	0.00	-	-		
85	OHX	1	3842	-	0,6,6	0.00	-	-		
85	OHX	2	2115	-	0,6,6	0.00	-	-		
85	OHX	5	3966	-	0,6,6	0.00	-	-		
85	OHX	6	2096	-	0,6,6	0.00	-	-		
85	OHX	1	3940	-	0,6,6	0.00	-	-		
85	OHX	6	2051	-	0,6,6	0.00	-	-		
85	OHX	5	3762	-	0,6,6	0.00	-	-		
85	OHX	5	3910	-	0,6,6	0.00	-	-		
85	OHX	6	2061	-	0,6,6	0.00	-	-		
85	OHX	5	3885	-	0,6,6	0.00	-	-		
85	OHX	1	3806	-	0,6,6	0.00	-	-		
85	OHX	5	3960	-	0,6,6	0.00	-	-		
85	OHX	5	3999	-	0,6,6	0.00	-	-		
85	OHX	1	3892	-	0,6,6	0.00	-	-		
85	OHX	6	2134	-	0,6,6	0.00	-	-		
85	OHX	5	3839	-	0,6,6	0.00	-	-		
85	OHX	5	4028	-	0,6,6	0.00	-	-		
85	OHX	1	3731	-	0,6,6	0.00	-	-		
85	OHX	7	214	-	0,6,6	0.00	-	-		
85	OHX	5	3884	-	0,6,6	0.00	-	-		
85	OHX	5	3866	-	0,6,6	0.00	-	-		
85	OHX	6	2092	-	0,6,6	0.00	-	-		
85	OHX	1	3859	-	0,6,6	0.00	-	-		
85	OHX	5	3974	-	0,6,6	0.00	-	-		
85	OHX	5	3853	-	0,6,6	0.00	-	-		
85	OHX	1	3797	-	0,6,6	0.00	-	-		
85	OHX	1	3805	-	0,6,6	0.00	-	-		
85	OHX	2	2007	-	0,6,6	0.00	-	-		
85	OHX	5	3852	-	0,6,6	0.00	-	-		
85	OHX	5	3802	-	0,6,6	0.00	-	-		
85	OHX	2	1998	-	0,6,6	0.00	-	-		
85	OHX	5	3929	-	0,6,6	0.00	-	-		
85	OHX	5	4033	-	0,6,6	0.00	-	-		
85	OHX	5	3894	-	0,6,6	0.00	-	-		
85	OHX	1	3772	-	0,6,6	0.00	-	-		
85	OHX	5	3954	-	0,6,6	0.00	-	-		
85	OHX	6	2059	-	0,6,6	0.00	-	-		
85	OHX	5	3826	-	0,6,6	0.00	-	-		
85	OHX	1	3727	-	0,6,6	0.00	-	-		
85	OHX	5	4005	-	0,6,6	0.00	-	-		
85	OHX	5	3869	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	2	2056	-	0,6,6	0.00	-	-		
85	OHX	6	2066	-	0,6,6	0.00	-	-		
85	OHX	4	222	-	0,6,6	0.00	-	-		
85	OHX	4	227	-	0,6,6	0.00	-	-		
85	OHX	8	223	-	0,6,6	0.00	-	-		
85	OHX	1	3848	-	0,6,6	0.00	-	-		
85	OHX	6	2129	-	0,6,6	0.00	-	-		
85	OHX	2	2101	-	0,6,6	0.00	-	-		
85	OHX	5	3761	-	0,6,6	0.00	-	-		
85	OHX	5	4031	-	0,6,6	0.00	-	-		
85	OHX	6	2115	-	0,6,6	0.00	-	-		
85	OHX	5	3957	-	0,6,6	0.00	-	-		
85	OHX	2	2006	-	0,6,6	0.00	-	-		
85	OHX	6	2156	-	0,6,6	0.00	-	-		
85	OHX	2	2080	-	0,6,6	0.00	-	-		
85	OHX	n9	102	-	0,6,6	0.00	-	-		
85	OHX	6	2049	-	0,6,6	0.00	-	-		
85	OHX	5	3872	-	0,6,6	0.00	-	-		
85	OHX	2	2074	-	0,6,6	0.00	-	-		
85	OHX	4	220	-	0,6,6	0.00	-	-		
85	OHX	1	4036	-	0,6,6	0.00	-	-		
85	OHX	5	3873	-	0,6,6	0.00	-	-		
85	OHX	8	214	-	0,6,6	0.00	-	-		
85	OHX	1	3846	-	0,6,6	0.00	-	-		
85	OHX	6	2069	-	0,6,6	0.00	-	-		
85	OHX	5	3786	-	0,6,6	0.00	-	-		
85	OHX	4	221	-	0,6,6	0.00	-	-		
85	OHX	1	3927	-	0,6,6	0.00	-	-		
85	OHX	1	3963	-	0,6,6	0.00	-	-		
85	OHX	5	3766	-	0,6,6	0.00	-	-		
85	OHX	6	2141	-	0,6,6	0.00	-	-		
85	OHX	6	2136	-	0,6,6	0.00	-	-		
85	OHX	2	2010	-	0,6,6	0.00	-	-		
85	OHX	2	2073	-	0,6,6	0.00	-	-		
85	OHX	4	230	-	0,6,6	0.00	-	-		
85	OHX	5	3827	-	0,6,6	0.00	-	-		
85	OHX	1	3860	-	0,6,6	0.00	-	-		
85	OHX	5	4057	-	0,6,6	0.00	-	-		
85	OHX	1	3778	-	0,6,6	0.00	-	-		
85	OHX	l3	408	-	0,6,6	0.00	-	-		
85	OHX	5	4010	-	0,6,6	0.00	-	-		
85	OHX	1	3782	-	0,6,6	0.00	-	-		
85	OHX	C5	201	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	o7	502	-	0,6,6	0.00	-	-		
85	OHX	5	4051	-	0,6,6	0.00	-	-		
85	OHX	5	3754	-	0,6,6	0.00	-	-		
85	OHX	5	3801	-	0,6,6	0.00	-	-		
85	OHX	1	3828	-	0,6,6	0.00	-	-		
85	OHX	5	3887	-	0,6,6	0.00	-	-		
85	OHX	5	4012	-	0,6,6	0.00	-	-		
85	OHX	6	2052	-	0,6,6	0.00	-	-		
85	OHX	5	3882	-	0,6,6	0.00	-	-		
85	OHX	5	3919	-	0,6,6	0.00	-	-		
85	OHX	5	3820	-	0,6,6	0.00	-	-		
85	OHX	m0	302	-	0,6,6	0.00	-	-		
85	OHX	5	3970	-	0,6,6	0.00	-	-		
85	OHX	5	3948	-	0,6,6	0.00	-	-		
85	OHX	6	2147	-	0,6,6	0.00	-	-		
85	OHX	2	2107	-	0,6,6	0.00	-	-		
85	OHX	1	3977	-	0,6,6	0.00	-	-		
85	OHX	2	2092	-	0,6,6	0.00	-	-		
85	OHX	1	3923	-	0,6,6	0.00	-	-		
85	OHX	1	3878	-	0,6,6	0.00	-	-		
85	OHX	6	2110	-	0,6,6	0.00	-	-		
85	OHX	5	3775	-	0,6,6	0.00	-	-		
85	OHX	1	3871	-	0,6,6	0.00	-	-		
85	OHX	1	3953	-	0,6,6	0.00	-	-		
85	OHX	1	3883	-	0,6,6	0.00	-	-		
85	OHX	1	3852	-	0,6,6	0.00	-	-		
85	OHX	5	4059	-	0,6,6	0.00	-	-		
85	OHX	1	3888	-	0,6,6	0.00	-	-		
85	OHX	5	3850	-	0,6,6	0.00	-	-		
85	OHX	5	3796	-	0,6,6	0.00	-	-		
85	OHX	5	3897	-	0,6,6	0.00	-	-		
85	OHX	1	4008	-	0,6,6	0.00	-	-		
85	OHX	1	3975	-	0,6,6	0.00	-	-		
85	OHX	1	3762	-	0,6,6	0.00	-	-		
85	OHX	1	3794	-	0,6,6	0.00	-	-		
85	OHX	7	221	-	0,6,6	0.00	-	-		
85	OHX	5	3819	-	0,6,6	0.00	-	-		
85	OHX	1	3814	-	0,6,6	0.00	-	-		
85	OHX	6	2079	-	0,6,6	0.00	-	-		
85	OHX	5	4043	-	0,6,6	0.00	-	-		
85	OHX	5	3824	-	0,6,6	0.00	-	-		
85	OHX	1	3938	-	0,6,6	0.00	-	-		
85	OHX	5	3745	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	2	2040	-	0,6,6	0.00	-	-		
85	OHX	6	2078	-	0,6,6	0.00	-	-		
85	OHX	2	1999	-	0,6,6	0.00	-	-		
85	OHX	5	3947	-	0,6,6	0.00	-	-		
85	OHX	5	4041	-	0,6,6	0.00	-	-		
85	OHX	5	3931	-	0,6,6	0.00	-	-		
85	OHX	1	3999	-	0,6,6	0.00	-	-		
85	OHX	1	3734	-	0,6,6	0.00	-	-		
85	OHX	5	3888	-	0,6,6	0.00	-	-		
85	OHX	5	4017	-	0,6,6	0.00	-	-		
85	OHX	5	3747	-	0,6,6	0.00	-	-		
85	OHX	5	3831	-	0,6,6	0.00	-	-		
85	OHX	1	3926	-	0,6,6	0.00	-	-		
85	OHX	6	2109	-	0,6,6	0.00	-	-		
85	OHX	2	1984	-	0,6,6	0.00	-	-		
85	OHX	5	3809	-	0,6,6	0.00	-	-		
85	OHX	2	1994	-	0,6,6	0.00	-	-		
85	OHX	5	3783	-	0,6,6	0.00	-	-		
85	OHX	M5	302	-	0,6,6	0.00	-	-		
85	OHX	2	2027	-	0,6,6	0.00	-	-		
85	OHX	6	2118	-	0,6,6	0.00	-	-		
85	OHX	1	3754	-	0,6,6	0.00	-	-		
85	OHX	6	2135	-	0,6,6	0.00	-	-		
85	OHX	1	3824	-	0,6,6	0.00	-	-		
85	OHX	5	3876	-	0,6,6	0.00	-	-		
85	OHX	5	3811	-	0,6,6	0.00	-	-		
85	OHX	5	3807	-	0,6,6	0.00	-	-		
85	OHX	1	3729	-	0,6,6	0.00	-	-		
85	OHX	1	3741	-	0,6,6	0.00	-	-		
85	OHX	2	2112	-	0,6,6	0.00	-	-		
85	OHX	1	3804	-	0,6,6	0.00	-	-		
85	OHX	6	2133	-	0,6,6	0.00	-	-		
85	OHX	4	215	-	0,6,6	0.00	-	-		
85	OHX	5	3972	-	0,6,6	0.00	-	-		
85	OHX	6	2030	-	0,6,6	0.00	-	-		
85	OHX	1	3730	-	0,6,6	0.00	-	-		
85	OHX	5	3825	-	0,6,6	0.00	-	-		
85	OHX	2	2004	-	0,6,6	0.00	-	-		
85	OHX	1	3970	-	0,6,6	0.00	-	-		
85	OHX	1	4010	-	0,6,6	0.00	-	-		
85	OHX	6	2119	-	0,6,6	0.00	-	-		
85	OHX	5	3939	-	0,6,6	0.00	-	-		
85	OHX	1	3816	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	1	3745	-	0,6,6	0.00	-	-		
85	OHX	5	3977	-	0,6,6	0.00	-	-		
85	OHX	7	219	-	0,6,6	0.00	-	-		
85	OHX	1	4035	-	0,6,6	0.00	-	-		
85	OHX	3	219	-	0,6,6	0.00	-	-		
85	OHX	S6	301	-	0,6,6	0.00	-	-		
85	OHX	3	217	-	0,6,6	0.00	-	-		
85	OHX	2	2070	-	0,6,6	0.00	-	-		
85	OHX	1	3798	-	0,6,6	0.00	-	-		
85	OHX	5	3943	-	0,6,6	0.00	-	-		
85	OHX	1	3956	-	0,6,6	0.00	-	-		
85	OHX	1	3962	-	0,6,6	0.00	-	-		
85	OHX	2	2025	-	0,6,6	0.00	-	-		
85	OHX	5	3774	-	0,6,6	0.00	-	-		
85	OHX	5	3845	-	0,6,6	0.00	-	-		
85	OHX	14	402	-	0,6,6	0.00	-	-		
85	OHX	5	3937	-	0,6,6	0.00	-	-		
85	OHX	5	3967	-	0,6,6	0.00	-	-		
85	OHX	5	3760	-	0,6,6	0.00	-	-		
85	OHX	1	3796	-	0,6,6	0.00	-	-		
85	OHX	8	221	-	0,6,6	0.00	-	-		
85	OHX	1	3944	-	0,6,6	0.00	-	-		
85	OHX	1	3742	-	0,6,6	0.00	-	-		
85	OHX	1	3761	-	0,6,6	0.00	-	-		
85	OHX	6	2104	-	0,6,6	0.00	-	-		
85	OHX	1	3941	-	0,6,6	0.00	-	-		
85	OHX	5	3889	-	0,6,6	0.00	-	-		
85	OHX	1	3748	-	0,6,6	0.00	-	-		
85	OHX	5	3810	-	0,6,6	0.00	-	-		
85	OHX	2	2041	-	0,6,6	0.00	-	-		
85	OHX	1	3758	-	0,6,6	0.00	-	-		
85	OHX	1	3951	-	0,6,6	0.00	-	-		
85	OHX	2	2081	-	0,6,6	0.00	-	-		
85	OHX	5	4047	-	0,6,6	0.00	-	-		
85	OHX	5	4011	-	0,6,6	0.00	-	-		
85	OHX	6	2063	-	0,6,6	0.00	-	-		
85	OHX	2	2095	-	0,6,6	0.00	-	-		
85	OHX	L3	403	-	0,6,6	0.00	-	-		
85	OHX	6	2024	-	0,6,6	0.00	-	-		
85	OHX	6	2053	-	0,6,6	0.00	-	-		
85	OHX	5	3953	-	0,6,6	0.00	-	-		
85	OHX	N9	101	-	0,6,6	0.00	-	-		
85	OHX	2	2017	-	0,6,6	0.00	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	5	3823	-	0,6,6	0.00	-	-		
85	OHX	2	2086	-	0,6,6	0.00	-	-		
85	OHX	1	3787	-	0,6,6	0.00	-	-		
85	OHX	5	3865	-	0,6,6	0.00	-	-		
85	OHX	2	2055	-	0,6,6	0.00	-	-		
85	OHX	5	3998	-	0,6,6	0.00	-	-		
85	OHX	5	3979	-	0,6,6	0.00	-	-		
85	OHX	1	3921	-	0,6,6	0.00	-	-		
85	OHX	2	2099	-	0,6,6	0.00	-	-		
85	OHX	5	3763	-	0,6,6	0.00	-	-		
85	OHX	3	214	-	0,6,6	0.00	-	-		
85	OHX	1	3789	-	0,6,6	0.00	-	-		
85	OHX	M6	202	-	0,6,6	0.00	-	-		
85	OHX	2	2020	-	0,6,6	0.00	-	-		
85	OHX	5	3846	-	0,6,6	0.00	-	-		
85	OHX	1	3855	-	0,6,6	0.00	-	-		
85	OHX	5	4022	-	0,6,6	0.00	-	-		
85	OHX	1	3834	-	0,6,6	0.00	-	-		
85	OHX	5	3995	-	0,6,6	0.00	-	-		
85	OHX	1	4019	-	0,6,6	0.00	-	-		
85	OHX	1	3769	-	0,6,6	0.00	-	-		
85	OHX	5	4004	-	0,6,6	0.00	-	-		
85	OHX	6	2046	-	0,6,6	0.00	-	-		
85	OHX	1	4014	-	0,6,6	0.00	-	-		
85	OHX	6	2150	-	0,6,6	0.00	-	-		
85	OHX	1	3781	-	0,6,6	0.00	-	-		
85	OHX	6	2142	-	0,6,6	0.00	-	-		
85	OHX	5	4023	-	0,6,6	0.00	-	-		
85	OHX	1	3933	-	0,6,6	0.00	-	-		
85	OHX	1	3885	-	0,6,6	0.00	-	-		
85	OHX	1	3939	-	0,6,6	0.00	-	-		
85	OHX	6	2033	-	0,6,6	0.00	-	-		
85	OHX	1	4017	-	0,6,6	0.00	-	-		
85	OHX	O3	202	-	0,6,6	0.00	-	-		
85	OHX	1	3868	-	0,6,6	0.00	-	-		
85	OHX	2	1987	-	0,6,6	0.00	-	-		
85	OHX	1	3884	-	0,6,6	0.00	-	-		
85	OHX	6	2099	-	0,6,6	0.00	-	-		
85	OHX	1	3894	-	0,6,6	0.00	-	-		
85	OHX	s9	201	-	0,6,6	0.00	-	-		
85	OHX	2	2079	-	0,6,6	0.00	-	-		
85	OHX	6	2018	-	0,6,6	0.00	-	-		
85	OHX	1	3911	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	m5	305	-	0,6,6	0.00	-	-		
85	OHX	5	3808	-	0,6,6	0.00	-	-		
85	OHX	5	4029	-	0,6,6	0.00	-	-		
85	OHX	5	4035	-	0,6,6	0.00	-	-		
85	OHX	2	2012	-	0,6,6	0.00	-	-		
85	OHX	1	4038	-	0,6,6	0.00	-	-		
85	OHX	M0	302	-	0,6,6	0.00	-	-		
85	OHX	1	3847	-	0,6,6	0.00	-	-		
85	OHX	2	2109	-	0,6,6	0.00	-	-		
85	OHX	6	2013	-	0,6,6	0.00	-	-		
85	OHX	6	2082	-	0,6,6	0.00	-	-		
85	OHX	6	2047	-	0,6,6	0.00	-	-		
85	OHX	1	3776	-	0,6,6	0.00	-	-		
85	OHX	5	3814	-	0,6,6	0.00	-	-		
85	OHX	C3	201	-	0,6,6	0.00	-	-		
85	OHX	1	3862	-	0,6,6	0.00	-	-		
85	OHX	5	3946	-	0,6,6	0.00	-	-		
85	OHX	1	3839	-	0,6,6	0.00	-	-		
85	OHX	2	2015	-	0,6,6	0.00	-	-		
85	OHX	6	2032	-	0,6,6	0.00	-	-		
85	OHX	5	3868	-	0,6,6	0.00	-	-		
85	OHX	1	3833	-	0,6,6	0.00	-	-		
85	OHX	1	3757	-	0,6,6	0.00	-	-		
85	OHX	5	3983	-	0,6,6	0.00	-	-		
85	OHX	1	3800	-	0,6,6	0.00	-	-		
85	OHX	2	2048	-	0,6,6	0.00	-	-		
85	OHX	6	2097	-	0,6,6	0.00	-	-		
85	OHX	8	222	-	0,6,6	0.00	-	-		
85	OHX	1	4032	-	0,6,6	0.00	-	-		
85	OHX	2	2071	-	0,6,6	0.00	-	-		
85	OHX	5	3926	-	0,6,6	0.00	-	-		
85	OHX	6	2107	-	0,6,6	0.00	-	-		
85	OHX	5	3758	-	0,6,6	0.00	-	-		
85	OHX	2	2049	-	0,6,6	0.00	-	-		
85	OHX	1	4012	-	0,6,6	0.00	-	-		
85	OHX	5	3780	-	0,6,6	0.00	-	-		
85	OHX	5	3933	-	0,6,6	0.00	-	-		
85	OHX	5	3964	-	0,6,6	0.00	-	-		
85	OHX	6	2139	-	0,6,6	0.00	-	-		
85	OHX	5	3914	-	0,6,6	0.00	-	-		
85	OHX	1	3881	-	0,6,6	0.00	-	-		
85	OHX	6	2127	-	0,6,6	0.00	-	-		
85	OHX	1	3737	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	2	2114	-	0,6,6	0.00	-	-		
85	OHX	5	3805	-	0,6,6	0.00	-	-		
85	OHX	5	3985	-	0,6,6	0.00	-	-		
85	OHX	5	4052	-	0,6,6	0.00	-	-		
85	OHX	6	2071	-	0,6,6	0.00	-	-		
85	OHX	6	2123	-	0,6,6	0.00	-	-		
85	OHX	C8	201	-	0,6,6	0.00	-	-		
85	OHX	7	220	-	0,6,6	0.00	-	-		
85	OHX	D9	103	-	0,6,6	0.00	-	-		
85	OHX	5	3804	-	0,6,6	0.00	-	-		
85	OHX	1	3807	-	0,6,6	0.00	-	-		
85	OHX	5	4039	-	0,6,6	0.00	-	-		
85	OHX	1	3919	-	0,6,6	0.00	-	-		
85	OHX	2	2113	-	0,6,6	0.00	-	-		
85	OHX	1	3913	-	0,6,6	0.00	-	-		
85	OHX	1	3851	-	0,6,6	0.00	-	-		
85	OHX	5	3764	-	0,6,6	0.00	-	-		
85	OHX	1	3976	-	0,6,6	0.00	-	-		
85	OHX	2	1983	-	0,6,6	0.00	-	-		
85	OHX	2	2039	-	0,6,6	0.00	-	-		
85	OHX	1	4013	-	0,6,6	0.00	-	-		
85	OHX	5	3813	-	0,6,6	0.00	-	-		
85	OHX	5	4042	-	0,6,6	0.00	-	-		
85	OHX	5	3956	-	0,6,6	0.00	-	-		
85	OHX	2	1995	-	0,6,6	0.00	-	-		
85	OHX	6	2072	-	0,6,6	0.00	-	-		
85	OHX	5	4001	-	0,6,6	0.00	-	-		
85	OHX	3	218	-	0,6,6	0.00	-	-		
85	OHX	6	2077	-	0,6,6	0.00	-	-		
85	OHX	1	3788	-	0,6,6	0.00	-	-		
85	OHX	5	3862	-	0,6,6	0.00	-	-		
85	OHX	1	3882	-	0,6,6	0.00	-	-		
85	OHX	1	3966	-	0,6,6	0.00	-	-		
85	OHX	5	3877	-	0,6,6	0.00	-	-		
85	OHX	1	3949	-	0,6,6	0.00	-	-		
85	OHX	1	3967	-	0,6,6	0.00	-	-		
85	OHX	M9	201	-	0,6,6	0.00	-	-		
85	OHX	5	4067	-	0,6,6	0.00	-	-		
85	OHX	1	3904	-	0,6,6	0.00	-	-		
85	OHX	2	2059	-	0,6,6	0.00	-	-		
85	OHX	s4	301	-	0,6,6	0.00	-	-		
85	OHX	2	2078	-	0,6,6	0.00	-	-		
85	OHX	1	3844	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
85	OHX	5	3858	-	0,6,6	0.00	-	-		
85	OHX	1	3959	-	0,6,6	0.00	-	-		
85	OHX	5	3871	-	0,6,6	0.00	-	-		
85	OHX	1	3930	-	0,6,6	0.00	-	-		
85	OHX	1	3905	-	0,6,6	0.00	-	-		
85	OHX	8	217	-	0,6,6	0.00	-	-		
85	OHX	6	2015	-	0,6,6	0.00	-	-		
85	OHX	2	2084	-	0,6,6	0.00	-	-		
85	OHX	6	2100	-	0,6,6	0.00	-	-		
85	OHX	5	3980	-	0,6,6	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
87	ANM	1	3401	-	3/3/4/5	3/10/23/23	0/2/2/2

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
87	1	3401	ANM	C4-C3	-6.47	1.43	1.53
87	1	3401	ANM	C3-C2	-6.41	1.40	1.53
87	1	3401	ANM	O2-C2	-4.67	1.37	1.44
87	1	3401	ANM	C16-N1	-4.41	1.38	1.48
87	1	3401	ANM	C15-C16	-3.10	1.47	1.53
87	1	3401	ANM	C2-C16	-2.91	1.47	1.53
87	1	3401	ANM	O4-C3	-2.83	1.37	1.43
87	1	3401	ANM	O1-C9	2.79	1.43	1.37
87	1	3401	ANM	O2-C5	2.62	1.41	1.35

All (10) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
87	1	3401	ANM	C15-C16-N1	-5.90	104.18	111.47
87	1	3401	ANM	C2-O2-C5	-5.34	109.46	117.72
87	1	3401	ANM	O2-C5-O3	-5.31	112.42	122.96
87	1	3401	ANM	C4-C3-C2	-4.14	97.94	103.29
87	1	3401	ANM	O4-C3-C4	-4.08	101.29	110.90
87	1	3401	ANM	O2-C5-C6	3.33	117.21	111.09
87	1	3401	ANM	O4-C3-C2	-2.88	103.16	111.63

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
87	1	3401	ANM	O3-C5-C6	-2.56	115.49	124.81
87	1	3401	ANM	C3-C2-C16	-2.33	100.92	104.29
87	1	3401	ANM	C14-O1-C9	-2.28	112.56	117.51

All (3) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
87	1	3401	ANM	C2
87	1	3401	ANM	C3
87	1	3401	ANM	C16

All (3) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
87	1	3401	ANM	C6-C5-O2-C2
87	1	3401	ANM	C10-C9-O1-C14
87	1	3401	ANM	C1-C9-O1-C14

There are no ring outliers.

496 monomers are involved in 773 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	1	3893	OHX	1	0
85	2	2052	OHX	1	0
85	5	3789	OHX	2	0
85	1	3733	OHX	1	0
85	2	2043	OHX	2	0
85	2	2105	OHX	1	0
85	6	2106	OHX	2	0
85	5	3861	OHX	1	0
85	5	4020	OHX	1	0
85	5	3860	OHX	1	0
85	6	2054	OHX	1	0
85	6	2112	OHX	3	0
85	5	3941	OHX	1	0
85	4	218	OHX	1	0
85	1	3774	OHX	1	0
85	5	4068	OHX	2	0
85	4	228	OHX	2	0
85	1	3858	OHX	1	0
85	5	3930	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	8	211	OHX	1	0
85	5	3911	OHX	1	0
85	1	3863	OHX	1	0
85	5	3815	OHX	1	0
85	1	3950	OHX	2	0
85	6	2009	OHX	1	0
85	5	3923	OHX	5	0
85	2	2085	OHX	1	0
85	2	2108	OHX	1	0
85	1	3895	OHX	2	0
85	3	210	OHX	1	0
85	5	3922	OHX	1	0
85	5	3806	OHX	4	0
85	6	2117	OHX	1	0
85	6	2138	OHX	2	0
85	1	3935	OHX	1	0
85	2	2029	OHX	2	0
85	1	3843	OHX	2	0
85	2	1992	OHX	2	0
85	1	3918	OHX	1	0
85	1	3739	OHX	2	0
85	6	2085	OHX	2	0
85	1	3766	OHX	1	0
85	5	3844	OHX	7	0
85	5	4032	OHX	2	0
85	5	3932	OHX	1	0
85	5	4021	OHX	1	0
85	5	3986	OHX	2	0
85	5	3891	OHX	1	0
85	5	3769	OHX	1	0
85	7	215	OHX	1	0
85	1	3900	OHX	1	0
85	1	3979	OHX	1	0
85	1	4009	OHX	8	0
85	2	2001	OHX	1	0
85	1	3945	OHX	1	0
85	1	4026	OHX	1	0
85	2	2067	OHX	1	0
85	8	215	OHX	1	0
85	1	3791	OHX	2	0
85	6	2108	OHX	1	0
85	1	3912	OHX	4	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	6	2121	OHX	4	0
85	1	4018	OHX	2	0
85	5	4018	OHX	1	0
85	5	3797	OHX	1	0
85	5	3751	OHX	2	0
85	5	3816	OHX	2	0
85	2	2116	OHX	1	0
85	2	1989	OHX	1	0
85	2	1986	OHX	1	0
85	1	3969	OHX	2	0
85	6	2014	OHX	1	0
85	5	3989	OHX	1	0
85	1	4003	OHX	1	0
85	1	3820	OHX	1	0
85	5	4056	OHX	1	0
85	5	3836	OHX	1	0
85	5	4062	OHX	3	0
85	5	3768	OHX	1	0
85	1	3948	OHX	1	0
85	L4	401	OHX	5	0
85	1	3752	OHX	1	0
85	2	2097	OHX	1	0
85	2	2037	OHX	2	0
85	5	3996	OHX	1	0
85	2	2030	OHX	2	0
85	2	2009	OHX	1	0
85	6	2064	OHX	2	0
85	8	213	OHX	1	0
85	2	2046	OHX	1	0
85	2	2036	OHX	1	0
85	5	3908	OHX	3	0
85	O9	101	OHX	2	0
85	5	3892	OHX	1	0
85	5	3857	OHX	1	0
85	5	3756	OHX	1	0
85	1	3826	OHX	1	0
85	1	3917	OHX	1	0
85	2	2065	OHX	2	0
85	1	3971	OHX	2	0
85	1	3974	OHX	1	0
85	6	2016	OHX	1	0
85	6	2019	OHX	2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	6	2088	OHX	3	0
85	1	4025	OHX	1	0
85	5	3822	OHX	8	0
85	5	4019	OHX	1	0
85	5	3835	OHX	3	0
85	1	3818	OHX	6	0
85	5	3742	OHX	1	0
85	5	4060	OHX	1	0
85	6	2146	OHX	1	0
85	6	2090	OHX	1	0
85	3	215	OHX	1	0
85	1	4007	OHX	3	0
85	5	4038	OHX	5	0
85	6	2157	OHX	1	0
85	7	213	OHX	1	0
85	5	3782	OHX	1	0
85	6	2105	OHX	1	0
85	8	216	OHX	1	0
85	5	3854	OHX	6	0
85	5	3976	OHX	1	0
85	1	3823	OHX	2	0
85	8	219	OHX	2	0
85	6	2029	OHX	1	0
85	5	3800	OHX	1	0
85	2	2075	OHX	1	0
85	1	4002	OHX	1	0
85	1	4015	OHX	2	0
85	2	2024	OHX	2	0
85	1	3736	OHX	1	0
85	5	4013	OHX	1	0
85	1	3899	OHX	3	0
85	1	3740	OHX	1	0
85	5	3855	OHX	1	0
85	4	219	OHX	1	0
85	6	2021	OHX	1	0
85	5	4054	OHX	5	0
85	2	2100	OHX	1	0
85	2	2102	OHX	1	0
85	6	2037	OHX	2	0
85	1	3836	OHX	7	0
85	6	2111	OHX	1	0
85	1	3898	OHX	1	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	6	2065	OHX	1	0
85	5	3950	OHX	2	0
85	1	3874	OHX	2	0
85	6	2062	OHX	1	0
85	M7	205	OHX	1	0
85	1	3735	OHX	1	0
85	6	2073	OHX	1	0
85	1	3929	OHX	1	0
85	1	3997	OHX	3	0
85	6	2120	OHX	2	0
85	5	3848	OHX	1	0
85	6	2050	OHX	1	0
85	6	2140	OHX	1	0
85	5	4049	OHX	4	0
85	5	3776	OHX	1	0
85	5	3864	OHX	1	0
85	1	3955	OHX	1	0
85	6	2154	OHX	1	0
85	2	2110	OHX	1	0
85	6	2126	OHX	1	0
85	1	3915	OHX	3	0
85	1	3743	OHX	1	0
85	5	3849	OHX	2	0
85	5	3834	OHX	1	0
85	5	3968	OHX	1	0
85	1	3835	OHX	2	0
85	1	3751	OHX	3	0
85	2	2031	OHX	1	0
85	1	3744	OHX	2	0
85	1	3841	OHX	2	0
85	2	2090	OHX	1	0
85	6	2087	OHX	3	0
87	1	3401	ANM	16	0
85	5	4025	OHX	6	0
85	1	3869	OHX	1	0
85	1	4011	OHX	1	0
85	1	3924	OHX	1	0
85	5	3963	OHX	1	0
85	2	2021	OHX	2	0
85	2	2068	OHX	7	0
85	6	2098	OHX	1	0
85	6	2137	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	6	2017	OHX	1	0
85	5	3856	OHX	2	0
85	5	3902	OHX	1	0
85	1	3934	OHX	1	0
85	6	2060	OHX	2	0
85	5	4030	OHX	2	0
85	1	3764	OHX	1	0
85	5	3792	OHX	1	0
85	2	2050	OHX	1	0
85	2	2042	OHX	3	0
85	6	2075	OHX	1	0
85	2	2018	OHX	1	0
85	1	3854	OHX	3	0
85	5	3748	OHX	1	0
85	6	2124	OHX	2	0
85	1	3767	OHX	1	0
85	1	3978	OHX	1	0
85	5	3935	OHX	1	0
85	1	3880	OHX	4	0
85	5	3909	OHX	1	0
85	5	3867	OHX	1	0
85	1	3907	OHX	3	0
85	8	224	OHX	2	0
85	1	4031	OHX	1	0
85	5	3759	OHX	1	0
85	1	3726	OHX	1	0
85	6	2012	OHX	1	0
85	6	2152	OHX	5	0
85	5	3750	OHX	1	0
85	1	3753	OHX	1	0
85	5	3886	OHX	1	0
85	5	4002	OHX	1	0
85	5	4007	OHX	9	0
85	1	3954	OHX	1	0
85	4	216	OHX	1	0
85	2	2023	OHX	1	0
85	5	3830	OHX	1	0
85	2	2054	OHX	6	0
85	2	2035	OHX	1	0
85	2	2069	OHX	1	0
85	1	3910	OHX	1	0
85	5	3875	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	1	3829	OHX	1	0
85	5	4016	OHX	1	0
85	5	3915	OHX	1	0
85	4	231	OHX	1	0
85	6	2025	OHX	2	0
85	5	4027	OHX	7	0
85	1	4004	OHX	7	0
85	2	1991	OHX	2	0
85	1	3867	OHX	1	0
85	5	4066	OHX	2	0
85	1	3817	OHX	1	0
85	1	4029	OHX	1	0
85	1	3993	OHX	2	0
85	2	2103	OHX	1	0
85	1	3779	OHX	1	0
85	5	3784	OHX	1	0
85	5	4037	OHX	7	0
85	2	2045	OHX	2	0
85	1	3932	OHX	2	0
85	6	2083	OHX	1	0
85	2	2005	OHX	2	0
85	5	3992	OHX	1	0
85	2	2013	OHX	2	0
85	5	3803	OHX	1	0
85	6	2056	OHX	1	0
85	1	3838	OHX	1	0
85	6	2116	OHX	6	0
85	1	3759	OHX	1	0
85	1	3901	OHX	2	0
85	S8	301	OHX	1	0
85	1	3980	OHX	1	0
85	5	3749	OHX	1	0
85	L3	402	OHX	1	0
85	2	2044	OHX	3	0
85	6	2023	OHX	6	0
85	2	2026	OHX	1	0
85	5	3944	OHX	2	0
85	5	3788	OHX	1	0
85	2	2002	OHX	1	0
85	2	2111	OHX	2	0
85	5	3752	OHX	2	0
85	1	3801	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	1	3812	OHX	1	0
85	1	3831	OHX	1	0
85	1	3952	OHX	1	0
85	5	3773	OHX	1	0
85	5	4044	OHX	1	0
85	2	1996	OHX	1	0
85	1	3891	OHX	3	0
85	5	4036	OHX	7	0
85	1	3983	OHX	1	0
85	1	3832	OHX	7	0
85	1	3837	OHX	1	0
85	5	3829	OHX	1	0
85	5	3921	OHX	1	0
85	1	3793	OHX	1	0
85	1	3864	OHX	1	0
85	6	2043	OHX	1	0
85	5	3798	OHX	3	0
85	1	3808	OHX	1	0
85	5	3895	OHX	1	0
85	5	3934	OHX	5	0
85	8	212	OHX	2	0
85	1	3947	OHX	1	0
85	5	3898	OHX	6	0
85	5	3912	OHX	1	0
85	1	3987	OHX	2	0
85	2	2000	OHX	1	0
85	1	3786	OHX	1	0
85	5	4058	OHX	1	0
85	2	2032	OHX	1	0
85	1	3964	OHX	1	0
85	6	2153	OHX	1	0
85	5	4015	OHX	1	0
85	5	3840	OHX	1	0
85	1	3903	OHX	1	0
85	6	2036	OHX	1	0
85	2	2119	OHX	1	0
85	2	1993	OHX	1	0
85	1	3849	OHX	1	0
85	5	4069	OHX	1	0
85	2	2051	OHX	2	0
85	6	2076	OHX	1	0
85	8	218	OHX	2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	6	2035	OHX	3	0
85	5	4034	OHX	1	0
85	2	2064	OHX	1	0
85	5	3917	OHX	2	0
85	O7	104	OHX	1	0
85	2	2033	OHX	1	0
85	1	3916	OHX	5	0
85	1	3842	OHX	1	0
85	5	3966	OHX	1	0
85	1	3940	OHX	6	0
85	6	2061	OHX	1	0
85	5	3999	OHX	2	0
85	5	3839	OHX	1	0
85	5	4028	OHX	1	0
85	1	3731	OHX	1	0
85	7	214	OHX	1	0
85	6	2092	OHX	1	0
85	1	3859	OHX	2	0
85	5	3974	OHX	1	0
85	5	3853	OHX	1	0
85	1	3797	OHX	1	0
85	2	2007	OHX	1	0
85	5	3852	OHX	1	0
85	2	1998	OHX	1	0
85	5	4033	OHX	1	0
85	5	3894	OHX	1	0
85	1	3772	OHX	2	0
85	5	3826	OHX	1	0
85	2	2056	OHX	3	0
85	6	2066	OHX	1	0
85	4	222	OHX	1	0
85	4	227	OHX	1	0
85	6	2129	OHX	1	0
85	2	2101	OHX	2	0
85	5	3761	OHX	1	0
85	5	4031	OHX	1	0
85	5	3957	OHX	1	0
85	2	2006	OHX	1	0
85	5	3872	OHX	1	0
85	2	2074	OHX	2	0
85	4	220	OHX	1	0
85	1	4036	OHX	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	8	214	OHX	1	0
85	1	3846	OHX	1	0
85	1	3927	OHX	5	0
85	5	3766	OHX	2	0
85	6	2141	OHX	1	0
85	6	2136	OHX	1	0
85	2	2010	OHX	1	0
85	5	3827	OHX	2	0
85	1	3860	OHX	2	0
85	5	4057	OHX	1	0
85	1	3778	OHX	1	0
85	1	3782	OHX	1	0
85	C5	201	OHX	3	0
85	5	4051	OHX	1	0
85	5	3754	OHX	2	0
85	5	3801	OHX	2	0
85	5	3882	OHX	1	0
85	5	3919	OHX	1	0
85	6	2147	OHX	2	0
85	2	2107	OHX	2	0
85	2	2092	OHX	1	0
85	1	3923	OHX	1	0
85	1	3878	OHX	1	0
85	6	2110	OHX	1	0
85	1	3852	OHX	1	0
85	5	4059	OHX	1	0
85	1	3888	OHX	1	0
85	5	3850	OHX	1	0
85	1	4008	OHX	6	0
85	1	3975	OHX	5	0
85	1	3794	OHX	1	0
85	1	3814	OHX	1	0
85	5	3745	OHX	1	0
85	2	1999	OHX	2	0
85	5	3947	OHX	2	0
85	1	3926	OHX	1	0
85	6	2109	OHX	7	0
85	5	3809	OHX	1	0
85	2	1994	OHX	1	0
85	6	2118	OHX	1	0
85	1	3824	OHX	2	0
85	5	3807	OHX	3	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	1	3729	OHX	1	0
85	2	2112	OHX	3	0
85	4	215	OHX	1	0
85	6	2030	OHX	1	0
85	1	3730	OHX	1	0
85	5	3825	OHX	1	0
85	2	2004	OHX	1	0
85	1	3970	OHX	1	0
85	5	3939	OHX	1	0
85	5	3977	OHX	1	0
85	7	219	OHX	4	0
85	3	219	OHX	1	0
85	S6	301	OHX	1	0
85	3	217	OHX	2	0
85	2	2070	OHX	3	0
85	1	3956	OHX	2	0
85	2	2025	OHX	1	0
85	5	3774	OHX	1	0
85	5	3937	OHX	1	0
85	8	221	OHX	2	0
85	1	3944	OHX	6	0
85	1	3742	OHX	1	0
85	1	3761	OHX	2	0
85	5	3889	OHX	1	0
85	1	3951	OHX	1	0
85	5	4011	OHX	1	0
85	2	2095	OHX	3	0
85	L3	403	OHX	1	0
85	6	2024	OHX	1	0
85	6	2053	OHX	1	0
85	5	3953	OHX	1	0
85	2	2017	OHX	1	0
85	2	2086	OHX	1	0
85	1	3787	OHX	1	0
85	5	3998	OHX	2	0
85	5	3979	OHX	2	0
85	2	2099	OHX	1	0
85	5	3763	OHX	1	0
85	5	3846	OHX	4	0
85	5	4022	OHX	1	0
85	5	3995	OHX	2	0
85	1	4019	OHX	3	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	6	2046	OHX	1	0
85	6	2150	OHX	1	0
85	6	2033	OHX	1	0
85	1	4017	OHX	5	0
85	O3	202	OHX	2	0
85	6	2099	OHX	2	0
85	1	3894	OHX	1	0
85	2	2079	OHX	5	0
85	6	2018	OHX	1	0
85	5	4029	OHX	1	0
85	5	4035	OHX	10	0
85	1	4038	OHX	1	0
85	6	2013	OHX	1	0
85	6	2082	OHX	1	0
85	6	2047	OHX	1	0
85	C3	201	OHX	3	0
85	1	3862	OHX	3	0
85	5	3868	OHX	2	0
85	1	3833	OHX	1	0
85	5	3983	OHX	2	0
85	1	3800	OHX	1	0
85	2	2048	OHX	4	0
85	6	2097	OHX	1	0
85	5	3926	OHX	1	0
85	2	2049	OHX	1	0
85	1	4012	OHX	3	0
85	5	3780	OHX	1	0
85	5	3933	OHX	2	0
85	5	3964	OHX	2	0
85	1	3737	OHX	1	0
85	2	2114	OHX	1	0
85	5	4052	OHX	1	0
85	6	2071	OHX	2	0
85	C8	201	OHX	0	1
85	D9	103	OHX	3	0
85	5	4039	OHX	3	0
85	2	2113	OHX	1	0
85	1	3851	OHX	2	0
85	1	3976	OHX	1	0
85	2	1983	OHX	1	0
85	5	4042	OHX	3	0
85	2	1995	OHX	1	0

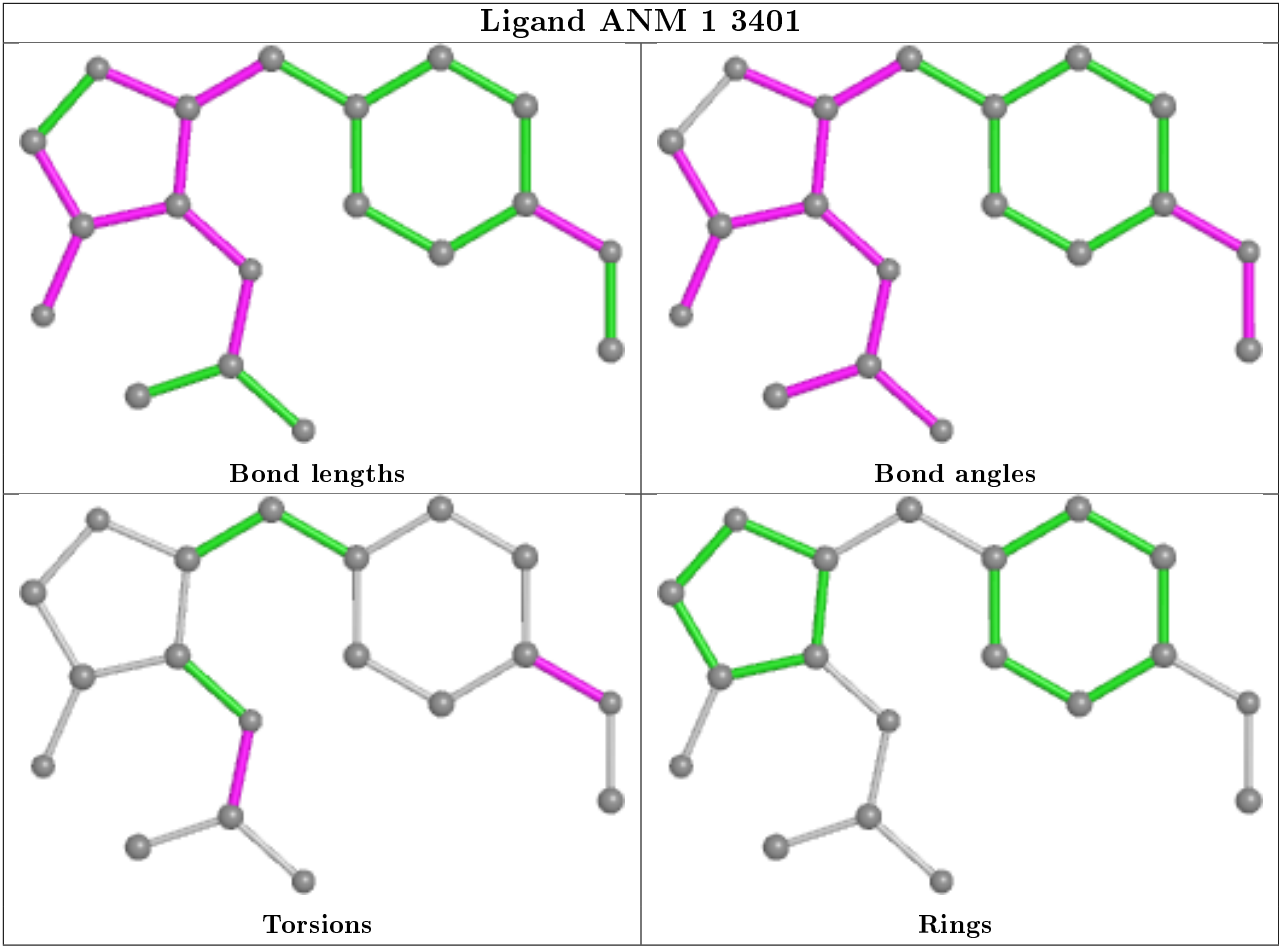
*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
85	6	2072	OHX	1	0
85	6	2077	OHX	1	0
85	1	3788	OHX	1	0
85	1	3966	OHX	1	0
85	5	3877	OHX	6	0
85	1	3967	OHX	2	0
85	M9	201	OHX	1	0
85	1	3904	OHX	7	0
85	2	2059	OHX	1	0
85	2	2078	OHX	1	0
85	5	3858	OHX	1	0
85	1	3930	OHX	1	0
85	2	2084	OHX	1	0
85	6	2100	OHX	1	0
85	5	3980	OHX	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

The following chains have linkage breaks:

Mol	Chain	Number of breaks
80	m2	2
35	sM	1
12	c0	1
1	2	1
35	SM	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	sM	139:UNK	C	155:UNK	N	37.86

Continued on next page...

*Continued from previous page...*

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	SM	141:ALA	C	151:UNK	N	26.40
1	c0	84:GLU	C	87:UNK	N	8.00
1	2	1716:C	O3'	1717:G	P	3.94
1	m2	23:UNK	C	28:UNK	N	3.86
1	m2	52:UNK	C	54:UNK	N	3.08

## 6 Fit of model and data ⓘ

### 6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	2	1781/1800 (98%)	0.47	141 (7%) 12 5	60, 86, 144, 179	0
1	6	1795/1800 (99%)	0.39	124 (6%) 16 7	43, 76, 145, 181	0
2	S0	206/251 (82%)	0.37	14 (6%) 17 7	87, 96, 101, 106	0
2	s0	206/251 (82%)	0.34	4 (1%) 66 46	78, 120, 181, 264	0
3	S1	214/254 (84%)	1.01	44 (20%) 1 0	96, 117, 134, 137	0
3	s1	216/254 (85%)	0.15	6 (2%) 53 30	71, 82, 95, 105	0
4	S2	217/253 (85%)	0.03	2 (0%) 84 69	73, 81, 90, 98	0
4	s2	217/253 (85%)	0.08	7 (3%) 47 25	58, 68, 84, 89	0
5	S3	223/239 (93%)	0.21	9 (4%) 38 19	76, 86, 104, 107	0
5	s3	223/239 (93%)	0.49	13 (5%) 23 10	77, 98, 120, 126	0
6	S4	260/260 (100%)	0.24	8 (3%) 49 26	64, 84, 91, 104	0
6	s4	260/260 (100%)	0.05	4 (1%) 73 54	49, 74, 82, 99	0
7	S5	206/224 (91%)	0.52	17 (8%) 11 4	94, 104, 110, 113	0
7	s5	206/224 (91%)	0.40	11 (5%) 26 12	74, 93, 100, 104	0
8	S6	226/236 (95%)	0.53	22 (9%) 7 2	67, 89, 106, 109	0
8	s6	218/236 (92%)	0.28	8 (3%) 41 21	51, 82, 94, 102	0
9	S7	184/189 (97%)	0.56	15 (8%) 11 4	83, 103, 119, 122	0
9	s7	186/189 (98%)	0.61	20 (10%) 5 2	71, 96, 123, 189	0
10	S8	188/200 (94%)	0.16	6 (3%) 47 25	61, 75, 106, 113	0
10	s8	188/200 (94%)	0.28	8 (4%) 35 17	46, 69, 110, 123	0
11	S9	185/196 (94%)	0.47	8 (4%) 35 17	77, 89, 111, 126	0
11	s9	185/196 (94%)	0.31	6 (3%) 47 25	62, 79, 104, 119	0
12	C0	84/96 (87%)	0.14	0 100 100	83, 96, 104, 107	0
12	c0	84/96 (87%)	0.77	10 (11%) 4 2	97, 122, 131, 135	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	C1	146/155 (94%)	0.17	6 (4%) 37 18	64, 72, 90, 101	0
13	c1	146/155 (94%)	0.26	9 (6%) 20 9	51, 66, 97, 152	0
14	C2	124/142 (87%)	1.60	46 (37%) 0 0	118, 124, 129, 132	0
14	c2	124/142 (87%)	2.93	76 (61%) 0 0	170, 185, 193, 202	0
15	C3	150/150 (100%)	0.06	6 (4%) 38 19	71, 85, 93, 97	0
15	c3	150/150 (100%)	-0.12	0 100 100	56, 72, 87, 92	0
16	C4	127/136 (93%)	1.07	25 (19%) 1 0	74, 116, 124, 126	0
16	c4	128/136 (94%)	0.21	2 (1%) 72 51	54, 81, 85, 88	0
17	C5	124/141 (87%)	0.08	3 (2%) 59 37	77, 88, 107, 114	0
17	c5	135/141 (95%)	0.32	10 (7%) 14 5	61, 91, 108, 115	0
18	C6	141/142 (99%)	0.41	6 (4%) 35 17	81, 99, 102, 103	0
18	c6	142/142 (100%)	0.67	18 (12%) 3 1	69, 89, 101, 104	0
19	C7	120/136 (88%)	0.51	11 (9%) 9 3	89, 99, 106, 107	0
19	c7	117/136 (86%)	0.82	17 (14%) 2 1	79, 95, 321, 380	0
20	C8	145/145 (100%)	0.78	18 (12%) 4 1	76, 94, 109, 114	0
20	c8	145/145 (100%)	0.46	8 (5%) 25 11	69, 87, 98, 103	0
21	C9	143/143 (100%)	0.47	7 (4%) 29 14	86, 97, 105, 110	0
21	c9	143/143 (100%)	0.17	0 100 100	71, 83, 93, 98	0
22	D0	107/120 (89%)	1.21	26 (24%) 0 0	76, 98, 107, 109	0
22	d0	110/120 (91%)	1.24	30 (27%) 0 0	73, 103, 118, 121	0
23	D1	87/87 (100%)	0.35	5 (5%) 23 11	84, 87, 97, 100	0
23	d1	87/87 (100%)	0.11	2 (2%) 60 39	70, 86, 139, 157	0
24	D2	129/129 (100%)	0.01	2 (1%) 72 51	73, 81, 87, 95	0
24	d2	129/129 (100%)	-0.03	0 100 100	56, 67, 74, 81	0
25	D3	144/144 (100%)	0.02	2 (1%) 75 56	63, 66, 72, 75	0
25	d3	144/144 (100%)	-0.26	0 100 100	47, 52, 60, 65	0
26	D4	134/134 (100%)	0.60	12 (8%) 9 3	74, 90, 97, 100	0
26	d4	134/134 (100%)	0.27	6 (4%) 33 16	58, 78, 88, 101	0
27	D5	70/107 (65%)	0.39	2 (2%) 51 28	103, 109, 114, 114	0
27	d5	69/107 (64%)	0.78	10 (14%) 2 1	86, 97, 101, 102	0
28	D6	97/97 (100%)	0.55	4 (4%) 37 18	76, 85, 121, 121	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
28	d6	97/97 (100%)	0.08	1 (1%) 82 67	56, 66, 87, 91	0
29	D7	81/81 (100%)	0.51	7 (8%) 10 4	84, 95, 107, 108	0
29	d7	81/81 (100%)	0.54	7 (8%) 10 4	72, 86, 101, 103	0
30	D8	63/66 (95%)	1.38	17 (26%) 0 0	101, 108, 112, 115	0
30	d8	63/66 (95%)	1.49	18 (28%) 0 0	88, 96, 101, 106	0
31	D9	53/55 (96%)	0.40	1 (1%) 66 46	78, 82, 94, 95	0
31	d9	53/55 (96%)	0.58	4 (7%) 14 5	73, 85, 114, 122	0
32	E0	60/62 (96%)	0.67	6 (10%) 7 2	65, 90, 102, 104	0
32	e0	62/62 (100%)	0.75	9 (14%) 2 1	53, 78, 95, 99	0
33	E1	71/76 (93%)	1.58	27 (38%) 0 0	89, 115, 125, 126	0
33	e1	76/76 (100%)	2.55	38 (50%) 0 0	96, 155, 181, 183	0
34	SR	318/318 (100%)	0.63	33 (10%) 6 2	95, 103, 114, 120	0
34	sR	318/318 (100%)	0.71	36 (11%) 5 2	102, 116, 127, 175	0
35	SM	133/182 (73%)	0.61	15 (11%) 5 2	56, 80, 122, 131	0
35	sM	63/182 (34%)	0.50	5 (7%) 12 5	44, 87, 93, 95	0
36	1	3149/3396 (92%)	0.05	123 (3%) 39 20	31, 53, 104, 189	0
36	5	3150/3396 (92%)	0.01	97 (3%) 49 26	29, 51, 105, 149	0
37	3	121/121 (100%)	-0.07	1 (0%) 86 72	43, 66, 77, 80	0
37	7	121/121 (100%)	-0.24	0 100 100	34, 52, 64, 69	0
38	4	158/158 (100%)	-0.17	3 (1%) 66 46	35, 54, 84, 107	0
38	8	158/158 (100%)	-0.04	3 (1%) 66 46	40, 61, 93, 104	0
39	L2	252/253 (99%)	-0.16	0 100 100	39, 52, 65, 70	0
39	l2	252/253 (99%)	-0.17	4 (1%) 72 51	37, 55, 73, 146	0
40	L3	386/386 (100%)	-0.25	1 (0%) 94 88	38, 53, 64, 73	0
40	l3	386/386 (100%)	-0.33	1 (0%) 94 88	30, 43, 58, 82	0
41	L4	361/361 (100%)	-0.37	0 100 100	33, 44, 56, 62	0
41	l4	361/361 (100%)	-0.25	3 (0%) 86 72	36, 51, 66, 72	0
42	L5	296/296 (100%)	0.13	5 (1%) 70 49	52, 69, 81, 90	0
42	l5	294/296 (99%)	-0.09	5 (1%) 70 49	37, 55, 77, 101	0
43	L6	156/175 (89%)	-0.29	0 100 100	42, 49, 58, 71	0
43	l6	157/175 (89%)	-0.24	2 (1%) 77 59	42, 54, 65, 71	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
44	L7	222/243 (91%)	-0.44	1 (0%) 91 81	36, 42, 58, 72	0
44	l7	223/243 (91%)	-0.30	6 (2%) 54 31	33, 41, 69, 86	0
45	L8	233/255 (91%)	0.09	8 (3%) 45 24	58, 71, 89, 96	0
45	l8	231/255 (90%)	0.41	15 (6%) 18 8	65, 80, 101, 106	0
46	L9	191/191 (100%)	0.04	2 (1%) 82 67	51, 59, 67, 72	0
46	l9	191/191 (100%)	-0.30	1 (0%) 91 81	39, 47, 59, 67	0
47	M0	211/220 (95%)	-0.25	3 (1%) 75 56	39, 50, 74, 80	0
47	m0	213/220 (96%)	-0.16	4 (1%) 66 46	33, 46, 75, 167	0
48	M1	169/173 (97%)	0.30	7 (4%) 37 18	61, 74, 82, 86	0
48	m1	169/173 (97%)	-0.09	2 (1%) 79 61	44, 57, 67, 76	0
49	M3	193/198 (97%)	-0.14	6 (3%) 49 26	35, 52, 76, 98	0
49	m3	194/198 (97%)	0.08	6 (3%) 49 26	35, 63, 86, 93	0
50	M4	136/137 (99%)	-0.25	2 (1%) 73 54	46, 52, 62, 64	0
50	m4	137/137 (100%)	-0.40	1 (0%) 87 75	41, 46, 61, 67	0
51	M5	203/203 (100%)	-0.17	0 100 100	36, 49, 59, 60	0
51	m5	203/203 (100%)	-0.08	0 100 100	40, 56, 66, 69	0
52	M6	197/198 (99%)	-0.40	1 (0%) 91 81	37, 43, 57, 58	0
52	m6	197/198 (99%)	-0.46	0 100 100	30, 35, 55, 58	0
53	M7	183/183 (100%)	0.10	16 (8%) 10 4	39, 47, 73, 82	0
53	m7	155/183 (84%)	-0.29	0 100 100	36, 43, 53, 61	0
54	M8	185/185 (100%)	-0.42	0 100 100	37, 47, 59, 68	0
54	m8	185/185 (100%)	-0.26	1 (0%) 91 81	36, 52, 60, 66	0
55	M9	188/188 (100%)	0.30	10 (5%) 26 12	58, 67, 117, 123	0
55	m9	188/188 (100%)	0.23	8 (4%) 35 17	53, 61, 108, 121	0
56	N0	172/172 (100%)	-0.29	2 (1%) 79 61	43, 49, 57, 63	0
56	n0	172/172 (100%)	-0.37	0 100 100	35, 41, 49, 52	0
57	N1	159/159 (100%)	-0.20	3 (1%) 66 46	39, 49, 71, 75	0
57	n1	159/159 (100%)	-0.22	3 (1%) 66 46	34, 41, 66, 71	0
58	N2	100/120 (83%)	0.89	11 (11%) 5 2	81, 89, 92, 92	0
58	n2	98/120 (81%)	0.61	11 (11%) 5 2	70, 79, 83, 86	0
59	N3	136/136 (100%)	0.01	4 (2%) 51 28	43, 50, 55, 59	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
59	n3	136/136 (100%)	-0.30	1 (0%) 87 75	30, 39, 48, 51	0
60	N4	98/155 (63%)	0.94	21 (21%) 0 0	49, 63, 112, 120	0
60	n4	135/155 (87%)	0.64	19 (14%) 2 1	38, 87, 303, 442	0
61	N5	121/141 (85%)	-0.04	1 (0%) 86 72	51, 60, 72, 88	0
61	n5	120/141 (85%)	0.14	6 (5%) 28 13	50, 65, 80, 86	0
62	N6	126/126 (100%)	0.20	4 (3%) 47 25	40, 53, 61, 64	0
62	n6	126/126 (100%)	0.03	1 (0%) 86 72	46, 60, 71, 75	0
63	N7	135/135 (100%)	0.26	3 (2%) 62 41	71, 79, 92, 98	0
63	n7	135/135 (100%)	0.19	4 (2%) 50 27	75, 86, 100, 107	0
64	N8	148/148 (100%)	-0.26	1 (0%) 87 75	30, 48, 62, 72	0
64	n8	148/148 (100%)	-0.25	0 100 100	31, 54, 63, 65	0
65	N9	58/58 (100%)	0.12	2 (3%) 45 24	35, 53, 81, 89	0
65	n9	58/58 (100%)	-0.13	0 100 100	32, 49, 69, 73	0
66	O0	97/104 (93%)	0.27	8 (8%) 11 4	67, 73, 84, 87	0
66	o0	100/104 (96%)	0.30	5 (5%) 28 13	66, 76, 86, 92	0
67	O1	109/112 (97%)	0.08	1 (0%) 84 69	52, 62, 76, 82	0
67	o1	109/112 (97%)	0.09	1 (0%) 84 69	44, 56, 81, 163	0
68	O2	127/129 (98%)	-0.18	2 (1%) 72 51	32, 44, 49, 53	0
68	o2	127/129 (98%)	-0.31	1 (0%) 86 72	31, 50, 57, 61	0
69	O3	106/106 (100%)	-0.32	0 100 100	37, 42, 56, 60	0
69	o3	106/106 (100%)	-0.33	0 100 100	34, 43, 59, 65	0
70	O4	112/120 (93%)	0.36	6 (5%) 25 12	52, 67, 82, 87	0
70	o4	112/120 (93%)	0.22	3 (2%) 54 31	51, 66, 88, 91	0
71	O5	119/119 (100%)	-0.03	1 (0%) 86 72	49, 60, 66, 70	0
71	o5	119/119 (100%)	-0.07	1 (0%) 86 72	57, 68, 76, 81	0
72	O6	99/99 (100%)	0.12	5 (5%) 28 13	51, 60, 77, 83	0
72	o6	99/99 (100%)	0.16	3 (3%) 50 27	59, 67, 77, 85	0
73	O7	87/87 (100%)	-0.09	1 (1%) 80 64	37, 43, 60, 73	0
73	o7	87/87 (100%)	0.04	2 (2%) 60 39	37, 46, 74, 90	0
74	O8	77/77 (100%)	0.22	3 (3%) 39 20	75, 80, 87, 87	0
74	o8	77/77 (100%)	0.62	6 (7%) 13 5	81, 89, 108, 120	0

*Continued on next page...*



Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
75	O9	50/50 (100%)	-0.26	2 (4%) 38 19	45, 49, 51, 52	0
75	o9	50/50 (100%)	-0.27	0 100 100	45, 50, 57, 66	0
76	Q0	52/52 (100%)	-0.01	0 100 100	48, 52, 61, 65	0
76	q0	52/52 (100%)	-0.27	0 100 100	36, 39, 47, 51	0
77	Q1	25/25 (100%)	0.52	1 (4%) 38 19	62, 63, 67, 68	0
77	q1	25/25 (100%)	-0.11	0 100 100	49, 51, 53, 55	0
78	Q2	105/105 (100%)	0.45	3 (2%) 51 28	39, 51, 63, 74	0
78	q2	105/105 (100%)	0.33	4 (3%) 40 20	38, 49, 59, 71	0
79	Q3	91/91 (100%)	-0.11	0 100 100	46, 53, 63, 69	0
79	q3	91/91 (100%)	-0.25	1 (1%) 80 64	43, 51, 65, 71	0
80	m2	0/150	-	-	-	-
81	p0	143/311 (45%)	0.41	12 (8%) 11 4	83, 101, 174, 180	0
82	p1	0/47	-	-	-	-
83	p2	0/46	-	-	-	-
All	All	32994/35138 (93%)	0.17	1617 (4%) 29 14	29, 66, 117, 442	0

All (1617) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
14	c2	20	ALA	27.1
47	m0	111	LEU	12.8
16	C4	15	GLY	12.0
1	2	1702	A	10.4
60	n4	68	ALA	10.3
33	e1	145	HIS	10.1
33	e1	77	GLY	10.1
36	1	1237	G	9.5
60	n4	73	ARG	9.4
1	2	194	U	9.4
14	c2	21	GLU	9.3
1	6	662	U	9.1
13	c1	147	ALA	8.7
1	6	663	U	8.6
60	N4	75	THR	8.3
1	6	658	C	8.1
1	2	656	G	8.1
33	e1	95	HIS	8.0
36	1	1952	G	8.0

Continued on next page...

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
14	c2	30	VAL	7.9
1	2	1700	C	7.9
1	6	239	C	7.9
14	C2	62	LEU	7.9
1	6	718	U	7.9
3	S1	93	GLY	7.7
1	6	668	C	7.7
36	1	1236	G	7.6
14	c2	80	ASN	7.5
36	1	1243	G	7.3
58	N2	27	VAL	7.3
14	c2	23	THR	7.2
1	2	1699	G	7.2
36	1	1955	U	7.1
11	S9	181	ALA	7.1
1	6	1707	A	7.0
14	c2	63	VAL	7.0
14	c2	126	TRP	7.0
30	D8	21	SER	6.9
22	d0	121	ASN	6.9
1	6	229	U	6.8
14	c2	86	VAL	6.8
1	2	1704	U	6.7
33	e1	85	TYR	6.7
39	l2	253	GLN	6.6
73	o7	87	SER	6.6
60	N4	86	SER	6.5
1	2	491	C	6.4
17	c5	133	ALA	6.4
14	c2	85	LYS	6.4
36	1	1238	C	6.3
1	6	661	A	6.3
60	N4	76	VAL	6.3
27	d5	37	GLN	6.3
36	5	2503	G	6.3
1	6	659	C	6.3
1	2	1709	C	6.2
33	e1	134	ASN	6.2
60	n4	65	GLU	6.2
1	6	667	U	6.2
5	S3	217	ILE	6.2
3	S1	226	GLY	6.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	2	714	G	6.2
1	2	1703	C	6.2
3	S1	92	GLN	6.2
33	e1	78	LYS	6.2
36	1	1245	A	6.1
1	6	669	G	6.1
60	n4	70	LYS	6.1
14	c2	123	VAL	6.1
39	l2	252	THR	6.0
27	d5	87	GLY	6.0
1	2	1698	G	6.0
60	n4	69	LYS	6.0
1	2	238	U	6.0
1	2	1711	C	6.0
1	2	506	A	6.0
1	6	1702	A	6.0
36	1	1568	U	6.0
60	N4	72	SER	5.9
22	d0	119	ALA	5.9
36	1	1234	G	5.9
1	2	1708	U	5.9
1	6	240	U	5.9
14	c2	57	ALA	5.9
1	2	493	U	5.9
1	2	715	U	5.8
35	sM	84	LYS	5.8
16	C4	14	PHE	5.8
19	C7	125	SER	5.8
3	S1	94	LYS	5.8
1	2	713	A	5.6
1	2	913	G	5.6
1	6	656	G	5.6
14	c2	29	LYS	5.6
31	d9	4	GLU	5.6
33	e1	80	ARG	5.6
3	S1	96	LEU	5.6
1	6	232	U	5.6
34	SR	79	TYR	5.6
5	S3	44	THR	5.5
1	2	1701	A	5.5
36	1	2539	C	5.5
47	m0	112	GLN	5.4

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	6	1711	C	5.4
1	2	1694	A	5.4
1	6	1712	A	5.4
1	6	490	C	5.4
1	2	1692	G	5.4
13	C1	146	ALA	5.4
1	6	238	U	5.3
1	2	657	U	5.3
36	1	1260	A	5.3
14	c2	64	SER	5.3
1	2	725	U	5.3
71	O5	120	ALA	5.3
1	6	660	G	5.3
14	c2	114	LYS	5.3
36	1	1349	G	5.2
22	D0	120	SER	5.2
2	S0	28	ASN	5.2
1	6	665	U	5.2
36	1	1242	G	5.2
12	c0	84	GLU	5.2
1	2	1705	C	5.2
1	6	1696	G	5.2
1	6	228	G	5.1
1	6	1697	G	5.1
3	S1	46	THR	5.1
33	e1	86	THR	5.1
22	D0	121	ASN	5.1
1	2	658	C	5.1
3	S1	25	THR	5.1
33	e1	102	VAL	5.1
22	d0	57	ARG	5.1
1	2	132	U	5.1
20	C8	8	GLN	5.1
1	2	1707	A	5.0
73	o7	88	ALA	5.1
1	2	1687	U	5.0
1	6	666	U	5.0
14	c2	124	LYS	5.0
1	6	664	U	5.0
22	D0	93	LEU	5.0
14	c2	59	LEU	5.0
17	c5	4	ALA	5.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
60	N4	70	LYS	5.0
33	e1	143	LYS	5.0
13	C1	147	ALA	5.0
35	SM	141	ALA	5.0
1	6	1371	A	4.9
14	c2	128	ALA	4.9
34	SR	36	ALA	4.9
1	2	1693	A	4.9
3	S1	45	LYS	4.9
58	N2	94	ARG	4.9
20	c8	146	ALA	4.9
36	5	249	U	4.9
1	2	712	G	4.9
1	6	1699	G	4.9
19	C7	126	ALA	4.9
22	d0	92	ASP	4.8
36	1	1239	C	4.8
14	c2	79	ALA	4.8
36	5	1569	U	4.8
30	d8	17	GLY	4.8
35	SM	84	LYS	4.8
19	C7	123	ASN	4.8
36	1	1256	G	4.8
13	c1	146	ALA	4.8
70	O4	113	LYS	4.8
1	2	1686	C	4.8
1	6	719	U	4.8
1	2	716	C	4.7
1	2	494	U	4.7
1	2	1691	A	4.7
22	D0	51	VAL	4.7
12	c0	79	TYR	4.7
30	d8	5	THR	4.7
1	2	718	U	4.7
36	5	1031	C	4.7
1	2	505	A	4.7
1	6	491	C	4.7
36	1	1569	U	4.7
81	p0	209	LEU	4.7
8	S6	180	THR	4.7
1	2	280	U	4.7
33	e1	79	LYS	4.7

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
7	S5	161	ASP	4.7
1	2	1690	G	4.7
1	2	1712	A	4.6
29	D7	38	PRO	4.6
14	c2	137	MET	4.6
1	2	135	A	4.6
14	c2	136	ILE	4.6
68	O2	2	ALA	4.6
16	C4	16	VAL	4.6
1	6	493	U	4.6
9	s7	3	ALA	4.6
3	S1	47	LEU	4.6
3	S1	28	GLU	4.6
8	S6	124	LEU	4.6
1	6	194	U	4.6
36	5	1580	A	4.6
22	d0	90	TYR	4.6
14	c2	56	GLU	4.5
14	c2	28	LEU	4.5
36	1	1235	U	4.5
14	C2	32	LEU	4.5
22	D0	19	ILE	4.5
14	C2	50	LYS	4.5
16	C4	75	GLY	4.5
16	C4	11	SER	4.5
9	s7	93	LEU	4.5
16	C4	89	THR	4.5
17	c5	50	THR	4.5
33	e1	147	VAL	4.5
1	2	721	U	4.5
14	c2	125	ASN	4.5
1	2	1713	G	4.5
1	2	719	U	4.5
36	1	1762	C	4.5
14	C2	111	ASN	4.5
1	2	134	U	4.5
9	S7	52	ALA	4.5
1	6	721	U	4.5
36	5	1567	U	4.5
36	5	2506	U	4.5
20	C8	10	SER	4.5
1	6	226	A	4.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	2	729	G	4.4
60	n4	71	ARG	4.4
1	2	492	A	4.4
81	p0	217	VAL	4.4
14	c2	43	ARG	4.4
1	6	1698	G	4.4
33	e1	90	LYS	4.4
12	c0	78	GLU	4.4
30	d8	13	ILE	4.4
35	SM	87	THR	4.4
3	S1	54	LEU	4.4
7	S5	41	LYS	4.4
5	s3	145	ALA	4.4
36	1	1269	U	4.4
36	1	1271	A	4.4
1	6	496	G	4.4
36	5	442	G	4.4
14	c2	84	ASN	4.4
60	n4	128	ALA	4.4
1	6	1217	A	4.3
45	l8	254	ASP	4.3
30	D8	44	VAL	4.3
36	5	1566	A	4.3
58	N2	93	ILE	4.3
1	6	225	A	4.3
36	1	1571	A	4.3
36	1	1567	U	4.3
8	s6	169	TYR	4.3
36	1	1273	A	4.3
1	6	75	U	4.3
1	6	657	U	4.3
42	L5	213	ASP	4.3
60	N4	73	ARG	4.3
22	D0	20	ILE	4.3
35	SM	88	ARG	4.3
27	d5	86	GLU	4.2
33	E1	116	LYS	4.2
36	1	1261	G	4.2
36	1	1572	U	4.2
1	2	1689	A	4.2
1	6	506	A	4.2
1	2	136	C	4.2

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
18	c6	19	VAL	4.2
60	N4	77	LYS	4.2
30	D8	7	VAL	4.2
36	1	1240	A	4.2
9	s7	2	SER	4.2
36	1	1255	C	4.2
3	S1	29	TRP	4.2
55	M9	181	ARG	4.2
53	M7	162	GLU	4.2
20	c8	18	LEU	4.2
26	d4	2	SER	4.2
33	e1	110	ALA	4.2
60	N4	78	ALA	4.2
36	1	1263	A	4.2
36	1	1570	U	4.2
31	d9	5	ASN	4.2
33	E1	149	LYS	4.2
53	M7	159	LYS	4.2
36	5	1025	A	4.2
14	C2	25	GLU	4.2
14	c2	106	ILE	4.2
36	1	1351	U	4.1
13	c1	3	THR	4.1
1	2	499	U	4.1
1	6	1059	U	4.1
13	C1	27	THR	4.1
34	sR	168	THR	4.1
14	c2	22	VAL	4.1
36	5	1017	C	4.1
53	M7	174	GLY	4.1
60	N4	69	LYS	4.1
65	N9	54	LEU	4.1
22	D0	92	ASP	4.1
35	SM	49	LYS	4.1
36	5	1349	G	4.1
36	1	1028	U	4.1
1	2	495	C	4.1
1	6	673	A	4.1
16	C4	27	PHE	4.1
14	c2	75	VAL	4.1
36	5	1026	A	4.1
21	C9	5	SER	4.1

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
33	e1	104	SER	4.1
16	C4	80	HIS	4.1
33	e1	112	GLY	4.1
34	SR	3	SER	4.1
14	c2	105	LYS	4.1
15	C3	61	THR	4.1
1	6	731	C	4.1
35	SM	89	ARG	4.1
36	5	2505	U	4.1
36	5	443	G	4.1
20	C8	22	VAL	4.1
60	n4	76	VAL	4.1
10	S8	21	PHE	4.1
58	n2	14	THR	4.1
1	6	492	A	4.1
22	d0	93	LEU	4.1
1	2	1688	U	4.0
14	c2	82	PRO	4.0
1	6	1694	A	4.0
18	c6	139	GLN	4.0
14	c2	47	GLU	4.0
1	6	1710	U	4.0
36	5	620	U	4.0
36	1	1233	G	4.0
19	c7	87	GLU	4.0
1	6	1703	C	4.0
1	6	676	G	4.0
1	2	490	C	4.0
47	m0	103	LEU	4.0
1	2	488	G	4.0
36	5	1024	G	4.0
22	d0	56	VAL	4.0
2	s0	205	ARG	4.0
7	S5	54	LYS	4.0
22	D0	48	HIS	4.0
33	e1	113	LYS	4.0
36	1	1259	A	4.0
60	n4	67	VAL	4.0
34	sR	244	ALA	4.0
1	6	717	C	4.0
3	S1	225	VAL	3.9
1	6	489	C	3.9

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
26	D4	2	SER	3.9
7	s5	37	GLN	3.9
36	1	1016	C	3.9
60	N4	64	THR	3.9
1	6	711	U	3.9
9	s7	52	ALA	3.9
26	D4	7	ILE	3.9
1	2	1697	G	3.9
36	1	1350	A	3.9
60	N4	95	SER	3.9
13	c1	4	GLU	3.9
36	5	1016	C	3.9
1	2	720	G	3.9
36	1	1270	A	3.9
22	D0	22	ILE	3.9
5	s3	128	GLU	3.9
66	o0	100	ILE	3.9
36	1	1953	G	3.9
14	c2	121	VAL	3.9
33	E1	146	SER	3.9
18	C6	3	ALA	3.9
28	D6	2	PRO	3.9
1	6	651	G	3.9
7	s5	159	ALA	3.9
59	N3	4	ASN	3.9
1	6	1704	U	3.8
35	sM	49	LYS	3.8
58	N2	89	LEU	3.8
7	S5	152	GLY	3.8
1	2	507	U	3.8
36	5	1764	U	3.8
66	o0	6	SER	3.8
34	sR	160	GLU	3.8
36	1	1241	U	3.8
14	c2	143	GLN	3.8
19	c7	119	LEU	3.8
14	C2	67	THR	3.8
36	1	1352	A	3.8
1	2	239	C	3.8
1	6	230	C	3.8
36	1	1566	A	3.8
55	M9	182	ASP	3.8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	2	234	G	3.8
59	N3	2	SER	3.8
35	sM	83	LYS	3.8
53	M7	168	LEU	3.8
31	d9	6	VAL	3.8
14	c2	76	GLU	3.8
33	e1	146	SER	3.8
81	p0	81	LYS	3.8
1	6	722	G	3.8
36	1	1278	A	3.8
1	2	500	C	3.8
30	d8	43	ASN	3.8
1	2	484	C	3.8
22	D0	21	LYS	3.7
1	6	227	U	3.7
14	c2	133	LEU	3.7
1	2	486	G	3.7
18	c6	3	ALA	3.7
22	D0	104	THR	3.7
33	e1	111	GLU	3.7
1	2	1059	U	3.7
1	6	1370	U	3.7
30	D8	17	GLY	3.7
27	D5	88	ILE	3.7
18	c6	4	VAL	3.7
49	M3	129	ASN	3.7
14	c2	132	GLU	3.7
36	1	1265	U	3.7
6	S4	261	LEU	3.7
14	c2	34	THR	3.7
45	l8	121	SER	3.7
67	o1	82	GLU	3.7
14	c2	58	LEU	3.7
3	S1	227	ALA	3.7
1	2	498	G	3.7
36	5	491	C	3.7
36	1	1229	G	3.6
18	c6	142	TYR	3.6
34	SR	4	ASN	3.6
67	O1	4	LEU	3.6
1	2	192	U	3.6
8	S6	1	MET	3.6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
22	d0	120	SER	3.6
36	1	1954	G	3.6
30	D8	45	LYS	3.6
48	M1	96	PHE	3.6
1	2	74	U	3.6
33	E1	87	THR	3.6
1	6	720	G	3.6
32	e0	63	GLN	3.6
79	q3	2	ALA	3.6
1	2	678	A	3.6
36	5	1574	C	3.6
1	2	261	U	3.6
14	c2	122	VAL	3.6
81	p0	221	ALA	3.6
10	s8	200	LYS	3.6
14	c2	140	PHE	3.6
34	sR	48	THR	3.6
1	2	485	A	3.6
36	1	1274	A	3.6
18	c6	5	PRO	3.6
18	c6	8	GLN	3.6
7	s5	145	ASP	3.6
60	n4	66	GLU	3.6
20	C8	13	HIS	3.6
1	6	1705	C	3.6
34	sR	46	LYS	3.6
19	c7	57	LEU	3.6
33	e1	89	LYS	3.5
16	C4	79	VAL	3.5
34	SR	6	VAL	3.5
36	1	1279	C	3.5
18	c6	141	SER	3.5
22	d0	100	VAL	3.5
33	e1	127	GLY	3.5
60	N4	85	ALA	3.5
36	5	1027	A	3.5
33	e1	81	LYS	3.5
3	S1	95	ASN	3.5
17	c5	134	THR	3.5
22	d0	18	GLN	3.5
34	sR	205	SER	3.5
14	c2	77	GLY	3.5

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
30	D8	40	ILE	3.5
2	S0	44	GLY	3.5
9	S7	97	ARG	3.5
60	n4	135	SER	3.5
22	D0	94	GLU	3.5
36	5	1562	C	3.5
19	c7	115	LEU	3.5
1	2	653	C	3.5
27	D5	48	ASP	3.5
1	2	1370	U	3.5
1	2	1710	U	3.5
34	SR	212	ALA	3.5
33	E1	85	TYR	3.5
36	1	2445	A	3.5
33	E1	115	THR	3.5
39	l2	249	SER	3.5
14	C2	63	VAL	3.4
60	N4	81	PRO	3.4
36	1	1951	C	3.4
1	6	834	G	3.4
14	c2	26	ASP	3.4
33	E1	134	ASN	3.4
22	d0	22	ILE	3.4
5	s3	151	LYS	3.4
36	1	1021	G	3.4
2	S0	25	GLY	3.4
20	C8	9	GLY	3.4
60	n4	132	GLY	3.4
8	S6	186	ARG	3.4
34	sR	72	THR	3.4
36	5	1032	C	3.4
7	s5	151	GLY	3.4
58	N2	28	PHE	3.4
45	l8	115	ALA	3.4
36	1	1232	C	3.4
8	s6	35	GLU	3.4
34	sR	121	MET	3.4
5	s3	144	ALA	3.4
1	2	497	G	3.4
14	c2	142	GLN	3.4
60	N4	74	LYS	3.4
1	6	1700	C	3.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
35	SM	16	ASP	3.4
60	n4	133	THR	3.4
1	6	710	U	3.4
16	C4	40	ALA	3.4
22	d0	117	VAL	3.4
14	c2	141	SER	3.4
58	N2	108	TYR	3.4
36	5	252	U	3.4
30	d8	9	LEU	3.4
61	n5	23	ALA	3.4
1	2	230	C	3.4
9	s7	22	GLN	3.4
45	L8	121	SER	3.4
36	5	1815	U	3.4
68	o2	128	LEU	3.4
18	C6	20	ALA	3.4
1	2	489	C	3.4
7	S5	37	GLN	3.4
14	C2	112	ALA	3.3
36	1	1231	A	3.3
10	s8	121	LEU	3.3
14	C2	23	THR	3.3
22	d0	25	THR	3.3
5	S3	88	ALA	3.3
34	SR	115	ILE	3.3
26	D4	47	VAL	3.3
32	e0	62	VAL	3.3
14	C2	47	GLU	3.3
1	2	1362	U	3.3
36	5	1028	U	3.3
45	l8	120	LYS	3.3
20	c8	22	VAL	3.3
36	1	1573	G	3.3
13	C1	2	SER	3.3
71	o5	120	ALA	3.3
36	1	1272	C	3.3
19	C7	71	PHE	3.3
34	SR	71	CYS	3.3
53	M7	160	ALA	3.3
1	2	677	G	3.3
14	C2	78	LEU	3.3
26	d4	18	LEU	3.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
36	1	1280	C	3.3
10	S8	144	ALA	3.3
11	S9	180	LYS	3.3
17	C5	14	THR	3.3
53	M7	163	LYS	3.3
1	6	655	G	3.3
65	N9	55	ALA	3.3
27	d5	105	THR	3.3
58	n2	97	SER	3.3
36	5	2874	G	3.3
21	C9	72	GLY	3.3
33	E1	151	ASN	3.3
3	S1	146	GLN	3.3
36	5	1572	U	3.3
34	SR	81	LEU	3.3
33	E1	143	LYS	3.3
3	S1	41	ARG	3.2
30	d8	61	ARG	3.2
1	2	1060	U	3.2
8	S6	175	ILE	3.2
14	c2	55	GLY	3.2
1	2	237	C	3.2
1	6	487	G	3.2
61	n5	36	LYS	3.2
2	S0	23	HIS	3.2
1	2	193	U	3.2
1	2	727	U	3.2
1	6	1693	A	3.2
34	SR	2	ALA	3.2
1	6	1228	G	3.2
36	5	244	G	3.2
17	c5	132	GLY	3.2
2	S0	24	LEU	3.2
63	n7	2	ALA	3.2
1	2	504	U	3.2
36	1	1763	U	3.2
8	S6	190	GLN	3.2
9	s7	60	ILE	3.2
45	l8	246	MET	3.2
14	c2	74	LEU	3.2
30	D8	43	ASN	3.2
35	SM	85	SER	3.2

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
53	M7	165	VAL	3.2
11	S9	87	SER	3.2
34	sR	161	LYS	3.2
32	e0	56	MET	3.2
36	5	246	U	3.2
10	S8	148	ALA	3.2
14	C2	90	LYS	3.2
14	C2	100	TRP	3.2
1	2	131	C	3.2
3	S1	233	GLY	3.2
13	C1	3	THR	3.2
1	6	494	U	3.2
17	c5	5	VAL	3.2
1	2	1696	G	3.2
36	1	3361	G	3.2
1	6	678	A	3.2
14	C2	128	ALA	3.2
44	l7	26	VAL	3.2
34	SR	122	ILE	3.2
36	5	1352	A	3.2
16	C4	42	VAL	3.2
53	M7	161	ALA	3.2
33	e1	96	LYS	3.2
1	2	730	G	3.2
1	2	1625	C	3.1
14	c2	24	ILE	3.1
36	1	1764	U	3.1
7	S5	181	GLU	3.1
14	C2	91	VAL	3.1
34	sR	303	ALA	3.1
34	sR	49	GLY	3.1
34	sR	294	TRP	3.1
2	S0	40	ALA	3.1
3	S1	91	VAL	3.1
74	o8	34	ALA	3.1
4	s2	90	THR	3.1
1	6	1701	A	3.1
14	c2	116	VAL	3.1
63	n7	56	LYS	3.1
1	2	496	G	3.1
1	6	234	G	3.1
22	d0	98	GLN	3.1

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
14	C2	28	LEU	3.1
16	C4	29	HIS	3.1
35	SM	135	ALA	3.1
1	2	502	U	3.1
16	C4	12	GLN	3.1
53	M7	166	VAL	3.1
36	5	2444	C	3.1
58	n2	11	ILE	3.1
1	2	217	A	3.1
32	E0	60	PRO	3.1
19	c7	116	LYS	3.1
32	E0	49	LEU	3.1
36	1	1264	G	3.1
20	C8	66	LEU	3.1
20	c8	15	LEU	3.1
33	E1	86	THR	3.1
33	e1	106	TYR	3.1
1	6	1399	C	3.1
36	5	1571	A	3.1
1	6	705	U	3.1
7	S5	71	ALA	3.1
40	l3	387	LEU	3.1
36	5	1581	C	3.1
7	S5	36	ALA	3.1
13	C1	145	ALA	3.1
29	d7	38	PRO	3.1
33	e1	103	LEU	3.1
14	c2	46	ARG	3.1
1	6	495	C	3.1
14	C2	74	LEU	3.1
36	1	2096	A	3.1
14	c2	87	PRO	3.0
36	5	2538	U	3.0
36	5	1029	G	3.0
33	e1	135	HIS	3.0
3	s1	202	LYS	3.0
5	S3	216	PRO	3.0
6	S4	259	GLN	3.0
36	5	1570	U	3.0
17	c5	136	SER	3.0
36	5	2539	C	3.0
42	l5	296	GLN	3.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
49	m3	80	VAL	3.0
9	s7	51	VAL	3.0
22	D0	97	VAL	3.0
81	p0	218	SER	3.0
14	C2	20	ALA	3.0
22	D0	98	GLN	3.0
7	S5	207	THR	3.0
33	E1	129	GLY	3.0
1	2	1361	U	3.0
36	5	1237	G	3.0
36	5	1350	A	3.0
42	l5	263	GLU	3.0
78	Q2	11	TYR	3.0
33	E1	150	VAL	3.0
34	sR	61	PHE	3.0
14	C2	68	GLU	3.0
70	O4	109	THR	3.0
36	1	2508	U	3.0
1	6	1695	G	3.0
28	D6	85	ARG	3.0
11	S9	64	GLU	3.0
44	l7	28	ALA	3.0
1	6	674	C	3.0
4	s2	87	GLN	3.0
36	5	439	C	3.0
36	1	2502	A	3.0
14	c2	83	GLU	3.0
66	O0	94	GLU	3.0
81	p0	32	ASN	3.0
19	c7	67	ARG	3.0
21	C9	2	PRO	3.0
1	6	1398	U	3.0
6	S4	215	ASP	3.0
20	C8	17	LEU	3.0
14	C2	94	ALA	3.0
19	c7	15	ALA	3.0
36	1	1247	U	3.0
1	6	136	C	3.0
3	S1	207	LEU	3.0
55	M9	185	LEU	3.0
19	C7	107	SER	3.0
36	1	2535	A	3.0

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
12	c0	74	GLU	2.9
14	C2	21	GLU	2.9
1	6	1058	U	2.9
38	8	81	U	2.9
2	S0	113	ARG	2.9
47	M0	209	ASN	2.9
33	E1	93	HIS	2.9
36	1	2507	C	2.9
36	5	247	C	2.9
5	S3	218	LEU	2.9
45	L8	93	LEU	2.9
55	M9	188	ASP	2.9
36	1	1275	C	2.9
3	S1	100	PHE	2.9
34	sR	189	GLU	2.9
1	2	133	U	2.9
1	2	241	U	2.9
1	2	912	U	2.9
36	1	3287	U	2.9
49	m3	133	PRO	2.9
74	O8	29	LYS	2.9
14	c2	127	GLY	2.9
22	D0	100	VAL	2.9
43	l6	128	LYS	2.9
58	n2	98	THR	2.9
7	S5	211	ILE	2.9
36	5	243	G	2.9
36	5	1576	G	2.9
60	N4	88	ASP	2.9
14	c2	27	ALA	2.9
34	sR	214	ALA	2.9
1	6	231	U	2.9
3	S1	23	PRO	2.9
30	d8	59	SER	2.9
36	5	250	U	2.9
72	O6	27	SER	2.9
74	O8	28	ASN	2.9
29	d7	57	GLU	2.9
28	D6	79	ILE	2.9
36	1	2772	C	2.9
36	1	3360	C	2.9
36	5	3154	C	2.9

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	2	722	G	2.9
1	2	723	G	2.9
36	5	1565	G	2.9
2	S0	187	ALA	2.9
14	C2	26	ASP	2.9
45	l8	247	ASP	2.9
60	N4	68	ALA	2.9
1	6	501	U	2.9
1	6	729	G	2.9
32	E0	46	ASN	2.9
60	N4	84	GLY	2.9
17	C5	50	THR	2.9
34	SR	253	ALA	2.9
36	5	1351	U	2.9
8	S6	50	PHE	2.9
49	M3	131	LYS	2.9
3	S1	97	LEU	2.9
4	s2	91	ARG	2.8
57	N1	121	ALA	2.8
62	N6	127	GLU	2.8
36	5	1261	G	2.8
36	5	1262	G	2.8
18	c6	29	ILE	2.8
26	D4	35	VAL	2.8
46	L9	134	ILE	2.8
1	2	1716	C	2.8
33	e1	140	TYR	2.8
9	s7	58	LEU	2.8
78	Q2	104	LEU	2.8
1	6	1256	A	2.8
1	6	235	G	2.8
18	C6	8	GLN	2.8
30	d8	58	GLU	2.8
23	D1	36	VAL	2.8
34	sR	284	ALA	2.8
81	p0	107	ALA	2.8
1	6	241	U	2.8
33	E1	83	LYS	2.8
36	5	441	U	2.8
55	m9	165	LYS	2.8
35	SM	140	ASP	2.8
36	1	1581	C	2.8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
10	s8	117	TYR	2.8
4	s2	84	LYS	2.8
11	s9	171	ARG	2.8
3	S1	30	PHE	2.8
1	6	714	G	2.8
58	N2	18	ASP	2.8
1	6	1248	C	2.8
30	d8	24	GLY	2.8
68	O2	128	LEU	2.8
8	s6	217	SER	2.8
16	C4	74	VAL	2.8
19	C7	70	SER	2.8
16	C4	31	THR	2.8
58	n2	44	GLU	2.8
55	M9	186	LYS	2.8
30	D8	16	LEU	2.8
40	L3	387	LEU	2.8
14	C2	89	ILE	2.8
36	5	2507	C	2.8
45	l8	253	SER	2.8
26	D4	39	GLU	2.8
45	l8	106	LYS	2.8
1	2	830	U	2.8
20	C8	32	LEU	2.8
22	D0	119	ALA	2.8
33	E1	105	TYR	2.8
36	5	1238	C	2.8
42	l5	270	LYS	2.8
49	m3	184	GLU	2.8
55	M9	187	GLU	2.8
14	c2	52	LEU	2.8
7	S5	151	GLY	2.8
33	E1	102	VAL	2.8
8	S6	177	ARG	2.8
30	d8	63	ALA	2.8
36	1	1277	C	2.8
57	N1	125	ALA	2.8
33	E1	100	LEU	2.8
42	l5	267	ALA	2.8
9	S7	100	PRO	2.8
22	d0	19	ILE	2.7
45	l8	227	ASP	2.8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
60	N4	65	GLU	2.7
36	1	1262	G	2.7
23	d1	43	GLY	2.7
3	S1	140	ILE	2.7
26	d4	26	ASP	2.7
36	1	1017	C	2.7
34	SR	252	LEU	2.7
19	C7	53	TYR	2.7
1	2	1371	A	2.7
7	S5	31	GLU	2.7
36	5	2441	A	2.7
6	s4	261	LEU	2.7
14	c2	115	VAL	2.7
34	SR	80	ALA	2.7
44	L7	23	ALA	2.7
20	C8	19	ASN	2.7
49	m3	178	LYS	2.7
1	2	191	C	2.7
1	2	724	C	2.7
1	6	1706	C	2.7
1	2	227	U	2.7
36	1	252	U	2.7
38	4	82	U	2.7
14	c2	135	MET	2.7
17	c5	135	THR	2.7
42	L5	214	ASP	2.7
1	2	235	G	2.7
7	s5	152	GLY	2.7
33	e1	98	VAL	2.7
22	D0	41	ILE	2.7
1	2	233	C	2.7
2	S0	18	LEU	2.7
13	c1	5	LEU	2.7
30	D8	30	VAL	2.7
3	S1	204	ILE	2.7
27	d5	58	ARG	2.7
60	N4	49	ILE	2.7
5	s3	86	LEU	2.7
29	D7	33	LEU	2.7
36	1	1565	G	2.7
36	1	3286	G	2.7
35	SM	45	SER	2.7

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
61	n5	24	LEU	2.7
14	C2	113	ARG	2.7
25	D3	102	VAL	2.7
33	e1	94	LYS	2.7
34	sR	163	ASP	2.7
72	O6	99	ARG	2.7
29	D7	49	HIS	2.7
33	e1	84	VAL	2.7
36	1	2522	G	2.7
14	C2	130	THR	2.7
16	C4	77	THR	2.7
21	C9	134	ARG	2.7
72	o6	29	LYS	2.7
3	S1	99	ASN	2.7
3	S1	147	ALA	2.7
34	sR	226	ALA	2.7
36	1	2207	A	2.7
1	6	1690	G	2.7
27	d5	85	LYS	2.7
36	1	2442	G	2.7
60	n4	77	LYS	2.7
29	D7	75	GLU	2.7
22	d0	99	ILE	2.7
23	D1	37	ALA	2.7
3	S1	31	ASP	2.7
14	c2	131	ASP	2.7
34	sR	252	LEU	2.7
75	O9	46	ARG	2.7
22	D0	105	GLN	2.7
60	N4	67	VAL	2.7
16	C4	41	ARG	2.6
2	S0	107	PHE	2.6
14	C2	49	THR	2.6
19	c7	8	THR	2.6
20	C8	24	GLY	2.6
11	S9	182	GLU	2.6
61	n5	26	VAL	2.6
36	5	1023	C	2.6
60	n4	131	ALA	2.6
36	5	1021	G	2.6
55	M9	164	LEU	2.6
8	S6	41	VAL	2.6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
43	l6	129	GLU	2.6
58	n2	13	LYS	2.6
58	n2	66	VAL	2.6
5	s3	182	LEU	2.6
32	e0	49	LEU	2.6
1	2	717	C	2.6
1	2	726	C	2.6
34	SR	186	PHE	2.6
14	C2	105	LYS	2.6
18	c6	140	LYS	2.6
26	D4	3	ASP	2.6
14	C2	71	ILE	2.6
38	8	158	U	2.6
3	S1	232	HIS	2.6
1	6	237	C	2.6
34	SR	82	SER	2.6
8	S6	114	VAL	2.6
8	S6	152	ASP	2.6
8	S6	196	ARG	2.6
21	C9	71	VAL	2.6
36	1	1254	C	2.6
9	S7	74	GLN	2.6
60	n4	134	GLN	2.6
62	N6	111	LEU	2.6
22	d0	55	PRO	2.6
36	1	1230	G	2.6
31	d9	7	TRP	2.6
35	sM	85	SER	2.6
36	5	1816	A	2.6
38	8	80	A	2.6
1	2	654	C	2.6
3	S1	156	ALA	2.6
3	s1	52	THR	2.6
53	M7	178	ALA	2.6
9	s7	90	VAL	2.6
36	5	1953	G	2.6
34	SR	91	LEU	2.6
7	s5	129	PRO	2.6
14	c2	129	GLU	2.6
26	D4	67	GLY	2.6
48	M1	85	LYS	2.6
53	M7	167	ARG	2.6

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
36	5	1239	C	2.6
1	6	675	U	2.6
33	E1	139	LEU	2.6
77	Q1	1	MET	2.6
12	c0	64	TYR	2.6
14	c2	92	ALA	2.6
34	sR	26	SER	2.6
35	SM	19	VAL	2.6
36	5	1573	G	2.6
36	1	1026	A	2.6
36	1	2540	A	2.6
1	2	1706	C	2.6
10	s8	67	TRP	2.6
14	C2	88	LEU	2.6
36	5	1763	U	2.6
19	c7	114	GLY	2.6
66	O0	93	LEU	2.6
1	2	682	C	2.6
36	5	2571	U	2.6
14	c2	102	GLY	2.6
48	M1	148	VAL	2.6
33	E1	135	HIS	2.6
34	sR	227	ALA	2.5
5	S3	214	GLU	2.5
14	C2	117	GLY	2.5
34	SR	102	ARG	2.5
36	1	2095	G	2.5
36	1	2205	U	2.5
29	D7	37	CYS	2.5
70	o4	68	THR	2.5
6	s4	183	VAL	2.5
58	N2	62	VAL	2.5
1	6	236	A	2.5
36	5	1575	A	2.5
22	d0	91	ILE	2.5
10	S8	20	GLN	2.5
30	D8	27	GLN	2.5
32	E0	48	THR	2.5
33	e1	148	TYR	2.5
50	M4	138	ALA	2.5
53	M7	184	ALA	2.5
60	n4	75	THR	2.5

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
63	N7	2	ALA	2.5
26	D4	38	ASP	2.5
36	1	2501	U	2.5
36	5	492	U	2.5
56	N0	1	MET	2.5
35	sM	50	ASN	2.5
1	6	677	G	2.5
1	6	1692	G	2.5
7	s5	150	GLY	2.5
44	l7	25	GLN	2.5
72	o6	31	GLY	2.5
11	S9	138	LYS	2.5
78	q2	15	LYS	2.5
9	s7	54	GLY	2.5
36	5	1579	C	2.5
39	l2	248	GLY	2.5
70	O4	66	SER	2.5
1	2	794	U	2.5
13	c1	117	VAL	2.5
14	c2	112	ALA	2.5
16	C4	78	ALA	2.5
34	SR	180	ALA	2.5
36	5	1564	U	2.5
61	n5	37	THR	2.5
30	d8	32	PHE	2.5
36	1	1025	A	2.5
36	1	1228	C	2.5
36	5	1232	C	2.5
3	s1	89	ASP	2.5
34	SR	117	LYS	2.5
34	sR	309	VAL	2.5
35	SM	22	PRO	2.5
13	c1	2	SER	2.5
55	m9	151	ARG	2.5
20	C8	73	MET	2.5
23	d1	5	LYS	2.5
34	SR	72	THR	2.5
3	s1	152	ARG	2.5
16	C4	114	ARG	2.5
10	s8	150	ALA	2.5
12	c0	76	LEU	2.5
22	D0	116	VAL	2.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
30	d8	15	VAL	2.5
33	E1	148	TYR	2.5
81	p0	192	ASP	2.5
50	M4	8	LYS	2.5
14	c2	89	ILE	2.5
45	L8	252	ASN	2.5
21	C9	83	ALA	2.5
7	s5	35	GLN	2.5
19	c7	86	PRO	2.5
24	D2	85	ASP	2.5
14	C2	24	ILE	2.5
36	1	1244	A	2.5
36	1	2548	C	2.5
36	1	3154	C	2.5
58	n2	92	TRP	2.5
1	2	240	U	2.5
1	6	822	U	2.5
5	s3	63	GLY	2.5
14	C2	60	VAL	2.5
61	n5	32	PHE	2.5
14	C2	64	SER	2.5
35	SM	137	GLU	2.5
1	6	1236	A	2.4
22	d0	21	LYS	2.4
59	N3	3	GLY	2.4
61	N5	38	LEU	2.4
66	O0	38	LYS	2.4
1	2	711	U	2.4
1	6	670	U	2.4
72	O6	68	ARG	2.4
12	c0	70	GLU	2.4
30	D8	31	GLU	2.4
26	D4	69	SER	2.4
1	6	1245	G	2.4
7	S5	150	GLY	2.4
18	C6	105	LEU	2.4
29	d7	36	LYS	2.4
30	d8	7	VAL	2.4
34	sR	92	TRP	2.4
45	l8	45	ASN	2.4
52	M6	185	ALA	2.4
66	o0	105	ALA	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
10	s8	111	GLN	2.4
16	C4	73	GLU	2.4
18	c6	11	GLY	2.4
25	D3	2	GLY	2.4
66	O0	91	SER	2.4
14	c2	113	ARG	2.4
20	C8	28	ILE	2.4
36	5	1246	G	2.4
36	5	1952	G	2.4
1	6	829	A	2.4
3	S1	229	MET	2.4
5	s3	65	ARG	2.4
46	L9	100	ASN	2.4
10	s8	165	LEU	2.4
20	c8	144	ARG	2.4
36	1	3351	U	2.4
1	2	503	G	2.4
33	E1	137	ASP	2.4
10	S8	200	LYS	2.4
16	C4	69	ALA	2.4
45	l8	213	LYS	2.4
53	M7	177	ALA	2.4
14	C2	138	GLU	2.4
19	C7	110	VAL	2.4
33	E1	119	ARG	2.4
34	sR	28	GLY	2.4
19	C7	7	LYS	2.4
20	C8	23	ASP	2.4
8	S6	12	SER	2.4
14	C2	141	SER	2.4
36	5	2573	G	2.4
5	S3	179	GLN	2.4
11	s9	174	ARG	2.4
20	C8	63	GLN	2.4
44	l7	30	ARG	2.4
14	C2	80	ASN	2.4
32	e0	58	PRO	2.4
60	n4	129	LYS	2.4
26	d4	134	ALA	2.4
33	E1	145	HIS	2.4
36	1	1564	U	2.4
36	1	2570	U	2.4

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
81	p0	212	HIS	2.4
2	s0	165	ARG	2.4
14	c2	71	ILE	2.4
23	D1	34	ILE	2.4
36	1	2569	A	2.4
58	N2	98	THR	2.4
3	S1	144	ARG	2.4
1	2	75	U	2.4
1	6	74	U	2.4
7	S5	137	ILE	2.4
36	5	2097	U	2.4
36	1	1563	C	2.4
36	5	1631	C	2.4
59	n3	2	SER	2.4
6	S4	25	GLY	2.4
22	D0	27	THR	2.4
44	l7	22	THR	2.4
33	e1	82	LYS	2.4
34	sR	50	ASP	2.4
1	6	1708	U	2.4
16	C4	102	LEU	2.4
36	1	1014	U	2.4
36	1	1094	U	2.4
14	c2	104	GLY	2.4
45	l8	123	GLN	2.4
1	2	910	C	2.4
19	c7	11	ARG	2.4
36	1	439	C	2.4
36	1	2566	C	2.4
70	O4	110	GLU	2.4
5	s3	208	ILE	2.4
66	o0	32	LYS	2.4
11	s9	93	LEU	2.4
16	c4	102	LEU	2.4
20	C8	101	LEU	2.4
9	s7	85	PHE	2.4
36	1	547	G	2.4
36	1	1246	G	2.4
36	1	2538	U	2.4
59	N3	5	GLY	2.4
18	c6	143	ARG	2.4
78	q2	8	ARG	2.4

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
8	S6	173	PRO	2.4
19	c7	111	LYS	2.4
20	C8	47	CYS	2.4
3	s1	31	ASP	2.3
8	S6	154	ARG	2.3
13	c1	116	ARG	2.3
19	C7	124	VAL	2.3
19	c7	103	ASP	2.3
22	d0	23	ARG	2.3
45	L8	116	VAL	2.3
45	L8	123	GLN	2.3
78	Q2	106	PHE	2.3
7	s5	31	GLU	2.3
73	O7	87	SER	2.3
1	2	655	G	2.3
1	6	1445	G	2.3
36	5	1354	G	2.3
57	n1	128	LEU	2.3
16	c4	48	VAL	2.3
19	c7	56	HIS	2.3
60	N4	71	ARG	2.3
30	D8	35	ASP	2.3
42	L5	185	PHE	2.3
1	6	219	A	2.3
34	SR	69	GLN	2.3
36	1	1027	A	2.3
17	C5	51	SER	2.3
33	E1	106	TYR	2.3
34	SR	211	ILE	2.3
3	S1	148	ASN	2.3
26	d4	71	GLY	2.3
62	N6	92	GLY	2.3
36	5	1761	C	2.3
36	5	440	A	2.3
36	5	1030	A	2.3
1	2	1058	U	2.3
34	sR	117	LYS	2.3
36	5	1356	U	2.3
18	c6	46	PHE	2.3
66	o0	67	VAL	2.3
34	SR	25	THR	2.3
35	SM	50	ASN	2.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
14	C2	33	ARG	2.3
34	sR	190	ALA	2.3
36	5	1563	C	2.3
7	S5	149	VAL	2.3
12	c0	10	LYS	2.3
55	m9	2	ALA	2.3
29	d7	32	PHE	2.3
36	1	2996	U	2.3
36	5	3155	U	2.3
36	5	3283	U	2.3
14	C2	43	ARG	2.3
22	d0	104	THR	2.3
3	S1	203	ASP	2.3
5	s3	59	LEU	2.3
53	M7	182	ILE	2.3
14	c2	61	VAL	2.3
22	d0	97	VAL	2.3
1	6	652	G	2.3
34	SR	63	GLY	2.3
27	d5	38	HIS	2.3
34	sR	251	TRP	2.3
19	c7	69	ILE	2.3
42	L5	2	ALA	2.3
26	D4	129	VAL	2.3
9	s7	31	SER	2.3
18	C6	66	ARG	2.3
70	O4	16	ARG	2.3
22	d0	53	LYS	2.3
36	1	1248	C	2.3
70	o4	106	LYS	2.3
1	6	679	U	2.3
36	1	1222	G	2.3
33	E1	140	TYR	2.3
55	m9	115	ILE	2.3
49	m3	179	PHE	2.3
14	c2	40	GLY	2.3
22	D0	101	LYS	2.3
34	SR	261	LYS	2.3
1	6	654	C	2.3
8	S6	185	GLN	2.3
14	c2	62	LEU	2.3
1	2	278	U	2.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
20	c8	14	ILE	2.3
30	D8	8	THR	2.3
32	e0	47	VAL	2.3
48	M1	127	PHE	2.3
1	2	228	G	2.3
14	C2	110	GLY	2.3
22	D0	54	GLY	2.3
1	2	706	A	2.3
57	n1	110	LYS	2.3
2	s0	24	LEU	2.3
14	c2	65	SER	2.3
20	c8	17	LEU	2.3
22	d0	103	ILE	2.3
9	S7	21	ALA	2.3
14	c2	31	VAL	2.3
22	D0	118	VAL	2.3
30	D8	15	VAL	2.3
41	l4	8	VAL	2.3
55	M9	177	VAL	2.3
1	2	847	A	2.3
3	s1	54	LEU	2.3
30	d8	65	ARG	2.3
36	1	251	G	2.3
34	SR	43	ILE	2.3
3	S1	160	HIS	2.3
26	d4	34	ASN	2.3
38	4	158	U	2.3
20	C8	18	LEU	2.3
2	S0	170	ILE	2.3
5	s3	148	LYS	2.3
45	l8	122	LYS	2.3
58	N2	83	TYR	2.3
66	O0	23	TYR	2.3
31	D9	4	GLU	2.2
55	m9	152	GLU	2.2
15	C3	104	ARG	2.2
22	d0	26	LEU	2.2
36	1	1765	U	2.2
36	1	1815	U	2.2
36	5	2537	U	2.2
6	S4	208	VAL	2.2
47	M0	217	PHE	2.2

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
78	q2	91	PHE	2.2
34	sR	213	SER	2.2
66	O0	105	ALA	2.2
36	1	1252	A	2.2
1	2	652	G	2.2
14	C2	135	MET	2.2
34	SR	32	LEU	2.2
58	n2	76	LEU	2.2
58	n2	105	LEU	2.2
36	1	1029	G	2.2
1	2	836	U	2.2
3	S1	133	TYR	2.2
22	D0	117	VAL	2.2
9	S7	42	GLN	2.2
36	5	1951	C	2.2
36	5	2098	C	2.2
63	n7	57	HIS	2.2
1	6	541	A	2.2
8	S6	226	ILE	2.2
58	n2	93	ILE	2.2
1	2	195	G	2.2
1	6	831	U	2.2
5	s3	131	ALA	2.2
34	SR	90	ARG	2.2
34	sR	187	GLN	2.2
47	M0	191	LYS	2.2
1	2	696	C	2.2
36	5	3164	C	2.2
8	S6	80	ASN	2.2
6	s4	134	LYS	2.2
15	C3	23	PRO	2.2
8	s6	190	GLN	2.2
55	M9	165	LYS	2.2
56	N0	2	ALA	2.2
1	2	820	U	2.2
36	1	601	U	2.2
72	O6	26	ILE	2.2
2	S0	110	TYR	2.2
6	s4	260	GLY	2.2
9	S7	87	ASP	2.2
21	C9	141	GLU	2.2
22	d0	113	ASP	2.2

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
26	D4	46	GLU	2.2
81	p0	82	GLY	2.2
33	e1	87	THR	2.2
3	S1	130	SER	2.2
15	C3	66	ILE	2.2
9	s7	95	GLU	2.2
74	o8	71	PRO	2.2
33	e1	115	THR	2.2
34	sR	32	LEU	2.2
14	C2	73	LYS	2.2
28	d6	80	HIS	2.2
66	O0	90	VAL	2.2
19	C7	86	PRO	2.2
23	D1	40	ASP	2.2
1	2	651	G	2.2
4	S2	90	THR	2.2
7	s5	122	ASN	2.2
37	3	73	C	2.2
14	c2	130	THR	2.2
18	c6	37	THR	2.2
58	N2	100	THR	2.2
74	o8	32	ASN	2.2
9	S7	90	VAL	2.2
1	6	836	U	2.2
22	d0	115	GLU	2.2
70	o4	110	GLU	2.2
32	e0	59	GLY	2.2
33	E1	126	CYS	2.2
36	5	2096	A	2.2
81	p0	216	ALA	2.2
1	2	708	C	2.2
30	d8	44	VAL	2.2
36	5	1582	C	2.2
18	c6	21	HIS	2.2
1	2	1243	G	2.2
1	6	712	G	2.2
36	1	1249	G	2.2
36	5	1268	G	2.2
49	M3	130	GLY	2.2
55	m9	113	GLY	2.2
72	O6	31	GLY	2.2
4	s2	247	ALA	2.2

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
10	S8	167	ALA	2.2
11	s9	177	ALA	2.2
66	O0	101	LEU	2.2
8	S6	16	PHE	2.2
3	S1	164	ILE	2.2
8	s6	162	VAL	2.2
19	c7	66	VAL	2.2
14	C2	104	GLY	2.2
3	S1	26	ARG	2.2
18	c6	49	TYR	2.2
44	l7	27	ALA	2.2
1	6	192	U	2.2
1	6	1247	U	2.2
1	6	1688	U	2.2
50	m4	2	SER	2.2
9	s7	63	PRO	2.2
1	2	733	A	2.2
8	s6	166	GLU	2.2
74	o8	27	ILE	2.2
14	C2	77	GLY	2.2
27	d5	51	LEU	2.1
1	6	1686	C	2.1
1	6	730	G	2.1
18	c6	72	GLY	2.1
9	s7	24	PHE	2.1
9	S7	73	VAL	2.1
1	2	781	U	2.1
1	2	1056	U	2.1
11	S9	89	ASP	2.1
30	D8	57	MET	2.1
36	5	1820	U	2.1
38	4	81	U	2.1
45	L8	207	ASP	2.1
62	N6	44	GLY	2.1
63	N7	5	LEU	2.1
27	d5	102	THR	2.1
29	d7	77	THR	2.1
41	l4	18	ASN	2.1
7	s5	127	GLN	2.1
8	s6	143	LYS	2.1
9	s7	48	GLU	2.1
55	m9	157	GLU	2.1

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
60	n4	74	LYS	2.1
14	C2	22	VAL	2.1
17	c5	109	PRO	2.1
34	sR	82	SER	2.1
1	2	1624	C	2.1
1	6	1687	U	2.1
6	S4	123	LEU	2.1
22	d0	58	LEU	2.1
36	5	981	U	2.1
2	S0	27	ARG	2.1
4	s2	92	ALA	2.1
9	S7	56	LYS	2.1
14	c2	100	TRP	2.1
48	M1	159	THR	2.1
49	M3	192	GLU	2.1
1	6	1344	A	2.1
14	c2	78	LEU	2.1
36	1	1580	A	2.1
1	6	821	U	2.1
26	D4	32	ARG	2.1
29	D7	32	PHE	2.1
33	E1	128	ALA	2.1
34	sR	253	ALA	2.1
36	1	545	U	2.1
36	1	1353	U	2.1
36	5	1568	U	2.1
49	M3	98	ASP	2.1
7	S5	182	ALA	2.1
14	c2	25	GLU	2.1
54	m8	95	GLU	2.1
55	m9	27	ASN	2.1
48	M1	90	GLN	2.1
9	S7	69	GLY	2.1
29	D7	41	LEU	2.1
29	d7	69	GLY	2.1
55	M9	4	LEU	2.1
3	S1	151	LYS	2.1
32	E0	53	LYS	2.1
72	o6	62	ARG	2.1
16	C4	13	VAL	2.1
17	c5	6	ASN	2.1
20	c8	21	ASN	2.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
9	S7	126	LEU	2.1
9	s7	176	LEU	2.1
30	D8	29	ARG	2.1
48	m1	174	LYS	2.1
9	S7	32	PRO	2.1
20	C8	58	ALA	2.1
46	l9	190	ASP	2.1
1	2	231	U	2.1
1	2	483	A	2.1
15	C3	5	HIS	2.1
18	c6	7	VAL	2.1
1	6	832	U	2.1
36	1	1030	A	2.1
36	1	2441	A	2.1
6	S4	77	ARG	2.1
8	s6	177	ARG	2.1
9	S7	105	THR	2.1
16	C4	110	LEU	2.1
30	d8	67	ARG	2.1
32	e0	48	THR	2.1
33	e1	92	LYS	2.1
74	o8	35	GLY	2.1
36	5	2572	C	2.1
34	SR	83	ALA	2.1
45	l8	107	GLU	2.1
30	d8	22	ARG	2.1
33	e1	83	LYS	2.1
33	e1	150	VAL	2.1
57	n1	126	VAL	2.1
36	1	1095	U	2.1
45	L8	152	LEU	2.1
62	n6	120	GLN	2.1
1	6	653	C	2.1
9	S7	80	GLU	2.1
36	5	547	G	2.1
9	s7	84	LYS	2.1
41	l4	346	LYS	2.1
53	M7	158	ALA	2.1
34	sR	310	ILE	2.1
75	O9	45	ARG	2.1
10	s8	118	GLY	2.1
18	C6	21	HIS	2.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
63	n7	58	GLY	2.1
1	2	232	U	2.1
3	S1	201	THR	2.1
34	SR	308	ASN	2.1
4	S2	249	ALA	2.1
24	D2	108	ALA	2.1
30	D8	67	ARG	2.1
49	M3	191	ALA	2.1
8	S6	3	LEU	2.1
47	m0	194	GLY	2.1
29	d7	59	CYS	2.1
33	e1	97	LYS	2.1
28	D6	62	TYR	2.1
14	c2	45	LEU	2.1
74	O8	5	ILE	2.1
1	2	848	C	2.1
2	s0	54	TRP	2.0
15	C3	108	ASP	2.1
2	S0	45	VAL	2.0
19	c7	53	TYR	2.0
36	5	2442	G	2.0
48	M1	167	TYR	2.0
32	e0	51	ASN	2.0
11	S9	60	LEU	2.0
14	c2	117	GLY	2.0
32	E0	38	LEU	2.0
30	d8	27	GLN	2.0
34	sR	54	PHE	2.0
36	1	1257	C	2.0
36	1	1283	C	2.0
12	c0	57	THR	2.0
1	2	1154	G	2.0
36	5	236	G	2.0
8	S6	155	ASP	2.0
11	s9	64	GLU	2.0
42	l5	274	GLN	2.0
63	N7	106	GLN	2.0
70	O4	73	SER	2.0
4	s2	86	VAL	2.0
45	l8	215	VAL	2.0
6	S4	162	ILE	2.0
8	S6	52	ILE	2.0

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
16	C4	76	ILE	2.0
22	D0	99	ILE	2.0
22	D0	103	ILE	2.0
23	D1	69	LEU	2.0
27	d5	89	ILE	2.0
36	5	1759	C	2.0
64	N8	94	ALA	2.0
78	q2	72	LEU	2.0
12	c0	77	ARG	2.0
42	L5	297	GLN	2.0
5	s3	160	SER	2.0
5	S3	41	VAL	2.0
7	S5	209	TYR	2.0
34	SR	283	LYS	2.0
34	sR	58	VAL	2.0
3	S1	228	LEU	2.0
14	C2	69	ALA	2.0
49	m3	190	LYS	2.0
1	2	541	A	2.0
1	6	713	A	2.0
57	N1	148	PRO	2.0
36	1	1258	U	2.0
36	1	1950	U	2.0
3	S1	131	ASP	2.0
34	SR	92	TRP	2.0
45	L8	97	TYR	2.0
53	M7	164	LYS	2.0
81	p0	188	VAL	2.0
9	s7	41	LEU	2.0
13	c1	145	ALA	2.0
1	2	1486	G	2.0
1	2	1601	G	2.0
9	s7	92	PHE	2.0
5	S3	43	PRO	2.0
1	2	1346	A	2.0
1	6	579	A	2.0
36	5	1091	A	2.0
48	m1	108	GLU	2.0
1	6	1447	C	2.0
11	s9	91	LYS	2.0
74	o8	74	LYS	2.0
14	C2	66	VAL	2.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
22	d0	114	VAL	2.0
22	d0	116	VAL	2.0

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

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

## 6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95<sup>th</sup> percentile and maximum values of B factors of atoms in the group. The column labelled 'Q<0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	6	1984	1/1	0.26	0.48	70,70,70,70	0
84	MG	1	3678	1/1	0.36	0.24	65,65,65,65	0
84	MG	M3	201	1/1	0.44	0.22	86,86,86,86	0
84	MG	5	3457	1/1	0.47	0.43	100,100,100,100	0
84	MG	2	1941	1/1	0.50	0.78	93,93,93,93	0
84	MG	2	1962	1/1	0.50	0.78	110,110,110,110	0
84	MG	5	3617	1/1	0.53	0.56	46,46,46,46	0
84	MG	l6	201	1/1	0.56	0.45	56,56,56,56	0
84	MG	5	3647	1/1	0.57	0.37	41,41,41,41	0
84	MG	5	3643	1/1	0.58	0.40	55,55,55,55	0
84	MG	SM	201	1/1	0.59	0.51	56,56,56,56	0
84	MG	1	3583	1/1	0.60	0.21	61,61,61,61	0
84	MG	6	1977	1/1	0.60	0.38	79,79,79,79	0
87	ANM	1	3401	19/19	0.61	0.52	62,62,62,62	19
84	MG	1	3494	1/1	0.62	0.38	52,52,52,52	0
84	MG	1	4043	1/1	0.62	0.72	33,33,33,33	0
84	MG	5	3613	1/1	0.63	0.34	58,58,58,58	0
84	MG	1	3714	1/1	0.64	0.22	45,45,45,45	0
84	MG	6	1971	1/1	0.64	0.60	90,90,90,90	0
84	MG	6	1996	1/1	0.64	0.36	54,54,54,54	0
84	MG	5	3460	1/1	0.65	0.29	44,44,44,44	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	1	3722	1/1	0.65	0.37	60,60,60,60	0
84	MG	5	3462	1/1	0.65	0.29	58,58,58,58	0
84	MG	6	1961	1/1	0.66	0.43	61,61,61,61	0
84	MG	2	1904	1/1	0.66	0.67	77,77,77,77	0
84	MG	1	3570	1/1	0.66	0.69	67,67,67,67	0
84	MG	1	3599	1/1	0.66	0.49	59,59,59,59	0
84	MG	O7	103	1/1	0.67	0.61	64,64,64,64	0
84	MG	1	3624	1/1	0.68	0.23	44,44,44,44	0
84	MG	2	1970	1/1	0.68	0.56	76,76,76,76	0
84	MG	2	1912	1/1	0.68	0.55	74,74,74,74	0
84	MG	1	3496	1/1	0.69	0.48	39,39,39,39	0
84	MG	2	1969	1/1	0.69	0.71	66,66,66,66	0
84	MG	1	3673	1/1	0.69	0.51	65,65,65,65	0
84	MG	5	3426	1/1	0.69	0.30	36,36,36,36	0
84	MG	5	3715	1/1	0.69	0.29	39,39,39,39	0
84	MG	5	3458	1/1	0.70	0.27	107,107,107,107	0
86	ZN	e1	501	1/1	0.70	0.07	160,160,160,160	0
84	MG	1	3667	1/1	0.70	0.66	62,62,62,62	0
84	MG	6	1969	1/1	0.71	0.48	65,65,65,65	0
84	MG	4	202	1/1	0.71	0.54	57,57,57,57	0
84	MG	5	3709	1/1	0.71	0.41	61,61,61,61	0
84	MG	1	3663	1/1	0.71	0.30	36,36,36,36	0
84	MG	2	1909	1/1	0.71	0.58	81,81,81,81	0
84	MG	5	3409	1/1	0.71	0.26	58,58,58,58	0
84	MG	1	3414	1/1	0.71	0.45	63,63,63,63	0
84	MG	2	1972	1/1	0.71	0.50	71,71,71,71	0
84	MG	2	1948	1/1	0.72	0.38	94,94,94,94	0
84	MG	5	3641	1/1	0.72	0.72	79,79,79,79	0
84	MG	3	201	1/1	0.72	0.24	71,71,71,71	0
84	MG	1	3487	1/1	0.72	0.62	49,49,49,49	0
84	MG	5	3693	1/1	0.72	0.40	80,80,80,80	0
84	MG	m7	201	1/1	0.73	0.31	37,37,37,37	0
84	MG	l3	402	1/1	0.73	0.24	32,32,32,32	0
84	MG	5	3404	1/1	0.73	0.24	33,33,33,33	0
84	MG	1	3715	1/1	0.73	0.78	48,48,48,48	0
84	MG	6	1998	1/1	0.73	0.23	58,58,58,58	0
84	MG	4	213	1/1	0.73	0.38	41,41,41,41	0
84	MG	1	3668	1/1	0.73	0.18	66,66,66,66	0
84	MG	6	1993	1/1	0.73	0.36	95,95,95,95	0
84	MG	6	2002	1/1	0.74	0.65	99,99,99,99	0
84	MG	2	1938	1/1	0.74	0.36	75,75,75,75	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3655	1/1	0.74	0.60	64,64,64,64	0
84	MG	1	3712	1/1	0.74	0.28	41,41,41,41	0
84	MG	2	1956	1/1	0.74	0.45	64,64,64,64	0
84	MG	6	1965	1/1	0.74	0.47	56,56,56,56	0
84	MG	1	3630	1/1	0.74	0.57	56,56,56,56	0
84	MG	1	3655	1/1	0.75	0.29	41,41,41,41	0
84	MG	1	3435	1/1	0.75	0.46	41,41,41,41	0
84	MG	1	3709	1/1	0.75	0.83	59,59,59,59	0
84	MG	5	3476	1/1	0.75	0.58	51,51,51,51	0
84	MG	2	1978	1/1	0.75	0.74	104,104,104,104	0
84	MG	6	2008	1/1	0.75	0.44	47,47,47,47	0
84	MG	8	207	1/1	0.76	0.45	51,51,51,51	0
84	MG	2	1979	1/1	0.76	0.40	72,72,72,72	0
84	MG	5	3697	1/1	0.76	0.29	50,50,50,50	0
84	MG	1	3508	1/1	0.76	0.39	43,43,43,43	0
84	MG	1	3639	1/1	0.76	0.43	59,59,59,59	0
84	MG	2	1915	1/1	0.77	0.59	76,76,76,76	0
84	MG	5	3438	1/1	0.77	0.36	45,45,45,45	0
84	MG	5	3738	1/1	0.77	0.38	45,45,45,45	0
84	MG	5	3731	1/1	0.77	0.57	37,37,37,37	0
84	MG	5	3614	1/1	0.77	0.25	55,55,55,55	0
84	MG	1	3408	1/1	0.77	0.33	50,50,50,50	0
84	MG	2	1923	1/1	0.77	0.51	56,56,56,56	0
84	MG	6	1938	1/1	0.77	0.50	99,99,99,99	0
84	MG	6	1917	1/1	0.77	1.38	75,75,75,75	0
84	MG	1	3701	1/1	0.78	0.27	40,40,40,40	0
84	MG	5	3645	1/1	0.78	0.31	33,33,33,33	0
84	MG	5	3732	1/1	0.78	0.30	52,52,52,52	0
84	MG	2	1949	1/1	0.78	0.40	96,96,96,96	0
84	MG	2	1913	1/1	0.78	0.32	63,63,63,63	0
84	MG	5	3635	1/1	0.78	0.18	66,66,66,66	0
84	MG	5	3463	1/1	0.78	0.37	41,41,41,41	0
84	MG	6	1908	1/1	0.78	0.20	51,51,51,51	0
84	MG	5	3722	1/1	0.78	0.31	55,55,55,55	0
84	MG	5	3678	1/1	0.78	0.31	58,58,58,58	0
84	MG	5	3688	1/1	0.78	0.40	33,33,33,33	0
84	MG	1	3707	1/1	0.78	0.35	53,53,53,53	0
84	MG	1	3666	1/1	0.79	0.24	45,45,45,45	0
84	MG	1	3568	1/1	0.79	0.52	40,40,40,40	0
84	MG	2	1946	1/1	0.79	0.63	93,93,93,93	0
84	MG	4	208	1/1	0.79	0.27	54,54,54,54	0
84	MG	1	3638	1/1	0.79	0.19	46,46,46,46	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	2	1975	1/1	0.79	0.35	76,76,76,76	0
84	MG	5	3450	1/1	0.79	0.25	58,58,58,58	0
84	MG	2	1911	1/1	0.79	0.82	69,69,69,69	0
84	MG	5	3453	1/1	0.79	0.23	42,42,42,42	0
84	MG	6	1911	1/1	0.79	0.30	52,52,52,52	0
84	MG	O4	202	1/1	0.79	0.37	67,67,67,67	0
84	MG	5	3667	1/1	0.79	0.30	38,38,38,38	0
84	MG	6	2001	1/1	0.79	0.42	73,73,73,73	0
84	MG	5	3632	1/1	0.79	0.43	42,42,42,42	0
84	MG	6	1930	1/1	0.79	0.56	59,59,59,59	0
84	MG	1	3430	1/1	0.79	0.30	36,36,36,36	0
84	MG	1	3694	1/1	0.79	0.47	41,41,41,41	0
84	MG	5	3685	1/1	0.80	0.28	36,36,36,36	0
84	MG	5	3407	1/1	0.80	0.25	33,33,33,33	0
84	MG	1	3437	1/1	0.80	0.20	45,45,45,45	0
84	MG	5	3598	1/1	0.80	0.17	42,42,42,42	0
84	MG	5	3467	1/1	0.80	0.62	65,65,65,65	0
84	MG	6	1903	1/1	0.80	0.50	45,45,45,45	0
84	MG	6	1946	1/1	0.80	0.56	49,49,49,49	0
84	MG	5	3585	1/1	0.80	0.30	39,39,39,39	0
84	MG	19	201	1/1	0.80	0.22	45,45,45,45	0
84	MG	1	3685	1/1	0.80	0.29	39,39,39,39	0
84	MG	6	1994	1/1	0.80	0.25	49,49,49,49	0
84	MG	1	3442	1/1	0.80	0.15	41,41,41,41	0
84	MG	5	3636	1/1	0.80	0.45	44,44,44,44	0
84	MG	4	210	1/1	0.80	0.38	58,58,58,58	0
84	MG	5	3542	1/1	0.80	0.53	36,36,36,36	0
84	MG	Q2	502	1/1	0.81	0.14	55,55,55,55	0
84	MG	12	302	1/1	0.81	0.37	42,42,42,42	0
84	MG	1	4039	1/1	0.81	0.42	46,46,46,46	0
84	MG	7	202	1/1	0.81	0.30	32,32,32,32	0
84	MG	5	3600	1/1	0.81	0.28	34,34,34,34	0
84	MG	1	3417	1/1	0.81	0.47	58,58,58,58	0
84	MG	n6	201	1/1	0.81	0.39	65,65,65,65	0
84	MG	1	3456	1/1	0.81	0.18	32,32,32,32	0
84	MG	5	3723	1/1	0.81	0.42	38,38,38,38	0
84	MG	2	1947	1/1	0.81	1.03	93,93,93,93	0
84	MG	6	1928	1/1	0.81	0.51	51,51,51,51	0
84	MG	5	3574	1/1	0.81	0.42	53,53,53,53	0
84	MG	1	3406	1/1	0.81	0.73	130,130,130,130	0
84	MG	2	1981	1/1	0.81	0.42	76,76,76,76	0
84	MG	1	3688	1/1	0.81	0.22	47,47,47,47	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	6	1995	1/1	0.81	0.71	52,52,52,52	0
84	MG	2	1971	1/1	0.82	0.33	77,77,77,77	0
84	MG	6	1926	1/1	0.82	0.56	46,46,46,46	0
84	MG	5	3608	1/1	0.82	0.41	89,89,89,89	0
84	MG	1	3690	1/1	0.82	0.31	48,48,48,48	0
84	MG	1	3536	1/1	0.82	0.42	56,56,56,56	0
84	MG	5	3456	1/1	0.82	0.40	54,54,54,54	0
84	MG	1	3697	1/1	0.82	0.51	41,41,41,41	0
84	MG	5	3701	1/1	0.82	0.45	47,47,47,47	0
84	MG	5	3664	1/1	0.82	0.19	53,53,53,53	0
84	MG	5	3704	1/1	0.82	0.44	54,54,54,54	0
84	MG	5	3728	1/1	0.82	0.32	50,50,50,50	0
84	MG	1	3657	1/1	0.82	0.33	50,50,50,50	0
84	MG	2	1961	1/1	0.82	0.22	75,75,75,75	0
84	MG	5	3595	1/1	0.82	0.13	60,60,60,60	0
84	MG	5	3461	1/1	0.82	0.19	40,40,40,40	0
84	MG	18	301	1/1	0.83	0.65	83,83,83,83	0
84	MG	13	405	1/1	0.83	0.69	34,34,34,34	0
84	MG	1	3457	1/1	0.83	0.46	42,42,42,42	0
84	MG	5	3604	1/1	0.83	0.42	36,36,36,36	0
84	MG	5	3470	1/1	0.83	0.37	32,32,32,32	0
84	MG	6	1956	1/1	0.83	0.64	60,60,60,60	0
84	MG	1	3720	1/1	0.83	0.18	56,56,56,56	0
84	MG	1	3692	1/1	0.83	0.35	45,45,45,45	0
84	MG	5	3471	1/1	0.83	0.34	68,68,68,68	0
84	MG	5	3640	1/1	0.83	0.27	51,51,51,51	0
84	MG	1	3611	1/1	0.83	0.26	39,39,39,39	0
84	MG	6	2006	1/1	0.83	0.56	61,61,61,61	0
84	MG	1	3424	1/1	0.83	0.45	45,45,45,45	0
84	MG	5	3485	1/1	0.83	0.34	37,37,37,37	0
84	MG	1	3710	1/1	0.83	0.32	40,40,40,40	0
84	MG	1	3637	1/1	0.83	0.42	42,42,42,42	0
84	MG	1	3629	1/1	0.83	0.46	74,74,74,74	0
84	MG	5	3727	1/1	0.83	0.23	62,62,62,62	0
84	MG	5	3674	1/1	0.83	0.30	49,49,49,49	0
84	MG	5	3605	1/1	0.83	0.21	37,37,37,37	0
84	MG	2	1937	1/1	0.84	0.39	79,79,79,79	0
84	MG	17	301	1/1	0.84	0.18	37,37,37,37	0
84	MG	5	3532	1/1	0.84	0.68	50,50,50,50	0
84	MG	5	3651	1/1	0.84	0.37	46,46,46,46	0
84	MG	5	3541	1/1	0.84	0.39	50,50,50,50	0
84	MG	D9	102	1/1	0.84	0.45	86,86,86,86	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	1	3479	1/1	0.84	0.61	64,64,64,64	0
84	MG	5	3642	1/1	0.84	0.32	37,37,37,37	0
84	MG	5	3675	1/1	0.84	0.18	59,59,59,59	0
84	MG	2	1921	1/1	0.84	0.69	81,81,81,81	0
84	MG	6	1970	1/1	0.84	0.47	98,98,98,98	0
84	MG	5	3644	1/1	0.84	0.32	72,72,72,72	0
84	MG	5	3624	1/1	0.84	0.21	41,41,41,41	0
84	MG	5	3681	1/1	0.84	0.49	40,40,40,40	0
84	MG	n6	202	1/1	0.84	0.39	52,52,52,52	0
84	MG	m5	303	1/1	0.84	0.51	46,46,46,46	0
84	MG	1	3560	1/1	0.84	0.34	40,40,40,40	0
84	MG	1	3618	1/1	0.84	0.29	62,62,62,62	0
84	MG	6	1922	1/1	0.84	0.54	48,48,48,48	0
84	MG	5	3413	1/1	0.84	0.33	41,41,41,41	0
84	MG	1	3696	1/1	0.84	0.32	55,55,55,55	0
84	MG	1	3527	1/1	0.84	0.23	64,64,64,64	0
84	MG	1	3516	1/1	0.84	0.65	40,40,40,40	0
84	MG	6	1990	1/1	0.84	0.18	61,61,61,61	0
84	MG	1	3411	1/1	0.85	0.44	51,51,51,51	0
84	MG	6	1916	1/1	0.85	0.46	46,46,46,46	0
84	MG	8	206	1/1	0.85	0.58	52,52,52,52	0
84	MG	1	3472	1/1	0.85	0.36	52,52,52,52	0
84	MG	5	3588	1/1	0.85	0.33	57,57,57,57	0
86	ZN	D7	101	1/1	0.85	0.35	115,115,115,115	0
84	MG	1	3439	1/1	0.85	0.26	60,60,60,60	0
84	MG	4	204	1/1	0.85	0.57	51,51,51,51	0
84	MG	d6	102	1/1	0.85	0.49	56,56,56,56	0
84	MG	1	3405	1/1	0.85	0.71	63,63,63,63	0
84	MG	5	3421	1/1	0.85	0.34	50,50,50,50	0
84	MG	5	3403	1/1	0.85	0.16	45,45,45,45	0
84	MG	1	3569	1/1	0.85	0.46	53,53,53,53	0
84	MG	6	1942	1/1	0.85	0.98	79,79,79,79	0
84	MG	1	3693	1/1	0.85	0.27	58,58,58,58	0
84	MG	5	3555	1/1	0.85	0.33	44,44,44,44	0
84	MG	1	3477	1/1	0.85	0.27	54,54,54,54	0
84	MG	5	3710	1/1	0.85	0.21	44,44,44,44	0
84	MG	5	3411	1/1	0.85	0.34	34,34,34,34	0
84	MG	M7	201	1/1	0.85	0.48	60,60,60,60	0
84	MG	2	1924	1/1	0.85	0.85	86,86,86,86	0
84	MG	1	3468	1/1	0.85	0.14	59,59,59,59	0
84	MG	5	3444	1/1	0.85	0.22	32,32,32,32	0
84	MG	1	3421	1/1	0.85	0.35	41,41,41,41	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3687	1/1	0.85	0.46	31,31,31,31	0
84	MG	6	1959	1/1	0.85	0.66	86,86,86,86	0
84	MG	5	3619	1/1	0.86	0.19	37,37,37,37	0
84	MG	2	1976	1/1	0.86	0.72	68,68,68,68	0
84	MG	4	214	1/1	0.86	0.41	53,53,53,53	0
84	MG	5	3540	1/1	0.86	0.54	28,28,28,28	0
84	MG	5	3616	1/1	0.86	0.37	40,40,40,40	0
84	MG	5	3406	1/1	0.86	0.13	47,47,47,47	0
84	MG	1	3684	1/1	0.86	0.82	51,51,51,51	0
84	MG	5	3621	1/1	0.86	0.34	40,40,40,40	0
84	MG	5	3666	1/1	0.86	0.21	37,37,37,37	0
84	MG	1	3598	1/1	0.86	0.29	39,39,39,39	0
84	MG	6	1982	1/1	0.86	0.22	46,46,46,46	0
84	MG	1	3610	1/1	0.86	0.61	42,42,42,42	0
84	MG	5	3544	1/1	0.86	0.46	32,32,32,32	0
84	MG	5	3684	1/1	0.86	0.19	77,77,77,77	0
84	MG	6	2003	1/1	0.86	1.02	63,63,63,63	0
84	MG	5	3559	1/1	0.86	0.35	40,40,40,40	0
84	MG	5	3680	1/1	0.86	0.22	53,53,53,53	0
84	MG	5	3516	1/1	0.86	0.40	31,31,31,31	0
84	MG	5	3625	1/1	0.86	0.15	44,44,44,44	0
84	MG	5	3676	1/1	0.86	0.17	63,63,63,63	0
84	MG	5	3531	1/1	0.86	0.46	56,56,56,56	0
84	MG	2	1940	1/1	0.86	0.71	72,72,72,72	0
84	MG	5	3657	1/1	0.86	0.21	57,57,57,57	0
84	MG	1	3640	1/1	0.86	0.35	74,74,74,74	0
84	MG	2	1974	1/1	0.86	0.22	93,93,93,93	0
84	MG	2	1933	1/1	0.86	0.48	74,74,74,74	0
84	MG	L3	401	1/1	0.86	0.86	53,53,53,53	0
84	MG	6	1962	1/1	0.86	0.17	84,84,84,84	0
84	MG	1	3619	1/1	0.86	0.29	35,35,35,35	0
84	MG	5	4078	1/1	0.86	0.57	40,40,40,40	0
84	MG	1	3517	1/1	0.86	0.45	51,51,51,51	0
84	MG	1	3458	1/1	0.86	0.32	59,59,59,59	0
84	MG	7	206	1/1	0.87	0.45	42,42,42,42	0
84	MG	1	3471	1/1	0.87	0.24	58,58,58,58	0
84	MG	2	1932	1/1	0.87	0.58	68,68,68,68	0
84	MG	5	3638	1/1	0.87	0.24	37,37,37,37	0
84	MG	6	1919	1/1	0.87	0.66	67,67,67,67	0
84	MG	5	3686	1/1	0.87	0.25	44,44,44,44	0
84	MG	1	3649	1/1	0.87	0.26	43,43,43,43	0
84	MG	6	1947	1/1	0.87	0.53	53,53,53,53	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	6	1924	1/1	0.87	0.70	56,56,56,56	0
84	MG	1	3552	1/1	0.87	0.67	44,44,44,44	0
84	MG	1	3626	1/1	0.87	0.27	44,44,44,44	0
84	MG	1	3589	1/1	0.87	0.14	64,64,64,64	0
84	MG	5	3408	1/1	0.87	0.39	42,42,42,42	0
84	MG	4	212	1/1	0.87	0.20	54,54,54,54	0
84	MG	1	3449	1/1	0.87	0.99	64,64,64,64	0
84	MG	1	3681	1/1	0.87	0.16	45,45,45,45	0
84	MG	6	1951	1/1	0.87	0.49	77,77,77,77	0
84	MG	1	3616	1/1	0.87	0.47	81,81,81,81	0
84	MG	6	1902	1/1	0.87	0.38	57,57,57,57	0
84	MG	O7	102	1/1	0.87	0.47	51,51,51,51	0
84	MG	1	3608	1/1	0.87	0.48	87,87,87,87	0
84	MG	5	3503	1/1	0.87	0.28	40,40,40,40	0
84	MG	6	1955	1/1	0.87	1.13	67,67,67,67	0
84	MG	1	3448	1/1	0.87	0.40	64,64,64,64	0
84	MG	5	3736	1/1	0.87	0.31	48,48,48,48	0
84	MG	1	3590	1/1	0.87	0.40	60,60,60,60	0
84	MG	1	3631	1/1	0.87	0.56	49,49,49,49	0
84	MG	2	1964	1/1	0.87	0.33	83,83,83,83	0
84	MG	1	3548	1/1	0.87	0.27	31,31,31,31	0
84	MG	5	3419	1/1	0.87	0.14	41,41,41,41	0
84	MG	5	3711	1/1	0.87	0.10	32,32,32,32	0
85	OHX	1	4012	7/7	0.87	0.38	116,116,116,116	0
84	MG	5	3526	1/1	0.87	0.37	38,38,38,38	0
84	MG	2	1936	1/1	0.87	0.67	73,73,73,73	0
84	MG	2	1965	1/1	0.88	0.72	60,60,60,60	0
84	MG	S4	301	1/1	0.88	0.32	79,79,79,79	0
84	MG	n9	101	1/1	0.88	0.38	33,33,33,33	0
84	MG	1	3431	1/1	0.88	0.17	51,51,51,51	0
84	MG	1	3650	1/1	0.88	0.56	81,81,81,81	0
84	MG	1	3708	1/1	0.88	0.28	60,60,60,60	0
84	MG	1	3679	1/1	0.88	0.24	34,34,34,34	0
84	MG	5	3402	1/1	0.88	0.66	61,61,61,61	0
84	MG	6	1932	1/1	0.88	0.76	62,62,62,62	0
84	MG	1	3429	1/1	0.88	0.53	51,51,51,51	0
84	MG	m5	301	1/1	0.88	0.26	48,48,48,48	0
84	MG	5	3482	1/1	0.88	0.12	33,33,33,33	0
84	MG	1	3689	1/1	0.88	0.32	57,57,57,57	0
84	MG	3	203	1/1	0.88	0.29	44,44,44,44	0
84	MG	n0	202	1/1	0.88	0.16	40,40,40,40	0
84	MG	6	1976	1/1	0.88	0.19	91,91,91,91	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3501	1/1	0.88	0.53	27,27,27,27	0
84	MG	1	3582	1/1	0.88	0.28	45,45,45,45	0
84	MG	6	1937	1/1	0.88	0.78	72,72,72,72	0
84	MG	3	202	1/1	0.88	0.68	67,67,67,67	0
84	MG	1	3601	1/1	0.88	0.32	65,65,65,65	0
84	MG	M7	204	1/1	0.88	0.23	40,40,40,40	0
84	MG	1	3652	1/1	0.88	0.25	57,57,57,57	0
84	MG	1	3510	1/1	0.88	0.36	31,31,31,31	0
84	MG	1	3615	1/1	0.88	0.33	31,31,31,31	0
84	MG	1	3656	1/1	0.88	0.44	46,46,46,46	0
84	MG	5	3610	1/1	0.88	0.29	37,37,37,37	0
84	MG	2	1954	1/1	0.88	0.49	90,90,90,90	0
84	MG	6	1927	1/1	0.88	0.40	50,50,50,50	0
84	MG	1	3620	1/1	0.88	0.42	54,54,54,54	0
84	MG	1	3724	1/1	0.88	0.46	49,49,49,49	0
84	MG	5	3601	1/1	0.88	0.42	38,38,38,38	0
84	MG	1	3526	1/1	0.88	0.21	52,52,52,52	0
84	MG	c1	201	1/1	0.88	0.44	53,53,53,53	0
84	MG	1	3600	1/1	0.89	0.34	52,52,52,52	0
84	MG	5	3442	1/1	0.89	0.32	36,36,36,36	0
84	MG	1	3634	1/1	0.89	0.38	39,39,39,39	0
84	MG	5	3622	1/1	0.89	0.17	55,55,55,55	0
84	MG	2	1905	1/1	0.89	0.77	63,63,63,63	0
84	MG	1	3538	1/1	0.89	0.42	42,42,42,42	0
84	MG	1	3704	1/1	0.89	0.36	34,34,34,34	0
84	MG	2	1902	1/1	0.89	0.41	55,55,55,55	0
84	MG	l2	301	1/1	0.89	0.60	48,48,48,48	0
84	MG	1	3461	1/1	0.89	0.35	36,36,36,36	0
85	OHX	5	4068	7/7	0.89	0.27	96,96,96,96	0
84	MG	5	3428	1/1	0.89	0.52	39,39,39,39	0
84	MG	6	1966	1/1	0.89	0.40	53,53,53,53	0
84	MG	2	1919	1/1	0.89	0.70	73,73,73,73	0
84	MG	2	1943	1/1	0.89	0.75	71,71,71,71	0
84	MG	6	1910	1/1	0.89	0.40	74,74,74,74	0
84	MG	1	3700	1/1	0.89	0.46	36,36,36,36	0
84	MG	s8	301	1/1	0.89	0.32	47,47,47,47	0
84	MG	5	3581	1/1	0.89	0.57	35,35,35,35	0
84	MG	1	3721	1/1	0.89	0.56	42,42,42,42	0
84	MG	5	3587	1/1	0.89	0.32	39,39,39,39	0
84	MG	5	3445	1/1	0.89	0.60	49,49,49,49	0
84	MG	1	3416	1/1	0.89	0.41	48,48,48,48	0
84	MG	6	1963	1/1	0.89	0.32	76,76,76,76	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3662	1/1	0.89	0.26	34,34,34,34	0
84	MG	1	3466	1/1	0.89	0.74	57,57,57,57	0
85	OHX	2	2115	7/7	0.89	0.41	115,115,115,115	0
84	MG	5	3566	1/1	0.89	0.56	46,46,46,46	0
84	MG	6	2005	1/1	0.89	0.51	61,61,61,61	0
84	MG	2	1939	1/1	0.89	0.43	74,74,74,74	0
84	MG	1	3528	1/1	0.89	0.36	34,34,34,34	0
84	MG	5	3659	1/1	0.89	0.29	41,41,41,41	0
84	MG	5	3487	1/1	0.89	0.42	32,32,32,32	0
84	MG	5	3583	1/1	0.89	0.12	42,42,42,42	0
84	MG	5	3571	1/1	0.89	0.78	53,53,53,53	0
84	MG	N3	201	1/1	0.89	0.35	40,40,40,40	0
84	MG	5	3712	1/1	0.89	0.24	44,44,44,44	0
84	MG	1	3438	1/1	0.89	0.32	32,32,32,32	0
84	MG	1	3664	1/1	0.89	0.33	36,36,36,36	0
84	MG	1	3643	1/1	0.89	0.52	63,63,63,63	0
85	OHX	5	4043	7/7	0.89	0.43	96,96,96,96	0
84	MG	1	3723	1/1	0.89	0.30	37,37,37,37	0
84	MG	5	3615	1/1	0.89	0.56	56,56,56,56	0
84	MG	6	2007	1/1	0.89	0.29	61,61,61,61	0
84	MG	5	3507	1/1	0.89	0.43	44,44,44,44	0
84	MG	sM	201	1/1	0.89	0.32	44,44,44,44	0
84	MG	1	3441	1/1	0.89	0.32	31,31,31,31	0
84	MG	2	1955	1/1	0.89	0.33	68,68,68,68	0
84	MG	1	3587	1/1	0.89	0.20	42,42,42,42	0
84	MG	5	3671	1/1	0.89	0.28	35,35,35,35	0
84	MG	4	211	1/1	0.89	0.23	42,42,42,42	0
84	MG	1	3450	1/1	0.89	0.37	33,33,33,33	0
84	MG	5	3646	1/1	0.89	0.18	35,35,35,35	0
85	OHX	5	3938	7/7	0.89	0.22	115,115,115,115	0
84	MG	5	3705	1/1	0.89	0.14	36,36,36,36	0
84	MG	2	1982	1/1	0.89	0.27	65,65,65,65	0
84	MG	6	1975	1/1	0.89	0.32	79,79,79,79	0
84	MG	5	3478	1/1	0.89	0.21	45,45,45,45	0
84	MG	1	3462	1/1	0.89	0.31	38,38,38,38	0
84	MG	5	3707	1/1	0.89	0.16	43,43,43,43	0
84	MG	5	3477	1/1	0.90	0.21	42,42,42,42	0
84	MG	1	3452	1/1	0.90	0.43	38,38,38,38	0
84	MG	2	1901	1/1	0.90	1.24	85,85,85,85	0
84	MG	6	1915	1/1	0.90	0.27	72,72,72,72	0
84	MG	5	3480	1/1	0.90	0.21	36,36,36,36	0
84	MG	5	3698	1/1	0.90	0.35	73,73,73,73	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	6	1988	1/1	0.90	0.27	73,73,73,73	0
84	MG	5	3737	1/1	0.90	0.08	52,52,52,52	0
84	MG	2	1910	1/1	0.90	0.43	64,64,64,64	0
84	MG	1	3484	1/1	0.90	0.40	52,52,52,52	0
84	MG	5	3696	1/1	0.90	0.21	31,31,31,31	0
84	MG	5	3650	1/1	0.90	0.11	46,46,46,46	0
84	MG	4	203	1/1	0.90	0.48	68,68,68,68	0
84	MG	5	3550	1/1	0.90	0.55	31,31,31,31	0
84	MG	5	3652	1/1	0.90	0.17	44,44,44,44	0
84	MG	5	3538	1/1	0.90	0.52	41,41,41,41	0
84	MG	5	3660	1/1	0.90	0.34	41,41,41,41	0
84	MG	5	3511	1/1	0.90	0.34	62,62,62,62	0
84	MG	1	3404	1/1	0.90	0.23	42,42,42,42	0
84	MG	5	4076	1/1	0.90	0.50	52,52,52,52	0
84	MG	5	3498	1/1	0.90	0.55	41,41,41,41	0
84	MG	o3	201	1/1	0.90	0.29	49,49,49,49	0
84	MG	4	207	1/1	0.90	0.25	49,49,49,49	0
84	MG	1	3605	1/1	0.90	0.19	46,46,46,46	0
84	MG	5	3578	1/1	0.90	0.82	40,40,40,40	0
84	MG	5	3668	1/1	0.90	0.46	71,71,71,71	0
84	MG	1	4040	1/1	0.90	0.35	39,39,39,39	0
84	MG	5	3739	1/1	0.90	0.30	88,88,88,88	0
84	MG	q1	101	1/1	0.90	0.57	47,47,47,47	0
84	MG	1	3539	1/1	0.90	0.52	44,44,44,44	0
84	MG	6	1987	1/1	0.90	0.14	55,55,55,55	0
84	MG	1	3641	1/1	0.90	0.29	51,51,51,51	0
84	MG	6	1979	1/1	0.90	0.30	52,52,52,52	0
84	MG	2	1963	1/1	0.90	0.58	78,78,78,78	0
84	MG	1	3460	1/1	0.90	0.28	52,52,52,52	0
84	MG	1	3658	1/1	0.90	0.33	52,52,52,52	0
84	MG	5	3447	1/1	0.90	0.57	34,34,34,34	0
84	MG	8	205	1/1	0.90	0.25	48,48,48,48	0
84	MG	1	3561	1/1	0.90	0.43	43,43,43,43	0
84	MG	5	3597	1/1	0.90	0.27	29,29,29,29	0
84	MG	5	3515	1/1	0.90	0.45	52,52,52,52	0
84	MG	1	3549	1/1	0.90	0.38	53,53,53,53	0
85	OHX	1	3931	7/7	0.90	0.27	111,111,111,111	0
84	MG	5	3637	1/1	0.90	0.32	49,49,49,49	0
84	MG	1	3642	1/1	0.90	0.23	48,48,48,48	0
84	MG	5	3448	1/1	0.90	0.32	28,28,28,28	0
84	MG	1	3554	1/1	0.90	0.39	32,32,32,32	0
84	MG	1	3713	1/1	0.90	0.19	45,45,45,45	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	6	2158	7/7	0.90	0.35	140,140,140,140	0
84	MG	5	3509	1/1	0.90	0.36	47,47,47,47	0
84	MG	6	1934	1/1	0.90	0.29	67,67,67,67	0
84	MG	5	3446	1/1	0.90	0.33	45,45,45,45	0
84	MG	5	3631	1/1	0.90	0.24	41,41,41,41	0
84	MG	6	1981	1/1	0.90	0.38	57,57,57,57	0
84	MG	8	204	1/1	0.90	0.21	56,56,56,56	0
84	MG	1	3659	1/1	0.90	0.45	47,47,47,47	0
84	MG	1	3420	1/1	0.90	0.10	38,38,38,38	0
84	MG	5	3499	1/1	0.90	0.31	36,36,36,36	0
84	MG	m7	203	1/1	0.90	0.41	40,40,40,40	0
84	MG	1	3467	1/1	0.90	0.23	47,47,47,47	0
84	MG	6	1945	1/1	0.90	0.41	66,66,66,66	0
84	MG	2	1957	1/1	0.91	0.57	76,76,76,76	0
84	MG	1	3512	1/1	0.91	0.35	55,55,55,55	0
84	MG	6	1929	1/1	0.91	0.30	67,67,67,67	0
84	MG	5	3529	1/1	0.91	0.67	58,58,58,58	0
84	MG	5	3425	1/1	0.91	0.19	31,31,31,31	0
84	MG	5	3500	1/1	0.91	0.38	47,47,47,47	0
84	MG	1	3531	1/1	0.91	0.72	45,45,45,45	0
84	MG	2	1918	1/1	0.91	0.77	64,64,64,64	0
84	MG	1	3623	1/1	0.91	0.19	51,51,51,51	0
84	MG	2	1952	1/1	0.91	0.98	77,77,77,77	0
85	OHX	5	4050	7/7	0.91	0.25	158,158,158,158	0
84	MG	5	4073	1/1	0.91	0.78	31,31,31,31	0
85	OHX	6	2131	7/7	0.91	0.34	121,121,121,121	0
84	MG	1	3427	1/1	0.91	0.41	48,48,48,48	0
84	MG	5	3741	1/1	0.91	0.31	54,54,54,54	0
84	MG	5	3418	1/1	0.91	0.31	41,41,41,41	0
84	MG	6	1913	1/1	0.91	0.53	51,51,51,51	0
84	MG	6	1980	1/1	0.91	0.28	68,68,68,68	0
84	MG	1	3407	1/1	0.91	0.45	45,45,45,45	0
84	MG	6	1957	1/1	0.91	0.46	63,63,63,63	0
84	MG	1	3585	1/1	0.91	0.70	59,59,59,59	0
84	MG	2	1935	1/1	0.91	0.35	68,68,68,68	0
84	MG	1	3584	1/1	0.91	0.88	54,54,54,54	0
84	MG	6	1901	1/1	0.91	0.37	50,50,50,50	0
84	MG	5	3690	1/1	0.91	0.43	30,30,30,30	0
84	MG	6	1985	1/1	0.91	0.29	65,65,65,65	0
84	MG	5	3653	1/1	0.91	0.17	67,67,67,67	0
84	MG	5	3672	1/1	0.91	0.34	40,40,40,40	0
84	MG	1	3506	1/1	0.91	0.53	42,42,42,42	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	2	1953	1/1	0.91	0.94	84,84,84,84	0
84	MG	1	3595	1/1	0.91	0.28	50,50,50,50	0
84	MG	5	3593	1/1	0.91	0.36	54,54,54,54	0
86	ZN	d6	101	1/1	0.91	0.09	60,60,60,60	0
84	MG	1	3491	1/1	0.91	0.55	41,41,41,41	0
84	MG	1	3597	1/1	0.91	0.28	46,46,46,46	0
84	MG	5	3677	1/1	0.91	0.39	41,41,41,41	0
84	MG	2	1942	1/1	0.91	0.20	69,69,69,69	0
84	MG	5	3536	1/1	0.91	0.58	46,46,46,46	0
84	MG	6	2000	1/1	0.91	0.28	86,86,86,86	0
84	MG	5	3669	1/1	0.91	0.39	39,39,39,39	0
84	MG	1	3543	1/1	0.91	0.36	34,34,34,34	0
84	MG	6	2160	1/1	0.91	0.31	84,84,84,84	0
84	MG	1	3503	1/1	0.91	0.57	33,33,33,33	0
84	MG	2	1960	1/1	0.91	1.10	72,72,72,72	0
84	MG	1	3514	1/1	0.91	0.36	33,33,33,33	0
84	MG	5	3639	1/1	0.91	0.17	40,40,40,40	0
84	MG	l3	403	1/1	0.91	0.38	38,38,38,38	0
84	MG	q0	202	1/1	0.91	0.28	44,44,44,44	0
84	MG	1	3651	1/1	0.91	0.20	36,36,36,36	0
85	OHX	1	3921	7/7	0.91	0.32	110,110,110,110	0
84	MG	1	3645	1/1	0.91	0.21	69,69,69,69	0
84	MG	6	1912	1/1	0.91	0.32	79,79,79,79	0
84	MG	5	3594	1/1	0.91	0.25	40,40,40,40	0
84	MG	L6	201	1/1	0.91	0.14	48,48,48,48	0
84	MG	1	3542	1/1	0.91	0.33	46,46,46,46	0
84	MG	5	3520	1/1	0.91	0.44	40,40,40,40	0
85	OHX	2	2108	7/7	0.91	0.25	145,145,145,145	0
84	MG	7	204	1/1	0.91	0.49	40,40,40,40	0
84	MG	1	3556	1/1	0.91	0.52	30,30,30,30	0
84	MG	5	3729	1/1	0.91	0.22	52,52,52,52	0
84	MG	5	3714	1/1	0.91	0.24	34,34,34,34	0
85	OHX	2	2118	7/7	0.91	0.30	132,132,132,132	0
84	MG	5	3437	1/1	0.92	0.20	35,35,35,35	0
84	MG	5	4072	1/1	0.92	0.29	33,33,33,33	0
84	MG	5	3551	1/1	0.92	0.34	35,35,35,35	0
84	MG	5	3721	1/1	0.92	0.58	35,35,35,35	0
84	MG	n8	201	1/1	0.92	0.34	50,50,50,50	0
85	OHX	5	3860	7/7	0.92	0.16	122,122,122,122	0
84	MG	5	3423	1/1	0.92	0.56	45,45,45,45	0
84	MG	1	3447	1/1	0.92	0.48	37,37,37,37	0
84	MG	5	3716	1/1	0.92	0.40	29,29,29,29	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3633	1/1	0.92	0.86	36,36,36,36	0
84	MG	M6	201	1/1	0.92	0.16	45,45,45,45	0
84	MG	5	3730	1/1	0.92	0.37	43,43,43,43	0
84	MG	6	1999	1/1	0.92	0.28	49,49,49,49	0
84	MG	6	1958	1/1	0.92	0.68	47,47,47,47	0
84	MG	5	3429	1/1	0.92	0.15	78,78,78,78	0
84	MG	5	3553	1/1	0.92	0.42	38,38,38,38	0
84	MG	1	3497	1/1	0.92	0.56	33,33,33,33	0
84	MG	5	4071	1/1	0.92	0.23	43,43,43,43	0
85	OHX	6	2157	7/7	0.92	0.47	115,115,115,115	0
86	ZN	d7	101	1/1	0.92	0.17	106,106,106,106	0
86	ZN	q2	501	1/1	0.92	0.21	64,64,64,64	0
84	MG	5	3689	1/1	0.92	0.23	30,30,30,30	0
84	MG	5	3440	1/1	0.92	0.15	40,40,40,40	0
84	MG	5	3634	1/1	0.92	0.16	31,31,31,31	0
84	MG	6	1964	1/1	0.92	0.33	73,73,73,73	0
84	MG	5	3451	1/1	0.92	0.35	33,33,33,33	0
84	MG	1	4044	1/1	0.92	0.30	51,51,51,51	0
84	MG	8	209	1/1	0.92	0.45	68,68,68,68	0
84	MG	2	1951	1/1	0.92	0.47	58,58,58,58	0
85	OHX	5	3969	7/7	0.92	0.25	138,138,138,138	0
85	OHX	2	2114	7/7	0.92	0.20	170,170,170,170	0
84	MG	6	1954	1/1	0.92	0.67	51,51,51,51	0
84	MG	1	3443	1/1	0.92	0.45	43,43,43,43	0
84	MG	1	3489	1/1	0.92	0.52	49,49,49,49	0
84	MG	1	3617	1/1	0.92	0.48	43,43,43,43	0
84	MG	5	4077	1/1	0.92	0.87	38,38,38,38	0
84	MG	1	3547	1/1	0.92	0.49	33,33,33,33	0
84	MG	5	3431	1/1	0.92	0.18	37,37,37,37	0
84	MG	5	3703	1/1	0.92	0.41	36,36,36,36	0
84	MG	6	1967	1/1	0.92	0.20	51,51,51,51	0
84	MG	l2	303	1/1	0.92	1.08	46,46,46,46	0
84	MG	5	3427	1/1	0.92	0.11	47,47,47,47	0
85	OHX	5	4061	7/7	0.92	0.39	121,121,121,121	0
84	MG	1	3459	1/1	0.92	0.44	46,46,46,46	0
84	MG	5	3603	1/1	0.92	0.35	47,47,47,47	0
84	MG	1	3705	1/1	0.92	0.82	52,52,52,52	0
84	MG	1	3676	1/1	0.92	0.25	48,48,48,48	0
84	MG	5	3473	1/1	0.92	0.41	44,44,44,44	0
84	MG	5	3434	1/1	0.92	0.30	32,32,32,32	0
84	MG	1	3665	1/1	0.92	0.29	67,67,67,67	0
84	MG	O2	201	1/1	0.92	0.24	35,35,35,35	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3496	1/1	0.92	0.43	56,56,56,56	0
84	MG	5	3563	1/1	0.92	0.37	38,38,38,38	0
84	MG	o1	201	1/1	0.92	0.61	49,49,49,49	0
85	OHX	6	2146	7/7	0.92	0.36	108,108,108,108	0
84	MG	1	3541	1/1	0.92	0.45	55,55,55,55	0
85	OHX	2	2111	7/7	0.92	0.43	112,112,112,112	0
84	MG	6	1923	1/1	0.92	0.69	68,68,68,68	0
84	MG	1	3592	1/1	0.92	0.21	61,61,61,61	0
84	MG	2	1966	1/1	0.92	0.35	67,67,67,67	0
84	MG	5	3412	1/1	0.92	0.46	39,39,39,39	0
84	MG	1	3482	1/1	0.92	0.15	53,53,53,53	0
85	OHX	5	4020	7/7	0.92	0.41	101,101,101,101	0
84	MG	1	3662	1/1	0.92	0.24	45,45,45,45	0
84	MG	m6	201	1/1	0.92	0.28	37,37,37,37	0
84	MG	6	2159	1/1	0.92	0.59	58,58,58,58	0
84	MG	1	3672	1/1	0.92	0.28	42,42,42,42	0
84	MG	1	3593	1/1	0.92	0.18	39,39,39,39	0
84	MG	5	3740	1/1	0.93	0.15	41,41,41,41	0
84	MG	1	3612	1/1	0.93	0.29	40,40,40,40	0
84	MG	N8	202	1/1	0.93	0.14	35,35,35,35	0
84	MG	1	3604	1/1	0.93	0.17	47,47,47,47	0
84	MG	2	1922	1/1	0.93	0.97	74,74,74,74	0
84	MG	8	202	1/1	0.93	0.40	64,64,64,64	0
85	OHX	2	2100	7/7	0.93	0.20	116,116,116,116	0
84	MG	5	3549	1/1	0.93	0.41	48,48,48,48	0
85	OHX	6	2155	7/7	0.93	0.42	116,116,116,116	0
84	MG	1	3426	1/1	0.93	0.47	50,50,50,50	0
84	MG	5	3589	1/1	0.93	0.41	37,37,37,37	0
84	MG	5	3717	1/1	0.93	0.18	39,39,39,39	0
84	MG	5	3648	1/1	0.93	0.19	61,61,61,61	0
84	MG	1	3670	1/1	0.93	0.39	52,52,52,52	0
84	MG	1	3488	1/1	0.93	0.34	33,33,33,33	0
84	MG	l3	401	1/1	0.93	0.51	29,29,29,29	0
84	MG	5	3623	1/1	0.93	0.49	57,57,57,57	0
84	MG	5	3654	1/1	0.93	0.25	42,42,42,42	0
84	MG	5	3679	1/1	0.93	0.41	42,42,42,42	0
85	OHX	2	2034	7/7	0.93	0.26	113,113,113,113	0
84	MG	1	3719	1/1	0.93	0.71	45,45,45,45	0
84	MG	7	210	1/1	0.93	0.12	53,53,53,53	0
84	MG	5	3535	1/1	0.93	0.35	49,49,49,49	0
84	MG	sM	202	1/1	0.93	0.11	43,43,43,43	0
84	MG	1	3648	1/1	0.93	0.22	37,37,37,37	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3607	1/1	0.93	0.18	38,38,38,38	0
84	MG	2	1903	1/1	0.93	0.69	55,55,55,55	0
84	MG	1	3469	1/1	0.93	0.52	51,51,51,51	0
84	MG	1	3532	1/1	0.93	0.19	57,57,57,57	0
84	MG	8	210	1/1	0.93	0.23	57,57,57,57	0
84	MG	5	3518	1/1	0.93	0.38	41,41,41,41	0
85	OHX	2	2107	7/7	0.93	0.33	126,126,126,126	0
85	OHX	6	2127	7/7	0.93	0.25	138,138,138,138	0
84	MG	1	3575	1/1	0.93	0.45	40,40,40,40	0
84	MG	5	3708	1/1	0.93	0.26	44,44,44,44	0
84	MG	L7	301	1/1	0.93	0.36	42,42,42,42	0
84	MG	1	3501	1/1	0.93	0.53	43,43,43,43	0
85	OHX	5	3870	7/7	0.93	0.28	76,76,76,76	0
84	MG	2	1967	1/1	0.93	0.26	83,83,83,83	0
84	MG	6	1986	1/1	0.93	0.20	57,57,57,57	0
84	MG	1	3564	1/1	0.93	0.62	40,40,40,40	0
84	MG	6	1921	1/1	0.93	0.48	56,56,56,56	0
84	MG	6	1909	1/1	0.93	0.40	98,98,98,98	0
85	OHX	5	3932	7/7	0.93	0.26	75,75,75,75	0
84	MG	1	3444	1/1	0.93	0.27	51,51,51,51	0
85	OHX	2	2052	7/7	0.93	0.23	117,117,117,117	0
85	OHX	5	4005	7/7	0.93	0.27	104,104,104,104	0
84	MG	1	3518	1/1	0.93	0.43	52,52,52,52	0
84	MG	4	205	1/1	0.93	0.49	39,39,39,39	0
84	MG	1	3577	1/1	0.93	0.24	46,46,46,46	0
84	MG	5	3718	1/1	0.93	0.20	40,40,40,40	0
84	MG	5	3735	1/1	0.93	0.22	65,65,65,65	0
84	MG	5	3522	1/1	0.93	0.27	43,43,43,43	0
84	MG	5	3534	1/1	0.93	0.37	36,36,36,36	0
84	MG	5	3663	1/1	0.93	0.25	62,62,62,62	0
84	MG	n8	202	1/1	0.93	0.23	37,37,37,37	0
85	OHX	6	2068	7/7	0.93	0.22	90,90,90,90	0
84	MG	2	1973	1/1	0.93	0.45	64,64,64,64	0
84	MG	5	3673	1/1	0.93	0.51	34,34,34,34	0
84	MG	1	3602	1/1	0.93	0.52	41,41,41,41	0
84	MG	2	1928	1/1	0.93	0.39	71,71,71,71	0
84	MG	1	3423	1/1	0.93	0.23	36,36,36,36	0
84	MG	1	3614	1/1	0.93	0.14	55,55,55,55	0
84	MG	5	3609	1/1	0.93	0.42	55,55,55,55	0
84	MG	6	1973	1/1	0.93	0.21	78,78,78,78	0
85	OHX	6	2144	7/7	0.93	0.35	102,102,102,102	0
84	MG	2	1907	1/1	0.93	0.51	64,64,64,64	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	7	209	1/1	0.93	0.34	51,51,51,51	0
85	OHX	7	220	7/7	0.93	0.31	110,110,110,110	0
84	MG	5	3596	1/1	0.93	0.43	40,40,40,40	0
85	OHX	5	4029	7/7	0.93	0.31	128,128,128,128	0
84	MG	5	3414	1/1	0.93	0.17	31,31,31,31	0
85	OHX	6	2135	7/7	0.93	0.39	92,92,92,92	0
84	MG	5	3401	1/1	0.94	0.26	32,32,32,32	0
85	OHX	2	2119	7/7	0.94	0.47	144,144,144,144	0
85	OHX	6	2137	7/7	0.94	0.27	127,127,127,127	0
85	OHX	5	4055	7/7	0.94	0.36	114,114,114,114	0
84	MG	5	3455	1/1	0.94	0.32	50,50,50,50	0
84	MG	5	3649	1/1	0.94	0.23	35,35,35,35	0
85	OHX	2	2106	7/7	0.94	0.35	123,123,123,123	0
85	OHX	1	3945	7/7	0.94	0.19	162,162,162,162	0
85	OHX	1	3889	7/7	0.94	0.21	99,99,99,99	0
84	MG	1	3661	1/1	0.94	0.47	55,55,55,55	0
84	MG	1	3520	1/1	0.94	0.32	42,42,42,42	0
84	MG	5	4075	1/1	0.94	0.46	33,33,33,33	0
84	MG	1	3682	1/1	0.94	0.50	33,33,33,33	0
85	OHX	5	4034	7/7	0.94	0.34	84,84,84,84	0
84	MG	1	3677	1/1	0.94	0.27	43,43,43,43	0
84	MG	4	209	1/1	0.94	0.29	54,54,54,54	0
84	MG	1	3613	1/1	0.94	0.13	45,45,45,45	0
84	MG	2	1925	1/1	0.94	0.76	74,74,74,74	0
85	OHX	1	3864	7/7	0.94	0.20	79,79,79,79	0
84	MG	5	3459	1/1	0.94	0.35	40,40,40,40	0
84	MG	6	1936	1/1	0.94	0.38	42,42,42,42	0
85	OHX	6	2142	7/7	0.94	0.24	117,117,117,117	0
84	MG	1	3644	1/1	0.94	0.72	41,41,41,41	0
84	MG	6	1952	1/1	0.94	0.51	54,54,54,54	0
84	MG	5	3439	1/1	0.94	0.33	33,33,33,33	0
84	MG	5	3628	1/1	0.94	0.27	49,49,49,49	0
84	MG	5	3492	1/1	0.94	0.56	41,41,41,41	0
84	MG	5	3530	1/1	0.94	0.31	41,41,41,41	0
84	MG	5	3665	1/1	0.94	0.45	39,39,39,39	0
84	MG	2	1934	1/1	0.94	0.32	72,72,72,72	0
84	MG	1	3545	1/1	0.94	0.54	36,36,36,36	0
84	MG	6	1972	1/1	0.94	0.31	51,51,51,51	0
84	MG	1	3428	1/1	0.94	0.44	48,48,48,48	0
84	MG	3	207	1/1	0.94	0.16	44,44,44,44	0
84	MG	1	3434	1/1	0.94	0.36	52,52,52,52	0
84	MG	5	3533	1/1	0.94	0.91	55,55,55,55	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	4008	7/7	0.94	0.26	144,144,144,144	0
84	MG	5	3495	1/1	0.94	0.17	35,35,35,35	0
85	OHX	1	4002	7/7	0.94	0.27	112,112,112,112	0
84	MG	4	201	1/1	0.94	0.52	53,53,53,53	0
84	MG	m1	201	1/1	0.94	0.40	48,48,48,48	0
84	MG	7	207	1/1	0.94	0.14	36,36,36,36	0
85	OHX	1	3918	7/7	0.94	0.29	121,121,121,121	0
84	MG	1	3455	1/1	0.94	0.34	32,32,32,32	0
84	MG	1	3476	1/1	0.94	0.20	42,42,42,42	0
84	MG	1	3660	1/1	0.94	0.09	47,47,47,47	0
85	OHX	2	2102	7/7	0.94	0.32	114,114,114,114	0
84	MG	6	1978	1/1	0.94	0.59	76,76,76,76	0
85	OHX	1	4029	7/7	0.94	0.42	89,89,89,89	0
85	OHX	5	4024	7/7	0.94	0.32	116,116,116,116	0
84	MG	1	3633	1/1	0.94	0.44	56,56,56,56	0
84	MG	1	3699	1/1	0.94	0.45	55,55,55,55	0
84	MG	1	3425	1/1	0.94	0.20	49,49,49,49	0
84	MG	1	3646	1/1	0.94	0.14	53,53,53,53	0
84	MG	3	205	1/1	0.94	0.24	66,66,66,66	0
84	MG	5	3725	1/1	0.94	0.28	38,38,38,38	0
85	OHX	1	4036	7/7	0.94	0.36	104,104,104,104	0
84	MG	1	3415	1/1	0.94	0.38	41,41,41,41	0
84	MG	2	1929	1/1	0.94	0.64	67,67,67,67	0
85	OHX	2	2110	7/7	0.94	0.38	130,130,130,130	0
84	MG	5	3733	1/1	0.94	0.43	32,32,32,32	0
84	MG	1	3687	1/1	0.94	0.19	48,48,48,48	0
84	MG	5	3629	1/1	0.94	0.35	35,35,35,35	0
85	OHX	2	2109	7/7	0.94	0.33	112,112,112,112	0
84	MG	2	1950	1/1	0.94	0.33	72,72,72,72	0
84	MG	1	3565	1/1	0.94	0.47	32,32,32,32	0
84	MG	1	3515	1/1	0.94	0.46	41,41,41,41	0
85	OHX	1	4003	7/7	0.94	0.39	108,108,108,108	0
84	MG	6	1918	1/1	0.94	0.48	58,58,58,58	0
84	MG	8	201	1/1	0.94	0.24	42,42,42,42	0
85	OHX	5	4044	7/7	0.94	0.24	116,116,116,116	0
85	OHX	5	4033	7/7	0.94	0.37	105,105,105,105	0
84	MG	1	3433	1/1	0.94	0.35	36,36,36,36	0
84	MG	1	3502	1/1	0.94	0.43	39,39,39,39	0
85	OHX	6	2088	7/7	0.94	0.46	81,81,81,81	0
84	MG	5	3582	1/1	0.94	0.23	49,49,49,49	0
85	OHX	5	3980	7/7	0.94	0.23	102,102,102,102	0
84	MG	5	3416	1/1	0.94	0.28	38,38,38,38	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3464	1/1	0.94	0.34	29,29,29,29	0
84	MG	1	3596	1/1	0.94	0.16	46,46,46,46	0
84	MG	3	204	1/1	0.94	0.60	40,40,40,40	0
84	MG	O3	201	1/1	0.94	0.21	42,42,42,42	0
85	OHX	2	2067	7/7	0.94	0.36	106,106,106,106	0
84	MG	1	3445	1/1	0.94	0.33	40,40,40,40	0
84	MG	5	3562	1/1	0.94	0.35	32,32,32,32	0
84	MG	6	1943	1/1	0.94	0.57	58,58,58,58	0
84	MG	1	3567	1/1	0.94	0.93	50,50,50,50	0
84	MG	5	3670	1/1	0.94	0.32	35,35,35,35	0
85	OHX	2	2089	7/7	0.94	0.42	113,113,113,113	0
84	MG	5	3417	1/1	0.94	0.20	84,84,84,84	0
84	MG	2	1920	1/1	0.94	0.69	74,74,74,74	0
84	MG	5	3415	1/1	0.94	0.59	29,29,29,29	0
85	OHX	5	3943	7/7	0.94	0.18	116,116,116,116	0
84	MG	1	3594	1/1	0.94	0.35	48,48,48,48	0
84	MG	5	3612	1/1	0.94	0.36	40,40,40,40	0
84	MG	1	3606	1/1	0.94	0.39	34,34,34,34	0
84	MG	1	3669	1/1	0.94	0.27	48,48,48,48	0
84	MG	6	1941	1/1	0.94	0.38	43,43,43,43	0
85	OHX	2	2027	7/7	0.94	0.20	128,128,128,128	0
85	OHX	6	2101	7/7	0.94	0.26	105,105,105,105	0
85	OHX	1	3997	7/7	0.94	0.39	82,82,82,82	0
84	MG	2	1906	1/1	0.94	0.45	63,63,63,63	0
85	OHX	6	2150	7/7	0.94	0.39	100,100,100,100	0
86	ZN	E1	501	1/1	0.94	0.05	115,115,115,115	0
84	MG	1	3432	1/1	0.94	0.22	49,49,49,49	0
85	OHX	2	2090	7/7	0.94	0.19	121,121,121,121	0
84	MG	5	3584	1/1	0.94	0.11	45,45,45,45	0
84	MG	5	3700	1/1	0.94	0.23	38,38,38,38	0
85	OHX	6	2123	7/7	0.94	0.33	102,102,102,102	0
84	MG	5	3502	1/1	0.94	0.46	32,32,32,32	0
85	OHX	2	2076	7/7	0.94	0.18	135,135,135,135	0
85	OHX	5	3976	7/7	0.94	0.25	107,107,107,107	0
84	MG	2	1926	1/1	0.94	0.33	74,74,74,74	0
85	OHX	2	2063	7/7	0.94	0.22	160,160,160,160	0
84	MG	5	3695	1/1	0.94	0.25	48,48,48,48	0
84	MG	5	3483	1/1	0.94	0.47	41,41,41,41	0
84	MG	2	1927	1/1	0.94	0.47	65,65,65,65	0
84	MG	5	3564	1/1	0.94	0.45	38,38,38,38	0
84	MG	1	3725	1/1	0.94	0.38	52,52,52,52	0
85	OHX	5	3909	7/7	0.94	0.18	88,88,88,88	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3906	7/7	0.94	0.21	101,101,101,101	0
84	MG	5	3611	1/1	0.94	0.22	40,40,40,40	0
84	MG	1	3609	1/1	0.94	0.32	41,41,41,41	0
84	MG	6	1949	1/1	0.94	0.68	76,76,76,76	0
85	OHX	6	2128	7/7	0.94	0.31	112,112,112,112	0
84	MG	5	3472	1/1	0.94	0.47	50,50,50,50	0
85	OHX	S6	301	7/7	0.94	0.38	117,117,117,117	0
84	MG	6	1906	1/1	0.94	0.34	51,51,51,51	0
84	MG	2	1908	1/1	0.95	0.39	78,78,78,78	0
84	MG	L2	301	1/1	0.95	0.39	39,39,39,39	0
84	MG	5	3719	1/1	0.95	0.15	32,32,32,32	0
84	MG	1	3500	1/1	0.95	0.66	44,44,44,44	0
85	OHX	5	4031	7/7	0.95	0.27	106,106,106,106	0
84	MG	1	3588	1/1	0.95	0.41	42,42,42,42	0
85	OHX	5	4062	7/7	0.95	0.42	84,84,84,84	0
84	MG	6	1904	1/1	0.95	0.62	76,76,76,76	0
84	MG	1	3403	1/1	0.95	0.65	51,51,51,51	0
85	OHX	4	225	7/7	0.95	0.16	113,113,113,113	0
85	OHX	O9	101	7/7	0.95	0.46	77,77,77,77	0
85	OHX	1	3858	7/7	0.95	0.11	128,128,128,128	0
84	MG	1	3422	1/1	0.95	0.35	55,55,55,55	0
84	MG	5	3575	1/1	0.95	0.47	31,31,31,31	0
85	OHX	5	3990	7/7	0.95	0.40	76,76,76,76	0
85	OHX	2	2092	7/7	0.95	0.32	106,106,106,106	0
85	OHX	6	2095	7/7	0.95	0.41	119,119,119,119	0
85	OHX	6	2154	7/7	0.95	0.38	100,100,100,100	0
85	OHX	1	3960	7/7	0.95	0.30	122,122,122,122	0
84	MG	n0	201	1/1	0.95	0.23	43,43,43,43	0
85	OHX	6	2132	7/7	0.95	0.30	112,112,112,112	0
84	MG	6	1920	1/1	0.95	0.49	42,42,42,42	0
85	OHX	6	2080	7/7	0.95	0.29	109,109,109,109	0
84	MG	5	3517	1/1	0.95	0.31	53,53,53,53	0
84	MG	5	3734	1/1	0.95	0.14	60,60,60,60	0
85	OHX	2	2085	7/7	0.95	0.29	114,114,114,114	0
84	MG	1	3627	1/1	0.95	0.23	45,45,45,45	0
85	OHX	1	4007	7/7	0.95	0.37	101,101,101,101	0
84	MG	L2	302	1/1	0.95	0.29	41,41,41,41	0
84	MG	5	3590	1/1	0.95	0.29	34,34,34,34	0
85	OHX	6	2133	7/7	0.95	0.25	85,85,85,85	0
84	MG	5	3572	1/1	0.95	0.55	28,28,28,28	0
85	OHX	m0	301	7/7	0.95	0.13	109,109,109,109	0
84	MG	5	3505	1/1	0.95	0.51	36,36,36,36	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3997	7/7	0.95	0.37	87,87,87,87	0
84	MG	5	3479	1/1	0.95	0.27	35,35,35,35	0
84	MG	6	1933	1/1	0.95	0.41	84,84,84,84	0
86	ZN	D6	500	1/1	0.95	0.07	81,81,81,81	0
84	MG	1	3533	1/1	0.95	0.43	39,39,39,39	0
84	MG	5	3682	1/1	0.95	0.41	35,35,35,35	0
85	OHX	1	4013	7/7	0.95	0.26	104,104,104,104	0
85	OHX	5	4047	7/7	0.95	0.29	101,101,101,101	0
84	MG	1	3474	1/1	0.95	0.18	53,53,53,53	0
85	OHX	5	3849	7/7	0.95	0.15	90,90,90,90	0
85	OHX	1	3983	7/7	0.95	0.33	78,78,78,78	0
84	MG	6	1950	1/1	0.95	0.67	72,72,72,72	0
84	MG	5	3484	1/1	0.95	0.35	35,35,35,35	0
84	MG	1	3572	1/1	0.95	0.52	33,33,33,33	0
84	MG	5	3443	1/1	0.95	0.20	38,38,38,38	0
85	OHX	5	3983	7/7	0.95	0.30	83,83,83,83	0
85	OHX	6	2040	7/7	0.95	0.13	89,89,89,89	0
85	OHX	6	2027	7/7	0.95	0.15	78,78,78,78	0
85	OHX	6	2098	7/7	0.95	0.34	99,99,99,99	0
85	OHX	2	2075	7/7	0.95	0.35	115,115,115,115	0
84	MG	5	3527	1/1	0.95	0.33	69,69,69,69	0
85	OHX	5	4053	7/7	0.95	0.29	105,105,105,105	0
84	MG	5	3513	1/1	0.95	0.41	32,32,32,32	0
84	MG	6	1968	1/1	0.95	0.35	55,55,55,55	0
85	OHX	2	2012	7/7	0.95	0.14	107,107,107,107	0
85	OHX	2	2068	7/7	0.95	0.33	122,122,122,122	0
85	OHX	1	3969	7/7	0.95	0.33	103,103,103,103	0
84	MG	5	3405	1/1	0.95	0.27	43,43,43,43	0
84	MG	1	3607	1/1	0.95	0.23	42,42,42,42	0
84	MG	5	3592	1/1	0.95	0.19	42,42,42,42	0
85	OHX	5	4067	7/7	0.95	0.22	93,93,93,93	0
85	OHX	5	3978	7/7	0.95	0.27	92,92,92,92	0
84	MG	5	3441	1/1	0.95	0.35	65,65,65,65	0
85	OHX	2	2000	7/7	0.95	0.13	89,89,89,89	0
84	MG	2	1916	1/1	0.95	0.41	59,59,59,59	0
84	MG	1	3706	1/1	0.95	0.65	32,32,32,32	0
84	MG	1	3470	1/1	0.95	0.28	37,37,37,37	0
84	MG	5	3475	1/1	0.95	0.66	32,32,32,32	0
85	OHX	M9	201	7/7	0.95	0.35	124,124,124,124	0
84	MG	1	3446	1/1	0.95	0.17	47,47,47,47	0
84	MG	5	3602	1/1	0.95	0.50	49,49,49,49	0
84	MG	5	3702	1/1	0.95	0.13	35,35,35,35	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	l5	302	7/7	0.95	0.24	107,107,107,107	0
84	MG	1	3544	1/1	0.95	0.57	35,35,35,35	0
85	OHX	5	3864	7/7	0.95	0.17	78,78,78,78	0
84	MG	1	3493	1/1	0.95	0.49	30,30,30,30	0
85	OHX	5	3886	7/7	0.95	0.21	82,82,82,82	0
84	MG	1	3603	1/1	0.95	0.39	38,38,38,38	0
84	MG	1	3524	1/1	0.95	0.26	43,43,43,43	0
84	MG	5	3694	1/1	0.95	0.27	35,35,35,35	0
84	MG	5	3494	1/1	0.95	0.49	30,30,30,30	0
84	MG	5	3626	1/1	0.95	0.33	33,33,33,33	0
85	OHX	5	3989	7/7	0.95	0.36	81,81,81,81	0
85	OHX	1	3888	7/7	0.95	0.30	85,85,85,85	0
84	MG	1	3490	1/1	0.95	0.26	42,42,42,42	0
85	OHX	5	3988	7/7	0.95	0.28	116,116,116,116	0
85	OHX	1	3966	7/7	0.95	0.34	175,175,175,175	0
85	OHX	5	4018	7/7	0.95	0.35	105,105,105,105	0
84	MG	7	205	1/1	0.95	0.52	35,35,35,35	0
85	OHX	2	2093	7/7	0.95	0.31	103,103,103,103	0
84	MG	1	4042	1/1	0.95	0.15	45,45,45,45	0
84	MG	5	3713	1/1	0.95	0.34	33,33,33,33	0
84	MG	2	1959	1/1	0.95	0.34	67,67,67,67	0
85	OHX	5	4019	7/7	0.95	0.33	109,109,109,109	0
85	OHX	5	4056	7/7	0.95	0.33	104,104,104,104	0
85	OHX	1	4035	7/7	0.95	0.23	105,105,105,105	0
85	OHX	3	219	7/7	0.95	0.37	95,95,95,95	0
84	MG	1	3674	1/1	0.95	0.50	37,37,37,37	0
84	MG	5	3508	1/1	0.95	0.39	34,34,34,34	0
84	MG	5	3493	1/1	0.95	0.64	34,34,34,34	0
85	OHX	1	3949	7/7	0.95	0.30	101,101,101,101	0
84	MG	2	1968	1/1	0.95	0.44	85,85,85,85	0
86	ZN	Q0	500	1/1	0.95	0.10	48,48,48,48	0
84	MG	1	3559	1/1	0.95	0.47	48,48,48,48	0
85	OHX	2	2003	7/7	0.95	0.11	101,101,101,101	0
84	MG	5	3452	1/1	0.95	0.34	43,43,43,43	0
85	OHX	6	2116	7/7	0.95	0.18	111,111,111,111	0
85	OHX	1	3978	7/7	0.95	0.22	92,92,92,92	0
84	MG	1	3402	1/1	0.95	0.61	46,46,46,46	0
85	OHX	c3	201	7/7	0.95	0.24	113,113,113,113	0
84	MG	5	3558	1/1	0.95	0.47	37,37,37,37	0
84	MG	5	3570	1/1	0.95	0.29	31,31,31,31	0
85	OHX	2	2040	7/7	0.95	0.24	110,110,110,110	0
85	OHX	2	2026	7/7	0.95	0.19	118,118,118,118	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3940	7/7	0.95	0.23	99,99,99,99	0
84	MG	1	3485	1/1	0.95	0.33	37,37,37,37	0
85	OHX	6	2109	7/7	0.95	0.26	84,84,84,84	0
84	MG	1	3511	1/1	0.95	0.50	39,39,39,39	0
85	OHX	2	2084	7/7	0.95	0.33	98,98,98,98	0
85	OHX	5	4058	7/7	0.95	0.35	115,115,115,115	0
85	OHX	1	4018	7/7	0.95	0.32	88,88,88,88	0
85	OHX	5	3897	7/7	0.95	0.32	81,81,81,81	0
85	OHX	6	2110	7/7	0.95	0.27	103,103,103,103	0
84	MG	M0	301	1/1	0.95	0.37	43,43,43,43	0
85	OHX	6	2143	7/7	0.95	0.34	97,97,97,97	0
85	OHX	2	2105	7/7	0.95	0.31	114,114,114,114	0
84	MG	5	3656	1/1	0.95	0.12	36,36,36,36	0
84	MG	5	3586	1/1	0.95	0.42	34,34,34,34	0
85	OHX	2	2025	7/7	0.95	0.14	108,108,108,108	0
84	MG	1	3418	1/1	0.95	0.22	66,66,66,66	0
85	OHX	6	2145	7/7	0.95	0.35	106,106,106,106	0
85	OHX	L4	401	7/7	0.95	0.30	92,92,92,92	0
85	OHX	5	3996	7/7	0.95	0.35	92,92,92,92	0
85	OHX	6	2081	7/7	0.95	0.19	110,110,110,110	0
84	MG	5	3658	1/1	0.95	0.31	46,46,46,46	0
85	OHX	1	3992	7/7	0.95	0.32	116,116,116,116	0
84	MG	5	3514	1/1	0.95	0.64	30,30,30,30	0
84	MG	5	3606	1/1	0.95	0.29	41,41,41,41	0
84	MG	1	3671	1/1	0.95	0.17	45,45,45,45	0
84	MG	8	203	1/1	0.95	0.43	43,43,43,43	0
85	OHX	1	3974	7/7	0.95	0.30	127,127,127,127	0
85	OHX	1	4031	7/7	0.95	0.23	102,102,102,102	0
85	OHX	4	228	7/7	0.95	0.36	85,85,85,85	0
85	OHX	1	4030	7/7	0.95	0.41	98,98,98,98	0
85	OHX	2	2098	7/7	0.95	0.38	125,125,125,125	0
84	MG	1	3436	1/1	0.95	0.38	38,38,38,38	0
84	MG	5	3580	1/1	0.95	0.57	37,37,37,37	0
85	OHX	5	3961	7/7	0.95	0.27	102,102,102,102	0
84	MG	5	3465	1/1	0.95	0.17	41,41,41,41	0
85	OHX	5	4001	7/7	0.95	0.27	130,130,130,130	0
85	OHX	6	2077	7/7	0.95	0.21	100,100,100,100	0
84	MG	M5	301	1/1	0.95	0.24	39,39,39,39	0
84	MG	5	3548	1/1	0.95	0.30	29,29,29,29	0
85	OHX	1	4017	7/7	0.95	0.41	68,68,68,68	0
84	MG	1	3698	1/1	0.95	0.26	49,49,49,49	0
85	OHX	1	3826	7/7	0.95	0.14	93,93,93,93	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3982	7/7	0.96	0.30	80,80,80,80	0
85	OHX	1	4024	7/7	0.96	0.28	155,155,155,155	0
86	ZN	d9	101	1/1	0.96	0.13	86,86,86,86	0
84	MG	5	3627	1/1	0.96	0.39	34,34,34,34	0
85	OHX	1	4034	7/7	0.96	0.36	104,104,104,104	0
85	OHX	1	3828	7/7	0.96	0.10	104,104,104,104	0
84	MG	2	1958	1/1	0.96	0.49	96,96,96,96	0
84	MG	5	3661	1/1	0.96	0.23	33,33,33,33	0
85	OHX	2	2077	7/7	0.96	0.33	110,110,110,110	0
85	OHX	1	4015	7/7	0.96	0.36	91,91,91,91	0
85	OHX	2	2057	7/7	0.96	0.16	126,126,126,126	0
84	MG	4	206	1/1	0.96	0.27	35,35,35,35	0
85	OHX	6	2091	7/7	0.96	0.18	110,110,110,110	0
85	OHX	5	4009	7/7	0.96	0.27	115,115,115,115	0
84	MG	1	3711	1/1	0.96	0.23	46,46,46,46	0
85	OHX	6	2108	7/7	0.96	0.25	102,102,102,102	0
85	OHX	1	3879	7/7	0.96	0.24	101,101,101,101	0
85	OHX	1	4016	7/7	0.96	0.38	109,109,109,109	0
85	OHX	6	2141	7/7	0.96	0.35	109,109,109,109	0
85	OHX	6	2105	7/7	0.96	0.32	115,115,115,115	0
85	OHX	M0	302	7/7	0.96	0.18	86,86,86,86	0
85	OHX	1	3943	7/7	0.96	0.31	112,112,112,112	0
84	MG	1	3635	1/1	0.96	0.28	41,41,41,41	0
85	OHX	l3	408	7/7	0.96	0.35	111,111,111,111	0
85	OHX	1	4014	7/7	0.96	0.38	110,110,110,110	0
84	MG	1	3653	1/1	0.96	0.17	40,40,40,40	0
84	MG	5	3506	1/1	0.96	0.63	47,47,47,47	0
85	OHX	1	3981	7/7	0.96	0.24	95,95,95,95	0
84	MG	1	3530	1/1	0.96	0.66	41,41,41,41	0
84	MG	5	3488	1/1	0.96	0.32	53,53,53,53	0
84	MG	6	2004	1/1	0.96	0.24	70,70,70,70	0
85	OHX	1	3923	7/7	0.96	0.35	91,91,91,91	0
85	OHX	3	216	7/7	0.96	0.28	108,108,108,108	0
85	OHX	4	229	7/7	0.96	0.39	113,113,113,113	0
85	OHX	2	2060	7/7	0.96	0.25	122,122,122,122	0
85	OHX	2	2073	7/7	0.96	0.20	120,120,120,120	0
85	OHX	5	4032	7/7	0.96	0.33	86,86,86,86	0
85	OHX	1	3946	7/7	0.96	0.32	99,99,99,99	0
85	OHX	5	3802	7/7	0.96	0.12	70,70,70,70	0
84	MG	1	3498	1/1	0.96	0.46	32,32,32,32	0
84	MG	5	3618	1/1	0.96	0.61	40,40,40,40	0
85	OHX	8	223	7/7	0.96	0.33	95,95,95,95	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	1	3574	1/1	0.96	0.41	33,33,33,33	0
85	OHX	5	3895	7/7	0.96	0.30	76,76,76,76	0
85	OHX	5	3878	7/7	0.96	0.15	80,80,80,80	0
85	OHX	5	3945	7/7	0.96	0.17	119,119,119,119	0
85	OHX	1	3950	7/7	0.96	0.26	121,121,121,121	0
84	MG	m7	202	1/1	0.96	0.36	36,36,36,36	0
85	OHX	1	3800	7/7	0.96	0.11	88,88,88,88	0
85	OHX	D9	103	7/7	0.96	0.38	108,108,108,108	0
84	MG	1	3702	1/1	0.96	0.44	36,36,36,36	0
85	OHX	5	4063	7/7	0.96	0.28	121,121,121,121	0
85	OHX	2	2091	7/7	0.96	0.20	122,122,122,122	0
84	MG	5	3424	1/1	0.96	0.37	32,32,32,32	0
85	OHX	4	223	7/7	0.96	0.24	97,97,97,97	0
85	OHX	1	3955	7/7	0.96	0.33	108,108,108,108	0
85	OHX	5	4051	7/7	0.96	0.36	100,100,100,100	0
84	MG	3	209	1/1	0.96	0.17	74,74,74,74	0
85	OHX	6	2121	7/7	0.96	0.33	108,108,108,108	0
85	OHX	5	3919	7/7	0.96	0.28	97,97,97,97	0
85	OHX	1	4023	7/7	0.96	0.33	109,109,109,109	0
84	MG	5	3720	1/1	0.96	0.19	32,32,32,32	0
85	OHX	1	3835	7/7	0.96	0.18	85,85,85,85	0
85	OHX	1	3917	7/7	0.96	0.13	133,133,133,133	0
85	OHX	5	3963	7/7	0.96	0.23	108,108,108,108	0
84	MG	1	3409	1/1	0.96	0.39	40,40,40,40	0
85	OHX	5	4059	7/7	0.96	0.37	74,74,74,74	0
84	MG	M7	203	1/1	0.96	0.31	38,38,38,38	0
85	OHX	1	3905	7/7	0.96	0.20	79,79,79,79	0
84	MG	1	3703	1/1	0.96	0.26	33,33,33,33	0
84	MG	1	3465	1/1	0.96	0.21	42,42,42,42	0
85	OHX	1	3909	7/7	0.96	0.23	83,83,83,83	0
84	MG	5	3469	1/1	0.96	0.22	58,58,58,58	0
84	MG	6	1907	1/1	0.96	0.42	75,75,75,75	0
85	OHX	1	4037	7/7	0.96	0.45	98,98,98,98	0
84	MG	5	3537	1/1	0.96	0.42	36,36,36,36	0
85	OHX	2	2104	7/7	0.96	0.37	96,96,96,96	0
85	OHX	2	1991	7/7	0.96	0.12	97,97,97,97	0
84	MG	6	1953	1/1	0.96	0.63	43,43,43,43	0
84	MG	N8	201	1/1	0.96	0.21	37,37,37,37	0
85	OHX	5	4064	7/7	0.96	0.37	90,90,90,90	0
84	MG	1	3523	1/1	0.96	0.41	41,41,41,41	0
84	MG	6	1992	1/1	0.96	0.66	60,60,60,60	0
84	MG	1	3580	1/1	0.96	0.22	42,42,42,42	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3984	7/7	0.96	0.31	86,86,86,86	0
84	MG	1	3654	1/1	0.96	0.16	45,45,45,45	0
85	OHX	2	2082	7/7	0.96	0.24	114,114,114,114	0
85	OHX	2	2059	7/7	0.96	0.23	119,119,119,119	0
85	OHX	2	2117	7/7	0.96	0.47	128,128,128,128	0
84	MG	5	3521	1/1	0.96	0.41	39,39,39,39	0
85	OHX	5	3972	7/7	0.96	0.33	87,87,87,87	0
84	MG	O4	201	1/1	0.96	0.52	51,51,51,51	0
84	MG	5	3410	1/1	0.96	0.62	42,42,42,42	0
85	OHX	2	2008	7/7	0.96	0.14	105,105,105,105	0
85	OHX	2	2070	7/7	0.96	0.24	95,95,95,95	0
84	MG	5	3576	1/1	0.96	0.41	34,34,34,34	0
85	OHX	sR	401	7/7	0.96	0.24	132,132,132,132	0
84	MG	1	3504	1/1	0.96	0.36	40,40,40,40	0
85	OHX	4	231	7/7	0.96	0.29	103,103,103,103	0
85	OHX	6	2062	7/7	0.96	0.12	126,126,126,126	0
85	OHX	m0	302	7/7	0.96	0.25	88,88,88,88	0
85	OHX	6	2103	7/7	0.96	0.21	131,131,131,131	0
84	MG	2	1914	1/1	0.96	0.56	73,73,73,73	0
85	OHX	N8	203	7/7	0.96	0.24	129,129,129,129	0
85	OHX	2	2086	7/7	0.96	0.35	104,104,104,104	0
85	OHX	1	3929	7/7	0.96	0.34	83,83,83,83	0
84	MG	1	3546	1/1	0.96	0.24	36,36,36,36	0
84	MG	5	3591	1/1	0.96	0.27	33,33,33,33	0
85	OHX	1	3873	7/7	0.96	0.18	112,112,112,112	0
85	OHX	5	4070	7/7	0.96	0.29	135,135,135,135	0
85	OHX	1	3770	7/7	0.96	0.18	74,74,74,74	0
85	OHX	2	2097	7/7	0.96	0.25	110,110,110,110	0
85	OHX	6	2151	7/7	0.96	0.33	127,127,127,127	0
84	MG	5	3435	1/1	0.96	0.21	34,34,34,34	0
85	OHX	1	3855	7/7	0.96	0.35	86,86,86,86	0
85	OHX	5	3995	7/7	0.96	0.33	80,80,80,80	0
85	OHX	1	3884	7/7	0.96	0.23	109,109,109,109	0
85	OHX	1	4000	7/7	0.96	0.31	109,109,109,109	0
84	MG	5	3726	1/1	0.96	0.13	33,33,33,33	0
84	MG	6	1948	1/1	0.96	0.48	47,47,47,47	0
85	OHX	1	3823	7/7	0.96	0.17	73,73,73,73	0
84	MG	1	3521	1/1	0.96	0.58	31,31,31,31	0
84	MG	1	3581	1/1	0.96	0.31	45,45,45,45	0
84	MG	2	1945	1/1	0.96	0.21	63,63,63,63	0
84	MG	5	3474	1/1	0.96	0.14	54,54,54,54	0
85	OHX	5	4017	7/7	0.96	0.27	128,128,128,128	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	6	2093	7/7	0.96	0.21	117,117,117,117	0
85	OHX	5	3884	7/7	0.96	0.10	129,129,129,129	0
85	OHX	s9	201	7/7	0.96	0.43	96,96,96,96	0
85	OHX	5	3914	7/7	0.96	0.24	93,93,93,93	0
84	MG	5	3420	1/1	0.96	0.54	60,60,60,60	0
84	MG	1	3647	1/1	0.96	0.20	49,49,49,49	0
84	MG	5	3512	1/1	0.96	0.14	31,31,31,31	0
85	OHX	1	4032	7/7	0.96	0.43	88,88,88,88	0
85	OHX	1	3856	7/7	0.96	0.15	107,107,107,107	0
85	OHX	7	221	7/7	0.96	0.32	110,110,110,110	0
85	OHX	5	4042	7/7	0.96	0.34	100,100,100,100	0
85	OHX	5	4014	7/7	0.96	0.28	96,96,96,96	0
85	OHX	3	218	7/7	0.96	0.37	125,125,125,125	0
85	OHX	1	3788	7/7	0.96	0.13	86,86,86,86	0
85	OHX	1	3916	7/7	0.96	0.30	87,87,87,87	0
85	OHX	6	2054	7/7	0.96	0.22	84,84,84,84	0
85	OHX	2	2015	7/7	0.96	0.15	106,106,106,106	0
84	MG	5	3432	1/1	0.96	0.21	31,31,31,31	0
84	MG	1	3691	1/1	0.96	0.16	54,54,54,54	0
85	OHX	1	3993	7/7	0.96	0.37	87,87,87,87	0
85	OHX	6	2084	7/7	0.96	0.19	117,117,117,117	0
84	MG	M7	202	1/1	0.96	0.36	41,41,41,41	0
84	MG	6	1997	1/1	0.96	0.20	63,63,63,63	0
85	OHX	2	2103	7/7	0.96	0.27	132,132,132,132	0
85	OHX	6	2149	7/7	0.96	0.31	132,132,132,132	0
84	MG	5	3422	1/1	0.96	0.34	37,37,37,37	0
85	OHX	m1	202	7/7	0.96	0.29	107,107,107,107	0
85	OHX	6	2112	7/7	0.96	0.27	115,115,115,115	0
84	MG	m5	302	1/1	0.96	0.17	53,53,53,53	0
85	OHX	2	2101	7/7	0.96	0.31	129,129,129,129	0
85	OHX	5	3843	7/7	0.96	0.14	91,91,91,91	0
85	OHX	6	2153	7/7	0.96	0.36	109,109,109,109	0
85	OHX	s8	302	7/7	0.96	0.38	132,132,132,132	0
85	OHX	1	3898	7/7	0.96	0.28	85,85,85,85	0
85	OHX	6	2148	7/7	0.96	0.51	114,114,114,114	0
84	MG	3	208	1/1	0.96	0.40	65,65,65,65	0
85	OHX	2	2112	7/7	0.96	0.34	116,116,116,116	0
85	OHX	2	2099	7/7	0.96	0.25	128,128,128,128	0
84	MG	5	3599	1/1	0.96	0.25	43,43,43,43	0
85	OHX	6	2152	7/7	0.96	0.29	107,107,107,107	0
84	MG	5	3486	1/1	0.96	0.36	48,48,48,48	0
85	OHX	6	2115	7/7	0.96	0.18	106,106,106,106	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	1	3621	1/1	0.96	0.16	36,36,36,36	0
84	MG	5	3491	1/1	0.96	0.50	42,42,42,42	0
85	OHX	5	4007	7/7	0.96	0.32	63,63,63,63	0
85	OHX	5	3819	7/7	0.96	0.12	78,78,78,78	0
85	OHX	5	3871	7/7	0.96	0.21	77,77,77,77	0
84	MG	5	3692	1/1	0.96	0.44	68,68,68,68	0
85	OHX	4	230	7/7	0.96	0.40	108,108,108,108	0
85	OHX	c5	201	7/7	0.96	0.22	128,128,128,128	0
85	OHX	2	2096	7/7	0.96	0.30	122,122,122,122	0
85	OHX	5	3973	7/7	0.96	0.27	96,96,96,96	0
84	MG	6	1940	1/1	0.96	0.24	43,43,43,43	0
85	OHX	5	4000	7/7	0.96	0.24	106,106,106,106	0
85	OHX	8	221	7/7	0.96	0.33	92,92,92,92	0
85	OHX	5	4016	7/7	0.96	0.39	90,90,90,90	0
85	OHX	5	3955	7/7	0.96	0.23	104,104,104,104	0
84	MG	1	3622	1/1	0.96	0.23	35,35,35,35	0
84	MG	1	3573	1/1	0.96	0.69	33,33,33,33	0
85	OHX	1	3897	7/7	0.96	0.16	109,109,109,109	0
85	OHX	1	4006	7/7	0.96	0.43	102,102,102,102	0
85	OHX	1	3987	7/7	0.96	0.32	79,79,79,79	0
84	MG	l3	404	1/1	0.96	0.26	39,39,39,39	0
84	MG	1	3478	1/1	0.96	0.15	40,40,40,40	0
85	OHX	6	2136	7/7	0.96	0.37	108,108,108,108	0
84	MG	1	3563	1/1	0.96	0.83	54,54,54,54	0
85	OHX	1	3976	7/7	0.96	0.31	91,91,91,91	0
84	MG	5	3466	1/1	0.96	0.23	68,68,68,68	0
84	MG	1	3412	1/1	0.96	0.25	42,42,42,42	0
84	MG	1	3486	1/1	0.96	0.45	36,36,36,36	0
85	OHX	1	3869	7/7	0.96	0.21	91,91,91,91	0
85	OHX	5	3937	7/7	0.96	0.29	112,112,112,112	0
85	OHX	5	3967	7/7	0.96	0.14	116,116,116,116	0
85	OHX	5	3959	7/7	0.96	0.34	118,118,118,118	0
85	OHX	1	3964	7/7	0.96	0.28	89,89,89,89	0
85	OHX	1	3941	7/7	0.96	0.36	107,107,107,107	0
85	OHX	5	3968	7/7	0.96	0.22	86,86,86,86	0
85	OHX	1	3932	7/7	0.96	0.36	71,71,71,71	0
84	MG	5	3620	1/1	0.96	0.35	35,35,35,35	0
85	OHX	1	3877	7/7	0.96	0.12	126,126,126,126	0
84	MG	1	3475	1/1	0.96	0.45	40,40,40,40	0
85	OHX	1	3930	7/7	0.96	0.23	100,100,100,100	0
84	MG	5	3543	1/1	0.96	0.49	37,37,37,37	0
85	OHX	1	4038	7/7	0.96	0.45	100,100,100,100	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3986	7/7	0.96	0.35	105,105,105,105	0
84	MG	5	3489	1/1	0.96	0.28	34,34,34,34	0
85	OHX	C3	201	7/7	0.96	0.18	115,115,115,115	0
85	OHX	1	4028	7/7	0.96	0.31	115,115,115,115	0
85	OHX	5	4054	7/7	0.96	0.33	87,87,87,87	0
84	MG	1	3632	1/1	0.96	0.53	50,50,50,50	0
85	OHX	1	3813	7/7	0.96	0.21	77,77,77,77	0
85	OHX	1	3920	7/7	0.96	0.17	121,121,121,121	0
85	OHX	1	3799	7/7	0.96	0.11	88,88,88,88	0
85	OHX	5	4023	7/7	0.96	0.32	89,89,89,89	0
84	MG	1	3525	1/1	0.96	0.39	46,46,46,46	0
85	OHX	1	3935	7/7	0.96	0.31	88,88,88,88	0
85	OHX	1	3919	7/7	0.96	0.24	99,99,99,99	0
85	OHX	6	2118	7/7	0.96	0.27	109,109,109,109	0
85	OHX	6	2089	7/7	0.96	0.32	85,85,85,85	0
85	OHX	2	2094	7/7	0.96	0.26	108,108,108,108	0
85	OHX	2	2058	7/7	0.96	0.11	89,89,89,89	0
85	OHX	1	3810	7/7	0.96	0.10	99,99,99,99	0
85	OHX	2	2113	7/7	0.96	0.34	110,110,110,110	0
85	OHX	5	3966	7/7	0.96	0.33	108,108,108,108	0
85	OHX	1	3914	7/7	0.96	0.16	111,111,111,111	0
85	OHX	s4	301	7/7	0.96	0.26	110,110,110,110	0
84	MG	7	201	1/1	0.96	0.68	49,49,49,49	0
84	MG	5	3724	1/1	0.96	0.14	42,42,42,42	0
85	OHX	6	2156	7/7	0.97	0.37	115,115,115,115	0
85	OHX	8	215	7/7	0.97	0.15	94,94,94,94	0
85	OHX	1	3936	7/7	0.97	0.23	98,98,98,98	0
84	MG	5	3449	1/1	0.97	0.23	34,34,34,34	0
85	OHX	l3	407	7/7	0.97	0.28	78,78,78,78	0
85	OHX	1	3910	7/7	0.97	0.24	84,84,84,84	0
84	MG	1	3507	1/1	0.97	0.41	34,34,34,34	0
85	OHX	5	3944	7/7	0.97	0.36	74,74,74,74	0
85	OHX	2	2116	7/7	0.97	0.42	109,109,109,109	0
85	OHX	5	4030	7/7	0.97	0.40	89,89,89,89	0
84	MG	1	3566	1/1	0.97	0.37	37,37,37,37	0
84	MG	1	3440	1/1	0.97	0.27	48,48,48,48	0
85	OHX	1	3977	7/7	0.97	0.29	98,98,98,98	0
85	OHX	5	3950	7/7	0.97	0.40	101,101,101,101	0
85	OHX	5	3998	7/7	0.97	0.44	83,83,83,83	0
85	OHX	5	3786	7/7	0.97	0.11	75,75,75,75	0
85	OHX	1	3967	7/7	0.97	0.35	94,94,94,94	0
85	OHX	2	2078	7/7	0.97	0.28	105,105,105,105	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	3	206	1/1	0.97	0.79	59,59,59,59	0
85	OHX	1	3778	7/7	0.97	0.12	84,84,84,84	0
84	MG	1	3413	1/1	0.97	0.46	43,43,43,43	0
85	OHX	4	221	7/7	0.97	0.32	88,88,88,88	0
85	OHX	5	4028	7/7	0.97	0.32	86,86,86,86	0
85	OHX	2	2018	7/7	0.97	0.12	106,106,106,106	0
85	OHX	6	2079	7/7	0.97	0.23	110,110,110,110	0
85	OHX	6	2130	7/7	0.97	0.42	88,88,88,88	0
85	OHX	6	2124	7/7	0.97	0.27	89,89,89,89	0
85	OHX	1	3862	7/7	0.97	0.21	74,74,74,74	0
84	MG	1	3480	1/1	0.97	0.36	36,36,36,36	0
85	OHX	3	215	7/7	0.97	0.18	98,98,98,98	0
85	OHX	1	3953	7/7	0.97	0.26	108,108,108,108	0
84	MG	5	3454	1/1	0.97	0.40	37,37,37,37	0
85	OHX	5	3892	7/7	0.97	0.23	80,80,80,80	0
84	MG	5	3573	1/1	0.97	0.32	37,37,37,37	0
85	OHX	5	3850	7/7	0.97	0.12	107,107,107,107	0
85	OHX	5	4057	7/7	0.97	0.34	96,96,96,96	0
85	OHX	1	3890	7/7	0.97	0.23	102,102,102,102	0
84	MG	1	3473	1/1	0.97	0.28	45,45,45,45	0
85	OHX	5	3824	7/7	0.97	0.13	82,82,82,82	0
85	OHX	5	3935	7/7	0.97	0.20	92,92,92,92	0
84	MG	o4	201	1/1	0.97	0.35	52,52,52,52	0
85	OHX	1	3807	7/7	0.97	0.12	76,76,76,76	0
84	MG	1	4041	1/1	0.97	0.30	41,41,41,41	0
85	OHX	2	1997	7/7	0.97	0.11	115,115,115,115	0
85	OHX	1	3982	7/7	0.97	0.32	107,107,107,107	0
85	OHX	8	224	7/7	0.97	0.45	94,94,94,94	0
85	OHX	l5	301	7/7	0.97	0.17	106,106,106,106	0
85	OHX	1	3984	7/7	0.97	0.26	102,102,102,102	0
85	OHX	5	4002	7/7	0.97	0.33	102,102,102,102	0
85	OHX	1	3887	7/7	0.97	0.14	99,99,99,99	0
85	OHX	6	2037	7/7	0.97	0.09	112,112,112,112	0
84	MG	5	3525	1/1	0.97	0.53	36,36,36,36	0
85	OHX	6	2074	7/7	0.97	0.14	106,106,106,106	0
85	OHX	6	2119	7/7	0.97	0.24	106,106,106,106	0
85	OHX	5	3977	7/7	0.97	0.42	70,70,70,70	0
85	OHX	2	2021	7/7	0.97	0.17	99,99,99,99	0
85	OHX	2	2054	7/7	0.97	0.20	122,122,122,122	0
85	OHX	5	3970	7/7	0.97	0.37	90,90,90,90	0
85	OHX	5	3954	7/7	0.97	0.25	82,82,82,82	0
84	MG	1	3537	1/1	0.97	0.34	33,33,33,33	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	1	3928	7/7	0.97	0.24	95,95,95,95	0
85	OHX	7	218	7/7	0.97	0.30	92,92,92,92	0
85	OHX	6	2048	7/7	0.97	0.08	117,117,117,117	0
85	OHX	7	219	7/7	0.97	0.24	80,80,80,80	0
85	OHX	1	3822	7/7	0.97	0.11	95,95,95,95	0
85	OHX	5	3956	7/7	0.97	0.35	76,76,76,76	0
85	OHX	19	202	7/7	0.97	0.23	92,92,92,92	0
84	MG	1	3578	1/1	0.97	0.27	35,35,35,35	0
85	OHX	6	2058	7/7	0.97	0.17	99,99,99,99	0
85	OHX	5	4065	7/7	0.97	0.13	92,92,92,92	0
84	MG	2	1980	1/1	0.97	0.12	58,58,58,58	0
84	MG	1	3522	1/1	0.97	0.34	32,32,32,32	0
84	MG	1	3718	1/1	0.97	0.24	78,78,78,78	0
85	OHX	1	3973	7/7	0.97	0.40	105,105,105,105	0
85	OHX	2	2095	7/7	0.97	0.36	96,96,96,96	0
85	OHX	5	3810	7/7	0.97	0.11	87,87,87,87	0
85	OHX	2	2017	7/7	0.97	0.15	89,89,89,89	0
85	OHX	2	2035	7/7	0.97	0.17	95,95,95,95	0
85	OHX	7	213	7/7	0.97	0.13	79,79,79,79	0
84	MG	5	3524	1/1	0.97	0.66	34,34,34,34	0
84	MG	5	3630	1/1	0.97	0.15	31,31,31,31	0
85	OHX	5	4039	7/7	0.97	0.40	105,105,105,105	0
84	MG	6	1989	1/1	0.97	0.20	74,74,74,74	0
85	OHX	6	2129	7/7	0.97	0.25	152,152,152,152	0
85	OHX	5	3896	7/7	0.97	0.21	77,77,77,77	0
86	ZN	Q2	501	1/1	0.97	0.16	64,64,64,64	0
85	OHX	5	4004	7/7	0.97	0.29	119,119,119,119	0
85	OHX	5	3904	7/7	0.97	0.20	76,76,76,76	0
85	OHX	5	4027	7/7	0.97	0.28	92,92,92,92	0
85	OHX	5	3901	7/7	0.97	0.19	110,110,110,110	0
84	MG	n3	201	1/1	0.97	0.55	28,28,28,28	0
85	OHX	8	219	7/7	0.97	0.29	90,90,90,90	0
85	OHX	2	2045	7/7	0.97	0.23	90,90,90,90	0
85	OHX	1	4020	7/7	0.97	0.39	118,118,118,118	0
85	OHX	2	2028	7/7	0.97	0.22	94,94,94,94	0
85	OHX	2	2005	7/7	0.97	0.13	94,94,94,94	0
85	OHX	1	3991	7/7	0.97	0.28	119,119,119,119	0
85	OHX	2	2053	7/7	0.97	0.09	130,130,130,130	0
85	OHX	1	3934	7/7	0.97	0.33	94,94,94,94	0
85	OHX	m7	204	7/7	0.97	0.40	84,84,84,84	0
85	OHX	1	3795	7/7	0.97	0.13	83,83,83,83	0
84	MG	1	3636	1/1	0.97	0.27	46,46,46,46	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
85	OHX	5	3957	7/7	0.97	0.28	84,84,84,84	0
85	OHX	2	2047	7/7	0.97	0.22	101,101,101,101	0
85	OHX	5	4046	7/7	0.97	0.35	75,75,75,75	0
85	OHX	5	3941	7/7	0.97	0.28	90,90,90,90	0
85	OHX	1	3881	7/7	0.97	0.29	87,87,87,87	0
85	OHX	6	2066	7/7	0.97	0.17	83,83,83,83	0
85	OHX	5	3958	7/7	0.97	0.29	98,98,98,98	0
84	MG	6	1960	1/1	0.97	0.26	45,45,45,45	0
85	OHX	2	2080	7/7	0.97	0.31	112,112,112,112	0
84	MG	2	1931	1/1	0.97	0.54	65,65,65,65	0
85	OHX	8	212	7/7	0.97	0.10	91,91,91,91	0
85	OHX	1	3899	7/7	0.97	0.32	91,91,91,91	0
85	OHX	5	4026	7/7	0.97	0.37	105,105,105,105	0
85	OHX	2	2071	7/7	0.97	0.28	127,127,127,127	0
85	OHX	5	3946	7/7	0.97	0.23	100,100,100,100	0
85	OHX	1	3947	7/7	0.97	0.23	85,85,85,85	0
85	OHX	2	2049	7/7	0.97	0.23	100,100,100,100	0
85	OHX	5	4045	7/7	0.97	0.37	99,99,99,99	0
85	OHX	5	3874	7/7	0.97	0.16	87,87,87,87	0
85	OHX	14	402	7/7	0.97	0.52	99,99,99,99	0
85	OHX	5	4037	7/7	0.97	0.28	89,89,89,89	0
85	OHX	1	3970	7/7	0.97	0.31	94,94,94,94	0
85	OHX	1	3988	7/7	0.97	0.32	104,104,104,104	0
85	OHX	o9	101	7/7	0.97	0.28	87,87,87,87	0
85	OHX	5	4052	7/7	0.97	0.38	94,94,94,94	0
84	MG	1	3551	1/1	0.97	0.57	37,37,37,37	0
85	OHX	1	3986	7/7	0.97	0.19	112,112,112,112	0
85	OHX	1	3812	7/7	0.97	0.12	88,88,88,88	0
85	OHX	1	3972	7/7	0.97	0.31	77,77,77,77	0
85	OHX	6	2117	7/7	0.97	0.25	86,86,86,86	0
85	OHX	5	3951	7/7	0.97	0.27	92,92,92,92	0
85	OHX	6	2147	7/7	0.97	0.37	100,100,100,100	0
85	OHX	6	2120	7/7	0.97	0.24	85,85,85,85	0
85	OHX	5	3795	7/7	0.97	0.12	104,104,104,104	0
85	OHX	5	4003	7/7	0.97	0.25	86,86,86,86	0
84	MG	1	3419	1/1	0.97	0.53	44,44,44,44	0
85	OHX	1	3865	7/7	0.97	0.21	93,93,93,93	0
85	OHX	14	401	7/7	0.97	0.26	96,96,96,96	0
85	OHX	5	3913	7/7	0.97	0.21	88,88,88,88	0
85	OHX	1	3809	7/7	0.97	0.09	107,107,107,107	0
85	OHX	1	3806	7/7	0.97	0.10	92,92,92,92	0
85	OHX	5	3960	7/7	0.97	0.32	105,105,105,105	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3947	7/7	0.97	0.36	79,79,79,79	0
85	OHX	1	3995	7/7	0.97	0.12	86,86,86,86	0
84	MG	1	3509	1/1	0.97	0.32	33,33,33,33	0
85	OHX	1	3985	7/7	0.97	0.41	97,97,97,97	0
85	OHX	1	3837	7/7	0.97	0.19	71,71,71,71	0
85	OHX	2	2032	7/7	0.97	0.15	121,121,121,121	0
85	OHX	5	3987	7/7	0.97	0.45	81,81,81,81	0
85	OHX	1	3942	7/7	0.97	0.30	88,88,88,88	0
85	OHX	5	4048	7/7	0.97	0.28	104,104,104,104	0
84	MG	1	3495	1/1	0.97	0.46	41,41,41,41	0
85	OHX	8	218	7/7	0.97	0.29	79,79,79,79	0
85	OHX	5	3818	7/7	0.97	0.11	90,90,90,90	0
85	OHX	4	227	7/7	0.97	0.39	85,85,85,85	0
85	OHX	1	3989	7/7	0.97	0.42	104,104,104,104	0
84	MG	1	3492	1/1	0.97	0.35	39,39,39,39	0
85	OHX	5	4040	7/7	0.97	0.41	102,102,102,102	0
85	OHX	8	217	7/7	0.97	0.20	101,101,101,101	0
85	OHX	1	3765	7/7	0.97	0.11	79,79,79,79	0
85	OHX	6	2140	7/7	0.97	0.30	101,101,101,101	0
85	OHX	5	3873	7/7	0.97	0.20	68,68,68,68	0
85	OHX	6	2100	7/7	0.97	0.20	96,96,96,96	0
84	MG	5	3490	1/1	0.97	0.60	39,39,39,39	0
85	OHX	1	3820	7/7	0.97	0.14	87,87,87,87	0
85	OHX	5	4010	7/7	0.97	0.38	75,75,75,75	0
84	MG	1	3571	1/1	0.97	0.43	35,35,35,35	0
85	OHX	2	2014	7/7	0.97	0.20	89,89,89,89	0
85	OHX	1	3971	7/7	0.97	0.41	98,98,98,98	0
85	OHX	6	2106	7/7	0.97	0.30	96,96,96,96	0
85	OHX	5	4021	7/7	0.97	0.38	82,82,82,82	0
85	OHX	C5	201	7/7	0.97	0.21	127,127,127,127	0
84	MG	1	3683	1/1	0.97	0.36	34,34,34,34	0
85	OHX	1	4033	7/7	0.97	0.27	100,100,100,100	0
85	OHX	1	4008	7/7	0.97	0.19	82,82,82,82	0
85	OHX	5	3879	7/7	0.97	0.16	103,103,103,103	0
85	OHX	1	3979	7/7	0.97	0.36	94,94,94,94	0
85	OHX	5	3869	7/7	0.97	0.15	79,79,79,79	0
85	OHX	1	3994	7/7	0.97	0.32	92,92,92,92	0
84	MG	2	1930	1/1	0.97	0.52	58,58,58,58	0
85	OHX	1	3915	7/7	0.97	0.28	69,69,69,69	0
85	OHX	5	4041	7/7	0.97	0.44	96,96,96,96	0
85	OHX	5	3930	7/7	0.97	0.37	75,75,75,75	0
85	OHX	6	2126	7/7	0.97	0.30	96,96,96,96	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3911	7/7	0.97	0.27	80,80,80,80	0
85	OHX	1	3933	7/7	0.97	0.17	92,92,92,92	0
85	OHX	2	1993	7/7	0.97	0.14	99,99,99,99	0
85	OHX	S8	301	7/7	0.97	0.26	124,124,124,124	0
85	OHX	6	2087	7/7	0.97	0.34	109,109,109,109	0
85	OHX	5	3993	7/7	0.97	0.32	101,101,101,101	0
84	MG	6	1944	1/1	0.97	0.60	69,69,69,69	0
85	OHX	6	2107	7/7	0.97	0.26	99,99,99,99	0
85	OHX	6	2069	7/7	0.97	0.23	86,86,86,86	0
85	OHX	1	3962	7/7	0.97	0.20	101,101,101,101	0
85	OHX	d4	201	7/7	0.97	0.28	115,115,115,115	0
84	MG	5	3519	1/1	0.97	0.54	34,34,34,34	0
84	MG	1	3591	1/1	0.97	0.15	44,44,44,44	0
84	MG	1	3534	1/1	0.97	0.72	36,36,36,36	0
85	OHX	1	3840	7/7	0.97	0.15	82,82,82,82	0
84	MG	3	220	1/1	0.97	0.42	46,46,46,46	0
84	MG	1	3529	1/1	0.97	0.48	50,50,50,50	0
84	MG	5	3468	1/1	0.97	0.49	51,51,51,51	0
84	MG	6	1974	1/1	0.97	0.14	50,50,50,50	0
85	OHX	6	2113	7/7	0.97	0.35	86,86,86,86	0
85	OHX	1	3937	7/7	0.97	0.43	88,88,88,88	0
85	OHX	5	3922	7/7	0.97	0.16	97,97,97,97	0
84	MG	1	3519	1/1	0.97	0.77	38,38,38,38	0
85	OHX	6	2057	7/7	0.97	0.12	108,108,108,108	0
84	MG	5	3433	1/1	0.97	0.34	42,42,42,42	0
85	OHX	1	3996	7/7	0.97	0.31	97,97,97,97	0
85	OHX	1	3998	7/7	0.97	0.42	102,102,102,102	0
84	MG	1	3680	1/1	0.97	0.13	40,40,40,40	0
85	OHX	2	2055	7/7	0.97	0.31	111,111,111,111	0
84	MG	1	3695	1/1	0.97	0.28	40,40,40,40	0
85	OHX	5	3905	7/7	0.97	0.26	93,93,93,93	0
85	OHX	1	4019	7/7	0.97	0.36	85,85,85,85	0
85	OHX	1	3906	7/7	0.97	0.30	85,85,85,85	0
84	MG	5	3481	1/1	0.97	0.44	35,35,35,35	0
85	OHX	1	4027	7/7	0.97	0.37	103,103,103,103	0
85	OHX	5	3903	7/7	0.97	0.11	110,110,110,110	0
85	OHX	5	3992	7/7	0.97	0.39	97,97,97,97	0
84	MG	1	3717	1/1	0.97	0.16	60,60,60,60	0
84	MG	5	3436	1/1	0.97	0.23	30,30,30,30	0
85	OHX	5	4038	7/7	0.97	0.30	91,91,91,91	0
85	OHX	1	3892	7/7	0.97	0.25	95,95,95,95	0
85	OHX	2	2036	7/7	0.97	0.14	103,103,103,103	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	1	3780	7/7	0.97	0.09	100,100,100,100	0
84	MG	5	3430	1/1	0.97	0.19	33,33,33,33	0
85	OHX	5	3889	7/7	0.97	0.25	72,72,72,72	0
85	OHX	1	3990	7/7	0.97	0.38	99,99,99,99	0
85	OHX	1	3903	7/7	0.97	0.24	77,77,77,77	0
85	OHX	8	222	7/7	0.97	0.27	114,114,114,114	0
85	OHX	5	3926	7/7	0.97	0.18	104,104,104,104	0
85	OHX	6	2036	7/7	0.97	0.10	110,110,110,110	0
85	OHX	5	4069	7/7	0.97	0.11	129,129,129,129	0
85	OHX	6	2139	7/7	0.97	0.44	84,84,84,84	0
85	OHX	2	2062	7/7	0.97	0.32	106,106,106,106	0
84	MG	2	1977	1/1	0.97	0.27	75,75,75,75	0
85	OHX	5	3852	7/7	0.97	0.18	71,71,71,71	0
85	OHX	5	3839	7/7	0.97	0.14	84,84,84,84	0
84	MG	5	3699	1/1	0.97	0.19	42,42,42,42	0
84	MG	1	3675	1/1	0.97	0.31	41,41,41,41	0
84	MG	5	3545	1/1	0.97	0.68	30,30,30,30	0
85	OHX	2	2039	7/7	0.97	0.19	133,133,133,133	0
84	MG	1	3586	1/1	0.97	0.56	68,68,68,68	0
85	OHX	1	3940	7/7	0.97	0.40	88,88,88,88	0
85	OHX	1	4010	7/7	0.97	0.45	104,104,104,104	0
85	OHX	5	3880	7/7	0.97	0.22	91,91,91,91	0
85	OHX	1	3912	7/7	0.97	0.25	110,110,110,110	0
85	OHX	1	4021	7/7	0.97	0.31	128,128,128,128	0
85	OHX	5	3975	7/7	0.97	0.39	85,85,85,85	0
85	OHX	6	2094	7/7	0.97	0.23	96,96,96,96	0
85	OHX	SR	401	7/7	0.97	0.13	134,134,134,134	0
85	OHX	5	3846	7/7	0.98	0.22	58,58,58,58	0
85	OHX	5	3912	7/7	0.98	0.30	108,108,108,108	0
85	OHX	6	2046	7/7	0.98	0.10	95,95,95,95	0
85	OHX	1	3907	7/7	0.98	0.21	96,96,96,96	0
85	OHX	7	211	7/7	0.98	0.09	74,74,74,74	0
84	MG	5	3691	1/1	0.98	0.12	43,43,43,43	0
85	OHX	1	3773	7/7	0.98	0.08	73,73,73,73	0
85	OHX	5	3994	7/7	0.98	0.30	97,97,97,97	0
85	OHX	6	2063	7/7	0.98	0.11	134,134,134,134	0
85	OHX	1	3944	7/7	0.98	0.18	100,100,100,100	0
84	MG	1	3410	1/1	0.98	0.45	35,35,35,35	0
85	OHX	1	3784	7/7	0.98	0.10	77,77,77,77	0
84	MG	5	3504	1/1	0.98	0.45	37,37,37,37	0
85	OHX	5	3854	7/7	0.98	0.21	80,80,80,80	0
85	OHX	O7	105	7/7	0.98	0.19	76,76,76,76	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3964	7/7	0.98	0.34	106,106,106,106	0
85	OHX	5	4012	7/7	0.98	0.27	89,89,89,89	0
85	OHX	5	4035	7/7	0.98	0.18	63,63,63,63	0
85	OHX	5	3773	7/7	0.98	0.11	64,64,64,64	0
84	MG	5	3569	1/1	0.98	0.63	29,29,29,29	0
85	OHX	5	3827	7/7	0.98	0.20	76,76,76,76	0
85	OHX	2	1989	7/7	0.98	0.08	92,92,92,92	0
84	MG	1	3451	1/1	0.98	0.37	47,47,47,47	0
84	MG	5	4074	1/1	0.98	0.41	32,32,32,32	0
85	OHX	1	3870	7/7	0.98	0.22	97,97,97,97	0
85	OHX	1	3925	7/7	0.98	0.10	116,116,116,116	0
85	OHX	1	3965	7/7	0.98	0.20	109,109,109,109	0
85	OHX	2	2051	7/7	0.98	0.32	93,93,93,93	0
84	MG	2	1944	1/1	0.98	0.57	91,91,91,91	0
85	OHX	5	3883	7/7	0.98	0.19	91,91,91,91	0
85	OHX	5	3796	7/7	0.98	0.09	89,89,89,89	0
85	OHX	1	3836	7/7	0.98	0.21	83,83,83,83	0
85	OHX	6	2033	7/7	0.98	0.13	74,74,74,74	0
85	OHX	1	3814	7/7	0.98	0.14	71,71,71,71	0
85	OHX	1	3791	7/7	0.98	0.11	73,73,73,73	0
85	OHX	1	3833	7/7	0.98	0.20	78,78,78,78	0
86	ZN	D9	101	1/1	0.98	0.12	79,79,79,79	0
84	MG	1	3625	1/1	0.98	0.40	63,63,63,63	0
85	OHX	1	3792	7/7	0.98	0.11	80,80,80,80	0
85	OHX	5	3836	7/7	0.98	0.15	81,81,81,81	0
85	OHX	1	3868	7/7	0.98	0.23	83,83,83,83	0
85	OHX	5	3952	7/7	0.98	0.33	77,77,77,77	0
85	OHX	2	1988	7/7	0.98	0.17	90,90,90,90	0
85	OHX	3	213	7/7	0.98	0.18	97,97,97,97	0
85	OHX	5	3866	7/7	0.98	0.19	87,87,87,87	0
85	OHX	6	2049	7/7	0.98	0.14	85,85,85,85	0
85	OHX	5	3857	7/7	0.98	0.20	71,71,71,71	0
85	OHX	2	2007	7/7	0.98	0.14	94,94,94,94	0
85	OHX	2	2030	7/7	0.98	0.20	103,103,103,103	0
85	OHX	5	3787	7/7	0.98	0.10	63,63,63,63	0
85	OHX	2	1998	7/7	0.98	0.10	89,89,89,89	0
85	OHX	1	3999	7/7	0.98	0.25	82,82,82,82	0
85	OHX	6	2064	7/7	0.98	0.07	141,141,141,141	0
85	OHX	5	3942	7/7	0.98	0.25	98,98,98,98	0
85	OHX	5	3891	7/7	0.98	0.22	84,84,84,84	0
85	OHX	4	222	7/7	0.98	0.26	83,83,83,83	0
84	MG	5	3539	1/1	0.98	0.42	29,29,29,29	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	1	3463	1/1	0.98	0.47	32,32,32,32	0
84	MG	1	3505	1/1	0.98	0.29	38,38,38,38	0
85	OHX	1	3789	7/7	0.98	0.10	88,88,88,88	0
85	OHX	6	2086	7/7	0.98	0.32	103,103,103,103	0
85	OHX	6	2061	7/7	0.98	0.18	98,98,98,98	0
85	OHX	1	3959	7/7	0.98	0.28	84,84,84,84	0
85	OHX	5	4060	7/7	0.98	0.30	125,125,125,125	0
85	OHX	1	4011	7/7	0.98	0.32	100,100,100,100	0
85	OHX	5	3933	7/7	0.98	0.30	77,77,77,77	0
85	OHX	6	2122	7/7	0.98	0.37	92,92,92,92	0
85	OHX	6	2075	7/7	0.98	0.24	96,96,96,96	0
85	OHX	5	3876	7/7	0.98	0.29	76,76,76,76	0
85	OHX	1	3927	7/7	0.98	0.29	92,92,92,92	0
85	OHX	5	3807	7/7	0.98	0.10	74,74,74,74	0
85	OHX	1	3831	7/7	0.98	0.18	86,86,86,86	0
84	MG	6	1991	1/1	0.98	0.15	50,50,50,50	0
85	OHX	5	4022	7/7	0.98	0.38	94,94,94,94	0
85	OHX	2	2048	7/7	0.98	0.24	87,87,87,87	0
85	OHX	1	3829	7/7	0.98	0.15	82,82,82,82	0
85	OHX	6	2059	7/7	0.98	0.10	106,106,106,106	0
85	OHX	2	2023	7/7	0.98	0.22	90,90,90,90	0
85	OHX	5	3837	7/7	0.98	0.26	72,72,72,72	0
84	MG	5	3497	1/1	0.98	0.56	30,30,30,30	0
85	OHX	1	3952	7/7	0.98	0.23	111,111,111,111	0
85	OHX	5	3775	7/7	0.98	0.11	60,60,60,60	0
85	OHX	6	2065	7/7	0.98	0.11	94,94,94,94	0
85	OHX	6	2017	7/7	0.98	0.09	85,85,85,85	0
85	OHX	6	2029	7/7	0.98	0.08	110,110,110,110	0
85	OHX	1	3844	7/7	0.98	0.19	71,71,71,71	0
85	OHX	2	2024	7/7	0.98	0.20	89,89,89,89	0
85	OHX	6	2041	7/7	0.98	0.12	74,74,74,74	0
85	OHX	5	3931	7/7	0.98	0.18	68,68,68,68	0
85	OHX	2	1985	7/7	0.98	0.16	84,84,84,84	0
85	OHX	4	224	7/7	0.98	0.27	82,82,82,82	0
84	MG	2	1917	1/1	0.98	0.52	62,62,62,62	0
85	OHX	5	3900	7/7	0.98	0.24	103,103,103,103	0
85	OHX	5	3855	7/7	0.98	0.23	83,83,83,83	0
85	OHX	2	2087	7/7	0.98	0.26	119,119,119,119	0
85	OHX	1	3804	7/7	0.98	0.10	88,88,88,88	0
85	OHX	5	3845	7/7	0.98	0.11	87,87,87,87	0
85	OHX	1	3961	7/7	0.98	0.23	104,104,104,104	0
85	OHX	1	3968	7/7	0.98	0.28	86,86,86,86	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	6	2104	7/7	0.98	0.30	103,103,103,103	0
85	OHX	6	2090	7/7	0.98	0.23	115,115,115,115	0
84	MG	5	3561	1/1	0.98	0.93	48,48,48,48	0
85	OHX	6	2055	7/7	0.98	0.10	95,95,95,95	0
85	OHX	1	3880	7/7	0.98	0.23	89,89,89,89	0
85	OHX	O3	202	7/7	0.98	0.33	85,85,85,85	0
85	OHX	5	3840	7/7	0.98	0.20	73,73,73,73	0
85	OHX	1	3922	7/7	0.98	0.43	92,92,92,92	0
85	OHX	6	2134	7/7	0.98	0.29	112,112,112,112	0
85	OHX	2	2041	7/7	0.98	0.10	119,119,119,119	0
84	MG	1	3716	1/1	0.98	0.10	33,33,33,33	0
85	OHX	2	2081	7/7	0.98	0.28	109,109,109,109	0
85	OHX	3	210	7/7	0.98	0.09	77,77,77,77	0
85	OHX	M7	205	7/7	0.98	0.30	101,101,101,101	0
85	OHX	1	3954	7/7	0.98	0.37	96,96,96,96	0
84	MG	1	3628	1/1	0.98	0.72	50,50,50,50	0
85	OHX	6	2125	7/7	0.98	0.27	87,87,87,87	0
85	OHX	3	214	7/7	0.98	0.18	95,95,95,95	0
84	MG	8	208	1/1	0.98	0.10	63,63,63,63	0
85	OHX	2	2013	7/7	0.98	0.21	105,105,105,105	0
84	MG	1	3540	1/1	0.98	0.45	35,35,35,35	0
85	OHX	5	3923	7/7	0.98	0.20	85,85,85,85	0
86	ZN	q0	201	1/1	0.98	0.10	36,36,36,36	0
85	OHX	1	4022	7/7	0.98	0.41	77,77,77,77	0
85	OHX	1	4026	7/7	0.98	0.39	90,90,90,90	0
85	OHX	2	2037	7/7	0.98	0.22	106,106,106,106	0
85	OHX	1	4004	7/7	0.98	0.35	85,85,85,85	0
85	OHX	1	3975	7/7	0.98	0.34	85,85,85,85	0
85	OHX	5	3859	7/7	0.98	0.17	81,81,81,81	0
85	OHX	1	4025	7/7	0.98	0.44	101,101,101,101	0
85	OHX	5	3856	7/7	0.98	0.07	120,120,120,120	0
85	OHX	1	3866	7/7	0.98	0.26	91,91,91,91	0
85	OHX	5	3907	7/7	0.98	0.17	116,116,116,116	0
85	OHX	1	3867	7/7	0.98	0.20	75,75,75,75	0
85	OHX	1	3896	7/7	0.98	0.22	88,88,88,88	0
85	OHX	5	3924	7/7	0.98	0.28	77,77,77,77	0
85	OHX	5	3784	7/7	0.98	0.12	70,70,70,70	0
85	OHX	6	2083	7/7	0.98	0.19	116,116,116,116	0
85	OHX	5	4049	7/7	0.98	0.33	85,85,85,85	0
85	OHX	2	2016	7/7	0.98	0.20	108,108,108,108	0
85	OHX	1	3781	7/7	0.98	0.12	78,78,78,78	0
85	OHX	5	3800	7/7	0.98	0.09	78,78,78,78	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	5	3557	1/1	0.98	0.68	42,42,42,42	0
85	OHX	1	3819	7/7	0.98	0.09	90,90,90,90	0
85	OHX	5	3934	7/7	0.98	0.26	91,91,91,91	0
84	MG	6	1983	1/1	0.98	0.19	73,73,73,73	0
85	OHX	1	3980	7/7	0.98	0.37	83,83,83,83	0
85	OHX	5	3979	7/7	0.98	0.28	85,85,85,85	0
85	OHX	5	3991	7/7	0.98	0.23	87,87,87,87	0
85	OHX	7	217	7/7	0.98	0.15	95,95,95,95	0
85	OHX	5	3831	7/7	0.98	0.11	77,77,77,77	0
85	OHX	1	3834	7/7	0.98	0.09	99,99,99,99	0
85	OHX	6	2102	7/7	0.98	0.27	104,104,104,104	0
85	OHX	5	3788	7/7	0.98	0.08	78,78,78,78	0
85	OHX	2	2002	7/7	0.98	0.08	84,84,84,84	0
85	OHX	1	3847	7/7	0.98	0.21	91,91,91,91	0
85	OHX	1	3764	7/7	0.98	0.15	64,64,64,64	0
85	OHX	5	3890	7/7	0.98	0.20	97,97,97,97	0
85	OHX	8	220	7/7	0.98	0.17	120,120,120,120	0
85	OHX	1	3771	7/7	0.98	0.09	76,76,76,76	0
85	OHX	C8	201	7/7	0.98	0.08	97,97,97,97	0
85	OHX	5	3925	7/7	0.98	0.22	81,81,81,81	0
84	MG	1	3550	1/1	0.98	0.26	40,40,40,40	0
85	OHX	1	3939	7/7	0.98	0.32	94,94,94,94	0
85	OHX	6	2097	7/7	0.98	0.19	103,103,103,103	0
85	OHX	5	3821	7/7	0.98	0.10	74,74,74,74	0
85	OHX	5	3875	7/7	0.98	0.10	112,112,112,112	0
84	MG	1	3558	1/1	0.98	0.32	45,45,45,45	0
85	OHX	1	3911	7/7	0.98	0.23	103,103,103,103	0
85	OHX	1	3891	7/7	0.98	0.22	81,81,81,81	0
85	OHX	8	225	7/7	0.98	0.37	101,101,101,101	0
85	OHX	5	3809	7/7	0.98	0.13	88,88,88,88	0
84	MG	1	3513	1/1	0.98	0.95	38,38,38,38	0
85	OHX	1	3751	7/7	0.98	0.13	67,67,67,67	0
85	OHX	5	4013	7/7	0.98	0.41	96,96,96,96	0
85	OHX	1	3776	7/7	0.98	0.13	69,69,69,69	0
85	OHX	6	2042	7/7	0.98	0.13	100,100,100,100	0
85	OHX	4	219	7/7	0.98	0.10	93,93,93,93	0
85	OHX	1	3757	7/7	0.98	0.11	70,70,70,70	0
84	MG	1	3579	1/1	0.98	0.42	40,40,40,40	0
85	OHX	5	3981	7/7	0.98	0.28	97,97,97,97	0
84	MG	5	3523	1/1	0.98	0.33	27,27,27,27	0
85	OHX	1	3783	7/7	0.98	0.11	70,70,70,70	0
85	OHX	2	1990	7/7	0.98	0.09	95,95,95,95	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	1	3846	7/7	0.98	0.19	97,97,97,97	0
85	OHX	6	2138	7/7	0.98	0.27	77,77,77,77	0
85	OHX	1	3756	7/7	0.98	0.12	68,68,68,68	0
85	OHX	1	3849	7/7	0.98	0.20	80,80,80,80	0
84	MG	5	3554	1/1	0.98	0.42	29,29,29,29	0
85	OHX	q2	502	7/7	0.98	0.16	61,61,61,61	0
85	OHX	4	218	7/7	0.98	0.18	77,77,77,77	0
85	OHX	1	3857	7/7	0.98	0.21	79,79,79,79	0
85	OHX	M5	302	7/7	0.98	0.22	88,88,88,88	0
85	OHX	2	2064	7/7	0.98	0.20	92,92,92,92	0
85	OHX	5	3902	7/7	0.98	0.27	87,87,87,87	0
84	MG	6	1905	1/1	0.98	0.83	61,61,61,61	0
84	MG	5	3579	1/1	0.98	0.55	32,32,32,32	0
85	OHX	6	2071	7/7	0.98	0.17	79,79,79,79	0
85	OHX	6	2051	7/7	0.98	0.12	93,93,93,93	0
85	OHX	2	1995	7/7	0.98	0.09	91,91,91,91	0
85	OHX	7	212	7/7	0.98	0.14	70,70,70,70	0
85	OHX	8	213	7/7	0.98	0.18	83,83,83,83	0
85	OHX	1	3882	7/7	0.98	0.19	90,90,90,90	0
85	OHX	6	2060	7/7	0.98	0.12	138,138,138,138	0
85	OHX	1	3853	7/7	0.98	0.14	93,93,93,93	0
85	OHX	2	2050	7/7	0.98	0.36	102,102,102,102	0
85	OHX	5	3804	7/7	0.98	0.11	63,63,63,63	0
85	OHX	2	2042	7/7	0.98	0.15	110,110,110,110	0
85	OHX	6	2070	7/7	0.98	0.28	98,98,98,98	0
85	OHX	7	214	7/7	0.98	0.15	71,71,71,71	0
85	OHX	1	3859	7/7	0.98	0.16	119,119,119,119	0
85	OHX	4	226	7/7	0.98	0.22	106,106,106,106	0
85	OHX	1	3816	7/7	0.98	0.12	84,84,84,84	0
84	MG	6	1925	1/1	0.98	0.38	72,72,72,72	0
85	OHX	3	217	7/7	0.98	0.31	85,85,85,85	0
85	OHX	1	3755	7/7	0.98	0.12	67,67,67,67	0
85	OHX	2	2072	7/7	0.98	0.29	106,106,106,106	0
85	OHX	5	4015	7/7	0.98	0.29	98,98,98,98	0
85	OHX	2	2056	7/7	0.98	0.09	127,127,127,127	0
85	OHX	1	3860	7/7	0.98	0.27	82,82,82,82	0
85	OHX	c8	201	7/7	0.98	0.15	117,117,117,117	0
85	OHX	5	3853	7/7	0.98	0.10	83,83,83,83	0
85	OHX	5	3928	7/7	0.98	0.22	91,91,91,91	0
84	MG	5	3683	1/1	0.98	0.11	46,46,46,46	0
85	OHX	1	3852	7/7	0.98	0.14	110,110,110,110	0
84	MG	1	3453	1/1	0.98	0.39	33,33,33,33	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3816	7/7	0.98	0.13	66,66,66,66	0
85	OHX	5	3971	7/7	0.98	0.23	94,94,94,94	0
85	OHX	5	3872	7/7	0.98	0.18	65,65,65,65	0
85	OHX	2	2074	7/7	0.98	0.24	101,101,101,101	0
85	OHX	6	2028	7/7	0.98	0.09	89,89,89,89	0
85	OHX	1	3843	7/7	0.98	0.23	79,79,79,79	0
85	OHX	6	2096	7/7	0.98	0.21	100,100,100,100	0
84	MG	5	3568	1/1	0.98	0.56	35,35,35,35	0
85	OHX	1	3886	7/7	0.98	0.22	101,101,101,101	0
85	OHX	5	3916	7/7	0.98	0.32	85,85,85,85	0
85	OHX	o7	502	7/7	0.98	0.13	79,79,79,79	0
85	OHX	5	3887	7/7	0.98	0.23	72,72,72,72	0
84	MG	7	203	1/1	0.98	0.38	58,58,58,58	0
85	OHX	5	3948	7/7	0.98	0.31	92,92,92,92	0
85	OHX	6	2085	7/7	0.98	0.24	78,78,78,78	0
85	OHX	5	3917	7/7	0.98	0.23	86,86,86,86	0
85	OHX	2	2029	7/7	0.98	0.12	108,108,108,108	0
85	OHX	5	3939	7/7	0.98	0.26	83,83,83,83	0
84	MG	1	3686	1/1	0.98	0.11	37,37,37,37	0
85	OHX	1	3872	7/7	0.98	0.18	98,98,98,98	0
85	OHX	5	3962	7/7	0.98	0.23	111,111,111,111	0
84	MG	5	3510	1/1	0.98	0.56	36,36,36,36	0
85	OHX	O7	104	7/7	0.98	0.09	77,77,77,77	0
85	OHX	n3	203	7/7	0.98	0.21	76,76,76,76	0
85	OHX	2	2022	7/7	0.98	0.12	107,107,107,107	0
85	OHX	1	3827	7/7	0.98	0.20	72,72,72,72	0
85	OHX	2	1999	7/7	0.98	0.10	84,84,84,84	0
85	OHX	1	3902	7/7	0.98	0.26	88,88,88,88	0
85	OHX	5	3885	7/7	0.98	0.26	92,92,92,92	0
85	OHX	5	3893	7/7	0.98	0.15	111,111,111,111	0
85	OHX	5	3915	7/7	0.98	0.25	91,91,91,91	0
85	OHX	m5	305	7/7	0.98	0.18	94,94,94,94	0
85	OHX	1	3926	7/7	0.98	0.31	81,81,81,81	0
85	OHX	5	4006	7/7	0.98	0.37	89,89,89,89	0
85	OHX	1	3895	7/7	0.98	0.22	70,70,70,70	0
85	OHX	5	3820	7/7	0.98	0.12	81,81,81,81	0
85	OHX	1	3777	7/7	0.98	0.07	84,84,84,84	0
85	OHX	5	3806	7/7	0.98	0.08	74,74,74,74	0
84	MG	7	208	1/1	0.98	0.58	43,43,43,43	0
85	OHX	1	3805	7/7	0.98	0.10	72,72,72,72	0
84	MG	1	3555	1/1	0.98	0.16	35,35,35,35	0
85	OHX	L3	403	7/7	0.98	0.22	86,86,86,86	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
84	MG	6	1935	1/1	0.98	0.47	44,44,44,44	0
85	OHX	5	3974	7/7	0.98	0.36	89,89,89,89	0
85	OHX	2	2083	7/7	0.98	0.30	115,115,115,115	0
84	MG	1	3454	1/1	0.98	0.39	34,34,34,34	0
85	OHX	1	3817	7/7	0.98	0.16	75,75,75,75	0
85	OHX	5	3899	7/7	0.98	0.25	80,80,80,80	0
85	OHX	1	4001	7/7	0.98	0.25	108,108,108,108	0
85	OHX	6	2053	7/7	0.98	0.15	84,84,84,84	0
85	OHX	5	3918	7/7	0.98	0.33	84,84,84,84	0
85	OHX	5	3894	7/7	0.98	0.40	80,80,80,80	0
85	OHX	2	2033	7/7	0.98	0.27	94,94,94,94	0
85	OHX	1	3956	7/7	0.98	0.36	100,100,100,100	0
85	OHX	1	3863	7/7	0.98	0.16	95,95,95,95	0
85	OHX	1	3842	7/7	0.98	0.14	96,96,96,96	0
85	OHX	5	4036	7/7	0.98	0.22	82,82,82,82	0
85	OHX	1	3875	7/7	0.98	0.21	100,100,100,100	0
85	OHX	1	3963	7/7	0.98	0.26	88,88,88,88	0
85	OHX	1	3900	7/7	0.98	0.25	83,83,83,83	0
85	OHX	6	2072	7/7	0.98	0.23	92,92,92,92	0
85	OHX	5	3834	7/7	0.98	0.14	79,79,79,79	0
85	OHX	5	3823	7/7	0.98	0.13	76,76,76,76	0
85	OHX	6	2056	7/7	0.98	0.13	82,82,82,82	0
85	OHX	6	2114	7/7	0.98	0.26	114,114,114,114	0
85	OHX	5	3803	7/7	0.98	0.10	63,63,63,63	0
85	OHX	5	3770	7/7	0.98	0.13	63,63,63,63	0
85	OHX	m5	304	7/7	0.98	0.11	74,74,74,74	0
85	OHX	5	4025	7/7	0.98	0.37	93,93,93,93	0
84	MG	5	3706	1/1	0.98	0.23	37,37,37,37	0
85	OHX	6	2092	7/7	0.98	0.17	96,96,96,96	0
85	OHX	1	3901	7/7	0.98	0.19	106,106,106,106	0
85	OHX	2	2066	7/7	0.98	0.20	93,93,93,93	0
85	OHX	2	2079	7/7	0.98	0.23	115,115,115,115	0
85	OHX	2	2061	7/7	0.98	0.25	115,115,115,115	0
85	OHX	2	2020	7/7	0.98	0.09	103,103,103,103	0
85	OHX	1	3797	7/7	0.98	0.10	76,76,76,76	0
85	OHX	5	3985	7/7	0.98	0.39	97,97,97,97	0
85	OHX	6	2047	7/7	0.98	0.12	91,91,91,91	0
84	MG	6	1939	1/1	0.98	0.31	56,56,56,56	0
85	OHX	3	212	7/7	0.98	0.11	81,81,81,81	0
85	OHX	5	3936	7/7	0.98	0.23	98,98,98,98	0
85	OHX	2	2044	7/7	0.98	0.22	113,113,113,113	0
85	OHX	6	2032	7/7	0.98	0.09	87,87,87,87	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	1	3845	7/7	0.98	0.25	77,77,77,77	0
85	OHX	5	3910	7/7	0.98	0.12	95,95,95,95	0
85	OHX	1	3924	7/7	0.98	0.26	76,76,76,76	0
85	OHX	8	216	7/7	0.98	0.31	86,86,86,86	0
84	MG	5	3556	1/1	0.98	0.41	36,36,36,36	0
84	MG	5	3528	1/1	0.98	0.26	36,36,36,36	0
85	OHX	5	3908	7/7	0.98	0.23	84,84,84,84	0
85	OHX	5	3817	7/7	0.98	0.12	67,67,67,67	0
85	OHX	2	2009	7/7	0.98	0.15	95,95,95,95	0
85	OHX	2	2046	7/7	0.98	0.16	105,105,105,105	0
85	OHX	1	3894	7/7	0.98	0.14	114,114,114,114	0
84	MG	1	3557	1/1	0.98	0.70	37,37,37,37	0
85	OHX	5	3927	7/7	0.98	0.23	87,87,87,87	0
85	OHX	1	3913	7/7	0.98	0.27	70,70,70,70	0
85	OHX	5	3799	7/7	0.98	0.16	82,82,82,82	0
84	MG	5	3546	1/1	0.98	0.67	39,39,39,39	0
84	MG	1	3499	1/1	0.98	0.47	39,39,39,39	0
85	OHX	6	2043	7/7	0.98	0.19	77,77,77,77	0
84	MG	5	3552	1/1	0.98	0.57	36,36,36,36	0
85	OHX	6	2039	7/7	0.98	0.11	83,83,83,83	0
86	ZN	Q3	501	1/1	0.98	0.06	58,58,58,58	0
85	OHX	2	2065	7/7	0.98	0.21	104,104,104,104	0
84	MG	5	3565	1/1	0.98	0.54	49,49,49,49	0
85	OHX	5	3877	7/7	0.98	0.19	80,80,80,80	0
85	OHX	4	220	7/7	0.98	0.17	96,96,96,96	0
85	OHX	8	214	7/7	0.98	0.13	102,102,102,102	0
85	OHX	5	3867	7/7	0.98	0.21	85,85,85,85	0
85	OHX	6	2067	7/7	0.98	0.16	98,98,98,98	0
85	OHX	2	2088	7/7	0.98	0.19	94,94,94,94	0
85	OHX	1	3790	7/7	0.99	0.11	72,72,72,72	0
85	OHX	1	3779	7/7	0.99	0.08	71,71,71,71	0
85	OHX	2	2011	7/7	0.99	0.16	98,98,98,98	0
85	OHX	2	1992	7/7	0.99	0.10	89,89,89,89	0
85	OHX	1	3739	7/7	0.99	0.07	62,62,62,62	0
85	OHX	6	2044	7/7	0.99	0.11	81,81,81,81	0
85	OHX	2	2031	7/7	0.99	0.18	95,95,95,95	0
85	OHX	1	3753	7/7	0.99	0.09	67,67,67,67	0
85	OHX	4	216	7/7	0.99	0.09	58,58,58,58	0
85	OHX	5	4066	7/7	0.99	0.43	114,114,114,114	0
85	OHX	1	3908	7/7	0.99	0.18	103,103,103,103	0
85	OHX	1	3878	7/7	0.99	0.21	88,88,88,88	0
85	OHX	5	3829	7/7	0.99	0.12	68,68,68,68	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
86	ZN	q3	501	1/1	0.99	0.10	57,57,57,57	0
85	OHX	5	3777	7/7	0.99	0.07	59,59,59,59	0
85	OHX	n3	202	7/7	0.99	0.08	72,72,72,72	0
85	OHX	1	3830	7/7	0.99	0.11	86,86,86,86	0
85	OHX	1	3871	7/7	0.99	0.22	100,100,100,100	0
85	OHX	5	3920	7/7	0.99	0.12	73,73,73,73	0
85	OHX	5	3765	7/7	0.99	0.10	59,59,59,59	0
84	MG	6	1914	1/1	0.99	0.46	41,41,41,41	0
85	OHX	5	3965	7/7	0.99	0.29	88,88,88,88	0
85	OHX	1	3731	7/7	0.99	0.11	50,50,50,50	0
85	OHX	5	3762	7/7	0.99	0.10	63,63,63,63	0
85	OHX	6	2022	7/7	0.99	0.09	87,87,87,87	0
85	OHX	5	3749	7/7	0.99	0.13	52,52,52,52	0
85	OHX	1	3774	7/7	0.99	0.06	74,74,74,74	0
86	ZN	O7	101	1/1	0.99	0.07	42,42,42,42	0
85	OHX	1	3841	7/7	0.99	0.17	62,62,62,62	0
85	OHX	6	2016	7/7	0.99	0.14	71,71,71,71	0
85	OHX	1	3742	7/7	0.99	0.11	65,65,65,65	0
85	OHX	6	2026	7/7	0.99	0.07	71,71,71,71	0
85	OHX	6	2019	7/7	0.99	0.13	77,77,77,77	0
85	OHX	1	3838	7/7	0.99	0.25	68,68,68,68	0
85	OHX	1	4009	7/7	0.99	0.20	83,83,83,83	0
85	OHX	1	3749	7/7	0.99	0.11	67,67,67,67	0
85	OHX	8	211	7/7	0.99	0.08	55,55,55,55	0
85	OHX	N1	201	7/7	0.99	0.08	59,59,59,59	0
85	OHX	5	3793	7/7	0.99	0.07	87,87,87,87	0
85	OHX	5	3848	7/7	0.99	0.20	80,80,80,80	0
85	OHX	1	3768	7/7	0.99	0.06	83,83,83,83	0
85	OHX	1	3767	7/7	0.99	0.12	69,69,69,69	0
85	OHX	1	3883	7/7	0.99	0.19	106,106,106,106	0
85	OHX	5	3778	7/7	0.99	0.06	64,64,64,64	0
85	OHX	5	3898	7/7	0.99	0.17	80,80,80,80	0
85	OHX	5	3999	7/7	0.99	0.28	76,76,76,76	0
85	OHX	5	3863	7/7	0.99	0.22	86,86,86,86	0
85	OHX	6	2031	7/7	0.99	0.13	76,76,76,76	0
85	OHX	6	2099	7/7	0.99	0.30	95,95,95,95	0
85	OHX	6	2011	7/7	0.99	0.09	61,61,61,61	0
85	OHX	5	3797	7/7	0.99	0.13	57,57,57,57	0
85	OHX	1	3762	7/7	0.99	0.07	66,66,66,66	0
85	OHX	5	3822	7/7	0.99	0.17	64,64,64,64	0
85	OHX	5	3767	7/7	0.99	0.11	63,63,63,63	0
85	OHX	6	2012	7/7	0.99	0.10	67,67,67,67	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3881	7/7	0.99	0.11	106,106,106,106	0
85	OHX	5	3742	7/7	0.99	0.18	46,46,46,46	0
85	OHX	2	1986	7/7	0.99	0.10	81,81,81,81	0
85	OHX	1	3733	7/7	0.99	0.10	47,47,47,47	0
85	OHX	2	2001	7/7	0.99	0.09	83,83,83,83	0
85	OHX	5	4011	7/7	0.99	0.20	63,63,63,63	0
85	OHX	1	3734	7/7	0.99	0.09	56,56,56,56	0
85	OHX	6	2045	7/7	0.99	0.10	87,87,87,87	0
85	OHX	5	3779	7/7	0.99	0.06	65,65,65,65	0
85	OHX	5	3747	7/7	0.99	0.12	53,53,53,53	0
85	OHX	5	3813	7/7	0.99	0.09	81,81,81,81	0
85	OHX	2	1984	7/7	0.99	0.11	78,78,78,78	0
85	OHX	2	1994	7/7	0.99	0.11	99,99,99,99	0
84	MG	5	3547	1/1	0.99	0.53	33,33,33,33	0
85	OHX	5	3792	7/7	0.99	0.06	81,81,81,81	0
85	OHX	5	3838	7/7	0.99	0.15	101,101,101,101	0
85	OHX	5	3865	7/7	0.99	0.11	87,87,87,87	0
85	OHX	5	3830	7/7	0.99	0.14	64,64,64,64	0
85	OHX	1	3824	7/7	0.99	0.09	56,56,56,56	0
85	OHX	1	3758	7/7	0.99	0.05	67,67,67,67	0
85	OHX	5	3811	7/7	0.99	0.11	73,73,73,73	0
85	OHX	5	3794	7/7	0.99	0.08	69,69,69,69	0
85	OHX	5	3746	7/7	0.99	0.16	54,54,54,54	0
85	OHX	1	3746	7/7	0.99	0.10	65,65,65,65	0
85	OHX	1	3832	7/7	0.99	0.19	75,75,75,75	0
85	OHX	5	3921	7/7	0.99	0.24	95,95,95,95	0
85	OHX	1	3815	7/7	0.99	0.14	71,71,71,71	0
85	OHX	6	2023	7/7	0.99	0.06	71,71,71,71	0
85	OHX	6	2021	7/7	0.99	0.09	74,74,74,74	0
85	OHX	6	2035	7/7	0.99	0.19	71,71,71,71	0
85	OHX	5	3835	7/7	0.99	0.13	73,73,73,73	0
85	OHX	6	2030	7/7	0.99	0.19	74,74,74,74	0
85	OHX	5	3748	7/7	0.99	0.10	55,55,55,55	0
85	OHX	1	4005	7/7	0.99	0.25	95,95,95,95	0
85	OHX	5	3798	7/7	0.99	0.08	80,80,80,80	0
85	OHX	1	3839	7/7	0.99	0.18	80,80,80,80	0
85	OHX	5	3832	7/7	0.99	0.12	103,103,103,103	0
85	OHX	5	3929	7/7	0.99	0.18	76,76,76,76	0
85	OHX	6	2013	7/7	0.99	0.12	70,70,70,70	0
85	OHX	6	2020	7/7	0.99	0.09	69,69,69,69	0
85	OHX	1	3850	7/7	0.99	0.24	83,83,83,83	0
85	OHX	5	3814	7/7	0.99	0.07	84,84,84,84	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	4	217	7/7	0.99	0.08	68,68,68,68	0
85	OHX	1	3948	7/7	0.99	0.18	70,70,70,70	0
85	OHX	1	3772	7/7	0.99	0.06	74,74,74,74	0
85	OHX	2	2019	7/7	0.99	0.18	87,87,87,87	0
85	OHX	1	3951	7/7	0.99	0.29	81,81,81,81	0
85	OHX	5	3755	7/7	0.99	0.09	50,50,50,50	0
85	OHX	5	3949	7/7	0.99	0.18	63,63,63,63	0
85	OHX	1	3848	7/7	0.99	0.15	90,90,90,90	0
85	OHX	5	3833	7/7	0.99	0.07	61,61,61,61	0
85	OHX	5	3782	7/7	0.99	0.10	76,76,76,76	0
85	OHX	1	3766	7/7	0.99	0.08	76,76,76,76	0
85	OHX	6	2024	7/7	0.99	0.07	71,71,71,71	0
84	MG	6	1931	1/1	0.99	0.29	48,48,48,48	0
84	MG	1	3464	1/1	0.99	0.28	36,36,36,36	0
85	OHX	1	3735	7/7	0.99	0.11	54,54,54,54	0
85	OHX	1	3787	7/7	0.99	0.07	73,73,73,73	0
85	OHX	1	3763	7/7	0.99	0.09	68,68,68,68	0
85	OHX	5	3844	7/7	0.99	0.12	70,70,70,70	0
85	OHX	1	3732	7/7	0.99	0.13	57,57,57,57	0
85	OHX	5	3780	7/7	0.99	0.05	59,59,59,59	0
85	OHX	5	3825	7/7	0.99	0.12	68,68,68,68	0
85	OHX	5	3759	7/7	0.99	0.08	62,62,62,62	0
85	OHX	1	3738	7/7	0.99	0.08	56,56,56,56	0
85	OHX	1	3782	7/7	0.99	0.07	77,77,77,77	0
85	OHX	1	3854	7/7	0.99	0.17	74,74,74,74	0
85	OHX	1	3748	7/7	0.99	0.10	72,72,72,72	0
85	OHX	5	3750	7/7	0.99	0.11	54,54,54,54	0
85	OHX	1	3769	7/7	0.99	0.07	63,63,63,63	0
84	MG	5	3567	1/1	0.99	0.49	30,30,30,30	0
85	OHX	13	406	7/7	0.99	0.14	79,79,79,79	0
85	OHX	2	2006	7/7	0.99	0.12	113,113,113,113	0
85	OHX	5	3751	7/7	0.99	0.12	52,52,52,52	0
85	OHX	1	3861	7/7	0.99	0.14	67,67,67,67	0
85	OHX	5	3783	7/7	0.99	0.06	77,77,77,77	0
85	OHX	1	3740	7/7	0.99	0.13	60,60,60,60	0
85	OHX	7	216	7/7	0.99	0.13	87,87,87,87	0
84	MG	1	3553	1/1	0.99	0.51	30,30,30,30	0
85	OHX	2	1987	7/7	0.99	0.10	74,74,74,74	0
84	MG	5	3577	1/1	0.99	0.50	45,45,45,45	0
85	OHX	Q2	503	7/7	0.99	0.20	59,59,59,59	0
84	MG	1	3481	1/1	0.99	0.21	45,45,45,45	0
84	MG	1	3535	1/1	0.99	0.37	43,43,43,43	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3764	7/7	0.99	0.06	57,57,57,57	0
85	OHX	5	3776	7/7	0.99	0.10	86,86,86,86	0
85	OHX	5	3888	7/7	0.99	0.26	91,91,91,91	0
85	OHX	5	3761	7/7	0.99	0.08	55,55,55,55	0
85	OHX	1	3876	7/7	0.99	0.23	86,86,86,86	0
85	OHX	1	3775	7/7	0.99	0.10	83,83,83,83	0
85	OHX	1	3760	7/7	0.99	0.09	68,68,68,68	0
85	OHX	1	3885	7/7	0.99	0.22	78,78,78,78	0
85	OHX	n9	102	7/7	0.99	0.14	59,59,59,59	0
85	OHX	L3	402	7/7	0.99	0.27	86,86,86,86	0
85	OHX	5	3842	7/7	0.99	0.10	91,91,91,91	0
85	OHX	6	2052	7/7	0.99	0.09	110,110,110,110	0
85	OHX	5	3768	7/7	0.99	0.06	58,58,58,58	0
85	OHX	5	3851	7/7	0.99	0.08	52,52,52,52	0
85	OHX	1	3786	7/7	0.99	0.08	101,101,101,101	0
85	OHX	1	3904	7/7	0.99	0.16	82,82,82,82	0
85	OHX	4	215	7/7	0.99	0.10	54,54,54,54	0
85	OHX	1	3821	7/7	0.99	0.15	77,77,77,77	0
85	OHX	2	2038	7/7	0.99	0.24	93,93,93,93	0
85	OHX	3	211	7/7	0.99	0.20	85,85,85,85	0
85	OHX	5	3812	7/7	0.99	0.08	74,74,74,74	0
85	OHX	1	3730	7/7	0.99	0.18	55,55,55,55	0
85	OHX	2	2004	7/7	0.99	0.09	86,86,86,86	0
85	OHX	1	3801	7/7	0.99	0.11	81,81,81,81	0
85	OHX	1	3938	7/7	0.99	0.24	92,92,92,92	0
85	OHX	1	3798	7/7	0.99	0.08	75,75,75,75	0
85	OHX	1	3741	7/7	0.99	0.09	55,55,55,55	0
85	OHX	2	2010	7/7	0.99	0.17	88,88,88,88	0
85	OHX	2	1983	7/7	0.99	0.11	75,75,75,75	0
85	OHX	o3	202	7/7	0.99	0.19	82,82,82,82	0
85	OHX	6	2111	7/7	0.99	0.21	84,84,84,84	0
85	OHX	2	2043	7/7	0.99	0.19	89,89,89,89	0
85	OHX	6	2010	7/7	0.99	0.18	73,73,73,73	0
85	OHX	1	3793	7/7	0.99	0.06	89,89,89,89	0
85	OHX	5	3760	7/7	0.99	0.09	56,56,56,56	0
85	OHX	1	3796	7/7	0.99	0.07	79,79,79,79	0
85	OHX	5	3772	7/7	0.99	0.05	61,61,61,61	0
85	OHX	7	215	7/7	0.99	0.09	82,82,82,82	0
85	OHX	1	3874	7/7	0.99	0.20	91,91,91,91	0
85	OHX	6	2038	7/7	0.99	0.11	71,71,71,71	0
85	OHX	1	3808	7/7	0.99	0.10	93,93,93,93	0
85	OHX	5	3826	7/7	0.99	0.10	62,62,62,62	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3790	7/7	0.99	0.08	58,58,58,58	0
85	OHX	5	3861	7/7	0.99	0.06	103,103,103,103	0
85	OHX	1	3750	7/7	0.99	0.12	76,76,76,76	0
85	OHX	6	2025	7/7	0.99	0.09	73,73,73,73	0
85	OHX	6	2073	7/7	0.99	0.28	86,86,86,86	0
85	OHX	5	3862	7/7	0.99	0.25	77,77,77,77	0
85	OHX	5	3789	7/7	0.99	0.06	59,59,59,59	0
85	OHX	5	3801	7/7	0.99	0.09	69,69,69,69	0
85	OHX	5	3781	7/7	0.99	0.09	65,65,65,65	0
85	OHX	1	3957	7/7	0.99	0.32	111,111,111,111	0
85	OHX	5	3808	7/7	0.99	0.09	67,67,67,67	0
85	OHX	1	3811	7/7	0.99	0.09	78,78,78,78	0
84	MG	5	3560	1/1	0.99	0.47	35,35,35,35	0
85	OHX	1	3851	7/7	0.99	0.23	82,82,82,82	0
85	OHX	1	3893	7/7	0.99	0.28	81,81,81,81	0
85	OHX	6	2015	7/7	0.99	0.11	75,75,75,75	0
85	OHX	5	3815	7/7	0.99	0.11	68,68,68,68	0
85	OHX	1	3818	7/7	0.99	0.16	58,58,58,58	0
85	OHX	1	3759	7/7	0.99	0.11	79,79,79,79	0
85	OHX	6	2082	7/7	0.99	0.21	91,91,91,91	0
85	OHX	5	3753	7/7	0.99	0.16	68,68,68,68	0
85	OHX	5	3841	7/7	0.99	0.08	97,97,97,97	0
85	OHX	1	3803	7/7	0.99	0.20	74,74,74,74	0
85	OHX	2	1996	7/7	0.99	0.10	83,83,83,83	0
84	MG	1	3576	1/1	0.99	0.57	28,28,28,28	0
85	OHX	5	3858	7/7	0.99	0.21	82,82,82,82	0
85	OHX	6	2050	7/7	0.99	0.12	92,92,92,92	0
85	OHX	1	3958	7/7	0.99	0.34	84,84,84,84	0
85	OHX	5	3868	7/7	0.99	0.07	96,96,96,96	0
85	OHX	6	2076	7/7	0.99	0.23	81,81,81,81	0
85	OHX	1	3794	7/7	0.99	0.06	62,62,62,62	0
85	OHX	5	3758	7/7	0.99	0.11	55,55,55,55	0
85	OHX	1	3802	7/7	0.99	0.13	75,75,75,75	0
85	OHX	5	3805	7/7	0.99	0.09	73,73,73,73	0
86	ZN	o7	501	1/1	0.99	0.07	45,45,45,45	0
85	OHX	6	2034	7/7	0.99	0.07	91,91,91,91	0
85	OHX	1	3825	7/7	0.99	0.15	83,83,83,83	0
85	OHX	6	2078	7/7	0.99	0.24	98,98,98,98	0
85	OHX	5	3953	7/7	0.99	0.20	81,81,81,81	0
84	MG	1	3562	1/1	0.99	0.56	48,48,48,48	0
85	OHX	5	3791	7/7	0.99	0.07	73,73,73,73	0
85	OHX	5	3754	7/7	0.99	0.09	50,50,50,50	0

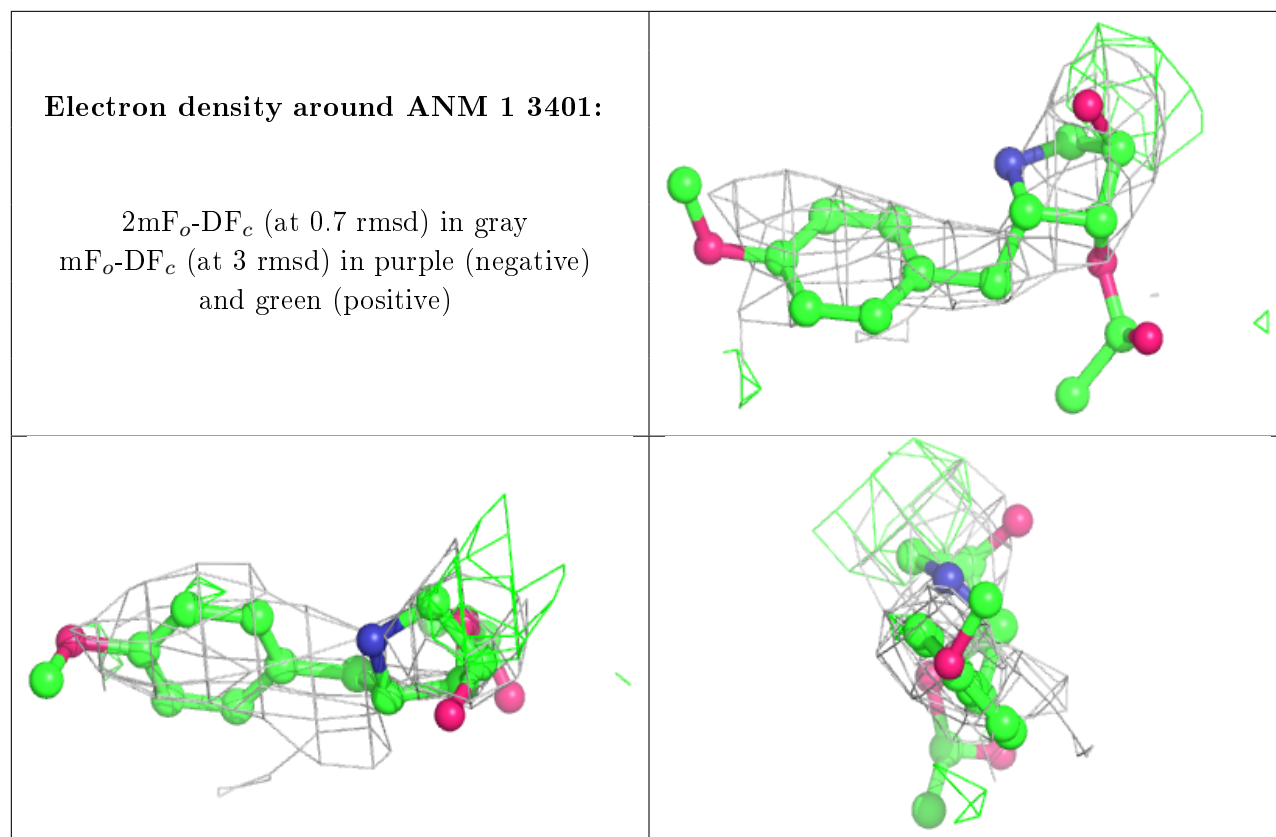
*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
85	OHX	5	3882	7/7	0.99	0.26	67,67,67,67	0
85	OHX	6	2018	7/7	0.99	0.10	60,60,60,60	0
85	OHX	2	2069	7/7	0.99	0.15	112,112,112,112	0
85	OHX	5	3828	7/7	0.99	0.19	73,73,73,73	0
85	OHX	1	3743	7/7	0.99	0.12	60,60,60,60	0
85	OHX	N9	101	7/7	0.99	0.11	56,56,56,56	0
85	OHX	5	3785	7/7	0.99	0.07	68,68,68,68	0
85	OHX	5	3847	7/7	0.99	0.12	67,67,67,67	0
85	OHX	1	3747	7/7	0.99	0.14	64,64,64,64	0
85	OHX	1	3736	7/7	0.99	0.11	63,63,63,63	0
84	MG	1	3483	1/1	0.99	0.31	45,45,45,45	0
85	OHX	5	3771	7/7	0.99	0.04	66,66,66,66	0
85	OHX	M6	202	7/7	0.99	0.18	80,80,80,80	0
85	OHX	1	3785	7/7	1.00	0.06	66,66,66,66	0
85	OHX	1	3761	7/7	1.00	0.06	60,60,60,60	0
85	OHX	1	3737	7/7	1.00	0.06	56,56,56,56	0
85	OHX	1	3729	7/7	1.00	0.14	53,53,53,53	0
85	OHX	1	3728	7/7	1.00	0.10	44,44,44,44	0
85	OHX	6	2009	7/7	1.00	0.12	57,57,57,57	0
85	OHX	1	3752	7/7	1.00	0.09	59,59,59,59	0
85	OHX	1	3745	7/7	1.00	0.09	66,66,66,66	0
85	OHX	5	3763	7/7	1.00	0.09	61,61,61,61	0
85	OHX	5	3743	7/7	1.00	0.14	43,43,43,43	0
85	OHX	1	3726	7/7	1.00	0.13	43,43,43,43	0
85	OHX	5	3752	7/7	1.00	0.09	40,40,40,40	0
85	OHX	5	3774	7/7	1.00	0.11	53,53,53,53	0
85	OHX	5	3757	7/7	1.00	0.10	58,58,58,58	0
85	OHX	5	3766	7/7	1.00	0.07	63,63,63,63	0
85	OHX	1	3744	7/7	1.00	0.04	54,54,54,54	0
85	OHX	5	3756	7/7	1.00	0.08	60,60,60,60	0
85	OHX	1	3754	7/7	1.00	0.05	63,63,63,63	0
85	OHX	5	3769	7/7	1.00	0.06	52,52,52,52	0
85	OHX	6	2014	7/7	1.00	0.09	62,62,62,62	0
85	OHX	5	3745	7/7	1.00	0.10	43,43,43,43	0
85	OHX	5	3744	7/7	1.00	0.12	40,40,40,40	0
85	OHX	1	3727	7/7	1.00	0.10	52,52,52,52	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.





## 6.5 Other polymers [i](#)

There are no such residues in this entry.