



Full wwPDB EM Validation Report ⓘ

Nov 20, 2022 – 12:37 AM EST

PDB ID : 3J78
EMDB ID : EMD-5977
Title : Structures of yeast 80S ribosome-tRNA complexes in the rotated and non-rotated conformations (Class I - non-rotated ribosome with 2 tRNAs)
Authors : Svidritskiy, E.; Brilot, A.F.; Koh, C.S.; Grigorieff, N.; Korostelev, A.A.
Deposited on : 2014-05-29
Resolution : 6.30 Å (reported)
Based on initial models : 3U5C, 3U5B, 3J3B, 3U5D, 3U5E, 3I9B

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

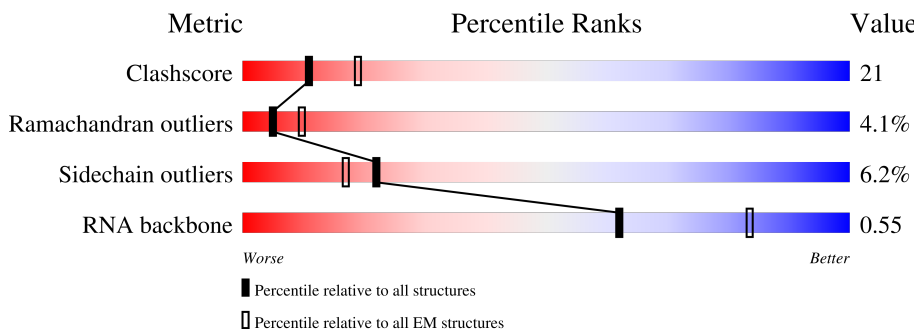
EMDB validation analysis : 0.0.1.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.3

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 6.30 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 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 EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	L1	217	<div> <div>78%</div> <div> <div>47%</div> <div>39%</div> <div>9%</div> <div>6%</div> </div> </div>
2	L2	254	<div> <div>11%</div> <div> <div>43%</div> <div>51%</div> <div>5%</div> </div> </div>
3	L3	387	<div> <div>13%</div> <div> <div>51%</div> <div>46%</div> </div> </div>
4	L4	362	<div> <div>11%</div> <div> <div>51%</div> <div>44%</div> </div> </div>
5	L5	297	<div> <div>25%</div> <div> <div>52%</div> <div>44%</div> </div> </div>
6	L6	176	<div> <div>11%</div> <div> <div>50%</div> <div>35%</div> <div>11%</div> </div> </div>
7	L7	244	<div> <div>6%</div> <div> <div>42%</div> <div>45%</div> <div>9%</div> </div> </div>




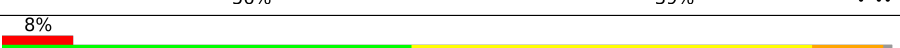
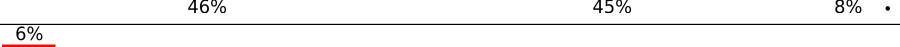




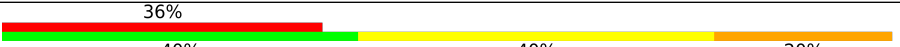

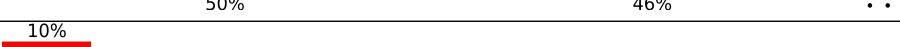



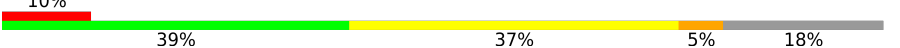
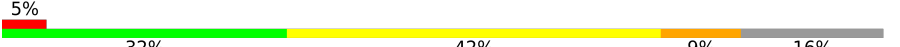
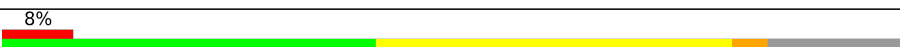

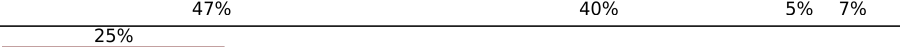





Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
8	L8	256	
9	L9	191	
10	60	221	
11	61	174	
12	62	165	
13	63	199	
14	64	138	
15	65	204	
16	66	199	
17	67	184	
18	68	186	
19	69	189	
20	70	172	
21	71	160	
22	72	121	
23	73	137	
24	74	155	
25	75	142	
26	76	127	
27	77	136	
28	78	149	
29	79	59	
30	80	105	
31	81	113	
32	82	130	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
33	83	107	
34	84	121	
35	85	120	
36	86	100	
37	87	88	
38	88	78	
39	89	51	
40	90	128	
41	91	25	
42	92	106	
43	93	92	
44	P0	312	
45	RC	319	
46	S0	252	
47	S1	255	
48	S2	254	
49	S3	240	
50	S4	261	
51	S5	225	
52	S6	236	
53	S7	190	
54	S8	200	
55	S9	197	
56	10	105	
57	11	156	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
58	12	143	
59	13	151	
60	14	137	
61	15	142	
62	16	143	
63	17	136	
64	18	146	
65	19	144	
66	20	121	
67	21	87	
68	22	130	
69	23	145	
70	24	135	
71	25	108	
72	26	119	
73	27	82	
74	28	67	
75	29	56	
76	30	63	
77	31	152	
78	1S	1798	
79	2S	3395	
80	8S	158	
81	5S	121	
82	ET	77	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
82	PT	77	
83	MR	14	

2 Entry composition

There are 83 unique types of molecules in this entry. The entry contains 209136 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 protein called 60S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	L1	204	Total	C	N	O	S	0	0
			1609	1031	279	290	9		

- Molecule 2 is a protein called 60S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	L2	252	Total	C	N	O	S	0	0
			1918	1193	389	335	1		

- Molecule 3 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	L3	386	Total	C	N	O	S	0	0
			3082	1956	584	534	8		

- Molecule 4 is a protein called 60S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	L4	361	Total	C	N	O	S	0	0
			2750	1730	522	495	3		

- Molecule 5 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	L5	296	Total	C	N	O	S	0	0
			2376	1501	414	459	2		

- Molecule 6 is a protein called 60S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	L6	156	Total	C	N	O	S	0	0
			1240	800	222	217	1		

- Molecule 7 is a protein called 60S ribosomal protein L7.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	L7	222	Total	C	N	O	S	0	0
			1785	1151	324	309	1		

- Molecule 8 is a protein called 60S ribosomal protein L8.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	L8	233	Total	C	N	O	S	0	0
			1818	1159	326	330	3		

- Molecule 9 is a protein called 60S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	L9	191	Total	C	N	O	S	0	0
			1519	963	274	278	4		

- Molecule 10 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	60	211	Total	C	N	O	S	0	0
			1718	1089	325	298	6		

- Molecule 11 is a protein called 60S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	61	169	Total	C	N	O	S	0	0
			1354	847	253	250	4		

- Molecule 12 is a protein called 60S ribosomal protein L12.

Mol	Chain	Residues	Atoms				AltConf	Trace
12	62	143	Total	C	N	O	0	0
			703	417	143	143		

- Molecule 13 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	63	193	Total	C	N	O	0	0
			1543	962	315	266		

- Molecule 14 is a protein called 60S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	64	136	Total	C	N	O	S	0	0
			1054	675	199	178	2		

- Molecule 15 is a protein called 60S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	65	203	Total	C	N	O	S	0	0
			1721	1077	361	282	1		

- Molecule 16 is a protein called 60S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	66	197	Total	C	N	O	S	0	0
			1556	1003	289	263	1		

- Molecule 17 is a protein called 60S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	67	183	Total	C	N	O		0	0
			1443	896	287	260			

- Molecule 18 is a protein called 60S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	68	185	Total	C	N	O	S	0	0
			1442	908	290	242	2		

- Molecule 19 is a protein called 60S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	69	188	Total	C	N	O		0	0
			1522	935	326	261			

- Molecule 20 is a protein called 60S ribosomal protein L20.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	70	172	Total	C	N	O	S	0	0
			1446	930	267	245	4		

- Molecule 21 is a protein called 60S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	71	159	Total	C	N	O	S	0	0
			1277	805	246	222	4		

- Molecule 22 is a protein called 60S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	72	100	Total	C	N	O		0	0
			796	516	131	149			

- Molecule 23 is a protein called 60S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	73	136	Total	C	N	O	S	0	0
			1004	628	189	180	7		

- Molecule 24 is a protein called 60S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	74	64	Total	C	N	O	S	0	0
			528	340	103	84	1		

- Molecule 25 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	75	121	Total	C	N	O	S	0	0
			969	623	170	174	2		

- Molecule 26 is a protein called 60S ribosomal protein L26.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	76	126	Total	C	N	O		0	0
			994	625	192	177			

- Molecule 27 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	77	135	Total	C	N	O		0	0
			1093	710	202	181			

- Molecule 28 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	78	148	Total	C	N	O	S	0	0
			1174	749	231	191	3		

- Molecule 29 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	79	58	Total	C	N	O		0	0
			463	289	100	74			

- Molecule 30 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	80	97	Total	C	N	O	S	0	0
			743	479	124	139	1		

- Molecule 31 is a protein called 60S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	81	109	Total	C	N	O	S	0	0
			890	565	168	156	1		

- Molecule 32 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	82	127	Total	C	N	O	S	0	0
			1020	647	205	167	1		

- Molecule 33 is a protein called 60S ribosomal protein L33.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	83	106	Total	C	N	O	S	0	0
			851	540	165	145	1		

- Molecule 34 is a protein called 60S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	84	112	Total	C	N	O	S	0	0
			881	546	179	152	4		

- Molecule 35 is a protein called 60S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	85	119	Total	C	N	O	S	0	0
			970	615	186	168	1		

- Molecule 36 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	86	99	Total	C	N	O	S	0	0
			772	481	156	133	2		

- Molecule 37 is a protein called 60S ribosomal protein L37.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	87	87	Total	C	N	O	S	0	0
			682	414	148	115	5		

- Molecule 38 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	88	77	Total	C	N	O		0	0
			613	391	115	107			

- Molecule 39 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	89	50	Total	C	N	O	S	0	0
			437	272	97	66	2		

- Molecule 40 is a protein called 60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	90	52	Total	C	N	O	S	0	0
			418	259	86	68	5		

- Molecule 41 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	91	25	Total	C	N	O	S	0	0
			234	142	63	28	1		

- Molecule 42 is a protein called 60S ribosomal protein L42.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	92	105	Total	C	N	O	S	0	0
			848	534	170	139	5		

- Molecule 43 is a protein called 60S ribosomal protein L43.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	93	91	Total	C	N	O	S	0	0
			695	429	138	122	6		

- Molecule 44 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	P0	125	Total	C	N	O	S	0	0
			987	633	174	177	3		

- Molecule 45 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	RC	318	Total	C	N	O	S	0	0
			2445	1546	419	472	8		

- Molecule 46 is a protein called 40S ribosomal protein S0.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	S0	206	Total	C	N	O	S	0	0
			1612	1034	285	291	2		

- Molecule 47 is a protein called 40S ribosomal protein S1.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	S1	214	Total	C	N	O	S	0	0
			1709	1084	310	311	4		

- Molecule 48 is a protein called 40S ribosomal protein S2.

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

- Molecule 49 is a protein called 40S ribosomal protein S3.

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

- Molecule 50 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	S4	260	Total	C	N	O	S	0	0
			2069	1316	389	361	3		

- Molecule 51 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	S5	206	Total	C	N	O	S	0	0
			1610	1007	300	300	3		

- Molecule 52 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	S6	226	Total	C	N	O	S	0	0
			1820	1142	350	325	3		

- Molecule 53 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms				AltConf	Trace
53	S7	184	Total	C	N	O	0	0
			1481	951	265	265		

- Molecule 54 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	S8	188	Total	C	N	O	S	0	0
			1490	925	298	265	2		

- Molecule 55 is a protein called 40S ribosomal protein S9.

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

- Molecule 56 is a protein called 40S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	10	96	Total	C	N	O	S	0	0
			817	529	133	153	2		

- Molecule 57 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	11	155	Total	C	N	O	S	0	0
			1245	798	235	209	3		

- Molecule 58 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	12	124	Total	C	N	O	S	0	0
			935	587	165	181	2		

- Molecule 59 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	13	150	Total	C	N	O	S	0	0
			1193	759	224	208	2		

- Molecule 60 is a protein called 40S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	14	127	Total	C	N	O	S	0	0
			942	578	186	175	3		

- Molecule 61 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	15	124	Total	C	N	O	S	0	0
			991	631	187	166	7		

- Molecule 62 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms				AltConf	Trace
62	16	141	Total	C	N	O	0	0
			1106	708	203	195		

- Molecule 63 is a protein called 40S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
63	17	120	Total	C	N	O	S	0	0
			965	603	183	177	2		

- Molecule 64 is a protein called 40S ribosomal protein S18.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	18	145	Total	C	N	O	S	0	0
			1193	743	237	211	2		

- Molecule 65 is a protein called 40S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	19	143	Total	C	N	O	S	0	0
			1113	694	208	209	2		

- Molecule 66 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	20	107	Total	C	N	O	S	0	0
			856	539	156	160	1		

- Molecule 67 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	21	87	Total	C	N	O	S	0	0
			685	420	125	138	2		

- Molecule 68 is a protein called 40S ribosomal protein S22.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	22	129	Total	C	N	O	S	0	0
			1022	650	188	181	3		

- Molecule 69 is a protein called 40S ribosomal protein S23.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	23	144	Total	C	N	O	S	0	0
			1122	708	220	192	2		

- Molecule 70 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms				AltConf	Trace
70	24	134	Total	C	N	O	0	0
			1074	676	208	190		

- Molecule 71 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms				AltConf	Trace
71	25	70	Total	C	N	O	0	0
			563	360	104	99		

- Molecule 72 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	26	97	Total	C	N	O	S	0	0
			769	475	160	129	5		

- Molecule 73 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	27	81	Total	C	N	O	S	0	0
			611	382	110	114	5		

- Molecule 74 is a protein called 40S ribosomal protein S28.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	28	63	Total	C	N	O	S	0	0
			498	306	99	92	1		

- Molecule 75 is a protein called 40S ribosomal protein S29.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	29	53	Total	C	N	O	S	0	0
			444	275	92	73	4		

- Molecule 76 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	30	60	Total	C	N	O	S	0	0
			475	299	98	77	1		

- Molecule 77 is a protein called 40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	31	71	Total	C	N	O	S	0	0
			498	309	93	92	4		

- Molecule 78 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	1S	1781	Total	C	N	O	P	0	0
			37949	16965	6715	12488	1781		

- Molecule 79 is a RNA chain called 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	2S	3302	Total	C	N	O	P	0	0
			70616	31540	12710	23064	3302		

- Molecule 80 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	8S	158	Total	C	N	O	P	0	0
			3354	1500	586	1110	158		

- Molecule 81 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	5S	121	Total	C	N	O	P	0	0
			2580	1152	461	846	121		

- Molecule 82 is a RNA chain called P/E-site initiator transfer RNA^{fMet}.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	ET	77	Total	C	N	O	P	0	0
			1644	732	297	538	77		
82	PT	77	Total	C	N	O	P	0	0
			1644	732	297	538	77		

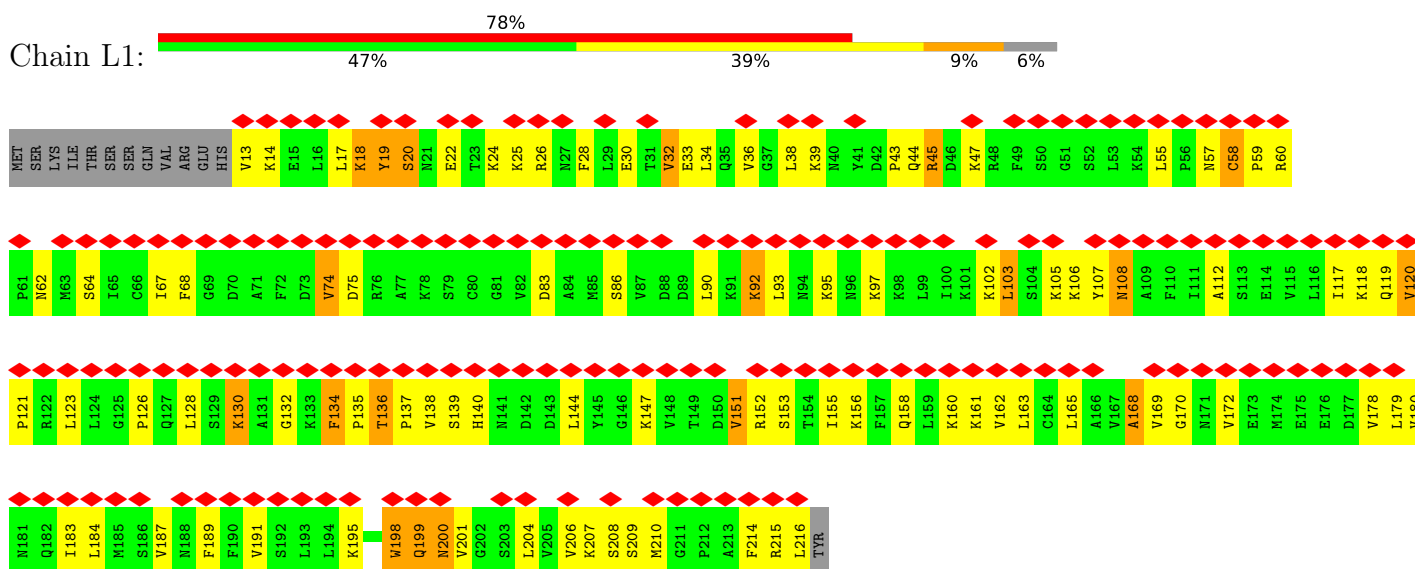
- Molecule 83 is a RNA chain called messenger RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	MR	9	Total	C	N	O	P	0	0
			195	88	39	59	9		

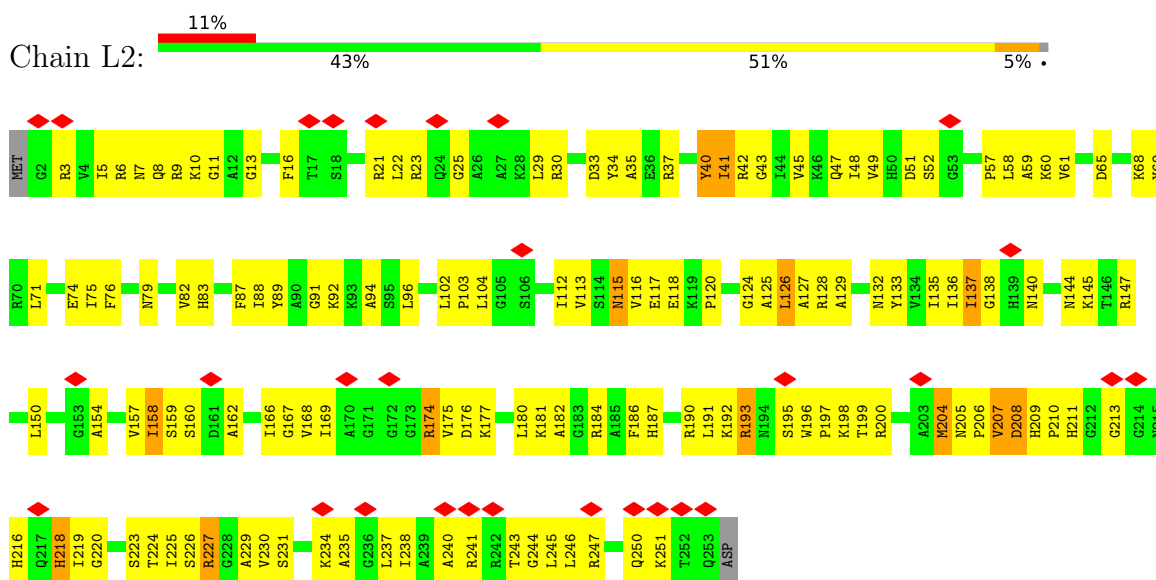
3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide 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 atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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.

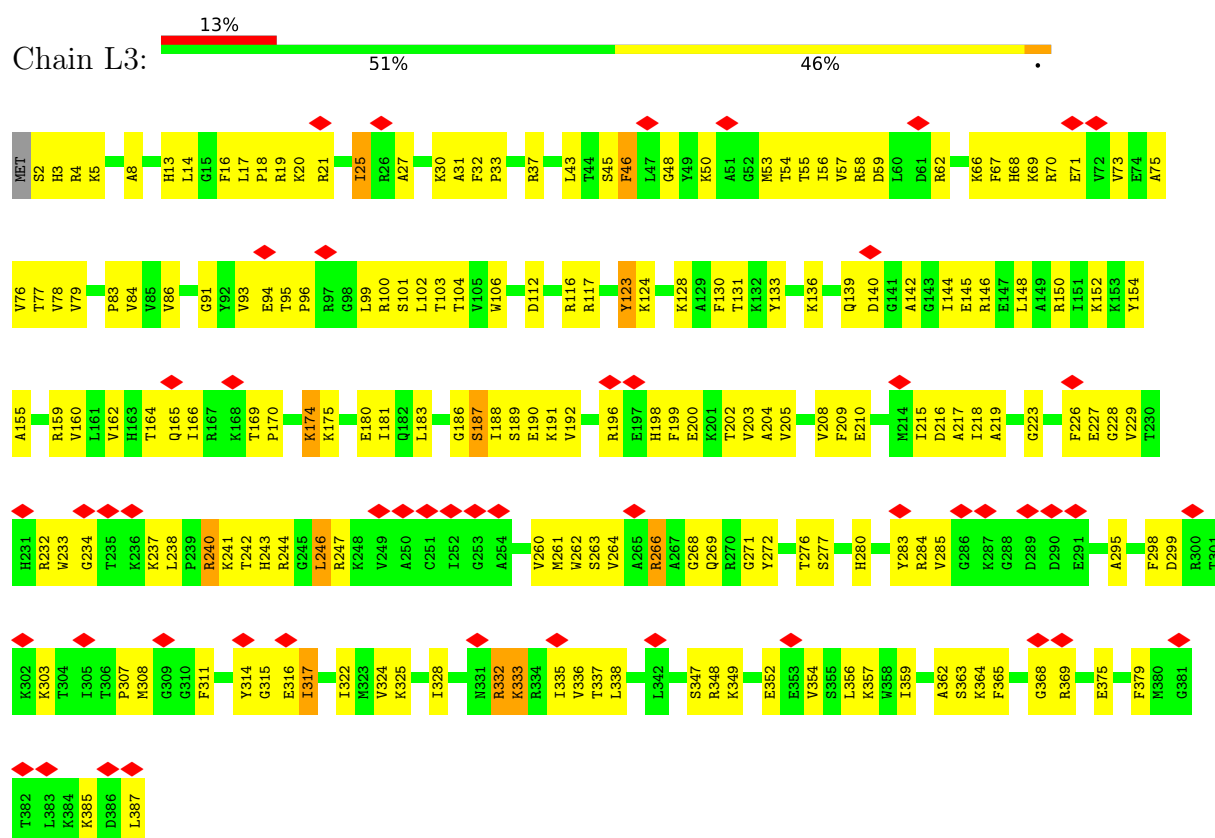
• Molecule 1: 60S ribosomal protein L1



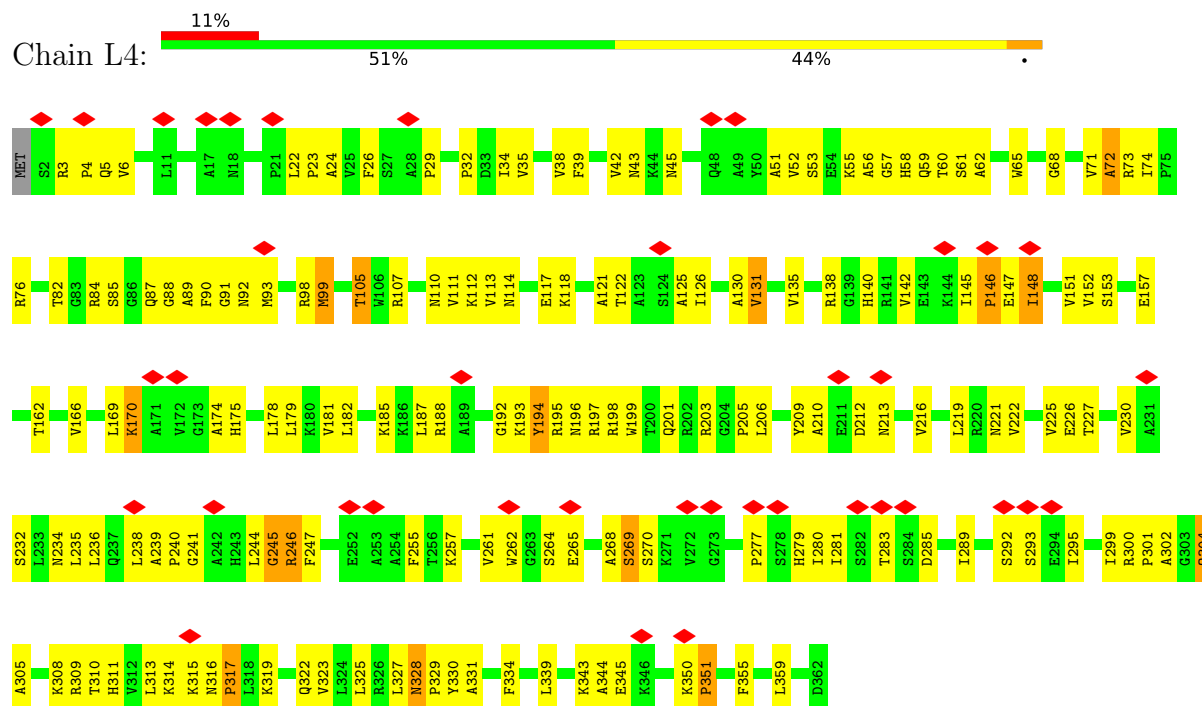
• Molecule 2: 60S ribosomal protein L2



• Molecule 3: 60S ribosomal protein L3

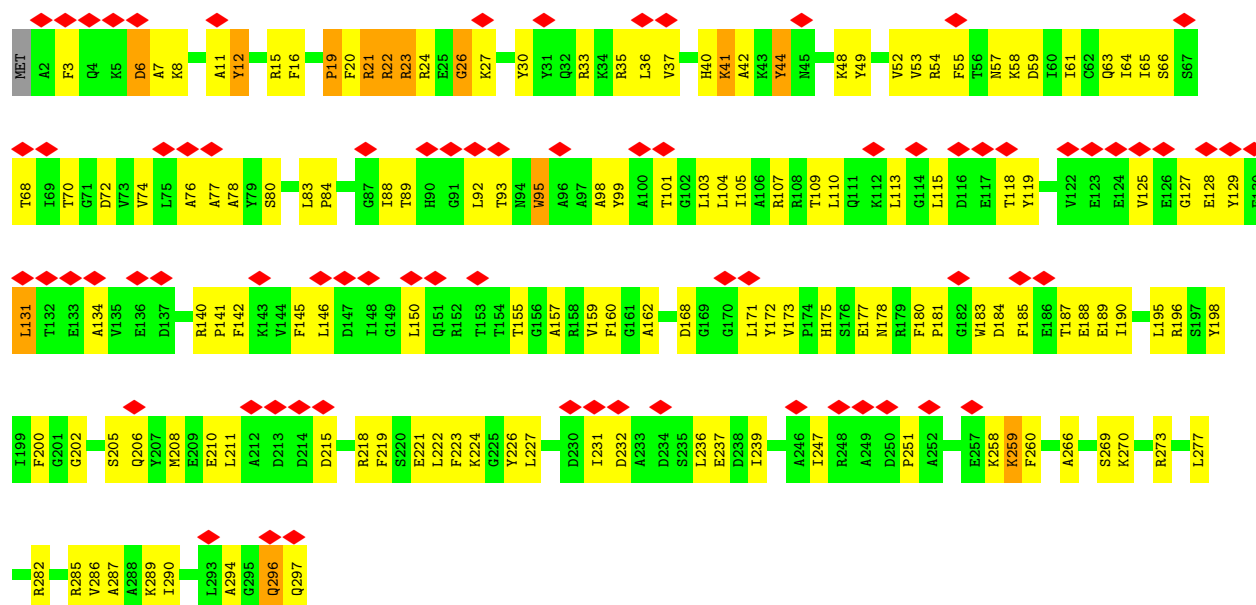


• Molecule 4: 60S ribosomal protein L4

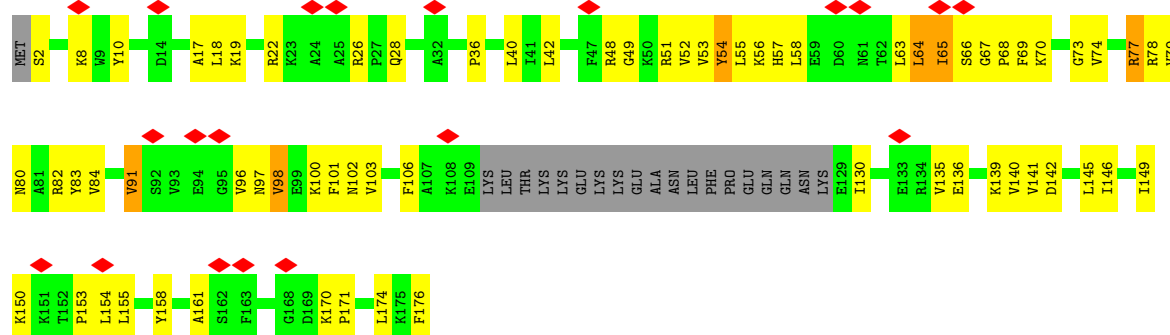


• Molecule 5: 60S ribosomal protein L5

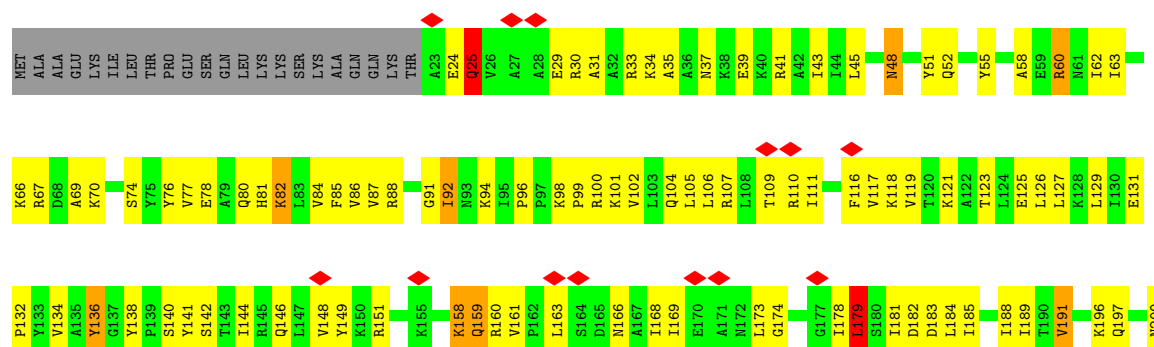
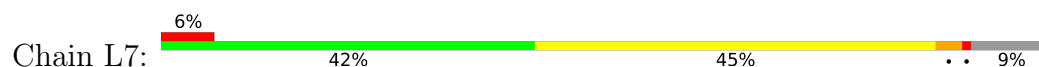


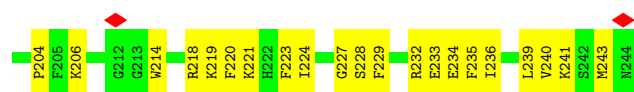


• Molecule 6: 60S ribosomal protein L6

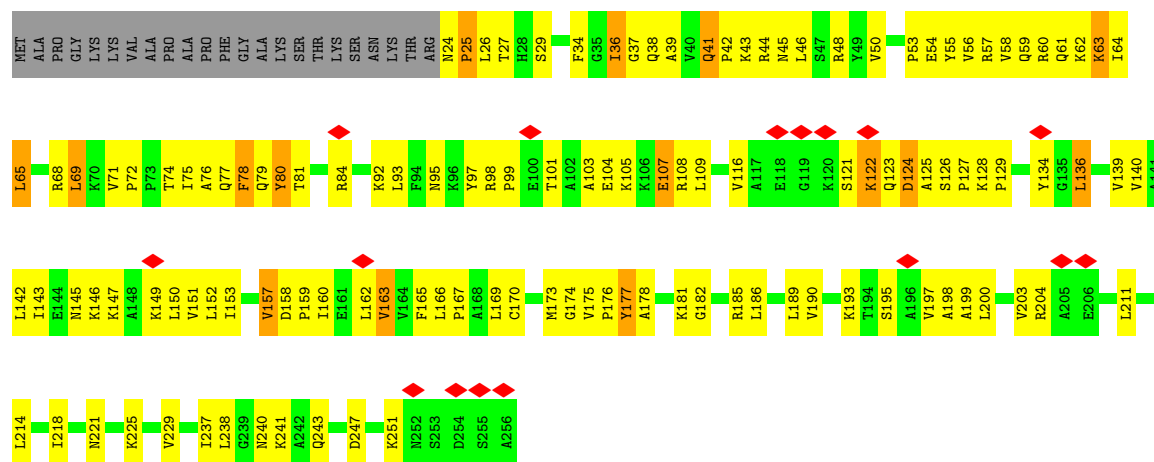
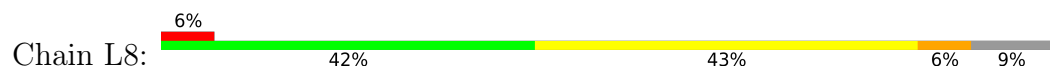


• Molecule 7: 60S ribosomal protein L7

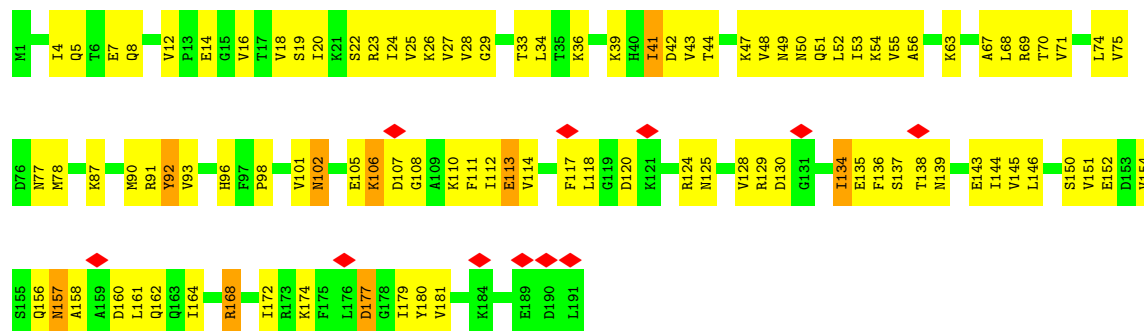




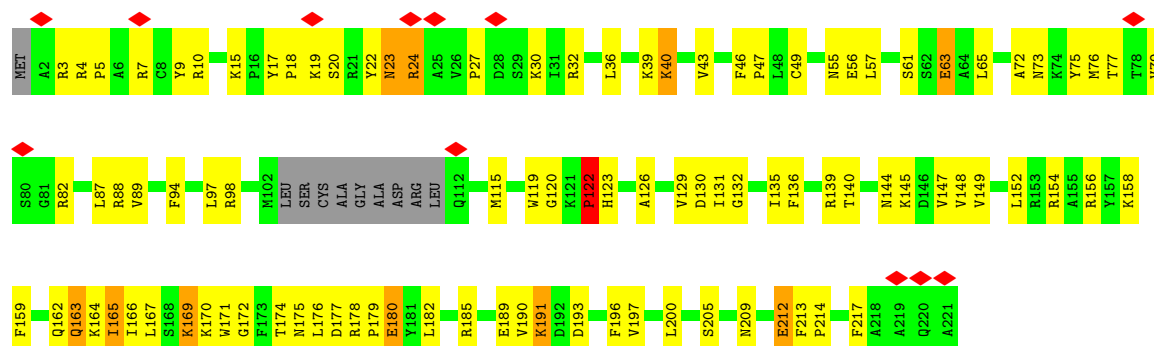
• Molecule 8: 60S ribosomal protein L8



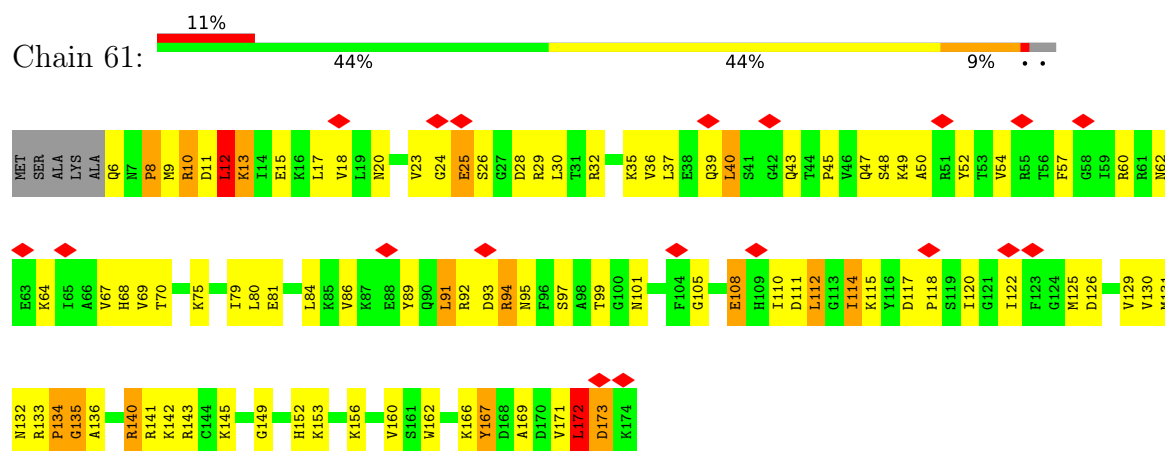
• Molecule 9: 60S ribosomal protein L9



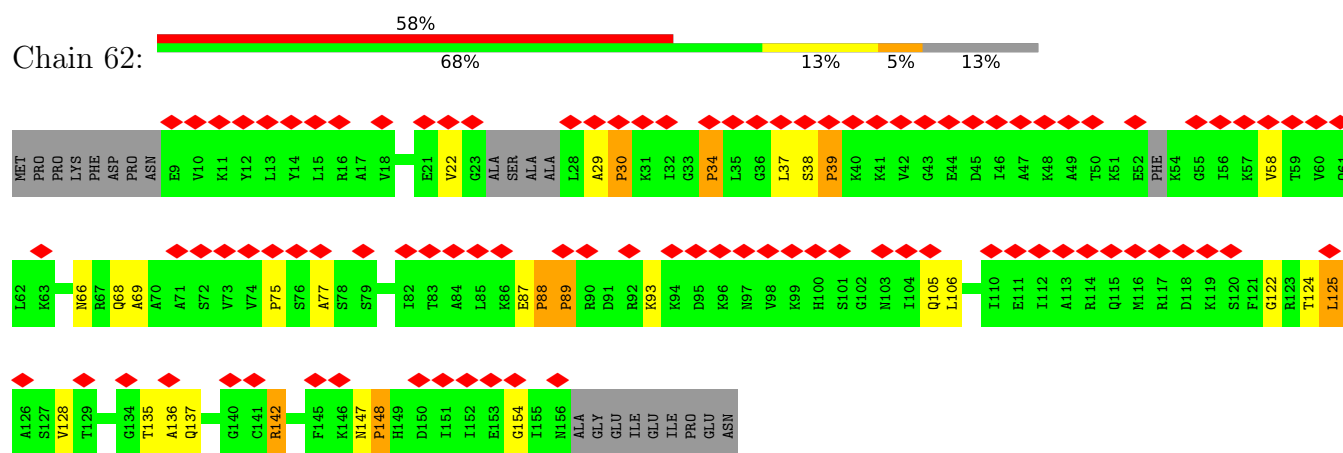
• Molecule 10: 60S ribosomal protein L10



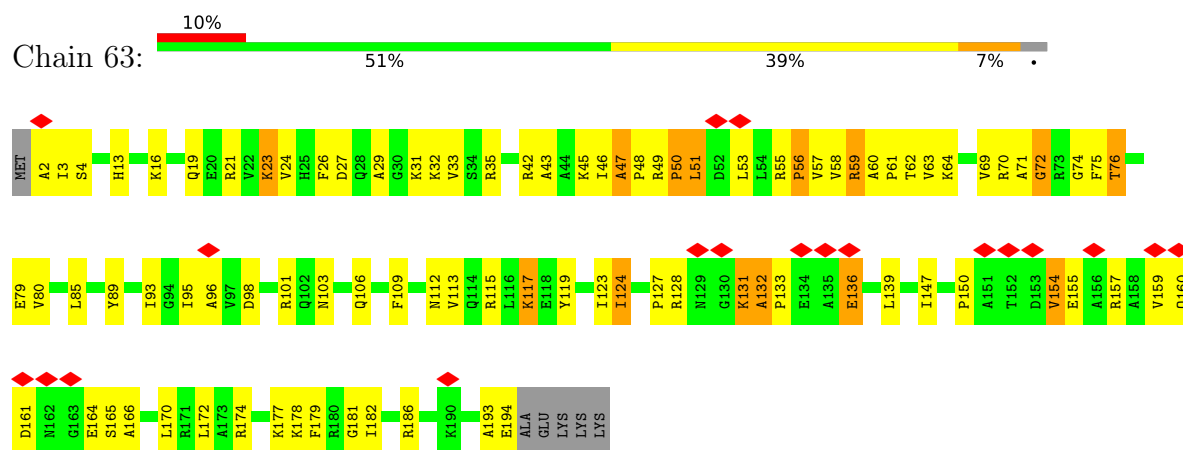
- Molecule 11: 60S ribosomal protein L11



- Molecule 12: 60S ribosomal protein L12

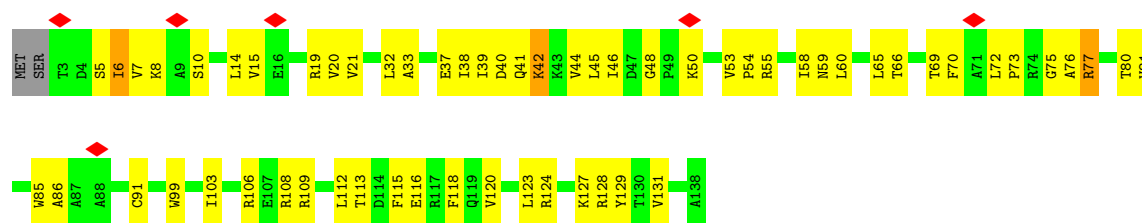


- Molecule 13: 60S ribosomal protein L13

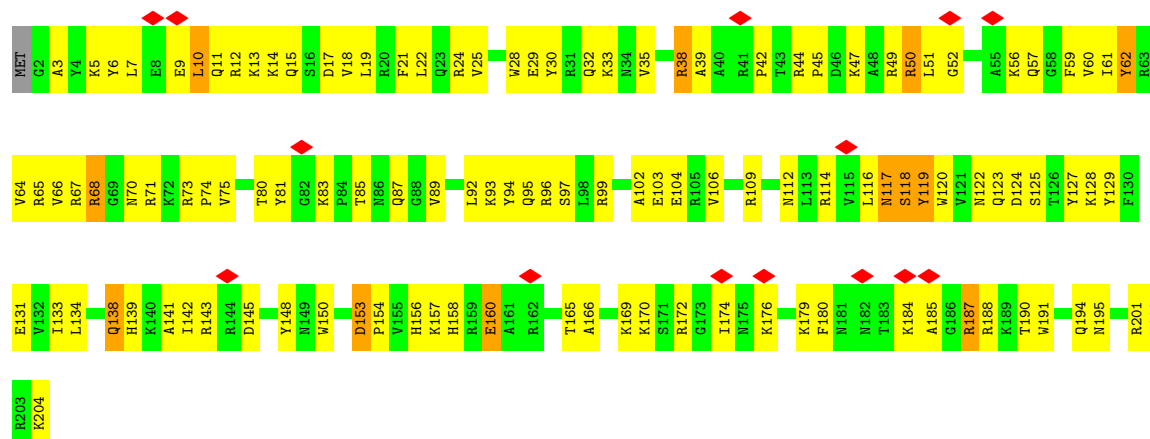
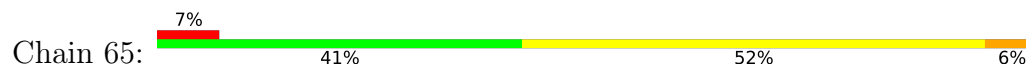


- Molecule 14: 60S ribosomal protein L14

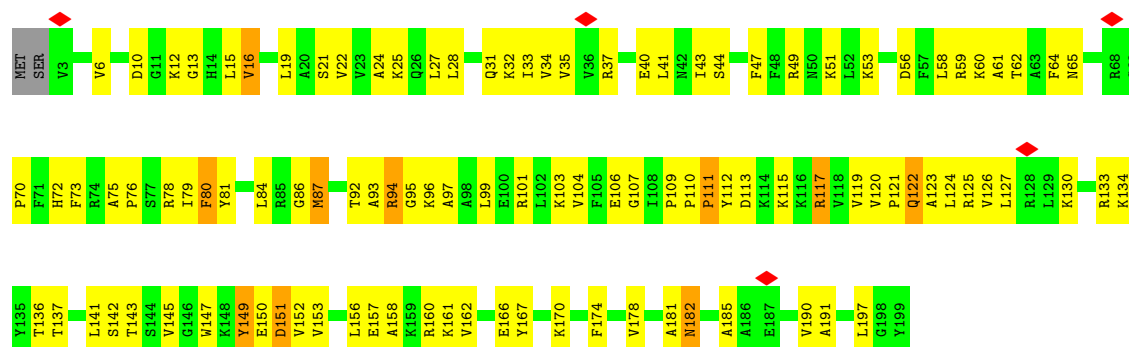




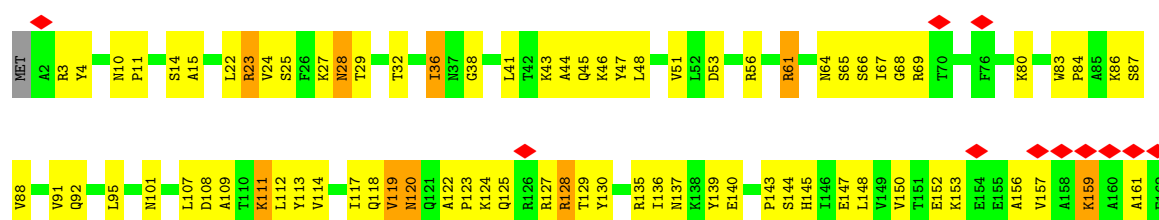
• Molecule 15: 60S ribosomal protein L15

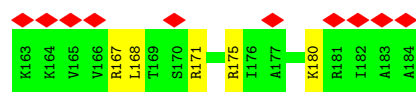


• Molecule 16: 60S ribosomal protein L16

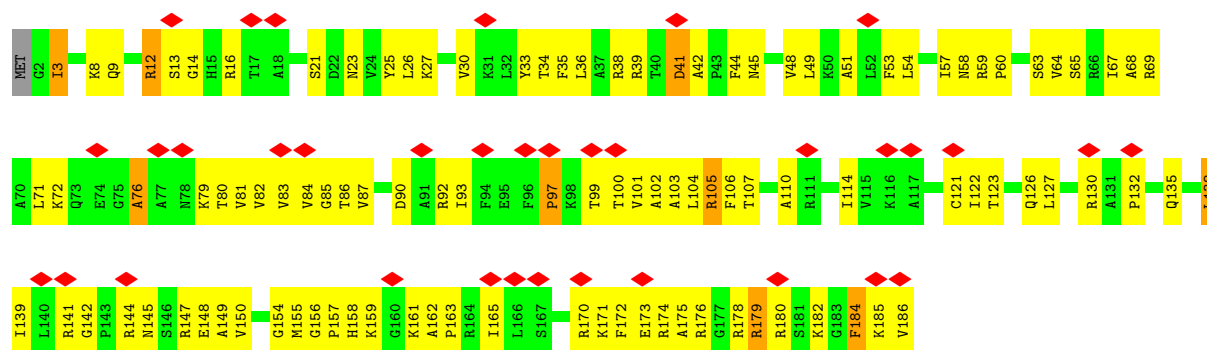
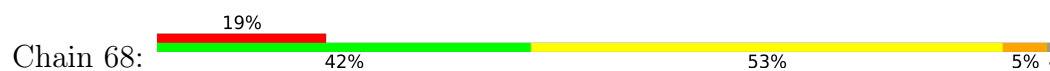


• Molecule 17: 60S ribosomal protein L17

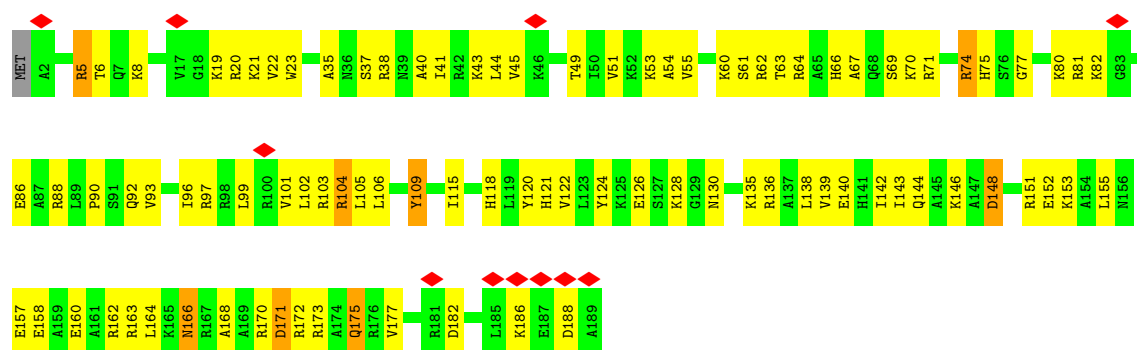




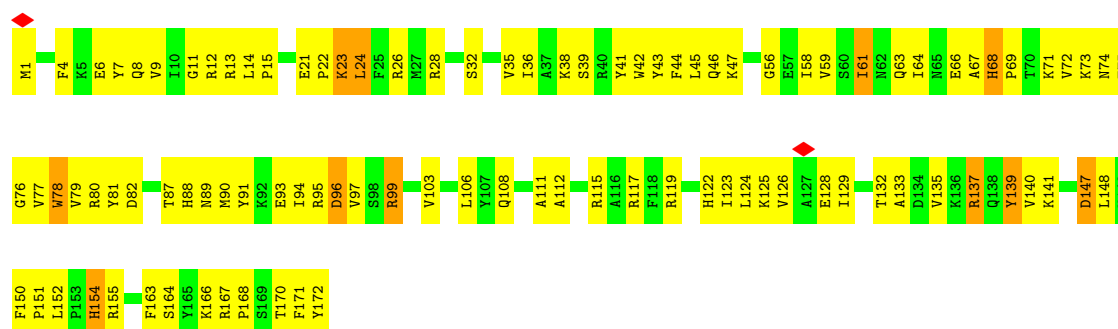
• Molecule 18: 60S ribosomal protein L18



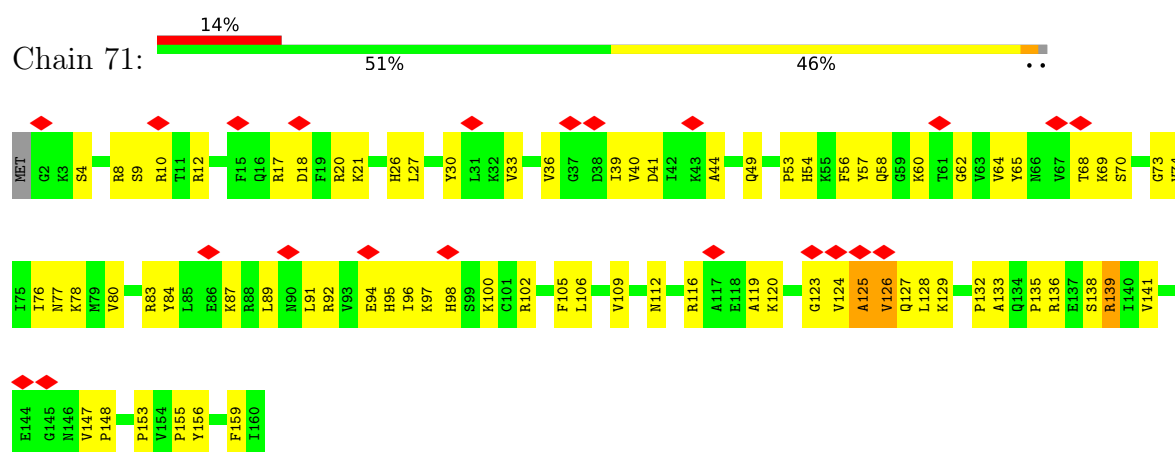
• Molecule 19: 60S ribosomal protein L19



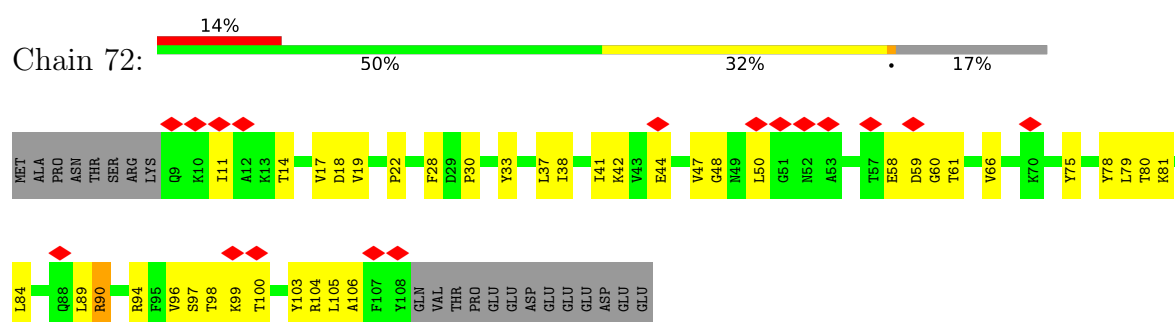
• Molecule 20: 60S ribosomal protein L20



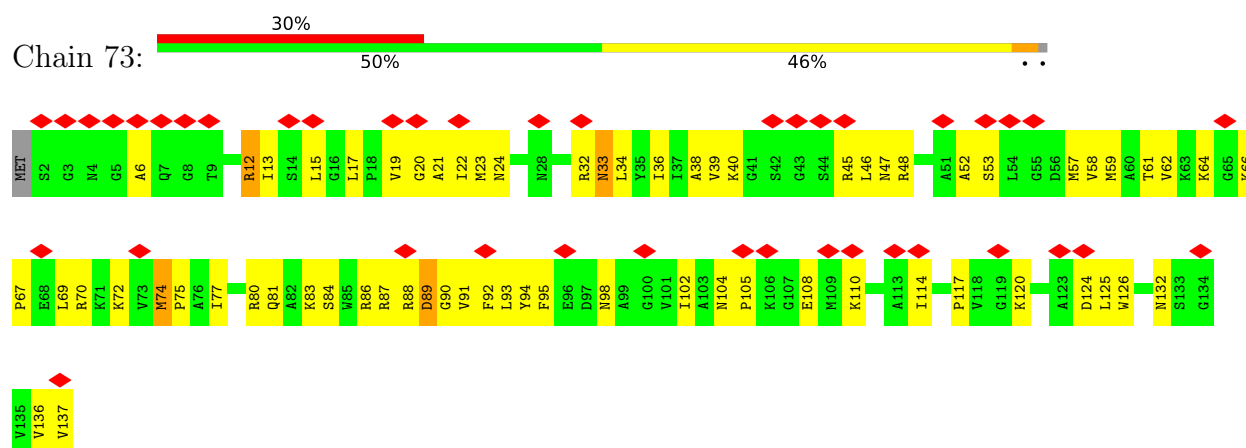
• Molecule 21: 60S ribosomal protein L21



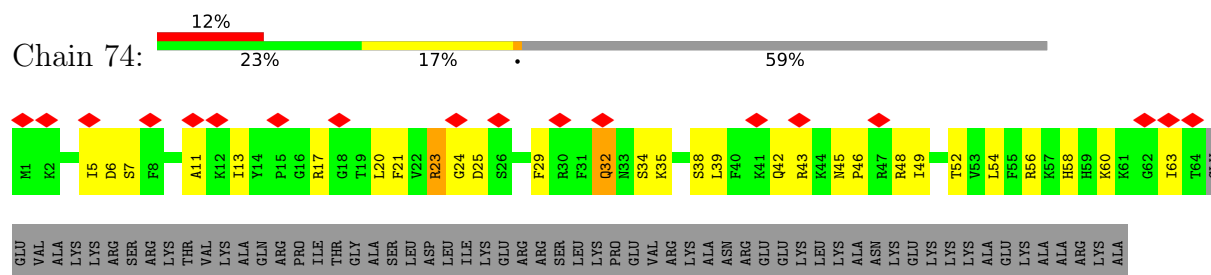
• Molecule 22: 60S ribosomal protein L22



• Molecule 23: 60S ribosomal protein L23



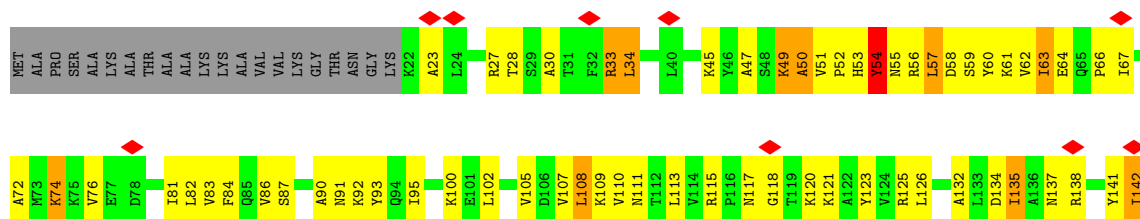
• Molecule 24: 60S ribosomal protein L24



GLU
LYS
ALA
PRO
LYS
SER
SER
ALA
GLY
THR
GLN
SER
SER
LYS
PHE
SER
LYS
GLN
GLN
ALA
LYS
GLY
ALA
PHE
GLN
LYS
VAL
ALA
ALA
THR
SER
ARG

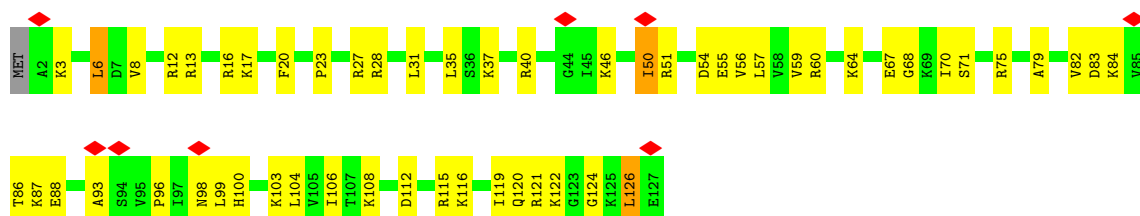
• Molecule 25: 60S ribosomal protein L25

Chain 75: 6% 40% 37% 7% 15%



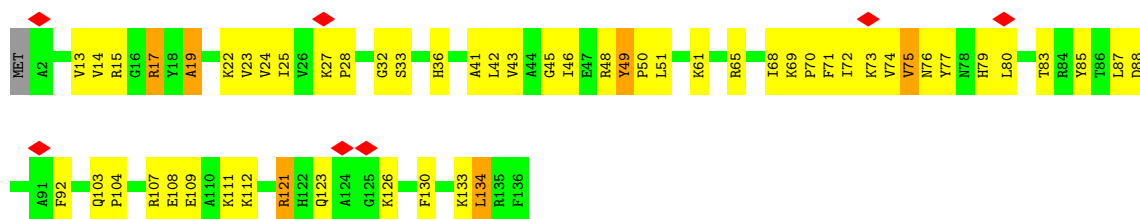
• Molecule 26: 60S ribosomal protein L26

Chain 76: 6% 56% 41% ..



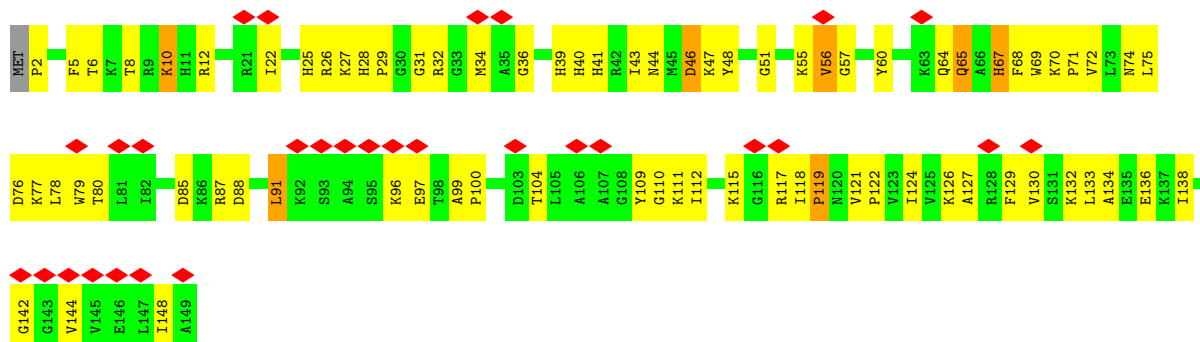
• Molecule 27: 60S ribosomal protein L27

Chain 77: 5% 59% 36% ..

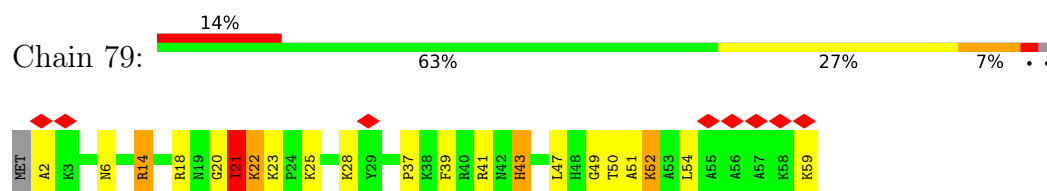


• Molecule 28: 60S ribosomal protein L28

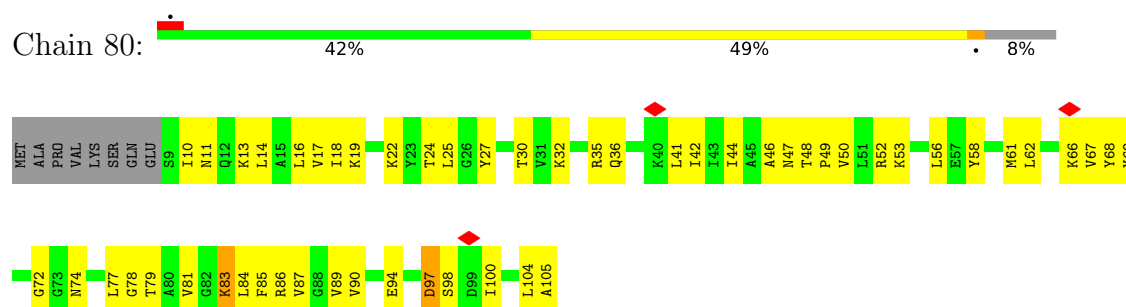
Chain 78: 19% 48% 46% 5% ..



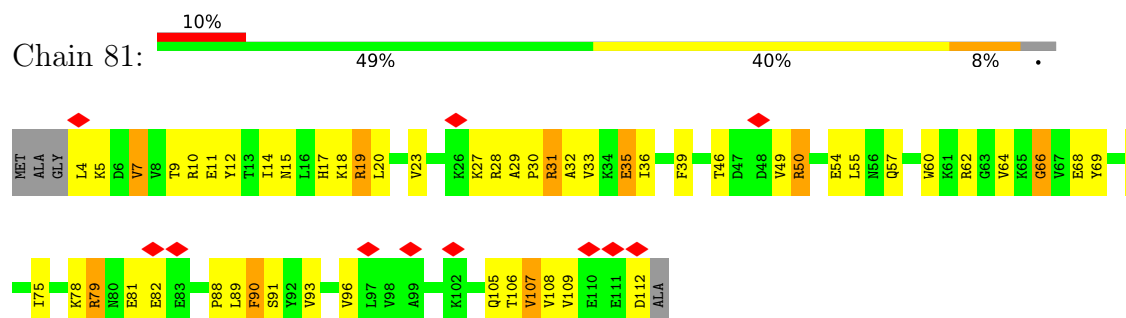
- Molecule 29: 60S ribosomal protein L29



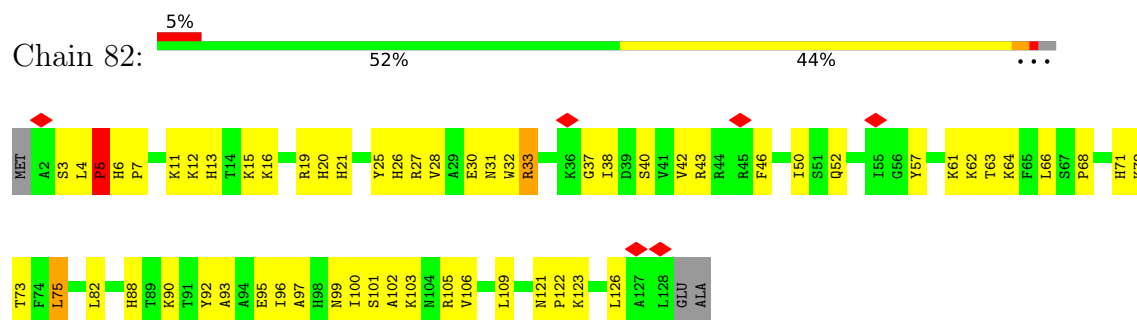
- Molecule 30: 60S ribosomal protein L30



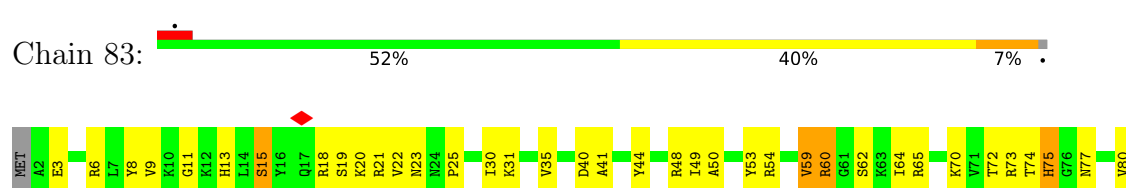
- Molecule 31: 60S ribosomal protein L31

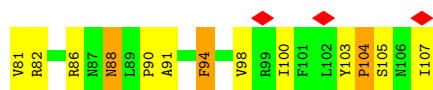


- Molecule 32: 60S ribosomal protein L32

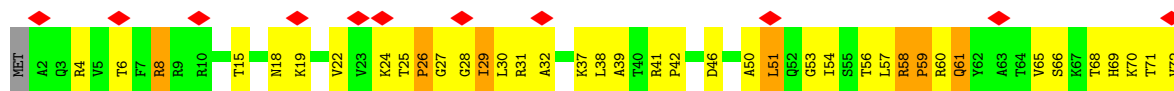
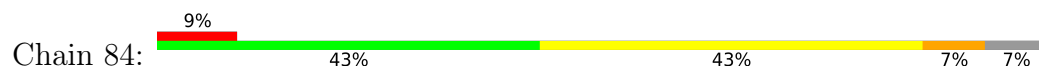


- Molecule 33: 60S ribosomal protein L33





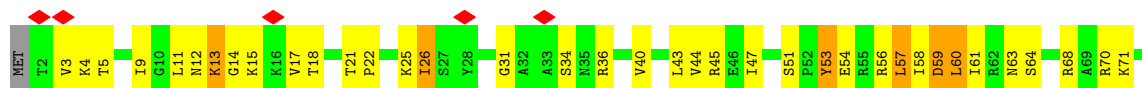
- Molecule 34: 60S ribosomal protein L34



- Molecule 35: 60S ribosomal protein L35



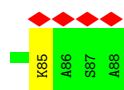
- Molecule 36: 60S ribosomal protein L36

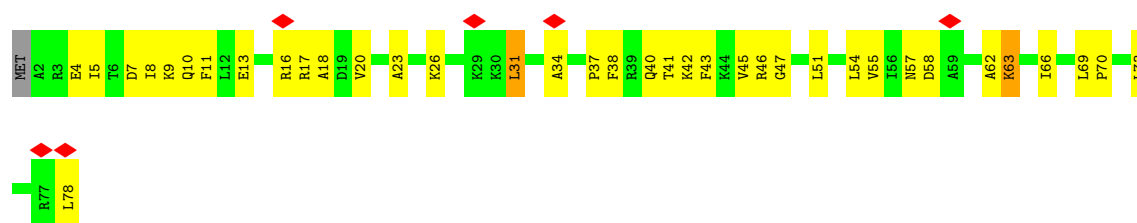


- Molecule 37: 60S ribosomal protein L37

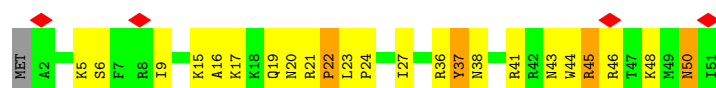


- Molecule 38: 60S ribosomal protein L38

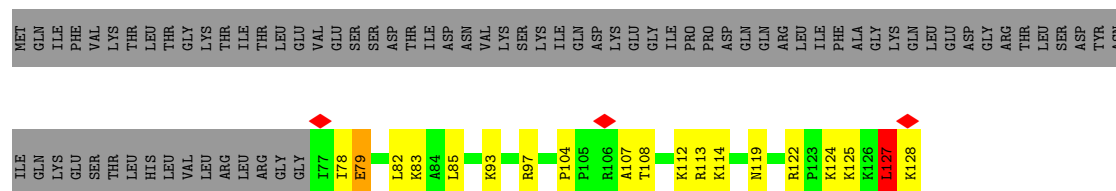




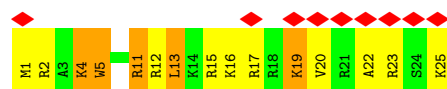
- Molecule 39: 60S ribosomal protein L39



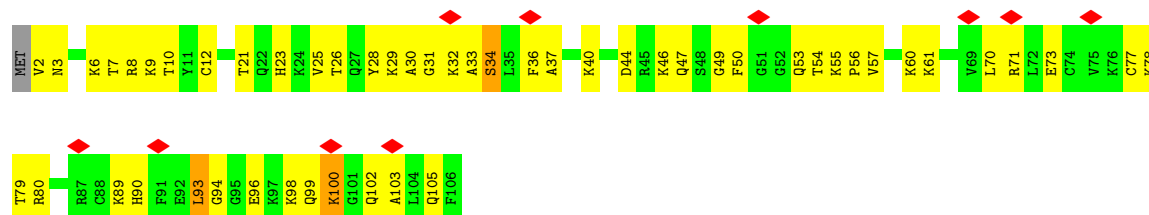
- Molecule 40: 60S ribosomal protein L40



- Molecule 41: 60S ribosomal protein L41

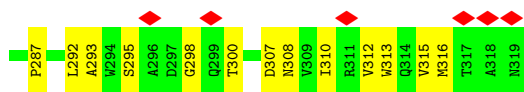


- Molecule 42: 60S ribosomal protein L42

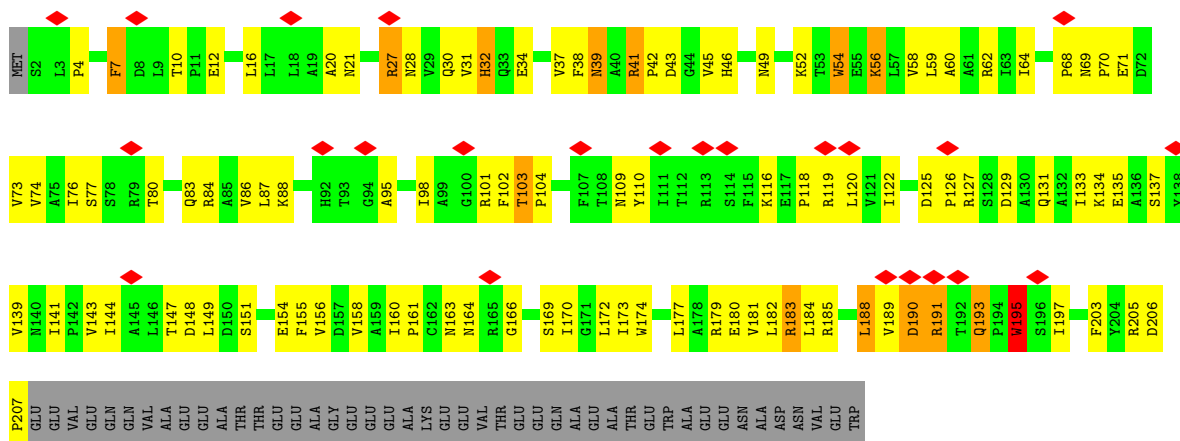


- Molecule 43: 60S ribosomal protein L43

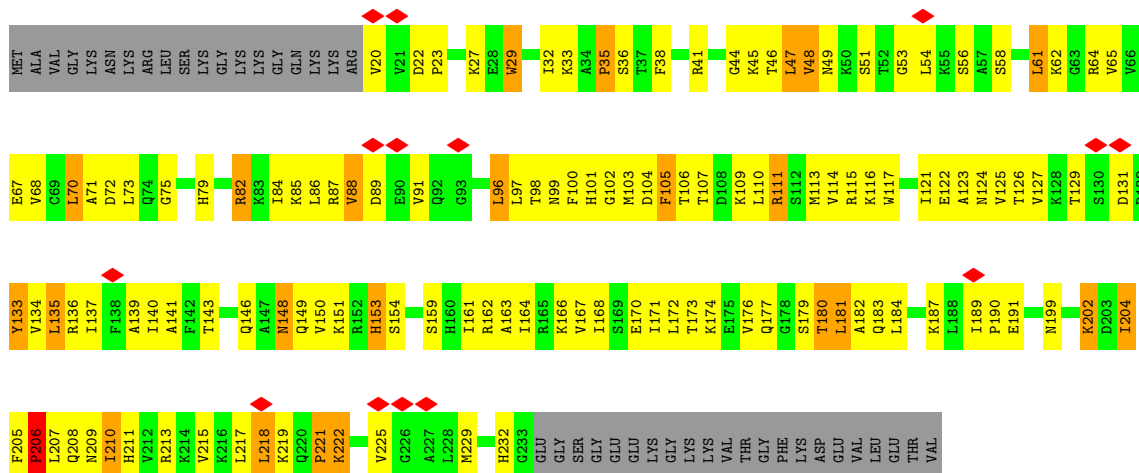




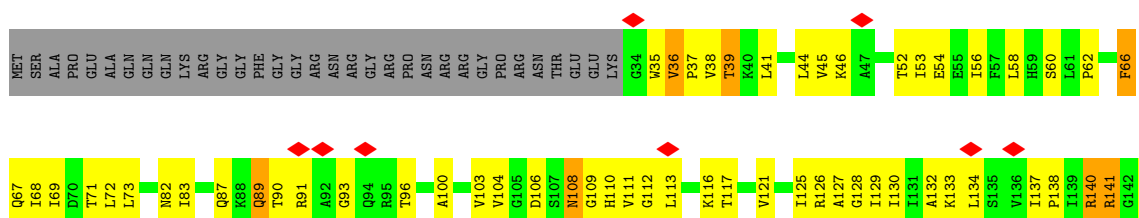
• Molecule 46: 40S ribosomal protein S0

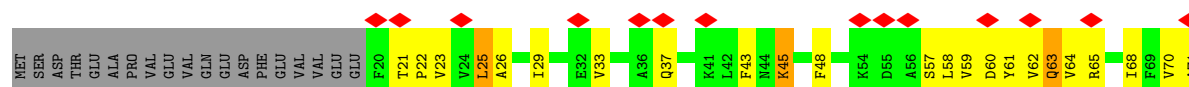


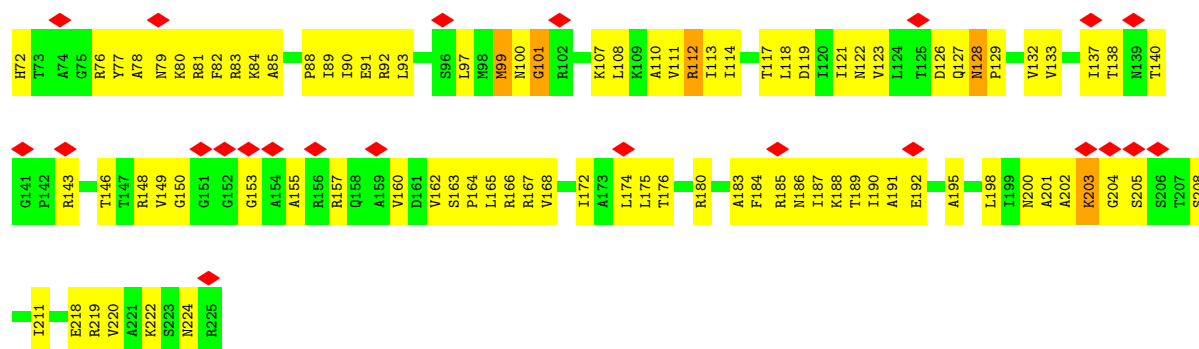
• Molecule 47: 40S ribosomal protein S1



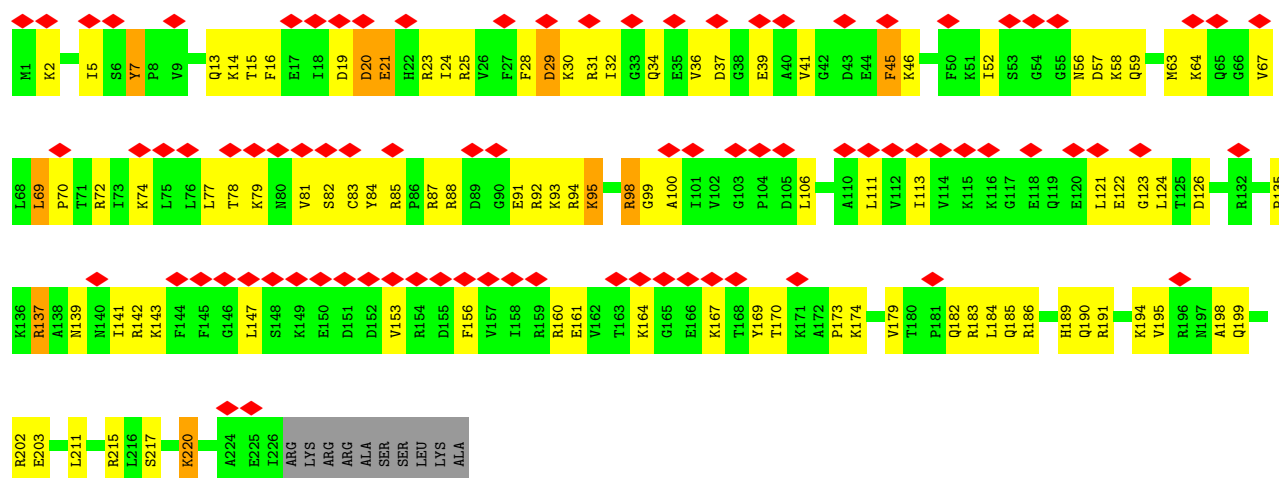
• Molecule 48: 40S ribosomal protein S2



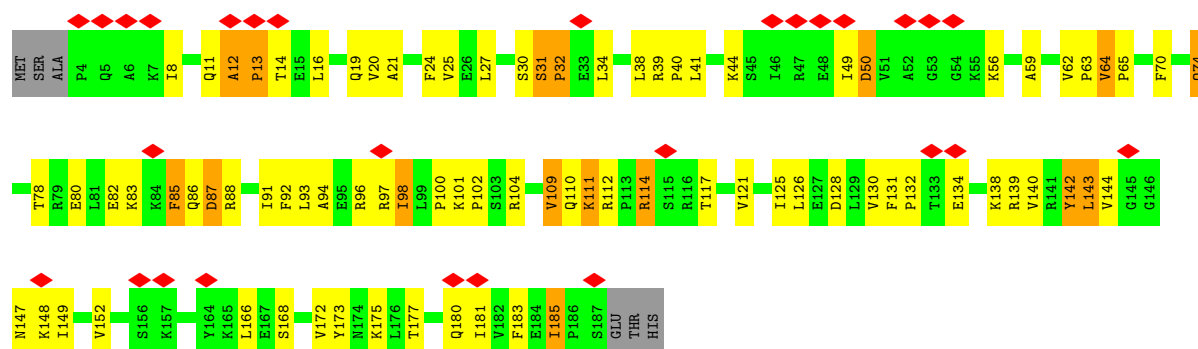




• Molecule 52: 40S ribosomal protein S6

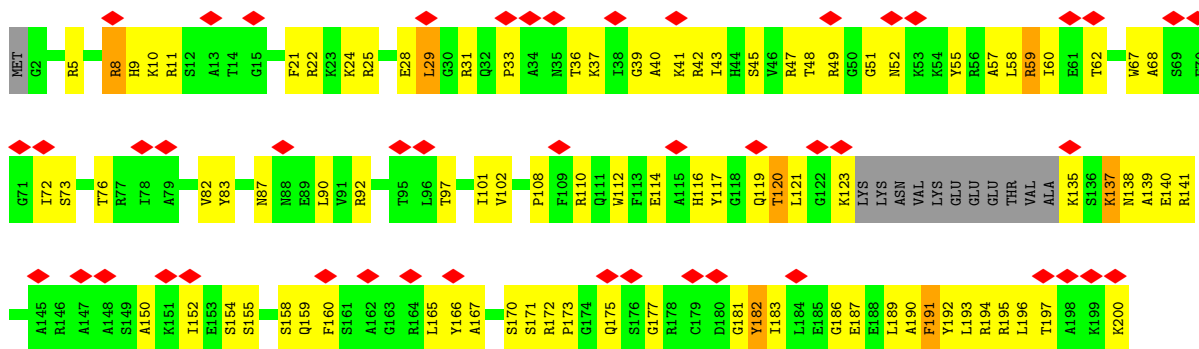


• Molecule 53: 40S ribosomal protein S7

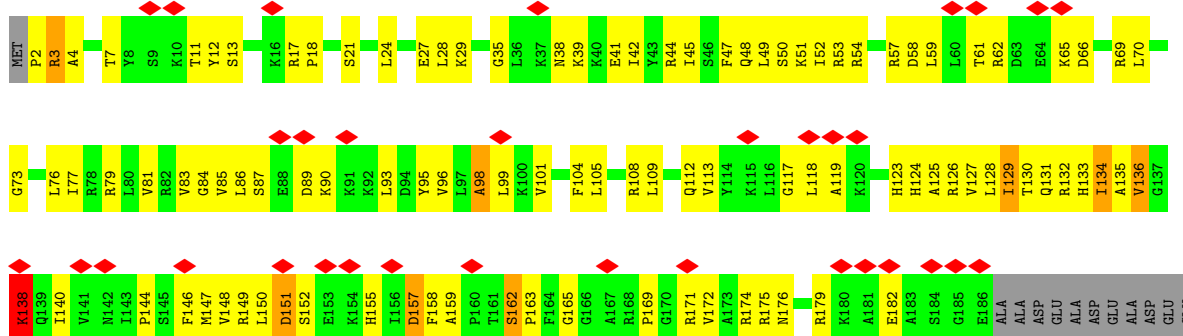


• Molecule 54: 40S ribosomal protein S8

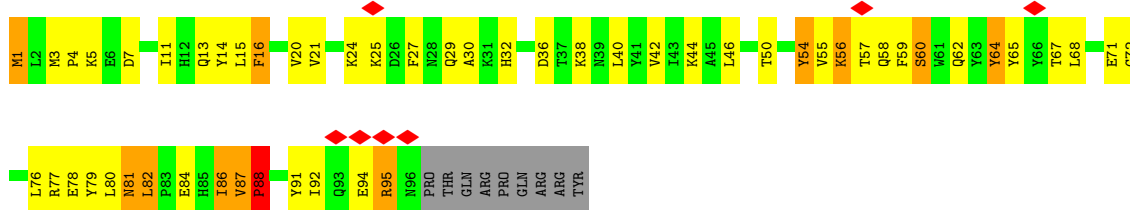
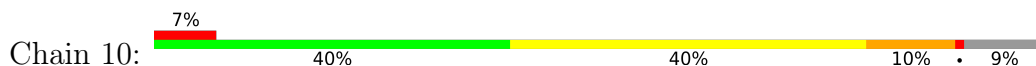




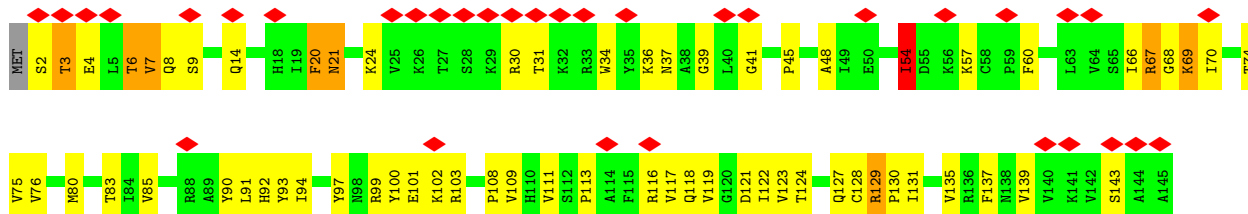
• Molecule 55: 40S ribosomal protein S9



• Molecule 56: 40S ribosomal protein S10

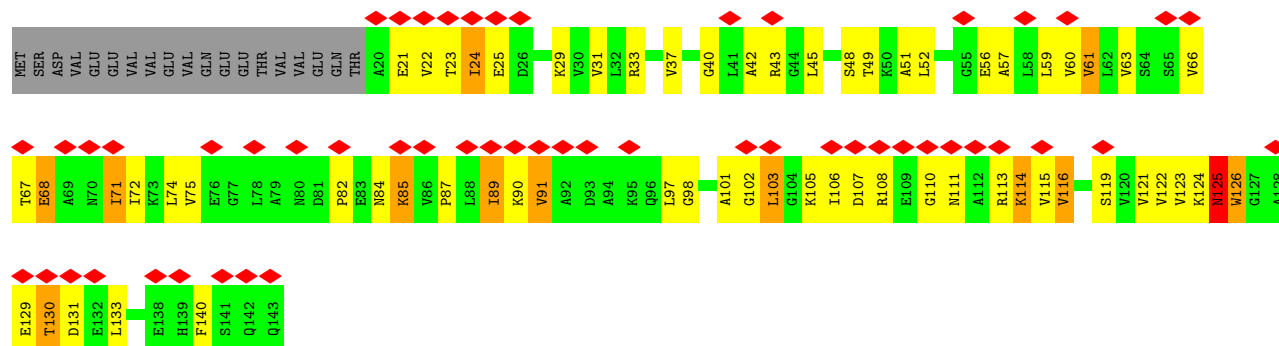
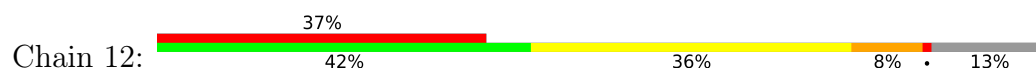


• Molecule 57: 40S ribosomal protein S11

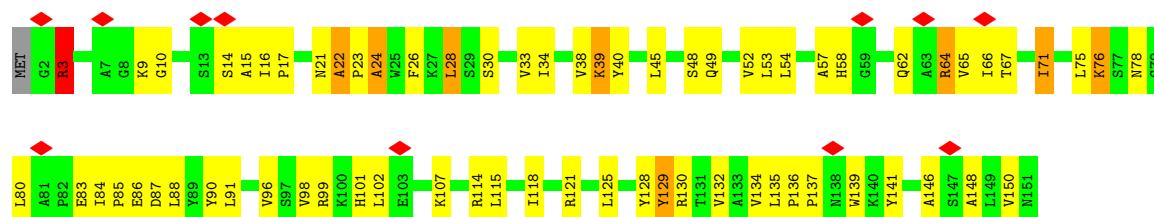




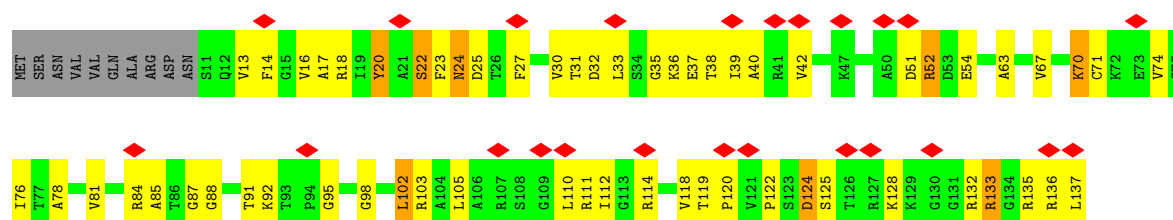
• Molecule 58: 40S ribosomal protein S12



• Molecule 59: 40S ribosomal protein S13

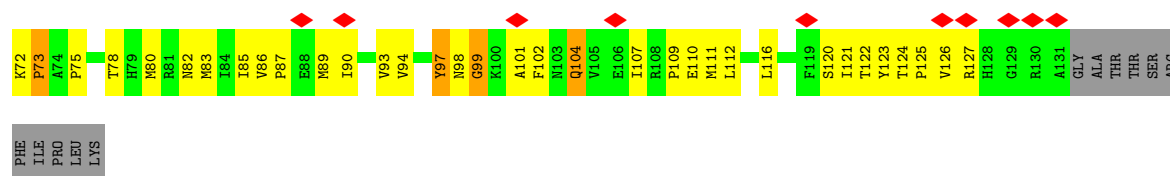


• Molecule 60: 40S ribosomal protein S14

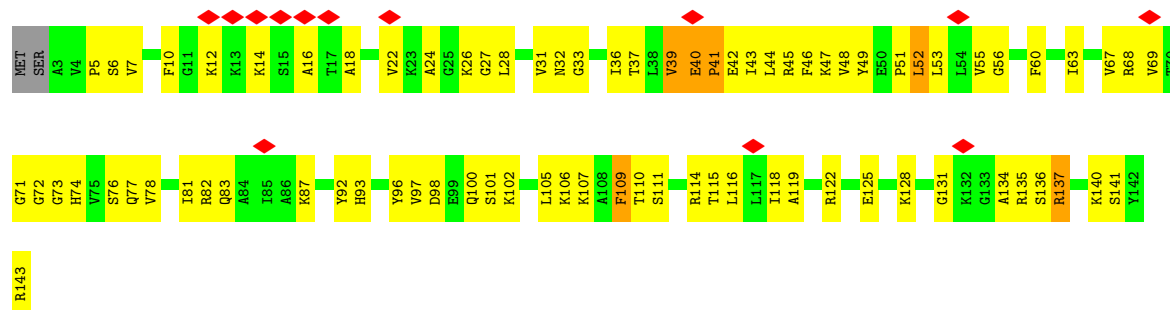
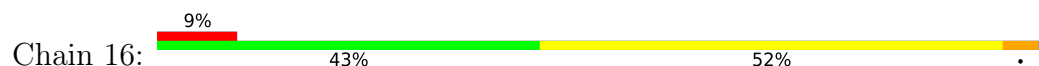


• Molecule 61: 40S ribosomal protein S15

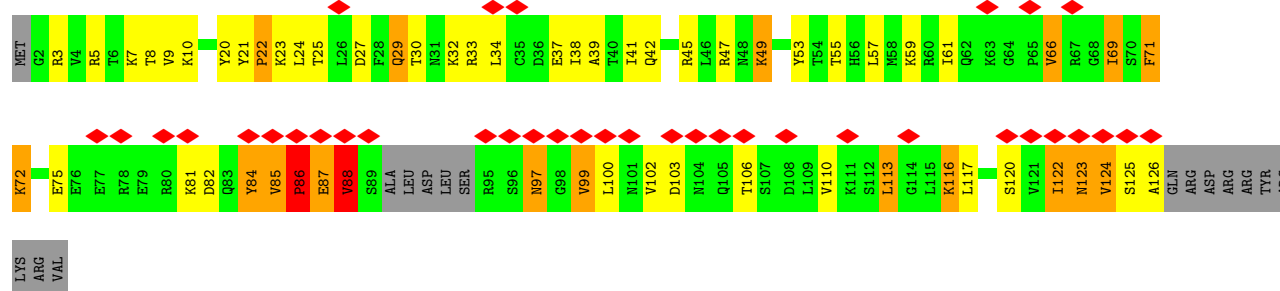




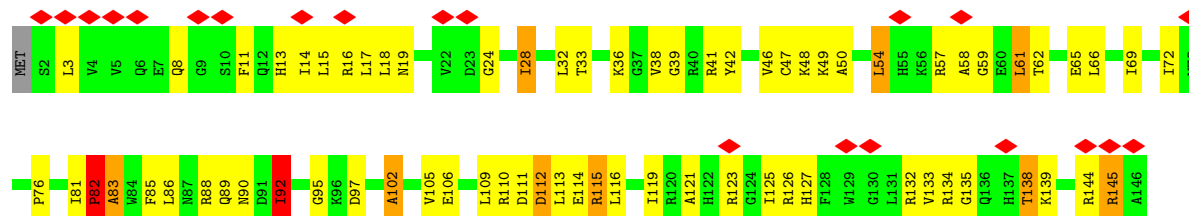
• Molecule 62: 40S ribosomal protein S16



• Molecule 63: 40S ribosomal protein S17

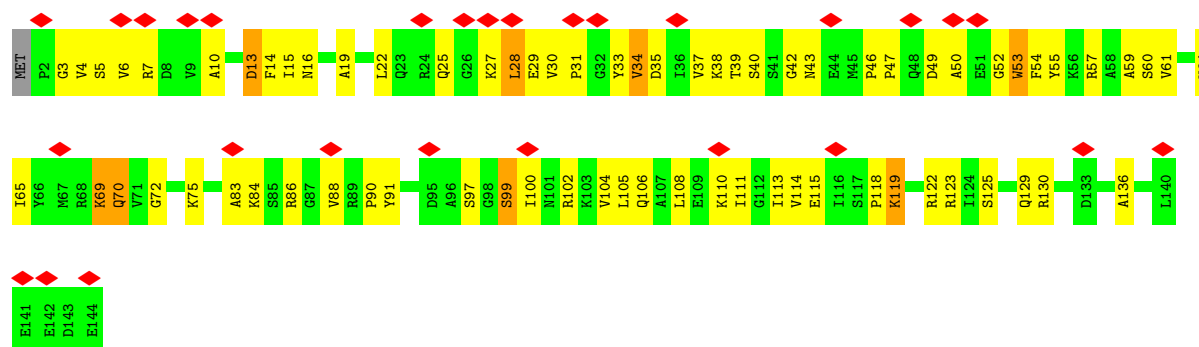


• Molecule 64: 40S ribosomal protein S18

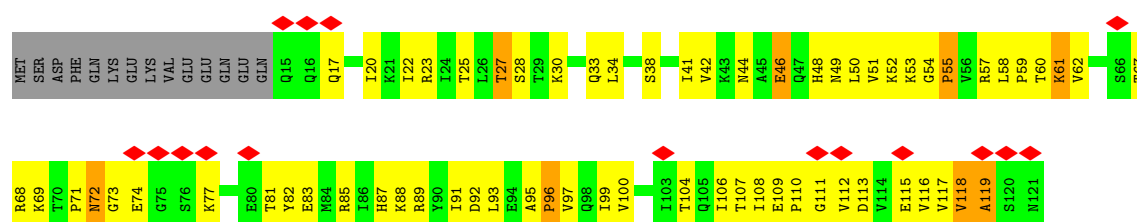


• Molecule 65: 40S ribosomal protein S19

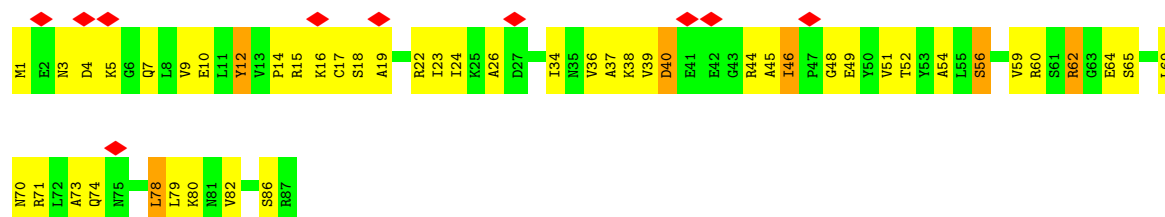




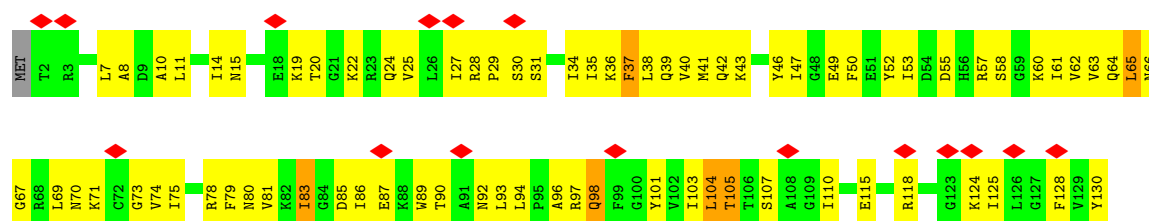
• Molecule 66: 40S ribosomal protein S20



• Molecule 67: 40S ribosomal protein S21

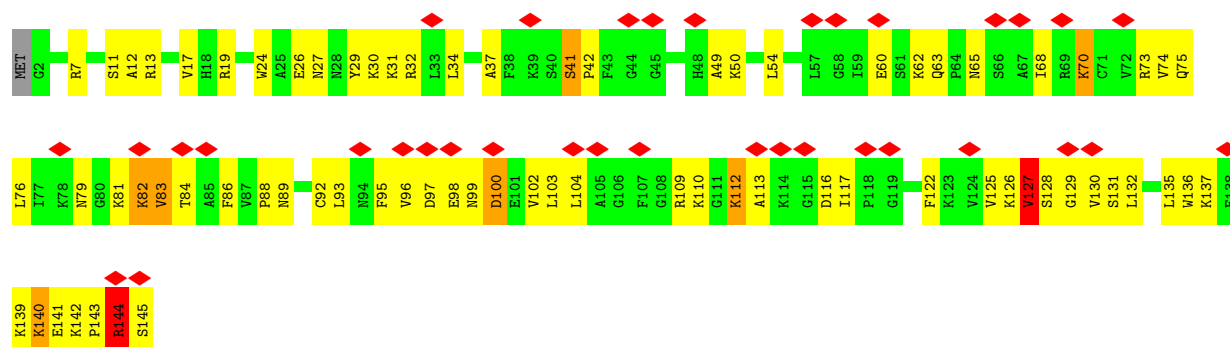


• Molecule 68: 40S ribosomal protein S22

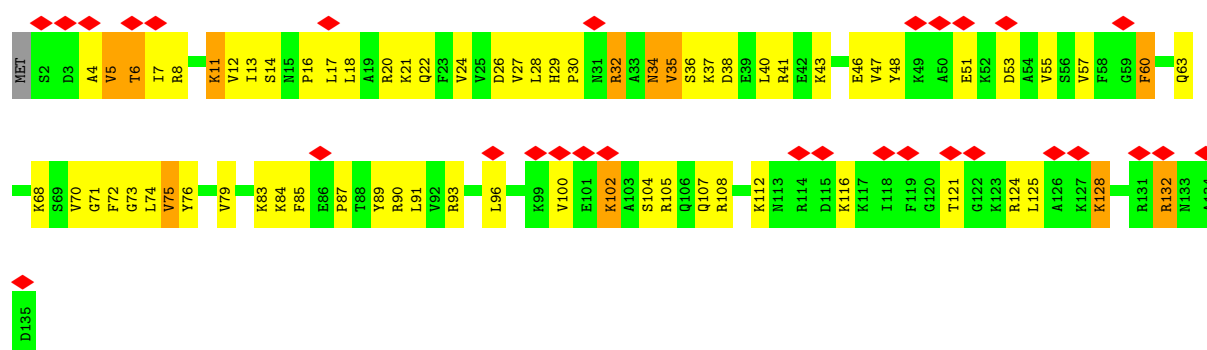


• Molecule 69: 40S ribosomal protein S23

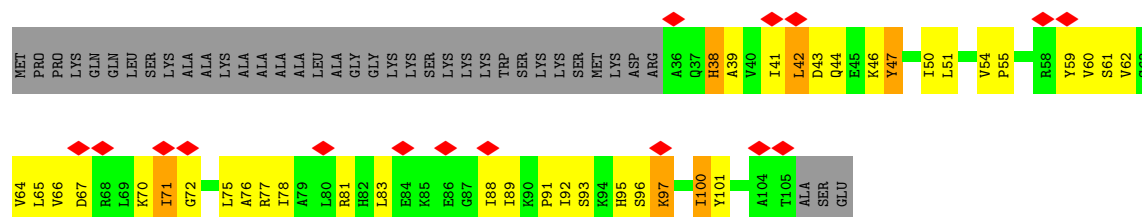
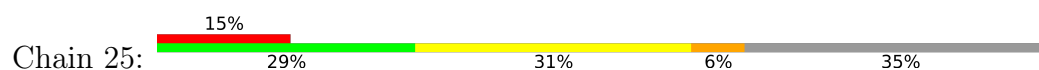




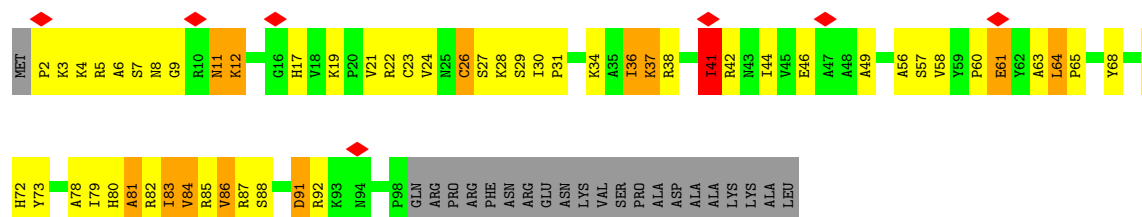
- Molecule 70: 40S ribosomal protein S24



- Molecule 71: 40S ribosomal protein S25

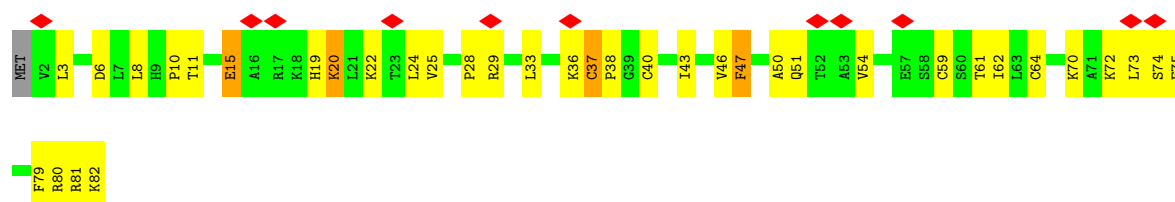


- Molecule 72: 40S ribosomal protein S26




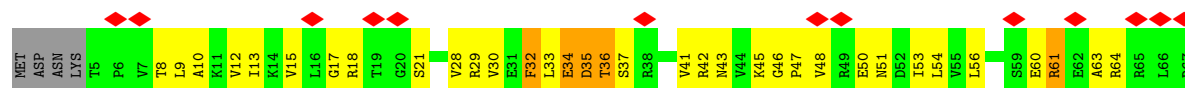
- Molecule 73: 40S ribosomal protein S27

Chain 27: 



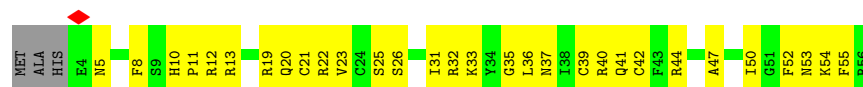
- Molecule 74: 40S ribosomal protein S28

Chain 28: 



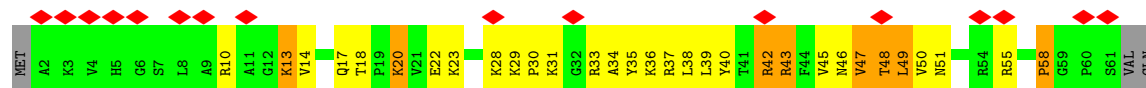
- Molecule 75: 40S ribosomal protein S29

Chain 29: 




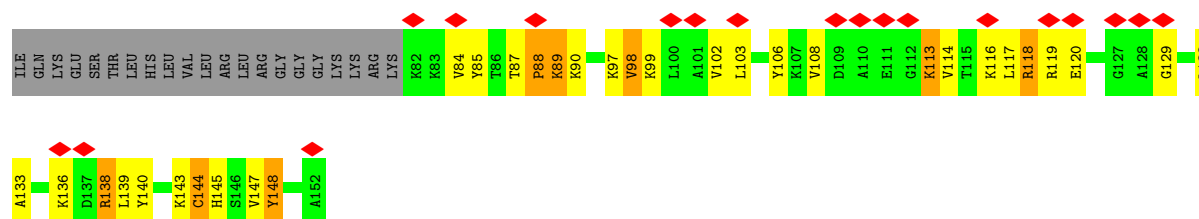
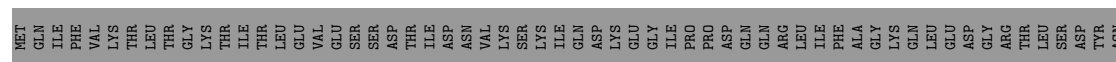
- Molecule 76: 40S ribosomal protein S30

Chain 30: 



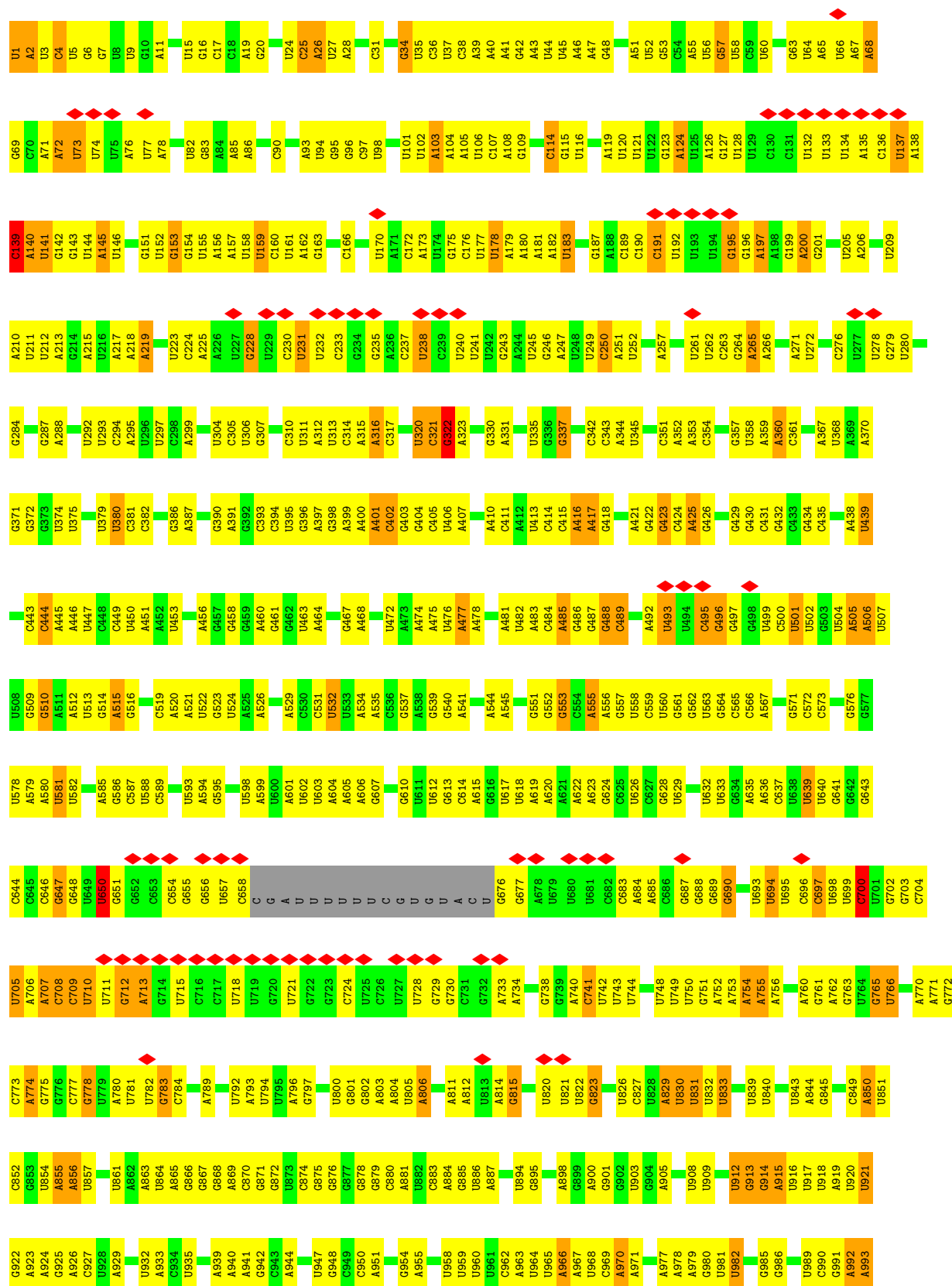
- Molecule 77: 40S ribosomal protein S31

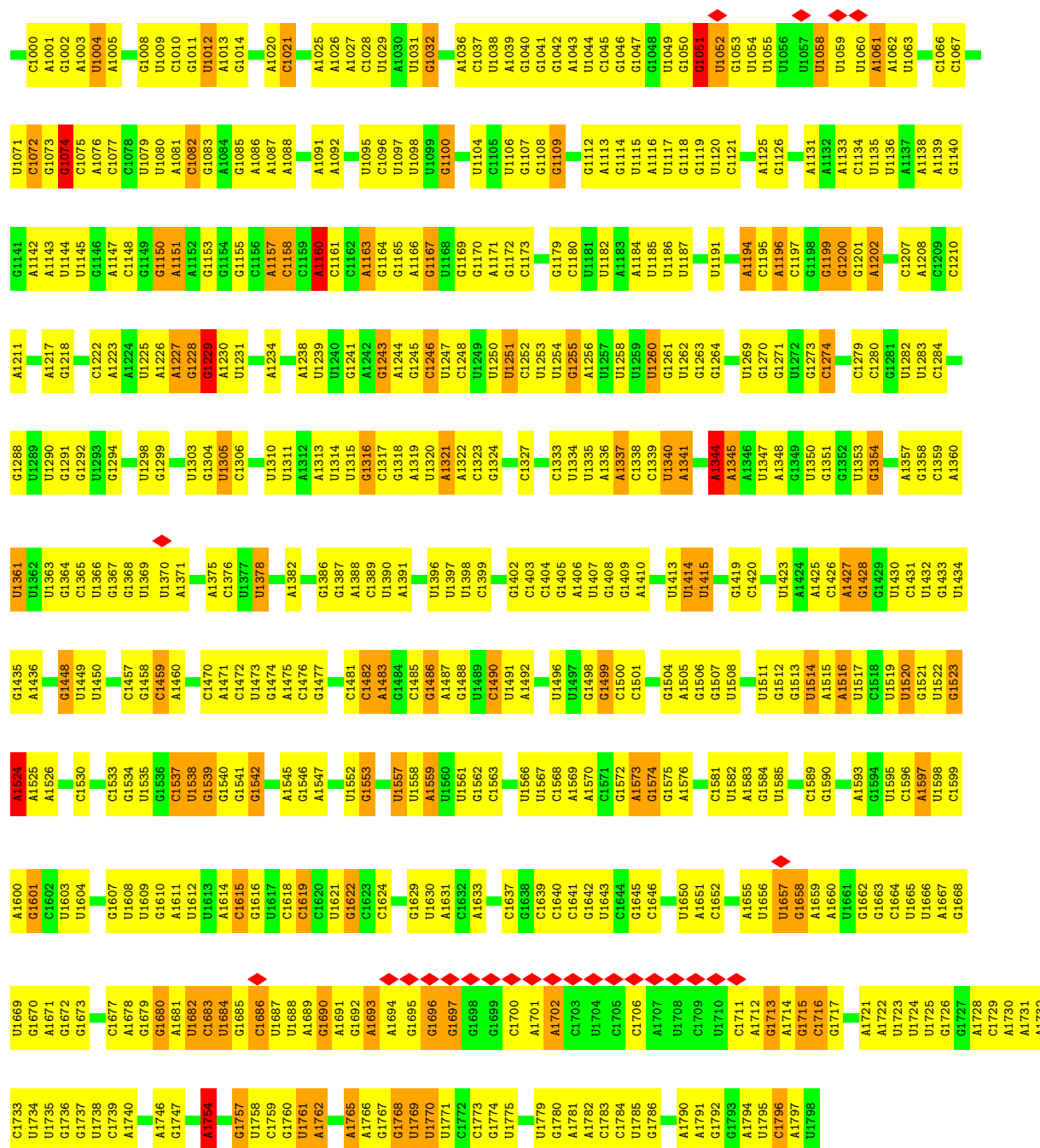
Chain 31: 



- Molecule 78: 18S ribosomal RNA

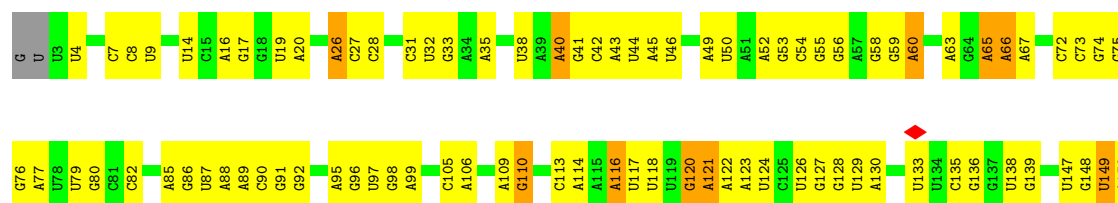
Chain 1S: 





• Molecule 79: 25S ribosomal RNA

Chain 2S: 39% 49% 9% ..



G1145	G1146	A1150	U1151	G1152	A1084	A1085	C1086	G1156	G1157	A1159	U1162	A1165	G1166	A1170	G1174	C1175	G1176	G1177	U1178	A1179	A1180	U1181	C1183	A1184	C1185	G1186	A1190	U1191	A1193	G1194	A1195	C1198	C1199	A1200	C1201	A1202	A1203	A1204	G1209	U1210	U1211	A1212	G1213	U1214	U1215	U1218									
A1064	A1066	U1067	U1081	U1153	A1067	U1081	A1084	G1157	A1158	U1094	U1095	U1096	U1097	A1098	G1101	A1102	A1103	G1104	U1014	U1015	C1016	C1017	G1023	G1024	A1025	A1026	A1027	U1028	G1029	C1038	U1039	A1040	U1041	U1042	C1045	A1046	A1047	A1048	C1049	U1050	U1051	U1052	A1053	A1054	A1055	U1056	A1057	U1058	U1059	U1060	A1061	A1062	G1063		
U990	G991	A992	G993	A996	A997	A998	A999	C1000	G1001	A1002	A1003	A1006	U1007	U1008	A1009	G1010	A1011	G1012	G1013	U1014	U1015	C1016	C1017	G1023	G1024	A1025	A1026	A1027	U1028	G1029	C1038	U1039	A1040	U1041	U1042	C1045	A1046	A1047	A1048	C1049	U1050	U1051	U1052	A1053	A1054	A1055	U1056	A1057	U1058	U1059	U1060	A1061	A1062	G1063	
U922	C923	G924	A925	A926	C927	C928	A929	U930	C931	C932	A933	G934	U935	A936	G937	C938	U939	G940	G941	U942	U943	C944	C949	G950	A951	A952	U955	U956	C957	C958	C959	U960	C961	A962	G963	G968	C969	A970	G971	A972	A973	G974	C975	U976	U979	A980	U981	C982	A983	G984	U985	U986	U987	U988	A989
U850	G856	G857	A858	G859	G860	C861	C862	C863	G864	U865	A866	G867	U871	U872	C873	U874	A876	C877	G878	U879	G880	C886	C887	A888	U889	C890	G891	C892	A893	A895	A896	U897	U898	U899	U900	A904	U905	A906	G907	G908	G909	G910	C911	G912	A913	A914	A915	G916	A917	C918	U919	A920	A921		
G781	A784	G785	A786	G787	C788	A789	A790	G791	G792	G793	U794	G795	U796	U797	A801	C802	C803	G804	C805	C806	U807	A808	G809	A810	U811	G812	G815	A816	A817	C818	U819	A820	U821	G822	C823	C824	U829	A830	G831	U834	G835	A836	A837	G838	C839	G840	A841	G842	G845	A846	A847	A848	C849		
A622	G627	U628	A629	U630	U631	G632	C633	C634	G635	C636	C637	C638	G639	U640	C641	U642	U643	G644	C645	A646	A647	C648	A649	G652	G653	U657	U658	A659	G660	C661	U662	U663	U664	U671	C672	A673	U674	C675	C676	U677	U678	G679	U681	U682	U683	G684	G685	G686	U687	U688	A690	U698	A699	C700	G701
A705	A709	A710	A711	U712	U713	U714	A715	G718	U719	U720	G721	G725	G726	U727	U728	G729	C730	G733	A736	G737	G740	U741	G742	C743	A744	C745	U751	C752	C753	C757	U758	U759	G760	A761	U762	U763	U764	C765	U766	U767	C768	U769	C770	U771	U772	G773	U776	U780							
G535	U536	U540	U541	U542	C543	C544	U545	C546	G547	U548	U549	A550	A557	U558	A559	G560	C561	C562	U563	A570	U571	A572	C576	C577	A578	G579	A585	G590	G591	A592	C593	U594	A598	C599	G600	A603	G604	A608	G609	G610	A611	U612	G616	G617	C618	A619	U620	A621							
U381	U382	G383	A386	A389	G394	A395	A396	A397	A398	A399	U400	A401	A402	C403	C404	U405	A406	A407	G412	U413	A418	A421	A422	G426	C427	A428	U429	U434	C435	A436	G437	A438	C439	U440	U441	G442	G443	U448	U449	G450	U451	G	C	C	U	C	U	C	G						
G297	U298	G299	G300	G301	U305	A306	A307	A308	C311	C312	A313	U314	C315	A319	U322	A323	U328	U329	A338	C339	G340	G341	C344	C345	C346	A349	C350	A351	A352	G353	U359	G360	A361	U362	G363	G364	A367	G368	A369	U370	G371	A372	A373	A374	A375	G376	C379	U380							
A219	G220	A221	U223	G224	C225	C226	U230	U239	C233	G234	A235	G236	U240	G241	C242	G243	U250	G251	U252	U257	G258	C259	C260	G267	A268	G269	U270	C271	G272	A273	U274	U275	U276	G277	U278	U279	G282	G283	A284	A285	U286	G287	C288	A289	G290	C291	U292	C293	U294	A295	A296				

A2182	A2183	U2186	G2187	A2188	U2189	A2106	A2107	U2110	G2111	U2112	U2044	G2045	U2046	A2047	C2050	G2051	U2052	C2053	U2054	U2055	U2056	G2123	U2057	G2058	U2059	A2126	U2127	A2208	U2209	G2210	U2211	G2216	G2221	A2222	A2223	A2224	U2225	U2226	C2227	A2228	A2229	U2241	A2242	U2243	A2244	G2245	U2246	U2247	U2248	G2249	U2250	G2251	A2252	A2255	A2256	U2257	U2258	A2259	U2260	G2261	A2262	C2263	U2264	G2265	U2266	A2182	A2183	U2186	G2187	A2188	U2189	G2116	A2117	G2118	A2119	A2120	G2121	G2122	G2123	U2124	A2125	U2126	U2127	C2128	U2129	G2130	A2131	G2132	G2133	U2134	A2135	U2136	U2137	U2138	U2139	U2140	U2141	U2142	U2143	A2144	U2145	U2146	U2147	U2148	U2149	U2150	U2151	U2152	U2153	U2154	U2155	U2156	U2157	U2158	U2159	U2160	U2161	U2162	U2163	A2168	A2169	U2173	G2174	U2175	U2176	U2177	A2178	U2179	U2180	U2181	U2182	U2183	U2184	U2185	U2186	U2187	U2188	U2189	U2190	U2191	U2192	U2193	U2194	U2195	U2196	U2197	U2198	U2199	U2200	U2201	U2202	U2203	U2204	U2205	U2206	U2207	U2208	U2209	U2210	U2211	U2212	U2213	U2214	U2215	U2216	U2217	U2218	U2219	U2220	U2221	U2222	U2223	U2224	U2225	U2226	U2227	U2228	U2229	U2230	U2231	U2232	U2233	U2234	U2235	U2236	U2237	U2238	U2239	U2240	U2241	U2242	U2243	U2244	U2245	U2246	U2247	U2248	U2249	U2250	U2251	U2252	U2253	U2254	U2255	U2256	U2257	U2258	U2259	U2260	U2261	U2262	U2263	U2264	U2265	U2266	U2267	U2268	U2269	U2270	U2271	U2272	U2273	U2274	U2275	U2276	U2277	U2278	U2279	U2280	U2281	U2282	U2283	U2284	U2285	U2286	U2287	U2288	U2289	U2290	U2291	U2292	U2293	U2294	U2295	U2296	U2297	U2298	U2299	U2300	U2301	U2302	U2303	U2304	U2305	U2306	U2307	U2308	U2309	U2310	U2311	U2312	U2313	U2314	U2315	U2316	U2317	U2318	U2319	U2320	U2321	U2322	U2323	U2324	U2325	U2326	U2327	U2328	U2329	U2330	U2331	U2332	U2333	U2334	U2335	U2336	U2337	U2338	U2339	U2340	U2341	U2342	U2343	U2344	U2345	U2346	U2347	U2348	U2349	U2350	U2351	U2352	U2353	U2354	U2355	U2356	U2357	U2358	U2359	U2360	U2361	U2362	U2363	U2364	U2365	U2366	U2367	U2368	U2369	U2370	U2371	U2372	U2373	U2374	U2375	U2376	U2377	U2378	U2379	U2380	U2381	U2382	U2383	U2384	U2385	U2386	U2387	U2388	U2389	U2390	U2391	U2392	U2393	U2394	U2395	U2396	U2397	U2398	U2399	U2400	U2401	U2402	U2403	U2404	U2405	U2406	U2407	U2408	U2409	U2410	U2411	U2412	U2413	U2414	U2415	U2416	U2417	U2418	U2419	U2420	U2421	U2422	U2423	U2424	U2425	U2426	U2427	U2428	U2429	U2430	U2431	U2432	U2433	U2434	U2435	U2436	U2437	U2438	U2439	U2440	U2441	U2442	U2443	U2444	U2445	U2446	U2447	U2448	U2449	U2450	U2451	U2452	U2453	U2454	U2455	U2456	U2457	U2458	U2459	U2460	U2461	U2462	U2463	U2464	U2465	U2466	U2467	U2468	U2469	U2470	U2471	U2472	U2473	U2474	U2475	U2476	U2477	U2478	U2479	U2480	U2481	U2482	U2483	U2484	U2485	U2486	U2487	U2488	U2489	U2490	U2491	U2492	U2493	U2494	U2495	U2496	U2497	U2498	U2499	U2500	U2501	U2502	U2503	U2504	U2505	U2506	U2507	U2508	U2509	U2510	U2511	U2512	U2513	U2514	U2515	U2516	U2517	U2518	U2519	U2520	U2521	U2522	U2523	U2524	U2525	U2526	U2527	U2528	U2529	U2530	U2531	U2532	U2533	U2534	U2535	U2536	U2537	U2538	U2539	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	U3143	U3144	U3145	U3146	U3147	U3148	U3149	U3150	U3151	U3152	U3153	U3154	U3155	U3156	U3157	U3158	U3159	U3160	U3161	U3162	U3163	U3164	U3165	U3166	U3167	U3168	U3169	U3170	U3171	U3172	U3173	U3174	U3175	U3176	U3177	U3178	U3179	U3180	U3181	U3182	U3183	U3184	U3185	U3186	U3187	U3188	U3189	U3190	U3191	U3192	U3193	U3194	U3195	U3196	U3197	U3198	U3199	U3200	U3201	U3202	U3203	U3204	U3205	U3206	U3207	U3208	U3209	U3210	U3211	U3212	U3213	U3214	U3215	U3216	U3217	U3218	U3219	U3220	U3221	U3222	U3223	U3224	U3225	U3226	U3227	U3228	U3229	U3230	U3231	U3232	U3233	U3234	U3235	U3236	U3237	U3238	U3239	U3240	U3241	U3242	U3243	U3244	U3245	U3246	U3247	U3248	U3249	U3250	U3251	U3252	U3253	U3254	U3255	U3256	U3257	U3258	U3259	U3260	U3261	U3262	U3263	U3264	U3265	U3266	U3267	U3268	U3269	U3270	U3271	U3272	U3273	U3274	U3275	U3276	U3277	U3278	U3279	U3280	
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	--

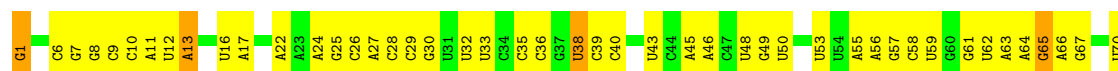
U3259	U3268	U3271	U3272	U3273	U3277	U3278	U3279	U3281	U3282	U3286	U3287	U3288	U3289	U3290	U3298	U3305	U3306	U3307	U3308	U3309	U3313	U3314	U3315	U3318	U3322	U3323	U3328	U3329	U3333	U3334	U3335	U3336	U3337	U3338	U3339	U3340	U3344	U3345	U3346	U3347	U3348	U3349	U3350	U3351	A2352									
A3256	A3257	A3258	A3261	C2362	A3263	A3264	C2365	A3266	A3267	A3268	A3269	G2370	G2371	A2372	A2373	C2374	C2375	C2376	C2377	C2378	U2379	U2380	G2381	A2384	A2387	A2388	C2389	A2390	G2391	G2394	C2395	C2396	A2397	A2401	A2402	A2403	C2405	C2406	C2407	U2411	G2412	G2413	G2414	C2415	G2418	A2419	C2420	U2421	C2422	U2423				
A2424	G2425	U2426	U2427	U2428	U2434	G2435	G2440	G2441	C2444	A2445	A2449	A2450	G2451	G2452	U2453	U2455	U2456	G2457	A2458	A2459	U2460	A2461	A2462	A2463	U2464	G2465	G2466	G2467	A2468	U2471	U2472	C2473	C2474	G2475	C2476	G2477	C2478	C2479	A2480	G2483	A2484	A2485	A2486	U2487	C2488	C2489	A2491	C2492	U2493	A2494	C2495			
C2496	U2497	U2498	U2499	A2500	U2501	A2502	C2512	U2513	U2514	A2515	U2516	U2517	G2522	U2523	A2524	G2525	C2526	G2527	U2528	A2529	G2530	C2531	U2532	G2533	G2534	A2535	A2536	U2537	U2538	C2539	A2540	C2541	A2542	A2547	C2548	C2549	U2550	C2552	U2553	A2554	C2555	C2556	A2557	U2558	U2559	C2560	A2561	A2562	G2563	G2564	C2567	C2568	A2569	U2570
U2571	C2572	G2573	U2581	C2582	C2583	G2584	U2585	C2586	U2587	A2590	A2591	G2592	C2594	A2595	U2596	U2597	G2598	U2599	G2600	A2601	G2602	G2603	U2604	G2605	G2606	G2607	G2608	A2609	G2610	U2611	U2612	U2613	G2614	G2615	C2616	U2617	G2618	G2619	A2626	U2633	U2634	A2635	A2636	A2637	C2638	G2639	A2640	U2641	A2642	A2643	G2645			
U2652	U2655	A2656	A2657	G2658	G2659	G2660	C2664	U2665	C2666	A2667	U2668	A2674	A2675	A2676	A2677	A2678	A2679	A2680	C2684	C2685	G2686	G2687	G2688	A2689	G2690	A2691	A2692	C2693	A2694	A2695	A2696	A2697	G2698	G2699	G2700	U2701	A2702	A2703	A2704	G2707	C2708	C2709	U2713	G2714	U2715	U2719	G2720	U2721	U2722	U2723				
G2726	A2727	G2728	U2729	U2730	U2731	G2732	A2736	C2737	C2742	A2743	A2748	G2749	G2753	G2754	G2755	C2756	U2757	G2761	A2762	U2763	C2764	G2765	U2766	U2767	U2768	A2769	C2772	C2773	U2774	U2775	C2776	G2777	G2778	G2779	A2780	U2783	G2784	G2787	C2788	U2789	G2794	U2795	U2796	C2797	C2798	A2799	C2800	A2801	U2802	A2803				
A2804	C2809	C2810	A2811	C2812	A2813	G2814	C2815	A2816	A2817	U2818	A2819	A2820	C2821	U2822	G2823	U2827	G2828	C2832	A2833	C2836	A2837	G2841	U2842	U2843	C2844	A2845	C2849	G2856	C2857	U2860	U2861	U2862	U2865	U2866	C2867	U2868	C2870	A2871	A2872	U2873	U2874	U2875	U2876	C2876	U2880	C2881	A2882	U2883						
U2886	A2887	C2894	C2895	A2896	A2897	G2898	C2899	A2900	C2901	A2902	A2903	U2904	U2905	C2906	G2907	U2908	U2909	A2910	G2911	G2912	U2915	U2916	G2917	U2920	U2921	G2922	U2923	C2927	C2928	C2931	U2932	U2935	A2936	C2937	G2938	C2939	A2940	A2941	C2942	U2943	U2944	G2945	A2946	C2947	A2948	U2949	C2950	G2951	C2952	U2953	U2954	U2955	A2956	
G2957	A2958	C2959	G2960	A2961	U2962	G2966	A2969	C2970	A2971	C2972	G2973	U2974	U2975	U2976	U2977	U2979	A2982	C2983	C2984	C2985	U2986	A2987	C2988	U2989	C2990	G2991	U2992	A2995	U2996	C2997	U2998	U2999	A3000	C3001	C3002	G3003	C3004	A3005	A3006	U3007	A3008	G3009	A3012	U3013	U3014	G3015	A3016	A3017	C3018	C3019	A3021	A3024	C3025	G3026
A3029	G3030	G3031	A3032	A3033	C3034	U3038	C3039	A3040	U3041	U3042	C3043	G3044	G3045	A3046	U3047	A3048	A3049	U3050	U3051	C3052	U3057	U3058	G3059	C3060	G3061	G3062	C3063	U3064	G3065	U3066	C3067	G3074	G3075	C3076	A3077	U3078	U3079	G3080	C3084	G3085	A3086	C3089	U3090	A3091	C3092	C3093	A3094	U3095	U3096	C3097	U3107	G3108		
G3109	C3110	G3111	G3112	G3116	C3117	C3118	U3119	C3120	U3121	A3122	C3126	A3130	U3131	G3136	C3137	U3138	A3139	G3140	A3141	A3142	C3143	G3146	G3147	U3148	G3149	A3150	U3151	U3152	U3153	C3154	U3155	U3156	U3157	G3158	C3159	U3160	C3161	C3162	A3163	C3164	U3169	A3170	U3171	A3172	G3173	A3174	U3175	U3176	C3177	A3178	U3179	A3180	C3181	
A3182	A3183	A3184	U3185	A3186	A3187	G3188	G3189	C3190	A3191	U3192	C3193	C3194	C3197	U3198	G3199	U3200	U3203	C3204	G3205	C3206	U3207	A3210	C3211	C3212	A3215	G3216	C3217	A3218	G3219	C3225	A3226	A3227	C3228	G3229	G3230	U3231	C3232	U3237	G3238	G3242	A3243	A3244	A3245	G3246	U3250	U3251	G3252	G3253	G3254	U3255	U3256	G3257		
U3259	A3268	U3269	U3270	G3271	C3272	A3273	A3274	U3275	G3276	U3277	C3278	A3279	U3280	U3281	U3282	G3286	U3287	G3288	C3289	U3293	A3294	A3295	A3296	U3297	C3298	A3299	U3302	G3303	U3304	A3307	C3308	G3309	U3312	U3313	A3314	G3315	A3316	U3317	U3318	C3320	C3321	A3322	C3323	C3324	G3325	G3326	G3327	U3331	U3332	U3333	G3334			



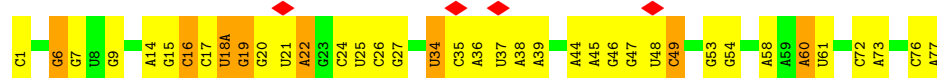
• Molecule 80: 5.8S ribosomal RNA



• Molecule 81: 5S ribosomal RNA



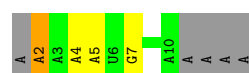
• Molecule 82: P/E-site initiator transfer RNAfMet



• Molecule 82: P/E-site initiator transfer RNAfMet



• Molecule 83: messenger RNA



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	23163	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	CTFFIND3, FREALIGN per micrograph	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	30	Depositor
Minimum defocus (nm)	1159	Depositor
Maximum defocus (nm)	4844	Depositor
Magnification	133333	Depositor
Image detector	FEI FALCON I (4k x 4k)	Depositor
Maximum map value	0.430	Depositor
Minimum map value	-0.198	Depositor
Average map value	0.006	Depositor
Map value standard deviation	0.048	Depositor
Recommended contour level	0.12	Depositor
Map size (\AA)	377.99997, 377.99997, 377.99997	wwPDB
Map dimensions	360, 360, 360	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.05, 1.05, 1.05	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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	L1	0.61	0/1634	0.67	0/2195
2	L2	0.43	0/1952	0.59	0/2622
3	L3	0.48	0/3153	0.56	0/4239
4	L4	0.46	0/2802	0.58	0/3792
5	L5	0.53	0/2426	0.58	0/3271
6	L6	0.52	0/1261	0.62	0/1694
7	L7	0.50	0/1822	0.60	1/2451 (0.0%)
8	L8	0.49	0/1850	0.60	0/2495
9	L9	0.50	0/1540	0.59	0/2073
10	60	0.49	0/1754	0.56	0/2350
11	61	0.51	0/1375	0.58	0/1842
12	62	0.52	0/700	0.72	7/968 (0.7%)
13	63	0.48	0/1568	0.60	0/2106
14	64	0.50	0/1069	0.56	0/1438
15	65	0.47	0/1758	0.54	0/2354
16	66	0.49	0/1586	0.57	0/2128
17	67	0.49	0/1466	0.56	0/1968
18	68	0.48	0/1466	0.57	0/1965
19	69	0.42	0/1539	0.56	0/2050
20	70	0.52	0/1482	0.58	0/1990
21	71	0.50	0/1301	0.56	0/1743
22	72	0.57	0/812	0.57	0/1099
23	73	0.46	0/1019	0.57	0/1369
24	74	0.51	0/540	0.56	0/717
25	75	0.50	0/984	0.60	0/1325
26	76	0.46	0/1005	0.58	1/1341 (0.1%)
27	77	0.51	0/1119	0.53	0/1497
28	78	0.46	0/1205	0.59	0/1612
29	79	0.48	0/474	0.60	0/629
30	80	0.52	0/751	0.55	0/1008
31	81	0.46	0/904	0.59	0/1213
32	82	0.46	0/1041	0.58	0/1394
33	83	0.51	0/869	0.56	0/1168
34	84	0.48	0/891	0.59	0/1191

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
35	85	0.45	0/979	0.57	0/1301
36	86	0.46	0/779	0.63	0/1034
37	87	0.48	0/697	0.54	0/923
38	88	0.52	0/619	0.55	0/826
39	89	0.46	0/444	0.54	0/588
40	90	0.44	0/424	0.58	0/562
41	91	0.46	0/235	0.58	0/300
42	92	0.49	0/861	0.58	0/1136
43	93	0.44	0/702	0.55	0/934
44	P0	0.62	0/1002	0.65	0/1348
45	RC	0.54	0/2498	0.60	0/3398
46	S0	0.55	0/1653	0.60	0/2261
47	S1	0.50	0/1735	0.59	0/2335
48	S2	0.50	0/1665	0.59	0/2263
49	S3	0.52	0/1759	0.58	0/2368
50	S4	0.50	0/2110	0.62	0/2839
51	S5	0.49	0/1630	0.59	0/2202
52	S6	0.51	0/1844	0.59	0/2464
53	S7	0.52	0/1506	0.62	0/2028
54	S8	0.49	0/1515	0.60	0/2021
55	S9	0.50	0/1519	0.62	0/2035
56	10	0.58	0/837	0.64	0/1131
57	11	0.53	0/1273	0.58	0/1712
58	12	0.56	0/943	0.68	0/1274
59	13	0.49	0/1216	0.59	0/1638
60	14	0.48	0/953	0.58	0/1279
61	15	0.54	0/1012	0.65	0/1356
62	16	0.52	0/1126	0.63	0/1510
63	17	0.58	0/974	0.70	0/1304
64	18	0.50	0/1212	0.61	0/1628
65	19	0.52	0/1131	0.60	0/1517
66	20	0.54	0/866	0.57	0/1169
67	21	0.51	0/694	0.57	0/935
68	22	0.49	0/1039	0.60	0/1395
69	23	0.48	0/1140	0.59	0/1518
70	24	0.53	0/1088	0.58	0/1449
71	25	0.52	0/571	0.67	0/768
72	26	0.47	0/782	0.57	0/1047
73	27	0.51	0/621	0.57	0/838
74	28	0.50	0/500	0.59	0/670
75	29	0.55	0/454	0.59	0/602
76	30	0.51	0/483	0.63	0/643
77	31	0.56	0/505	0.72	2/682 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
78	1S	0.76	3/42445 (0.0%)	0.74	18/66138 (0.0%)
79	2S	0.72	5/79038 (0.0%)	0.72	22/123226 (0.0%)
80	8S	0.72	1/3747 (0.0%)	0.71	0/5832
81	5S	0.73	1/2884 (0.0%)	0.70	0/4491
82	ET	0.83	1/1836 (0.1%)	0.73	0/2859
82	PT	0.76	1/1836 (0.1%)	0.73	0/2859
83	MR	0.93	1/219 (0.5%)	0.75	0/339
All	All	0.65	13/224719 (0.0%)	0.68	51/330272 (0.0%)

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
78	1S	0	23
79	2S	3	56
80	8S	0	6
All	All	3	85

All (13) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
80	8S	1	A	OP3-P	-7.03	1.52	1.61
78	1S	1	U	OP3-P	-6.96	1.52	1.61
81	5S	1	G	OP3-P	-6.89	1.52	1.61
79	2S	486	A	P-O5'	6.74	1.66	1.59
82	PT	1	C	OP3-P	-6.69	1.53	1.61
82	ET	1	C	OP3-P	-6.67	1.53	1.61
79	2S	489	U	N1-C2	6.42	1.44	1.38
79	2S	493	U	N1-C2	5.65	1.43	1.38
83	MR	2	A	P-O5'	5.39	1.65	1.59
78	1S	658	C	N1-C2	5.26	1.45	1.40
79	2S	2037	G	P-O5'	5.13	1.64	1.59
79	2S	451	U	N1-C2	5.03	1.43	1.38
78	1S	1	U	P-O5'	5.02	1.64	1.59

All (51) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
78	1S	829	A	C2'-C3'-O3'	9.04	129.39	109.50
79	2S	2065	U	C2'-C3'-O3'	8.72	128.69	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
79	2S	2512	C	C2'-C3'-O3'	8.22	127.58	109.50
79	2S	493	U	N1-C1'-C2'	7.81	124.15	114.00
77	31	144	CYS	N-CA-C	-6.92	92.32	111.00
79	2S	1953	G	O4'-C1'-N9	6.40	113.32	108.20
78	1S	861	U	N1-C1'-C2'	6.11	121.94	114.00
78	1S	453	U	N1-C1'-C2'	6.04	121.85	114.00
78	1S	1052	U	N1-C1'-C2'	6.00	121.80	114.00
78	1S	1754	A	N9-C1'-C2'	5.95	121.73	114.00
79	2S	1953	G	N9-C1'-C2'	5.91	121.68	114.00
12	62	30	PRO	N-CA-CB	5.86	110.33	103.30
78	1S	1051	G	C2'-C3'-O3'	5.86	123.07	113.70
12	62	148	PRO	N-CA-CB	5.80	110.26	103.30
78	1S	228	G	N9-C1'-C2'	5.79	121.53	114.00
12	62	89	PRO	N-CA-CB	5.77	110.23	103.30
79	2S	1481	A	N9-C1'-C2'	5.75	121.47	114.00
79	2S	2541	U	C2'-C3'-O3'	5.74	122.88	113.70
78	1S	1524	A	N9-C1'-C2'	5.73	121.44	114.00
78	1S	1768	G	N9-C1'-C2'	5.70	121.41	114.00
79	2S	282	G	C2'-C3'-O3'	5.70	122.82	113.70
78	1S	724	C	N1-C1'-C2'	5.66	121.35	114.00
79	2S	3170	A	N9-C1'-C2'	5.64	121.34	114.00
12	62	75	PRO	N-CA-CB	5.62	110.05	103.30
78	1S	139	C	C2'-C3'-O3'	5.61	122.68	113.70
12	62	34	PRO	N-CA-CB	5.58	110.00	103.30
79	2S	1307	G	C2'-C3'-O3'	5.58	122.62	113.70
79	2S	1246	G	N9-C1'-C2'	5.54	121.20	114.00
12	62	88	PRO	N-CA-CB	5.51	109.92	103.30
78	1S	1274	C	N1-C1'-C2'	5.51	121.16	114.00
79	2S	2512	C	C4'-C3'-O3'	5.47	123.94	113.00
12	62	39	PRO	N-CA-CB	5.47	109.86	103.30
78	1S	700	C	N1-C1'-C2'	5.47	121.11	114.00
79	2S	487	U	N1-C1'-C2'	5.46	121.10	114.00
78	1S	1344	A	C2'-C3'-O3'	5.44	122.41	113.70
79	2S	2037	G	OP1-P-OP2	-5.40	111.50	119.60
79	2S	2094	C	O4'-C1'-N1	5.35	112.48	108.20
79	2S	2635	A	N9-C1'-C2'	5.31	120.90	114.00
78	1S	1074	G	N9-C1'-C2'	5.24	120.81	114.00
7	L7	179	LEU	CA-CB-CG	5.24	127.34	115.30
77	31	88	PRO	N-CA-CB	5.23	109.58	103.30
78	1S	555	A	C2'-C3'-O3'	5.22	122.06	113.70
79	2S	3218	A	C2'-C3'-O3'	5.17	121.97	113.70
26	76	126	LEU	CA-CB-CG	5.15	127.15	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
79	2S	2554	A	C2'-C3'-O3'	5.08	121.83	113.70
79	2S	486	A	OP1-P-OP2	-5.06	112.01	119.60
78	1S	501	U	C2'-C3'-O3'	5.04	121.77	113.70
79	2S	439	C	N1-C1'-C2'	5.03	120.54	114.00
78	1S	650	U	N1-C1'-C2'	5.02	120.53	114.00
79	2S	959	C	N1-C1'-C2'	5.01	120.51	114.00
79	2S	770	G	N9-C1'-C2'	5.00	120.50	114.00

All (3) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
79	2S	65	A	C3'
79	2S	2065	U	C3'
79	2S	2512	C	C3'

All (85) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
78	1S	1074	G	Sidechain
78	1S	1085	G	Sidechain
78	1S	1160	A	Sidechain
78	1S	1229	G	Sidechain
78	1S	1230	A	Sidechain
78	1S	1251	U	Sidechain
78	1S	1255	G	Sidechain
78	1S	1524	A	Sidechain
78	1S	1542	G	Sidechain
78	1S	1553	G	Sidechain
78	1S	1680	G	Sidechain
78	1S	1754	A	Sidechain
78	1S	183	U	Sidechain
78	1S	199	G	Sidechain
78	1S	228	G	Sidechain
78	1S	287	G	Sidechain
78	1S	313	U	Sidechain
78	1S	322	G	Sidechain
78	1S	337	G	Sidechain
78	1S	447	U	Sidechain
78	1S	535	A	Sidechain
78	1S	553	G	Sidechain
78	1S	576	G	Sidechain
79	2S	1000	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
79	2S	1127	G	Sidechain
79	2S	1154	A	Sidechain
79	2S	1195	A	Sidechain
79	2S	1315	U	Sidechain
79	2S	1393	A	Sidechain
79	2S	1417	G	Sidechain
79	2S	1561	G	Sidechain
79	2S	1646	G	Sidechain
79	2S	1695	U	Sidechain
79	2S	1713	G	Sidechain
79	2S	1730	G	Sidechain
79	2S	1731	A	Sidechain
79	2S	1808	G	Sidechain
79	2S	1809	A	Sidechain
79	2S	1930	A	Sidechain
79	2S	196	G	Sidechain
79	2S	2376	G	Sidechain
79	2S	2403	G	Sidechain
79	2S	2541	U	Sidechain
79	2S	26	A	Sidechain
79	2S	2635	A	Sidechain
79	2S	2642	A	Sidechain
79	2S	2656	A	Sidechain
79	2S	2704	A	Sidechain
79	2S	2713	U	Sidechain
79	2S	2800	G	Sidechain
79	2S	2844	C	Sidechain
79	2S	2898	G	Sidechain
79	2S	2901	G	Sidechain
79	2S	3026	G	Sidechain
79	2S	3118	C	Sidechain
79	2S	3140	G	Sidechain
79	2S	3170	A	Sidechain
79	2S	322	U	Sidechain
79	2S	3333	G	Sidechain
79	2S	341	G	Sidechain
79	2S	371	G	Sidechain
79	2S	372	A	Sidechain
79	2S	383	G	Sidechain
79	2S	394	G	Sidechain
79	2S	395	A	Sidechain
79	2S	40	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
79	2S	400	G	Sidechain
79	2S	405	U	Sidechain
79	2S	489	U	Sidechain
79	2S	733	G	Sidechain
79	2S	736	A	Sidechain
79	2S	760	G	Sidechain
79	2S	770	G	Sidechain
79	2S	771	A	Sidechain
79	2S	835	G	Sidechain
79	2S	845	G	Sidechain
79	2S	857	G	Sidechain
79	2S	858	A	Sidechain
79	2S	907	G	Sidechain
80	8S	105	A	Sidechain
80	8S	40	A	Sidechain
80	8S	70	G	Sidechain
80	8S	71	A	Sidechain
80	8S	87	G	Sidechain
80	8S	88	A	Sidechain

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	L1	1609	0	1701	103	0
2	L2	1918	0	1987	162	0
3	L3	3082	0	3165	181	0
4	L4	2750	0	2863	153	0
5	L5	2376	0	2325	130	0
6	L6	1240	0	1326	77	0
7	L7	1785	0	1862	126	0
8	L8	1818	0	1908	129	0
9	L9	1519	0	1587	90	0
10	60	1718	0	1754	88	0
11	61	1354	0	1383	81	0
12	62	703	0	324	7	0
13	63	1543	0	1608	85	0
14	64	1054	0	1149	55	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	65	1721	0	1779	132	0
16	66	1556	0	1659	93	0
17	67	1443	0	1485	85	0
18	68	1442	0	1543	113	0
19	69	1522	0	1617	82	0
20	70	1446	0	1487	97	0
21	71	1277	0	1323	80	0
22	72	796	0	812	36	0
23	73	1004	0	1048	77	0
24	74	528	0	558	30	0
25	75	969	0	1036	56	0
26	76	994	0	1081	47	0
27	77	1093	0	1155	44	0
28	78	1174	0	1215	74	0
29	79	463	0	491	18	0
30	80	743	0	797	43	0
31	81	890	0	938	52	0
32	82	1020	0	1090	54	0
33	83	851	0	880	59	0
34	84	881	0	949	62	0
35	85	970	0	1078	42	0
36	86	772	0	849	50	0
37	87	682	0	687	46	0
38	88	613	0	682	37	0
39	89	437	0	475	16	0
40	90	418	0	459	18	0
41	91	234	0	284	16	0
42	92	848	0	918	46	0
43	93	695	0	738	46	0
44	P0	987	0	999	46	0
45	RC	2445	0	2401	115	0
46	S0	1612	0	1623	107	0
47	S1	1709	0	1784	141	0
48	S2	1635	0	1723	101	0
49	S3	1734	0	1817	95	0
50	S4	2069	0	2154	121	0
51	S5	1610	0	1675	112	0
52	S6	1820	0	1918	81	0
53	S7	1481	0	1572	82	0
54	S8	1490	0	1525	80	0
55	S9	1494	0	1573	105	0
56	10	817	0	804	55	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	11	1245	0	1314	64	0
58	12	935	0	975	45	0
59	13	1193	0	1255	67	0
60	14	942	0	979	63	0
61	15	991	0	1035	62	0
62	16	1106	0	1166	82	0
63	17	965	0	1026	68	0
64	18	1193	0	1222	72	0
65	19	1113	0	1124	65	0
66	20	856	0	917	72	0
67	21	685	0	672	39	0
68	22	1022	0	1060	77	0
69	23	1122	0	1196	84	0
70	24	1074	0	1132	55	0
71	25	563	0	603	41	0
72	26	769	0	818	66	0
73	27	611	0	633	33	0
74	28	498	0	535	33	0
75	29	444	0	436	27	0
76	30	475	0	525	32	0
77	31	498	0	441	22	0
78	1S	37949	0	19093	951	0
79	2S	70616	0	35486	1791	0
80	8S	3354	0	1695	74	0
81	5S	2580	0	1304	75	0
82	ET	1644	0	836	30	0
82	PT	1644	0	836	25	0
83	MR	195	0	98	3	0
All	All	209136	0	154035	7478	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 21.

All (7478) 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)
1:L1:30:GLU:HB2	1:L1:34:LEU:HD11	1.32	1.10
78:1S:712:G:H2'	78:1S:713:A:H5''	1.34	1.09
1:L1:93:LEU:HD21	1:L1:118:LYS:HD2	1.35	1.08
79:2S:1604:G:H4'	79:2S:1835:A:H4'	1.35	1.08
79:2S:1971:C:H2'	79:2S:1972:A:H4'	1.27	1.07

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1844:C:H2'	79:2S:1845:G:H5''	1.37	1.07
79:2S:2476:C:H2'	79:2S:2477:G:H4'	1.35	1.06
79:2S:1626:U:H4'	79:2S:1632:A:H4'	1.39	1.04
56:10:87:VAL:H	56:10:88:PRO:HD2	1.21	1.04
17:67:36:ILE:HD11	17:67:44:ALA:HB1	1.35	1.04
78:1S:138:A:N6	78:1S:266:A:H61	1.56	1.03
72:26:82:ARG:HG3	72:26:83:ILE:H	1.22	1.03
79:2S:441:U:H3	79:2S:494:G:H4'	1.19	1.02
47:S1:71:ALA:HB2	47:S1:79:HIS:HB2	1.38	1.02
78:1S:1701:A:H3'	78:1S:1702:A:H5''	1.41	1.01
60:14:52:ARG:HD3	78:1S:905:A:H5''	1.42	1.00
3:L3:53:MET:HG2	3:L3:77:THR:HG22	1.44	1.00
54:S8:76:THR:HG22	54:S8:108:PRO:HG2	1.41	1.00
74:28:10:ALA:HA	74:28:32:PHE:HA	1.42	0.99
31:81:5:LYS:HA	31:81:89:LEU:HD21	1.45	0.99
5:L5:140:ARG:HG3	5:L5:141:PRO:HD2	1.42	0.99
53:S7:27:LEU:HD21	53:S7:80:GLU:HG2	1.46	0.98
68:22:40:VAL:HG21	68:22:103:ILE:HD12	1.45	0.98
78:1S:740:A:H3'	78:1S:741:C:H5''	1.42	0.98
31:81:62:ARG:HB2	31:81:66:GLY:HA3	1.46	0.98
37:87:25:ARG:HH21	79:2S:817:A:H61	1.10	0.98
79:2S:2513:U:H3	79:2S:2593:A:H62	1.13	0.97
79:2S:725:G:H2'	79:2S:726:G:H5''	1.46	0.97
25:75:117:ASN:HA	39:89:17:LYS:HD3	1.42	0.97
65:19:102:ARG:HD3	78:1S:1500:C:H5''	1.44	0.97
78:1S:515:A:H62	78:1S:537:G:H21	0.98	0.97
64:18:126:ARG:HG2	64:18:133:VAL:HB	1.43	0.96
44:P0:46:ARG:HH22	79:2S:1257:C:H4'	1.30	0.96
59:13:64:ARG:HB3	59:13:64:ARG:HH11	1.30	0.95
78:1S:593:U:H4'	78:1S:595:G:H4'	1.45	0.95
79:2S:1896:A:H61	79:2S:2339:C:H42	1.13	0.95
52:S6:72:ARG:HG2	52:S6:98:ARG:HG2	1.46	0.95
10:60:15:LYS:HE3	79:2S:1047:A:H5''	1.48	0.95
25:75:47:ALA:HB3	35:85:77:PRO:HG3	1.45	0.94
78:1S:237:C:H5''	78:1S:238:U:H5'	1.49	0.94
22:72:84:LEU:HB3	22:72:90:ARG:HG2	1.48	0.94
57:11:68:GLY:HA3	57:11:127:GLN:HB3	1.47	0.94
78:1S:707:A:H3'	78:1S:708:C:H5''	1.47	0.94
7:L7:25:GLN:HG2	7:L7:29:GLU:HB2	1.48	0.94
23:73:38:ALA:HB3	23:73:59:MET:HB2	1.48	0.94
78:1S:1657:U:H4'	78:1S:1658:G:H5''	1.50	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:31:144:CYS:HB3	77:31:147:VAL:HG13	1.50	0.94
4:L4:206:LEU:HG	4:L4:226:GLU:HB2	1.49	0.94
23:73:66:LYS:HB2	23:73:69:LEU:HD13	1.49	0.94
79:2S:2493:U:H3'	79:2S:2494:A:H5''	1.46	0.94
18:68:12:ARG:H	18:68:12:ARG:HE	1.11	0.93
60:14:85:ALA:H	60:14:119:THR:HG22	1.33	0.93
78:1S:1169:G:H21	78:1S:1576:A:H62	1.11	0.93
7:L7:63:ILE:HA	7:L7:66:LYS:HE3	1.48	0.93
49:S3:134:CYS:H	49:S3:157:LEU:HD11	1.34	0.93
79:2S:2068:U:H3'	79:2S:2069:G:H5'	1.47	0.93
79:2S:109:A:H4'	79:2S:110:G:H5'	1.48	0.93
79:2S:2798:C:H5''	79:2S:2800:G:H5'	1.50	0.93
21:71:128:LEU:HD11	79:2S:1096:U:H5'	1.50	0.92
44:P0:28:VAL:HG12	44:P0:187:VAL:HG22	1.49	0.92
79:2S:829:U:H3	79:2S:895:A:H62	1.09	0.92
36:86:94:ILE:HA	36:86:98:ARG:HD3	1.50	0.92
10:60:154:ARG:HH12	79:2S:2837:A:H5''	1.31	0.92
79:2S:1951:C:H6	79:2S:2095:G:H22	1.17	0.92
19:69:163:ARG:HG2	78:1S:815:G:H5''	1.51	0.92
55:S9:148:VAL:HG12	55:S9:150:LEU:H	1.32	0.92
2:L2:22:LEU:HB3	2:L2:52:SER:HB2	1.50	0.92
55:S9:39:LYS:HD3	55:S9:42:ILE:HD12	1.50	0.92
62:16:73:GLY:H	62:16:76:SER:HB3	1.32	0.92
59:13:71:ILE:H	59:13:71:ILE:HD12	1.33	0.91
21:71:78:LYS:HB2	21:71:87:LYS:HE2	1.50	0.91
30:80:13:LYS:HB3	30:80:100:ILE:HG12	1.52	0.91
39:89:43:ASN:HB3	39:89:46:ARG:HB2	1.52	0.91
50:S4:31:PRO:HG3	50:S4:43:PRO:HG3	1.49	0.91
79:2S:2361:A:H61	79:2S:2377:G:H1	1.13	0.91
4:L4:300:ARG:HB2	4:L4:301:PRO:HD2	1.53	0.91
25:75:113:LEU:HB3	79:2S:1523:U:H5'	1.51	0.91
81:5S:12:U:H4'	81:5S:110:G:H21	1.36	0.91
3:L3:94:GLU:HB3	16:66:152:VAL:HG13	1.53	0.91
78:1S:505:A:H3'	78:1S:506:A:H5''	1.53	0.90
66:20:62:VAL:HG22	66:20:85:ARG:HG3	1.53	0.90
78:1S:913:G:H3'	78:1S:914:G:H5''	1.50	0.90
47:S1:48:VAL:HG12	47:S1:49:ASN:H	1.35	0.90
55:S9:93:LEU:HD12	55:S9:96:VAL:HG21	1.52	0.90
79:2S:1565:G:H1	79:2S:1574:C:H42	1.14	0.90
79:2S:2536:A:H3'	79:2S:2537:U:H5''	1.51	0.90
79:2S:2530:G:H2'	79:2S:2531:C:H5''	1.54	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:S3:203:PRO:HA	63:17:42:GLN:HG3	1.52	0.90
13:63:70:ARG:HG2	13:63:71:ALA:H	1.36	0.90
79:2S:3334:U:H4'	79:2S:3335:A:H5''	1.51	0.90
59:13:130:ARG:HD2	59:13:137:PRO:HA	1.52	0.90
49:S3:134:CYS:HB3	49:S3:154:ASP:HB3	1.52	0.89
69:23:11:SER:HB3	78:1S:632:U:H4'	1.54	0.89
4:L4:152:VAL:HG12	4:L4:153:SER:H	1.36	0.89
3:L3:43:LEU:HD23	3:L3:181:ILE:HB	1.52	0.89
11:61:35:LYS:HD2	11:61:120:ILE:HG12	1.55	0.89
28:78:65:GLN:HA	28:78:68:PHE:HD2	1.37	0.89
34:84:58:ARG:HG3	34:84:59:PRO:HD2	1.52	0.89
78:1S:1229:G:H21	78:1S:1256:A:H62	1.20	0.89
8:L8:186:LEU:HB3	8:L8:195:SER:HB3	1.53	0.89
9:L9:23:ARG:HD2	9:L9:39:LYS:HA	1.54	0.89
79:2S:153:U:H2'	79:2S:154:U:H5''	1.53	0.89
3:L3:25:ILE:HD13	3:L3:25:ILE:H	1.37	0.89
10:60:174:THR:HG22	10:60:176:LEU:H	1.38	0.88
79:2S:2821:C:H42	79:2S:2869:U:H3	1.16	0.88
79:2S:2346:C:H2'	79:2S:2347:U:H5''	1.55	0.88
2:L2:48:ILE:HD11	43:93:63:THR:HG22	1.55	0.88
11:61:25:GLU:HG2	11:61:29:ARG:HD2	1.54	0.88
12:62:122:GLY:HA2	44:P0:43:LYS:HD3	1.53	0.88
47:S1:218:LEU:HD13	47:S1:218:LEU:H	1.36	0.88
79:2S:1064:A:H62	79:2S:1096:U:H3	1.16	0.88
20:70:80:ARG:HB3	20:70:122:HIS:HB2	1.54	0.88
33:83:9:VAL:HB	33:83:100:ILE:HB	1.55	0.88
50:S4:145:ARG:HH22	50:S4:167:GLY:HA2	1.39	0.87
56:10:16:PHE:HE1	56:10:82:LEU:HD11	1.36	0.87
79:2S:2483:G:H2'	79:2S:2484:A:H2'	1.55	0.87
4:L4:42:VAL:HA	4:L4:45:ASN:HD22	1.38	0.87
53:S7:11:GLN:HG3	53:S7:13:PRO:HD2	1.55	0.87
58:12:45:LEU:HD22	77:31:103:LEU:HD12	1.56	0.87
48:S2:164:SER:HB2	78:1S:1086:A:H5'	1.57	0.87
50:S4:19:LEU:HD21	50:S4:108:ARG:HD2	1.57	0.86
5:L5:141:PRO:HB2	5:L5:172:TYR:HB2	1.56	0.86
36:86:26:ILE:HD12	36:86:26:ILE:H	1.38	0.86
11:61:11:ASP:O	11:61:12:LEU:HB2	1.73	0.86
18:68:145:ASN:HD22	79:2S:745:C:H5''	1.39	0.86
48:S2:90:THR:HG23	48:S2:93:GLY:H	1.40	0.86
61:15:78:THR:HA	78:1S:1241:G:H4'	1.57	0.86
71:25:93:SER:HB2	71:25:100:ILE:HG22	1.56	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:58:G:H2'	79:2S:59:G:C8	2.09	0.86
13:63:47:ALA:HB1	13:63:48:PRO:HD2	1.57	0.86
16:66:60:LYS:HE3	79:2S:1307:G:H5''	1.56	0.86
79:2S:2778:G:H2'	79:2S:2779:A:H5''	1.58	0.86
63:17:122:ILE:HG12	63:17:123:ASN:H	1.39	0.86
64:18:116:LEU:HD21	64:18:123:ARG:HB3	1.58	0.86
69:23:96:VAL:HG23	69:23:97:ASP:H	1.40	0.86
75:29:11:PRO:HB3	75:29:13:ARG:HH12	1.40	0.86
3:L3:332:ARG:HD3	3:L3:332:ARG:H	1.39	0.86
68:22:81:VAL:HG13	68:22:85:ASP:HB2	1.55	0.86
78:1S:1350:U:H2'	78:1S:1351:G:C8	2.11	0.86
78:1S:777:C:H2'	78:1S:778:G:H5''	1.58	0.86
57:11:155:LYS:HD3	59:13:83:GLU:HA	1.58	0.85
67:21:18:SER:H	67:21:54:ALA:HB3	1.41	0.85
78:1S:1498:G:H2'	78:1S:1499:G:H5''	1.58	0.85
2:L2:227:ARG:HH21	79:2S:2161:G:H5''	1.41	0.85
30:80:79:THR:HG23	59:13:148:ALA:HA	1.58	0.85
79:2S:1581:C:H2'	79:2S:1582:C:H5'	1.58	0.85
54:S8:47:ARG:NH1	78:1S:397:A:H5''	1.91	0.85
54:S8:47:ARG:HH12	78:1S:397:A:H5''	1.40	0.85
62:16:40:GLU:HA	62:16:42:GLU:H	1.41	0.85
78:1S:1058:U:H5	78:1S:1061:A:N1	1.74	0.85
79:2S:1654:A:H2'	79:2S:1655:G:H5'	1.59	0.85
79:2S:3242:G:H5'	79:2S:3245:A:H1'	1.57	0.85
10:60:36:LEU:HD13	10:60:87:LEU:HD22	1.59	0.84
27:77:75:VAL:HG22	27:77:76:ASN:H	1.38	0.84
37:87:56:ARG:HH22	79:2S:362:U:H3'	1.40	0.84
47:S1:219:LYS:HE2	47:S1:219:LYS:HA	1.58	0.84
28:78:112:ILE:HB	28:78:130:VAL:HG12	1.57	0.84
79:2S:599:C:H2'	79:2S:600:G:H5''	1.59	0.84
60:14:76:ILE:H	60:14:76:ILE:HD12	1.41	0.84
79:2S:726:G:H21	79:2S:744:A:H62	1.24	0.84
81:5S:85:G:H1	81:5S:95:A:H61	1.24	0.84
18:68:179:ARG:HB3	18:68:179:ARG:NH1	1.93	0.84
68:22:89:TRP:HA	68:22:92:ASN:HB2	1.59	0.84
20:70:94:ILE:HG22	20:70:95:ARG:H	1.41	0.84
48:S2:140:ARG:HB3	48:S2:221:THR:HB	1.59	0.84
54:S8:137:LYS:H	54:S8:137:LYS:HD3	1.43	0.84
45:RC:137:LYS:HE3	45:RC:137:LYS:HA	1.58	0.84
53:S7:98:ILE:HG12	53:S7:121:VAL:HG21	1.59	0.83
7:L7:121:LYS:HD2	21:71:133:ALA:HB3	1.61	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:S0:10:THR:HG21	46:S0:191:ARG:HE	1.41	0.83
9:L9:135:GLU:O	9:L9:144:ILE:HG13	1.79	0.83
79:2S:250:U:H5'	79:2S:251:G:H5''	1.60	0.83
18:68:179:ARG:HB3	18:68:179:ARG:HH11	1.44	0.83
79:2S:2895:G:H2'	79:2S:2896:A:H5''	1.60	0.83
50:S4:137:PRO:HG2	50:S4:150:PRO:HD2	1.60	0.83
42:92:89:LYS:HE3	79:2S:2652:U:H4'	1.61	0.83
55:S9:38:ASN:HB2	55:S9:41:GLU:HG3	1.60	0.83
79:2S:915:A:H4'	79:2S:2957:G:H4'	1.60	0.83
51:S5:81:ARG:HH21	74:28:47:PRO:HA	1.42	0.83
69:23:50:LYS:HE2	78:1S:435:C:H5''	1.60	0.83
8:L8:185:ARG:HD3	80:8S:155:A:H5'	1.61	0.83
66:20:27:THR:HG23	66:20:113:ASP:HB3	1.61	0.83
79:2S:405:U:H2'	79:2S:406:G:H5'	1.60	0.83
10:60:185:ARG:HA	10:60:190:VAL:HB	1.60	0.83
25:75:81:ILE:HG12	25:75:125:ARG:HB2	1.61	0.83
55:S9:90:LYS:HB3	55:S9:95:TYR:HB2	1.59	0.83
61:15:14:THR:HB	61:15:22:LEU:HD21	1.61	0.83
62:16:115:THR:HA	62:16:118:ILE:HG22	1.60	0.83
13:63:161:ASP:HB2	28:78:144:VAL:HG12	1.61	0.82
26:76:17:LYS:HG2	80:8S:23:U:H4'	1.61	0.82
3:L3:100:ARG:HH22	79:2S:3242:G:H1'	1.44	0.82
5:L5:64:ILE:HD13	5:L5:76:ALA:HB3	1.59	0.82
13:63:70:ARG:HG2	13:63:71:ALA:N	1.93	0.82
13:63:59:ARG:HH22	13:63:150:PRO:HG2	1.44	0.82
68:22:24:GLN:HB3	68:22:64:GLN:HE22	1.43	0.82
79:2S:58:G:H2'	79:2S:59:G:H8	1.40	0.82
79:2S:627:U:H2'	79:2S:628:A:C8	2.14	0.82
23:73:20:GLY:H	23:73:36:ILE:HB	1.45	0.82
63:17:33:ARG:O	63:17:37:GLU:HG2	1.79	0.82
64:18:110:ARG:O	64:18:114:GLU:HG2	1.80	0.82
65:19:102:ARG:HH22	78:1S:1501:C:H41	1.23	0.82
72:26:86:VAL:HG22	72:26:87:ARG:H	1.42	0.82
8:L8:143:ILE:HG22	8:L8:173:MET:HG3	1.60	0.82
58:12:42:ALA:HB3	58:12:122:VAL:HB	1.61	0.82
62:16:97:VAL:HG12	62:16:98:ASP:H	1.43	0.82
2:L2:191:LEU:HD11	79:2S:1794:G:H4'	1.62	0.81
28:78:32:ARG:HD2	79:2S:38:U:H4'	1.60	0.81
36:86:79:SER:HB2	36:86:82:ARG:HG3	1.60	0.81
47:S1:135:LEU:HB3	47:S1:217:LEU:HG	1.61	0.81
79:2S:160:G:H3'	79:2S:161:G:H5''	1.60	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:33:LYS:HA	47:S1:41:ARG:O	1.80	0.81
64:18:115:ARG:HB3	64:18:115:ARG:HH21	1.45	0.81
44:P0:25:LEU:HB3	44:P0:191:TYR:HB3	1.62	0.81
66:20:106:ILE:HG13	66:20:107:THR:H	1.44	0.81
69:23:102:VAL:HG12	69:23:127:VAL:HG12	1.60	0.81
79:2S:1257:C:H3'	79:2S:1258:U:H5''	1.62	0.81
53:S7:138:LYS:HG3	53:S7:152:VAL:HG22	1.61	0.81
20:70:71:LYS:HD2	79:2S:562:C:H5''	1.60	0.81
2:L2:224:THR:HG21	79:2S:2201:G:H21	1.46	0.81
1:L1:169:VAL:HG12	1:L1:170:GLY:H	1.45	0.81
10:60:200:LEU:HD11	10:60:209:ASN:HD21	1.44	0.81
31:81:106:THR:HG22	79:2S:3324:C:H1'	1.63	0.81
78:1S:1350:U:H2'	78:1S:1351:G:H8	1.45	0.81
79:2S:4:U:H3	80:8S:155:A:H2	1.28	0.80
27:77:14:VAL:HG13	27:77:15:ARG:HG3	1.63	0.80
36:86:77:LEU:HD13	36:86:82:ARG:HB3	1.63	0.80
48:S2:66:PHE:HB2	48:S2:133:LYS:HD2	1.61	0.80
11:61:110:ILE:HG13	64:18:16:ARG:HD2	1.62	0.80
56:10:87:VAL:H	56:10:88:PRO:CD	1.92	0.80
38:88:69:LEU:HD21	38:88:73:LEU:HD22	1.64	0.80
47:S1:148:ASN:H	47:S1:148:ASN:HD22	1.29	0.80
72:26:78:ALA:HA	72:26:82:ARG:HB3	1.62	0.80
79:2S:516:A:H2'	79:2S:517:G:H5''	1.63	0.80
2:L2:21:ARG:HD3	79:2S:824:C:H5''	1.64	0.80
3:L3:84:VAL:HG22	3:L3:164:THR:HG22	1.63	0.80
73:27:33:LEU:HB2	73:27:79:PHE:HB2	1.62	0.80
79:2S:2971:A:H5''	79:2S:2972:G:H5''	1.62	0.80
25:75:82:LEU:HD21	25:75:132:ALA:HB1	1.63	0.80
16:66:119:VAL:HG23	20:70:164:SER:HB3	1.63	0.80
56:10:58:GLN:HB2	56:10:65:TYR:HB2	1.63	0.80
26:76:121:ARG:HG2	79:2S:185:C:H5'	1.63	0.80
1:L1:32:VAL:HG22	1:L1:33:GLU:H	1.44	0.80
78:1S:755:A:H2'	78:1S:756:A:O4'	1.81	0.80
5:L5:294:ALA:HB1	10:60:217:PHE:HB3	1.63	0.79
51:S5:112:ARG:HA	51:S5:112:ARG:HE	1.47	0.79
59:13:99:ARG:NH2	59:13:102:LEU:HD12	1.97	0.79
9:L9:23:ARG:HB2	9:L9:39:LYS:HG2	1.62	0.79
49:S3:70:THR:HG22	49:S3:86:LEU:HD13	1.63	0.79
53:S7:185:ILE:H	53:S7:185:ILE:HD13	1.47	0.79
1:L1:120:VAL:HG23	1:L1:121:PRO:HD3	1.65	0.79
2:L2:68:LYS:HG2	2:L2:69:TYR:H	1.47	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
74:28:12:VAL:HA	74:28:30:VAL:HG12	1.64	0.79
79:2S:3299:A:H61	79:2S:3315:G:H1	1.30	0.79
1:L1:169:VAL:HB	1:L1:172:VAL:HG23	1.63	0.79
4:L4:322:GLN:HB3	79:2S:608:A:H5'	1.65	0.79
7:L7:86:VAL:HG22	7:L7:136:TYR:HB3	1.65	0.79
36:86:89:GLU:O	36:86:93:ILE:HG12	1.82	0.79
39:89:22:PRO:HG3	79:2S:1517:G:H5''	1.63	0.79
42:92:36:PHE:HZ	79:2S:2225:U:H4'	1.46	0.79
47:S1:134:VAL:HB	47:S1:219:LYS:HB2	1.63	0.79
79:2S:2356:A:H61	79:2S:2983:C:H41	1.30	0.79
79:2S:2356:A:N6	79:2S:2983:C:H5	1.79	0.79
79:2S:2501:U:H2'	79:2S:2502:A:H5'	1.65	0.79
4:L4:52:VAL:HG22	4:L4:53:SER:H	1.47	0.79
49:S3:49:ILE:HG13	49:S3:87:TYR:HB2	1.63	0.79
52:S6:14:LYS:HD2	52:S6:123:GLY:HA3	1.64	0.79
58:12:74:LEU:HD21	77:31:106:TYR:HB2	1.63	0.79
70:24:132:ARG:O	70:24:132:ARG:HD3	1.83	0.79
78:1S:1621:U:H3'	78:1S:1622:G:H5''	1.64	0.79
79:2S:618:C:H2'	79:2S:619:A:H5'	1.65	0.79
79:2S:2700:G:H2'	79:2S:2701:U:C6	2.18	0.79
79:2S:3348:G:H1	79:2S:3357:U:H3	1.27	0.79
19:69:106:LEU:HB3	19:69:120:TYR:HE1	1.48	0.79
45:RC:157:VAL:HG11	45:RC:225:LEU:CD2	2.13	0.79
78:1S:492:A:H5''	78:1S:493:U:H5'	1.65	0.79
79:2S:1238:C:H3'	79:2S:1239:C:H5''	1.63	0.79
17:67:3:ARG:HA	17:67:3:ARG:HE	1.48	0.78
24:74:13:ILE:HG12	24:74:32:GLN:HG2	1.65	0.78
79:2S:1488:G:H5''	79:2S:1838:G:O6	1.82	0.78
48:S2:225:LEU:HB3	48:S2:230:TRP:HE1	1.48	0.78
66:20:55:PRO:HB2	66:20:89:ARG:HG2	1.64	0.78
9:L9:27:VAL:HG21	9:L9:78:MET:HB3	1.65	0.78
34:84:31:ARG:HG3	34:84:32:ALA:H	1.48	0.78
35:85:78:LYS:HA	35:85:81:ARG:HD3	1.64	0.78
17:67:135:ARG:HB2	17:67:135:ARG:HH11	1.46	0.78
46:S0:76:ILE:HD13	46:S0:98:ILE:HB	1.63	0.78
2:L2:133:TYR:HB3	2:L2:168:VAL:HG12	1.64	0.78
35:85:71:LYS:HA	35:85:71:LYS:HE3	1.65	0.78
2:L2:219:ILE:HD12	79:2S:2245:C:H5''	1.66	0.78
14:64:14:LEU:HD22	20:70:151:PRO:HD3	1.63	0.78
18:68:3:ILE:HD13	79:2S:1364:C:H5''	1.65	0.78
54:S8:97:THR:HA	54:S8:173:PRO:HG2	1.64	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:868:G:H1	78:1S:960:U:H3	1.31	0.78
13:63:106:GLN:HB3	36:86:18:THR:HG23	1.64	0.78
16:66:12:LYS:HA	16:66:40:GLU:HB3	1.64	0.78
79:2S:118:U:O2	79:2S:121:A:H5'	1.83	0.78
79:2S:1040:A:H3'	79:2S:1041:U:H5''	1.64	0.78
1:L1:158:GLN:HG3	1:L1:162:VAL:HG12	1.65	0.78
79:2S:1016:C:H2'	79:2S:1017:C:H5'	1.66	0.78
79:2S:1844:C:C2'	79:2S:1845:G:H5''	2.13	0.78
48:S2:37:PRO:HD2	48:S2:46:LYS:HD2	1.65	0.78
42:92:44:ASP:HA	42:92:47:GLN:HB3	1.66	0.78
52:S6:98:ARG:HD3	52:S6:99:GLY:H	1.49	0.78
78:1S:391:A:H4'	78:1S:1730:A:H5''	1.65	0.77
59:13:136:PRO:HG2	59:13:139:TRP:HB2	1.66	0.77
64:18:105:VAL:HG13	64:18:106:GLU:H	1.49	0.77
23:73:67:PRO:HA	23:73:70:ARG:HD3	1.67	0.77
2:L2:246:LEU:HD22	2:L2:250:GLN:HG3	1.67	0.77
78:1S:689:G:H2'	78:1S:690:G:H5''	1.66	0.77
2:L2:206:PRO:HG3	2:L2:213:GLY:HA3	1.66	0.77
62:16:7:VAL:HG13	62:16:96:TYR:HE2	1.49	0.77
65:19:130:ARG:HA	78:1S:1358:G:H4'	1.64	0.77
69:23:76:LEU:HD12	69:23:81:LYS:HB2	1.66	0.77
26:76:12:ARG:HG3	79:2S:215:G:H5''	1.67	0.77
53:S7:121:VAL:O	53:S7:125:ILE:HG13	1.84	0.77
54:S8:41:LYS:HA	54:S8:60:ILE:HG12	1.67	0.77
68:22:78:ARG:HB3	68:22:124:LYS:HD3	1.66	0.77
71:25:96:SER:O	71:25:97:LYS:HB3	1.85	0.77
10:60:190:VAL:HG13	10:60:197:VAL:HG21	1.65	0.77
11:61:140:ARG:HB3	81:5S:43:U:H4'	1.65	0.77
16:66:43:ILE:HG22	16:66:44:SER:H	1.49	0.77
31:81:107:VAL:HG12	31:81:108:VAL:H	1.49	0.77
34:84:68:THR:HG21	79:2S:1644:C:H41	1.50	0.77
78:1S:138:A:H61	78:1S:266:A:H61	1.33	0.77
2:L2:117:GLU:HG2	2:L2:124:GLY:H	1.50	0.77
47:S1:176:VAL:HG12	47:S1:177:GLN:H	1.50	0.77
49:S3:15:GLY:HA3	75:29:50:ILE:HG23	1.67	0.77
50:S4:198:LYS:HG2	50:S4:208:VAL:HG22	1.65	0.77
59:13:22:ALA:HB1	59:13:23:PRO:HA	1.66	0.77
74:28:29:ARG:HG3	74:28:41:VAL:HG22	1.67	0.77
2:L2:207:VAL:HG13	79:2S:2415:C:H5''	1.67	0.77
35:85:85:THR:HG22	35:85:87:ALA:H	1.50	0.77
36:86:5:THR:HG23	36:86:12:ASN:HB2	1.65	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RC:157:VAL:HG11	45:RC:225:LEU:HD21	1.66	0.77
55:S9:65:LYS:HD3	55:S9:70:LEU:HD11	1.66	0.77
65:19:15:ILE:HG23	65:19:59:ALA:HB3	1.67	0.77
79:2S:428:A:H2'	79:2S:429:U:C6	2.19	0.77
27:77:25:ILE:HA	27:77:43:VAL:HG12	1.66	0.76
45:RC:123:ILE:HD12	45:RC:154:VAL:HB	1.68	0.76
75:29:54:LYS:HE3	78:1S:1419:G:H4'	1.65	0.76
78:1S:1519:U:H2'	78:1S:1520:U:C5	2.19	0.76
79:2S:1951:C:C5	79:2S:2095:G:N1	2.50	0.76
79:2S:2612:U:H2'	79:2S:2613:U:O4'	1.85	0.76
2:L2:115:ASN:HA	2:L2:126:LEU:O	1.85	0.76
3:L3:283:TYR:HE1	3:L3:325:LYS:HB2	1.50	0.76
17:67:25:SER:HB3	17:67:28:ASN:ND2	1.98	0.76
22:72:19:VAL:HG12	22:72:105:LEU:HD13	1.67	0.76
13:63:57:VAL:HG22	13:63:147:ILE:HD12	1.67	0.76
17:67:135:ARG:HB2	17:67:135:ARG:NH1	2.00	0.76
60:14:87:GLY:HA3	60:14:120:PRO:HG2	1.66	0.76
47:S1:96:LEU:HD23	47:S1:96:LEU:H	1.50	0.76
52:S6:78:THR:HG22	52:S6:79:LYS:H	1.50	0.76
10:60:154:ARG:NH1	79:2S:2837:A:H5''	2.00	0.76
45:RC:196:ASN:ND2	45:RC:219:GLU:HG3	2.01	0.76
10:60:165:ILE:HD13	10:60:165:ILE:H	1.50	0.76
24:74:13:ILE:HA	24:74:32:GLN:HE21	1.51	0.76
70:24:7:ILE:HG23	70:24:27:VAL:HG22	1.68	0.76
78:1S:218:A:H3'	78:1S:219:A:H5''	1.67	0.76
78:1S:515:A:N6	78:1S:537:G:H21	1.82	0.76
21:71:40:VAL:HB	21:71:96:ILE:HG23	1.68	0.76
27:77:22:LYS:HE3	27:77:134:LEU:HD23	1.67	0.76
57:11:149:ALA:O	57:11:152:GLN:HG2	1.86	0.76
79:2S:725:G:C2'	79:2S:726:G:H5''	2.16	0.76
1:L1:201:VAL:HG13	1:L1:204:LEU:HD11	1.67	0.76
45:RC:89:LEU:HB2	45:RC:103:PHE:HB2	1.66	0.76
52:S6:179:VAL:HA	52:S6:183:ARG:HD3	1.68	0.76
78:1S:773:C:H4'	78:1S:774:A:H5'	1.66	0.76
81:5S:29:C:H2'	81:5S:30:G:H8	1.49	0.76
5:L5:63:GLN:HG2	5:L5:77:ALA:HA	1.66	0.76
45:RC:10:ARG:HB3	45:RC:312:VAL:HG23	1.67	0.76
76:30:47:VAL:HG22	76:30:48:THR:H	1.50	0.76
78:1S:1589:C:H2'	78:1S:1590:G:C8	2.20	0.76
31:81:79:ARG:HE	31:81:81:GLU:HG2	1.48	0.76
36:86:84:LYS:O	36:86:88:GLU:HG2	1.86	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:S3:134:CYS:N	49:S3:157:LEU:HD11	2.01	0.76
59:13:96:VAL:HA	59:13:99:ARG:HB2	1.66	0.76
71:25:70:LYS:HG3	71:25:71:ILE:H	1.49	0.76
45:RC:196:ASN:HD22	45:RC:219:GLU:HG3	1.50	0.75
60:14:30:VAL:HG12	60:14:40:ALA:HB3	1.67	0.75
60:14:70:LYS:HA	60:14:70:LYS:HE2	1.68	0.75
61:15:98:ASN:HB2	61:15:122:THR:HG22	1.66	0.75
79:2S:1312:C:H2'	79:2S:1313:G:O4'	1.85	0.75
62:16:40:GLU:HG3	62:16:41:PRO:HA	1.69	0.75
78:1S:1573:A:H4'	78:1S:1574:G:H5'	1.69	0.75
79:2S:3174:A:H2'	79:2S:3175:U:H5'	1.67	0.75
16:66:34:VAL:HG12	16:66:103:LYS:HB2	1.68	0.75
18:68:100:THR:HG23	18:68:122:ILE:HD13	1.68	0.75
2:L2:140:ASN:HB3	2:L2:145:LYS:HB2	1.68	0.75
55:S9:59:LEU:HD22	55:S9:69:ARG:HA	1.66	0.75
62:16:31:VAL:HG13	62:16:67:VAL:HB	1.66	0.75
70:24:35:VAL:HG13	70:24:36:SER:H	1.50	0.75
72:26:36:ILE:HG23	72:26:73:TYR:HB2	1.66	0.75
78:1S:386:G:H2'	78:1S:387:A:C8	2.22	0.75
11:61:49:LYS:HB3	11:61:62:ASN:HA	1.69	0.75
18:68:147:ARG:NH2	18:68:149:ALA:HB3	2.00	0.75
52:S6:93:LYS:HE3	78:1S:405:C:H5''	1.67	0.75
56:10:16:PHE:CE1	56:10:82:LEU:HD11	2.22	0.75
59:13:62:GLN:HB2	59:13:65:VAL:HG23	1.68	0.75
78:1S:1012:U:H5'	78:1S:1012:U:H6	1.50	0.75
78:1S:1552:U:H2'	78:1S:1553:G:O4'	1.86	0.75
79:2S:1951:C:C6	79:2S:2095:G:N1	2.54	0.75
16:66:160:ARG:HB3	16:66:160:ARG:HH11	1.51	0.75
46:S0:189:VAL:HG13	46:S0:190:ASP:H	1.50	0.75
53:S7:91:ILE:HG13	53:S7:92:PHE:H	1.50	0.75
78:1S:189:C:H3'	78:1S:190:C:H5''	1.67	0.75
78:1S:1158:C:C5	78:1S:1581:C:H2'	2.21	0.75
79:2S:1565:G:H21	79:2S:1575:A:H62	1.35	0.75
2:L2:104:LEU:HD22	2:L2:162:ALA:HB3	1.68	0.75
7:L7:118:LYS:HE2	7:L7:191:VAL:HG11	1.69	0.75
64:18:54:LEU:H	64:18:54:LEU:HD22	1.50	0.75
79:2S:2347:U:H2'	79:2S:2348:A:O4'	1.86	0.75
1:L1:60:ARG:HB2	1:L1:180:VAL:HG21	1.69	0.75
36:86:26:ILE:HG22	79:2S:155:G:H21	1.52	0.75
45:RC:19:TRP:HB2	45:RC:38:ARG:HD2	1.68	0.75
56:10:80:LEU:O	56:10:82:LEU:HG	1.87	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:13:121:ARG:HD3	78:1S:867:G:H4'	1.68	0.75
72:26:84:VAL:HG13	72:26:85:ARG:H	1.48	0.75
79:2S:1951:C:H6	79:2S:2095:G:N2	1.83	0.75
20:70:6:GLU:O	20:70:63:GLN:HG3	1.87	0.75
28:78:118:ILE:HB	28:78:119:PRO:HD2	1.67	0.75
38:88:26:LYS:HZ1	79:2S:1750:A:H4'	1.50	0.75
51:S5:29:ILE:HA	62:16:37:THR:HG21	1.67	0.75
78:1S:1711:C:H2'	78:1S:1712:A:H4'	1.69	0.75
79:2S:1238:C:C3'	79:2S:1239:C:H5''	2.17	0.75
2:L2:74:GLU:HB3	2:L2:76:PHE:HE1	1.52	0.74
65:19:102:ARG:NH2	78:1S:1501:C:H41	1.85	0.74
3:L3:20:LYS:HB3	79:2S:2990:G:H5'	1.68	0.74
6:L6:82:ARG:HD2	33:83:104:PRO:HB3	1.68	0.74
25:75:74:LYS:HE2	25:75:74:LYS:HA	1.68	0.74
58:12:24:ILE:HD13	58:12:24:ILE:H	1.51	0.74
70:24:5:VAL:HG13	70:24:29:HIS:HB3	1.69	0.74
78:1S:145:A:HO2'	78:1S:146:U:H6	1.32	0.74
22:72:17:VAL:HG22	22:72:103:TYR:HD2	1.50	0.74
46:S0:184:LEU:HD13	67:21:39:VAL:HG11	1.70	0.74
50:S4:31:PRO:HB3	50:S4:83:PRO:HB3	1.67	0.74
79:2S:543:C:H42	79:2S:548:G:H1	1.31	0.74
79:2S:3192:U:H2'	79:2S:3193:C:C6	2.22	0.74
3:L3:152:LYS:HG2	3:L3:192:VAL:HG11	1.69	0.74
68:22:29:PRO:HB2	68:22:58:SER:HB2	1.68	0.74
79:2S:1764:U:H3'	79:2S:1765:U:H5''	1.70	0.74
19:69:82:LYS:HD3	79:2S:1863:G:H4'	1.68	0.74
65:19:114:VAL:HG22	65:19:115:GLU:H	1.51	0.74
69:23:76:LEU:HD13	69:23:79:ASN:HD22	1.49	0.74
78:1S:138:A:H8	78:1S:141:U:H4'	1.51	0.74
3:L3:136:LYS:O	3:L3:144:ILE:HD11	1.86	0.74
8:L8:50:VAL:HG12	25:75:30:ALA:HA	1.69	0.74
15:65:104:GLU:HG2	15:65:160:GLU:HG2	1.68	0.74
25:75:51:VAL:HG11	35:85:62:GLN:HE21	1.50	0.74
44:P0:34:SER:O	44:P0:38:MET:HG2	1.88	0.74
47:S1:180:THR:O	47:S1:184:LEU:HD23	1.87	0.74
78:1S:230:C:H3'	78:1S:231:U:H5''	1.68	0.74
78:1S:709:C:H2'	78:1S:710:U:H4'	1.70	0.74
8:L8:101:THR:HG22	8:L8:104:GLU:HG3	1.69	0.74
19:69:90:PRO:HB2	19:69:93:VAL:HG23	1.69	0.74
33:83:59:VAL:HG23	33:83:60:ARG:H	1.52	0.74
72:26:12:LYS:HE3	78:1S:1790:A:H5''	1.68	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:138:A:N6	78:1S:266:A:N6	2.35	0.74
78:1S:811:A:H2	78:1S:814:A:H62	1.35	0.74
78:1S:1701:A:H3'	78:1S:1702:A:C5'	2.17	0.74
79:2S:2271:A:H2'	79:2S:2272:G:H4'	1.70	0.74
16:66:37:ARG:HG2	16:66:107:GLY:HA2	1.67	0.74
18:68:147:ARG:O	18:68:150:VAL:HG22	1.88	0.74
20:70:79:VAL:HB	20:70:90:MET:HB2	1.68	0.74
42:92:49:GLY:HA2	79:2S:277:G:H5''	1.70	0.74
65:19:49:ASP:HB3	65:19:53:TRP:HD1	1.52	0.74
3:L3:86:VAL:HA	3:L3:162:VAL:HG12	1.68	0.74
15:65:80:THR:HG21	15:65:87:GLN:HG2	1.69	0.74
43:93:51:ALA:HB3	43:93:54:ILE:HD12	1.68	0.74
68:22:96:ALA:HB1	68:22:98:GLN:HE21	1.51	0.74
48:S2:69:ILE:HG12	48:S2:133:LYS:HB3	1.67	0.74
50:S4:102:VAL:HG22	50:S4:103:TYR:H	1.52	0.74
78:1S:871:G:H2'	78:1S:872:G:C8	2.22	0.74
45:RC:170:ILE:HD11	45:RC:204:ALA:HB2	1.70	0.73
72:26:44:ILE:HD13	72:26:65:PRO:HG2	1.70	0.73
80:8S:107:G:H2'	80:8S:108:C:C6	2.22	0.73
51:S5:77:TYR:HB3	51:S5:84:LYS:HA	1.69	0.73
55:S9:163:PRO:HG3	78:1S:512:A:H5''	1.68	0.73
57:11:21:ASN:HB3	57:11:31:THR:HG23	1.69	0.73
2:L2:227:ARG:NH2	79:2S:2161:G:H5''	2.01	0.73
21:71:68:THR:HG23	21:71:69:LYS:H	1.52	0.73
49:S3:212:LYS:HG2	49:S3:213:GLU:H	1.52	0.73
69:23:74:VAL:HG12	69:23:75:GLN:H	1.53	0.73
76:30:14:VAL:HA	76:30:17:GLN:HG2	1.70	0.73
79:2S:2346:C:C2'	79:2S:2347:U:H5''	2.19	0.73
1:L1:207:LYS:HD3	79:2S:2491:A:C1'	2.19	0.73
4:L4:29:PRO:HD2	4:L4:277:PRO:HB2	1.71	0.73
34:84:39:ALA:HB2	34:84:58:ARG:HD2	1.68	0.73
51:S5:160:VAL:HG21	74:28:45:LYS:HD2	1.70	0.73
61:15:126:VAL:HG13	61:15:127:ARG:H	1.52	0.73
7:L7:196:LYS:HD3	7:L7:197:GLN:HE21	1.54	0.73
18:68:12:ARG:HG3	79:2S:1342:C:H5''	1.71	0.73
79:2S:763:G:C2	79:2S:764:U:H1'	2.22	0.73
82:ET:21:U:H3'	82:ET:22:A:H5'	1.70	0.73
8:L8:116:VAL:HA	8:L8:121:SER:HB2	1.71	0.73
13:63:3:ILE:HD11	28:78:34:MET:HA	1.70	0.73
26:76:55:GLU:HB2	26:76:108:LYS:HB2	1.70	0.73
26:76:68:GLY:HA2	26:76:84:LYS:HD2	1.71	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:S3:92:GLN:NE2	49:S3:92:GLN:H	1.87	0.73
79:2S:1472:U:H2'	79:2S:1473:G:C8	2.23	0.73
10:60:213:PHE:N	10:60:214:PRO:HD3	2.04	0.73
78:1S:1646:C:H42	78:1S:1754:A:H61	1.37	0.73
35:85:84:LYS:HE3	35:85:88:LEU:HD13	1.69	0.73
71:25:55:PRO:HA	71:25:88:ILE:HG21	1.71	0.73
79:2S:257:U:H2'	79:2S:258:G:H8	1.54	0.73
18:68:81:VAL:HG23	18:68:101:VAL:HA	1.69	0.73
60:14:14:PHE:HA	60:14:78:ALA:HB3	1.71	0.73
68:22:29:PRO:HB2	68:22:58:SER:CB	2.17	0.73
79:2S:2516:U:H1'	79:2S:2595:A:H62	1.54	0.73
15:65:204:LYS:HZ1	79:2S:82:C:H4'	1.53	0.73
21:71:129:LYS:HE3	79:2S:1096:U:H5''	1.70	0.73
33:83:35:VAL:HG13	33:83:40:ASP:HB2	1.70	0.73
79:2S:72:C:H1'	79:2S:74:G:H1'	1.71	0.73
4:L4:205:PRO:HG2	4:L4:225:VAL:HG22	1.70	0.72
5:L5:40:HIS:HA	21:71:69:LYS:HG3	1.68	0.72
14:64:85:TRP:HE1	14:64:91:CYS:HB3	1.54	0.72
1:L1:207:LYS:HD3	79:2S:2491:A:H1'	1.70	0.72
19:69:106:LEU:HB3	19:69:120:TYR:CE1	2.24	0.72
79:2S:2536:A:H3'	79:2S:2537:U:C5'	2.18	0.72
46:S0:30:GLN:HG2	46:S0:149:LEU:HD22	1.72	0.72
70:24:102:LYS:HB2	70:24:108:ARG:HH11	1.53	0.72
2:L2:150:LEU:HD13	79:2S:2157:G:C8	2.24	0.72
18:68:16:ARG:HH22	79:2S:671:U:H5''	1.53	0.72
48:S2:228:ASN:HD22	67:21:1:MET:HG2	1.54	0.72
66:20:55:PRO:HB3	66:20:91:ILE:HG12	1.70	0.72
79:2S:2533:G:H5'	79:2S:2533:G:H8	1.54	0.72
51:S5:60:ASP:O	51:S5:85:ALA:HB1	1.88	0.72
77:31:108:VAL:HB	77:31:114:VAL:HG22	1.71	0.72
78:1S:1158:C:H5	78:1S:1581:C:H2'	1.55	0.72
1:L1:59:PRO:HG2	1:L1:180:VAL:HG22	1.70	0.72
7:L7:123:THR:HA	7:L7:126:LEU:HD12	1.69	0.72
18:68:86:THR:HG22	18:68:105:ARG:HB2	1.71	0.72
22:72:84:LEU:HD23	22:72:89:LEU:HB2	1.70	0.72
46:S0:45:VAL:HG12	46:S0:46:HIS:H	1.54	0.72
54:S8:37:LYS:HB2	54:S8:59:ARG:HG2	1.71	0.72
56:10:46:LEU:O	56:10:50:THR:HG23	1.90	0.72
23:73:80:ARG:HD3	23:73:117:PRO:HG2	1.70	0.72
47:S1:106:THR:O	47:S1:110:LEU:HD13	1.89	0.72
56:10:87:VAL:N	56:10:88:PRO:HD2	2.01	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:18:102:ALA:O	64:18:105:VAL:HG12	1.90	0.72
79:2S:2525:G:H5''	79:2S:2526:C:O5'	1.89	0.72
79:2S:3317:U:H4'	79:2S:3318:G:H5'	1.71	0.72
24:74:17:ARG:CZ	79:2S:3050:U:H5''	2.19	0.72
48:S2:83:ILE:HG12	48:S2:100:ALA:HA	1.71	0.72
69:23:73:ARG:HG2	69:23:84:THR:HG22	1.71	0.72
73:27:61:THR:HG23	73:27:62:ILE:H	1.54	0.72
78:1S:395:U:H2'	78:1S:396:G:O4'	1.90	0.72
78:1S:912:U:H5'	78:1S:913:G:H2'	1.70	0.72
78:1S:1058:U:C5	78:1S:1061:A:N1	2.57	0.72
78:1S:1686:C:H5'	78:1S:1686:C:H6	1.55	0.72
4:L4:317:PRO:HG2	7:L7:149:TYR:HD2	1.54	0.72
78:1S:926:A:H2'	78:1S:927:C:C6	2.25	0.72
78:1S:1667:A:H2'	78:1S:1668:G:C8	2.25	0.72
79:2S:1291:A:H3'	79:2S:1292:C:H5''	1.72	0.72
5:L5:109:THR:O	5:L5:113:LEU:HB2	1.90	0.72
5:L5:236:LEU:HD12	5:L5:239:ILE:HD12	1.71	0.72
46:S0:83:GLN:O	46:S0:87:LEU:HD13	1.90	0.72
48:S2:38:VAL:HG22	48:S2:39:THR:H	1.52	0.72
78:1S:495:C:H5'	78:1S:496:G:H4'	1.72	0.72
79:2S:2094:C:H2'	79:2S:2095:G:H8	1.55	0.72
13:63:157:ARG:HH21	28:78:124:ILE:HG21	1.55	0.71
56:10:86:ILE:HD13	56:10:88:PRO:HD2	1.72	0.71
68:22:97:ARG:HB3	68:22:97:ARG:NH1	2.04	0.71
78:1S:913:G:H3'	78:1S:914:G:C5'	2.20	0.71
79:2S:920:A:H4'	79:2S:921:A:H5''	1.70	0.71
79:2S:2344:U:H2'	79:2S:2345:A:C8	2.24	0.71
3:L3:84:VAL:HG12	3:L3:162:VAL:HB	1.71	0.71
6:L6:176:PHE:HD2	33:83:107:ILE:HG21	1.55	0.71
7:L7:30:ARG:O	7:L7:34:LYS:HB2	1.90	0.71
7:L7:142:SER:OG	79:2S:576:C:H5''	1.90	0.71
15:65:204:LYS:NZ	79:2S:82:C:H4'	2.04	0.71
51:S5:128:ASN:O	51:S5:132:VAL:HG23	1.90	0.71
9:L9:111:PHE:HB3	9:L9:125:ASN:HB3	1.70	0.71
72:26:42:ARG:NH1	72:26:42:ARG:HB2	2.06	0.71
76:30:48:THR:HB	76:30:49:LEU:HD23	1.71	0.71
79:2S:1787:A:C3'	79:2S:1788:C:H5''	2.20	0.71
79:2S:3389:U:H6	79:2S:3389:U:H5'	1.55	0.71
2:L2:41:ILE:HG12	2:L2:42:ARG:H	1.55	0.71
7:L7:224:ILE:HD13	20:70:39:SER:HB2	1.72	0.71
51:S5:128:ASN:HD22	51:S5:129:PRO:HD2	1.55	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
76:30:55:ARG:HB3	76:30:58:PRO:HG3	1.72	0.71
79:2S:2207:A:H3'	79:2S:2208:A:H5'	1.72	0.71
5:L5:30:TYR:HA	5:L5:33:ARG:HB3	1.72	0.71
6:L6:130:ILE:H	6:L6:130:ILE:HD12	1.55	0.71
14:64:21:VAL:HG12	14:64:65:LEU:HA	1.71	0.71
48:S2:240:LEU:O	48:S2:244:SER:HB2	1.91	0.71
66:20:82:TYR:HB3	75:29:52:PHE:HB3	1.73	0.71
78:1S:390:G:H8	78:1S:1731:A:H4'	1.55	0.71
78:1S:878:G:H2'	78:1S:879:G:C8	2.25	0.71
79:2S:1066:G:H2'	79:2S:1067:U:C6	2.26	0.71
79:2S:1176:C:H3'	79:2S:1177:G:H2'	1.71	0.71
32:82:38:ILE:HA	32:82:43:ARG:HE	1.55	0.71
48:S2:187:LEU:HD22	48:S2:211:LEU:HD22	1.71	0.71
69:23:126:LYS:HE3	69:23:129:GLY:HA2	1.71	0.71
79:2S:2356:A:N6	79:2S:2983:C:C5	2.57	0.71
79:2S:2778:G:C2'	79:2S:2779:A:H5''	2.21	0.71
17:67:29:THR:HA	17:67:32:THR:HG22	1.73	0.71
38:88:51:LEU:HD22	79:2S:1612:A:H5''	1.71	0.71
55:S9:101:VAL:O	55:S9:105:LEU:HD13	1.89	0.71
79:2S:153:U:C2'	79:2S:154:U:H5''	2.21	0.71
79:2S:2485:A:H2'	79:2S:2486:A:H5'	1.72	0.71
79:2S:2567:C:H3'	79:2S:2568:C:H5''	1.73	0.71
30:80:24:THR:HG23	30:80:30:THR:HG22	1.70	0.71
79:2S:744:A:H2'	79:2S:745:C:H5'	1.72	0.71
79:2S:3079:U:H3'	79:2S:3080:G:H5''	1.71	0.71
7:L7:166:ASN:HA	7:L7:169:ILE:HD12	1.73	0.71
64:18:105:VAL:HG13	64:18:106:GLU:N	2.06	0.71
66:20:23:ARG:HB3	66:20:117:VAL:HG13	1.73	0.71
10:60:87:LEU:HD23	10:60:88:ARG:N	2.05	0.71
15:65:154:PRO:HA	15:65:157:LYS:HE3	1.71	0.71
45:RC:20:VAL:HG23	45:RC:308:ASN:HA	1.73	0.71
47:S1:68:VAL:HG22	47:S1:72:ASP:HB2	1.73	0.71
48:S2:145:GLY:HA3	68:22:97:ARG:HH11	1.54	0.71
66:20:58:LEU:HD12	66:20:88:LYS:HG2	1.73	0.71
78:1S:920:U:H2'	78:1S:921:U:H5''	1.73	0.71
78:1S:992:A:H2'	78:1S:993:A:H5'	1.73	0.71
79:2S:2180:G:H2'	79:2S:2181:C:C6	2.25	0.71
7:L7:126:LEU:HA	7:L7:129:LEU:HD12	1.71	0.70
34:84:99:LYS:O	34:84:103:LYS:HG2	1.91	0.70
79:2S:1654:A:C2'	79:2S:1655:G:H5'	2.21	0.70
1:L1:13:VAL:HG22	1:L1:14:LYS:H	1.54	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:27:ALA:HB3	3:L3:218:ILE:HG22	1.72	0.70
4:L4:313:LEU:HD21	79:2S:1336:U:H5''	1.72	0.70
33:83:19:SER:HB3	79:2S:1329:U:H4'	1.71	0.70
57:11:80:MET:HB3	57:11:83:THR:HG23	1.73	0.70
63:17:27:ASP:HB3	63:17:30:THR:HG22	1.73	0.70
72:26:36:ILE:HD12	72:26:73:TYR:HD2	1.55	0.70
2:L2:132:ASN:HD21	79:2S:2179:C:H2'	1.55	0.70
7:L7:77:VAL:HG22	21:71:139:ARG:O	1.91	0.70
45:RC:136:ILE:HD13	45:RC:136:ILE:H	1.55	0.70
61:15:90:ILE:HD11	61:15:112:LEU:HD21	1.73	0.70
79:2S:1553:U:H4'	79:2S:1554:U:H5'	1.74	0.70
79:2S:2376:G:H2'	79:2S:2377:G:C8	2.26	0.70
18:68:35:PHE:HA	18:68:38:ARG:HD3	1.72	0.70
23:73:12:ARG:HB2	79:2S:3040:A:H5''	1.73	0.70
53:S7:16:LEU:O	53:S7:20:VAL:HG23	1.91	0.70
54:S8:29:LEU:HD12	78:1S:400:A:H61	1.56	0.70
57:11:91:LEU:HD23	57:11:102:LYS:HA	1.73	0.70
69:23:126:LYS:HA	69:23:131:SER:HA	1.74	0.70
79:2S:2356:A:H61	79:2S:2983:C:N4	1.88	0.70
69:23:83:VAL:HG12	69:23:84:THR:H	1.55	0.70
78:1S:292:U:H2'	78:1S:293:U:O4'	1.92	0.70
78:1S:805:U:H2'	78:1S:806:A:H5''	1.74	0.70
79:2S:283:G:H21	79:2S:285:A:H5''	1.55	0.70
81:5S:75:G:H1'	81:5S:104:A:H61	1.56	0.70
6:L6:40:LEU:HD13	6:L6:84:VAL:HG11	1.73	0.70
6:L6:52:VAL:HG22	6:L6:53:VAL:H	1.56	0.70
15:65:49:ARG:HG2	79:2S:114:A:H4'	1.74	0.70
62:16:40:GLU:HA	62:16:42:GLU:N	2.07	0.70
78:1S:1340:U:H3'	78:1S:1341:A:C5'	2.21	0.70
2:L2:150:LEU:HD12	2:L2:154:ALA:HB3	1.73	0.70
18:68:64:VAL:HG13	18:68:93:ILE:HD11	1.73	0.70
51:S5:71:ALA:HB1	51:S5:91:GLU:HA	1.74	0.70
55:S9:133:HIS:NE2	55:S9:163:PRO:HG2	2.06	0.70
58:12:21:GLU:HG3	58:12:22:VAL:H	1.57	0.70
79:2S:1809:A:H2'	79:2S:1810:A:O4'	1.92	0.70
82:ET:21:U:H3'	82:ET:22:A:C5'	2.21	0.70
3:L3:261:MET:O	3:L3:264:VAL:HG22	1.91	0.70
34:84:97:GLU:O	34:84:101:VAL:HG23	1.91	0.70
48:S2:141:ARG:HB2	48:S2:153:SER:O	1.92	0.70
72:26:36:ILE:CG2	72:26:73:TYR:HB2	2.22	0.70
78:1S:754:A:H61	78:1S:793:A:H2'	1.57	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:69:40:ALA:O	19:69:44:LEU:HD23	1.92	0.70
47:S1:176:VAL:HG12	47:S1:177:GLN:N	2.06	0.70
54:S8:31:ARG:HH22	54:S8:48:THR:HG22	1.54	0.70
78:1S:751:G:H2'	78:1S:752:A:O4'	1.91	0.70
9:L9:156:GLN:HE22	79:2S:3109:G:H21	1.38	0.70
19:69:120:TYR:O	19:69:124:TYR:HB2	1.92	0.70
25:75:105:VAL:HG11	25:75:126:LEU:HD13	1.74	0.70
74:28:33:LEU:HD21	74:28:53:ILE:HG23	1.72	0.70
78:1S:5:U:H2'	78:1S:6:G:H8	1.57	0.70
79:2S:3286:G:H2'	79:2S:3287:U:H5''	1.73	0.70
8:L8:60:ARG:HG2	80:8S:152:G:H5'	1.73	0.69
16:66:160:ARG:HB3	16:66:160:ARG:NH1	2.07	0.69
28:78:55:LYS:HG3	79:2S:2764:C:H5''	1.74	0.69
28:78:124:ILE:HG12	28:78:144:VAL:HG22	1.74	0.69
54:S8:172:ARG:HD3	54:S8:175:GLN:HG3	1.72	0.69
69:23:26:GLU:HB2	69:23:29:TYR:HB3	1.74	0.69
79:2S:2601:A:H2'	79:2S:2602:G:C8	2.27	0.69
80:8S:8:C:H2'	80:8S:9:A:C8	2.27	0.69
4:L4:23:PRO:HD2	4:L4:26:PHE:HE2	1.57	0.69
15:65:122:ASN:HB3	15:65:129:TYR:CD2	2.28	0.69
28:78:133:LEU:HD13	79:2S:715:A:H5''	1.73	0.69
38:88:43:PHE:HZ	38:88:62:ALA:HB1	1.57	0.69
49:S3:158:ILE:H	49:S3:158:ILE:HD13	1.57	0.69
70:24:5:VAL:HA	70:24:29:HIS:HA	1.73	0.69
79:2S:1564:U:H2'	79:2S:1565:G:O4'	1.91	0.69
6:L6:63:LEU:HB2	6:L6:79:VAL:HG23	1.75	0.69
50:S4:62:LYS:O	50:S4:66:MET:HG2	1.93	0.69
50:S4:125:LYS:HA	50:S4:159:THR:HA	1.73	0.69
60:14:122:PRO:HA	78:1S:886:U:O2'	1.91	0.69
78:1S:1336:A:H3'	78:1S:1337:A:H5''	1.72	0.69
82:ET:26:C:H2'	82:ET:27:G:H5'	1.73	0.69
15:65:188:ARG:HA	15:65:191:TRP:HB3	1.74	0.69
28:78:70:LYS:HD3	28:78:129:PHE:CD2	2.27	0.69
30:80:22:LYS:HB2	30:80:94:GLU:HB2	1.74	0.69
37:87:58:THR:HB	37:87:61:THR:HG23	1.75	0.69
49:S3:211:PRO:HG3	63:17:20:TYR:HE1	1.58	0.69
79:2S:1460:A:H2'	79:2S:1461:A:C8	2.27	0.69
79:2S:2530:G:C2'	79:2S:2531:C:H5''	2.21	0.69
80:8S:41:A:H61	80:8S:103:G:H1'	1.57	0.69
82:PT:54:G:H2'	82:PT:55:U:C6	2.27	0.69
9:L9:48:VAL:HG13	9:L9:49:ASN:H	1.58	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:64:50:LYS:NZ	14:64:86:ALA:HB2	2.07	0.69
20:70:74:ASN:HB3	20:70:129:ILE:HD12	1.74	0.69
49:S3:176:LEU:HA	49:S3:181:VAL:HG12	1.74	0.69
60:14:16:VAL:O	60:14:30:VAL:HG23	1.91	0.69
78:1S:1686:C:H2'	78:1S:1687:U:H5'	1.73	0.69
79:2S:1967:U:H5''	79:2S:1968:G:H5''	1.74	0.69
20:70:94:ILE:HG22	20:70:95:ARG:N	2.06	0.69
32:82:33:ARG:HA	32:82:33:ARG:HE	1.58	0.69
33:83:72:THR:HG22	79:2S:585:A:H4'	1.73	0.69
45:RC:133:VAL:HB	45:RC:142:ALA:HB3	1.73	0.69
49:S3:119:ALA:O	49:S3:123:VAL:HG23	1.92	0.69
55:S9:175:ARG:O	55:S9:179:ARG:HG3	1.93	0.69
4:L4:280:ILE:HD11	18:68:25:TYR:HB2	1.73	0.69
8:L8:72:PRO:HD2	8:L8:75:ILE:HD12	1.74	0.69
56:10:68:LEU:HD11	56:10:72:GLY:HA3	1.75	0.69
79:2S:3121:U:H1'	79:2S:3122:A:H5''	1.75	0.69
7:L7:88:ARG:HG2	7:L7:110:ARG:O	1.93	0.69
14:64:113:THR:HG22	14:64:115:PHE:H	1.58	0.69
18:68:174:ARG:HA	18:68:178:ARG:HG3	1.74	0.69
34:84:41:ARG:HG2	34:84:56:THR:HG21	1.75	0.69
51:S5:203:LYS:HA	51:S5:203:LYS:HE3	1.72	0.69
57:11:122:ILE:HB	57:11:143:SER:HB2	1.72	0.69
63:17:61:ILE:HG12	63:17:66:VAL:HG21	1.73	0.69
69:23:24:TRP:HE3	69:23:30:LYS:HD2	1.56	0.69
78:1S:524:U:H2'	78:1S:526:A:OP2	1.92	0.69
78:1S:822:U:H2'	78:1S:823:G:H5''	1.75	0.69
79:2S:1218:U:H2'	79:2S:1219:C:H5'	1.72	0.69
79:2S:1238:C:H2'	79:2S:1239:C:H5''	1.75	0.69
79:2S:2197:C:N4	79:2S:2241:U:H2'	2.08	0.69
80:8S:40:A:H2'	80:8S:41:A:C8	2.27	0.69
26:76:31:LEU:HD11	26:76:75:ARG:HG2	1.75	0.69
47:S1:32:ILE:HD12	60:14:33:LEU:HD22	1.75	0.69
60:14:124:ASP:HB2	78:1S:929:A:C4'	2.22	0.69
69:23:103:LEU:HD12	69:23:125:VAL:HB	1.74	0.69
78:1S:44:U:H2'	78:1S:45:U:H5	1.56	0.69
78:1S:477:A:H2'	78:1S:478:A:H8	1.55	0.69
79:2S:1787:A:H3'	79:2S:1788:C:H5''	1.73	0.69
10:60:97:LEU:HD21	10:60:126:ALA:HB2	1.75	0.69
46:S0:102:PHE:HZ	46:S0:135:GLU:HG3	1.58	0.69
55:S9:134:ILE:HA	55:S9:158:PHE:HA	1.72	0.69
72:26:82:ARG:HG3	72:26:83:ILE:N	2.04	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:307:A:H2'	79:2S:308:A:C8	2.28	0.69
9:L9:7:GLU:HB3	9:L9:56:ALA:HA	1.74	0.68
27:77:50:PRO:HD3	27:77:68:ILE:HG12	1.75	0.68
30:80:16:LEU:HD12	30:80:98:SER:HB2	1.73	0.68
42:92:98:LYS:HD2	79:2S:2656:A:H4'	1.74	0.68
78:1S:5:U:H2'	78:1S:6:G:C8	2.29	0.68
78:1S:72:A:H3'	78:1S:73:U:H5''	1.73	0.68
6:L6:63:LEU:HB2	6:L6:79:VAL:CG2	2.23	0.68
18:68:23:ASN:O	18:68:27:LYS:HG3	1.92	0.68
21:71:41:ASP:O	21:71:96:ILE:HA	1.93	0.68
34:84:85:VAL:O	34:84:89:ILE:HG13	1.93	0.68
45:RC:260:ILE:HB	45:RC:274:LEU:HB2	1.74	0.68
47:S1:111:ARG:HB3	72:26:68:TYR:HD2	1.58	0.68
1:L1:178:VAL:HG13	1:L1:179:LEU:HG	1.75	0.68
17:67:107:LEU:HD23	17:67:112:LEU:HD11	1.75	0.68
33:83:88:ASN:HB2	79:2S:429:U:H5'	1.75	0.68
44:P0:45:LEU:HD13	44:P0:49:ALA:HB3	1.75	0.68
54:S8:116:HIS:HD1	54:S8:117:TYR:HD2	1.42	0.68
54:S8:159:GLN:HB3	54:S8:165:LEU:HD23	1.75	0.68
64:18:24:GLY:HA2	64:18:58:ALA:HB3	1.74	0.68
66:20:71:PRO:HB3	75:29:41:GLN:HG2	1.76	0.68
79:2S:443:G:H22	79:2S:493:U:H1'	1.58	0.68
79:2S:2372:A:H5''	79:2S:2373:A:H5'	1.76	0.68
4:L4:135:VAL:HG11	4:L4:142:VAL:HG11	1.75	0.68
46:S0:56:LYS:HG3	46:S0:161:PRO:HD2	1.75	0.68
79:2S:129:U:H2'	79:2S:130:A:C8	2.28	0.68
79:2S:830:A:H2'	79:2S:831:G:O4'	1.93	0.68
79:2S:1605:A:HO2'	79:2S:1607:U:H6	1.41	0.68
26:76:115:ARG:O	26:76:119:ILE:HG13	1.94	0.68
27:77:24:VAL:HG22	27:77:130:PHE:HZ	1.59	0.68
46:S0:30:GLN:HE21	46:S0:149:LEU:HD22	1.59	0.68
63:17:21:TYR:N	63:17:22:PRO:HD2	2.09	0.68
78:1S:1524:A:H2'	78:1S:1525:A:C8	2.28	0.68
78:1S:1650:U:H2'	78:1S:1651:A:C8	2.29	0.68
79:2S:549:U:H2'	79:2S:550:A:C8	2.28	0.68
79:2S:3006:A:H2'	79:2S:3007:U:O4'	1.94	0.68
1:L1:62:ASN:HA	1:L1:168:ALA:HA	1.75	0.68
2:L2:61:VAL:O	2:L2:74:GLU:HB2	1.93	0.68
2:L2:216:HIS:HB2	2:L2:218:HIS:CD2	2.28	0.68
15:65:6:TYR:O	15:65:10:LEU:HB2	1.94	0.68
33:83:13:HIS:HA	33:83:30:ILE:HD13	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:S0:56:LYS:HB2	46:S0:160:ILE:HG23	1.75	0.68
48:S2:90:THR:CG2	48:S2:93:GLY:H	2.07	0.68
48:S2:170:ILE:HB	48:S2:197:TYR:HB2	1.73	0.68
71:25:77:ARG:HB3	71:25:81:ARG:HH12	1.58	0.68
3:L3:66:LYS:HB3	23:73:88:ARG:NH1	2.09	0.68
47:S1:71:ALA:CB	47:S1:79:HIS:HB2	2.22	0.68
53:S7:49:ILE:HG21	53:S7:175:LYS:HG2	1.76	0.68
78:1S:1166:A:H2'	78:1S:1167:G:H4'	1.75	0.68
79:2S:516:A:C2'	79:2S:517:G:H5''	2.24	0.68
79:2S:820:A:H2'	79:2S:821:U:C6	2.29	0.68
8:L8:46:LEU:O	8:L8:50:VAL:HG13	1.94	0.68
9:L9:96:HIS:O	9:L9:98:PRO:HD3	1.94	0.68
15:65:70:ASN:ND2	79:2S:2599:U:H5''	2.08	0.68
31:81:28:ARG:HB2	31:81:64:VAL:O	1.94	0.68
62:16:69:VAL:HG21	62:16:81:ILE:HG22	1.74	0.68
78:1S:1770:U:H2'	78:1S:1771:U:C6	2.29	0.68
79:2S:2060:A:H2'	79:2S:2061:G:H5'	1.76	0.68
79:2S:3346:U:H3	79:2S:3359:A:H61	1.42	0.68
1:L1:103:LEU:HD11	1:L1:128:LEU:HB3	1.76	0.68
8:L8:193:LYS:HD2	79:2S:7:C:H5''	1.75	0.68
35:85:119:LYS:HE2	35:85:119:LYS:HA	1.76	0.68
48:S2:165:VAL:HG13	48:S2:204:THR:HG22	1.73	0.68
51:S5:78:ALA:HB3	78:1S:1583:A:N7	2.09	0.68
61:15:28:MET:HG2	61:15:29:SER:H	1.58	0.68
71:25:92:ILE:HG13	71:25:100:ILE:HG23	1.76	0.68
79:2S:627:U:H2'	79:2S:628:A:H8	1.57	0.68
2:L2:104:LEU:HD13	2:L2:162:ALA:O	1.93	0.68
4:L4:23:PRO:HD2	4:L4:26:PHE:CE2	2.29	0.68
30:80:78:GLY:O	30:80:81:VAL:HG22	1.93	0.68
46:S0:170:ILE:H	46:S0:170:ILE:HD12	1.58	0.68
57:11:14:GLN:HB3	57:11:54:ILE:HG12	1.74	0.68
70:24:53:ASP:HB3	70:24:79:VAL:HG13	1.76	0.68
78:1S:44:U:H2'	78:1S:45:U:C5	2.28	0.68
78:1S:1320:U:O2	78:1S:1322:A:H5'	1.94	0.68
78:1S:1496:U:H4'	78:1S:1519:U:O2'	1.93	0.68
79:2S:66:A:N6	79:2S:76:G:H1'	2.09	0.68
3:L3:142:ALA:O	3:L3:146:ARG:HB2	1.93	0.67
5:L5:19:PRO:HB3	5:L5:23:ARG:HD3	1.74	0.67
8:L8:181:LYS:HG2	80:8S:154:C:H5''	1.76	0.67
34:84:60:ARG:NH2	79:2S:1616:U:H4'	2.08	0.67
37:87:25:ARG:HH21	79:2S:817:A:N6	1.88	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:103:MET:HB3	47:S1:215:VAL:HG12	1.76	0.67
55:S9:90:LYS:HE3	55:S9:95:TYR:HB2	1.76	0.67
66:20:53:LYS:HB2	66:20:92:ASP:HB2	1.75	0.67
79:2S:2515:A:C6	79:2S:2593:A:H1'	2.29	0.67
31:81:62:ARG:HB2	31:81:66:GLY:CA	2.22	0.67
78:1S:16:G:H21	78:1S:1138:A:H62	1.40	0.67
78:1S:41:A:H2'	78:1S:438:A:N7	2.09	0.67
78:1S:519:C:H3'	78:1S:520:A:H8	1.58	0.67
79:2S:2501:U:C2'	79:2S:2502:A:H5'	2.24	0.67
79:2S:2775:U:H2'	79:2S:2776:C:C6	2.28	0.67
4:L4:234:ASN:O	4:L4:238:LEU:HG	1.94	0.67
42:92:36:PHE:CZ	79:2S:2225:U:H4'	2.29	0.67
47:S1:71:ALA:HB3	60:14:114:ARG:HH12	1.59	0.67
79:2S:3334:U:H4'	79:2S:3335:A:C5'	2.24	0.67
79:2S:3375:A:H5''	79:2S:3378:C:H5	1.58	0.67
5:L5:83:LEU:HB3	5:L5:88:ILE:HB	1.76	0.67
7:L7:146:GLN:HE22	7:L7:241:LYS:HG3	1.60	0.67
16:66:73:PHE:HA	79:2S:3007:U:OP1	1.93	0.67
65:19:40:SER:HB3	65:19:43:ASN:HB2	1.75	0.67
78:1S:1291:G:H2'	78:1S:1292:G:H8	1.58	0.67
78:1S:1357:A:H2'	78:1S:1358:G:C8	2.30	0.67
6:L6:82:ARG:HB3	33:83:104:PRO:HA	1.77	0.67
9:L9:24:ILE:HD11	9:L9:39:LYS:HD2	1.77	0.67
9:L9:41:ILE:HD12	9:L9:43:VAL:HG13	1.77	0.67
25:75:115:ARG:HE	25:75:121:LYS:HB2	1.58	0.67
44:P0:4:ILE:HD13	44:P0:4:ILE:H	1.58	0.67
46:S0:59:LEU:HD11	67:21:78:LEU:HD12	1.77	0.67
48:S2:45:VAL:HG11	48:S2:68:ILE:HG23	1.77	0.67
63:17:55:THR:O	63:17:59:LYS:HG3	1.94	0.67
78:1S:626:U:H5'	78:1S:939:A:H1'	1.75	0.67
79:2S:528:U:H2'	79:2S:529:A:C8	2.29	0.67
79:2S:2387:A:H3'	79:2S:2388:U:H5''	1.75	0.67
14:64:85:TRP:NE1	14:64:91:CYS:HB3	2.08	0.67
16:66:76:PRO:HD2	16:66:106:GLU:OE2	1.95	0.67
17:67:24:VAL:HG22	17:67:86:LYS:HE2	1.75	0.67
45:RC:214:ALA:HB2	45:RC:220:ILE:HG12	1.75	0.67
79:2S:1040:A:C3'	79:2S:1041:U:H5''	2.23	0.67
19:69:86:GLU:HG2	19:69:90:PRO:HA	1.77	0.67
46:S0:38:PHE:O	46:S0:39:ASN:HB2	1.94	0.67
52:S6:135:PRO:HB2	52:S6:141:ILE:HG12	1.75	0.67
53:S7:98:ILE:CG1	53:S7:121:VAL:HG21	2.23	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:16:82:ARG:HH22	62:16:116:LEU:HD11	1.59	0.67
78:1S:707:A:H3'	78:1S:708:C:C5'	2.22	0.67
79:2S:2798:C:C5'	79:2S:2800:G:H5'	2.21	0.67
2:L2:35:ALA:HA	8:L8:36:ILE:HD13	1.77	0.67
32:82:102:ALA:HA	32:82:105:ARG:HD3	1.77	0.67
71:25:59:TYR:CE2	71:25:100:ILE:HG12	2.30	0.67
79:2S:1054:A:H5''	79:2S:2637:A:H61	1.58	0.67
79:2S:1236:G:H3'	79:2S:1237:G:C5'	2.25	0.67
79:2S:2076:G:H2'	79:2S:2077:U:H5''	1.77	0.67
2:L2:33:ASP:O	2:L2:37:ARG:HG2	1.95	0.67
17:67:43:LYS:HA	17:67:46:LYS:HE2	1.77	0.67
20:70:119:ARG:HB2	81:5S:96:U:H4'	1.75	0.67
47:S1:71:ALA:HB2	47:S1:79:HIS:CB	2.19	0.67
62:16:71:GLY:HA2	78:1S:1483:A:H4'	1.77	0.67
78:1S:1291:G:H1	78:1S:1324:G:H22	1.43	0.67
79:2S:2688:U:H5'	79:2S:2689:A:C8	2.30	0.67
79:2S:2995:A:H2'	79:2S:2996:U:H5''	1.77	0.67
11:61:40:LEU:HD22	11:61:114:ILE:HG12	1.76	0.67
50:S4:45:ILE:O	50:S4:49:ARG:HB3	1.95	0.67
50:S4:126:VAL:HA	50:S4:141:THR:HA	1.75	0.67
64:18:109:LEU:O	64:18:113:LEU:HG	1.95	0.67
78:1S:205:U:H2'	78:1S:206:A:H8	1.59	0.67
78:1S:602:U:H2'	78:1S:603:U:C6	2.31	0.67
79:2S:3079:U:H3'	79:2S:3080:G:C5'	2.24	0.67
3:L3:210:GLU:HA	3:L3:285:VAL:HG21	1.77	0.66
15:65:176:LYS:NZ	79:2S:65:A:H5'	2.09	0.66
16:66:92:THR:O	16:66:96:LYS:HG3	1.95	0.66
18:68:34:THR:HA	18:68:49:LEU:HD11	1.77	0.66
28:78:6:THR:HG22	28:78:8:THR:HG23	1.77	0.66
45:RC:131:ILE:HB	45:RC:144:LEU:HB2	1.77	0.66
47:S1:35:PRO:HA	47:S1:232:HIS:NE2	2.09	0.66
47:S1:136:ARG:HD3	78:1S:884:A:H5''	1.76	0.66
53:S7:111:LYS:HG3	53:S7:112:ARG:N	2.10	0.66
53:S7:114:ARG:HH11	53:S7:114:ARG:HB2	1.59	0.66
5:L5:260:PHE:HE2	81:5S:121:U:H5'	1.60	0.66
16:66:56:ASP:HB3	16:66:60:LYS:NZ	2.10	0.66
20:70:124:LEU:HA	21:71:153:PRO:HG2	1.78	0.66
35:85:24:LEU:HB3	35:85:51:ILE:HG12	1.77	0.66
52:S6:137:ARG:HH12	78:1S:144:U:H5	1.43	0.66
78:1S:71:A:H2'	78:1S:72:A:H4'	1.75	0.66
79:2S:671:U:H2'	79:2S:672:A:C8	2.30	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L1:169:VAL:HG12	1:L1:170:GLY:N	2.09	0.66
6:L6:136:GLU:O	6:L6:140:VAL:HG23	1.95	0.66
26:76:87:LYS:HE2	79:2S:375:A:O2'	1.95	0.66
45:RC:21:THR:HG21	45:RC:38:ARG:HE	1.60	0.66
52:S6:59:GLN:HE21	78:1S:156:A:H62	1.43	0.66
60:14:87:GLY:HA2	60:14:92:LYS:HB3	1.75	0.66
82:PT:58:A:H2'	82:PT:59:A:H5'	1.77	0.66
2:L2:112:ILE:HG23	2:L2:133:TYR:HB2	1.78	0.66
3:L3:100:ARG:NH2	79:2S:3242:G:H1'	2.08	0.66
4:L4:6:VAL:HG21	4:L4:22:LEU:HD21	1.78	0.66
17:67:122:ALA:HB3	17:67:143:PRO:HB2	1.77	0.66
47:S1:91:VAL:HB	47:S1:96:LEU:HB3	1.77	0.66
55:S9:109:LEU:O	55:S9:113:VAL:HG23	1.95	0.66
61:15:68:PRO:HG2	61:15:71:GLU:HB3	1.77	0.66
69:23:7:ARG:HH12	78:1S:1100:G:H1'	1.60	0.66
79:2S:235:A:H2'	79:2S:236:G:C8	2.30	0.66
79:2S:599:C:C2'	79:2S:600:G:H5''	2.24	0.66
1:L1:58:CYS:HB2	1:L1:152:ARG:HA	1.76	0.66
2:L2:51:ASP:HB2	2:L2:58:LEU:HG	1.76	0.66
18:68:51:ALA:HB1	18:68:84:VAL:HG11	1.78	0.66
30:80:11:ASN:HA	30:80:14:LEU:HD12	1.78	0.66
57:11:74:THR:HG22	57:11:122:ILE:HG12	1.76	0.66
61:15:31:GLU:O	61:15:34:VAL:HG22	1.94	0.66
79:2S:571:U:H2'	79:2S:572:A:H8	1.59	0.66
7:L7:121:LYS:HD2	21:71:133:ALA:CB	2.24	0.66
8:L8:26:LEU:HD11	27:77:123:GLN:HA	1.78	0.66
22:72:30:PRO:HG2	22:72:60:GLY:O	1.96	0.66
32:82:75:LEU:HG	32:82:95:GLU:OE1	1.96	0.66
60:14:17:ALA:HB3	60:14:81:VAL:HA	1.75	0.66
78:1S:1738:U:H2'	78:1S:1739:C:C6	2.30	0.66
79:2S:178:U:H2'	79:2S:179:C:H6	1.58	0.66
79:2S:1787:A:H2'	79:2S:1788:C:H5''	1.77	0.66
79:2S:3317:U:H1'	79:2S:3318:G:OP2	1.95	0.66
4:L4:39:PHE:HE1	4:L4:236:LEU:HA	1.60	0.66
4:L4:328:ASN:HD21	4:L4:330:TYR:HB3	1.61	0.66
15:65:116:LEU:HB3	15:65:133:ILE:HG23	1.77	0.66
27:77:25:ILE:CG2	27:77:28:PRO:HD3	2.26	0.66
30:80:32:LYS:HG3	30:80:36:GLN:HE21	1.61	0.66
30:80:42:ILE:HD11	30:80:67:VAL:HG22	1.77	0.66
31:81:10:ARG:HD2	31:81:12:TYR:OH	1.96	0.66
52:S6:191:ARG:O	52:S6:195:VAL:HG23	1.96	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:S9:174:ARG:HA	55:S9:174:ARG:HE	1.59	0.66
66:20:118:VAL:HG13	66:20:119:ALA:H	1.59	0.66
79:2S:796:U:H2'	79:2S:797:U:C6	2.31	0.66
79:2S:1951:C:H5	79:2S:2095:G:H1	1.35	0.66
11:61:47:GLN:HB3	11:61:64:LYS:HD3	1.75	0.66
14:64:15:VAL:HG22	20:70:150:PHE:O	1.96	0.66
16:66:24:ALA:O	16:66:28:LEU:HG	1.96	0.66
24:74:23:ARG:HG2	24:74:24:GLY:H	1.59	0.66
66:20:95:ALA:HB1	66:20:96:PRO:HD2	1.78	0.66
75:29:10:HIS:ND1	75:29:11:PRO:HD2	2.11	0.66
79:2S:178:U:H2'	79:2S:179:C:C6	2.30	0.66
5:L5:285:ARG:O	5:L5:289:LYS:HG3	1.96	0.66
15:65:71:ARG:O	15:65:92:LEU:HB2	1.96	0.66
51:S5:101:GLY:HA2	78:1S:1166:A:H5''	1.76	0.66
72:26:7:SER:HB2	72:26:11:ASN:H	1.61	0.66
79:2S:1534:A:H2'	79:2S:1535:A:C8	2.30	0.66
79:2S:1959:G:H2'	79:2S:1960:A:H5'	1.77	0.66
79:2S:2322:C:O2'	79:2S:2323:G:H5'	1.96	0.66
33:83:13:HIS:HA	33:83:30:ILE:CD1	2.26	0.66
52:S6:139:ASN:O	52:S6:143:LYS:HD3	1.96	0.66
72:26:41:ILE:HD13	72:26:41:ILE:H	1.59	0.66
78:1S:1681:A:C2'	78:1S:1682:U:H5'	2.26	0.66
79:2S:989:A:H2'	79:2S:990:U:C6	2.30	0.66
79:2S:1454:A:H5''	79:2S:1455:U:H5'	1.78	0.66
79:2S:1594:A:H1'	79:2S:1615:C:H1'	1.77	0.66
79:2S:2843:U:H5''	79:2S:2844:C:H5	1.61	0.66
7:L7:80:GLN:HB2	21:71:135:PRO:HB2	1.78	0.65
17:67:117:ILE:HG13	17:67:148:LEU:HB3	1.78	0.65
18:68:34:THR:HG22	18:68:49:LEU:HD21	1.77	0.65
38:88:26:LYS:NZ	79:2S:1750:A:H4'	2.11	0.65
40:90:113:ARG:HH12	79:2S:1190:A:H4'	1.60	0.65
45:RC:189:GLU:HA	49:S3:225:TYR:HB2	1.76	0.65
49:S3:24:PHE:HZ	49:S3:72:LEU:HD13	1.60	0.65
51:S5:79:ASN:HB2	51:S5:83:ARG:NH2	2.11	0.65
56:10:30:ALA:O	56:10:38:LYS:HA	1.95	0.65
65:19:28:LEU:HD21	65:19:30:VAL:HG13	1.78	0.65
79:2S:1913:A:N3	79:2S:2120:A:H2'	2.11	0.65
79:2S:2374:C:H5	79:2S:2823:G:H1'	1.61	0.65
23:73:84:SER:HA	23:73:94:TYR:HB3	1.78	0.65
31:81:54:GLU:HA	31:81:57:GLN:NE2	2.12	0.65
34:84:66:SER:HB2	34:84:69:HIS:ND1	2.11	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:S2:53:ILE:HG12	48:S2:72:LEU:HB3	1.77	0.65
51:S5:187:ILE:HA	78:1S:1534:G:N2	2.11	0.65
70:24:8:ARG:O	70:24:26:ASP:HB2	1.96	0.65
78:1S:515:A:H62	78:1S:537:G:N2	1.82	0.65
78:1S:760:A:H2'	78:1S:761:G:O4'	1.97	0.65
79:2S:751:A:H2'	79:2S:752:C:C6	2.31	0.65
79:2S:926:A:H2'	79:2S:927:C:C6	2.30	0.65
79:2S:1805:C:H2'	79:2S:1806:A:H8	1.61	0.65
4:L4:42:VAL:HA	4:L4:45:ASN:ND2	2.11	0.65
8:L8:178:ALA:HB2	8:L8:218:ILE:HG23	1.79	0.65
11:61:97:SER:HB2	11:61:101:ASN:HB2	1.78	0.65
13:63:63:VAL:HG13	79:2S:72:C:H5'	1.78	0.65
17:67:129:THR:HB	17:67:137:ASN:HB2	1.77	0.65
19:69:102:LEU:HD21	19:69:135:LYS:HA	1.77	0.65
22:72:42:LYS:HE2	22:72:47:VAL:HG13	1.79	0.65
23:73:93:LEU:HD23	23:73:93:LEU:H	1.61	0.65
31:81:32:ALA:O	31:81:36:ILE:HG13	1.96	0.65
36:86:26:ILE:HD12	36:86:26:ILE:N	2.10	0.65
42:92:77:CYS:SG	42:92:79:THR:HG22	2.36	0.65
46:S0:56:LYS:HB3	46:S0:160:ILE:HG12	1.79	0.65
59:13:64:ARG:HB3	59:13:64:ARG:NH1	2.08	0.65
65:19:119:LYS:HE2	78:1S:1369:U:H5''	1.75	0.65
68:22:22:LYS:HD2	73:27:3:LEU:HD23	1.78	0.65
72:26:84:VAL:HG13	72:26:85:ARG:N	2.11	0.65
78:1S:1672:G:H2'	78:1S:1673:G:C8	2.31	0.65
79:2S:442:G:O6	79:2S:493:U:H2'	1.96	0.65
6:L6:82:ARG:O	33:83:103:TYR:HB2	1.96	0.65
25:75:63:ILE:HA	25:75:86:VAL:HG23	1.76	0.65
34:84:41:ARG:HB2	34:84:50:ALA:HB1	1.78	0.65
68:22:83:ILE:O	68:22:86:ILE:HG12	1.97	0.65
78:1S:989:U:H2'	78:1S:990:C:C6	2.31	0.65
79:2S:598:A:H2'	79:2S:599:C:C6	2.31	0.65
4:L4:317:PRO:HG3	4:L4:323:VAL:HG13	1.77	0.65
5:L5:84:PRO:HB3	5:L5:89:THR:HG22	1.78	0.65
6:L6:56:LYS:HG2	6:L6:57:HIS:N	2.11	0.65
23:73:66:LYS:CB	23:73:69:LEU:HD13	2.26	0.65
37:87:18:LEU:HD23	37:87:25:ARG:HB2	1.78	0.65
59:13:17:PRO:HG3	73:27:28:PRO:HG3	1.79	0.65
69:23:103:LEU:HD13	69:23:104:LEU:N	2.12	0.65
78:1S:16:G:H2'	78:1S:17:C:C6	2.32	0.65
78:1S:1036:A:H2'	78:1S:1037:C:C6	2.32	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1171:A:H2'	78:1S:1172:G:C8	2.31	0.65
78:1S:1225:U:H2'	78:1S:1226:A:H5'	1.78	0.65
79:2S:209:A:H4'	79:2S:211:A:C8	2.32	0.65
2:L2:68:LYS:HG2	2:L2:69:TYR:N	2.11	0.65
47:S1:172:LEU:O	47:S1:176:VAL:HG23	1.96	0.65
53:S7:131:PHE:H	53:S7:132:PRO:HD2	1.61	0.65
56:10:25:LYS:HD3	56:10:62:GLN:NE2	2.12	0.65
63:17:97:ASN:ND2	63:17:97:ASN:H	1.95	0.65
74:28:8:THR:HB	74:28:56:LEU:HB2	1.77	0.65
79:2S:296:A:O2'	79:2S:297:G:H5'	1.96	0.65
28:78:36:GLY:HA3	28:78:40:HIS:CE1	2.32	0.65
33:83:73:ARG:O	33:83:81:VAL:HG13	1.96	0.65
47:S1:176:VAL:O	47:S1:177:GLN:HG2	1.97	0.65
55:S9:135:ALA:HB2	55:S9:159:ALA:HB2	1.77	0.65
78:1S:177:U:H3'	78:1S:178:U:H5''	1.79	0.65
78:1S:1107:G:O2'	78:1S:1108:G:H5'	1.97	0.65
1:L1:64:SER:H	1:L1:151:VAL:HG21	1.61	0.65
1:L1:144:LEU:HD13	1:L1:147:LYS:HD2	1.79	0.65
3:L3:187:SER:O	3:L3:191:LYS:HG3	1.95	0.65
8:L8:169:LEU:O	8:L8:173:MET:HG2	1.97	0.65
18:68:147:ARG:HB3	18:68:150:VAL:HG13	1.79	0.65
50:S4:122:LYS:HG2	50:S4:164:LEU:HD21	1.78	0.65
52:S6:31:ARG:HD2	52:S6:34:GLN:HE22	1.62	0.65
53:S7:91:ILE:HG13	53:S7:92:PHE:N	2.11	0.65
78:1S:969:C:H4'	78:1S:1104:U:H4'	1.78	0.65
78:1S:1060:U:H3'	78:1S:1061:A:H5''	1.78	0.65
79:2S:1363:A:H2'	79:2S:1364:C:C6	2.31	0.65
79:2S:2346:C:C3'	79:2S:2347:U:H5''	2.27	0.65
79:2S:3354:U:H5''	79:2S:3356:G:H5'	1.79	0.65
81:5S:100:C:H2'	81:5S:101:G:O4'	1.97	0.65
2:L2:251:LYS:HE2	2:L2:251:LYS:HA	1.78	0.65
26:76:3:LYS:HE2	26:76:8:VAL:HG13	1.78	0.65
47:S1:143:THR:HA	47:S1:207:LEU:HG	1.79	0.65
54:S8:29:LEU:HD21	54:S8:31:ARG:HG3	1.79	0.65
69:23:127:VAL:O	69:23:130:VAL:HG22	1.97	0.65
78:1S:484:C:H2'	78:1S:485:A:H5''	1.79	0.65
78:1S:1425:A:H2'	78:1S:1426:C:C6	2.32	0.65
79:2S:549:U:H2'	79:2S:550:A:H8	1.62	0.65
79:2S:1605:A:O2'	79:2S:1607:U:H5'	1.97	0.65
79:2S:2601:A:H2'	79:2S:2602:G:H8	1.62	0.65
79:2S:2843:U:H5''	79:2S:2844:C:C5	2.32	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:128:ARG:HB2	79:2S:2177:G:H2'	1.78	0.65
3:L3:3:HIS:HD2	79:2S:2938:G:H3'	1.62	0.65
9:L9:63:LYS:HE3	79:2S:1210:U:H5'	1.78	0.65
10:60:65:LEU:HD23	10:60:159:PHE:CZ	2.32	0.65
55:S9:48:GLN:HA	55:S9:51:LYS:HE2	1.78	0.65
59:13:134:VAL:HG23	59:13:135:LEU:HG	1.79	0.65
69:23:13:ARG:O	69:23:17:VAL:HG23	1.97	0.65
79:2S:1190:A:H5'	79:2S:1191:U:OP1	1.96	0.65
79:2S:1460:A:H2'	79:2S:1461:A:H8	1.62	0.65
79:2S:1814:A:H4'	79:2S:1815:U:O4'	1.97	0.65
79:2S:1951:C:H6	79:2S:2095:G:H1	1.40	0.65
79:2S:2050:C:H2'	79:2S:2051:G:C8	2.32	0.65
81:5S:85:G:H1	81:5S:95:A:N6	1.94	0.65
1:L1:62:ASN:H	1:L1:151:VAL:HB	1.62	0.64
3:L3:159:ARG:HB3	3:L3:180:GLU:HB3	1.79	0.64
16:66:124:LEU:HB3	16:66:127:LEU:HD12	1.79	0.64
22:72:33:TYR:O	22:72:37:LEU:HD13	1.97	0.64
27:77:24:VAL:HG22	27:77:130:PHE:CZ	2.32	0.64
36:86:9:ILE:HA	36:86:13:LYS:HG3	1.79	0.64
54:S8:137:LYS:HA	54:S8:140:GLU:HB2	1.78	0.64
78:1S:886:U:H2'	78:1S:887:A:C8	2.32	0.64
78:1S:1160:A:H2'	78:1S:1161:C:C6	2.32	0.64
78:1S:1561:U:H4'	78:1S:1599:C:H4'	1.77	0.64
79:2S:600:G:H1'	79:2S:603:A:N6	2.12	0.64
79:2S:2821:C:N4	79:2S:2869:U:H3	1.92	0.64
79:2S:3163:A:H3'	79:2S:3164:C:H5''	1.77	0.64
3:L3:123:TYR:CE2	3:L3:124:LYS:HG3	2.33	0.64
16:66:153:VAL:O	16:66:157:GLU:HG2	1.96	0.64
25:75:63:ILE:HD13	25:75:64:GLU:H	1.61	0.64
32:82:95:GLU:HG2	32:82:96:ILE:H	1.62	0.64
48:S2:126:ARG:O	48:S2:130:ILE:HD13	1.98	0.64
53:S7:139:ARG:HD2	68:22:53:ILE:HG22	1.80	0.64
62:16:73:GLY:N	62:16:76:SER:HB3	2.10	0.64
78:1S:1310:U:H3	78:1S:1315:U:H3	1.45	0.64
79:2S:2635:A:H4'	79:2S:2636:A:O5'	1.96	0.64
31:81:75:ILE:HG23	31:81:93:VAL:HG22	1.79	0.64
34:84:65:VAL:HG12	34:84:66:SER:H	1.62	0.64
78:1S:822:U:C3'	78:1S:823:G:H5''	2.28	0.64
79:2S:3231:U:H2'	79:2S:3232:G:C8	2.32	0.64
3:L3:332:ARG:HD3	3:L3:332:ARG:N	2.10	0.64
5:L5:52:VAL:HG13	5:L5:54:ARG:NH1	2.13	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:L9:168:ARG:HH12	79:2S:3034:C:H4'	1.62	0.64
14:64:39:ILE:HG23	20:70:72:VAL:HG11	1.78	0.64
17:67:87:SER:O	17:67:91:VAL:HG23	1.98	0.64
26:76:122:LYS:HG2	79:2S:185:C:H5''	1.78	0.64
46:S0:169:SER:O	46:S0:173:ILE:HG12	1.98	0.64
78:1S:138:A:H62	78:1S:266:A:N6	1.94	0.64
10:60:17:TYR:HE2	79:2S:1047:A:H62	1.46	0.64
18:68:154:GLY:O	18:68:161:LYS:HG3	1.97	0.64
20:70:66:GLU:O	20:70:69:PRO:HG3	1.97	0.64
21:71:20:ARG:NH1	21:71:20:ARG:HB3	2.12	0.64
30:80:52:ARG:O	30:80:56:LEU:HG	1.97	0.64
43:93:16:VAL:HG22	79:2S:1927:G:C8	2.32	0.64
51:S5:76:ARG:HD3	51:S5:76:ARG:N	2.12	0.64
63:17:10:LYS:HG2	63:17:53:TYR:HE1	1.62	0.64
63:17:97:ASN:HD22	63:17:97:ASN:N	1.95	0.64
72:26:9:GLY:HA3	72:26:34:LYS:HE2	1.79	0.64
79:2S:1764:U:H3'	79:2S:1765:U:C5'	2.27	0.64
79:2S:2953:U:H2'	79:2S:2954:U:H2'	1.79	0.64
18:68:157:PRO:HD3	28:78:47:LYS:HE2	1.80	0.64
19:69:77:GLY:O	19:69:81:ARG:HD3	1.98	0.64
43:93:22:LEU:HD11	79:2S:2189:U:H5''	1.78	0.64
46:S0:118:PRO:HG2	46:S0:141:ILE:HD13	1.79	0.64
47:S1:122:GLU:HG3	47:S1:139:ALA:O	1.98	0.64
51:S5:29:ILE:HG12	62:16:37:THR:HG23	1.79	0.64
65:19:14:PHE:HE1	65:19:136:ALA:HA	1.62	0.64
78:1S:941:A:H2'	78:1S:942:G:H5'	1.79	0.64
79:2S:2186:U:H5''	79:2S:2315:G:OP2	1.97	0.64
4:L4:334:PHE:CD2	79:2S:578:A:H2'	2.33	0.64
13:63:109:PHE:O	13:63:113:VAL:HG23	1.97	0.64
28:78:126:LYS:HB3	28:78:148:ILE:HG21	1.80	0.64
36:86:36:ARG:HE	36:86:36:ARG:HA	1.61	0.64
40:90:127:LEU:HD22	40:90:128:LYS:HG2	1.78	0.64
58:12:87:PRO:HA	58:12:140:PHE:HZ	1.62	0.64
76:30:36:LYS:N	76:30:36:LYS:HD2	2.12	0.64
79:2S:600:G:H1'	79:2S:603:A:H62	1.63	0.64
79:2S:1212:A:H2'	79:2S:1213:G:C8	2.33	0.64
79:2S:1238:C:C2'	79:2S:1239:C:H5''	2.28	0.64
79:2S:1601:U:H2'	79:2S:1603:A:OP2	1.97	0.64
5:L5:141:PRO:HB2	5:L5:172:TYR:CB	2.27	0.64
32:82:95:GLU:HG2	32:82:96:ILE:N	2.12	0.64
45:RC:29:GLN:HE21	45:RC:32:LEU:HB2	1.62	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RC:83:ALA:HB1	45:RC:110:VAL:HG12	1.79	0.64
49:S3:40:ARG:HB2	49:S3:47:GLU:HB2	1.79	0.64
51:S5:187:ILE:HA	78:1S:1534:G:H21	1.63	0.64
2:L2:196:TRP:CG	2:L2:197:PRO:HA	2.33	0.64
6:L6:64:LEU:HD21	6:L6:106:PHE:HE2	1.62	0.64
11:61:105:GLY:HA3	79:2S:2674:A:H5'	1.80	0.64
18:68:64:VAL:HA	18:68:67:ILE:HD12	1.80	0.64
28:78:36:GLY:HA2	28:78:39:HIS:HD2	1.63	0.64
31:81:79:ARG:NE	31:81:81:GLU:HG2	2.12	0.64
65:19:88:VAL:HG21	78:1S:1173:C:O2'	1.98	0.64
79:2S:1843:C:H2'	79:2S:1844:C:C6	2.32	0.64
10:60:65:LEU:HD23	10:60:159:PHE:HZ	1.62	0.64
19:69:38:ARG:HG3	79:2S:1602:A:H5'	1.80	0.64
21:71:78:LYS:CB	21:71:87:LYS:HE2	2.25	0.64
22:72:14:THR:HG23	22:72:66:VAL:HG22	1.80	0.64
38:88:63:LYS:HE3	38:88:66:ILE:HD12	1.78	0.64
47:S1:67:GLU:HB2	47:S1:85:LYS:HD3	1.80	0.64
63:17:66:VAL:HB	63:17:69:ILE:HG12	1.80	0.64
79:2S:1696:A:H2'	79:2S:1697:A:C8	2.32	0.64
79:2S:2094:C:H2'	79:2S:2095:G:C8	2.32	0.64
79:2S:2493:U:H3'	79:2S:2494:A:C5'	2.23	0.64
7:L7:107:ARG:HB3	7:L7:204:PRO:HG2	1.79	0.63
15:65:21:PHE:O	15:65:25:VAL:HG23	1.98	0.63
32:82:25:TYR:HB3	32:82:27:ARG:HG2	1.79	0.63
34:84:6:THR:HG22	79:2S:1486:G:H21	1.62	0.63
36:86:36:ARG:HA	36:86:36:ARG:NE	2.13	0.63
53:S7:34:LEU:O	53:S7:38:LEU:HD13	1.98	0.63
60:14:18:ARG:HH12	60:14:35:GLY:HA3	1.61	0.63
70:24:5:VAL:H	70:24:30:PRO:HD2	1.63	0.63
72:26:79:ILE:HA	72:26:84:VAL:HG11	1.79	0.63
78:1S:190:C:O2'	78:1S:191:C:H5'	1.99	0.63
6:L6:56:LYS:HG2	6:L6:57:HIS:H	1.62	0.63
8:L8:71:VAL:HG12	15:65:21:PHE:CE2	2.34	0.63
14:64:106:ARG:HA	14:64:109:ARG:HD2	1.80	0.63
17:67:91:VAL:O	17:67:95:LEU:HG	1.99	0.63
43:93:46:THR:HB	43:93:58:SER:HB2	1.78	0.63
66:20:41:ILE:HA	66:20:44:ASN:HB3	1.78	0.63
78:1S:138:A:H62	78:1S:266:A:H61	1.38	0.63
78:1S:271:A:H2	78:1S:284:G:H22	1.45	0.63
79:2S:760:G:H1'	79:2S:771:A:N6	2.12	0.63
79:2S:900:G:H1'	79:2S:1589:A:N6	2.13	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1728:G:H5'	79:2S:1728:G:N3	2.12	0.63
79:2S:3392:U:H2'	79:2S:3393:U:C6	2.34	0.63
2:L2:209:HIS:CD2	2:L2:211:HIS:HB2	2.33	0.63
5:L5:7:ALA:C	5:L5:8:LYS:HD2	2.17	0.63
5:L5:113:LEU:HD23	5:L5:115:LEU:HD23	1.80	0.63
6:L6:96:VAL:HG12	6:L6:97:ASN:H	1.62	0.63
15:65:180:PHE:O	15:65:184:LYS:HG3	1.99	0.63
16:66:152:VAL:O	16:66:156:LEU:HG	1.99	0.63
21:71:100:LYS:HB2	79:2S:990:U:H4'	1.80	0.63
40:90:125:LYS:HD2	79:2S:2897:A:H5''	1.79	0.63
44:P0:34:SER:HA	79:2S:1230:G:H4'	1.81	0.63
55:S9:24:LEU:O	55:S9:28:LEU:HG	1.97	0.63
69:23:142:LYS:HG2	69:23:143:PRO:HD2	1.80	0.63
72:26:36:ILE:HG12	72:26:38:ARG:NH1	2.13	0.63
78:1S:772:G:H2'	78:1S:773:C:C6	2.34	0.63
79:2S:1911:A:H2'	79:2S:1912:U:C6	2.34	0.63
79:2S:2895:G:C2'	79:2S:2896:A:H5''	2.27	0.63
2:L2:190:ARG:HH12	79:2S:1794:G:H1'	1.61	0.63
6:L6:19:LYS:H	79:2S:591:G:H1'	1.64	0.63
17:67:3:ARG:HA	17:67:3:ARG:NE	2.13	0.63
55:S9:3:ARG:HB2	55:S9:3:ARG:NH2	2.14	0.63
79:2S:374:A:H4'	79:2S:375:A:H5'	1.80	0.63
79:2S:1141:C:H2'	79:2S:1142:G:O4'	1.98	0.63
3:L3:243:HIS:HB3	79:2S:2948:C:H5''	1.80	0.63
7:L7:178:ILE:HG23	7:L7:183:ASP:HB2	1.80	0.63
8:L8:241:LYS:HB3	8:L8:241:LYS:NZ	2.14	0.63
50:S4:92:LEU:HD13	50:S4:97:GLU:HB2	1.80	0.63
55:S9:136:VAL:O	55:S9:155:HIS:HB3	1.98	0.63
57:11:67:ARG:O	57:11:67:ARG:HG2	1.99	0.63
58:12:57:ALA:HB2	58:12:122:VAL:CG1	2.28	0.63
63:17:5:ARG:HG3	63:17:9:VAL:HG11	1.79	0.63
68:22:8:ALA:HB2	68:22:74:VAL:HG11	1.80	0.63
79:2S:1805:C:H2'	79:2S:1806:A:C8	2.34	0.63
79:2S:3075:G:H2'	79:2S:3076:C:C6	2.33	0.63
3:L3:116:ARG:O	3:L3:175:LYS:HE2	1.98	0.63
3:L3:332:ARG:H	3:L3:332:ARG:CD	2.10	0.63
4:L4:219:LEU:O	4:L4:222:VAL:HG12	1.98	0.63
7:L7:119:VAL:O	21:71:135:PRO:HD3	1.99	0.63
33:83:30:ILE:HG22	33:83:31:LYS:N	2.14	0.63
35:85:86:ARG:HD2	80:8S:36:G:H3'	1.81	0.63
51:S5:33:VAL:O	51:S5:37:GLN:HG3	1.99	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:S6:78:THR:HG23	52:S6:92:ARG:HG2	1.81	0.63
78:1S:689:G:C2'	78:1S:690:G:H5''	2.28	0.63
79:2S:2722:U:H2'	79:2S:2723:U:C6	2.33	0.63
79:2S:3269:U:H1'	79:2S:3270:U:OP2	1.98	0.63
2:L2:209:HIS:ND1	2:L2:210:PRO:HD2	2.13	0.63
3:L3:32:PHE:HE2	3:L3:159:ARG:HH21	1.45	0.63
4:L4:6:VAL:CG2	4:L4:22:LEU:HD21	2.29	0.63
4:L4:42:VAL:HB	4:L4:236:LEU:HD21	1.79	0.63
16:66:86:GLY:O	16:66:87:MET:HG3	1.99	0.63
19:69:5:ARG:HD3	79:2S:1471:U:H5''	1.81	0.63
19:69:102:LEU:HD22	19:69:138:LEU:HD13	1.80	0.63
38:88:40:GLN:HG2	38:88:41:THR:N	2.13	0.63
46:S0:126:PRO:HG3	46:S0:147:THR:HG22	1.81	0.63
50:S4:31:PRO:HD2	50:S4:38:LEU:HD11	1.79	0.63
51:S5:183:ALA:HB3	51:S5:190:ILE:HD13	1.80	0.63
53:S7:131:PHE:N	53:S7:132:PRO:HD2	2.14	0.63
78:1S:805:U:C2'	78:1S:806:A:H5''	2.28	0.63
78:1S:1273:G:N7	78:1S:1431:C:H5''	2.13	0.63
79:2S:1856:C:H2'	79:2S:1857:C:C6	2.33	0.63
79:2S:3295:A:H2'	79:2S:3296:A:C8	2.34	0.63
4:L4:192:GLY:HA2	4:L4:195:ARG:HB2	1.78	0.63
4:L4:203:ARG:HD2	4:L4:226:GLU:OE2	1.98	0.63
15:65:139:HIS:HB3	15:65:142:ILE:HD13	1.81	0.63
45:RC:38:ARG:HG2	45:RC:67:ILE:HG23	1.81	0.63
47:S1:180:THR:HG22	47:S1:181:LEU:H	1.63	0.63
49:S3:159:HIS:O	49:S3:160:SER:HB3	1.99	0.63
60:14:87:GLY:HA2	60:14:92:LYS:CB	2.28	0.63
78:1S:924:A:H2'	78:1S:925:G:C8	2.34	0.63
79:2S:440:A:H3'	79:2S:441:U:H4'	1.80	0.63
79:2S:727:G:H2'	79:2S:728:G:O4'	1.99	0.63
79:2S:1182:A:H2'	79:2S:1183:C:C6	2.34	0.63
13:63:29:ALA:H	15:65:201:ARG:NH2	1.97	0.63
14:64:55:ARG:NH1	14:64:77:ARG:HG3	2.14	0.63
32:82:4:LEU:HD12	32:82:5:PRO:HD2	1.79	0.63
47:S1:71:ALA:HB3	60:14:114:ARG:NH1	2.13	0.63
64:18:139:LYS:HE3	78:1S:1458:G:OP2	1.99	0.63
71:25:39:ALA:HB1	71:25:72:GLY:N	2.14	0.63
74:28:15:VAL:HG23	74:28:28:VAL:HG22	1.80	0.63
75:29:11:PRO:HB3	75:29:13:ARG:NH1	2.12	0.63
78:1S:304:U:H2'	78:1S:305:C:C6	2.33	0.63
2:L2:9:ARG:HH21	2:L2:9:ARG:HB2	1.62	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:14:LEU:HD21	3:L3:263:SER:HA	1.81	0.62
4:L4:82:THR:C	4:L4:84:ARG:H	2.00	0.62
9:L9:47:LYS:HG3	9:L9:53:ILE:HG12	1.81	0.62
10:60:182:LEU:HD23	10:60:185:ARG:NH1	2.14	0.62
19:69:138:LEU:O	19:69:142:ILE:HG13	1.99	0.62
28:78:28:HIS:HB3	28:78:31:GLY:O	1.99	0.62
48:S2:228:ASN:HD22	67:21:1:MET:CG	2.11	0.62
78:1S:82:U:H2'	78:1S:83:G:O4'	1.99	0.62
79:2S:656:A:H2'	79:2S:657:A:C8	2.34	0.62
79:2S:3197:G:H2'	79:2S:3198:U:H3'	1.81	0.62
1:L1:47:LYS:N	1:L1:47:LYS:HD2	2.13	0.62
9:L9:118:LEU:HD21	9:L9:177:ASP:HB2	1.81	0.62
23:73:21:ALA:HB3	23:73:36:ILE:HD12	1.80	0.62
28:78:43:ILE:HD11	79:2S:957:C:H1'	1.81	0.62
34:84:29:ILE:HD13	34:84:29:ILE:H	1.64	0.62
52:S6:122:GLU:HA	52:S6:126:ASP:HB2	1.80	0.62
77:31:132:LEU:HD13	77:31:139:LEU:HB3	1.81	0.62
2:L2:219:ILE:CD1	79:2S:2245:C:H5''	2.29	0.62
3:L3:46:PHE:HB2	3:L3:209:PHE:HE2	1.64	0.62
5:L5:72:ASP:H	81:5S:115:G:H21	1.46	0.62
11:61:36:VAL:O	11:61:40:LEU:HB2	1.98	0.62
20:70:13:ARG:HG2	20:70:14:LEU:H	1.65	0.62
31:81:10:ARG:NH2	79:2S:3386:G:H5''	2.15	0.62
37:87:25:ARG:NH2	79:2S:817:A:H61	1.90	0.62
43:93:75:ALA:O	43:93:78:THR:HG22	1.99	0.62
53:S7:111:LYS:HG3	53:S7:112:ARG:H	1.64	0.62
69:23:76:LEU:HD13	69:23:79:ASN:ND2	2.13	0.62
70:24:89:TYR:O	70:24:93:ARG:HG3	1.98	0.62
3:L3:62:ARG:HG3	3:L3:348:ARG:HH21	1.65	0.62
10:60:24:ARG:NH1	10:60:24:ARG:HB2	2.15	0.62
15:65:190:THR:O	15:65:194:GLN:HG2	2.00	0.62
28:78:5:PHE:O	79:2S:793:C:H5''	1.99	0.62
28:78:91:LEU:HD22	28:78:121:VAL:HG21	1.82	0.62
47:S1:61:LEU:CD2	47:S1:62:LYS:H	2.12	0.62
57:11:94:ILE:HG21	57:11:97:TYR:HD2	1.64	0.62
61:15:34:VAL:O	61:15:42:ARG:HG2	2.00	0.62
78:1S:1519:U:H2'	78:1S:1520:U:H5	1.63	0.62
79:2S:288:C:H2'	79:2S:289:A:C8	2.33	0.62
79:2S:955:U:H2'	79:2S:956:U:C6	2.35	0.62
81:5S:92:A:H2'	81:5S:93:C:O4'	2.00	0.62
2:L2:225:ILE:HG21	2:L2:234:LYS:HA	1.80	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:67:88:VAL:O	17:67:92:GLN:HG2	1.98	0.62
25:75:86:VAL:HG22	25:75:87:SER:H	1.64	0.62
46:S0:174:TRP:HA	46:S0:177:LEU:HD12	1.81	0.62
48:S2:66:PHE:HD1	48:S2:66:PHE:H	1.45	0.62
53:S7:177:THR:HA	78:1S:641:G:H21	1.64	0.62
55:S9:3:ARG:HB2	55:S9:3:ARG:HH21	1.64	0.62
71:25:91:PRO:HB3	71:25:101:TYR:HE1	1.65	0.62
78:1S:481:A:H2'	78:1S:482:U:O4'	2.00	0.62
79:2S:861:C:H2'	79:2S:862:U:C6	2.35	0.62
79:2S:1126:G:H2'	79:2S:1127:G:O4'	2.00	0.62
79:2S:1501:U:H3	79:2S:1515:A:H61	1.48	0.62
79:2S:1565:G:N2	79:2S:1575:A:H62	1.97	0.62
1:L1:32:VAL:HG11	79:2S:2468:A:H5''	1.81	0.62
3:L3:73:VAL:CG2	23:73:90:GLY:HA3	2.30	0.62
4:L4:111:VAL:HG12	4:L4:112:LYS:H	1.64	0.62
17:67:113:TYR:CE2	17:67:153:LYS:HA	2.35	0.62
19:69:41:ILE:O	19:69:45:VAL:HG23	2.00	0.62
31:81:17:HIS:HB2	31:81:69:TYR:HB3	1.81	0.62
33:83:60:ARG:NH2	33:83:60:ARG:HB2	2.14	0.62
50:S4:42:LEU:HD23	50:S4:101:LEU:HD11	1.81	0.62
55:S9:123:HIS:HE1	76:30:37:ARG:HB2	1.64	0.62
64:18:115:ARG:HB3	64:18:115:ARG:NH2	2.15	0.62
66:20:67:THR:HG21	75:29:40:ARG:HB2	1.81	0.62
78:1S:985:G:H2'	78:1S:986:G:O4'	1.99	0.62
79:2S:311:C:H2'	79:2S:312:C:C6	2.34	0.62
79:2S:1322:U:H2'	79:2S:1323:G:C8	2.35	0.62
79:2S:1608:C:H2'	79:2S:1609:C:H6	1.64	0.62
79:2S:2356:A:N6	79:2S:2983:C:H41	1.97	0.62
79:2S:2536:A:C3'	79:2S:2537:U:H5''	2.28	0.62
79:2S:2922:G:H3'	79:2S:2923:U:H5''	1.81	0.62
5:L5:33:ARG:HG3	5:L5:33:ARG:HH11	1.63	0.62
37:87:18:LEU:HA	37:87:25:ARG:H	1.65	0.62
48:S2:130:ILE:O	48:S2:134:LEU:HD23	1.99	0.62
53:S7:21:ALA:O	53:S7:25:VAL:HG23	2.00	0.62
61:15:22:LEU:H	61:15:22:LEU:HD22	1.64	0.62
78:1S:505:A:C3'	78:1S:506:A:H5''	2.29	0.62
79:2S:2493:U:H2'	79:2S:2494:A:H4'	1.81	0.62
3:L3:262:TRP:HH2	79:2S:3009:G:H4'	1.64	0.62
4:L4:114:ASN:O	4:L4:118:LYS:HG3	2.00	0.62
8:L8:24:ASN:N	8:L8:25:PRO:HD2	2.14	0.62
15:65:64:VAL:HG11	15:65:102:ALA:HB1	1.80	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:126:THR:HG22	47:S1:136:ARG:HG3	1.80	0.62
52:S6:137:ARG:HE	52:S6:139:ASN:HB2	1.65	0.62
78:1S:196:G:HO2'	78:1S:197:A:H8	1.45	0.62
79:2S:903:U:H2'	79:2S:904:A:C8	2.35	0.62
81:5S:13:A:OP1	81:5S:111:U:H1'	1.99	0.62
1:L1:28:PHE:HB2	1:L1:210:MET:HB3	1.80	0.62
5:L5:107:ARG:HB3	5:L5:251:PRO:HB3	1.82	0.62
15:65:154:PRO:HB2	79:2S:58:G:H5'	1.82	0.62
24:74:20:LEU:HD23	24:74:21:PHE:N	2.15	0.62
26:76:116:LYS:O	26:76:120:GLN:HG2	2.00	0.62
41:91:23:ARG:HH11	79:2S:2277:C:H5''	1.64	0.62
45:RC:10:ARG:HA	45:RC:10:ARG:HE	1.65	0.62
52:S6:36:VAL:HG12	52:S6:37:ASP:H	1.64	0.62
78:1S:740:A:H3'	78:1S:741:C:C5'	2.25	0.62
78:1S:979:A:H2'	78:1S:980:G:H8	1.64	0.62
78:1S:1081:A:H2'	78:1S:1083:G:C5	2.35	0.62
79:2S:1693:C:H2'	79:2S:1773:C:H5	1.64	0.62
2:L2:207:VAL:HG13	79:2S:2415:C:C5'	2.29	0.62
5:L5:59:ASP:HA	5:L5:80:SER:HB3	1.82	0.62
18:68:23:ASN:HB3	18:68:26:LEU:HB3	1.82	0.62
25:75:67:ILE:HD12	25:75:83:VAL:HG12	1.82	0.62
25:75:113:LEU:CB	79:2S:1523:U:H5'	2.29	0.62
57:11:80:MET:CB	57:11:83:THR:HG23	2.29	0.62
68:22:79:PHE:H	68:22:125:ILE:HG22	1.65	0.62
71:25:41:ILE:HG13	71:25:42:LEU:H	1.64	0.62
72:26:86:VAL:HG23	78:1S:1795:U:H5''	1.81	0.62
78:1S:1511:U:H2'	78:1S:1512:G:C8	2.34	0.62
1:L1:18:LYS:HE3	1:L1:20:SER:HA	1.82	0.61
4:L4:188:ARG:NH2	4:L4:197:ARG:HB3	2.15	0.61
13:63:59:ARG:HG2	13:63:60:ALA:H	1.65	0.61
23:73:120:LYS:HD2	23:73:137:VAL:HG22	1.81	0.61
49:S3:31:GLU:HA	49:S3:107:PHE:HZ	1.65	0.61
49:S3:116:ARG:O	49:S3:120:TYR:HB2	2.00	0.61
50:S4:122:LYS:HG2	50:S4:164:LEU:CD2	2.29	0.61
53:S7:148:LYS:HE2	78:1S:641:G:H4'	1.82	0.61
79:2S:1246:G:O2'	79:2S:1264:G:H5''	1.99	0.61
79:2S:1662:G:H2'	79:2S:1663:C:H6	1.65	0.61
79:2S:3041:U:H2'	79:2S:3042:U:C6	2.35	0.61
6:L6:58:LEU:HG	6:L6:64:LEU:HD23	1.82	0.61
32:82:105:ARG:O	32:82:109:LEU:HG	2.00	0.61
49:S3:135:GLU:HB3	49:S3:187:LYS:HB3	1.81	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:18:72:ILE:HG22	64:18:81:ILE:HD11	1.81	0.61
66:20:27:THR:HA	66:20:87:HIS:O	1.99	0.61
69:23:24:TRP:CE3	69:23:30:LYS:HD2	2.35	0.61
78:1S:922:G:H2'	78:1S:923:A:C8	2.35	0.61
79:2S:962:A:O2'	79:2S:963:G:H5'	2.00	0.61
79:2S:1060:U:H2'	79:2S:1061:A:C8	2.34	0.61
80:8S:79:A:H2'	80:8S:80:A:H4'	1.82	0.61
7:L7:131:GLU:HB2	7:L7:132:PRO:HD3	1.80	0.61
7:L7:160:ARG:HH12	7:L7:206:LYS:HD3	1.64	0.61
17:67:15:ALA:HB3	17:67:150:VAL:HG23	1.83	0.61
18:68:44:PHE:HB2	79:2S:729:C:OP1	2.00	0.61
19:69:53:LYS:HG2	19:69:54:ALA:H	1.66	0.61
30:80:58:TYR:O	30:80:62:LEU:HG	2.00	0.61
37:87:18:LEU:HD23	37:87:25:ARG:N	2.16	0.61
38:88:62:ALA:O	38:88:66:ILE:HG13	1.99	0.61
47:S1:48:VAL:HG12	47:S1:49:ASN:N	2.11	0.61
50:S4:10:LYS:HA	50:S4:27:TYR:HA	1.81	0.61
53:S7:109:VAL:HG22	53:S7:110:GLN:H	1.64	0.61
64:18:38:VAL:HG12	64:18:42:TYR:CD2	2.35	0.61
78:1S:144:U:HO2'	78:1S:145:A:H8	1.46	0.61
78:1S:1166:A:H2'	78:1S:1167:G:C4'	2.31	0.61
78:1S:1171:A:H2'	78:1S:1172:G:H8	1.65	0.61
79:2S:105:C:H2'	79:2S:106:A:C8	2.35	0.61
79:2S:2154:U:H2'	79:2S:2155:G:C8	2.35	0.61
79:2S:2496:C:H2'	79:2S:2497:U:C6	2.36	0.61
82:PT:24:C:H2'	82:PT:25:U:C6	2.35	0.61
7:L7:161:VAL:HG11	7:L7:168:ILE:HG21	1.83	0.61
10:60:177:ASP:HB2	10:60:180:GLU:HB2	1.82	0.61
19:69:97:ARG:O	19:69:101:VAL:HG23	2.00	0.61
46:S0:131:GLN:O	46:S0:135:GLU:HG2	2.00	0.61
46:S0:205:ARG:HD3	63:17:82:ASP:HB3	1.81	0.61
47:S1:96:LEU:HD23	47:S1:96:LEU:N	2.15	0.61
47:S1:148:ASN:H	47:S1:148:ASN:ND2	1.96	0.61
47:S1:187:LYS:O	47:S1:191:GLU:HA	2.00	0.61
53:S7:20:VAL:HG22	53:S7:85:PHE:HE1	1.65	0.61
53:S7:56:LYS:HB2	53:S7:88:ARG:CD	2.31	0.61
53:S7:114:ARG:HB2	53:S7:114:ARG:NH1	2.15	0.61
54:S8:92:ARG:NH1	79:2S:3345:G:H4'	2.15	0.61
60:14:85:ALA:H	60:14:119:THR:CG2	2.09	0.61
69:23:7:ARG:NH1	78:1S:1100:G:H1'	2.14	0.61
78:1S:1402:G:H2'	78:1S:1403:C:C6	2.35	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1787:A:C2'	79:2S:1788:C:H5''	2.30	0.61
79:2S:1921:A:H2'	79:2S:1922:A:C8	2.35	0.61
79:2S:2079:G:H2'	79:2S:2080:C:H5'	1.81	0.61
79:2S:3225:C:H2'	79:2S:3226:A:C8	2.35	0.61
2:L2:187:HIS:HA	2:L2:190:ARG:HD3	1.83	0.61
3:L3:83:PRO:HB3	3:L3:202:THR:OG1	2.00	0.61
7:L7:148:VAL:HG12	7:L7:181:ILE:HD11	1.83	0.61
10:60:152:LEU:HD13	10:60:165:ILE:HG21	1.81	0.61
13:63:85:LEU:HD23	13:63:85:LEU:H	1.65	0.61
29:79:14:ARG:O	29:79:18:ARG:HG2	2.00	0.61
34:84:22:VAL:HG12	34:84:30:LEU:HD22	1.81	0.61
34:84:54:ILE:HD12	34:84:70:LYS:O	2.01	0.61
41:91:1:MET:SD	78:1S:1642:G:H5'	2.40	0.61
45:RC:191:ASP:O	49:S3:223:LYS:HD3	2.00	0.61
69:23:50:LYS:HG3	78:1S:435:C:H5'	1.82	0.61
72:26:23:CYS:O	72:26:27:SER:HA	2.00	0.61
78:1S:209:U:H2'	78:1S:210:A:C8	2.35	0.61
78:1S:689:G:C3'	78:1S:690:G:H5''	2.31	0.61
78:1S:1701:A:C3'	78:1S:1702:A:H5''	2.24	0.61
78:1S:1711:C:H2'	78:1S:1712:A:C4'	2.31	0.61
79:2S:85:A:N1	79:2S:99:A:H5''	2.14	0.61
79:2S:571:U:H2'	79:2S:572:A:C8	2.35	0.61
79:2S:634:C:H2'	79:2S:635:G:C8	2.35	0.61
79:2S:2076:G:C2'	79:2S:2077:U:H5''	2.29	0.61
81:5S:105:C:H2'	81:5S:106:U:C6	2.36	0.61
7:L7:51:TYR:HE2	7:L7:183:ASP:HA	1.65	0.61
15:65:93:LYS:O	15:65:94:TYR:HB3	2.01	0.61
19:69:60:LYS:O	19:69:64:ARG:HG3	2.00	0.61
31:81:11:GLU:HG3	31:81:109:VAL:CG2	2.30	0.61
31:81:88:PRO:HG2	31:81:89:LEU:HD12	1.81	0.61
46:S0:120:LEU:HD11	46:S0:144:ILE:HD11	1.83	0.61
52:S6:91:GLU:HG2	52:S6:92:ARG:N	2.14	0.61
54:S8:47:ARG:HE	54:S8:51:GLY:HA2	1.66	0.61
54:S8:73:SER:HB2	78:1S:257:A:H1'	1.82	0.61
55:S9:179:ARG:HA	55:S9:182:GLU:HG2	1.82	0.61
70:24:7:ILE:HD11	70:24:40:LEU:HD22	1.82	0.61
78:1S:628:G:H21	78:1S:971:A:H62	1.47	0.61
79:2S:662:U:H2'	79:2S:663:C:C6	2.36	0.61
79:2S:1662:G:H2'	79:2S:1663:C:C6	2.35	0.61
79:2S:2856:G:H2'	79:2S:2857:C:C6	2.35	0.61
8:L8:97:TYR:OH	8:L8:203:VAL:HG23	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:87:31:LYS:NZ	79:2S:815:G:H5''	2.16	0.61
52:S6:57:ASP:HB3	52:S6:106:LEU:HD23	1.83	0.61
59:13:10:GLY:HA2	78:1S:1073:G:H4'	1.82	0.61
67:21:37:ALA:HA	67:21:49:GLU:O	2.01	0.61
73:27:24:LEU:HG	73:27:25:VAL:HG23	1.83	0.61
78:1S:413:U:H2'	78:1S:414:C:C6	2.36	0.61
78:1S:814:A:H61	78:1S:857:U:H3	1.49	0.61
79:2S:214:G:H2'	79:2S:215:G:C8	2.36	0.61
79:2S:218:G:H1'	79:2S:372:A:H1'	1.83	0.61
79:2S:2068:U:H3'	79:2S:2069:G:C5'	2.24	0.61
3:L3:226:PHE:CE1	3:L3:268:GLY:HA2	2.36	0.61
13:63:57:VAL:HG12	13:63:69:VAL:HG22	1.83	0.61
18:68:30:VAL:O	18:68:34:THR:HG23	2.01	0.61
34:84:58:ARG:CG	34:84:59:PRO:HD2	2.26	0.61
50:S4:121:TYR:HA	50:S4:164:LEU:HD23	1.81	0.61
50:S4:132:GLY:O	78:1S:252:U:H4'	2.00	0.61
76:30:30:PRO:HB2	76:30:34:ALA:HB3	1.83	0.61
78:1S:1087:A:H5'	78:1S:1298:U:O4	2.00	0.61
79:2S:643:U:H2'	79:2S:644:G:O4'	2.01	0.61
79:2S:2388:U:H2'	79:2S:2389:C:C6	2.35	0.61
2:L2:230:VAL:HG11	79:2S:2424:A:H2	1.65	0.61
3:L3:66:LYS:HB3	23:73:88:ARG:HH11	1.65	0.61
17:67:135:ARG:HH11	17:67:135:ARG:CB	2.14	0.61
47:S1:121:ILE:HD12	47:S1:207:LEU:HD21	1.82	0.61
53:S7:109:VAL:HG13	53:S7:110:GLN:N	2.16	0.61
56:10:5:LYS:HD3	78:1S:1256:A:OP1	2.01	0.61
67:21:12:TYR:CE2	67:21:14:PRO:HG3	2.36	0.61
78:1S:393:C:H2'	78:1S:394:C:C6	2.36	0.61
78:1S:1298:U:H2'	78:1S:1299:G:O4'	2.00	0.61
79:2S:1786:G:H2'	79:2S:1787:A:C8	2.36	0.61
6:L6:65:ILE:HD13	6:L6:65:ILE:H	1.66	0.61
10:60:152:LEU:O	10:60:156:ARG:HG3	2.01	0.61
11:61:156:LYS:O	11:61:160:VAL:HG23	2.00	0.61
16:66:124:LEU:HG	16:66:126:VAL:HG12	1.83	0.61
18:68:79:LYS:HD3	18:68:138:LEU:HD23	1.83	0.61
31:81:60:TRP:O	79:2S:1476:G:H4'	2.01	0.61
36:86:59:ASP:O	36:86:63:ASN:HB3	2.01	0.61
39:89:48:LYS:HD2	39:89:48:LYS:N	2.15	0.61
48:S2:104:VAL:CG2	48:S2:112:GLY:HA3	2.31	0.61
52:S6:77:LEU:HD13	52:S6:84:TYR:HB2	1.83	0.61
57:11:90:TYR:CE1	57:11:103:ARG:HB3	2.36	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:18:76:PRO:HA	64:18:81:ILE:HD12	1.82	0.61
78:1S:1522:U:H3'	78:1S:1523:G:C5'	2.30	0.61
78:1S:1525:A:H2'	78:1S:1526:A:O4'	2.01	0.61
79:2S:794:U:H2'	79:2S:795:G:H8	1.64	0.61
79:2S:1203:A:H2'	79:2S:1204:A:C8	2.36	0.61
13:63:56:PRO:HB3	13:63:75:PHE:CE1	2.36	0.60
18:68:42:ALA:HB3	18:68:45:ASN:ND2	2.16	0.60
20:70:81:TYR:CE1	20:70:88:HIS:HB2	2.36	0.60
21:71:105:PHE:O	21:71:109:VAL:HG23	2.00	0.60
52:S6:164:LYS:HD2	78:1S:72:A:N7	2.15	0.60
55:S9:108:ARG:O	55:S9:112:GLN:HG2	2.01	0.60
68:22:42:GLN:HE21	68:22:49:GLU:HA	1.65	0.60
78:1S:1304:G:H5'	78:1S:1322:A:OP2	2.00	0.60
3:L3:311:PHE:CB	3:L3:314:TYR:HB3	2.31	0.60
4:L4:111:VAL:HG12	4:L4:112:LYS:N	2.16	0.60
9:L9:20:ILE:HB	14:64:7:VAL:HG13	1.83	0.60
17:67:45:GLN:HA	17:67:48:LEU:HD12	1.82	0.60
30:80:27:TYR:HB2	79:2S:1729:A:OP2	2.01	0.60
46:S0:45:VAL:HG12	46:S0:46:HIS:N	2.15	0.60
48:S2:36:VAL:HA	48:S2:46:LYS:HE3	1.82	0.60
55:S9:126:ARG:O	55:S9:130:THR:HG22	2.01	0.60
56:10:54:TYR:HA	56:10:71:GLU:HG3	1.83	0.60
72:26:79:ILE:HG12	72:26:84:VAL:HG21	1.82	0.60
73:27:10:PRO:HB2	73:27:15:GLU:OE1	2.01	0.60
79:2S:250:U:C5'	79:2S:251:G:H5''	2.31	0.60
79:2S:822:G:H2'	79:2S:823:C:C6	2.35	0.60
79:2S:1936:A:H2'	79:2S:1937:U:C6	2.36	0.60
81:5S:97:A:H2'	81:5S:98:C:C6	2.34	0.60
3:L3:95:THR:HG22	79:2S:3243:A:C5'	2.31	0.60
8:L8:42:PRO:HD2	8:L8:44:ARG:HH12	1.66	0.60
17:67:23:ARG:HH21	17:67:125:GLN:HG3	1.65	0.60
22:72:41:ILE:O	22:72:47:VAL:HA	2.01	0.60
31:81:11:GLU:HG3	31:81:109:VAL:HG21	1.84	0.60
32:82:26:HIS:HB2	79:2S:655:C:H5''	1.83	0.60
33:83:54:ARG:HG3	33:83:64:ILE:CG1	2.31	0.60
46:S0:188:LEU:CD1	46:S0:193:GLN:HG2	2.30	0.60
47:S1:110:LEU:O	47:S1:114:VAL:HG23	2.01	0.60
49:S3:40:ARG:HA	66:20:110:PRO:HB3	1.83	0.60
56:10:7:ASP:O	56:10:11:ILE:HG12	2.01	0.60
70:24:70:VAL:HG12	70:24:71:GLY:H	1.67	0.60
76:30:33:ARG:NH1	76:30:33:ARG:HB3	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:736:A:H2'	79:2S:737:G:O4'	2.01	0.60
79:2S:878:G:H22	79:2S:2979:U:H5''	1.66	0.60
79:2S:1055:A:H5''	81:5S:100:C:O2'	2.00	0.60
79:2S:1722:U:H2'	79:2S:1723:A:O4'	2.00	0.60
79:2S:1729:A:H3'	79:2S:1730:G:H5'	1.82	0.60
79:2S:1877:U:H5''	79:2S:1878:G:O4'	2.01	0.60
3:L3:277:SER:HB3	3:L3:280:HIS:NE2	2.16	0.60
8:L8:136:LEU:O	8:L8:140:VAL:HG23	2.02	0.60
8:L8:200:LEU:HD13	8:L8:211:LEU:HD13	1.82	0.60
9:L9:106:LYS:O	9:L9:107:ASP:HB2	2.00	0.60
23:73:70:ARG:HB2	23:73:70:ARG:HH11	1.66	0.60
41:91:15:ARG:O	41:91:19:LYS:HD3	2.01	0.60
71:25:50:ILE:O	71:25:54:VAL:HG23	2.01	0.60
78:1S:1169:G:N2	78:1S:1576:A:H62	1.92	0.60
79:2S:1581:C:C2'	79:2S:1582:C:H5'	2.30	0.60
79:2S:1829:G:H5''	79:2S:1830:G:H5'	1.83	0.60
79:2S:2585:G:H22	80:8S:151:C:H3'	1.65	0.60
2:L2:177:LYS:HD2	43:93:26:VAL:HG13	1.82	0.60
3:L3:215:ILE:HD12	3:L3:338:LEU:HD12	1.84	0.60
4:L4:334:PHE:HD2	79:2S:578:A:H2'	1.64	0.60
5:L5:22:ARG:HH12	81:5S:6:C:H5	1.48	0.60
5:L5:266:ALA:HA	81:5S:1:G:H1'	1.84	0.60
14:64:127:LYS:O	14:64:131:VAL:HG23	2.02	0.60
28:78:28:HIS:CD2	28:78:32:ARG:HG2	2.36	0.60
51:S5:162:VAL:HG23	51:S5:166:ARG:HD3	1.82	0.60
54:S8:167:ALA:HA	54:S8:183:ILE:HA	1.83	0.60
59:13:3:ARG:H	78:1S:866:G:H5''	1.66	0.60
77:31:147:VAL:O	77:31:148:TYR:HB2	2.01	0.60
78:1S:108:A:H2'	78:1S:109:G:C8	2.36	0.60
78:1S:140:A:H4'	78:1S:141:U:H5'	1.82	0.60
78:1S:854:U:H2'	78:1S:855:A:O4'	2.01	0.60
78:1S:1680:G:H1'	78:1S:1721:A:N6	2.16	0.60
78:1S:1695:G:H21	78:1S:1706:C:H41	1.49	0.60
3:L3:91:GLY:O	3:L3:101:SER:HA	2.02	0.60
8:L8:48:ARG:HG3	79:2S:2585:G:H8	1.66	0.60
20:70:58:ILE:H	20:70:58:ILE:HD12	1.67	0.60
46:S0:188:LEU:HD11	46:S0:193:GLN:HG2	1.82	0.60
48:S2:87:GLN:HG2	48:S2:96:THR:HB	1.84	0.60
63:17:122:ILE:HG12	63:17:123:ASN:N	2.13	0.60
64:18:132:ARG:HB2	64:18:138:THR:HB	1.83	0.60
69:23:32:ARG:NH1	78:1S:375:U:H5''	2.15	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:195:G:H2'	78:1S:196:G:H5''	1.82	0.60
78:1S:487:G:H3'	78:1S:488:G:H5''	1.83	0.60
81:5S:79:A:H2'	81:5S:80:G:O4'	2.02	0.60
1:L1:62:ASN:HB3	1:L1:151:VAL:CG1	2.31	0.60
9:L9:23:ARG:CB	9:L9:39:LYS:HG2	2.31	0.60
9:L9:156:GLN:HE22	79:2S:3109:G:N2	2.00	0.60
22:72:96:VAL:HG12	22:72:97:SER:H	1.67	0.60
29:79:49:GLY:HA2	29:79:52:LYS:HE2	1.81	0.60
33:83:20:LYS:HB3	33:83:20:LYS:NZ	2.16	0.60
35:85:23:ASP:O	35:85:27:GLU:HG2	2.01	0.60
37:87:25:ARG:O	37:87:25:ARG:HD3	2.02	0.60
56:10:77:ARG:NH1	56:10:84:GLU:HG3	2.16	0.60
60:14:23:PHE:HE2	60:14:91:THR:HG21	1.65	0.60
62:16:143:ARG:HD2	78:1S:1191:U:H4'	1.83	0.60
65:19:111:ILE:HG23	65:19:113:ILE:HG13	1.83	0.60
66:20:38:SER:O	66:20:42:VAL:HG23	2.02	0.60
67:21:15:ARG:HB2	67:21:24:ILE:HB	1.83	0.60
1:L1:44:GLN:HG3	1:L1:160:LYS:O	2.02	0.60
9:L9:74:LEU:HA	9:L9:77:ASN:ND2	2.16	0.60
10:60:61:SER:HB2	10:60:63:GLU:OE2	2.02	0.60
16:66:28:LEU:HD22	16:66:94:ARG:NH2	2.17	0.60
16:66:174:PHE:O	16:66:178:VAL:HG23	2.02	0.60
45:RC:180:ALA:HB3	45:RC:190:ALA:HB3	1.84	0.60
46:S0:73:VAL:O	46:S0:95:ALA:HB1	2.02	0.60
62:16:118:ILE:HG13	62:16:119:ALA:H	1.67	0.60
78:1S:617:U:H2'	78:1S:618:U:C6	2.36	0.60
78:1S:885:G:H2'	78:1S:886:U:C6	2.37	0.60
79:2S:641:C:H42	79:2S:645:A:H8	1.46	0.60
79:2S:835:G:H1'	79:2S:858:A:N6	2.17	0.60
79:2S:1458:U:H2'	79:2S:1459:C:C6	2.36	0.60
79:2S:2210:G:H2'	79:2S:2211:U:C6	2.36	0.60
79:2S:2371:G:H2'	79:2S:2373:A:OP1	2.02	0.60
79:2S:2995:A:C3'	79:2S:2996:U:H5''	2.30	0.60
3:L3:21:ARG:HG3	3:L3:269:GLN:HG2	1.83	0.60
4:L4:51:ALA:HB2	4:L4:105:THR:HG23	1.84	0.60
5:L5:53:VAL:HA	5:L5:61:ILE:O	2.02	0.60
15:65:39:ALA:HB3	15:65:61:ILE:CG2	2.31	0.60
25:75:63:ILE:HD13	25:75:64:GLU:N	2.17	0.60
26:76:51:ARG:HB3	26:76:115:ARG:NH2	2.17	0.60
28:78:46:ASP:O	28:78:47:LYS:HB3	2.00	0.60
29:79:21:ILE:HG23	29:79:21:ILE:O	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:80:10:ILE:O	30:80:14:LEU:HG	2.01	0.60
32:82:100:ILE:HB	32:82:105:ARG:HH11	1.67	0.60
46:S0:42:PRO:O	46:S0:43:ASP:HB2	2.02	0.60
53:S7:86:GLN:O	53:S7:87:ASP:HB2	2.01	0.60
54:S8:22:ARG:HB2	54:S8:25:ARG:HH21	1.66	0.60
59:13:21:ASN:O	59:13:65:VAL:HG13	2.01	0.60
78:1S:1656:U:H3'	78:1S:1657:U:H5''	1.84	0.60
79:2S:293:C:H2'	79:2S:294:U:O4'	2.02	0.60
79:2S:653:A:H2'	79:2S:654:C:C6	2.37	0.60
79:2S:2097:U:H2'	79:2S:2098:C:C6	2.37	0.60
79:2S:3153:U:H3	79:2S:3293:U:H3	1.49	0.60
3:L3:262:TRP:CH2	79:2S:3009:G:H4'	2.36	0.60
4:L4:344:ALA:HB3	79:2S:516:A:H5''	1.84	0.60
14:64:58:ILE:HG12	14:64:59:ASN:H	1.66	0.60
15:65:10:LEU:HD13	15:65:19:LEU:HD11	1.83	0.60
16:66:143:THR:HG23	16:66:147:TRP:O	2.02	0.60
33:83:23:ASN:HD21	79:2S:633:C:H1'	1.67	0.60
38:88:40:GLN:HG3	38:88:57:ASN:HA	1.84	0.60
44:P0:56:ASN:HB3	44:P0:80:VAL:CG2	2.32	0.60
49:S3:105:MET:HG2	49:S3:122:VAL:HG21	1.82	0.60
50:S4:68:ARG:HB3	50:S4:76:VAL:HG21	1.83	0.60
54:S8:72:ILE:HG21	54:S8:112:TRP:CZ3	2.36	0.60
57:11:69:LYS:H	57:11:69:LYS:HD2	1.66	0.60
64:18:16:ARG:HH12	64:18:19:ASN:HA	1.65	0.60
67:21:65:SER:O	67:21:69:LEU:HB2	2.01	0.60
81:5S:9:C:H2'	81:5S:10:C:H5'	1.83	0.60
15:65:120:TRP:CE3	79:2S:269:G:H5'	2.37	0.59
15:65:179:LYS:HB3	79:2S:287:G:H5'	1.82	0.59
46:S0:12:GLU:O	46:S0:16:LEU:HG	2.02	0.59
49:S3:6:SER:HA	78:1S:1514:U:O2'	2.01	0.59
55:S9:11:THR:HG23	78:1S:472:U:H5''	1.84	0.59
69:23:93:LEU:HD12	69:23:96:VAL:HG21	1.84	0.59
78:1S:294:C:H2'	78:1S:295:A:O4'	2.02	0.59
79:2S:1655:G:H1'	79:2S:1800:A:H61	1.67	0.59
80:8S:93:U:H2'	80:8S:94:C:O4'	2.01	0.59
3:L3:45:SER:HB2	3:L3:181:ILE:HG12	1.84	0.59
9:L9:67:ALA:O	9:L9:71:VAL:HG23	2.02	0.59
15:65:50:ARG:HB3	15:65:50:ARG:NH1	2.17	0.59
28:78:56:VAL:HG23	28:78:57:GLY:H	1.66	0.59
28:78:65:GLN:HA	28:78:68:PHE:CD2	2.28	0.59
42:92:8:ARG:HD2	79:2S:2713:U:H2'	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:P0:15:LEU:O	44:P0:19:LEU:HG	2.02	0.59
45:RC:155:ARG:HB2	45:RC:170:ILE:HG13	1.84	0.59
47:S1:23:PRO:O	47:S1:27:LYS:HG2	2.02	0.59
50:S4:95:THR:HG22	70:24:16:PRO:HB2	1.83	0.59
50:S4:214:LEU:HD23	50:S4:216:ASN:HD21	1.68	0.59
51:S5:140:THR:HG21	51:S5:175:LEU:HD21	1.84	0.59
52:S6:190:GLN:HE22	78:1S:265:A:H8	1.49	0.59
63:17:97:ASN:H	63:17:97:ASN:HD22	1.49	0.59
66:20:118:VAL:HG22	66:20:119:ALA:N	2.17	0.59
70:24:11:LYS:HB2	70:24:24:VAL:HG23	1.84	0.59
72:26:37:LYS:HA	72:26:71:LEU:O	2.02	0.59
76:30:31:LYS:HG2	78:1S:477:A:OP1	2.02	0.59
78:1S:754:A:N6	78:1S:793:A:H2'	2.17	0.59
79:2S:698:U:H2'	79:2S:699:A:O4'	2.02	0.59
79:2S:822:G:H2'	79:2S:823:C:H6	1.67	0.59
3:L3:308:MET:HB2	3:L3:363:SER:HB2	1.84	0.59
5:L5:26:GLY:HA2	79:2S:2703:A:N1	2.17	0.59
7:L7:236:ILE:HD12	7:L7:239:LEU:HD12	1.84	0.59
8:L8:126:SER:HB3	8:L8:127:PRO:HD2	1.85	0.59
11:61:94:ARG:HD3	11:61:94:ARG:N	2.16	0.59
20:70:139:TYR:H	20:70:139:TYR:HD1	1.49	0.59
21:71:116:ARG:O	21:71:120:LYS:HB2	2.02	0.59
37:87:66:TYR:O	37:87:70:VAL:HG23	2.02	0.59
50:S4:2:ALA:O	50:S4:3:ARG:HB2	2.02	0.59
53:S7:13:PRO:O	53:S7:14:THR:HG22	2.03	0.59
53:S7:152:VAL:HG21	53:S7:181:ILE:HD11	1.84	0.59
64:18:36:LYS:HB2	64:18:102:ALA:HA	1.84	0.59
79:2S:757:C:H2'	79:2S:758:C:C4'	2.32	0.59
79:2S:1009:A:H2'	79:2S:1010:G:C8	2.37	0.59
79:2S:2349:U:H2'	79:2S:2350:C:C6	2.37	0.59
79:2S:3091:A:H2'	79:2S:3094:A:N7	2.18	0.59
6:L6:17:ALA:O	79:2S:592:A:H5'	2.03	0.59
25:75:100:LYS:NZ	25:75:107:VAL:H	2.01	0.59
31:81:78:LYS:HD2	31:81:90:PHE:CE1	2.37	0.59
38:88:63:LYS:HE3	38:88:63:LYS:HA	1.83	0.59
41:91:16:LYS:O	41:91:20:VAL:HG23	2.02	0.59
42:92:37:ALA:HB1	79:2S:2766:U:H5''	1.84	0.59
61:15:72:LYS:H	61:15:72:LYS:HD2	1.67	0.59
62:16:40:GLU:CA	62:16:42:GLU:H	2.14	0.59
63:17:72:LYS:NZ	63:17:72:LYS:HB3	2.18	0.59
72:26:84:VAL:HG22	72:26:85:ARG:N	2.17	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:19:U:H2'	79:2S:20:A:C8	2.36	0.59
79:2S:1265:U:H2'	79:2S:1266:G:C8	2.37	0.59
79:2S:1818:U:H3'	79:2S:1819:U:H5''	1.83	0.59
79:2S:2434:U:H5'	79:2S:2593:A:H2	1.67	0.59
2:L2:230:VAL:HG21	79:2S:2424:A:N1	2.17	0.59
14:64:38:ILE:HG13	14:64:44:VAL:HG12	1.84	0.59
16:66:22:VAL:HG21	16:66:120:VAL:HG11	1.84	0.59
21:71:36:VAL:HG13	21:71:65:TYR:HA	1.83	0.59
36:86:58:ILE:HG23	36:86:90:MET:SD	2.42	0.59
56:10:81:ASN:HB3	58:12:37:VAL:HG12	1.84	0.59
62:16:101:SER:O	62:16:105:LEU:HD13	2.02	0.59
78:1S:1194:A:H2'	78:1S:1195:C:H5'	1.85	0.59
79:2S:522:A:H62	79:2S:570:A:H2	1.50	0.59
79:2S:1869:C:H2'	79:2S:1870:C:C6	2.36	0.59
79:2S:2896:A:H5'	79:2S:2896:A:H8	1.66	0.59
80:8S:36:G:H2'	80:8S:37:A:H2	1.67	0.59
53:S7:104:ARG:HG3	78:1S:803:A:C4	2.38	0.59
57:11:8:GLN:HE22	57:11:14:GLN:H	1.51	0.59
59:13:102:LEU:HD11	59:13:115:LEU:HG	1.84	0.59
72:26:24:VAL:HG12	72:26:72:HIS:O	2.02	0.59
78:1S:872:G:H22	78:1S:955:A:H2	1.50	0.59
79:2S:709:A:C8	79:2S:2788:C:H5'	2.37	0.59
79:2S:968:G:H2'	79:2S:969:C:C6	2.37	0.59
79:2S:3275:U:H3'	79:2S:3276:G:C5'	2.32	0.59
2:L2:25:GLY:HA2	79:2S:2175:U:O2	2.02	0.59
10:60:196:PHE:CE2	79:2S:1042:U:H4'	2.37	0.59
11:61:125:MET:HG2	11:61:126:ASP:N	2.18	0.59
13:63:50:PRO:HA	13:63:139:LEU:HA	1.84	0.59
25:75:134:ASP:HA	25:75:137:ASN:OD1	2.02	0.59
26:76:99:LEU:HB3	26:76:104:LEU:HD11	1.85	0.59
48:S2:66:PHE:O	48:S2:69:ILE:HG13	2.02	0.59
48:S2:212:LYS:O	48:S2:216:VAL:HG23	2.02	0.59
51:S5:165:LEU:HD23	74:28:47:PRO:HB2	1.84	0.59
55:S9:76:LEU:HD13	55:S9:79:ARG:HH21	1.67	0.59
58:12:126:TRP:CZ2	58:12:129:GLU:HG3	2.37	0.59
66:20:61:LYS:NZ	66:20:61:LYS:HB3	2.18	0.59
79:2S:1951:C:H5	79:2S:2095:G:N1	1.95	0.59
22:72:84:LEU:HB3	22:72:90:ARG:CG	2.28	0.59
23:73:38:ALA:O	23:73:58:VAL:HB	2.02	0.59
25:75:51:VAL:HG11	35:85:62:GLN:NE2	2.18	0.59
35:85:77:PRO:HB2	35:85:80:LEU:HG	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:93:79:VAL:O	43:93:83:ILE:HG12	2.03	0.59
51:S5:187:ILE:H	51:S5:187:ILE:HD12	1.68	0.59
59:13:99:ARG:HA	59:13:99:ARG:CZ	2.31	0.59
63:17:110:VAL:HG11	63:17:117:LEU:O	2.01	0.59
76:30:20:LYS:HE2	76:30:20:LYS:HA	1.85	0.59
78:1S:1118:G:H2'	78:1S:1119:G:O4'	2.02	0.59
79:2S:3029:A:H2'	79:2S:3030:G:O4'	2.02	0.59
82:PT:57:C:O2	82:PT:57:C:H2'	2.03	0.59
2:L2:240:ALA:CB	79:2S:2154:U:H4'	2.33	0.59
3:L3:73:VAL:HG21	23:73:90:GLY:HA3	1.85	0.59
6:L6:96:VAL:HG11	6:L6:141:VAL:HG13	1.85	0.59
7:L7:48:ASN:HA	7:L7:51:TYR:HB2	1.85	0.59
33:83:18:ARG:HB3	33:83:23:ASN:HA	1.84	0.59
36:86:26:ILE:HG12	79:2S:157:A:C8	2.38	0.59
37:87:28:HIS:CD2	79:2S:815:G:H5'	2.38	0.59
49:S3:42:THR:HB	49:S3:43:PRO:HD2	1.84	0.59
50:S4:155:LYS:HE2	50:S4:155:LYS:HA	1.85	0.59
56:10:1:MET:HG3	56:10:44:LYS:HB3	1.84	0.59
78:1S:766:U:H3	78:1S:770:A:H62	1.51	0.59
78:1S:1474:G:H2'	78:1S:1475:A:C8	2.38	0.59
79:2S:1288:U:H2'	79:2S:1289:G:C8	2.37	0.59
79:2S:2456:A:O2'	79:2S:2457:G:H5'	2.03	0.59
79:2S:2907:G:O2'	79:2S:2908:G:H5'	2.02	0.59
79:2S:2995:A:C2'	79:2S:2996:U:H5''	2.33	0.59
1:L1:22:GLU:HG2	1:L1:25:LYS:HE2	1.85	0.59
3:L3:295:ALA:HA	3:L3:299:ASP:HB2	1.84	0.59
7:L7:74:SER:HB3	21:71:141:VAL:O	2.03	0.59
8:L8:27:THR:CG2	79:2S:2563:G:H5''	2.33	0.59
22:72:33:TYR:OH	22:72:80:THR:HG22	2.03	0.59
34:84:19:LYS:NZ	34:84:38:LEU:HD12	2.17	0.59
43:93:29:LEU:HD13	43:93:69:TYR:CD2	2.38	0.59
43:93:57:CYS:HB3	43:93:62:LYS:H	1.68	0.59
50:S4:162:ILE:HG22	50:S4:163:ASP:H	1.66	0.59
51:S5:122:ASN:HD22	51:S5:129:PRO:HD3	1.66	0.59
52:S6:63:MET:HB3	52:S6:99:GLY:O	2.03	0.59
54:S8:45:SER:HB3	54:S8:55:TYR:CD1	2.38	0.59
68:22:53:ILE:HG13	68:22:53:ILE:O	2.00	0.59
78:1S:320:U:O2'	78:1S:321:C:H2'	2.03	0.59
78:1S:391:A:O2'	78:1S:1730:A:H4'	2.03	0.59
78:1S:826:U:H2'	78:1S:827:C:C6	2.38	0.59
78:1S:1641:C:H2'	78:1S:1642:G:C8	2.38	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:L7:82:LYS:HA	7:L7:119:VAL:HB	1.83	0.58
7:L7:100:ARG:O	7:L7:104:GLN:HG3	2.02	0.58
16:66:119:VAL:CG2	20:70:164:SER:HB3	2.33	0.58
22:72:17:VAL:HG13	22:72:103:TYR:HB2	1.85	0.58
38:88:23:ALA:HB2	38:88:45:VAL:HG12	1.85	0.58
60:14:31:THR:HG22	60:14:38:THR:CB	2.33	0.58
72:26:36:ILE:HG12	72:26:38:ARG:HH11	1.67	0.58
78:1S:900:A:H3'	78:1S:901:G:H21	1.68	0.58
78:1S:1449:U:H2'	78:1S:1450:U:C6	2.38	0.58
79:2S:3016:A:H2'	79:2S:3017:A:C8	2.38	0.58
4:L4:329:PRO:HG3	7:L7:41:ARG:O	2.03	0.58
29:79:20:GLY:O	29:79:21:ILE:HG22	2.03	0.58
38:88:26:LYS:HD2	38:88:78:LEU:HD13	1.84	0.58
47:S1:153:HIS:HE2	78:1S:1044:U:H5''	1.68	0.58
49:S3:212:LYS:HG2	49:S3:213:GLU:N	2.18	0.58
57:11:37:ASN:OD1	78:1S:247:A:H4'	2.03	0.58
72:26:88:SER:O	72:26:92:ARG:HG3	2.03	0.58
79:2S:95:A:H8	79:2S:95:A:O5'	1.85	0.58
79:2S:1693:C:H2'	79:2S:1773:C:C5	2.38	0.58
79:2S:1818:U:H2'	79:2S:1819:U:C4'	2.33	0.58
79:2S:3374:U:H4'	79:2S:3376:A:H61	1.67	0.58
2:L2:57:PRO:HB3	43:93:54:ILE:HD11	1.85	0.58
7:L7:181:ILE:HG23	7:L7:182:ASP:OD1	2.03	0.58
10:60:189:GLU:HG2	10:60:200:LEU:HD23	1.85	0.58
18:68:144:ARG:O	18:68:150:VAL:HG11	2.03	0.58
31:81:20:LEU:HD23	31:81:23:VAL:HG21	1.84	0.58
34:84:65:VAL:HG12	34:84:66:SER:N	2.19	0.58
45:RC:206:PRO:HD3	45:RC:245:PHE:HB3	1.85	0.58
45:RC:248:ASN:HD21	45:RC:298:GLY:HA3	1.66	0.58
54:S8:158:SER:HB3	79:2S:2067:U:C6	2.38	0.58
78:1S:521:A:H2'	78:1S:522:U:O4'	2.02	0.58
79:2S:2958:A:H2'	79:2S:2959:C:C6	2.38	0.58
31:81:72:ARG:HG3	31:81:96:VAL:HG21	1.85	0.58
45:RC:238:ASP:HB3	45:RC:257:ALA:H	1.68	0.58
68:22:31:SER:HB3	78:1S:636:A:H5''	1.84	0.58
68:22:115:GLU:HG3	68:22:118:ARG:HH12	1.68	0.58
78:1S:25:C:H4'	78:1S:26:A:H5'	1.85	0.58
78:1S:224:C:H2'	78:1S:225:A:C8	2.38	0.58
79:2S:757:C:H3'	79:2S:758:C:H5''	1.86	0.58
79:2S:1221:A:H3'	79:2S:1222:G:H5''	1.85	0.58
79:2S:1556:C:H3'	79:2S:2169:G:N2	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2367:A:H2'	79:2S:2368:A:C8	2.39	0.58
79:2S:3017:A:H2'	79:2S:3018:C:C6	2.38	0.58
1:L1:13:VAL:HG22	1:L1:14:LYS:N	2.17	0.58
9:L9:111:PHE:HB2	9:L9:125:ASN:HD22	1.68	0.58
9:L9:111:PHE:CB	9:L9:125:ASN:HD22	2.16	0.58
10:60:19:LYS:HE3	10:60:24:ARG:O	2.04	0.58
18:68:147:ARG:HH21	18:68:149:ALA:HB3	1.69	0.58
33:83:75:HIS:HB3	33:83:80:VAL:CG1	2.34	0.58
47:S1:221:PRO:HG2	47:S1:222:LYS:H	1.67	0.58
51:S5:189:THR:HB	71:25:97:LYS:NZ	2.19	0.58
55:S9:49:LEU:HD11	55:S9:53:ARG:HD3	1.84	0.58
57:11:75:VAL:HG21	57:11:117:VAL:HG11	1.85	0.58
73:27:70:LYS:HE3	78:1S:1049:U:H5''	1.86	0.58
78:1S:156:A:C2	78:1S:415:C:H1'	2.39	0.58
78:1S:1334:U:H2'	78:1S:1335:U:O4'	2.03	0.58
79:2S:259:C:H2'	79:2S:260:C:C6	2.39	0.58
79:2S:1472:U:H2'	79:2S:1473:G:H8	1.65	0.58
79:2S:1534:A:H1'	79:2S:1797:A:H2	1.68	0.58
79:2S:2056:U:H2'	79:2S:2057:G:H5'	1.85	0.58
79:2S:2626:A:H1'	79:2S:2644:C:H5'	1.85	0.58
79:2S:2692:A:H2'	79:2S:2693:C:O4'	2.03	0.58
3:L3:266:ARG:HA	3:L3:266:ARG:HE	1.69	0.58
4:L4:52:VAL:HG22	4:L4:53:SER:N	2.15	0.58
4:L4:152:VAL:HG12	4:L4:153:SER:N	2.15	0.58
48:S2:184:VAL:HG22	48:S2:211:LEU:HD23	1.85	0.58
50:S4:23:LEU:HD13	55:S9:4:ALA:HB3	1.85	0.58
50:S4:162:ILE:HG22	50:S4:164:LEU:H	1.69	0.58
54:S8:83:TYR:H	54:S8:101:ILE:HB	1.67	0.58
55:S9:65:LYS:HA	55:S9:70:LEU:HD11	1.85	0.58
78:1S:551:G:H5'	78:1S:581:U:H2'	1.84	0.58
78:1S:1020:A:H3'	78:1S:1021:C:H5''	1.85	0.58
78:1S:1681:A:H2'	78:1S:1682:U:O4'	2.02	0.58
79:2S:54:C:H2'	79:2S:55:G:C8	2.38	0.58
79:2S:1231:A:H4'	79:2S:1261:G:C8	2.39	0.58
79:2S:1341:U:H2'	79:2S:1342:C:C6	2.37	0.58
79:2S:1788:C:H2'	79:2S:1789:G:C8	2.37	0.58
79:2S:1887:A:C2	79:2S:2391:G:H4'	2.39	0.58
81:5S:38:U:H2'	81:5S:40:C:OP2	2.04	0.58
15:65:176:LYS:HZ3	79:2S:65:A:H5'	1.69	0.58
20:70:58:ILE:HD12	20:70:58:ILE:N	2.19	0.58
22:72:28:PHE:CE2	22:72:30:PRO:HG3	2.39	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:73:19:VAL:HG13	23:73:36:ILE:HG22	1.85	0.58
35:85:22:VAL:HA	35:85:25:LYS:HD2	1.86	0.58
37:87:85:LYS:HB2	80:8S:67:U:H5''	1.85	0.58
50:S4:196:VAL:CG2	50:S4:211:LYS:HG2	2.34	0.58
51:S5:63:GLN:HG3	51:S5:88:PRO:HA	1.86	0.58
60:14:124:ASP:HB2	78:1S:929:A:H4'	1.85	0.58
65:19:75:LYS:H	65:19:75:LYS:HD2	1.69	0.58
78:1S:1573:A:H4'	78:1S:1574:G:C5'	2.33	0.58
81:5S:104:A:H2'	81:5S:105:C:H5'	1.83	0.58
2:L2:147:ARG:HD2	2:L2:157:VAL:HB	1.85	0.58
4:L4:334:PHE:CD1	4:L4:339:LEU:HD12	2.39	0.58
10:60:49:CYS:HB2	10:60:172:GLY:HA2	1.86	0.58
25:75:58:ASP:O	25:75:62:VAL:HG23	2.04	0.58
41:91:2:ARG:HH22	78:1S:1773:C:H5	1.50	0.58
45:RC:81:LEU:HD13	45:RC:113:VAL:HG22	1.85	0.58
45:RC:93:ASP:HB2	45:RC:100:TYR:CE1	2.38	0.58
47:S1:146:GLN:HE21	47:S1:148:ASN:HD21	1.50	0.58
51:S5:37:GLN:HB3	62:16:53:LEU:HD22	1.85	0.58
54:S8:87:ASN:HB3	54:S8:90:LEU:HG	1.85	0.58
64:18:28:ILE:O	64:18:28:ILE:HD13	2.03	0.58
78:1S:832:U:H2'	78:1S:833:U:H5''	1.84	0.58
78:1S:1042:G:H22	78:1S:1076:A:H2	1.52	0.58
79:2S:1448:U:H2'	79:2S:1449:A:C8	2.39	0.58
79:2S:1653:G:H2'	79:2S:1654:A:C8	2.38	0.58
79:2S:2516:U:H2'	79:2S:2517:U:C6	2.39	0.58
14:64:19:ARG:HA	14:64:69:THR:HG22	1.84	0.58
17:67:117:ILE:HA	17:67:148:LEU:HA	1.86	0.58
19:69:171:ASP:O	19:69:175:GLN:HB2	2.04	0.58
23:73:33:ASN:HD21	23:73:64:LYS:N	2.01	0.58
33:83:20:LYS:HE2	33:83:21:ARG:NH1	2.19	0.58
33:83:103:TYR:HA	33:83:104:PRO:C	2.24	0.58
34:84:53:GLY:HA2	79:2S:1640:G:OP1	2.04	0.58
36:86:93:ILE:O	36:86:97:SER:HB3	2.04	0.58
45:RC:57:PRO:HG2	62:16:100:GLN:HB2	1.86	0.58
45:RC:295:SER:HB2	45:RC:300:THR:HB	1.84	0.58
54:S8:114:GLU:HG3	54:S8:120:THR:HG22	1.85	0.58
78:1S:138:A:C8	78:1S:141:U:H4'	2.36	0.58
78:1S:822:U:C2'	78:1S:823:G:H5''	2.33	0.58
80:8S:62:C:H4'	80:8S:63:G:O5'	2.04	0.58
1:L1:162:VAL:HB	79:2S:2493:U:H4'	1.85	0.58
3:L3:67:PHE:CD2	23:73:88:ARG:HD3	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:67:66:SER:HA	79:2S:2389:C:H5''	1.83	0.58
17:67:118:GLN:HG2	17:67:119:VAL:H	1.69	0.58
46:S0:122:ILE:HG12	46:S0:144:ILE:HD12	1.85	0.58
61:15:72:LYS:HD2	61:15:72:LYS:N	2.18	0.58
72:26:84:VAL:O	72:26:85:ARG:HB2	2.04	0.58
78:1S:844:A:H2'	78:1S:845:G:H8	1.69	0.58
78:1S:1304:G:OP2	78:1S:1306:C:H5'	2.03	0.58
79:2S:992:A:O2'	79:2S:993:G:H5'	2.04	0.58
79:2S:1200:A:H5'	79:2S:1201:C:H4'	1.84	0.58
2:L2:204:MET:HB2	2:L2:208:ASP:HB2	1.86	0.57
3:L3:56:ILE:HG21	3:L3:356:LEU:HD22	1.85	0.57
9:L9:91:ARG:HD2	9:L9:143:GLU:HB2	1.86	0.57
21:71:27:LEU:HD22	21:71:27:LEU:N	2.18	0.57
54:S8:58:LEU:O	54:S8:59:ARG:HB2	2.04	0.57
75:29:36:LEU:HD12	75:29:37:ASN:N	2.19	0.57
78:1S:1273:G:O6	78:1S:1430:U:H2'	2.04	0.57
78:1S:1323:C:H2'	78:1S:1324:G:O4'	2.03	0.57
79:2S:1951:C:H5	79:2S:2095:G:C6	2.22	0.57
1:L1:14:LYS:HB3	1:L1:216:LEU:CD1	2.34	0.57
2:L2:193:ARG:HD2	79:2S:2182:A:OP1	2.05	0.57
3:L3:130:PHE:CE1	79:2S:3149:G:H4'	2.39	0.57
3:L3:311:PHE:HB2	3:L3:314:TYR:HB3	1.86	0.57
17:67:11:PRO:HA	17:67:14:SER:HB2	1.86	0.57
38:88:20:VAL:HG22	38:88:47:GLY:HA2	1.85	0.57
41:91:23:ARG:NH1	79:2S:2277:C:H5''	2.19	0.57
45:RC:103:PHE:CE1	45:RC:138:GLY:HA2	2.39	0.57
54:S8:171:SER:HB3	78:1S:209:U:H5'	1.86	0.57
61:15:25:LEU:O	61:15:87:PRO:HB2	2.03	0.57
66:20:50:LEU:HD13	66:20:95:ALA:HB2	1.85	0.57
78:1S:903:U:H2'	78:1S:905:A:OP2	2.05	0.57
78:1S:920:U:C2'	78:1S:921:U:H5''	2.34	0.57
79:2S:1287:A:O2'	79:2S:1288:U:H5'	2.04	0.57
79:2S:2394:G:H2'	79:2S:2395:G:O4'	2.03	0.57
14:64:50:LYS:HZ2	14:64:86:ALA:HB2	1.68	0.57
20:70:132:THR:O	20:70:133:ALA:HB3	2.04	0.57
38:88:31:LEU:HB3	38:88:37:PRO:HB3	1.85	0.57
42:92:25:VAL:HG13	42:92:70:LEU:HD13	1.84	0.57
50:S4:207:LEU:HB3	50:S4:219:VAL:CG1	2.34	0.57
78:1S:564:G:H4'	78:1S:566:C:N3	2.19	0.57
78:1S:598:U:H2'	78:1S:599:A:C8	2.39	0.57
78:1S:636:A:H2'	78:1S:637:C:H5'	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1476:C:H2'	78:1S:1477:G:C8	2.39	0.57
79:2S:719:U:H3'	79:2S:720:A:H4'	1.86	0.57
79:2S:3297:U:H2'	79:2S:3298:C:O4'	2.04	0.57
3:L3:348:ARG:O	3:L3:352:GLU:HB2	2.04	0.57
4:L4:285:ASP:O	4:L4:289:ILE:HG13	2.04	0.57
8:L8:61:GLN:O	8:L8:65:LEU:HB2	2.04	0.57
20:70:94:ILE:CG2	20:70:95:ARG:H	2.16	0.57
27:77:33:SER:HB3	27:77:36:HIS:HB2	1.84	0.57
45:RC:222:LEU:HD21	45:RC:234:LEU:HD13	1.86	0.57
49:S3:92:GLN:H	49:S3:92:GLN:HE21	1.52	0.57
50:S4:64:ILE:HD13	70:24:17:LEU:HD13	1.86	0.57
62:16:105:LEU:O	62:16:109:PHE:HB2	2.04	0.57
78:1S:1662:G:H2'	78:1S:1663:G:H8	1.68	0.57
79:2S:543:C:H2'	79:2S:544:C:H5'	1.87	0.57
79:2S:760:G:H1'	79:2S:771:A:H61	1.68	0.57
79:2S:2495:C:H3'	79:2S:2496:C:C5'	2.35	0.57
2:L2:129:ALA:HB3	2:L2:132:ASN:HD22	1.69	0.57
3:L3:56:ILE:HD13	3:L3:76:VAL:HG21	1.85	0.57
25:75:86:VAL:HG22	25:75:87:SER:N	2.19	0.57
26:76:70:ILE:HD12	26:76:70:ILE:N	2.19	0.57
27:77:104:PRO:HA	27:77:107:ARG:HD2	1.87	0.57
31:81:81:GLU:O	31:81:82:GLU:HB3	2.05	0.57
47:S1:70:LEU:HA	47:S1:73:LEU:HG	1.87	0.57
48:S2:121:VAL:O	48:S2:125:ILE:HG13	2.04	0.57
53:S7:94:ALA:HB3	53:S7:96:ARG:NH1	2.19	0.57
62:16:12:LYS:HA	62:16:16:ALA:O	2.05	0.57
68:22:53:ILE:HD11	68:22:60:LYS:HB2	1.87	0.57
78:1S:410:A:H2'	78:1S:411:C:O4'	2.04	0.57
78:1S:1541:G:H21	78:1S:1570:A:H62	1.52	0.57
78:1S:1562:G:H2'	78:1S:1563:C:C6	2.40	0.57
78:1S:1614:A:H2'	78:1S:1615:C:O4'	2.04	0.57
79:2S:2689:A:H1'	79:2S:2702:A:N6	2.20	0.57
79:2S:2768:U:H2'	79:2S:2769:A:C8	2.39	0.57
80:8S:70:G:H1'	80:8S:88:A:N6	2.19	0.57
1:L1:36:VAL:HA	1:L1:208:SER:HA	1.86	0.57
2:L2:234:LYS:HB3	2:L2:238:ILE:HD13	1.85	0.57
12:62:66:ASN:H	12:62:69:ALA:HB3	1.69	0.57
15:65:169:LYS:HA	15:65:174:ILE:HD12	1.85	0.57
16:66:51:LYS:HG3	16:66:141:LEU:HD11	1.85	0.57
20:70:78:TRP:CE3	20:70:125:LYS:HE3	2.39	0.57
20:70:155:ARG:H	20:70:170:THR:HB	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:75:57:LEU:HA	25:75:61:LYS:HD2	1.86	0.57
46:S0:27:ARG:O	46:S0:46:HIS:HE1	1.87	0.57
49:S3:43:PRO:O	49:S3:44:THR:HB	2.04	0.57
64:18:92:ILE:O	64:18:92:ILE:HD13	2.05	0.57
66:20:118:VAL:HG13	66:20:119:ALA:N	2.20	0.57
69:23:126:LYS:CE	69:23:129:GLY:HA2	2.34	0.57
69:23:127:VAL:O	69:23:128:SER:HB2	2.05	0.57
76:30:10:ARG:HD2	76:30:13:LYS:HD2	1.86	0.57
78:1S:487:G:H22	78:1S:500:C:N4	2.02	0.57
79:2S:637:C:H2'	79:2S:638:C:C6	2.40	0.57
79:2S:1038:C:H2'	79:2S:1039:U:C6	2.39	0.57
79:2S:1348:U:H4'	79:2S:1349:G:C5'	2.35	0.57
79:2S:1689:U:H2'	79:2S:1690:C:C6	2.39	0.57
79:2S:1903:U:H2'	79:2S:1905:G:OP2	2.03	0.57
79:2S:3199:G:H2'	79:2S:3200:G:C8	2.40	0.57
1:L1:55:LEU:HD23	1:L1:135:PRO:HD2	1.84	0.57
4:L4:107:ARG:HG3	79:2S:663:C:O3'	2.05	0.57
7:L7:134:VAL:O	7:L7:229:PHE:HB2	2.05	0.57
15:65:154:PRO:HB2	79:2S:58:G:C5'	2.35	0.57
16:66:43:ILE:HB	16:66:136:THR:HB	1.86	0.57
19:69:62:ARG:HH21	19:69:62:ARG:HG3	1.68	0.57
19:69:63:THR:HA	19:69:66:HIS:HB3	1.85	0.57
45:RC:88:THR:HG22	45:RC:104:VAL:HG13	1.85	0.57
57:11:94:ILE:HG12	69:23:12:ALA:HB1	1.87	0.57
60:14:24:ASN:O	60:14:54:GLU:HB2	2.05	0.57
70:24:29:HIS:HB2	70:24:32:ARG:CB	2.35	0.57
70:24:102:LYS:N	70:24:102:LYS:HD2	2.19	0.57
78:1S:212:U:H2'	78:1S:213:A:C8	2.39	0.57
79:2S:1828:A:H2'	79:2S:1829:G:C8	2.40	0.57
79:2S:2881:C:H2'	79:2S:2882:U:C6	2.40	0.57
82:PT:76:C:H2'	82:PT:77:A:H4'	1.85	0.57
2:L2:34:TYR:CD1	79:2S:2525:G:H2'	2.40	0.57
5:L5:140:ARG:HG3	5:L5:141:PRO:CD	2.27	0.57
6:L6:142:ASP:O	6:L6:146:ILE:HG12	2.05	0.57
7:L7:82:LYS:NZ	7:L7:191:VAL:HB	2.19	0.57
11:61:86:VAL:HG21	11:61:111:ASP:HB3	1.87	0.57
13:63:76:THR:O	13:63:80:VAL:HG23	2.04	0.57
13:63:103:ASN:O	36:86:22:PRO:HD3	2.05	0.57
13:63:131:LYS:HB3	13:63:131:LYS:NZ	2.20	0.57
14:64:55:ARG:HH12	14:64:77:ARG:HG3	1.70	0.57
24:74:38:SER:O	24:74:42:GLN:HG3	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:82:19:ARG:HG2	32:82:20:HIS:N	2.20	0.57
42:92:49:GLY:HA2	79:2S:277:G:C5'	2.34	0.57
45:RC:83:ALA:HA	45:RC:89:LEU:HD23	1.86	0.57
46:S0:206:ASP:HB2	46:S0:207:PRO:HA	1.86	0.57
58:12:63:VAL:HG23	58:12:66:VAL:HG23	1.86	0.57
79:2S:1123:U:H2'	79:2S:1124:U:H5'	1.85	0.57
79:2S:1568:U:H4'	79:2S:1570:U:H5	1.68	0.57
79:2S:1756:C:H2'	79:2S:1757:A:C8	2.40	0.57
79:2S:2927:C:H2'	79:2S:2928:C:C6	2.40	0.57
1:L1:24:LYS:O	1:L1:24:LYS:HD2	2.04	0.57
13:63:46:ILE:HG22	13:63:49:ARG:HB2	1.87	0.57
15:65:57:GLN:O	15:65:142:ILE:HD11	2.04	0.57
15:65:172:ARG:NE	15:65:174:ILE:HD11	2.20	0.57
21:71:116:ARG:O	21:71:120:LYS:HE3	2.05	0.57
43:93:29:LEU:HD13	43:93:69:TYR:HD2	1.68	0.57
44:P0:49:ALA:HB2	44:P0:89:THR:HB	1.85	0.57
46:S0:126:PRO:HG2	46:S0:151:SER:HB3	1.86	0.57
47:S1:113:MET:HE3	47:S1:209:ASN:HD22	1.70	0.57
48:S2:137:ILE:HG13	48:S2:138:PRO:HD2	1.85	0.57
50:S4:15:PRO:HD2	50:S4:18:TRP:HZ3	1.69	0.57
51:S5:189:THR:HG21	71:25:97:LYS:HG3	1.87	0.57
61:15:94:VAL:O	61:15:104:GLN:HA	2.04	0.57
64:18:115:ARG:O	64:18:119:ILE:HD13	2.05	0.57
78:1S:1629:G:H2'	78:1S:1630:U:C6	2.40	0.57
79:2S:1545:A:H2'	79:2S:1547:G:OP2	2.05	0.57
79:2S:1702:U:H2'	79:2S:1703:U:C6	2.39	0.57
79:2S:2106:A:H2'	79:2S:2107:A:C8	2.39	0.57
80:8S:81:U:H4'	80:8S:82:U:H5'	1.87	0.57
1:L1:162:VAL:HG22	1:L1:163:LEU:H	1.69	0.57
5:L5:48:LYS:HG3	5:L5:145:PHE:CE2	2.40	0.57
13:63:29:ALA:O	13:63:33:VAL:HG23	2.03	0.57
30:80:48:THR:HG21	30:80:52:ARG:HD2	1.86	0.57
33:83:54:ARG:HG3	33:83:64:ILE:HG13	1.87	0.57
35:85:76:GLN:HB2	35:85:77:PRO:CD	2.35	0.57
50:S4:159:THR:HG21	50:S4:227:VAL:HB	1.87	0.57
52:S6:14:LYS:HD2	52:S6:123:GLY:CA	2.33	0.57
52:S6:113:ILE:HD11	52:S6:124:LEU:HD22	1.86	0.57
52:S6:137:ARG:HH21	52:S6:137:ARG:HG3	1.70	0.57
55:S9:152:SER:HB3	55:S9:155:HIS:HB2	1.86	0.57
56:10:50:THR:HG21	56:10:57:THR:OG1	2.05	0.57
78:1S:209:U:H2'	78:1S:210:A:H8	1.70	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1733:C:H2'	78:1S:1734:U:C6	2.40	0.57
79:2S:341:G:H4'	79:2S:344:A:H1'	1.87	0.57
79:2S:794:U:H2'	79:2S:795:G:C8	2.39	0.57
79:2S:1611:G:H2'	79:2S:1612:A:C8	2.39	0.57
79:2S:1940:G:H21	79:2S:3362:A:H8	1.53	0.57
82:PT:15:G:H22	82:PT:49:C:H42	1.53	0.57
2:L2:112:ILE:HG13	2:L2:135:ILE:HG12	1.86	0.56
5:L5:269:SER:O	5:L5:273:ARG:HB2	2.05	0.56
7:L7:29:GLU:O	7:L7:33:ARG:HB3	2.05	0.56
9:L9:105:GLU:CG	9:L9:108:GLY:HA2	2.34	0.56
16:66:136:THR:HG22	16:66:137:THR:N	2.20	0.56
23:73:57:MET:HB2	23:73:77:ILE:HG12	1.87	0.56
28:78:74:ASN:HB3	28:78:115:LYS:HB2	1.87	0.56
50:S4:194:THR:O	50:S4:195:ILE:HB	2.05	0.56
51:S5:146:THR:HB	51:S5:157:ARG:HB3	1.87	0.56
52:S6:184:LEU:HD21	78:1S:140:A:H5'	1.86	0.56
54:S8:189:LEU:O	54:S8:193:LEU:HB2	2.05	0.56
57:11:2:SER:HA	57:11:113:PRO:HA	1.87	0.56
65:19:100:ILE:O	65:19:104:VAL:HG23	2.05	0.56
78:1S:1513:G:O2'	78:1S:1515:A:H1'	2.05	0.56
79:2S:2328:U:H2'	79:2S:2329:C:C6	2.40	0.56
79:2S:2387:A:C3'	79:2S:2388:U:H5''	2.35	0.56
80:8S:37:A:H5''	80:8S:39:G:O4'	2.05	0.56
3:L3:223:GLY:HA2	3:L3:271:GLY:HA3	1.87	0.56
4:L4:170:LYS:HE3	4:L4:178:LEU:HD12	1.87	0.56
10:60:200:LEU:HD11	10:60:209:ASN:ND2	2.18	0.56
25:75:135:ILE:O	25:75:135:ILE:HD13	2.04	0.56
52:S6:67:VAL:HG23	52:S6:99:GLY:HA2	1.87	0.56
60:14:102:LEU:O	60:14:105:LEU:HG	2.05	0.56
64:18:105:VAL:CG1	64:18:106:GLU:H	2.18	0.56
69:23:49:ALA:O	69:23:103:LEU:HD22	2.04	0.56
78:1S:381:C:H2'	78:1S:382:C:H6	1.68	0.56
79:2S:1274:A:H2'	79:2S:1275:C:C6	2.39	0.56
79:2S:1718:G:H2'	79:2S:1719:G:H8	1.69	0.56
79:2S:2119:A:H2'	79:2S:2120:A:O4'	2.04	0.56
79:2S:2271:A:H3'	79:2S:2272:G:H5''	1.87	0.56
79:2S:3013:U:H2'	79:2S:3014:U:C6	2.40	0.56
1:L1:14:LYS:HB3	1:L1:216:LEU:HD12	1.87	0.56
3:L3:189:SER:HA	3:L3:192:VAL:HG12	1.86	0.56
4:L4:107:ARG:HA	79:2S:664:U:H5'	1.86	0.56
5:L5:64:ILE:HD12	5:L5:64:ILE:N	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:L8:158:ASP:HB2	8:L8:159:PRO:HD3	1.87	0.56
14:64:41:GLN:HB3	14:64:42:LYS:HD3	1.88	0.56
15:65:5:LYS:HG3	36:86:40:VAL:HG11	1.86	0.56
18:68:147:ARG:HG2	18:68:148:GLU:H	1.70	0.56
19:69:136:ARG:O	19:69:140:GLU:HG3	2.06	0.56
20:70:82:ASP:HB3	20:70:87:THR:HG22	1.87	0.56
26:76:60:ARG:HB2	26:76:103:LYS:HD2	1.86	0.56
28:78:72:VAL:HG12	28:78:111:LYS:HB3	1.86	0.56
34:84:91:ARG:O	34:84:95:ILE:HB	2.05	0.56
38:88:5:ILE:HD12	38:88:11:PHE:CD2	2.40	0.56
38:88:26:LYS:HD2	38:88:78:LEU:CD1	2.35	0.56
45:RC:46:LYS:O	45:RC:55:GLY:HA2	2.06	0.56
45:RC:85:TRP:CZ3	63:17:29:GLN:HB3	2.39	0.56
47:S1:189:ILE:HB	47:S1:190:PRO:HD3	1.87	0.56
57:11:20:PHE:HB2	78:1S:211:U:H5''	1.86	0.56
59:13:30:SER:O	59:13:33:VAL:HG22	2.05	0.56
61:15:60:LEU:O	61:15:60:LEU:HD13	2.05	0.56
63:17:57:LEU:O	63:17:61:ILE:HG13	2.05	0.56
63:17:85:VAL:N	63:17:86:PRO:HD2	2.20	0.56
66:20:58:LEU:HB2	66:20:88:LYS:HB3	1.86	0.56
68:22:20:THR:OG1	68:22:22:LYS:HD3	2.04	0.56
78:1S:51:A:H62	78:1S:429:G:H21	1.53	0.56
78:1S:205:U:H2'	78:1S:206:A:C8	2.40	0.56
78:1S:401:A:O2'	78:1S:402:C:H4'	2.04	0.56
78:1S:650:U:H2'	78:1S:651:G:C8	2.39	0.56
78:1S:796:A:H2'	78:1S:797:G:H8	1.69	0.56
78:1S:870:C:H2'	78:1S:871:G:C8	2.40	0.56
78:1S:1227:A:H4'	78:1S:1228:G:H5''	1.87	0.56
78:1S:1269:U:H4'	78:1S:1270:G:H5''	1.85	0.56
79:2S:87:U:H2'	79:2S:88:A:C8	2.40	0.56
79:2S:912:G:H2'	79:2S:914:A:N7	2.20	0.56
79:2S:1174:G:H2'	79:2S:1175:C:C6	2.41	0.56
79:2S:1260:A:H4'	79:2S:1280:C:H4'	1.86	0.56
79:2S:1526:U:H1'	79:2S:1595:U:H5'	1.87	0.56
79:2S:1658:G:H2'	79:2S:1659:U:C6	2.40	0.56
79:2S:2221:G:C2	79:2S:2223:A:H5''	2.40	0.56
79:2S:2756:C:H2'	79:2S:2757:U:C6	2.40	0.56
79:2S:3146:G:H2'	79:2S:3147:G:H8	1.70	0.56
2:L2:79:ASN:O	2:L2:82:VAL:HG22	2.06	0.56
5:L5:19:PRO:HB2	5:L5:24:ARG:HG2	1.87	0.56
6:L6:18:LEU:HD22	6:L6:18:LEU:H	1.70	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:60:98:ARG:HD2	10:60:120:GLY:O	2.05	0.56
18:68:21:SER:HB2	79:2S:672:A:H5''	1.87	0.56
32:82:15:LYS:HG2	32:82:16:LYS:H	1.70	0.56
35:85:59:ASN:O	35:85:63:ARG:HG3	2.05	0.56
38:88:42:LYS:HG2	38:88:55:VAL:HG13	1.88	0.56
45:RC:89:LEU:HD21	45:RC:110:VAL:HG11	1.88	0.56
47:S1:151:LYS:HD2	47:S1:153:HIS:CE1	2.41	0.56
50:S4:86:PHE:O	50:S4:87:MET:HB2	2.03	0.56
58:12:49:THR:HG21	77:31:103:LEU:HD21	1.87	0.56
65:19:28:LEU:HG	65:19:55:TYR:HE1	1.69	0.56
69:23:96:VAL:HG23	69:23:97:ASP:N	2.17	0.56
71:25:100:ILE:HD13	71:25:101:TYR:N	2.20	0.56
78:1S:1003:A:H4'	78:1S:1004:U:H5''	1.88	0.56
78:1S:1279:C:H2'	78:1S:1280:C:C6	2.40	0.56
79:2S:418:A:H2	80:8S:5:U:H3	1.51	0.56
79:2S:1620:U:H2'	79:2S:1621:A:C8	2.41	0.56
79:2S:2216:G:H22	79:2S:2229:A:H2	1.53	0.56
79:2S:2271:A:H2'	79:2S:2272:G:C4'	2.35	0.56
4:L4:329:PRO:HG2	7:L7:45:LEU:HB2	1.88	0.56
5:L5:224:LYS:HD2	81:5S:50:U:O2'	2.05	0.56
10:60:61:SER:O	10:60:65:LEU:HG	2.06	0.56
11:61:29:ARG:HG2	11:61:32:ARG:HH21	1.70	0.56
17:67:61:ARG:HH21	80:8S:3:A:H4'	1.71	0.56
18:68:9:GLN:HB3	79:2S:949:C:H5''	1.87	0.56
19:69:69:SER:HB2	19:69:74:ARG:HB2	1.88	0.56
32:82:37:GLY:HA3	79:2S:639:G:OP1	2.06	0.56
46:S0:116:LYS:O	46:S0:118:PRO:HD3	2.05	0.56
52:S6:21:GLU:HA	52:S6:24:ILE:HB	1.86	0.56
58:12:67:THR:O	58:12:68:GLU:HB2	2.03	0.56
65:19:47:PRO:HA	78:1S:1477:G:O2'	2.05	0.56
70:24:8:ARG:HD3	70:24:28:LEU:HG	1.87	0.56
78:1S:830:U:O2'	78:1S:831:U:H5''	2.05	0.56
78:1S:1150:G:H22	83:MR:4:A:H3'	1.71	0.56
79:2S:225:C:H2'	79:2S:226:C:C6	2.40	0.56
79:2S:495:G:H2'	79:2S:496:C:C6	2.39	0.56
79:2S:2422:C:H2'	79:2S:2423:U:C6	2.40	0.56
79:2S:2567:C:C3'	79:2S:2568:C:H5''	2.35	0.56
81:5S:12:U:H4'	81:5S:110:G:N2	2.14	0.56
82:PT:20:G:H3'	82:PT:21:U:C5	2.41	0.56
11:61:25:GLU:CG	11:61:29:ARG:HD2	2.33	0.56
20:70:99:ARG:O	20:70:103:VAL:HG23	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:80:27:TYR:HA	30:80:89:VAL:HG11	1.86	0.56
34:84:60:ARG:HH21	79:2S:1616:U:H4'	1.70	0.56
48:52:225:LEU:HB2	68:22:70:ASN:HD21	1.71	0.56
59:13:34:ILE:O	59:13:38:VAL:HG23	2.05	0.56
59:13:71:ILE:HD12	59:13:71:ILE:N	2.12	0.56
65:19:28:LEU:HD21	65:19:30:VAL:CG1	2.36	0.56
78:1S:1524:A:H2'	78:1S:1525:A:H8	1.70	0.56
78:1S:1603:U:H2'	78:1S:1604:U:C6	2.40	0.56
78:1S:1757:G:N3	78:1S:1757:G:H2'	2.21	0.56
79:2S:374:A:N3	79:2S:376:G:H5''	2.20	0.56
79:2S:636:C:O4'	79:2S:2378:C:H5'	2.04	0.56
79:2S:2349:U:H2'	79:2S:2350:C:H6	1.70	0.56
79:2S:3302:U:H2'	79:2S:3303:G:C8	2.40	0.56
79:2S:3387:U:H2'	79:2S:3388:C:C6	2.41	0.56
1:L1:32:VAL:HG22	1:L1:33:GLU:N	2.17	0.56
1:L1:67:ILE:HD11	1:L1:86:SER:HB2	1.87	0.56
3:L3:369:ARG:HH22	24:74:11:ALA:HB1	1.70	0.56
8:L8:45:ASN:HA	25:75:28:THR:HA	1.88	0.56
18:68:3:ILE:H	18:68:3:ILE:HD12	1.70	0.56
28:78:122:PRO:HB3	28:78:142:GLY:O	2.05	0.56
35:85:21:LEU:HD12	35:85:24:LEU:HD12	1.88	0.56
43:93:19:GLY:O	43:93:23:ARG:HG3	2.05	0.56
45:RC:114:ASP:OD2	45:RC:156:VAL:HG23	2.06	0.56
47:S1:176:VAL:CG1	47:S1:177:GLN:H	2.18	0.56
50:S4:49:ARG:O	50:S4:53:LYS:HA	2.05	0.56
59:13:84:ILE:HD11	59:13:150:VAL:HG23	1.88	0.56
63:17:45:ARG:HG2	63:17:49:LYS:HE2	1.87	0.56
66:20:28:SER:HB3	66:20:34:LEU:HB2	1.86	0.56
72:26:30:ILE:HD12	72:26:31:PRO:HD2	1.88	0.56
78:1S:531:C:H2'	78:1S:532:U:H5''	1.87	0.56
79:2S:845:G:H2'	79:2S:847:A:OP2	2.06	0.56
79:2S:1110:U:H2'	79:2S:1111:U:C6	2.41	0.56
3:L3:332:ARG:O	3:L3:333:LYS:HB2	2.06	0.56
4:L4:110:ASN:HB2	15:65:201:ARG:O	2.06	0.56
6:L6:149:ILE:HG23	6:L6:155:LEU:HD12	1.88	0.56
10:60:30:LYS:N	10:60:30:LYS:HD2	2.21	0.56
11:61:17:LEU:HD13	11:61:129:VAL:HG22	1.87	0.56
15:65:118:SER:HB2	15:65:131:GLU:O	2.06	0.56
32:82:101:SER:O	32:82:105:ARG:HG3	2.05	0.56
36:86:58:ILE:HD12	36:86:98:ARG:HH22	1.71	0.56
49:S3:37:VAL:HG12	49:S3:50:ILE:CD1	2.35	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:10:82:LEU:HD13	56:10:86:ILE:HG12	1.88	0.56
58:12:87:PRO:HA	58:12:140:PHE:CZ	2.40	0.56
58:12:103:LEU:H	58:12:103:LEU:HD22	1.70	0.56
60:14:88:GLY:HA2	60:14:122:PRO:HD3	1.87	0.56
64:18:86:LEU:HD22	64:18:97:ASP:HB3	1.88	0.56
78:1S:181:A:H2'	78:1S:182:A:O4'	2.05	0.56
78:1S:703:G:H2'	78:1S:704:C:H5'	1.88	0.56
79:2S:59:G:H2'	80:8S:33:A:O2'	2.06	0.56
79:2S:1231:A:H4'	79:2S:1261:G:H8	1.69	0.56
79:2S:2207:A:H3'	79:2S:2208:A:C5'	2.36	0.56
4:L4:162:THR:O	4:L4:166:VAL:HG23	2.06	0.56
7:L7:60:ARG:HA	7:L7:60:ARG:HE	1.71	0.56
7:L7:239:LEU:O	7:L7:243:MET:HG3	2.06	0.56
16:66:109:PRO:HG2	16:66:112:TYR:HD2	1.71	0.56
19:69:23:TRP:HB3	19:69:51:VAL:CG2	2.36	0.56
38:88:7:ASP:HB3	38:88:10:GLN:CB	2.36	0.56
46:S0:41:ARG:HH11	46:S0:45:VAL:HG21	1.71	0.56
47:S1:179:SER:HB3	47:S1:183:GLN:HB2	1.87	0.56
49:S3:164:VAL:HG13	49:S3:168:ILE:HD11	1.87	0.56
50:S4:196:VAL:HG21	50:S4:211:LYS:HG2	1.87	0.56
53:S7:168:SER:O	53:S7:172:VAL:HG23	2.05	0.56
57:11:129:ARG:HD3	78:1S:115:G:C8	2.41	0.56
61:15:110:GLU:HB2	64:18:119:ILE:HD11	1.88	0.56
75:29:19:ARG:HG3	75:29:19:ARG:HH11	1.71	0.56
78:1S:1474:G:H2'	78:1S:1475:A:H8	1.70	0.56
79:2S:511:G:H2'	79:2S:512:U:O4'	2.05	0.56
79:2S:1308:A:C2	79:2S:1311:G:H5''	2.41	0.56
79:2S:2527:G:H2'	79:2S:2528:G:C8	2.41	0.56
79:2S:2581:U:H2'	79:2S:2582:C:C6	2.41	0.56
3:L3:25:ILE:H	3:L3:25:ILE:CD1	2.13	0.56
3:L3:57:VAL:O	3:L3:357:LYS:HB2	2.05	0.56
5:L5:63:GLN:OE1	5:L5:74:VAL:HG11	2.06	0.56
5:L5:78:ALA:HB1	5:L5:101:THR:HG22	1.88	0.56
8:L8:186:LEU:CB	8:L8:195:SER:HB3	2.33	0.56
13:63:42:ARG:HA	13:63:45:LYS:HB3	1.87	0.56
33:83:74:THR:O	33:83:82:ARG:HG3	2.06	0.56
48:S2:160:GLY:HA3	48:S2:216:VAL:HB	1.88	0.56
50:S4:145:ARG:NH2	50:S4:167:GLY:HA2	2.17	0.56
53:S7:149:ILE:HG12	53:S7:180:GLN:HB2	1.87	0.56
58:12:29:LYS:O	58:12:33:ARG:HG2	2.04	0.56
61:15:18:ARG:HG3	61:15:36:LEU:HB2	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:16:78:VAL:O	62:16:82:ARG:HG2	2.06	0.56
65:19:118:PRO:O	65:19:119:LYS:HB2	2.06	0.56
68:22:103:ILE:HD11	68:22:110:ILE:HG22	1.88	0.56
68:22:107:SER:HA	78:1S:804:A:C8	2.41	0.56
70:24:35:VAL:HG21	70:24:40:LEU:HD21	1.87	0.56
71:25:89:ILE:HB	71:25:101:TYR:HB3	1.88	0.56
77:31:136:LYS:C	77:31:138:ARG:H	2.10	0.56
78:1S:219:A:H4'	78:1S:219:A:OP1	2.06	0.56
78:1S:312:A:C2	78:1S:314:C:H2'	2.41	0.56
78:1S:694:U:O2	78:1S:694:U:H2'	2.05	0.56
78:1S:900:A:C2'	78:1S:901:G:H5'	2.35	0.56
79:2S:350:C:N3	79:2S:367:A:H2'	2.21	0.56
79:2S:516:A:C3'	79:2S:517:G:H5''	2.36	0.56
79:2S:757:C:C3'	79:2S:758:C:H5''	2.36	0.56
79:2S:1028:U:H3'	79:2S:1029:G:H5''	1.88	0.56
79:2S:1444:G:H2'	79:2S:1445:U:O4'	2.06	0.56
79:2S:2471:U:H2'	79:2S:2472:U:H5'	1.87	0.56
79:2S:3314:A:H2'	79:2S:3315:G:C8	2.40	0.56
3:L3:95:THR:HB	79:2S:3243:A:H4'	1.87	0.55
4:L4:39:PHE:CE1	4:L4:236:LEU:HA	2.40	0.55
4:L4:221:ASN:HD21	79:2S:212:G:H3'	1.70	0.55
5:L5:55:PHE:HE2	5:L5:159:VAL:HG22	1.72	0.55
5:L5:61:ILE:HG23	5:L5:63:GLN:HE21	1.70	0.55
7:L7:82:LYS:HZ1	7:L7:191:VAL:HB	1.71	0.55
9:L9:18:VAL:HG12	9:L9:27:VAL:HG22	1.88	0.55
11:61:115:LYS:HB2	11:61:115:LYS:NZ	2.21	0.55
13:63:128:ARG:HG3	35:85:114:ARG:HH11	1.70	0.55
20:70:89:ASN:ND2	21:71:156:TYR:HB3	2.21	0.55
35:85:63:ARG:O	35:85:67:ARG:HG3	2.07	0.55
36:86:68:ARG:HA	36:86:71:LYS:HE2	1.88	0.55
38:88:46:ARG:HG2	38:88:46:ARG:HH11	1.71	0.55
46:S0:166:GLY:HA2	46:S0:170:ILE:HD11	1.88	0.55
51:S5:110:ALA:O	51:S5:114:ILE:HG12	2.06	0.55
59:13:86:GLU:HG3	59:13:87:ASP:N	2.22	0.55
60:14:112:ILE:O	72:26:58:VAL:HG22	2.05	0.55
61:15:37:ALA:HB1	61:15:38:PRO:HD2	1.88	0.55
63:17:53:TYR:O	63:17:57:LEU:HG	2.06	0.55
65:19:27:LYS:HB3	65:19:27:LYS:NZ	2.21	0.55
78:1S:1621:U:C3'	78:1S:1622:G:H5''	2.35	0.55
79:2S:438:A:H2'	79:2S:439:C:O4'	2.05	0.55
79:2S:1024:G:H3'	79:2S:1025:A:C5'	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1808:G:H4'	79:2S:2559:U:O4	2.06	0.55
79:2S:2361:A:N6	79:2S:2377:G:H1	1.95	0.55
81:5S:28:C:H2'	81:5S:29:C:O4'	2.06	0.55
2:L2:23:ARG:HH11	2:L2:23:ARG:HG3	1.71	0.55
4:L4:29:PRO:HB3	18:68:25:TYR:HE2	1.71	0.55
4:L4:82:THR:HG23	4:L4:85:SER:H	1.72	0.55
4:L4:329:PRO:HB3	7:L7:41:ARG:HH12	1.71	0.55
10:60:205:SER:O	10:60:209:ASN:HB2	2.06	0.55
13:63:177:LYS:HG3	36:86:11:LEU:HD13	1.88	0.55
16:66:130:LYS:NZ	16:66:133:ARG:HH21	2.04	0.55
20:70:152:LEU:HD12	20:70:172:TYR:HE2	1.72	0.55
34:84:94:LEU:O	34:84:98:GLN:HG2	2.05	0.55
62:16:51:PRO:HG2	62:16:52:LEU:HD23	1.87	0.55
68:22:25:VAL:HG22	68:22:63:VAL:O	2.06	0.55
68:22:71:LYS:HB3	68:22:130:TYR:CE2	2.42	0.55
79:2S:87:U:H2'	79:2S:88:A:H8	1.72	0.55
79:2S:1250:G:H2'	79:2S:1251:A:C8	2.41	0.55
79:2S:1966:U:H2'	79:2S:1967:U:H5'	1.89	0.55
79:2S:2226:U:H2'	79:2S:2227:C:C6	2.41	0.55
79:2S:2922:G:H2'	79:2S:2923:U:H4'	1.88	0.55
79:2S:2960:C:H2'	79:2S:2961:G:C8	2.41	0.55
80:8S:53:A:H2'	80:8S:54:A:C8	2.41	0.55
4:L4:185:LYS:HG2	4:L4:199:TRP:CE3	2.42	0.55
9:L9:87:LYS:HE3	9:L9:145:VAL:HG13	1.87	0.55
20:70:81:TYR:CD1	20:70:90:MET:HG3	2.41	0.55
26:76:79:ALA:HA	26:76:99:LEU:O	2.06	0.55
45:RC:13:LEU:HD21	45:RC:54:PHE:HB3	1.87	0.55
47:S1:87:ARG:NH2	47:S1:101:HIS:HA	2.21	0.55
50:S4:162:ILE:HG22	50:S4:163:ASP:N	2.21	0.55
59:13:98:VAL:O	59:13:102:LEU:HG	2.06	0.55
68:22:71:LYS:HD3	78:1S:1098:U:H1'	1.87	0.55
70:24:29:HIS:HB2	70:24:32:ARG:HB3	1.87	0.55
78:1S:264:G:H5''	78:1S:265:A:H5'	1.89	0.55
78:1S:477:A:H2'	78:1S:478:A:C8	2.40	0.55
78:1S:1060:U:H3'	78:1S:1061:A:C5'	2.36	0.55
78:1S:1112:G:H2'	78:1S:1113:A:C8	2.41	0.55
79:2S:1130:A:H8	79:2S:1130:A:O5'	1.89	0.55
79:2S:1220:U:H5''	79:2S:1286:A:N6	2.22	0.55
79:2S:1660:C:H2'	79:2S:1661:G:C8	2.41	0.55
79:2S:2783:U:H2'	79:2S:2784:G:O4'	2.05	0.55
79:2S:3064:U:H2'	79:2S:3065:G:C8	2.41	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:3121:U:C1'	79:2S:3122:A:H5''	2.35	0.55
2:L2:144:ASN:HB2	2:L2:160:SER:HB2	1.88	0.55
3:L3:59:ASP:OD1	3:L3:71:GLU:HG2	2.06	0.55
6:L6:40:LEU:HB3	6:L6:84:VAL:HG13	1.87	0.55
7:L7:121:LYS:HB2	21:71:133:ALA:HB3	1.88	0.55
8:L8:48:ARG:HG3	79:2S:2585:G:C8	2.42	0.55
19:69:166:ASN:O	19:69:170:ARG:HB2	2.06	0.55
27:77:121:ARG:NH1	27:77:126:LYS:HD3	2.21	0.55
40:90:97:ARG:NE	40:90:122:ARG:HB3	2.21	0.55
41:91:13:LEU:O	41:91:17:ARG:HG3	2.06	0.55
47:S1:100:PHE:HZ	47:S1:103:MET:HB2	1.71	0.55
49:S3:209:ILE:HG22	63:17:38:ILE:HG13	1.88	0.55
51:S5:200:ASN:HA	51:S5:205:SER:HB2	1.88	0.55
54:S8:68:ALA:HB2	78:1S:210:A:O2'	2.07	0.55
55:S9:50:SER:HB3	78:1S:1:U:H5	1.71	0.55
60:14:103:ARG:HD2	72:26:49:ALA:HB2	1.87	0.55
78:1S:562:G:H2'	78:1S:563:U:C6	2.41	0.55
79:2S:191:U:H2'	79:2S:192:C:C6	2.42	0.55
79:2S:371:G:H2'	79:2S:373:A:OP2	2.07	0.55
79:2S:725:G:H2'	79:2S:726:G:C5'	2.28	0.55
79:2S:1115:G:H5''	79:2S:1116:G:C5'	2.36	0.55
79:2S:1951:C:H5	79:2S:2095:G:O6	1.90	0.55
4:L4:92:ASN:HA	4:L4:98:ARG:O	2.07	0.55
5:L5:184:ASP:HB3	5:L5:187:THR:HG23	1.87	0.55
20:70:71:LYS:NZ	79:2S:562:C:H4'	2.20	0.55
21:71:27:LEU:HD22	21:71:27:LEU:H	1.71	0.55
32:82:57:TYR:CE1	79:2S:1162:U:H4'	2.41	0.55
34:84:42:PRO:O	34:84:50:ALA:HA	2.07	0.55
36:86:15:LYS:HG3	36:86:17:VAL:HG23	1.87	0.55
38:88:8:ILE:H	38:88:8:ILE:HD12	1.71	0.55
44:P0:56:ASN:HB3	44:P0:80:VAL:HG23	1.87	0.55
48:S2:41:LEU:O	48:S2:45:VAL:HG23	2.07	0.55
59:13:14:SER:HB3	78:1S:959:U:H5''	1.88	0.55
60:14:71:CYS:SG	60:14:76:ILE:HB	2.47	0.55
67:21:16:LYS:HA	67:21:23:ILE:HA	1.88	0.55
70:24:37:LYS:HG2	70:24:60:PHE:CE2	2.41	0.55
74:28:50:GLU:O	74:28:51:ASN:HB2	2.07	0.55
78:1S:106:U:H2'	78:1S:107:C:C6	2.40	0.55
78:1S:181:A:H2'	78:1S:182:A:C8	2.41	0.55
78:1S:370:A:H2'	78:1S:371:G:O4'	2.06	0.55
78:1S:920:U:C3'	78:1S:921:U:H5''	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1690:G:H2'	78:1S:1691:A:C8	2.42	0.55
1:L1:119:GLN:HB3	1:L1:123:LEU:HD12	1.87	0.55
1:L1:155:ILE:HG23	1:L1:163:LEU:HD11	1.88	0.55
11:61:15:GLU:HB3	11:61:130:VAL:O	2.06	0.55
11:61:141:ARG:O	11:61:145:LYS:HB2	2.06	0.55
13:63:75:PHE:O	13:63:79:GLU:HB2	2.07	0.55
18:68:33:TYR:CD1	18:68:36:LEU:HD12	2.42	0.55
49:S3:12:VAL:O	49:S3:16:VAL:HG23	2.06	0.55
52:S6:58:LYS:O	52:S6:59:GLN:HB2	2.07	0.55
68:22:57:ARG:HG2	78:1S:864:U:OP2	2.06	0.55
69:23:50:LYS:CE	78:1S:435:C:H5''	2.35	0.55
78:1S:310:C:H2'	78:1S:311:U:C6	2.42	0.55
78:1S:446:A:N6	78:1S:461:G:H21	2.04	0.55
78:1S:1147:A:H2'	78:1S:1148:C:C6	2.41	0.55
78:1S:1725:U:H2'	78:1S:1726:G:C8	2.41	0.55
79:2S:1718:G:H2'	79:2S:1719:G:C8	2.42	0.55
79:2S:1764:U:C3'	79:2S:1765:U:H5''	2.37	0.55
81:5S:32:U:H1'	81:5S:33:U:H5	1.72	0.55
82:ET:17:C:H2'	82:ET:18(A):U:C5	2.41	0.55
1:L1:38:LEU:HA	1:L1:206:VAL:HG22	1.88	0.55
1:L1:207:LYS:HD3	79:2S:2491:A:O4'	2.06	0.55
2:L2:240:ALA:HB2	79:2S:2154:U:H4'	1.89	0.55
13:63:27:ASP:HB3	80:8S:29:U:H5''	1.88	0.55
13:63:57:VAL:HG13	13:63:147:ILE:HG23	1.89	0.55
15:65:66:VAL:HG22	15:65:128:LYS:O	2.07	0.55
20:70:41:TYR:O	20:70:45:LEU:HD23	2.07	0.55
25:75:59:SER:HB3	25:75:102:LEU:HD11	1.89	0.55
30:80:48:THR:CG2	30:80:52:ARG:HD2	2.36	0.55
35:85:86:ARG:O	35:85:90:ARG:HG2	2.07	0.55
51:S5:58:LEU:O	51:S5:62:VAL:HG23	2.07	0.55
51:S5:107:LYS:O	51:S5:111:VAL:HG23	2.06	0.55
51:S5:143:ARG:O	51:S5:162:VAL:HG12	2.07	0.55
52:S6:199:GLN:O	52:S6:203:GLU:HG2	2.07	0.55
54:S8:138:ASN:ND2	78:1S:197:A:H61	2.04	0.55
63:17:3:ARG:HB2	78:1S:1414:U:H5'	1.88	0.55
68:22:41:MET:HB3	68:22:46:TYR:HB2	1.87	0.55
78:1S:640:U:H2'	78:1S:641:G:C8	2.42	0.55
78:1S:1485:C:H3'	78:1S:1486:G:H5''	1.89	0.55
78:1S:1669:U:H2'	78:1S:1670:G:O4'	2.06	0.55
79:2S:2761:G:H1	79:2S:2795:U:H3'	1.72	0.55
79:2S:2971:A:H5''	79:2S:2972:G:C5'	2.34	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:112:ILE:HD12	2:L2:112:ILE:N	2.22	0.55
6:L6:52:VAL:HG22	6:L6:53:VAL:N	2.20	0.55
13:63:166:ALA:O	13:63:170:LEU:HG	2.07	0.55
14:64:21:VAL:CG1	14:64:65:LEU:HD23	2.36	0.55
27:77:75:VAL:HG22	27:77:76:ASN:N	2.17	0.55
44:P0:6:GLU:O	44:P0:10:GLU:HB2	2.06	0.55
44:P0:61:ARG:HA	44:P0:64:ARG:HD2	1.89	0.55
51:S5:189:THR:OG1	51:S5:192:GLU:HG3	2.07	0.55
60:14:30:VAL:CG1	60:14:40:ALA:HB3	2.34	0.55
62:16:115:THR:HA	62:16:118:ILE:CG2	2.36	0.55
63:17:24:LEU:HD23	63:17:34:LEU:HD13	1.87	0.55
73:27:20:LYS:HD3	73:27:20:LYS:H	1.72	0.55
78:1S:381:C:H2'	78:1S:382:C:C6	2.41	0.55
78:1S:552:G:H2'	78:1S:553:G:O4'	2.07	0.55
79:2S:2407:C:H1'	79:2S:2818:U:O2	2.06	0.55
79:2S:2476:C:C2'	79:2S:2477:G:H4'	2.23	0.55
79:2S:2633:U:O2'	79:2S:2634:U:H5'	2.06	0.55
79:2S:2794:G:H1'	79:2S:2795:U:C6	2.41	0.55
79:2S:2898:G:OP2	79:2S:2899:C:H5'	2.06	0.55
81:5S:9:C:C2'	81:5S:10:C:H5'	2.37	0.55
82:PT:19:G:HO2'	82:PT:58:A:H2	1.53	0.55
82:PT:70:C:H2'	82:PT:71:G:H8	1.71	0.55
3:L3:27:ALA:CB	3:L3:218:ILE:HG22	2.37	0.55
5:L5:22:ARG:HG3	5:L5:27:LYS:HB2	1.89	0.55
5:L5:36:LEU:HD23	79:2S:2748:A:H1'	1.88	0.55
6:L6:176:PHE:CD2	33:83:107:ILE:HG21	2.40	0.55
11:61:32:ARG:O	11:61:36:VAL:HG23	2.07	0.55
13:63:124:ILE:HD13	13:63:124:ILE:N	2.22	0.55
18:68:83:VAL:HB	18:68:103:ALA:HB2	1.88	0.55
27:77:27:LYS:O	27:77:42:LEU:HB2	2.07	0.55
28:78:22:ILE:HB	79:2S:1114:U:OP1	2.06	0.55
30:80:44:ILE:HD13	30:80:53:LYS:HG3	1.89	0.55
34:84:19:LYS:NZ	34:84:37:LYS:HA	2.22	0.55
34:84:25:THR:HG22	79:2S:1597:C:H5''	1.89	0.55
34:84:81:CYS:O	34:84:82:ALA:HB3	2.07	0.55
42:92:37:ALA:HB3	42:92:40:LYS:HB2	1.88	0.55
43:93:45:LYS:HB2	43:93:45:LYS:NZ	2.22	0.55
45:RC:222:LEU:CD2	45:RC:234:LEU:HD13	2.37	0.55
64:18:144:ARG:O	64:18:145:ARG:HB2	2.07	0.55
73:27:36:LYS:HG2	73:27:43:ILE:HG22	1.88	0.55
78:1S:422:G:H2'	78:1S:423:G:C8	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1488:G:H3'	78:1S:1515:A:H61	1.72	0.55
79:2S:1023:C:C2	79:2S:1024:G:H1'	2.42	0.55
79:2S:3193:C:H2'	79:2S:3194:C:C6	2.42	0.55
80:8S:26:U:H2'	80:8S:27:U:C6	2.42	0.55
2:L2:209:HIS:HD2	2:L2:211:HIS:HB2	1.71	0.55
2:L2:230:VAL:HG12	2:L2:231:SER:N	2.21	0.55
5:L5:277:LEU:HB2	5:L5:282:ARG:HG3	1.88	0.55
6:L6:26:ARG:NH1	6:L6:26:ARG:HB2	2.22	0.55
9:L9:23:ARG:HH12	79:2S:3185:U:H5''	1.71	0.55
14:64:75:GLY:O	79:2S:561:C:H5''	2.07	0.55
17:67:171:ARG:HD2	79:2S:3274:A:OP2	2.07	0.55
25:75:53:HIS:CE1	25:75:56:ARG:HG2	2.41	0.55
31:81:62:ARG:CB	31:81:66:GLY:HA3	2.29	0.55
34:84:75:ALA:O	34:84:76:TYR:HB2	2.07	0.55
44:P0:56:ASN:HD22	79:2S:1282:G:H5''	1.72	0.55
45:RC:66:HIS:HB3	45:RC:85:TRP:HB2	1.88	0.55
53:S7:56:LYS:HB2	53:S7:88:ARG:HD2	1.89	0.55
60:14:85:ALA:N	60:14:119:THR:HG22	2.13	0.55
72:26:23:CYS:HB3	72:26:28:LYS:H	1.71	0.55
78:1S:564:G:H4'	78:1S:566:C:C2	2.42	0.55
78:1S:941:A:C2'	78:1S:942:G:H5'	2.37	0.55
78:1S:1386:G:H2'	78:1S:1387:G:C8	2.42	0.55
79:2S:1583:A:H3'	79:2S:1584:U:H6	1.72	0.55
79:2S:1647:A:N6	79:2S:1808:G:H1'	2.22	0.55
79:2S:2873:U:O2'	79:2S:2874:G:H5'	2.06	0.55
1:L1:136:THR:HB	1:L1:137:PRO:HD3	1.87	0.54
2:L2:247:ARG:HG2	2:L2:247:ARG:HH11	1.72	0.54
4:L4:135:VAL:HG12	4:L4:140:HIS:HB2	1.88	0.54
5:L5:64:ILE:HD12	5:L5:64:ILE:H	1.72	0.54
10:60:23:ASN:HD22	10:60:23:ASN:N	2.05	0.54
10:60:145:LYS:O	10:60:149:VAL:HG23	2.07	0.54
10:60:200:LEU:CD1	10:60:209:ASN:HD21	2.15	0.54
16:66:136:THR:HG22	16:66:137:THR:H	1.71	0.54
18:68:71:LEU:HD21	18:68:99:THR:HG21	1.89	0.54
21:71:39:ILE:HD12	21:71:102:ARG:HB2	1.88	0.54
39:89:6:SER:OG	39:89:9:ILE:HG12	2.07	0.54
44:P0:46:ARG:NH2	79:2S:1257:C:H4'	2.12	0.54
46:S0:119:ARG:HE	46:S0:119:ARG:HA	1.72	0.54
46:S0:183:ARG:HG3	46:S0:188:LEU:HG	1.88	0.54
47:S1:107:THR:HA	47:S1:110:LEU:HD22	1.89	0.54
49:S3:148:LYS:NZ	49:S3:148:LYS:HB3	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:37:LYS:HD2	78:1S:297:U:H5''	1.89	0.54
59:13:99:ARG:HH22	59:13:102:LEU:HD12	1.72	0.54
78:1S:822:U:H3'	78:1S:823:G:H5''	1.89	0.54
78:1S:1690:G:H21	78:1S:1712:A:N6	2.05	0.54
78:1S:1692:G:H2'	78:1S:1693:A:C8	2.43	0.54
79:2S:434:U:H2'	79:2S:435:C:C6	2.41	0.54
79:2S:1138:U:H2'	79:2S:1139:G:O4'	2.07	0.54
79:2S:2344:U:H2'	79:2S:2345:A:H8	1.71	0.54
79:2S:3108:G:H2'	79:2S:3109:G:O4'	2.07	0.54
2:L2:74:GLU:HB3	2:L2:76:PHE:CE1	2.38	0.54
5:L5:202:GLY:O	5:L5:206:GLN:HB2	2.08	0.54
8:L8:99:PRO:HB2	8:L8:190:VAL:HG23	1.89	0.54
15:65:3:ALA:O	15:65:7:LEU:HD13	2.06	0.54
15:65:66:VAL:O	15:65:127:TYR:HA	2.07	0.54
18:68:60:PRO:HB2	18:68:142:GLY:HA3	1.89	0.54
42:92:37:ALA:HB3	42:92:40:LYS:CB	2.37	0.54
44:P0:99:VAL:HA	44:P0:103:ASN:HD22	1.72	0.54
49:S3:164:VAL:O	49:S3:168:ILE:HG13	2.07	0.54
51:S5:149:VAL:HG13	51:S5:149:VAL:O	2.07	0.54
58:12:24:ILE:O	58:12:25:GLU:HB2	2.06	0.54
63:17:100:LEU:HD22	63:17:117:LEU:HB3	1.88	0.54
68:22:73:GLY:HA3	68:22:128:PHE:CZ	2.42	0.54
69:23:109:ARG:HB3	69:23:112:LYS:HB2	1.88	0.54
69:23:142:LYS:HG2	69:23:143:PRO:CD	2.38	0.54
72:26:4:LYS:HE3	72:26:5:ARG:HH21	1.71	0.54
78:1S:967:A:H2'	78:1S:968:U:C6	2.42	0.54
78:1S:1151:A:H4'	78:1S:1766:A:N7	2.21	0.54
78:1S:1458:G:N3	78:1S:1458:G:H2'	2.22	0.54
78:1S:1533:C:H4'	78:1S:1539:G:H1	1.71	0.54
79:2S:1813:A:H2'	79:2S:1814:A:H5'	1.89	0.54
4:L4:60:THR:HG22	4:L4:62:ALA:H	1.72	0.54
8:L8:53:PRO:HB2	8:L8:55:TYR:CD2	2.43	0.54
9:L9:12:VAL:O	9:L9:51:GLN:HB3	2.07	0.54
28:78:2:PRO:HD2	28:78:5:PHE:HB2	1.90	0.54
29:79:23:LYS:HG3	79:2S:982:C:H5''	1.89	0.54
30:80:18:ILE:HG12	30:80:81:VAL:HA	1.88	0.54
31:81:27:LYS:O	31:81:31:ARG:HB2	2.07	0.54
45:RC:157:VAL:HG11	45:RC:225:LEU:HD22	1.88	0.54
46:S0:129:ASP:O	46:S0:133:ILE:HD13	2.07	0.54
49:S3:54:ARG:HD2	49:S3:57:ASP:HB2	1.88	0.54
51:S5:58:LEU:HD13	51:S5:138:THR:HG22	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:15:124:THR:HG21	78:1S:1182:U:H4'	1.90	0.54
78:1S:406:U:H2'	78:1S:407:A:C8	2.42	0.54
78:1S:1506:G:H2'	78:1S:1507:G:C8	2.42	0.54
78:1S:1723:U:H2'	78:1S:1724:U:C6	2.43	0.54
79:2S:599:C:C3'	79:2S:600:G:H5''	2.37	0.54
79:2S:2261:G:H21	79:2S:2262:A:N6	2.04	0.54
79:2S:3163:A:C3'	79:2S:3164:C:H5''	2.36	0.54
2:L2:42:ARG:HD2	2:L2:87:PHE:HB3	1.89	0.54
3:L3:362:ALA:HB1	3:L3:368:GLY:HA3	1.88	0.54
4:L4:322:GLN:CB	79:2S:608:A:H5'	2.37	0.54
5:L5:64:ILE:HD11	5:L5:105:ILE:HG23	1.89	0.54
7:L7:224:ILE:HD11	20:70:35:VAL:HG12	1.89	0.54
17:67:3:ARG:HG3	79:2S:398:A:C5'	2.37	0.54
18:68:158:HIS:H	18:68:186:VAL:CG1	2.21	0.54
26:76:17:LYS:CG	80:8S:23:U:H4'	2.36	0.54
30:80:16:LEU:HA	30:80:19:LYS:HE2	1.89	0.54
45:RC:176:LYS:HE3	45:RC:197:SER:HA	1.90	0.54
47:S1:127:VAL:HB	47:S1:173:THR:HG22	1.88	0.54
49:S3:170:THR:HA	49:S3:186:VAL:O	2.07	0.54
54:S8:10:LYS:NZ	54:S8:10:LYS:HB2	2.23	0.54
54:S8:76:THR:HG22	54:S8:108:PRO:CG	2.26	0.54
60:14:20:TYR:HB3	60:14:27:PHE:HB2	1.88	0.54
65:19:49:ASP:O	65:19:50:ALA:HB3	2.07	0.54
69:23:144:ARG:HD2	69:23:145:SER:H	1.71	0.54
77:31:119:ARG:HE	77:31:139:LEU:HD21	1.72	0.54
78:1S:1116:A:H2'	78:1S:1117:U:C6	2.43	0.54
79:2S:2609:A:H2'	79:2S:2610:G:C8	2.41	0.54
1:L1:120:VAL:H	1:L1:121:PRO:CD	2.20	0.54
4:L4:35:VAL:HG21	4:L4:244:LEU:HD21	1.90	0.54
14:64:103:ILE:O	14:64:106:ARG:HG2	2.08	0.54
20:70:38:LYS:HE2	20:70:61:ILE:HG12	1.90	0.54
25:75:62:VAL:HG13	25:75:90:ALA:HB2	1.90	0.54
39:89:36:ARG:HH11	39:89:36:ARG:HG2	1.72	0.54
50:S4:192:ILE:HD13	50:S4:228:ILE:CD1	2.38	0.54
52:S6:59:GLN:HA	78:1S:155:U:H4'	1.88	0.54
53:S7:97:ARG:O	53:S7:98:ILE:HB	2.08	0.54
53:S7:109:VAL:HG13	53:S7:110:GLN:H	1.72	0.54
56:10:77:ARG:HH21	56:10:86:ILE:HD11	1.73	0.54
59:13:90:TYR:CD2	78:1S:869:A:H5''	2.43	0.54
61:15:52:LYS:H	61:15:53:PRO:HD2	1.73	0.54
65:19:31:PRO:HD2	65:19:34:VAL:HB	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:21:62:ARG:HB3	67:21:64:GLU:HG2	1.90	0.54
78:1S:1419:G:H2'	78:1S:1420:C:O4'	2.07	0.54
79:2S:987:U:H2'	79:2S:988:U:C6	2.43	0.54
79:2S:1014:U:H2'	79:2S:1015:U:H5''	1.89	0.54
79:2S:1221:A:H3'	79:2S:1222:G:C5'	2.36	0.54
79:2S:1913:A:C2	79:2S:2120:A:H2'	2.43	0.54
79:2S:2456:A:C2'	79:2S:2457:G:H5'	2.38	0.54
82:ET:9:G:H1'	82:ET:46:G:H2'	1.88	0.54
3:L3:56:ILE:HD11	3:L3:359:ILE:HG23	1.89	0.54
7:L7:88:ARG:HH21	7:L7:92:ILE:HA	1.73	0.54
7:L7:140:SER:O	7:L7:144:ILE:HG13	2.08	0.54
10:60:46:PHE:CD1	10:60:140:THR:HA	2.43	0.54
10:60:56:GLU:HA	10:60:131:ILE:HG12	1.89	0.54
23:73:33:ASN:HD21	23:73:64:LYS:H	1.54	0.54
27:77:17:ARG:C	27:77:19:ALA:H	2.10	0.54
49:S3:209:ILE:HG22	63:17:38:ILE:CG1	2.38	0.54
50:S4:195:ILE:HA	50:S4:210:ILE:HD13	1.89	0.54
65:19:15:ILE:HD13	65:19:60:SER:HB2	1.90	0.54
70:24:35:VAL:HG13	70:24:36:SER:N	2.22	0.54
73:27:81:ARG:O	73:27:82:LYS:HB2	2.08	0.54
78:1S:114:C:H42	78:1S:245:U:H1'	1.72	0.54
78:1S:870:C:H2'	78:1S:871:G:H8	1.73	0.54
78:1S:1525:A:H3'	78:1S:1526:A:H8	1.71	0.54
79:2S:1818:U:C3'	79:2S:1819:U:H5''	2.38	0.54
79:2S:2593:A:N3	79:2S:2593:A:H2'	2.21	0.54
79:2S:3199:G:H2'	79:2S:3200:G:H8	1.73	0.54
3:L3:16:PHE:CD2	79:2S:3045:G:H4'	2.43	0.54
3:L3:232:ARG:HH11	3:L3:268:GLY:N	2.05	0.54
6:L6:52:VAL:CG2	6:L6:65:ILE:HB	2.38	0.54
9:L9:48:VAL:HG13	9:L9:49:ASN:N	2.23	0.54
13:63:29:ALA:HB2	15:65:201:ARG:HH12	1.73	0.54
14:64:108:ARG:HG2	14:64:108:ARG:HH21	1.73	0.54
21:71:53:PRO:HB3	21:71:91:LEU:CD1	2.38	0.54
25:75:115:ARG:NE	25:75:121:LYS:HB2	2.23	0.54
47:S1:29:TRP:CD1	47:S1:47:LEU:HD23	2.43	0.54
48:S2:148:LEU:O	67:21:3:ASN:HB2	2.07	0.54
49:S3:211:PRO:HG3	63:17:20:TYR:CE1	2.39	0.54
61:15:52:LYS:HB2	61:15:53:PRO:HD3	1.90	0.54
69:23:26:GLU:O	69:23:30:LYS:HB2	2.08	0.54
76:30:38:LEU:O	76:30:42:ARG:HB2	2.07	0.54
76:30:49:LEU:HD12	76:30:51:ASN:HB2	1.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:316:A:H2'	78:1S:317:C:C6	2.43	0.54
78:1S:698:U:H2'	78:1S:699:U:O4'	2.07	0.54
78:1S:947:U:H2'	78:1S:948:G:C8	2.43	0.54
79:2S:2181:C:H2'	79:2S:2182:A:C8	2.43	0.54
3:L3:50:LYS:HG3	3:L3:328:ILE:HD12	1.89	0.54
3:L3:260:VAL:HG21	79:2S:2987:A:C2	2.43	0.54
7:L7:80:GLN:HB2	21:71:135:PRO:CB	2.37	0.54
7:L7:91:GLY:O	7:L7:92:ILE:HB	2.08	0.54
13:63:174:ARG:O	13:63:178:LYS:HB2	2.07	0.54
15:65:15:GLN:HG3	36:86:51:SER:HB2	1.90	0.54
18:68:16:ARG:HD2	18:68:53:PHE:O	2.08	0.54
18:68:67:ILE:O	18:68:71:LEU:HG	2.08	0.54
18:68:170:ARG:HB2	28:78:56:VAL:HG11	1.90	0.54
19:69:61:SER:HB3	79:2S:1689:U:H5''	1.90	0.54
21:71:17:ARG:O	21:71:18:ASP:HB2	2.07	0.54
32:82:26:HIS:HD2	79:2S:655:C:H5'	1.72	0.54
35:85:85:THR:C	35:85:89:ARG:HE	2.10	0.54
37:87:31:LYS:HZ1	79:2S:815:G:H5''	1.73	0.54
41:91:22:ALA:HA	41:91:25:LYS:HE2	1.89	0.54
45:RC:32:LEU:HD21	45:RC:94:VAL:HG11	1.90	0.54
45:RC:227:ALA:HB1	45:RC:229:LYS:NZ	2.23	0.54
45:RC:235:SER:HB3	45:RC:237:GLN:HE21	1.73	0.54
51:S5:187:ILE:HD12	51:S5:187:ILE:N	2.21	0.54
55:S9:162:SER:HB2	55:S9:163:PRO:HD2	1.90	0.54
55:S9:175:ARG:O	55:S9:175:ARG:HD2	2.07	0.54
59:13:45:LEU:HD12	59:13:49:GLN:HB3	1.90	0.54
64:18:57:ARG:O	64:18:61:LEU:HD23	2.08	0.54
68:22:10:ALA:O	68:22:14:ILE:HG13	2.07	0.54
78:1S:1291:G:H2'	78:1S:1292:G:C8	2.41	0.54
78:1S:1656:U:H3'	78:1S:1657:U:C5'	2.35	0.54
78:1S:1746:A:H2'	78:1S:1747:G:O4'	2.08	0.54
79:2S:725:G:C3'	79:2S:726:G:H5''	2.38	0.54
79:2S:1240:A:H61	79:2S:1244:A:H5''	1.72	0.54
79:2S:1739:U:H2'	79:2S:1740:U:H5'	1.90	0.54
5:L5:11:ALA:HB1	79:2S:1003:A:H5'	1.89	0.54
8:L8:99:PRO:HG2	8:L8:190:VAL:HG23	1.89	0.54
16:66:6:VAL:HG13	16:66:32:LYS:HB2	1.90	0.54
17:67:64:ASN:O	17:67:80:LYS:HD2	2.08	0.54
18:68:58:ASN:C	18:68:60:PRO:HD3	2.29	0.54
20:70:7:TYR:CE1	20:70:63:GLN:HB2	2.43	0.54
35:85:29:ALA:O	35:85:33:VAL:HG23	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:S6:185:GLN:O	52:S6:189:HIS:HB2	2.08	0.54
53:S7:143:LEU:HD13	53:S7:144:VAL:H	1.73	0.54
54:S8:8:ARG:HD3	54:S8:21:PHE:HB3	1.90	0.54
54:S8:110:ARG:HE	54:S8:121:LEU:HD21	1.73	0.54
59:13:129:TYR:HA	59:13:132:VAL:HG22	1.90	0.54
67:21:56:SER:OG	67:21:59:VAL:HG23	2.08	0.54
71:25:77:ARG:HB3	71:25:81:ARG:NH1	2.23	0.54
75:29:5:ASN:HD22	75:29:8:PHE:HB2	1.72	0.54
78:1S:158:U:H3'	78:1S:159:U:H5''	1.89	0.54
78:1S:843:U:H2'	78:1S:844:A:C8	2.42	0.54
78:1S:849:C:H2'	78:1S:850:A:C8	2.43	0.54
79:2S:79:U:H2'	79:2S:80:G:C8	2.42	0.54
79:2S:790:U:H2'	79:2S:791:A:C8	2.42	0.54
79:2S:1653:G:H2'	79:2S:1654:A:H8	1.73	0.54
79:2S:2056:U:C2'	79:2S:2057:G:H5'	2.38	0.54
4:L4:210:ALA:HA	4:L4:230:VAL:HG23	1.90	0.54
5:L5:286:VAL:HG11	81:5S:64:A:H1'	1.89	0.54
6:L6:80:ASN:HB3	6:L6:83:TYR:HD2	1.72	0.54
10:60:40:LYS:N	10:60:40:LYS:HD2	2.22	0.54
18:68:170:ARG:HD2	28:78:56:VAL:HG21	1.90	0.54
19:69:92:GLN:O	19:69:96:ILE:HG13	2.08	0.54
21:71:49:GLN:HG2	79:2S:2755:C:O2'	2.08	0.54
23:73:39:VAL:O	79:2S:2931:C:H4'	2.08	0.54
32:82:4:LEU:CD1	32:82:5:PRO:HD2	2.38	0.54
32:82:50:ILE:HG22	79:2S:426:G:H4'	1.89	0.54
37:87:21:ARG:NH2	37:87:39:TYR:HA	2.23	0.54
39:89:15:LYS:HE3	39:89:19:GLN:NE2	2.23	0.54
51:S5:89:ILE:HD12	51:S5:90:ILE:HG12	1.88	0.54
52:S6:63:MET:HG2	52:S6:98:ARG:HB3	1.90	0.54
55:S9:49:LEU:CD1	55:S9:53:ARG:HD3	2.37	0.54
60:14:22:SER:HA	60:14:95:GLY:N	2.23	0.54
61:15:22:LEU:H	61:15:22:LEU:CD2	2.21	0.54
68:22:41:MET:HB2	68:22:47:ILE:HG12	1.90	0.54
78:1S:572:C:H2'	78:1S:573:C:C6	2.42	0.54
78:1S:588:U:H2'	78:1S:589:C:C6	2.43	0.54
78:1S:712:G:H2'	78:1S:713:A:C5'	2.24	0.54
79:2S:2904:U:H2'	79:2S:2905:U:C6	2.43	0.54
79:2S:3317:U:H4'	79:2S:3318:G:C5'	2.37	0.54
2:L2:34:TYR:HA	2:L2:37:ARG:NH2	2.22	0.53
4:L4:350:LYS:CG	4:L4:351:PRO:HD2	2.37	0.53
9:L9:16:VAL:HG12	9:L9:29:GLY:HA2	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:64:32:LEU:O	14:64:48:GLY:HA3	2.08	0.53
26:76:70:ILE:HD12	26:76:70:ILE:H	1.72	0.53
27:77:72:ILE:H	27:77:111:LYS:HE2	1.73	0.53
29:79:47:LEU:O	29:79:50:THR:HG22	2.08	0.53
42:92:12:CYS:HB2	42:92:23:HIS:CE1	2.43	0.53
51:S5:183:ALA:CB	51:S5:190:ILE:HD13	2.38	0.53
56:10:4:PRO:HG2	56:10:7:ASP:OD1	2.07	0.53
68:22:83:ILE:HD13	78:1S:749:U:OP1	2.08	0.53
73:27:50:ALA:O	73:27:51:GLN:HB2	2.07	0.53
78:1S:586:G:H2'	78:1S:587:C:C6	2.43	0.53
78:1S:694:U:H5''	78:1S:695:U:H5	1.73	0.53
78:1S:1569:A:H2'	78:1S:1570:A:C8	2.43	0.53
79:2S:380:U:H2'	79:2S:381:U:C6	2.43	0.53
79:2S:435:C:H2'	79:2S:436:A:C8	2.42	0.53
79:2S:877:C:H2'	79:2S:878:G:O4'	2.07	0.53
79:2S:1509:A:H2'	79:2S:1510:G:O4'	2.08	0.53
5:L5:208:MET:HA	5:L5:219:PHE:HE2	1.73	0.53
7:L7:125:GLU:HG3	79:2S:987:U:H5'	1.90	0.53
20:70:72:VAL:HA	20:70:97:VAL:HA	1.88	0.53
35:85:16:GLN:O	35:85:20:GLN:HB2	2.08	0.53
41:91:19:LYS:HD2	41:91:19:LYS:N	2.23	0.53
46:S0:144:ILE:HG23	46:S0:158:VAL:HG13	1.90	0.53
47:S1:29:TRP:HD1	47:S1:47:LEU:HD23	1.73	0.53
49:S3:8:LYS:O	49:S3:12:VAL:HG23	2.09	0.53
51:S5:153:GLY:HA2	83:MR:2:A:C8	2.43	0.53
54:S8:172:ARG:HB3	54:S8:175:GLN:HB2	1.90	0.53
60:14:63:ALA:O	60:14:67:VAL:HG23	2.07	0.53
71:25:93:SER:HB2	71:25:100:ILE:H	1.72	0.53
78:1S:1025:A:H5''	78:1S:1027:A:N7	2.23	0.53
78:1S:1186:U:H2'	78:1S:1187:U:O4'	2.08	0.53
78:1S:1662:G:H2'	78:1S:1663:G:C8	2.43	0.53
79:2S:1055:A:H1'	81:5S:81:U:O2'	2.08	0.53
79:2S:1234:G:H2'	79:2S:1235:U:C5	2.42	0.53
79:2S:3302:U:H3	79:2S:3312:U:H3	1.55	0.53
80:8S:114:G:H2'	80:8S:115:C:C6	2.43	0.53
82:ET:9:G:H4'	82:ET:47:G:H5'	1.90	0.53
15:65:122:ASN:HB3	15:65:129:TYR:HD2	1.73	0.53
15:65:158:HIS:CG	79:2S:56:G:H4'	2.44	0.53
21:71:26:HIS:HB2	81:5S:9:C:OP1	2.08	0.53
26:76:17:LYS:HG2	80:8S:23:U:C4'	2.35	0.53
26:76:56:VAL:HG22	26:76:57:LEU:H	1.72	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:83:70:LYS:HE2	79:2S:585:A:H5''	1.89	0.53
37:87:51:ALA:O	37:87:55:ARG:HB2	2.08	0.53
40:90:125:LYS:HD2	79:2S:2897:A:C5'	2.38	0.53
49:S3:174:HIS:O	49:S3:176:LEU:HD12	2.09	0.53
54:S8:5:ARG:HH11	54:S8:5:ARG:HG3	1.73	0.53
59:13:23:PRO:O	59:13:24:ALA:HB3	2.08	0.53
61:15:83:MET:O	61:15:116:LEU:HG	2.08	0.53
68:22:31:SER:O	68:22:35:ILE:HG12	2.08	0.53
73:27:72:LYS:HD3	73:27:73:LEU:N	2.23	0.53
74:28:36:THR:HG23	74:28:37:SER:H	1.73	0.53
78:1S:353:A:H2'	78:1S:354:C:O4'	2.07	0.53
78:1S:922:G:H2'	78:1S:923:A:H8	1.73	0.53
82:PT:70:C:H2'	82:PT:71:G:C8	2.43	0.53
5:L5:72:ASP:OD1	81:5S:7:G:H1'	2.08	0.53
13:63:128:ARG:HG3	35:85:114:ARG:NH1	2.24	0.53
18:68:170:ARG:NH1	28:78:56:VAL:HG21	2.23	0.53
19:69:102:LEU:HD13	19:69:138:LEU:HD12	1.90	0.53
36:86:4:LYS:HG3	36:86:15:LYS:O	2.08	0.53
51:S5:189:THR:HB	71:25:97:LYS:HZ3	1.72	0.53
52:S6:84:TYR:HD2	52:S6:95:LYS:HD2	1.73	0.53
55:S9:13:SER:HB2	55:S9:47:PHE:CD1	2.42	0.53
63:17:103:ASP:OD1	63:17:122:ILE:HG21	2.08	0.53
65:19:72:GLY:HA3	78:1S:1498:G:OP1	2.09	0.53
66:20:118:VAL:HG22	66:20:119:ALA:H	1.72	0.53
67:21:86:SER:HA	73:27:6:ASP:CB	2.39	0.53
78:1S:397:A:H2'	78:1S:398:G:O4'	2.07	0.53
78:1S:1260:U:H2'	78:1S:1261:G:C8	2.43	0.53
79:2S:1505:C:H2'	79:2S:1506:A:C8	2.43	0.53
79:2S:1951:C:H6	79:2S:2095:G:N1	2.02	0.53
79:2S:2173:U:H3'	79:2S:2174:G:H2'	1.90	0.53
79:2S:2882:U:H2'	79:2S:2883:U:C6	2.42	0.53
79:2S:2949:U:C2'	79:2S:2950:G:H5'	2.37	0.53
80:8S:104:A:OP2	80:8S:105:A:H2'	2.09	0.53
10:60:131:ILE:HD11	81:5S:93:C:H4'	1.90	0.53
17:67:41:LEU:O	17:67:45:GLN:HG3	2.09	0.53
20:70:171:PHE:H	20:70:171:PHE:HD1	1.57	0.53
30:80:66:LYS:HD3	30:80:66:LYS:N	2.24	0.53
32:82:11:LYS:C	32:82:13:HIS:H	2.11	0.53
33:83:59:VAL:HG23	33:83:60:ARG:N	2.22	0.53
34:84:39:ALA:HB2	34:84:58:ARG:CD	2.38	0.53
45:RC:128:ASP:O	45:RC:129:LYS:HG2	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:S0:84:ARG:O	46:S0:88:LYS:HD2	2.09	0.53
51:S5:76:ARG:HD2	62:16:122:ARG:NE	2.23	0.53
51:S5:184:PHE:CD2	51:S5:185:ARG:HG3	2.44	0.53
58:12:98:GLY:O	58:12:103:LEU:HD11	2.08	0.53
61:15:98:ASN:HB3	61:15:120:SER:OG	2.09	0.53
68:22:15:ASN:O	68:22:19:LYS:HG3	2.08	0.53
71:25:47:TYR:O	71:25:51:LEU:HD13	2.09	0.53
71:25:65:LEU:HB3	71:25:71:ILE:HD11	1.90	0.53
78:1S:482:U:H2'	78:1S:483:A:H8	1.74	0.53
78:1S:560:U:H2'	78:1S:561:G:C8	2.43	0.53
78:1S:981:U:H2'	78:1S:982:U:H5'	1.91	0.53
78:1S:1414:U:H2'	78:1S:1414:U:O2	2.09	0.53
79:2S:200:C:H5'	79:2S:221:A:C2	2.43	0.53
79:2S:700:C:H2'	79:2S:701:G:C8	2.44	0.53
79:2S:1158:A:H2'	79:2S:1159:A:H4'	1.90	0.53
79:2S:2060:A:H2'	79:2S:2061:G:C5'	2.39	0.53
1:L1:169:VAL:CG1	1:L1:170:GLY:H	2.20	0.53
8:L8:101:THR:HG22	8:L8:104:GLU:CG	2.39	0.53
10:60:36:LEU:HD23	10:60:73:ASN:HD22	1.73	0.53
22:72:96:VAL:HG12	22:72:97:SER:N	2.22	0.53
26:76:50:ILE:HD13	26:76:51:ARG:N	2.24	0.53
44:P0:15:LEU:HD21	44:P0:52:LEU:HD12	1.91	0.53
46:S0:148:ASP:HB2	46:S0:164:ASN:ND2	2.22	0.53
46:S0:184:LEU:O	46:S0:185:ARG:HB3	2.08	0.53
47:S1:61:LEU:HD13	47:S1:61:LEU:N	2.23	0.53
47:S1:148:ASN:HD22	47:S1:148:ASN:N	1.96	0.53
48:S2:54:GLU:O	48:S2:58:LEU:HB2	2.08	0.53
59:13:129:TYR:O	59:13:134:VAL:HG22	2.07	0.53
61:15:34:VAL:HG11	61:15:45:PHE:HB2	1.91	0.53
62:16:49:TYR:O	62:16:53:LEU:HG	2.09	0.53
64:18:111:ASP:O	64:18:115:ARG:HB2	2.08	0.53
65:19:97:SER:HB2	78:1S:1504:G:OP1	2.09	0.53
68:22:103:ILE:HD11	68:22:110:ILE:CG2	2.39	0.53
69:23:32:ARG:HH12	78:1S:375:U:H5''	1.72	0.53
69:23:109:ARG:HH21	69:23:112:LYS:HG3	1.74	0.53
79:2S:1548:C:C5	79:2S:1549:U:H1'	2.44	0.53
79:2S:1726:C:H2'	79:2S:1727:G:H8	1.73	0.53
79:2S:2043:U:H2'	79:2S:2044:U:O4'	2.08	0.53
79:2S:2812:C:H2'	79:2S:2813:A:C8	2.44	0.53
79:2S:3017:A:H2'	79:2S:3018:C:H6	1.74	0.53
2:L2:177:LYS:HD3	43:93:29:LEU:HD12	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L6:55:LEU:HD11	6:L6:66:SER:OG	2.09	0.53
8:L8:124:ASP:HA	79:2S:120:G:H22	1.72	0.53
11:61:166:LYS:O	11:61:167:TYR:HB2	2.09	0.53
21:71:95:HIS:HB2	21:71:96:ILE:HD12	1.91	0.53
24:74:23:ARG:HB2	24:74:29:PHE:HE2	1.74	0.53
29:79:39:PHE:O	29:79:43:HIS:HB2	2.08	0.53
38:88:8:ILE:HD12	38:88:8:ILE:N	2.23	0.53
39:89:6:SER:HB2	80:8S:113:U:OP2	2.08	0.53
53:S7:142:TYR:O	68:22:49:GLU:HB2	2.08	0.53
55:S9:144:PRO:HD2	78:1S:474:A:H5''	1.91	0.53
61:15:97:TYR:HB2	61:15:102:PHE:CE1	2.44	0.53
65:19:29:GLU:OE2	65:19:110:LYS:HD2	2.09	0.53
78:1S:487:G:H22	78:1S:500:C:H42	1.55	0.53
78:1S:1760:G:O2'	78:1S:1761:U:H5'	2.08	0.53
79:2S:2809:C:H5''	79:2S:2956:A:H4'	1.91	0.53
79:2S:2920:U:H2'	79:2S:2921:U:C6	2.44	0.53
79:2S:3203:U:H2'	79:2S:3204:C:C6	2.44	0.53
81:5S:24:A:H2'	81:5S:25:G:O4'	2.09	0.53
81:5S:75:G:H1'	81:5S:104:A:N6	2.22	0.53
1:L1:17:LEU:HD13	1:L1:215:ARG:O	2.09	0.53
3:L3:154:TYR:O	3:L3:155:ALA:HB3	2.08	0.53
4:L4:317:PRO:HG2	7:L7:149:TYR:CD2	2.41	0.53
5:L5:157:ALA:HA	81:5S:46:A:OP1	2.09	0.53
15:65:10:LEU:O	15:65:19:LEU:HD21	2.08	0.53
18:68:65:SER:HB3	18:68:90:ASP:OD2	2.08	0.53
22:72:84:LEU:HD13	22:72:90:ARG:CD	2.39	0.53
22:72:84:LEU:HD13	22:72:90:ARG:HD2	1.91	0.53
28:78:36:GLY:HA2	28:78:39:HIS:CD2	2.43	0.53
28:78:56:VAL:HG23	28:78:57:GLY:N	2.24	0.53
36:86:56:ARG:O	36:86:60:LEU:HB2	2.09	0.53
47:S1:164:ILE:O	47:S1:168:ILE:HG13	2.09	0.53
50:S4:193:GLY:HA3	50:S4:210:ILE:HG22	1.90	0.53
50:S4:210:ILE:HB	50:S4:218:PHE:CE1	2.44	0.53
61:15:90:ILE:HG12	61:15:107:ILE:HG22	1.90	0.53
65:19:52:GLY:HA2	65:19:55:TYR:CE2	2.43	0.53
78:1S:705:U:H2'	78:1S:706:A:H8	1.74	0.53
78:1S:918:U:H2'	78:1S:919:A:C8	2.43	0.53
78:1S:1486:G:H8	78:1S:1593:A:H5'	1.73	0.53
78:1S:1686:C:C2'	78:1S:1687:U:H5'	2.38	0.53
79:2S:308:A:H5'	79:2S:2223:A:O2'	2.08	0.53
79:2S:1338:C:H2'	79:2S:1339:C:C6	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1921:A:H2'	79:2S:1922:A:H8	1.74	0.53
79:2S:3016:A:H2'	79:2S:3017:A:H8	1.74	0.53
81:5S:56:A:H2'	81:5S:57:G:H8	1.72	0.53
4:L4:212:ASP:OD1	4:L4:216:VAL:HG13	2.09	0.53
15:65:150:TRP:HE3	15:65:156:HIS:NE2	2.07	0.53
31:81:46:THR:HG21	31:81:91:SER:OG	2.08	0.53
48:S2:238:SER:HB3	48:S2:241:ASP:OD2	2.08	0.53
51:S5:172:ILE:O	51:S5:176:THR:HG23	2.09	0.53
51:S5:184:PHE:HD2	51:S5:185:ARG:HG3	1.73	0.53
60:14:124:ASP:O	60:14:125:SER:HB2	2.09	0.53
73:27:54:VAL:O	73:27:62:ILE:HD12	2.09	0.53
79:2S:85:A:H61	79:2S:99:A:H3'	1.74	0.53
79:2S:241:G:C2'	79:2S:242:C:H5'	2.39	0.53
79:2S:866:A:H3'	79:2S:867:G:H8	1.74	0.53
79:2S:2279:A:H2	79:2S:2305:G:N7	2.07	0.53
79:2S:2675:C:O5'	79:2S:2675:C:H6	1.92	0.53
80:8S:98:U:H2'	80:8S:99:C:H5'	1.91	0.53
4:L4:241:GLY:HA2	79:2S:1382:G:H21	1.72	0.53
6:L6:155:LEU:O	6:L6:155:LEU:HD13	2.09	0.53
15:65:165:THR:O	15:65:169:LYS:HG3	2.09	0.53
17:67:47:TYR:O	17:67:51:VAL:HG23	2.08	0.53
20:70:61:ILE:HG13	20:70:61:ILE:O	2.08	0.53
21:71:53:PRO:HB3	21:71:91:LEU:HD13	1.91	0.53
44:P0:82:GLY:O	79:2S:1282:G:H4'	2.08	0.53
44:P0:91:GLU:CD	44:P0:96:ILE:HD11	2.30	0.53
53:S7:11:GLN:HG3	53:S7:13:PRO:CD	2.35	0.53
59:13:88:LEU:HA	59:13:91:LEU:HD12	1.91	0.53
66:20:109:GLU:OE1	66:20:110:PRO:HD2	2.08	0.53
75:29:31:ILE:HG22	75:29:33:LYS:H	1.73	0.53
78:1S:1164:G:H2'	78:1S:1165:G:C8	2.44	0.53
78:1S:1765:A:H8	78:1S:1768:G:H22	1.54	0.53
79:2S:398:A:H1'	79:2S:1416:C:OP1	2.08	0.53
79:2S:810:A:H2'	79:2S:811:U:C6	2.44	0.53
79:2S:1117:G:H2'	79:2S:1118:C:C6	2.44	0.53
79:2S:2444:C:H2'	79:2S:2445:A:O4'	2.09	0.53
79:2S:2611:U:H2'	79:2S:2612:U:C6	2.44	0.53
79:2S:2949:U:O2'	79:2S:2950:G:H5'	2.08	0.53
80:8S:41:A:N6	80:8S:103:G:H1'	2.21	0.53
80:8S:107:G:H2'	80:8S:108:C:H6	1.72	0.53
3:L3:68:HIS:O	3:L3:69:LYS:HB2	2.09	0.52
4:L4:304:GLN:O	4:L4:305:ALA:HB3	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:L7:60:ARG:HH21	7:L7:63:ILE:HD12	1.75	0.52
9:L9:8:GLN:HG2	9:L9:68:LEU:CD1	2.39	0.52
15:65:35:VAL:O	15:65:64:VAL:HA	2.09	0.52
15:65:39:ALA:HB3	15:65:61:ILE:HG22	1.90	0.52
18:68:58:ASN:O	18:68:60:PRO:HD3	2.07	0.52
18:68:180:ARG:HD2	18:68:185:LYS:HB2	1.91	0.52
19:69:139:VAL:O	19:69:143:ILE:HG13	2.10	0.52
23:73:61:THR:HG22	23:73:72:LYS:O	2.08	0.52
24:74:52:THR:O	24:74:56:ARG:HG2	2.09	0.52
28:78:126:LYS:HB3	28:78:148:ILE:HD13	1.89	0.52
43:93:59:CYS:O	43:93:60:CYS:HB3	2.09	0.52
46:S0:71:GLU:HA	46:S0:95:ALA:HA	1.90	0.52
46:S0:197:ILE:H	46:S0:197:ILE:HD12	1.74	0.52
47:S1:117:TRP:HB3	47:S1:153:HIS:HA	1.90	0.52
47:S1:148:ASN:CB	63:17:126:ALA:HB3	2.40	0.52
49:S3:5:ILE:HG22	49:S3:6:SER:H	1.72	0.52
51:S5:150:GLY:HA2	51:S5:155:ALA:HA	1.91	0.52
51:S5:163:SER:O	51:S5:167:ARG:HG3	2.08	0.52
51:S5:186:ASN:ND2	51:S5:188:LYS:HB2	2.24	0.52
60:14:23:PHE:CE2	60:14:91:THR:HG21	2.42	0.52
62:16:74:HIS:O	62:16:78:VAL:HG23	2.09	0.52
68:22:85:ASP:O	68:22:89:TRP:HD1	1.92	0.52
70:24:20:ARG:HD2	70:24:74:LEU:HD22	1.91	0.52
73:27:59:CYS:O	73:27:61:THR:HG22	2.07	0.52
78:1S:223:U:H2'	78:1S:224:C:C6	2.44	0.52
79:2S:1439:U:O5'	79:2S:1439:U:H6	1.91	0.52
79:2S:2476:C:H2'	79:2S:2477:G:C4'	2.22	0.52
79:2S:2590:A:H2'	79:2S:2591:A:C8	2.44	0.52
79:2S:3146:G:H2'	79:2S:3147:G:C8	2.44	0.52
3:L3:13:HIS:HB3	3:L3:16:PHE:HD1	1.73	0.52
5:L5:57:ASN:ND2	81:5S:26:C:H3'	2.25	0.52
5:L5:150:LEU:HB3	11:61:142:LYS:HD2	1.90	0.52
17:67:22:LEU:C	17:67:24:VAL:H	2.13	0.52
21:71:20:ARG:HB3	21:71:20:ARG:HH11	1.74	0.52
23:73:15:LEU:CD2	23:73:53:SER:HB3	2.39	0.52
25:75:52:PRO:HB3	80:8S:135:G:H5'	1.90	0.52
28:78:26:ARG:HB2	28:78:29:PRO:HG3	1.90	0.52
32:82:4:LEU:HD13	32:82:90:LYS:HE3	1.92	0.52
43:93:73:THR:HG23	43:93:76:ALA:H	1.74	0.52
47:S1:45:LYS:HB2	60:14:13:VAL:HG23	1.91	0.52
48:S2:53:ILE:HG23	48:S2:56:ILE:HD12	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:S3:105:MET:O	49:S3:109:LEU:HG	2.08	0.52
59:13:99:ARG:HA	59:13:99:ARG:NE	2.25	0.52
68:22:24:GLN:HB3	68:22:64:GLN:NE2	2.21	0.52
78:1S:157:A:H2'	78:1S:158:U:H5''	1.91	0.52
79:2S:1525:G:H2'	79:2S:1525:G:N3	2.24	0.52
79:2S:1886:A:H2'	79:2S:1887:A:H8	1.74	0.52
79:2S:2144:A:H1'	79:2S:2281:A:N6	2.24	0.52
79:2S:3169:U:H2'	79:2S:3170:A:O4'	2.09	0.52
79:2S:3374:U:H5''	79:2S:3376:A:N1	2.23	0.52
82:ET:49:C:H2'	82:ET:60:A:H4'	1.91	0.52
3:L3:2:SER:N	79:2S:2940:A:C8	2.77	0.52
11:61:35:LYS:HD2	11:61:120:ILE:CG1	2.34	0.52
20:70:112:ALA:HB1	79:2S:1186:G:N3	2.24	0.52
31:81:105:GLN:HA	79:2S:3324:C:O2'	2.08	0.52
38:88:43:PHE:CZ	38:88:62:ALA:HB1	2.43	0.52
42:92:99:GLN:NE2	42:92:102:GLN:HB2	2.25	0.52
46:S0:127:ARG:HG3	46:S0:127:ARG:HH11	1.75	0.52
47:S1:61:LEU:HD23	47:S1:62:LYS:H	1.72	0.52
48:S2:172:ALA:HB3	48:S2:195:ASP:HB3	1.92	0.52
53:S7:38:LEU:HD23	53:S7:38:LEU:O	2.09	0.52
62:16:18:ALA:CB	62:16:69:VAL:HG22	2.40	0.52
62:16:128:LYS:HB2	62:16:137:ARG:NH2	2.25	0.52
64:18:145:ARG:HA	64:18:145:ARG:HE	1.74	0.52
65:19:102:ARG:O	65:19:106:GLN:HG3	2.10	0.52
69:23:27:ASN:O	69:23:31:LYS:HG2	2.09	0.52
76:30:28:LYS:HD3	76:30:29:LYS:N	2.25	0.52
78:1S:271:A:H2	78:1S:284:G:N2	2.07	0.52
78:1S:941:A:H8	78:1S:941:A:O5'	1.92	0.52
78:1S:1585:U:N3	78:1S:1611:A:H2	2.07	0.52
79:2S:359:U:H2'	79:2S:360:G:O4'	2.10	0.52
79:2S:421:G:C6	79:2S:2384:A:H4'	2.44	0.52
79:2S:671:U:H2'	79:2S:672:A:H8	1.71	0.52
79:2S:992:A:C2'	79:2S:993:G:H5'	2.38	0.52
79:2S:1598:G:H2'	79:2S:1599:G:C8	2.44	0.52
79:2S:3120:C:O2'	79:2S:3121:U:H2'	2.08	0.52
82:ET:6:G:O2'	82:ET:7:G:H5'	2.10	0.52
1:L1:24:LYS:HG3	1:L1:214:PHE:HE1	1.74	0.52
3:L3:78:VAL:HG12	3:L3:79:VAL:H	1.72	0.52
3:L3:95:THR:CB	79:2S:3243:A:H4'	2.39	0.52
6:L6:36:PRO:HB3	6:L6:55:LEU:O	2.09	0.52
10:60:57:LEU:HB2	10:60:131:ILE:HG13	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:68:176:ARG:O	28:78:51:GLY:HA2	2.09	0.52
27:77:46:ILE:HA	27:77:70:PRO:HA	1.91	0.52
28:78:75:LEU:HA	28:78:78:LEU:HD23	1.91	0.52
33:83:90:PRO:O	33:83:91:ALA:HB3	2.10	0.52
37:87:5:THR:N	37:87:6:PRO:HD2	2.24	0.52
37:87:56:ARG:NH2	79:2S:362:U:H3'	2.17	0.52
42:92:26:THR:OG1	42:92:71:ARG:HB3	2.09	0.52
50:S4:211:LYS:HB3	50:S4:217:THR:HG22	1.91	0.52
57:11:68:GLY:CA	57:11:127:GLN:HB3	2.32	0.52
62:16:39:VAL:HB	62:16:45:ARG:HD3	1.92	0.52
63:17:7:LYS:HG3	63:17:8:THR:N	2.24	0.52
68:22:7:LEU:O	68:22:11:LEU:HG	2.08	0.52
69:23:137:LYS:HD2	69:23:139:LYS:HE2	1.90	0.52
71:25:55:PRO:CA	71:25:88:ILE:HG21	2.37	0.52
76:30:14:VAL:HG21	78:1S:567:A:N3	2.25	0.52
78:1S:643:G:H2'	78:1S:644:C:C6	2.45	0.52
78:1S:1671:A:H2'	78:1S:1672:G:O4'	2.09	0.52
79:2S:235:A:H2'	79:2S:236:G:H8	1.72	0.52
79:2S:421:G:H3'	79:2S:421:G:N3	2.24	0.52
79:2S:718:G:N2	79:2S:721:G:H1'	2.23	0.52
79:2S:1198:C:H2'	79:2S:1199:C:C5	2.44	0.52
79:2S:3375:A:H2'	79:2S:3378:C:H6	1.74	0.52
81:5S:11:A:O2'	81:5S:13:A:H5''	2.09	0.52
1:L1:120:VAL:CG2	1:L1:121:PRO:HD3	2.35	0.52
2:L2:9:ARG:HB2	2:L2:9:ARG:NH2	2.23	0.52
2:L2:71:LEU:HD22	79:2S:1651:U:H4'	1.91	0.52
9:L9:162:GLN:OE1	9:L9:181:VAL:HG23	2.09	0.52
11:61:20:ASN:OD1	11:61:68:HIS:HB3	2.08	0.52
19:69:173:ARG:O	19:69:177:VAL:HG23	2.09	0.52
26:76:27:ARG:O	26:76:31:LEU:HG	2.09	0.52
33:83:15:SER:HA	33:83:94:PHE:CE1	2.44	0.52
42:92:53:GLN:HB2	79:2S:2421:U:H5''	1.92	0.52
44:P0:12:PHE:HZ	44:P0:61:ARG:HG3	1.75	0.52
50:S4:123:LEU:HG	50:S4:161:LYS:HG2	1.92	0.52
54:S8:10:LYS:HG2	54:S8:11:ARG:H	1.74	0.52
56:10:24:LYS:NZ	56:10:29:GLN:HE22	2.07	0.52
56:10:56:LYS:HE2	56:10:67:THR:HB	1.92	0.52
64:18:66:LEU:HA	64:18:69:ILE:HD12	1.91	0.52
69:23:63:GLN:HA	69:23:65:ASN:H	1.74	0.52
78:1S:1058:U:H5	78:1S:1061:A:C6	2.28	0.52
78:1S:1338:C:H1'	78:1S:1410:A:C4	2.45	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:66:A:H61	79:2S:76:G:H1'	1.70	0.52
79:2S:188:U:H2'	79:2S:223:U:O2'	2.09	0.52
79:2S:207:U:H2'	79:2S:208:C:C6	2.45	0.52
79:2S:1039:U:H2'	79:2S:1040:A:C8	2.45	0.52
79:2S:1123:U:C2'	79:2S:1124:U:H5'	2.40	0.52
79:2S:3138:U:C3'	79:2S:3139:A:H5''	2.39	0.52
1:L1:17:LEU:HD23	1:L1:17:LEU:H	1.73	0.52
6:L6:2:SER:N	79:2S:1385:C:HO2'	2.07	0.52
9:L9:16:VAL:HG12	9:L9:29:GLY:CA	2.40	0.52
9:L9:96:HIS:CD2	79:2S:3024:A:H5''	2.45	0.52
11:61:94:ARG:O	11:61:95:ASN:HB2	2.10	0.52
24:74:6:ASP:HB3	24:74:11:ALA:H	1.74	0.52
27:77:48:ARG:HB2	27:77:69:LYS:HB3	1.92	0.52
33:83:30:ILE:CG2	33:83:31:LYS:N	2.72	0.52
38:88:16:ARG:HD3	38:88:70:PRO:HG2	1.92	0.52
47:S1:87:ARG:N	47:S1:101:HIS:HB2	2.25	0.52
51:S5:185:ARG:HA	78:1S:1472:C:OP2	2.10	0.52
58:12:90:LYS:O	58:12:91:VAL:HB	2.09	0.52
63:17:7:LYS:HG3	63:17:8:THR:H	1.75	0.52
69:23:86:PHE:O	69:23:88:PRO:HD3	2.09	0.52
78:1S:195:G:C2'	78:1S:196:G:H5''	2.39	0.52
78:1S:839:U:H2'	78:1S:840:U:H5''	1.90	0.52
78:1S:1246:C:H2'	78:1S:1247:U:H6	1.74	0.52
78:1S:1516:A:O2'	78:1S:1517:U:H5'	2.09	0.52
78:1S:1684:U:H2'	78:1S:1685:G:C8	2.44	0.52
79:2S:631:U:H4'	79:2S:3172:A:H61	1.75	0.52
79:2S:1202:A:C2	79:2S:2857:C:H5'	2.45	0.52
79:2S:1445:U:H2'	79:2S:1446:A:C8	2.45	0.52
79:2S:2451:G:H22	79:2S:2495:C:H42	1.56	0.52
79:2S:2809:C:C5'	79:2S:2956:A:H4'	2.39	0.52
1:L1:24:LYS:HG3	1:L1:214:PHE:CE1	2.43	0.52
1:L1:103:LEU:CD1	1:L1:106:LYS:HG3	2.40	0.52
3:L3:369:ARG:NH2	24:74:11:ALA:HB1	2.25	0.52
4:L4:230:VAL:HB	4:L4:257:LYS:HD3	1.92	0.52
8:L8:99:PRO:CB	8:L8:190:VAL:HG23	2.40	0.52
10:60:170:LYS:HA	10:60:177:ASP:HA	1.92	0.52
11:61:17:LEU:HD22	11:61:80:LEU:HG	1.91	0.52
11:61:47:GLN:CB	11:61:64:LYS:HD3	2.39	0.52
18:68:92:ARG:HB3	79:2S:784:A:C2	2.45	0.52
43:93:6:LYS:C	43:93:6:LYS:HD3	2.30	0.52
45:RC:7:LEU:HB3	45:RC:313:TRP:HB3	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:S0:41:ARG:HH21	46:S0:41:ARG:HG3	1.74	0.52
49:S3:5:ILE:HG22	49:S3:6:SER:N	2.24	0.52
53:S7:63:PRO:O	53:S7:64:VAL:HB	2.10	0.52
54:S8:41:LYS:HB2	54:S8:60:ILE:HG23	1.92	0.52
55:S9:149:ARG:O	55:S9:150:LEU:HB3	2.09	0.52
56:10:94:GLU:HG3	56:10:95:ARG:H	1.75	0.52
65:19:61:VAL:O	65:19:65:ILE:HG13	2.09	0.52
72:26:87:ARG:HD3	72:26:91:ASP:O	2.09	0.52
74:28:64:ARG:HG2	74:28:64:ARG:HH11	1.75	0.52
78:1S:306:U:H2'	78:1S:307:G:C8	2.44	0.52
78:1S:832:U:H2'	78:1S:833:U:C5'	2.40	0.52
78:1S:1737:G:H2'	78:1S:1738:U:C6	2.44	0.52
79:2S:958:C:H5''	79:2S:2800:G:P	2.50	0.52
79:2S:1686:U:O2	79:2S:1688:U:H1'	2.09	0.52
79:2S:1756:C:H2'	79:2S:1757:A:H8	1.75	0.52
79:2S:2124:G:H2'	79:2S:2125:A:C8	2.43	0.52
79:2S:2181:C:H2'	79:2S:2182:A:H8	1.74	0.52
79:2S:2836:C:C2'	79:2S:2837:A:H5'	2.39	0.52
79:2S:2985:C:H2'	79:2S:2986:U:C6	2.44	0.52
4:L4:193:LYS:HB2	4:L4:193:LYS:NZ	2.25	0.52
7:L7:196:LYS:HD3	7:L7:197:GLN:NE2	2.21	0.52
15:65:114:ARG:NH1	15:65:157:LYS:HG2	2.25	0.52
32:82:38:ILE:HA	32:82:43:ARG:NE	2.24	0.52
53:S7:117:THR:O	53:S7:121:VAL:HG23	2.10	0.52
54:S8:138:ASN:HD21	78:1S:197:A:H61	1.58	0.52
55:S9:123:HIS:O	55:S9:127:VAL:HG23	2.10	0.52
55:S9:129:ILE:HD13	55:S9:144:PRO:HA	1.92	0.52
56:10:59:PHE:CZ	56:10:62:GLN:HA	2.44	0.52
60:14:18:ARG:HH12	60:14:35:GLY:CA	2.23	0.52
60:14:51:ASP:O	60:14:54:GLU:HG3	2.10	0.52
62:16:93:HIS:HB3	62:16:102:LYS:HB2	1.92	0.52
64:18:62:THR:O	64:18:66:LEU:HG	2.10	0.52
65:19:102:ARG:HD3	78:1S:1500:C:C5'	2.30	0.52
78:1S:844:A:H2'	78:1S:845:G:C8	2.44	0.52
78:1S:1082:C:H2'	78:1S:1082:C:O2	2.10	0.52
78:1S:1426:C:H3'	78:1S:1427:A:H5''	1.92	0.52
78:1S:1482:C:H41	78:1S:1524:A:H3'	1.75	0.52
78:1S:1506:G:H2'	78:1S:1507:G:H8	1.75	0.52
78:1S:1567:U:H2'	78:1S:1568:C:H5'	1.92	0.52
78:1S:1770:U:H2'	78:1S:1771:U:H6	1.74	0.52
78:1S:1779:U:H2'	78:1S:1781:A:OP2	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1235:U:H4'	79:2S:1236:G:C5'	2.39	0.52
79:2S:1598:G:H2'	79:2S:1599:G:H8	1.75	0.52
79:2S:1682:U:H1'	79:2S:1685:C:H41	1.74	0.52
79:2S:2155:G:H2'	79:2S:2156:C:C6	2.44	0.52
3:L3:219:ALA:HB2	3:L3:336:VAL:HG13	1.91	0.52
6:L6:8:LYS:HE2	79:2S:1354:G:H4'	1.92	0.52
7:L7:233:GLU:O	7:L7:236:ILE:HG22	2.09	0.52
8:L8:197:VAL:O	8:L8:197:VAL:HG23	2.09	0.52
9:L9:158:ALA:HA	9:L9:161:LEU:HD12	1.92	0.52
13:63:103:ASN:HD22	13:63:109:PHE:HD2	1.57	0.52
15:65:45:PRO:O	15:65:49:ARG:HB2	2.09	0.52
20:70:71:LYS:HZ2	79:2S:562:C:H4'	1.73	0.52
21:71:136:ARG:HG3	21:71:136:ARG:HH11	1.74	0.52
23:73:125:LEU:HG	23:73:126:TRP:CD1	2.45	0.52
32:82:3:SER:HB3	32:82:71:HIS:CE1	2.45	0.52
37:87:55:ARG:HD2	79:2S:353:G:N7	2.25	0.52
38:88:31:LEU:HA	38:88:37:PRO:HA	1.91	0.52
51:S5:107:LYS:HD2	78:1S:1610:G:H5''	1.91	0.52
53:S7:19:GLN:HB3	53:S7:85:PHE:CZ	2.45	0.52
55:S9:109:LEU:HD12	55:S9:146:PHE:HB3	1.91	0.52
55:S9:174:ARG:HA	55:S9:174:ARG:NE	2.25	0.52
58:12:61:VAL:HG23	58:12:90:LYS:O	2.10	0.52
66:20:109:GLU:HB3	66:20:112:VAL:HB	1.92	0.52
78:1S:416:A:H5'	78:1S:417:A:C8	2.45	0.52
78:1S:1575:G:H2'	78:1S:1576:A:C8	2.45	0.52
79:2S:1104:G:H2'	79:2S:1105:A:C8	2.45	0.52
79:2S:1693:C:O2'	79:2S:1772:U:H4'	2.10	0.52
79:2S:2060:A:C2'	79:2S:2061:G:H5'	2.39	0.52
79:2S:2513:U:H3	79:2S:2593:A:N6	1.96	0.52
79:2S:3250:U:H2'	79:2S:3251:U:C6	2.45	0.52
5:L5:98:ALA:HB1	5:L5:162:ALA:HB2	1.92	0.52
5:L5:134:ALA:HB2	5:L5:141:PRO:HD3	1.90	0.52
6:L6:54:TYR:HD2	6:L6:55:LEU:H	1.58	0.52
6:L6:58:LEU:CD2	6:L6:102:ASN:HA	2.39	0.52
23:73:84:SER:HB3	23:73:94:TYR:CD2	2.45	0.52
25:75:60:TYR:CG	35:85:25:LYS:HB3	2.45	0.52
28:78:134:ALA:O	28:78:138:ILE:HG13	2.10	0.52
41:91:4:LYS:HE3	78:1S:1774:G:N7	2.25	0.52
49:S3:105:MET:HE2	49:S3:105:MET:HA	1.91	0.52
52:S6:64:LYS:HD3	52:S6:67:VAL:HG13	1.92	0.52
55:S9:138:LYS:HB2	55:S9:138:LYS:NZ	2.24	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:10:1:MET:HG3	56:10:44:LYS:CB	2.40	0.52
69:23:89:ASN:HB3	69:23:136:TRP:CD1	2.45	0.52
75:29:32:ARG:HD3	78:1S:1596:C:OP2	2.09	0.52
78:1S:979:A:H2'	78:1S:980:G:C8	2.43	0.52
78:1S:1336:A:H2'	78:1S:1337:A:C4'	2.40	0.52
79:2S:8:C:H2'	79:2S:9:U:O4'	2.10	0.52
79:2S:428:A:H2'	79:2S:429:U:H6	1.69	0.52
79:2S:529:A:H2'	79:2S:530:G:C8	2.44	0.52
79:2S:846:A:H2'	79:2S:847:A:C8	2.45	0.52
79:2S:1006:A:H2'	79:2S:1007:U:O4'	2.10	0.52
79:2S:2666:C:H1'	79:2S:2691:A:C2	2.45	0.52
79:2S:3112:G:O6	79:2S:3119:U:H3'	2.10	0.52
79:2S:3295:A:H2'	79:2S:3296:A:H8	1.75	0.52
1:L1:74:VAL:HG12	1:L1:75:ASP:N	2.25	0.51
2:L2:113:VAL:HA	2:L2:167:GLY:O	2.10	0.51
3:L3:246:LEU:HD12	3:L3:247:ARG:N	2.25	0.51
4:L4:55:LYS:O	4:L4:59:GLN:HG3	2.09	0.51
5:L5:41:LYS:H	21:71:69:LYS:HA	1.74	0.51
8:L8:41:GLN:N	8:L8:41:GLN:HE21	2.08	0.51
9:L9:138:THR:O	9:L9:139:ASN:HB3	2.10	0.51
13:63:2:ALA:HB3	28:78:41:HIS:HE1	1.75	0.51
13:63:47:ALA:HB1	13:63:48:PRO:CD	2.33	0.51
15:65:97:SER:HB3	79:2S:289:A:H5''	1.93	0.51
15:65:142:ILE:HD12	15:65:142:ILE:N	2.25	0.51
16:66:58:LEU:HA	16:66:72:HIS:CD2	2.45	0.51
19:69:40:ALA:HA	19:69:43:LYS:HD2	1.92	0.51
31:81:50:ARG:HB2	31:81:90:PHE:HE2	1.75	0.51
31:81:54:GLU:HA	31:81:57:GLN:HE21	1.74	0.51
44:P0:190:VAL:HG12	44:P0:191:TYR:N	2.25	0.51
45:RC:92:TRP:HA	45:RC:98:GLU:O	2.10	0.51
53:S7:166:LEU:HD11	53:S7:183:PHE:HB2	1.92	0.51
56:10:77:ARG:NH2	56:10:86:ILE:HD11	2.25	0.51
57:11:57:LYS:HD3	57:11:131:ILE:HG23	1.92	0.51
61:15:25:LEU:HB3	61:15:87:PRO:CB	2.41	0.51
71:25:88:ILE:HD12	71:25:88:ILE:N	2.24	0.51
72:26:3:LYS:NZ	72:26:6:ALA:HA	2.24	0.51
72:26:82:ARG:CG	72:26:83:ILE:H	2.05	0.51
79:2S:700:C:H2'	79:2S:701:G:H8	1.75	0.51
79:2S:801:A:H4'	79:2S:802:C:H5''	1.91	0.51
79:2S:1661:G:H2'	79:2S:1662:G:C8	2.45	0.51
79:2S:1896:A:H61	79:2S:2339:C:N4	1.96	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:42:ARG:HA	2:L2:88:ILE:O	2.10	0.51
4:L4:121:ALA:HB3	4:L4:235:LEU:HD21	1.92	0.51
4:L4:138:ARG:NH1	4:L4:246:ARG:HG2	2.25	0.51
5:L5:37:VAL:HG12	21:71:30:TYR:HB2	1.93	0.51
17:67:27:LYS:HD2	79:2S:1447:G:C8	2.45	0.51
18:68:68:ALA:O	18:68:72:LYS:HG3	2.10	0.51
18:68:170:ARG:HH11	28:78:56:VAL:HG21	1.75	0.51
19:69:144:GLN:O	19:69:148:ASP:HB2	2.11	0.51
28:78:118:ILE:HB	28:78:119:PRO:CD	2.40	0.51
33:83:48:ARG:HG3	33:83:104:PRO:HD3	1.91	0.51
33:83:60:ARG:HB2	33:83:60:ARG:HH21	1.75	0.51
46:S0:60:ALA:O	46:S0:64:ILE:HG13	2.10	0.51
46:S0:189:VAL:HG13	46:S0:190:ASP:N	2.21	0.51
48:S2:218:ILE:HA	48:S2:221:THR:HG23	1.93	0.51
48:S2:227:PRO:HA	48:S2:230:TRP:CE3	2.46	0.51
51:S5:112:ARG:HD2	62:16:43:ILE:HD12	1.91	0.51
52:S6:2:LYS:HD3	52:S6:15:THR:HB	1.92	0.51
61:15:18:ARG:HD2	64:18:95:GLY:HA2	1.91	0.51
68:22:50:PHE:HB3	68:22:63:VAL:HG22	1.91	0.51
70:24:79:VAL:O	70:24:83:LYS:HG3	2.10	0.51
75:29:47:ALA:HB1	75:29:52:PHE:HB2	1.91	0.51
78:1S:230:C:H3'	78:1S:231:U:C5'	2.39	0.51
78:1S:610:G:H5'	78:1S:612:U:O4	2.10	0.51
78:1S:1553:G:H1'	78:1S:1597:A:H2	1.76	0.51
79:2S:874:U:H5'	79:2S:875:G:H5'	1.91	0.51
79:2S:1231:A:H5''	79:2S:1232:C:H5'	1.93	0.51
79:2S:2719:U:H2'	79:2S:2720:G:C8	2.45	0.51
80:8S:109:A:H2'	80:8S:110:C:H5'	1.92	0.51
82:PT:16:C:O2	82:PT:61:U:H4'	2.10	0.51
2:L2:22:LEU:CB	2:L2:52:SER:HB2	2.34	0.51
3:L3:186:GLY:O	3:L3:190:GLU:HB2	2.10	0.51
5:L5:200:PHE:HB3	5:L5:237:GLU:HG3	1.92	0.51
8:L8:71:VAL:HG12	15:65:21:PHE:HE2	1.74	0.51
8:L8:160:ILE:HD12	15:65:22:LEU:HG	1.91	0.51
11:61:132:ASN:ND2	11:61:136:ALA:HB2	2.25	0.51
17:67:48:LEU:HD11	17:67:95:LEU:HD12	1.93	0.51
22:72:78:TYR:HA	22:72:81:LYS:HE2	1.92	0.51
34:84:25:THR:CG2	79:2S:1597:C:H5''	2.40	0.51
34:84:73:SER:HB2	79:2S:1639:C:N4	2.25	0.51
38:88:40:GLN:HG2	38:88:41:THR:H	1.74	0.51
44:P0:45:LEU:HD22	44:P0:49:ALA:HB3	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:S5:77:TYR:HB3	51:S5:84:LYS:CA	2.39	0.51
58:12:66:VAL:HG12	58:12:67:THR:O	2.10	0.51
72:26:41:ILE:H	72:26:41:ILE:CD1	2.22	0.51
73:27:11:THR:O	73:27:15:GLU:HB2	2.10	0.51
76:30:22:GLU:HG3	76:30:23:LYS:H	1.75	0.51
77:31:108:VAL:HA	77:31:113:LYS:O	2.09	0.51
78:1S:750:U:H2'	78:1S:751:G:O4'	2.11	0.51
78:1S:1388:A:N6	78:1S:1409:G:H1'	2.25	0.51
78:1S:1691:A:H61	78:1S:1711:C:H42	1.57	0.51
79:2S:368:G:H2'	79:2S:369:A:H5'	1.92	0.51
79:2S:521:A:H2'	79:2S:522:A:O4'	2.10	0.51
79:2S:856:G:H2'	79:2S:857:G:O4'	2.10	0.51
79:2S:2160:G:H2'	79:2S:2161:G:H8	1.75	0.51
79:2S:2615:G:H2'	79:2S:2616:C:C6	2.45	0.51
2:L2:49:VAL:HG13	2:L2:58:LEU:HB2	1.93	0.51
3:L3:79:VAL:HG12	3:L3:322:ILE:HB	1.92	0.51
6:L6:19:LYS:HA	79:2S:592:A:H5''	1.92	0.51
6:L6:19:LYS:HB2	79:2S:591:G:H1'	1.92	0.51
7:L7:236:ILE:O	7:L7:240:VAL:HG23	2.11	0.51
8:L8:99:PRO:HD2	8:L8:190:VAL:HA	1.92	0.51
10:60:179:PRO:HA	10:60:182:LEU:HD12	1.91	0.51
11:61:48:SER:O	11:61:64:LYS:HA	2.11	0.51
19:69:162:ARG:O	19:69:166:ASN:HB2	2.11	0.51
24:74:35:LYS:O	24:74:39:LEU:HD23	2.11	0.51
24:74:54:LEU:O	24:74:58:HIS:HB2	2.11	0.51
25:75:50:ALA:HB2	35:85:77:PRO:HB3	1.90	0.51
26:76:6:LEU:H	26:76:6:LEU:HD23	1.75	0.51
45:RC:242:SER:HB3	45:RC:292:LEU:HD23	1.92	0.51
54:S8:5:ARG:HH12	54:S8:28:GLU:C	2.14	0.51
63:17:84:TYR:O	63:17:85:VAL:HB	2.10	0.51
68:22:104:LEU:HB2	68:22:124:LYS:O	2.10	0.51
69:23:19:ARG:HA	69:23:19:ARG:HE	1.76	0.51
72:26:80:HIS:O	72:26:81:ALA:HB2	2.10	0.51
78:1S:120:U:H2'	78:1S:121:U:H6	1.75	0.51
78:1S:504:U:H2'	78:1S:505:A:H4'	1.92	0.51
79:2S:618:C:C2'	79:2S:619:A:H5'	2.37	0.51
79:2S:924:G:H3'	79:2S:925:A:H5'	1.92	0.51
79:2S:1024:G:H3'	79:2S:1025:A:H5''	1.93	0.51
79:2S:1944:U:H2'	79:2S:1945:A:C8	2.46	0.51
79:2S:2570:U:H1'	79:2S:2571:U:O2	2.10	0.51
2:L2:243:THR:OG1	79:2S:2244:A:H5''	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:247:ARG:HB3	78:1S:1012:U:H4'	1.91	0.51
3:L3:217:ALA:HB3	3:L3:277:SER:HB2	1.93	0.51
4:L4:300:ARG:HG2	18:68:39:ARG:HB3	1.92	0.51
8:L8:139:VAL:HA	8:L8:142:LEU:HD12	1.93	0.51
8:L8:150:LEU:HD21	8:L8:218:ILE:HD13	1.93	0.51
9:L9:157:ASN:O	9:L9:161:LEU:HG	2.09	0.51
13:63:19:GLN:CD	13:63:19:GLN:H	2.14	0.51
13:63:29:ALA:CB	15:65:201:ARG:HH12	2.23	0.51
19:69:23:TRP:HE3	19:69:51:VAL:HG22	1.75	0.51
28:78:119:PRO:HG2	28:78:121:VAL:HG23	1.92	0.51
47:S1:218:LEU:H	47:S1:218:LEU:CD1	2.13	0.51
49:S3:26:THR:HA	49:S3:30:ALA:HB2	1.92	0.51
55:S9:17:ARG:HH21	55:S9:17:ARG:HG2	1.76	0.51
64:18:18:LEU:O	64:18:19:ASN:HB2	2.11	0.51
78:1S:56:U:H4'	78:1S:57:G:H5'	1.93	0.51
78:1S:488:G:H2'	78:1S:489:C:H5'	1.93	0.51
78:1S:800:U:H2'	78:1S:801:G:C8	2.45	0.51
78:1S:1201:G:N2	78:1S:1600:A:H5'	2.26	0.51
78:1S:1679:G:O2'	78:1S:1680:G:H5'	2.10	0.51
79:2S:214:G:H2'	79:2S:215:G:H8	1.74	0.51
79:2S:435:C:H3'	79:2S:621:A:H61	1.75	0.51
79:2S:1667:A:H2'	79:2S:1668:G:C8	2.46	0.51
79:2S:1971:C:C2'	79:2S:1972:A:H4'	2.20	0.51
79:2S:2298:U:O2'	79:2S:2299:A:H5'	2.11	0.51
79:2S:2714:G:H4'	79:2S:2715:A:H5''	1.92	0.51
3:L3:3:HIS:CD2	79:2S:2938:G:H5''	2.46	0.51
5:L5:127:GLY:HA3	5:L5:196:ARG:HB2	1.93	0.51
8:L8:77:GLN:HE22	8:L8:167:PRO:HG2	1.75	0.51
8:L8:181:LYS:HD2	80:8S:154:C:OP1	2.11	0.51
9:L9:152:GLU:O	9:L9:156:GLN:HB3	2.10	0.51
10:60:165:ILE:H	10:60:165:ILE:CD1	2.23	0.51
11:61:18:VAL:HG22	11:61:70:THR:HG22	1.92	0.51
11:61:143:ARG:HG3	11:61:143:ARG:HH11	1.74	0.51
16:66:56:ASP:O	16:66:59:ARG:HG2	2.10	0.51
20:70:4:PHE:HA	20:70:32:SER:HA	1.93	0.51
23:73:17:LEU:HB2	23:73:52:ALA:H	1.75	0.51
32:82:19:ARG:HG3	32:82:33:ARG:H	1.76	0.51
33:83:60:ARG:HH11	79:2S:622:A:H5'	1.75	0.51
41:91:4:LYS:HB2	41:91:4:LYS:NZ	2.25	0.51
48:S2:157:LYS:HD3	48:S2:168:ARG:HH21	1.76	0.51
50:S4:9:LEU:HD21	50:S4:14:ALA:HB2	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:185:GLY:H	50:S4:189:LEU:HD13	1.75	0.51
50:S4:192:ILE:HG21	50:S4:228:ILE:HD11	1.93	0.51
53:S7:50:ASP:HA	53:S7:56:LYS:HG2	1.93	0.51
57:11:94:ILE:HD12	57:11:94:ILE:N	2.26	0.51
66:20:55:PRO:CB	66:20:91:ILE:HG12	2.39	0.51
68:22:90:THR:O	68:22:94:LEU:HB2	2.11	0.51
72:26:84:VAL:HG22	72:26:85:ARG:H	1.75	0.51
73:27:29:ARG:HH11	73:27:29:ARG:HG3	1.74	0.51
78:1S:20:G:H5'	78:1S:571:G:C8	2.46	0.51
78:1S:271:A:H2'	78:1S:272:U:H4'	1.91	0.51
78:1S:1041:G:H2'	78:1S:1042:G:C8	2.46	0.51
78:1S:1498:G:H2'	78:1S:1499:G:C5'	2.37	0.51
79:2S:1354:G:N1	79:2S:1358:C:H5'	2.26	0.51
79:2S:1608:C:H2'	79:2S:1609:C:C6	2.43	0.51
79:2S:2465:G:H2'	79:2S:2466:G:O4'	2.10	0.51
79:2S:2611:U:H2'	79:2S:2612:U:H6	1.76	0.51
79:2S:3278:C:H3'	79:2S:3279:A:H5''	1.92	0.51
82:ET:26:C:C2'	82:ET:27:G:H5'	2.40	0.51
2:L2:88:ILE:HD12	2:L2:88:ILE:N	2.26	0.51
2:L2:187:HIS:O	2:L2:191:LEU:HG	2.11	0.51
3:L3:45:SER:H	3:L3:181:ILE:HG21	1.75	0.51
3:L3:333:LYS:HE2	79:2S:3304:U:C6	2.46	0.51
4:L4:87:GLN:NE2	79:2S:1439:U:H5''	2.25	0.51
6:L6:40:LEU:HB3	6:L6:84:VAL:CG1	2.39	0.51
8:L8:74:THR:HG21	15:65:18:VAL:HB	1.92	0.51
8:L8:169:LEU:O	8:L8:169:LEU:HD23	2.10	0.51
9:L9:117:PHE:O	9:L9:120:ASP:HB2	2.10	0.51
13:63:47:ALA:HB3	13:63:49:ARG:HE	1.76	0.51
16:66:10:ASP:HB2	16:66:117:ARG:HG3	1.92	0.51
23:73:6:ALA:HB2	23:73:126:TRP:CZ2	2.46	0.51
24:74:49:ILE:HG21	24:74:52:THR:HG23	1.93	0.51
26:76:28:ARG:NH2	80:8S:70:G:H5''	2.26	0.51
28:78:10:LYS:N	28:78:10:LYS:HD2	2.26	0.51
36:86:31:GLY:HA3	79:2S:299:G:C4	2.45	0.51
36:86:57:LEU:O	36:86:61:ILE:HG13	2.11	0.51
43:93:8:VAL:O	43:93:11:THR:HG22	2.11	0.51
50:S4:180:LEU:HB3	50:S4:228:ILE:HD11	1.92	0.51
53:S7:138:LYS:O	53:S7:139:ARG:HD3	2.11	0.51
55:S9:113:VAL:HG12	55:S9:119:ALA:HB2	1.92	0.51
78:1S:1135:U:H2'	78:1S:1136:U:C6	2.46	0.51
79:2S:196:G:H21	79:2S:219:A:H61	1.57	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1322:U:H2'	79:2S:1323:G:H8	1.75	0.51
79:2S:2422:C:H2'	79:2S:2423:U:H6	1.74	0.51
79:2S:2457:G:N2	79:2S:2485:A:N7	2.59	0.51
79:2S:2861:U:H2'	79:2S:2862:U:O4'	2.11	0.51
79:2S:3139:A:H2'	79:2S:3140:G:O4'	2.10	0.51
79:2S:3231:U:H2'	79:2S:3232:G:H8	1.74	0.51
3:L3:83:PRO:HB2	3:L3:165:GLN:NE2	2.25	0.51
3:L3:146:ARG:HA	3:L3:146:ARG:HE	1.75	0.51
5:L5:33:ARG:O	5:L5:37:VAL:HG23	2.11	0.51
8:L8:247:ASP:O	8:L8:251:LYS:HE3	2.11	0.51
19:69:81:ARG:HG2	19:69:88:ARG:NH1	2.25	0.51
25:75:115:ARG:HG3	25:75:115:ARG:NH1	2.26	0.51
26:76:16:ARG:O	26:76:20:PHE:HD2	1.93	0.51
30:80:46:ALA:HB3	30:80:72:GLY:H	1.75	0.51
34:84:38:LEU:HD21	79:2S:1785:U:H4'	1.91	0.51
36:86:26:ILE:H	36:86:26:ILE:CD1	2.14	0.51
42:92:71:ARG:NH2	42:92:80:ARG:HH11	2.09	0.51
45:RC:129:LYS:HB2	45:RC:147:HIS:O	2.10	0.51
49:S3:16:VAL:O	49:S3:20:GLU:HB2	2.10	0.51
53:S7:59:ALA:HB1	53:S7:93:LEU:HD12	1.93	0.51
53:S7:63:PRO:C	53:S7:65:PRO:HD2	2.30	0.51
59:13:130:ARG:CD	59:13:137:PRO:HA	2.34	0.51
60:14:98:GLY:O	60:14:102:LEU:HB2	2.10	0.51
62:16:39:VAL:O	62:16:40:GLU:CB	2.59	0.51
68:22:97:ARG:HB3	68:22:97:ARG:CZ	2.39	0.51
78:1S:52:U:H2'	78:1S:53:G:C8	2.46	0.51
78:1S:1667:A:H2'	78:1S:1668:G:H8	1.74	0.51
79:2S:818:C:H2'	79:2S:819:U:O4'	2.11	0.51
79:2S:1085:A:H2'	79:2S:1086:C:C6	2.46	0.51
79:2S:1352:A:H1'	79:2S:1353:U:O5'	2.11	0.51
79:2S:1404:G:H2'	79:2S:1406:A:OP2	2.11	0.51
79:2S:1427:U:O2'	79:2S:1428:A:H5'	2.10	0.51
3:L3:67:PHE:CE1	3:L3:70:ARG:HD2	2.45	0.51
4:L4:122:THR:CG2	4:L4:235:LEU:HD13	2.41	0.51
7:L7:25:GLN:HA	7:L7:29:GLU:H	1.76	0.51
7:L7:151:ARG:HH11	7:L7:151:ARG:HG3	1.75	0.51
7:L7:221:LYS:HB2	7:L7:227:GLY:HA3	1.93	0.51
9:L9:112:ILE:HD11	9:L9:128:VAL:HG22	1.93	0.51
10:60:115:MET:HB2	79:2S:2865:U:OP1	2.11	0.51
15:65:71:ARG:CG	15:65:94:TYR:HB2	2.41	0.51
19:69:128:LYS:HE2	79:2S:1724:U:C5	2.46	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:71:78:LYS:O	21:71:84:TYR:HA	2.11	0.51
23:73:39:VAL:HG13	23:73:58:VAL:HG12	1.93	0.51
28:78:79:TRP:HB3	28:78:87:ARG:HG3	1.91	0.51
42:92:8:ARG:HG2	42:92:8:ARG:HH11	1.74	0.51
46:S0:155:PHE:HA	67:21:60:ARG:HB3	1.93	0.51
49:S3:49:ILE:HD12	49:S3:49:ILE:N	2.26	0.51
49:S3:191:ASP:OD2	49:S3:192:PRO:HD2	2.11	0.51
55:S9:112:GLN:HG3	55:S9:148:VAL:HG21	1.92	0.51
56:10:14:TYR:CE2	56:10:21:VAL:HG22	2.45	0.51
58:12:31:VAL:HG13	58:12:133:LEU:HG	1.92	0.51
60:14:22:SER:HA	60:14:95:GLY:H	1.76	0.51
62:16:27:GLY:HA2	62:16:63:ILE:O	2.10	0.51
64:18:16:ARG:HH11	64:18:16:ARG:HG3	1.76	0.51
64:18:105:VAL:CG1	64:18:106:GLU:N	2.74	0.51
78:1S:694:U:H3'	78:1S:695:U:H6	1.76	0.51
78:1S:1196:A:H4'	78:1S:1197:C:H5''	1.92	0.51
78:1S:1537:C:H4'	78:1S:1538:U:C5	2.45	0.51
79:2S:858:A:H2'	79:2S:859:G:C8	2.46	0.51
79:2S:1118:C:H2'	79:2S:1119:C:C6	2.45	0.51
79:2S:1128:U:O2	79:2S:2827:U:H4'	2.11	0.51
79:2S:1176:C:H2'	79:2S:1177:G:C2	2.45	0.51
1:L1:189:PHE:CE1	1:L1:200:ASN:HB2	2.46	0.51
3:L3:364:LYS:N	3:L3:364:LYS:HD2	2.26	0.51
5:L5:20:PHE:HD1	5:L5:23:ARG:HG3	1.75	0.51
8:L8:152:LEU:O	8:L8:197:VAL:HA	2.11	0.51
11:61:60:ARG:HH12	42:92:103:ALA:HB1	1.75	0.51
14:64:123:LEU:HD22	16:66:190:VAL:HG23	1.93	0.51
16:66:130:LYS:O	16:66:133:ARG:HG2	2.11	0.51
17:67:159:LYS:HD3	17:67:159:LYS:N	2.26	0.51
18:68:69:ARG:HH22	79:2S:720:A:H5''	1.76	0.51
19:69:23:TRP:HB3	19:69:51:VAL:HG23	1.93	0.51
25:75:111:ASN:HB2	25:75:123:TYR:HB2	1.91	0.51
32:82:19:ARG:HB2	32:82:31:ASN:O	2.11	0.51
32:82:37:GLY:HA2	79:2S:640:U:OP2	2.10	0.51
34:84:72:VAL:HG22	34:84:77:GLY:HA2	1.93	0.51
40:90:112:LYS:HB3	40:90:114:LYS:HG2	1.92	0.51
50:S4:44:LEU:HD12	50:S4:79:ASP:O	2.10	0.51
50:S4:152:PRO:HG2	52:S6:215:ARG:HG2	1.93	0.51
51:S5:58:LEU:O	51:S5:61:TYR:HB2	2.11	0.51
54:S8:9:HIS:O	54:S8:10:LYS:HB3	2.11	0.51
62:16:6:SER:HA	62:16:22:VAL:O	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
69:23:127:VAL:HG23	69:23:130:VAL:CG2	2.41	0.51
72:26:42:ARG:HB2	72:26:42:ARG:HH11	1.76	0.51
75:29:39:CYS:SG	75:29:42:CYS:HB2	2.51	0.51
78:1S:160:C:H2'	78:1S:161:U:O4'	2.10	0.51
78:1S:1010:C:H2'	78:1S:1011:G:O4'	2.11	0.51
78:1S:1246:C:H2'	78:1S:1247:U:C6	2.46	0.51
78:1S:1732:A:H2'	78:1S:1733:C:C6	2.46	0.51
79:2S:2126:A:H2'	79:2S:2127:U:C6	2.45	0.51
79:2S:2719:U:H2'	79:2S:2720:G:H8	1.76	0.51
79:2S:3138:U:H3'	79:2S:3139:A:H5''	1.93	0.51
81:5S:113:C:H2'	81:5S:114:U:C6	2.46	0.51
1:L1:14:LYS:HA	1:L1:17:LEU:HD21	1.92	0.50
4:L4:281:ILE:O	4:L4:281:ILE:HG23	2.11	0.50
8:L8:157:VAL:HG12	8:L8:159:PRO:HD2	1.92	0.50
15:65:117:ASN:H	15:65:133:ILE:HG23	1.77	0.50
22:72:19:VAL:HG21	22:72:28:PHE:HE2	1.76	0.50
42:92:46:LYS:HG2	42:92:54:THR:HG21	1.93	0.50
45:RC:192:PHE:CE1	49:S3:222:VAL:HG23	2.46	0.50
50:S4:159:THR:CG2	50:S4:227:VAL:HB	2.41	0.50
57:11:109:VAL:HG23	57:11:137:PHE:C	2.32	0.50
66:20:96:PRO:HG2	66:20:99:ILE:HG22	1.93	0.50
72:26:31:PRO:HB2	72:26:34:LYS:HB3	1.93	0.50
73:27:74:SER:O	73:27:75:GLU:HB3	2.11	0.50
78:1S:7:G:H4'	78:1S:573:C:O2'	2.10	0.50
78:1S:883:C:H2'	78:1S:884:A:C8	2.46	0.50
78:1S:970:A:H3'	78:1S:971:A:H8	1.77	0.50
78:1S:1470:C:O2'	78:1S:1572:G:H5'	2.11	0.50
79:2S:709:A:H2	79:2S:2787:G:H21	1.59	0.50
79:2S:957:C:H2'	79:2S:958:C:C6	2.46	0.50
79:2S:1238:C:H3'	79:2S:1239:C:C5'	2.38	0.50
79:2S:1288:U:H2'	79:2S:1289:G:H8	1.75	0.50
79:2S:1647:A:H8	79:2S:1647:A:O5'	1.93	0.50
79:2S:1841:A:O2'	79:2S:1842:A:H5''	2.12	0.50
79:2S:2533:G:H5'	79:2S:2533:G:C8	2.41	0.50
4:L4:65:TRP:CZ3	4:L4:76:ARG:HD3	2.47	0.50
6:L6:145:LEU:O	6:L6:149:ILE:HG13	2.11	0.50
8:L8:126:SER:HB2	79:2S:121:A:H61	1.75	0.50
19:69:37:SER:O	19:69:41:ILE:HD13	2.10	0.50
23:73:86:ARG:HA	23:73:91:VAL:O	2.11	0.50
26:76:79:ALA:HB1	26:76:98:ASN:HB3	1.93	0.50
29:79:28:LYS:HG2	79:2S:1065:A:C4	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:79:51:ALA:HA	29:79:54:LEU:HB2	1.94	0.50
30:80:48:THR:CG2	30:80:49:PRO:HD2	2.42	0.50
32:82:103:LYS:O	32:82:106:VAL:HG12	2.10	0.50
42:92:77:CYS:O	42:92:78:LYS:HB3	2.11	0.50
47:S1:181:LEU:HA	47:S1:184:LEU:HB2	1.93	0.50
48:S2:174:ARG:HD2	55:S9:98:ALA:HB2	1.92	0.50
49:S3:24:PHE:CZ	49:S3:72:LEU:HD13	2.45	0.50
50:S4:131:LEU:HD21	78:1S:243:G:H1'	1.93	0.50
50:S4:181:VAL:HG22	50:S4:227:VAL:HG22	1.94	0.50
53:S7:31:SER:O	53:S7:32:PRO:O	2.30	0.50
57:11:70:ILE:HD12	57:11:70:ILE:N	2.26	0.50
64:18:121:ALA:O	64:18:125:ILE:HG13	2.11	0.50
68:22:104:LEU:HD13	68:22:104:LEU:N	2.26	0.50
69:23:82:LYS:HD3	69:23:82:LYS:N	2.27	0.50
72:26:36:ILE:C	72:26:36:ILE:HD13	2.31	0.50
78:1S:515:A:H2'	78:1S:516:G:O4'	2.10	0.50
78:1S:1681:A:O2'	78:1S:1682:U:H5'	2.11	0.50
79:2S:2079:G:C2'	79:2S:2080:C:H5'	2.41	0.50
1:L1:39:LYS:HA	1:L1:163:LEU:O	2.12	0.50
1:L1:103:LEU:CD1	1:L1:128:LEU:HB3	2.41	0.50
4:L4:3:ARG:HE	4:L4:22:LEU:HB2	1.77	0.50
4:L4:74:ILE:HD12	4:L4:74:ILE:O	2.11	0.50
5:L5:177:GLU:HA	5:L5:180:PHE:CD2	2.45	0.50
7:L7:52:GLN:HA	7:L7:55:TYR:CD2	2.47	0.50
20:70:26:ARG:HH22	20:70:28:ARG:HH21	1.58	0.50
24:74:34:SER:HB3	79:2S:3052:G:OP1	2.11	0.50
28:78:91:LEU:CD2	28:78:121:VAL:HG21	2.41	0.50
30:80:32:LYS:O	30:80:36:GLN:HG3	2.11	0.50
32:82:63:THR:HA	32:82:66:LEU:HD12	1.94	0.50
43:93:19:GLY:HA3	79:2S:2189:U:H4'	1.91	0.50
48:S2:52:THR:HB	48:S2:54:GLU:HG2	1.93	0.50
50:S4:211:LYS:HA	50:S4:216:ASN:O	2.12	0.50
51:S5:63:GLN:CG	51:S5:88:PRO:HA	2.40	0.50
53:S7:111:LYS:CG	53:S7:112:ARG:H	2.23	0.50
57:11:103:ARG:HA	78:1S:351:C:O2	2.12	0.50
58:12:89:ILE:HG23	58:12:90:LYS:N	2.26	0.50
64:18:134:ARG:HH11	64:18:134:ARG:HG3	1.75	0.50
66:20:100:VAL:O	66:20:104:THR:HG23	2.11	0.50
70:24:14:SER:C	70:24:16:PRO:HD3	2.32	0.50
72:26:23:CYS:HB3	72:26:28:LYS:N	2.26	0.50
78:1S:372:G:H1'	78:1S:612:U:O2	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:601:A:H2'	78:1S:602:U:C6	2.46	0.50
78:1S:693:U:H5''	78:1S:694:U:H5'	1.93	0.50
79:2S:973:A:H2'	79:2S:974:G:O4'	2.11	0.50
79:2S:975:C:H2'	79:2S:976:U:C6	2.46	0.50
79:2S:1666:G:H2'	79:2S:1667:A:C8	2.46	0.50
79:2S:1951:C:H6	79:2S:2095:G:C2	2.28	0.50
79:2S:2813:A:H2'	79:2S:2814:G:O4'	2.11	0.50
79:2S:2909:U:H2'	79:2S:2910:A:O4'	2.12	0.50
79:2S:3096:C:H2'	79:2S:3097:C:C6	2.46	0.50
1:L1:45:ARG:HD2	1:L1:195:LYS:HE3	1.93	0.50
2:L2:104:LEU:HD21	2:L2:116:VAL:HG21	1.93	0.50
3:L3:243:HIS:O	3:L3:244:ARG:HG2	2.11	0.50
6:L6:19:LYS:HE3	79:2S:590:G:H21	1.76	0.50
7:L7:102:VAL:HG12	7:L7:106:LEU:HD11	1.94	0.50
10:60:55:ASN:ND2	10:60:164:LYS:HE2	2.27	0.50
10:60:213:PHE:N	10:60:214:PRO:CD	2.74	0.50
15:65:67:ARG:NH2	79:2S:2168:A:H5''	2.27	0.50
15:65:89:VAL:HG21	79:2S:2424:A:H5'	1.92	0.50
15:65:124:ASP:CG	15:65:125:SER:H	2.15	0.50
15:65:157:LYS:O	15:65:158:HIS:HB2	2.11	0.50
16:66:87:MET:HG2	79:2S:1175:C:O2	2.10	0.50
16:66:157:GLU:O	16:66:161:LYS:HG3	2.11	0.50
18:68:82:VAL:HB	18:68:139:ILE:HA	1.94	0.50
19:69:99:LEU:HD12	79:2S:1722:U:H5''	1.92	0.50
19:69:139:VAL:HA	19:69:142:ILE:HD12	1.92	0.50
19:69:168:ALA:O	19:69:172:ARG:HG3	2.11	0.50
20:70:106:LEU:O	20:70:106:LEU:HD23	2.11	0.50
33:83:49:ILE:HG22	33:83:50:ALA:H	1.77	0.50
35:85:86:ARG:HG2	35:85:89:ARG:NH2	2.26	0.50
37:87:47:TYR:HB3	37:87:49:TRP:NE1	2.26	0.50
42:92:61:LYS:NZ	42:92:61:LYS:HB3	2.26	0.50
45:RC:240:VAL:HA	45:RC:255:ALA:O	2.11	0.50
47:S1:109:LYS:O	47:S1:113:MET:HG3	2.12	0.50
48:S2:228:ASN:ND2	67:21:1:MET:HG2	2.24	0.50
50:S4:47:PHE:HE1	50:S4:111:VAL:HG22	1.76	0.50
51:S5:164:PRO:O	51:S5:168:VAL:HG23	2.11	0.50
51:S5:198:LEU:O	51:S5:202:ALA:HB2	2.11	0.50
62:16:39:VAL:HG22	62:16:48:VAL:HG11	1.93	0.50
65:19:52:GLY:HA2	65:19:55:TYR:HE2	1.77	0.50
78:1S:391:A:O4'	78:1S:1731:A:H5'	2.11	0.50
78:1S:1569:A:H2'	78:1S:1570:A:H8	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1739:C:H2'	78:1S:1740:A:C8	2.47	0.50
79:2S:751:A:H2'	79:2S:752:C:H6	1.75	0.50
79:2S:1105:A:H2'	79:2S:1106:G:C8	2.47	0.50
79:2S:1178:G:H1'	79:2S:1328:C:O2'	2.11	0.50
79:2S:2726:C:O2'	79:2S:2727:A:H2'	2.11	0.50
5:L5:33:ARG:HG3	5:L5:33:ARG:NH1	2.26	0.50
6:L6:42:LEU:O	6:L6:49:GLY:HA2	2.12	0.50
8:L8:68:ARG:HD3	8:L8:237:ILE:O	2.10	0.50
11:61:86:VAL:CG2	11:61:111:ASP:HB3	2.42	0.50
13:63:59:ARG:HG2	13:63:60:ALA:N	2.24	0.50
15:65:18:VAL:O	15:65:22:LEU:HD13	2.11	0.50
20:70:117:ARG:HG3	20:70:119:ARG:HH12	1.76	0.50
48:S2:117:THR:HG23	48:S2:117:THR:O	2.12	0.50
50:S4:15:PRO:HD2	50:S4:18:TRP:CZ3	2.47	0.50
55:S9:52:ILE:HG23	55:S9:76:LEU:HD11	1.93	0.50
56:10:58:GLN:CB	56:10:65:TYR:HB2	2.38	0.50
57:11:34:TRP:HH2	57:11:36:LYS:HD3	1.76	0.50
59:13:71:ILE:O	59:13:75:LEU:HD13	2.12	0.50
60:14:87:GLY:H	60:14:92:LYS:HA	1.77	0.50
61:15:22:LEU:HD22	61:15:22:LEU:N	2.25	0.50
78:1S:17:C:H5'	78:1S:1109:G:H5'	1.94	0.50
79:2S:1334:U:H2'	79:2S:1335:C:C6	2.46	0.50
79:2S:1532:C:H2'	79:2S:1533:U:C6	2.46	0.50
79:2S:2466:G:C2'	79:2S:2467:G:H5'	2.42	0.50
79:2S:3376:A:H5'	79:2S:3377:G:H5''	1.94	0.50
81:5S:58:C:H2'	81:5S:59:U:C6	2.47	0.50
1:L1:199:GLN:C	1:L1:201:VAL:H	2.15	0.50
3:L3:117:ARG:HA	3:L3:175:LYS:HD3	1.92	0.50
3:L3:166:ILE:O	3:L3:166:ILE:HG13	2.11	0.50
4:L4:138:ARG:HH12	4:L4:246:ARG:HG2	1.76	0.50
4:L4:169:LEU:O	4:L4:174:ALA:HB3	2.11	0.50
4:L4:194:TYR:HD1	4:L4:194:TYR:H	1.58	0.50
5:L5:44:TYR:CD1	21:71:33:VAL:HG13	2.47	0.50
6:L6:176:PHE:CE2	33:83:107:ILE:HD13	2.47	0.50
18:68:102:ALA:HA	18:68:122:ILE:O	2.12	0.50
23:73:75:PRO:HG2	23:73:105:PRO:HD3	1.94	0.50
36:86:60:LEU:O	36:86:64:SER:HB3	2.11	0.50
42:92:57:VAL:HG22	82:ET:76:C:H4'	1.94	0.50
43:93:5:THR:HB	43:93:8:VAL:HG22	1.94	0.50
48:S2:38:VAL:HG22	48:S2:39:THR:N	2.23	0.50
48:S2:242:ILE:HD12	48:S2:242:ILE:N	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:S3:141:LYS:O	49:S3:141:LYS:HD3	2.12	0.50
51:S5:148:ARG:HH12	82:ET:36:A:H62	1.60	0.50
56:10:50:THR:HG22	56:10:55:VAL:HG13	1.94	0.50
58:12:113:ARG:HG3	58:12:114:LYS:H	1.77	0.50
59:13:14:SER:OG	78:1S:958:U:H2'	2.12	0.50
69:23:141:GLU:HG2	69:23:142:LYS:N	2.26	0.50
71:25:64:VAL:HA	71:25:67:ASP:HB2	1.94	0.50
78:1S:1058:U:O2'	78:1S:1059:U:H2'	2.12	0.50
78:1S:1459:C:OP2	78:1S:1459:C:H6	1.95	0.50
79:2S:741:U:C2	79:2S:742:G:H1'	2.47	0.50
79:2S:757:C:H2'	79:2S:758:C:O4'	2.10	0.50
79:2S:2267:C:H2'	79:2S:2268:U:O4'	2.12	0.50
79:2S:2553:U:O2	79:2S:2553:U:H2'	2.10	0.50
79:2S:3152:U:O2'	79:2S:3153:U:H5'	2.12	0.50
82:ET:60:A:H3'	82:ET:61:U:C6	2.46	0.50
5:L5:55:PHE:CE2	5:L5:159:VAL:HG22	2.46	0.50
8:L8:116:VAL:HG23	8:L8:125:ALA:HB2	1.93	0.50
15:65:114:ARG:HD2	15:65:157:LYS:HA	1.94	0.50
18:68:127:LEU:O	18:68:127:LEU:HD13	2.12	0.50
26:76:82:VAL:HG12	26:76:84:LYS:H	1.75	0.50
28:78:117:ARG:O	28:78:118:ILE:HG23	2.12	0.50
29:79:2:ALA:HB2	79:2S:2818:U:H5''	1.93	0.50
32:82:71:HIS:HB2	32:82:93:ALA:HB2	1.93	0.50
46:S0:64:ILE:HG12	46:S0:120:LEU:HD21	1.92	0.50
47:S1:111:ARG:HG2	47:S1:111:ARG:HH11	1.77	0.50
50:S4:86:PHE:HE2	50:S4:102:VAL:HA	1.75	0.50
57:11:69:LYS:HD2	57:11:69:LYS:N	2.27	0.50
62:16:114:ARG:H	62:16:116:LEU:CD2	2.24	0.50
63:17:84:TYR:C	63:17:86:PRO:HD2	2.32	0.50
64:18:38:VAL:HG12	64:18:42:TYR:HD2	1.74	0.50
65:19:104:VAL:O	65:19:108:LEU:HG	2.12	0.50
77:31:145:HIS:HB2	78:1S:1234:A:H4'	1.94	0.50
78:1S:38:C:O2'	78:1S:39:A:H5'	2.12	0.50
78:1S:699:U:H2'	78:1S:700:C:C6	2.47	0.50
79:2S:1812:G:O2'	79:2S:1818:U:H4'	2.12	0.50
79:2S:1881:A:H2'	79:2S:1882:G:H8	1.76	0.50
79:2S:2529:A:H2'	79:2S:2530:G:O4'	2.11	0.50
79:2S:2736:A:H2'	79:2S:2737:C:O4'	2.12	0.50
79:2S:2915:U:H5''	79:2S:2916:U:H5'	1.94	0.50
80:8S:106:C:H4'	80:8S:107:G:H5''	1.93	0.50
3:L3:3:HIS:NE2	79:2S:2938:G:H5''	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:L4:295:ILE:O	4:L4:299:ILE:HG12	2.12	0.50
10:60:47:PRO:HB3	10:60:171:TRP:CZ2	2.46	0.50
11:61:172:LEU:O	11:61:173:ASP:HB2	2.11	0.50
12:62:105:GLN:HA	12:62:142:ARG:O	2.12	0.50
18:68:26:LEU:O	18:68:30:VAL:HG23	2.12	0.50
20:70:67:ALA:C	20:70:69:PRO:HD3	2.32	0.50
21:71:96:ILE:HD12	21:71:96:ILE:N	2.27	0.50
23:73:39:VAL:HA	23:73:58:VAL:HB	1.93	0.50
36:86:83:ALA:O	36:86:87:VAL:HG23	2.12	0.50
45:RC:7:LEU:N	45:RC:7:LEU:HD12	2.27	0.50
48:S2:161:LYS:HG2	48:S2:162:CYS:N	2.26	0.50
54:S8:135:LYS:O	54:S8:135:LYS:HD3	2.12	0.50
56:10:15:LEU:HD13	56:10:21:VAL:HG23	1.94	0.50
57:11:6:THR:HB	57:11:9:SER:OG	2.12	0.50
59:13:62:GLN:HB2	59:13:65:VAL:CG2	2.39	0.50
64:18:72:ILE:CG2	64:18:81:ILE:HD11	2.42	0.50
70:24:57:VAL:HA	70:24:73:GLY:HA2	1.94	0.50
78:1S:251:A:H2'	78:1S:252:U:O4'	2.11	0.50
78:1S:1250:U:C2'	78:1S:1251:U:H5'	2.42	0.50
79:2S:72:C:C1'	79:2S:74:G:H1'	2.41	0.50
79:2S:1055:A:H2'	79:2S:1056:U:O4'	2.12	0.50
79:2S:3356:G:H2'	79:2S:3357:U:C6	2.46	0.50
82:ET:38:A:H2'	82:ET:39:A:O4'	2.11	0.50
82:PT:1:C:H2'	82:PT:2:G:H8	1.76	0.50
2:L2:83:HIS:CB	43:93:64:VAL:HG22	2.42	0.50
2:L2:225:ILE:HB	2:L2:238:ILE:HG12	1.94	0.50
3:L3:95:THR:HG22	79:2S:3243:A:H5''	1.93	0.50
4:L4:32:PRO:HG3	4:L4:244:LEU:HD12	1.94	0.50
9:L9:114:VAL:HB	9:L9:124:ARG:HB2	1.94	0.50
11:61:23:VAL:CG1	11:61:29:ARG:HD3	2.42	0.50
16:66:158:ALA:O	16:66:162:VAL:HG23	2.12	0.50
31:81:18:LYS:HB3	79:2S:3376:A:N3	2.26	0.50
33:83:54:ARG:HG3	33:83:64:ILE:HG12	1.94	0.50
35:85:66:VAL:HA	35:85:69:LEU:HG	1.93	0.50
42:92:32:LYS:HG2	42:92:34:SER:H	1.77	0.50
46:S0:76:ILE:CD1	46:S0:98:ILE:HB	2.37	0.50
51:S5:59:VAL:O	51:S5:60:ASP:HB2	2.12	0.50
52:S6:78:THR:HG22	52:S6:79:LYS:N	2.24	0.50
53:S7:83:LYS:O	53:S7:86:GLN:HB2	2.11	0.50
55:S9:117:GLY:O	55:S9:118:LEU:HB3	2.10	0.50
56:10:13:GLN:HA	56:10:80:LEU:HD11	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:10:60:SER:HB3	56:10:65:TYR:HE2	1.76	0.50
57:11:8:GLN:OE1	57:11:14:GLN:HG2	2.12	0.50
57:11:99:ARG:HB3	69:23:12:ALA:HB2	1.93	0.50
78:1S:162:A:H3'	78:1S:163:G:H21	1.77	0.50
78:1S:839:U:H2'	78:1S:840:U:C5'	2.41	0.50
78:1S:1210:C:H2'	78:1S:1211:A:C8	2.47	0.50
78:1S:1567:U:C2'	78:1S:1568:C:H5'	2.42	0.50
78:1S:1713:G:H2'	78:1S:1714:A:H5'	1.92	0.50
79:2S:300:G:H2'	79:2S:301:G:C8	2.47	0.50
79:2S:839:C:O2'	79:2S:840:C:H5'	2.12	0.50
79:2S:2466:G:H2'	79:2S:2467:G:H5'	1.93	0.50
3:L3:237:LYS:HD3	79:2S:2340:U:H5''	1.93	0.49
5:L5:3:PHE:HB2	5:L5:6:ASP:HB2	1.93	0.49
5:L5:12:TYR:O	5:L5:16:PHE:HB2	2.12	0.49
5:L5:134:ALA:HB2	5:L5:141:PRO:CD	2.42	0.49
7:L7:125:GLU:HG3	79:2S:987:U:C5'	2.42	0.49
9:L9:28:VAL:HG22	9:L9:33:THR:HG22	1.94	0.49
9:L9:41:ILE:O	9:L9:42:ASP:HB2	2.11	0.49
11:61:114:ILE:N	11:61:114:ILE:HD12	2.27	0.49
17:67:38:GLY:H	17:67:114:VAL:HG13	1.77	0.49
20:70:15:PRO:HG3	20:70:22:PRO:CD	2.42	0.49
21:71:8:ARG:HB2	79:2S:2757:U:O2'	2.12	0.49
21:71:17:ARG:HG3	21:71:21:LYS:O	2.12	0.49
21:71:102:ARG:HG2	21:71:102:ARG:HH11	1.77	0.49
21:71:116:ARG:HG3	21:71:116:ARG:HH11	1.77	0.49
30:80:74:ASN:HB2	30:80:87:VAL:O	2.12	0.49
46:S0:197:ILE:HD12	46:S0:197:ILE:N	2.26	0.49
50:S4:86:PHE:CE2	50:S4:102:VAL:HA	2.47	0.49
54:S8:166:TYR:HD2	54:S8:189:LEU:HD21	1.77	0.49
63:17:21:TYR:C	63:17:23:LYS:H	2.16	0.49
64:18:65:GLU:O	64:18:69:ILE:HG13	2.12	0.49
68:22:89:TRP:HA	68:22:92:ASN:HD22	1.77	0.49
70:24:84:LYS:HE3	70:24:85:PHE:CE2	2.47	0.49
78:1S:177:U:H3'	78:1S:178:U:C5'	2.42	0.49
78:1S:224:C:H2'	78:1S:225:A:H8	1.77	0.49
78:1S:1044:U:H2'	78:1S:1045:C:C5	2.47	0.49
78:1S:1360:A:H2'	78:1S:1361:U:H4'	1.94	0.49
78:1S:1785:U:H2'	78:1S:1786:G:H8	1.77	0.49
79:2S:1551:C:H2'	79:2S:1552:G:C8	2.47	0.49
79:2S:2095:G:H2'	79:2S:2096:A:C8	2.47	0.49
79:2S:2152:A:H1'	79:2S:2243:A:C2	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2333:C:H2'	79:2S:2334:U:O4'	2.11	0.49
79:2S:3048:A:H4'	79:2S:3049:A:H5'	1.94	0.49
4:L4:308:LYS:HG2	4:L4:309:ARG:H	1.77	0.49
4:L4:350:LYS:HG2	4:L4:351:PRO:HD2	1.94	0.49
7:L7:160:ARG:NH1	7:L7:206:LYS:HD3	2.26	0.49
8:L8:150:LEU:HD13	8:L8:151:VAL:N	2.27	0.49
9:L9:23:ARG:CD	9:L9:39:LYS:HA	2.36	0.49
10:60:27:PRO:HD2	10:60:122:PRO:HB3	1.94	0.49
16:66:32:LYS:HA	16:66:101:ARG:HB3	1.94	0.49
16:66:37:ARG:HB3	16:66:40:GLU:HG2	1.92	0.49
19:69:93:VAL:HG12	19:69:97:ARG:NE	2.27	0.49
19:69:153:LYS:O	19:69:157:GLU:HG3	2.12	0.49
30:80:86:ARG:HD2	43:93:44:LYS:HE2	1.95	0.49
34:84:106:LYS:O	34:84:110:GLU:HG3	2.12	0.49
47:S1:140:ILE:HG23	47:S1:211:HIS:HB2	1.95	0.49
48:S2:44:LEU:HD22	48:S2:243:TYR:HB3	1.95	0.49
48:S2:125:ILE:O	48:S2:129:ILE:HG13	2.11	0.49
48:S2:238:SER:O	48:S2:241:ASP:HB2	2.12	0.49
49:S3:167:PHE:CE1	49:S3:192:PRO:HA	2.46	0.49
51:S5:129:PRO:O	51:S5:133:VAL:HG23	2.12	0.49
53:S7:109:VAL:HG22	53:S7:110:GLN:N	2.26	0.49
63:17:5:ARG:CG	63:17:9:VAL:HG11	2.42	0.49
69:23:144:ARG:CD	69:23:145:SER:H	2.25	0.49
78:1S:487:G:H1	78:1S:500:C:H41	1.61	0.49
78:1S:915:A:H3'	78:1S:916:U:C6	2.47	0.49
79:2S:436:A:H2'	79:2S:437:G:H5'	1.95	0.49
79:2S:861:C:H2'	79:2S:862:U:H6	1.74	0.49
79:2S:1627:U:HO2'	79:2S:1813:A:H8	1.59	0.49
79:2S:1910:A:O2'	79:2S:2334:U:H4'	2.11	0.49
2:L2:118:GLU:HG3	2:L2:125:ALA:HB3	1.94	0.49
4:L4:235:LEU:HD12	4:L4:238:LEU:HD12	1.94	0.49
10:60:162:GLN:HG2	10:60:163:GLN:N	2.26	0.49
10:60:166:ILE:HG22	10:60:167:LEU:N	2.27	0.49
18:68:80:THR:HG22	18:68:100:THR:HB	1.94	0.49
18:68:126:GLN:O	18:68:130:ARG:HG3	2.12	0.49
20:70:124:LEU:HD13	21:71:155:PRO:HG3	1.93	0.49
33:83:74:THR:HA	33:83:81:VAL:HA	1.94	0.49
33:83:75:HIS:HB3	33:83:80:VAL:HB	1.93	0.49
47:S1:87:ARG:HH22	47:S1:101:HIS:HA	1.76	0.49
50:S4:173:ILE:HD12	50:S4:173:ILE:N	2.27	0.49
51:S5:63:GLN:C	51:S5:65:ARG:H	2.16	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:S6:142:ARG:HG2	52:S6:147:LEU:HB2	1.94	0.49
54:S8:24:LYS:O	54:S8:25:ARG:HD3	2.12	0.49
64:18:76:PRO:HB2	64:18:81:ILE:HB	1.93	0.49
67:21:86:SER:HA	73:27:6:ASP:HB3	1.93	0.49
73:27:33:LEU:HA	73:27:80:ARG:O	2.12	0.49
79:2S:405:U:C2'	79:2S:406:G:H5'	2.38	0.49
79:2S:937:G:OP2	79:2S:938:C:H5	1.94	0.49
79:2S:982:C:O2'	79:2S:983:A:H5'	2.12	0.49
79:2S:1367:G:H2'	79:2S:1368:U:H5	1.77	0.49
79:2S:1525:G:O2'	79:2S:1829:G:H2'	2.12	0.49
79:2S:1655:G:H2'	79:2S:1656:A:C8	2.47	0.49
79:2S:1694:U:O2'	79:2S:1695:U:H5'	2.13	0.49
79:2S:1813:A:C3'	79:2S:1814:A:H5'	2.41	0.49
79:2S:2363:A:H2'	79:2S:2364:G:O4'	2.12	0.49
79:2S:2369:G:H2'	79:2S:2370:G:C8	2.48	0.49
79:2S:2998:U:H2'	79:2S:2999:U:C6	2.47	0.49
79:2S:3294:A:H2'	79:2S:3295:A:O4'	2.12	0.49
80:8S:68:G:H2'	80:8S:69:U:C6	2.48	0.49
80:8S:153:U:H2'	80:8S:154:C:C6	2.47	0.49
3:L3:146:ARG:HA	3:L3:146:ARG:NE	2.27	0.49
5:L5:226:TYR:HD2	5:L5:231:ILE:HB	1.77	0.49
7:L7:96:PRO:HB2	7:L7:99:PRO:HD2	1.93	0.49
14:64:76:ALA:HB1	14:64:80:THR:HB	1.95	0.49
18:68:85:GLY:N	18:68:104:LEU:HD12	2.28	0.49
28:78:47:LYS:O	28:78:48:TYR:HB2	2.13	0.49
36:86:26:ILE:CG2	79:2S:155:G:H21	2.22	0.49
36:86:40:VAL:O	36:86:44:VAL:HG23	2.12	0.49
45:RC:72:THR:CG2	45:RC:81:LEU:HD12	2.42	0.49
45:RC:169:ILE:HD13	45:RC:183:LEU:HD21	1.95	0.49
48:S2:104:VAL:HG22	48:S2:132:ALA:HB1	1.93	0.49
52:S6:56:ASN:HD21	78:1S:153:G:N2	2.10	0.49
52:S6:198:ALA:O	52:S6:202:ARG:HG2	2.12	0.49
63:17:113:LEU:HD23	63:17:113:LEU:N	2.27	0.49
71:25:70:LYS:HG3	71:25:71:ILE:HG13	1.94	0.49
78:1S:431:C:H2'	78:1S:432:G:C8	2.48	0.49
78:1S:1774:G:H2'	78:1S:1775:U:C6	2.47	0.49
79:2S:1311:G:H2'	79:2S:1312:C:C6	2.48	0.49
79:2S:1348:U:H4'	79:2S:1349:G:H5''	1.94	0.49
79:2S:2379:U:H2'	79:2S:2380:U:C6	2.48	0.49
79:2S:2731:U:H2'	79:2S:2732:G:C8	2.47	0.49
3:L3:128:LYS:NZ	79:2S:3293:U:H5'	2.27	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:375:GLU:O	3:L3:379:PHE:HB2	2.13	0.49
3:L3:385:LYS:C	3:L3:387:LEU:H	2.16	0.49
4:L4:239:ALA:N	4:L4:240:PRO:HD3	2.28	0.49
10:60:36:LEU:HD12	10:60:36:LEU:N	2.28	0.49
13:63:89:TYR:O	13:63:93:ILE:HG12	2.13	0.49
14:64:37:GLU:H	14:64:45:LEU:HB3	1.77	0.49
18:68:16:ARG:HG2	79:2S:974:G:OP1	2.12	0.49
22:72:19:VAL:HG23	22:72:61:THR:HA	1.93	0.49
23:73:33:ASN:ND2	23:73:64:LYS:H	2.11	0.49
29:79:14:ARG:HD2	29:79:14:ARG:C	2.31	0.49
45:RC:112:SER:HB2	45:RC:153:GLN:HA	1.93	0.49
46:S0:32:HIS:HB2	78:1S:1040:G:H4'	1.94	0.49
46:S0:52:LYS:O	46:S0:56:LYS:HG2	2.13	0.49
47:S1:82:ARG:HA	47:S1:105:PHE:HA	1.94	0.49
53:S7:130:VAL:O	53:S7:130:VAL:HG23	2.12	0.49
62:16:92:TYR:O	62:16:97:VAL:HG23	2.12	0.49
63:17:122:ILE:HG23	63:17:123:ASN:N	2.28	0.49
69:23:37:ALA:HA	69:23:41:SER:HB3	1.94	0.49
69:23:50:LYS:HE2	78:1S:435:C:C5'	2.39	0.49
70:24:22:GLN:HB2	70:24:72:PHE:CZ	2.47	0.49
76:30:47:VAL:HG22	76:30:48:THR:N	2.23	0.49
78:1S:34:G:H2'	78:1S:35:U:C6	2.47	0.49
78:1S:97:C:H2'	78:1S:98:U:C6	2.47	0.49
78:1S:387:A:H4'	78:1S:425:A:H61	1.77	0.49
78:1S:900:A:H2'	78:1S:901:G:H5'	1.93	0.49
78:1S:1340:U:H3'	78:1S:1341:A:H5''	1.91	0.49
79:2S:165:A:H2'	79:2S:166:C:O4'	2.12	0.49
79:2S:528:U:H2'	79:2S:529:A:H8	1.73	0.49
79:2S:616:G:H2'	79:2S:617:G:C8	2.48	0.49
79:2S:791:A:H2'	79:2S:792:G:C8	2.47	0.49
79:2S:2265:C:H2'	79:2S:2266:U:C6	2.47	0.49
79:2S:2799:A:H4'	79:2S:2800:G:C5	2.48	0.49
79:2S:3319:U:OP1	79:2S:3320:A:H5'	2.13	0.49
80:8S:30:C:H2'	80:8S:31:G:C8	2.47	0.49
2:L2:21:ARG:CD	79:2S:824:C:H5''	2.38	0.49
2:L2:40:TYR:HA	2:L2:91:GLY:HA3	1.95	0.49
2:L2:91:GLY:O	2:L2:102:LEU:HG	2.13	0.49
3:L3:99:LEU:HB2	79:2S:3004:C:H4'	1.94	0.49
6:L6:158:TYR:CE1	14:64:115:PHE:HA	2.47	0.49
17:67:29:THR:O	17:67:32:THR:HG22	2.13	0.49
20:70:46:GLN:O	20:70:47:LYS:HG3	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:80:83:LYS:N	30:80:83:LYS:HD2	2.26	0.49
31:81:49:VAL:HG22	31:81:91:SER:HB2	1.95	0.49
34:84:97:GLU:O	34:84:100:ILE:HG22	2.13	0.49
49:S3:40:ARG:HG2	66:20:110:PRO:HB3	1.94	0.49
57:11:20:PHE:CG	78:1S:211:U:H5''	2.47	0.49
59:13:88:LEU:HD23	59:13:125:LEU:HD12	1.95	0.49
60:14:133:ARG:HB2	60:14:136:ARG:HH21	1.78	0.49
64:18:36:LYS:HB3	64:18:105:VAL:HG21	1.94	0.49
66:20:41:ILE:O	66:20:41:ILE:HG22	2.13	0.49
69:23:19:ARG:HA	69:23:19:ARG:NE	2.28	0.49
69:23:79:ASN:HB3	69:23:81:LYS:HG3	1.95	0.49
69:23:93:LEU:O	69:23:96:VAL:HG22	2.12	0.49
78:1S:95:G:H2'	78:1S:96:G:H8	1.77	0.49
78:1S:467:G:H2'	78:1S:468:A:H5''	1.94	0.49
78:1S:1071:U:H2'	78:1S:1072:C:C6	2.48	0.49
78:1S:1340:U:H3'	78:1S:1341:A:H5'	1.94	0.49
79:2S:970:A:H2'	79:2S:971:G:C8	2.48	0.49
79:2S:1158:A:H2'	79:2S:1159:A:C4'	2.43	0.49
79:2S:1861:G:H21	79:2S:3066:U:H5'	1.77	0.49
79:2S:1878:G:H3'	79:2S:1878:G:N3	2.27	0.49
79:2S:2882:U:H2'	79:2S:2883:U:H6	1.77	0.49
81:5S:90:U:H2'	81:5S:91:G:O4'	2.13	0.49
1:L1:58:CYS:CB	1:L1:152:ARG:HA	2.42	0.49
2:L2:224:THR:HA	2:L2:237:LEU:HB2	1.94	0.49
3:L3:62:ARG:HD3	79:2S:3038:U:H5''	1.94	0.49
6:L6:22:ARG:NH1	79:2S:608:A:H2'	2.27	0.49
8:L8:238:LEU:HD22	8:L8:238:LEU:N	2.28	0.49
13:63:43:ALA:HA	13:63:51:LEU:HD21	1.95	0.49
15:65:29:GLU:O	15:65:33:LYS:HG3	2.12	0.49
16:66:16:VAL:HA	16:66:41:LEU:HD21	1.94	0.49
16:66:22:VAL:HG11	16:66:122:GLN:CG	2.42	0.49
17:67:3:ARG:HG3	79:2S:398:A:H5''	1.95	0.49
17:67:22:LEU:HB3	17:67:24:VAL:HG23	1.93	0.49
17:67:29:THR:CA	17:67:32:THR:HG22	2.41	0.49
17:67:118:GLN:HG2	17:67:119:VAL:N	2.28	0.49
22:72:37:LEU:O	22:72:41:ILE:HG13	2.13	0.49
23:73:22:ILE:HG22	23:73:33:ASN:HB2	1.94	0.49
24:74:5:ILE:N	24:74:5:ILE:HD12	2.28	0.49
24:74:23:ARG:CG	24:74:24:GLY:H	2.25	0.49
30:80:17:VAL:O	30:80:17:VAL:HG12	2.11	0.49
47:S1:163:ALA:O	47:S1:167:VAL:HG23	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:S9:93:LEU:O	55:S9:96:VAL:HG22	2.13	0.49
56:10:60:SER:HB3	56:10:65:TYR:CE2	2.47	0.49
58:12:51:ALA:HB2	58:12:124:LYS:HD2	1.94	0.49
59:13:26:PHE:HZ	59:13:28:LEU:HD12	1.78	0.49
62:16:107:LYS:O	62:16:111:SER:HB2	2.13	0.49
62:16:143:ARG:CD	78:1S:1191:U:H4'	2.43	0.49
63:17:29:GLN:HA	63:17:32:LYS:HE2	1.93	0.49
69:23:140:LYS:HB2	69:23:140:LYS:NZ	2.26	0.49
74:28:34:GLU:O	74:28:35:ASP:HB2	2.12	0.49
78:1S:9:U:H2'	78:1S:11:A:OP2	2.12	0.49
78:1S:874:C:H2'	78:1S:875:G:C8	2.47	0.49
78:1S:964:U:H4'	78:1S:965:U:O4'	2.13	0.49
78:1S:1139:A:C2'	78:1S:1140:G:H5'	2.42	0.49
78:1S:1250:U:H2'	78:1S:1251:U:H5'	1.94	0.49
78:1S:1682:U:O2'	78:1S:1683:C:H2'	2.13	0.49
79:2S:399:A:H2'	79:2S:400:G:H5'	1.95	0.49
79:2S:811:U:H2'	79:2S:812:G:C8	2.47	0.49
79:2S:3043:C:O2'	79:2S:3044:G:H5'	2.12	0.49
81:5S:71:G:H2'	81:5S:72:A:C8	2.48	0.49
3:L3:240:ARG:NH2	3:L3:241:LYS:HB2	2.28	0.49
5:L5:128:GLU:HG3	5:L5:129:TYR:H	1.78	0.49
7:L7:136:TYR:N	7:L7:136:TYR:CD1	2.81	0.49
12:62:124:THR:O	12:62:125:LEU:CB	2.60	0.49
13:63:112:ASN:HA	13:63:115:ARG:HB3	1.95	0.49
15:65:44:ARG:HB2	15:65:119:TYR:CE2	2.48	0.49
16:66:147:TRP:CZ2	16:66:149:TYR:HB2	2.48	0.49
17:67:136:ILE:C	17:67:137:ASN:HD22	2.15	0.49
19:69:88:ARG:HG2	79:2S:1864:A:H5'	1.95	0.49
34:84:26:PRO:HB3	79:2S:1695:U:O2	2.13	0.49
38:88:31:LEU:N	38:88:31:LEU:HD23	2.28	0.49
51:S5:77:TYR:HD2	51:S5:83:ARG:O	1.95	0.49
51:S5:166:ARG:HD2	74:28:46:GLY:CA	2.43	0.49
52:S6:14:LYS:HD3	52:S6:16:PHE:CE1	2.48	0.49
57:11:39:GLY:HA2	78:1S:246:G:O2'	2.13	0.49
63:17:27:ASP:HB3	63:17:30:THR:CG2	2.42	0.49
66:20:74:GLU:HG2	78:1S:1428:G:H21	1.77	0.49
67:21:34:ILE:HG22	67:21:36:VAL:HG23	1.94	0.49
78:1S:145:A:O2'	78:1S:146:U:H6	1.91	0.49
78:1S:390:G:O2'	78:1S:1731:A:H5''	2.12	0.49
78:1S:913:G:C3'	78:1S:914:G:H5''	2.33	0.49
79:2S:79:U:H2'	79:2S:80:G:H8	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:225:C:H2'	79:2S:226:C:H6	1.78	0.49
79:2S:1002:A:H2'	79:2S:1003:A:H8	1.78	0.49
79:2S:1785:U:H2'	79:2S:1786:G:C8	2.46	0.49
79:2S:1902:G:H2'	79:2S:1903:U:O4'	2.12	0.49
79:2S:2633:U:H2'	79:2S:2634:U:O4'	2.13	0.49
79:2S:2638:C:H2'	79:2S:2639:G:O4'	2.13	0.49
79:2S:3005:A:H2	79:2S:3141:A:N7	2.11	0.49
80:8S:53:A:H2'	80:8S:54:A:H8	1.76	0.49
1:L1:106:LYS:O	1:L1:136:THR:HG23	2.12	0.49
2:L2:30:ARG:HG2	2:L2:76:PHE:HZ	1.78	0.49
3:L3:78:VAL:HG12	3:L3:79:VAL:N	2.27	0.49
5:L5:109:THR:HG23	5:L5:110:LEU:HD12	1.94	0.49
5:L5:183:TRP:HA	5:L5:189:GLU:O	2.13	0.49
15:65:83:LYS:HE2	79:2S:46:U:O4	2.13	0.49
17:67:125:GLN:O	17:67:140:GLU:HA	2.13	0.49
24:74:23:ARG:HB2	24:74:29:PHE:CE2	2.47	0.49
38:88:7:ASP:HB3	38:88:10:GLN:HB3	1.94	0.49
42:92:3:ASN:HD22	79:2S:2655:U:H3'	1.77	0.49
44:P0:55:LYS:HG3	79:2S:1281:G:H5'	1.94	0.49
45:RC:46:LYS:HB3	45:RC:56:VAL:HG22	1.94	0.49
50:S4:47:PHE:CE1	50:S4:111:VAL:HG22	2.48	0.49
54:S8:196:LEU:HG	54:S8:200:LYS:NZ	2.28	0.49
59:13:85:PRO:HB2	59:13:88:LEU:HB3	1.94	0.49
60:14:133:ARG:HG2	60:14:133:ARG:HH11	1.78	0.49
62:16:7:VAL:HG13	62:16:96:TYR:CE2	2.38	0.49
65:19:42:GLY:HA2	65:19:84:LYS:HD2	1.95	0.49
68:22:86:ILE:HG13	68:22:87:GLU:N	2.27	0.49
69:23:113:ALA:HB1	69:23:117:ILE:HB	1.94	0.49
79:2S:838:G:H2'	79:2S:839:C:C6	2.48	0.49
79:2S:2591:A:C2'	79:2S:2592:G:H5'	2.43	0.49
79:2S:2635:A:N6	79:2S:2641:U:H2'	2.27	0.49
79:2S:2816:G:C8	79:2S:2869:U:H3'	2.47	0.49
79:2S:3158:G:H21	79:2S:3395:G:H1	1.60	0.49
79:2S:3211:C:H2'	79:2S:3212:C:H6	1.78	0.49
3:L3:145:GLU:HA	3:L3:148:LEU:HB2	1.94	0.49
3:L3:295:ALA:HB2	3:L3:303:LYS:HE2	1.94	0.49
10:60:4:ARG:NH2	79:2S:1128:U:H5'	2.28	0.49
16:66:15:LEU:HG	16:66:125:ARG:HA	1.94	0.49
16:66:119:VAL:O	20:70:163:PHE:HD1	1.95	0.49
16:66:170:LYS:NZ	16:66:170:LYS:HB3	2.28	0.49
18:68:14:GLY:O	79:2S:974:G:H5''	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:68:184:PHE:N	18:68:184:PHE:CD1	2.80	0.49
19:69:93:VAL:O	19:69:97:ARG:HG3	2.13	0.49
37:87:18:LEU:CD2	37:87:25:ARG:HB2	2.43	0.49
45:RC:10:ARG:HA	45:RC:10:ARG:NE	2.27	0.49
46:S0:30:GLN:NE2	46:S0:149:LEU:HD22	2.28	0.49
47:S1:151:LYS:HE3	47:S1:154:SER:HA	1.94	0.49
50:S4:127:LYS:O	50:S4:156:VAL:HG13	2.13	0.49
55:S9:11:THR:CG2	78:1S:472:U:H5''	2.42	0.49
57:11:36:LYS:HG2	57:11:60:PHE:O	2.13	0.49
58:12:43:ARG:HB3	58:12:121:VAL:HG12	1.95	0.49
59:13:54:LEU:O	59:13:58:HIS:HB2	2.13	0.49
66:20:62:VAL:CG1	66:20:83:GLU:HB2	2.41	0.49
67:21:37:ALA:CB	67:21:45:ALA:HB1	2.43	0.49
78:1S:19:A:O2'	78:1S:571:G:H8	1.96	0.49
78:1S:915:A:H3'	78:1S:916:U:H6	1.77	0.49
78:1S:1525:A:H3'	78:1S:1526:A:C8	2.48	0.49
79:2S:138:U:H2'	79:2S:139:G:C8	2.48	0.49
79:2S:395:A:H2'	79:2S:396:A:C8	2.48	0.49
79:2S:631:U:H4'	79:2S:3172:A:N6	2.28	0.49
79:2S:807:A:N7	79:2S:2412:G:H1'	2.27	0.49
79:2S:1195:A:H2'	79:2S:1309:U:O2	2.13	0.49
79:2S:1567:U:H2'	79:2S:1568:U:H5''	1.95	0.49
79:2S:1729:A:H3'	79:2S:1730:G:C5'	2.41	0.49
79:2S:1748:G:H2'	79:2S:1749:A:C8	2.47	0.49
79:2S:1941:C:H2'	79:2S:1942:U:C6	2.48	0.49
79:2S:2208:A:H4'	79:2S:2209:U:H5'	1.94	0.49
79:2S:3211:C:H2'	79:2S:3212:C:C6	2.48	0.49
1:L1:191:VAL:O	1:L1:191:VAL:HG12	2.12	0.48
3:L3:17:LEU:HG	3:L3:18:PRO:HA	1.95	0.48
6:L6:176:PHE:O	14:64:113:THR:HG23	2.13	0.48
7:L7:51:TYR:CE2	7:L7:183:ASP:HA	2.47	0.48
7:L7:77:VAL:HG12	20:70:59:VAL:HA	1.93	0.48
7:L7:214:TRP:CE3	7:L7:219:LYS:HD2	2.47	0.48
8:L8:126:SER:HB2	79:2S:121:A:N6	2.28	0.48
9:L9:90:MET:HB3	9:L9:179:ILE:HG22	1.94	0.48
16:66:35:VAL:HB	16:66:104:VAL:HG13	1.95	0.48
19:69:63:THR:HG21	79:2S:1861:G:H4'	1.95	0.48
19:69:99:LEU:O	19:69:103:ARG:HB2	2.13	0.48
21:71:44:ALA:HA	21:71:95:HIS:ND1	2.28	0.48
21:71:70:SER:O	21:71:92:ARG:HG2	2.12	0.48
30:80:67:VAL:HG12	30:80:68:TYR:N	2.27	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:82:40:SER:HB2	79:2S:639:G:OP1	2.13	0.48
34:84:71:THR:HG22	34:84:72:VAL:H	1.77	0.48
38:88:7:ASP:HB3	38:88:10:GLN:HB2	1.95	0.48
45:RC:150:TRP:CZ2	63:17:37:GLU:HG3	2.48	0.48
48:S2:141:ARG:HB2	48:S2:154:LEU:HA	1.94	0.48
51:S5:58:LEU:CD1	51:S5:138:THR:HG22	2.42	0.48
52:S6:13:GLN:HE22	78:1S:151:G:H21	1.60	0.48
54:S8:37:LYS:HB2	54:S8:59:ARG:HE	1.78	0.48
57:11:54:ILE:N	57:11:54:ILE:HD12	2.27	0.48
66:20:25:THR:HB	66:20:115:GLU:HB2	1.95	0.48
67:21:36:VAL:O	67:21:51:VAL:HG23	2.13	0.48
78:1S:1139:A:H2'	78:1S:1140:G:H5'	1.94	0.48
78:1S:1595:U:H5	78:1S:1596:C:C4	2.31	0.48
78:1S:1665:U:H2'	78:1S:1666:U:C5	2.49	0.48
78:1S:1693:A:H2'	78:1S:1694:A:O4'	2.13	0.48
79:2S:1118:C:H2'	79:2S:1119:C:H6	1.78	0.48
79:2S:1153:A:O2'	79:2S:1154:A:H5'	2.13	0.48
79:2S:1357:G:H2'	79:2S:1358:C:C6	2.48	0.48
79:2S:1563:C:H42	79:2S:1577:G:H1	1.61	0.48
79:2S:2419:A:H2'	79:2S:2420:C:C6	2.47	0.48
79:2S:2615:G:H2'	79:2S:2616:C:O4'	2.13	0.48
79:2S:3380:U:O2'	79:2S:3381:U:H5'	2.13	0.48
82:ET:16:C:H5'	82:ET:60:A:C2	2.48	0.48
9:L9:26:LYS:HB2	79:2S:3198:U:O4	2.13	0.48
9:L9:34:LEU:HD13	9:L9:78:MET:HA	1.95	0.48
9:L9:71:VAL:O	9:L9:75:VAL:HG23	2.13	0.48
15:65:73:ARG:HB2	15:65:92:LEU:CD2	2.43	0.48
19:69:19:LYS:O	19:69:22:VAL:HG22	2.12	0.48
21:71:12:ARG:HG2	21:71:12:ARG:HH11	1.77	0.48
45:RC:150:TRP:HZ2	63:17:37:GLU:HG3	1.78	0.48
48:S2:104:VAL:HG23	48:S2:112:GLY:HA3	1.94	0.48
53:S7:111:LYS:CG	53:S7:112:ARG:N	2.75	0.48
55:S9:29:LYS:HD3	76:30:40:TYR:CE2	2.47	0.48
60:14:78:ALA:HB1	60:14:111:ARG:O	2.13	0.48
61:15:99:GLY:O	78:1S:1211:A:H1'	2.13	0.48
65:19:57:ARG:O	65:19:61:VAL:HG23	2.13	0.48
69:23:62:LYS:H	69:23:116:ASP:HB2	1.77	0.48
78:1S:55:A:N1	78:1S:403:G:H1'	2.27	0.48
78:1S:237:C:H4'	78:1S:238:U:C6	2.48	0.48
78:1S:832:U:H2'	78:1S:833:U:C4'	2.43	0.48
78:1S:1435:G:H4'	78:1S:1436:A:H5'	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1519:U:H2'	78:1S:1520:U:C6	2.47	0.48
79:2S:27:C:H4'	79:2S:328:U:H4'	1.95	0.48
79:2S:1261:G:H5'	79:2S:1279:C:O2'	2.13	0.48
79:2S:1356:U:H3'	79:2S:1357:G:H5'	1.94	0.48
79:2S:2970:C:H2'	79:2S:2972:G:C8	2.48	0.48
79:2S:3228:C:H4'	79:2S:3229:G:O5'	2.14	0.48
82:ET:44:A:H2'	82:ET:45:A:C8	2.48	0.48
1:L1:55:LEU:HD11	1:L1:153:SER:O	2.13	0.48
1:L1:90:LEU:HD11	1:L1:112:ALA:CB	2.42	0.48
2:L2:7:ASN:HB3	79:2S:2183:A:H5''	1.95	0.48
24:74:13:ILE:HA	24:74:32:GLN:NE2	2.23	0.48
25:75:74:LYS:HA	25:75:74:LYS:CE	2.39	0.48
28:78:28:HIS:CG	28:78:32:ARG:HG2	2.49	0.48
30:80:32:LYS:HD3	30:80:35:ARG:HH21	1.78	0.48
34:84:39:ALA:HB1	34:84:57:LEU:O	2.14	0.48
48:S2:83:ILE:HG12	48:S2:100:ALA:CA	2.43	0.48
50:S4:64:ILE:HD11	70:24:18:LEU:HD21	1.95	0.48
50:S4:163:ASP:O	50:S4:164:LEU:HB2	2.13	0.48
71:25:95:HIS:HB3	78:1S:1530:C:P	2.53	0.48
79:2S:495:G:H2'	79:2S:496:C:H6	1.78	0.48
79:2S:1150:A:H3'	79:2S:1151:U:C6	2.48	0.48
79:2S:1891:A:O2'	79:2S:1892:G:H5'	2.14	0.48
79:2S:1951:C:O2	79:2S:1951:C:O4'	2.31	0.48
79:2S:2591:A:H2'	79:2S:2592:G:H5'	1.95	0.48
79:2S:2748:A:C5	79:2S:2749:G:H1'	2.48	0.48
79:2S:3047:U:O2'	79:2S:3048:A:H5'	2.14	0.48
80:8S:118:C:H2'	80:8S:119:C:C6	2.48	0.48
1:L1:30:GLU:CB	1:L1:34:LEU:HD11	2.24	0.48
8:L8:225:LYS:O	8:L8:229:VAL:HG23	2.13	0.48
13:63:159:VAL:HG22	28:78:99:ALA:HB2	1.96	0.48
14:64:120:VAL:HG22	16:66:197:LEU:HD13	1.95	0.48
15:65:85:THR:HA	42:92:50:PHE:HB3	1.95	0.48
21:71:102:ARG:O	21:71:106:LEU:HD23	2.13	0.48
22:72:48:GLY:O	22:72:50:LEU:HG	2.13	0.48
25:75:53:HIS:O	80:8S:134:G:H5''	2.12	0.48
33:83:18:ARG:CB	33:83:23:ASN:HA	2.42	0.48
45:RC:201:THR:CG2	45:RC:243:LEU:HG	2.43	0.48
51:S5:128:ASN:ND2	51:S5:129:PRO:HD2	2.27	0.48
52:S6:160:ARG:HD2	78:1S:68:A:C2	2.48	0.48
54:S8:110:ARG:O	54:S8:114:GLU:HB2	2.13	0.48
55:S9:12:TYR:HA	55:S9:44:ARG:HA	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:11:109:VAL:HA	57:11:135:VAL:HG13	1.95	0.48
65:19:34:VAL:HG22	65:19:34:VAL:O	2.13	0.48
72:26:78:ALA:CA	72:26:82:ARG:HB3	2.38	0.48
74:28:13:ILE:HD11	74:28:29:ARG:HG2	1.94	0.48
78:1S:393:C:H2'	78:1S:394:C:H6	1.78	0.48
78:1S:1618:C:H1'	78:1S:1619:C:H5	1.79	0.48
79:2S:186:U:H3	79:2S:230:U:H3	1.62	0.48
79:2S:201:A:H2'	79:2S:202:G:C8	2.48	0.48
79:2S:241:G:H2'	79:2S:242:C:H5'	1.96	0.48
79:2S:1263:A:H2'	79:2S:1263:A:N3	2.28	0.48
79:2S:3326:G:H2'	79:2S:3327:G:H8	1.77	0.48
2:L2:11:GLY:HA3	79:2S:2163:C:O2'	2.13	0.48
2:L2:245:LEU:O	2:L2:247:ARG:NH1	2.46	0.48
3:L3:283:TYR:HB3	3:L3:356:LEU:HD21	1.95	0.48
3:L3:332:ARG:O	3:L3:333:LYS:CB	2.61	0.48
5:L5:44:TYR:HD2	79:2S:1084:A:H4'	1.79	0.48
5:L5:181:PRO:HG2	5:L5:195:LEU:HA	1.95	0.48
10:60:57:LEU:N	10:60:131:ILE:HG12	2.28	0.48
23:73:6:ALA:HB2	23:73:126:TRP:CE2	2.48	0.48
38:88:69:LEU:HD11	38:88:73:LEU:HD13	1.95	0.48
39:89:44:TRP:CE3	39:89:45:ARG:HB2	2.49	0.48
43:93:82:THR:HG22	43:93:86:LEU:HD12	1.95	0.48
44:P0:48:ARG:NE	44:P0:90:ASN:HB3	2.28	0.48
47:S1:206:PRO:O	47:S1:207:LEU:HB2	2.14	0.48
48:S2:208:GLU:O	48:S2:212:LYS:HB2	2.13	0.48
49:S3:62:ASN:O	56:10:92:ILE:HB	2.12	0.48
49:S3:208:ILE:HA	63:17:39:ALA:HB2	1.96	0.48
51:S5:25:LEU:HD22	51:S5:25:LEU:H	1.78	0.48
56:10:15:LEU:HD13	56:10:21:VAL:CG2	2.43	0.48
68:22:105:THR:HB	78:1S:804:A:N3	2.29	0.48
71:25:70:LYS:HG3	71:25:71:ILE:N	2.25	0.48
78:1S:315:A:O3'	78:1S:316:A:H4'	2.14	0.48
78:1S:636:A:C2'	78:1S:637:C:H5'	2.43	0.48
79:2S:603:A:H2'	79:2S:604:G:C4'	2.43	0.48
79:2S:849:C:H2'	79:2S:850:U:C6	2.48	0.48
79:2S:2143:A:H2'	79:2S:2145:A:N7	2.28	0.48
79:2S:2258:U:H2'	79:2S:2259:A:O4'	2.12	0.48
79:2S:2495:C:H3'	79:2S:2496:C:H5''	1.96	0.48
79:2S:2664:C:O2'	79:2S:2665:U:H5'	2.13	0.48
79:2S:2768:U:H2'	79:2S:2769:A:H8	1.77	0.48
79:2S:3320:A:H2'	79:2S:3321:C:C6	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:41:ILE:O	2:L2:89:TYR:HA	2.14	0.48
3:L3:261:MET:HG2	16:66:64:PHE:HA	1.96	0.48
5:L5:19:PRO:HB2	5:L5:24:ARG:CG	2.43	0.48
5:L5:41:LYS:HB2	21:71:69:LYS:O	2.13	0.48
7:L7:58:ALA:O	7:L7:62:ILE:HG13	2.13	0.48
9:L9:67:ALA:O	9:L9:70:THR:HG22	2.13	0.48
13:63:55:ARG:HG3	13:63:72:GLY:O	2.13	0.48
15:65:47:LYS:HD2	15:65:50:ARG:HE	1.79	0.48
43:93:26:VAL:O	43:93:30:GLU:HG3	2.14	0.48
44:P0:89:THR:HG21	44:P0:96:ILE:HG21	1.94	0.48
47:S1:65:VAL:HB	47:S1:85:LYS:HE2	1.95	0.48
47:S1:159:SER:HA	47:S1:162:ARG:HD2	1.96	0.48
51:S5:57:SER:HB3	74:28:53:ILE:HD12	1.95	0.48
54:S8:191:PHE:O	54:S8:195:ARG:HG2	2.13	0.48
58:12:48:SER:O	58:12:52:LEU:HD23	2.13	0.48
61:15:28:MET:HG2	61:15:32:ASP:HB2	1.95	0.48
70:24:20:ARG:HA	70:24:76:TYR:HA	1.95	0.48
78:1S:752:A:H2'	78:1S:753:A:O4'	2.13	0.48
78:1S:1157:A:H5'	78:1S:1157:A:H8	1.77	0.48
78:1S:1199:G:OP1	78:1S:1200:G:H8	1.96	0.48
78:1S:1530:C:O5'	78:1S:1530:C:H6	1.97	0.48
79:2S:891:G:H2'	79:2S:892:U:O4'	2.13	0.48
79:2S:1178:G:O2'	79:2S:1328:C:H4'	2.14	0.48
79:2S:1237:G:H1	79:2S:1251:A:H61	1.61	0.48
79:2S:1329:U:H1'	79:2S:1330:A:OP1	2.13	0.48
79:2S:1907:C:H3'	79:2S:1908:A:C8	2.49	0.48
79:2S:1964:C:H2'	79:2S:1965:C:O4'	2.12	0.48
79:2S:3138:U:H2'	79:2S:3139:A:H5''	1.94	0.48
13:63:113:VAL:O	13:63:117:LYS:HD3	2.13	0.48
13:63:186:ARG:HG3	13:63:186:ARG:HH11	1.78	0.48
14:64:128:ARG:O	14:64:128:ARG:HG2	2.13	0.48
15:65:174:ILE:HG21	79:2S:63:A:H5''	1.94	0.48
16:66:35:VAL:CG2	16:66:104:VAL:HG22	2.44	0.48
18:68:12:ARG:H	18:68:12:ARG:NE	1.94	0.48
18:68:59:ARG:HD2	18:68:84:VAL:HG12	1.95	0.48
20:70:15:PRO:HG3	20:70:22:PRO:HD3	1.96	0.48
28:78:71:PRO:HB2	28:78:109:TYR:HA	1.96	0.48
31:81:18:LYS:HG3	31:81:19:ARG:HD2	1.94	0.48
34:84:15:THR:H	34:84:18:ASN:HB2	1.78	0.48
34:84:29:ILE:HD13	34:84:29:ILE:N	2.27	0.48
46:S0:41:ARG:NH1	46:S0:45:VAL:HG21	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:153:HIS:ND1	47:S1:154:SER:N	2.55	0.48
54:S8:170:SER:O	78:1S:209:U:H5''	2.13	0.48
65:19:37:VAL:HG22	65:19:39:THR:H	1.78	0.48
68:22:7:LEU:HD23	68:22:34:ILE:HG12	1.96	0.48
68:22:86:ILE:O	68:22:90:THR:HG23	2.13	0.48
73:27:33:LEU:HD13	73:27:79:PHE:HB3	1.96	0.48
78:1S:476:U:H5''	78:1S:477:A:O4'	2.13	0.48
78:1S:740:A:C3'	78:1S:741:C:H5''	2.31	0.48
78:1S:1201:G:H21	78:1S:1600:A:H5'	1.79	0.48
78:1S:1345:A:H2'	78:1S:1348:A:N7	2.28	0.48
78:1S:1486:G:H2'	78:1S:1487:A:O4'	2.14	0.48
78:1S:1677:C:H2'	78:1S:1678:A:O4'	2.13	0.48
79:2S:32:U:H2'	79:2S:33:G:O4'	2.14	0.48
79:2S:1002:A:H61	79:2S:1050:U:H1'	1.78	0.48
79:2S:1108:U:H2'	79:2S:1109:U:C6	2.48	0.48
79:2S:1259:A:H2	79:2S:1281:G:H1'	1.78	0.48
79:2S:2346:C:H3'	79:2S:2347:U:H5''	1.95	0.48
79:2S:3252:G:H2'	79:2S:3253:G:O4'	2.13	0.48
82:ET:34:U:H5'	82:ET:35:C:OP2	2.14	0.48
2:L2:11:GLY:HA3	79:2S:2163:C:H1'	1.96	0.48
3:L3:169:THR:HG23	3:L3:170:PRO:HD2	1.95	0.48
4:L4:39:PHE:CZ	4:L4:240:PRO:HA	2.49	0.48
5:L5:131:LEU:HD13	5:L5:131:LEU:H	1.78	0.48
8:L8:64:ILE:HG23	8:L8:68:ARG:CZ	2.44	0.48
10:60:178:ARG:N	10:60:179:PRO:HD2	2.29	0.48
13:63:64:LYS:HG3	28:78:69:TRP:CG	2.48	0.48
15:65:70:ASN:HD22	79:2S:2599:U:H5''	1.75	0.48
18:68:170:ARG:HA	18:68:174:ARG:HD2	1.95	0.48
23:73:33:ASN:ND2	23:73:64:LYS:HB2	2.27	0.48
31:81:4:LEU:HD23	31:81:4:LEU:N	2.29	0.48
37:87:9:GLY:HA2	79:2S:1852:G:H21	1.79	0.48
47:S1:71:ALA:CB	60:14:114:ARG:HH12	2.24	0.48
47:S1:174:LYS:HB2	47:S1:174:LYS:NZ	2.28	0.48
49:S3:76:ARG:O	49:S3:76:ARG:HD3	2.12	0.48
58:12:71:ILE:O	58:12:75:VAL:HG23	2.14	0.48
62:16:135:ARG:NE	78:1S:1582:U:H5''	2.29	0.48
65:19:75:LYS:HD2	65:19:75:LYS:N	2.28	0.48
69:23:139:LYS:HE3	78:1S:31:C:H4'	1.95	0.48
78:1S:1655:A:H2'	78:1S:1656:U:H5'	1.94	0.48
79:2S:1366:A:H2'	79:2S:1367:G:O4'	2.14	0.48
79:2S:1526:U:H5'	79:2S:1594:A:C2	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2265:C:H2'	79:2S:2266:U:H6	1.78	0.48
79:2S:2942:C:OP1	79:2S:2943:G:H5'	2.13	0.48
79:2S:3066:U:H2'	79:2S:3067:C:C6	2.49	0.48
82:ET:14:A:H2'	82:ET:15:G:O4'	2.13	0.48
4:L4:329:PRO:HB3	7:L7:41:ARG:NH1	2.29	0.48
5:L5:65:ILE:CG2	5:L5:72:ASP:HB3	2.44	0.48
8:L8:48:ARG:HG3	79:2S:2585:G:H1'	1.96	0.48
9:L9:102:ASN:O	9:L9:113:GLU:HB3	2.14	0.48
16:66:162:VAL:HG12	16:66:166:GLU:OE2	2.14	0.48
20:70:135:VAL:O	20:70:141:LYS:HE3	2.14	0.48
21:71:119:ALA:HB1	21:71:125:ALA:HB3	1.95	0.48
23:73:89:ASP:OD1	23:73:91:VAL:HG22	2.13	0.48
28:78:40:HIS:HB3	79:2S:958:C:H1'	1.95	0.48
31:81:29:ALA:HB3	31:81:30:PRO:HD3	1.94	0.48
37:87:60:GLY:HA2	37:87:64:MET:SD	2.54	0.48
43:93:17:ARG:NH1	79:2S:861:C:H5'	2.28	0.48
44:P0:190:VAL:HG12	44:P0:191:TYR:H	1.79	0.48
46:S0:64:ILE:HA	46:S0:120:LEU:HD22	1.95	0.48
47:S1:32:ILE:CD1	60:14:33:LEU:HD22	2.43	0.48
52:S6:88:ARG:HB3	52:S6:91:GLU:HB2	1.96	0.48
54:S8:139:ALA:HB2	78:1S:187:G:OP1	2.14	0.48
55:S9:90:LYS:HB3	55:S9:95:TYR:CB	2.36	0.48
55:S9:140:ILE:HG12	55:S9:159:ALA:CB	2.44	0.48
61:15:9:LYS:NZ	61:15:9:LYS:HB3	2.29	0.48
61:15:13:LYS:HG3	61:15:14:THR:H	1.79	0.48
61:15:85:ILE:HD12	61:15:111:MET:O	2.13	0.48
62:16:18:ALA:HB2	62:16:69:VAL:HG22	1.94	0.48
65:19:49:ASP:HB3	65:19:53:TRP:CD1	2.40	0.48
66:20:108:ILE:HD12	66:20:108:ILE:O	2.14	0.48
70:24:51:GLU:O	70:24:55:VAL:HG23	2.14	0.48
73:27:36:LYS:HG2	73:27:43:ILE:CG2	2.44	0.48
78:1S:387:A:H2'	78:1S:402:C:H5'	1.96	0.48
78:1S:887:A:H2	78:1S:925:G:H22	1.61	0.48
79:2S:603:A:H2'	79:2S:604:G:O4'	2.14	0.48
79:2S:996:A:H2'	79:2S:997:A:O4'	2.14	0.48
79:2S:1932:A:H2'	79:2S:1933:A:H5'	1.95	0.48
79:2S:2263:C:H2'	79:2S:2264:U:C6	2.48	0.48
79:2S:3281:U:H2'	79:2S:3282:U:C6	2.48	0.48
1:L1:102:LYS:HG2	79:2S:2480:A:OP1	2.13	0.48
1:L1:103:LEU:HD13	1:L1:106:LYS:HG3	1.95	0.48
3:L3:205:VAL:HG21	3:L3:322:ILE:HD11	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:354:VAL:O	3:L3:354:VAL:HG23	2.14	0.48
5:L5:64:ILE:CD1	5:L5:76:ALA:HB3	2.37	0.48
6:L6:98:VAL:O	6:L6:98:VAL:HG12	2.14	0.48
7:L7:224:ILE:HG23	20:70:36:ILE:HG23	1.95	0.48
15:65:112:ASN:HB3	79:2S:19:U:O2'	2.13	0.48
25:75:113:LEU:O	25:75:120:LYS:HG3	2.14	0.48
27:77:61:LYS:O	27:77:65:ARG:HG2	2.13	0.48
30:80:83:LYS:HB3	30:80:85:PHE:CE2	2.49	0.48
32:82:13:HIS:CE1	32:82:15:LYS:HB3	2.49	0.48
35:85:10:ARG:HG2	35:85:10:ARG:HH11	1.79	0.48
35:85:58:ILE:O	35:85:62:GLN:HG3	2.13	0.48
36:86:98:ARG:HD2	36:86:98:ARG:N	2.29	0.48
46:S0:182:LEU:O	46:S0:188:LEU:HB2	2.14	0.48
61:15:34:VAL:HG12	61:15:41:VAL:HG12	1.95	0.48
64:18:32:LEU:O	64:18:38:VAL:HG23	2.13	0.48
65:19:15:ILE:O	65:19:19:ALA:HB2	2.14	0.48
66:20:106:ILE:HG23	66:20:107:THR:HG23	1.95	0.48
69:23:70:LYS:NZ	78:1S:567:A:H5''	2.29	0.48
78:1S:357:G:H2'	78:1S:358:U:O4'	2.14	0.48
78:1S:374:U:H2'	78:1S:375:U:C6	2.49	0.48
78:1S:879:G:H2'	78:1S:880:C:C6	2.49	0.48
78:1S:1695:G:H21	78:1S:1706:C:N4	2.12	0.48
79:2S:1218:U:C2'	79:2S:1219:C:H5'	2.44	0.48
79:2S:1666:G:H2'	79:2S:1667:A:H8	1.78	0.48
79:2S:1906:G:H1'	79:2S:1908:A:N6	2.29	0.48
79:2S:2500:A:H3'	79:2S:2500:A:N3	2.29	0.48
79:2S:2563:G:H2'	79:2S:2564:G:H8	1.78	0.48
79:2S:2822:U:H2'	79:2S:2823:G:O4'	2.13	0.48
79:2S:2945:G:H5'	79:2S:2947:G:N7	2.29	0.48
2:L2:48:ILE:HG13	2:L2:48:ILE:O	2.13	0.47
4:L4:29:PRO:HB3	18:68:25:TYR:CE2	2.49	0.47
4:L4:122:THR:HG22	4:L4:235:LEU:HD13	1.96	0.47
5:L5:83:LEU:HB2	5:L5:84:PRO:HD3	1.96	0.47
9:L9:134:ILE:N	9:L9:134:ILE:HD12	2.29	0.47
12:62:77:ALA:HB1	79:2S:1235:U:OP1	2.13	0.47
13:63:64:LYS:HE3	28:78:69:TRP:CD1	2.48	0.47
15:65:60:VAL:HG21	80:8S:142:C:H4'	1.95	0.47
16:66:61:ALA:HA	16:66:70:PRO:HD2	1.96	0.47
17:67:4:TYR:CE1	17:67:147:GLU:HB2	2.49	0.47
19:69:8:LYS:HG3	19:69:19:LYS:HE3	1.95	0.47
19:69:20:ARG:HD2	79:2S:1875:G:OP2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:85:70:TYR:HD1	35:85:73:LYS:HD2	1.79	0.47
44:P0:43:LYS:HA	44:P0:46:ARG:HG2	1.96	0.47
45:RC:147:HIS:CD2	45:RC:151:VAL:HG22	2.49	0.47
47:S1:176:VAL:CG1	47:S1:177:GLN:N	2.75	0.47
51:S5:25:LEU:HG	62:16:60:PHE:HB3	1.96	0.47
56:10:3:MET:HB2	56:10:4:PRO:HD2	1.96	0.47
66:20:27:THR:CG2	66:20:113:ASP:HB3	2.40	0.47
68:22:65:LEU:CD1	68:22:65:LEU:H	2.27	0.47
78:1S:249:U:H3'	78:1S:250:C:C5'	2.43	0.47
78:1S:1414:U:H3'	78:1S:1415:U:H5''	1.96	0.47
79:2S:2288:G:H2'	79:2S:2289:U:C6	2.49	0.47
79:2S:2860:U:O2'	79:2S:2861:U:H5'	2.14	0.47
79:2S:3355:U:O2'	79:2S:3356:G:H5''	2.14	0.47
82:PT:38:A:H2'	82:PT:39:A:O4'	2.14	0.47
1:L1:126:PRO:HG2	1:L1:128:LEU:HG	1.96	0.47
4:L4:343:LYS:HD3	4:L4:343:LYS:H	1.78	0.47
5:L5:20:PHE:HB2	5:L5:23:ARG:HB2	1.96	0.47
6:L6:100:LYS:HG2	6:L6:100:LYS:O	2.14	0.47
7:L7:174:GLY:HA2	7:L7:178:ILE:O	2.13	0.47
17:67:119:VAL:HA	17:67:145:HIS:O	2.14	0.47
18:68:16:ARG:NH2	79:2S:671:U:H5''	2.24	0.47
20:70:75:PHE:HA	20:70:128:GLU:HA	1.95	0.47
23:73:17:LEU:HD21	23:73:81:GLN:HG3	1.95	0.47
26:76:57:LEU:HD23	26:76:67:GLU:HB3	1.94	0.47
48:S2:116:LYS:HE2	48:S2:127:ALA:HB3	1.96	0.47
49:S3:37:VAL:HG12	49:S3:50:ILE:HD13	1.96	0.47
49:S3:43:PRO:HD3	66:20:108:ILE:HG21	1.96	0.47
50:S4:138:TYR:HB2	50:S4:146:THR:OG1	2.14	0.47
52:S6:85:ARG:HH21	52:S6:87:ARG:HG2	1.80	0.47
55:S9:127:VAL:O	55:S9:131:GLN:HB2	2.14	0.47
60:14:70:LYS:HA	60:14:70:LYS:CE	2.41	0.47
64:18:57:ARG:NH1	71:25:75:LEU:HD21	2.29	0.47
64:18:76:PRO:CB	64:18:81:ILE:HB	2.44	0.47
64:18:134:ARG:HG3	64:18:134:ARG:NH1	2.28	0.47
70:24:5:VAL:HG12	70:24:6:THR:N	2.29	0.47
79:2S:757:C:H2'	79:2S:758:C:H5''	1.95	0.47
79:2S:834:U:C2'	79:2S:835:G:H5'	2.44	0.47
79:2S:1052:U:O2	81:5S:103:A:H4'	2.14	0.47
79:2S:1525:G:H1'	79:2S:1829:G:H2'	1.96	0.47
82:ET:36:A:H2'	82:ET:37:U:C5	2.49	0.47
2:L2:6:ARG:O	2:L2:10:LYS:HG2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:L7:121:LYS:O	7:L7:125:GLU:HG2	2.14	0.47
7:L7:232:ARG:O	7:L7:235:PHE:HB2	2.14	0.47
8:L8:149:LYS:HB2	8:L8:200:LEU:O	2.13	0.47
13:63:46:ILE:HG22	13:63:46:ILE:O	2.15	0.47
14:64:20:VAL:HG23	14:64:33:ALA:O	2.15	0.47
15:65:103:GLU:O	15:65:106:VAL:HG22	2.13	0.47
18:68:156:GLY:HA2	28:78:47:LYS:HG3	1.95	0.47
41:91:25:LYS:HD2	79:2S:1923:C:H5'	1.96	0.47
47:S1:124:ASN:HA	47:S1:137:ILE:O	2.14	0.47
47:S1:149:GLN:HE22	78:1S:1066:C:H4'	1.79	0.47
47:S1:210:ILE:O	47:S1:210:ILE:HG22	2.13	0.47
48:S2:91:ARG:NH2	78:1S:1624:C:H5'	2.30	0.47
49:S3:120:TYR:O	49:S3:124:ARG:HG3	2.14	0.47
51:S5:23:VAL:O	51:S5:23:VAL:HG13	2.14	0.47
51:S5:166:ARG:HD2	74:28:46:GLY:HA3	1.97	0.47
55:S9:41:GLU:O	55:S9:45:ILE:HG12	2.14	0.47
55:S9:93:LEU:CD1	55:S9:96:VAL:HG21	2.33	0.47
61:15:121:ILE:HG23	61:15:123:TYR:CE1	2.49	0.47
65:19:6:VAL:HG13	65:19:7:ARG:HG3	1.96	0.47
73:27:46:VAL:HG12	73:27:47:PHE:N	2.30	0.47
78:1S:488:G:H4'	78:1S:488:G:OP1	2.14	0.47
78:1S:749:U:H2'	78:1S:750:U:C6	2.50	0.47
79:2S:1040:A:H2'	79:2S:1041:U:C4'	2.44	0.47
79:2S:1165:A:H2'	79:2S:1166:G:C8	2.49	0.47
79:2S:1638:A:H2'	79:2S:1639:C:H5'	1.95	0.47
79:2S:2886:U:H4'	79:2S:2887:A:C2	2.50	0.47
79:2S:3217:C:O2	79:2S:3217:C:H2'	2.14	0.47
81:5S:112:G:H2'	81:5S:113:C:C6	2.49	0.47
82:ET:17:C:H2'	82:ET:18(A):U:H5	1.78	0.47
82:PT:58:A:C2'	82:PT:59:A:H5'	2.42	0.47
2:L2:127:ALA:O	2:L2:169:ILE:HD11	2.14	0.47
7:L7:81:HIS:HB2	7:L7:138:TYR:CE1	2.48	0.47
7:L7:218:ARG:NH1	79:2S:1170:A:H5'	2.29	0.47
7:L7:223:PHE:HD1	7:L7:228:SER:HA	1.80	0.47
10:60:135:ILE:HG22	10:60:136:PHE:CD1	2.49	0.47
15:65:39:ALA:HB3	15:65:61:ILE:HG21	1.95	0.47
19:69:151:ARG:HD3	57:11:116:ARG:NH2	2.29	0.47
23:73:12:ARG:HH11	23:73:12:ARG:HG3	1.79	0.47
26:76:59:VAL:O	26:76:64:LYS:HD3	2.14	0.47
27:77:75:VAL:HA	79:2S:1636:U:H4'	1.96	0.47
42:92:93:LEU:N	42:92:93:LEU:HD23	2.29	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:218:LEU:HD23	47:S1:219:LYS:HG2	1.96	0.47
48:S2:170:ILE:HG21	78:1S:2:A:N1	2.29	0.47
50:S4:31:PRO:HG3	50:S4:43:PRO:CG	2.31	0.47
51:S5:113:ILE:HG23	51:S5:191:ALA:HB2	1.96	0.47
51:S5:148:ARG:NH1	51:S5:155:ALA:HB3	2.30	0.47
53:S7:98:ILE:CD1	53:S7:121:VAL:HG21	2.43	0.47
63:17:123:ASN:O	63:17:124:VAL:HG12	2.14	0.47
68:22:36:LYS:O	68:22:40:VAL:HG23	2.14	0.47
73:27:54:VAL:O	73:27:62:ILE:HA	2.15	0.47
77:31:133:ALA:HB2	78:1S:1252:C:O4'	2.14	0.47
78:1S:46:A:H4'	78:1S:48:G:OP1	2.13	0.47
78:1S:425:A:H2'	78:1S:425:A:N3	2.29	0.47
78:1S:778:G:N3	78:1S:778:G:H5'	2.29	0.47
79:2S:1193:A:H3'	79:2S:1194:G:C8	2.49	0.47
79:2S:3337:G:H2'	79:2S:3338:C:C6	2.49	0.47
82:ET:60:A:H3'	82:ET:61:U:H6	1.80	0.47
2:L2:83:HIS:HB3	43:93:64:VAL:HG22	1.97	0.47
3:L3:58:ARG:NH1	3:L3:59:ASP:O	2.48	0.47
3:L3:311:PHE:HB3	3:L3:314:TYR:HB3	1.95	0.47
4:L4:315:LYS:HG2	79:2S:505:G:H5'	1.96	0.47
6:L6:10:TYR:HB3	32:82:88:HIS:CE1	2.49	0.47
7:L7:181:ILE:O	7:L7:185:ILE:HG13	2.15	0.47
8:L8:27:THR:HG23	79:2S:2563:G:H5''	1.95	0.47
9:L9:174:LYS:HD3	40:90:127:LEU:HD11	1.96	0.47
10:60:148:VAL:O	10:60:152:LEU:HG	2.15	0.47
18:68:3:ILE:HD12	18:68:3:ILE:N	2.29	0.47
20:70:38:LYS:HG3	20:70:61:ILE:HD13	1.95	0.47
20:70:93:GLU:HB3	20:70:129:ILE:HD11	1.97	0.47
32:82:97:ALA:HB1	32:82:99:ASN:OD1	2.15	0.47
34:84:68:THR:HG21	79:2S:1644:C:N4	2.24	0.47
37:87:3:LYS:HG2	79:2S:2138:A:O2'	2.13	0.47
45:RC:269:TYR:CZ	45:RC:271:VAL:HG22	2.49	0.47
46:S0:30:GLN:NE2	46:S0:34:GLU:HB2	2.30	0.47
46:S0:80:THR:HA	46:S0:83:GLN:HG3	1.96	0.47
46:S0:173:ILE:O	46:S0:177:LEU:HG	2.15	0.47
49:S3:133:GLY:HA3	49:S3:157:LEU:HG	1.96	0.47
50:S4:159:THR:HG23	50:S4:173:ILE:HB	1.96	0.47
54:S8:37:LYS:HB2	54:S8:59:ARG:CG	2.42	0.47
62:16:143:ARG:CZ	78:1S:1191:U:H5'	2.44	0.47
68:22:89:TRP:CA	68:22:92:ASN:HB2	2.39	0.47
68:22:105:THR:HG22	68:22:110:ILE:HG12	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:176:C:C2'	78:1S:177:U:H5'	2.44	0.47
78:1S:990:C:H2'	78:1S:991:G:O4'	2.14	0.47
78:1S:1179:G:H2'	78:1S:1180:C:C6	2.50	0.47
78:1S:1483:A:H2	78:1S:1607:G:H1'	1.79	0.47
79:2S:127:G:H2'	79:2S:128:G:H8	1.79	0.47
79:2S:268:A:O4'	79:2S:270:U:H1'	2.13	0.47
79:2S:1203:A:H2'	79:2S:1204:A:H8	1.79	0.47
79:2S:1223:A:H2'	79:2S:1224:C:O4'	2.14	0.47
79:2S:2610:G:H2'	79:2S:2611:U:O4'	2.15	0.47
79:2S:3375:A:H5''	79:2S:3378:C:C5	2.45	0.47
79:2S:3384:U:H2'	79:2S:3385:U:C6	2.49	0.47
1:L1:97:LYS:O	1:L1:97:LYS:HG2	2.13	0.47
8:L8:190:VAL:O	8:L8:190:VAL:HG22	2.14	0.47
16:66:93:ALA:HB3	79:2S:631:U:H5''	1.95	0.47
24:74:49:ILE:CG2	24:74:52:THR:HG23	2.44	0.47
34:84:71:THR:HG22	34:84:72:VAL:N	2.30	0.47
42:92:6:LYS:HE2	42:92:94:GLY:HA2	1.96	0.47
42:92:8:ARG:HH12	42:92:10:THR:HB	1.80	0.47
45:RC:68:VAL:HA	45:RC:84:SER:HA	1.97	0.47
45:RC:201:THR:HG23	45:RC:243:LEU:HG	1.97	0.47
47:S1:86:LEU:HB3	47:S1:98:THR:OG1	2.15	0.47
49:S3:40:ARG:HA	66:20:110:PRO:CB	2.45	0.47
49:S3:63:GLY:HA3	56:10:92:ILE:HD13	1.96	0.47
50:S4:12:LEU:HD13	78:1S:381:C:H5'	1.97	0.47
62:16:110:THR:O	62:16:110:THR:HG22	2.15	0.47
64:18:82:PRO:O	64:18:83:ALA:HB2	2.15	0.47
65:19:38:LYS:HA	65:19:46:PRO:HA	1.96	0.47
66:20:23:ARG:HA	66:20:91:ILE:O	2.14	0.47
70:24:125:LEU:HA	70:24:128:LYS:HB2	1.96	0.47
71:25:88:ILE:HD12	71:25:88:ILE:H	1.79	0.47
72:26:2:PRO:HG3	78:1S:1142:A:H5''	1.97	0.47
78:1S:872:G:H21	78:1S:1047:G:H4'	1.80	0.47
78:1S:1243:G:N3	78:1S:1243:G:H2'	2.29	0.47
79:2S:311:C:H2'	79:2S:312:C:H6	1.76	0.47
79:2S:768:C:H2'	79:2S:769:G:O4'	2.14	0.47
79:2S:1731:A:H2'	79:2S:1732:U:C6	2.49	0.47
79:2S:2346:C:H2'	79:2S:2347:U:C5'	2.36	0.47
79:2S:2547:A:H2'	79:2S:2548:C:H5'	1.95	0.47
79:2S:3174:A:H2'	79:2S:3175:U:C5'	2.41	0.47
81:5S:32:U:H3	81:5S:45:A:H61	1.63	0.47
3:L3:188:ILE:HD12	3:L3:189:SER:N	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:L4:107:ARG:NE	79:2S:663:C:H4'	2.29	0.47
4:L4:145:ILE:HD11	4:L4:148:ILE:HG12	1.97	0.47
7:L7:45:LEU:O	7:L7:45:LEU:HD23	2.15	0.47
7:L7:85:PHE:CE1	7:L7:87:VAL:HG22	2.49	0.47
7:L7:106:LEU:O	7:L7:107:ARG:HB2	2.14	0.47
8:L8:128:LYS:CG	8:L8:129:PRO:HD2	2.45	0.47
11:61:13:LYS:O	11:61:131:MET:HE3	2.15	0.47
11:61:111:ASP:HB2	11:61:112:LEU:HD23	1.97	0.47
14:64:38:ILE:HA	14:64:44:VAL:HG12	1.96	0.47
15:65:11:GLN:HG2	15:65:44:ARG:CZ	2.45	0.47
16:66:93:ALA:CB	79:2S:631:U:H5''	2.44	0.47
17:67:112:LEU:HD12	17:67:152:GLU:N	2.29	0.47
18:68:155:MET:HG2	28:78:48:TYR:HA	1.96	0.47
20:70:1:MET:O	79:2S:1323:G:H5''	2.14	0.47
20:70:9:VAL:HG22	20:70:61:ILE:HD12	1.96	0.47
20:70:68:HIS:N	20:70:69:PRO:HD3	2.29	0.47
20:70:73:LYS:HE2	20:70:75:PHE:CE1	2.50	0.47
21:71:58:GLN:HG3	79:2S:992:A:O2'	2.15	0.47
25:75:115:ARG:HG3	25:75:115:ARG:HH11	1.78	0.47
30:80:32:LYS:HG3	30:80:36:GLN:NE2	2.28	0.47
33:83:11:GLY:O	33:83:98:VAL:HG12	2.15	0.47
36:86:25:LYS:HB3	79:2S:156:G:OP2	2.13	0.47
36:86:31:GLY:HA2	79:2S:297:G:H8	1.79	0.47
38:88:45:VAL:HG23	38:88:45:VAL:O	2.15	0.47
42:92:44:ASP:HA	42:92:47:GLN:CB	2.42	0.47
43:93:51:ALA:CB	43:93:54:ILE:HD12	2.42	0.47
45:RC:89:LEU:CD2	45:RC:110:VAL:HG11	2.45	0.47
45:RC:224:ASN:HB3	45:RC:229:LYS:H	1.79	0.47
47:S1:113:MET:CE	47:S1:209:ASN:HD22	2.26	0.47
50:S4:180:LEU:HD23	50:S4:194:THR:HG23	1.97	0.47
51:S5:92:ARG:HG2	51:S5:92:ARG:HH11	1.80	0.47
52:S6:74:LYS:HB3	52:S6:94:ARG:HD2	1.96	0.47
52:S6:122:GLU:O	52:S6:126:ASP:HB3	2.14	0.47
53:S7:49:ILE:CG2	53:S7:175:LYS:HG2	2.44	0.47
54:S8:10:LYS:HG2	54:S8:11:ARG:N	2.29	0.47
54:S8:187:GLU:HA	54:S8:190:ALA:HB3	1.96	0.47
55:S9:112:GLN:NE2	55:S9:112:GLN:HA	2.30	0.47
55:S9:149:ARG:C	55:S9:151:ASP:H	2.17	0.47
58:12:105:LYS:HB3	58:12:107:ASP:OD1	2.15	0.47
58:12:125:ASN:O	58:12:126:TRP:CD1	2.67	0.47
61:15:38:PRO:O	61:15:42:ARG:HG3	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:16:125:GLU:OE1	62:16:134:ALA:HB1	2.15	0.47
63:17:61:ILE:HA	63:17:66:VAL:HG22	1.97	0.47
65:19:102:ARG:HD2	78:1S:1501:C:OP2	2.14	0.47
66:20:28:SER:HB2	66:20:112:VAL:HG22	1.95	0.47
66:20:50:LEU:HD11	66:20:93:LEU:HD22	1.96	0.47
71:25:77:ARG:O	71:25:81:ARG:HG3	2.14	0.47
74:28:36:THR:HG23	74:28:37:SER:N	2.30	0.47
76:30:14:VAL:CG2	78:1S:567:A:H1'	2.45	0.47
78:1S:144:U:O2'	78:1S:145:A:H8	1.97	0.47
78:1S:217:A:H61	78:1S:844:A:H2	1.61	0.47
78:1S:1038:U:H2'	78:1S:1039:A:H5''	1.97	0.47
78:1S:1120:U:H2'	78:1S:1121:C:C6	2.49	0.47
78:1S:1262:U:H2'	78:1S:1263:G:C8	2.50	0.47
78:1S:1344:A:H2'	78:1S:1345:A:C8	2.49	0.47
78:1S:1507:G:H2'	78:1S:1508:U:O4'	2.15	0.47
78:1S:1611:A:H2'	78:1S:1612:U:H5'	1.96	0.47
78:1S:1651:A:H2'	78:1S:1652:C:H6	1.79	0.47
78:1S:1781:A:H2'	78:1S:1782:A:C8	2.50	0.47
79:2S:66:A:N1	79:2S:77:A:H5''	2.30	0.47
79:2S:90:C:H2'	79:2S:91:G:C8	2.49	0.47
79:2S:97:U:H2'	79:2S:98:G:O4'	2.14	0.47
79:2S:440:A:H5'	79:2S:493:U:O4	2.15	0.47
79:2S:834:U:H2'	79:2S:835:G:H5'	1.97	0.47
79:2S:936:A:H2'	79:2S:938:C:C5	2.49	0.47
79:2S:1116:G:H3'	79:2S:1117:G:H5''	1.96	0.47
79:2S:1361:U:H2'	79:2S:1362:G:C8	2.49	0.47
79:2S:1377:G:H2'	79:2S:1378:U:H6	1.79	0.47
79:2S:1610:G:H2'	79:2S:1611:G:O4'	2.14	0.47
79:2S:1646:G:H1'	79:2S:1809:A:H61	1.80	0.47
79:2S:1655:G:H1'	79:2S:1800:A:N6	2.28	0.47
79:2S:1797:A:H2'	79:2S:1798:A:O4'	2.15	0.47
79:2S:2309:A:H1'	79:2S:2962:U:H5'	1.95	0.47
79:2S:2388:U:H2'	79:2S:2389:C:C5	2.50	0.47
79:2S:2874:G:H3'	79:2S:2945:G:H1	1.79	0.47
79:2S:2894:C:O2'	79:2S:3107:U:H4'	2.14	0.47
79:2S:2902:A:H2'	79:2S:2903:A:O4'	2.14	0.47
79:2S:3174:A:C2'	79:2S:3175:U:H5'	2.41	0.47
81:5S:8:G:H2'	81:5S:9:C:O4'	2.15	0.47
3:L3:363:SER:C	3:L3:365:PHE:H	2.18	0.47
4:L4:310:THR:O	4:L4:311:HIS:HB3	2.15	0.47
4:L4:334:PHE:HB3	79:2S:578:A:H2'	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:L5:21:ARG:HD3	81:5S:112:G:O6	2.14	0.47
6:L6:77:ARG:HB3	6:L6:77:ARG:HH11	1.78	0.47
7:L7:123:THR:O	7:L7:127:LEU:HG	2.15	0.47
7:L7:141:TYR:HB2	7:L7:189:ILE:CD1	2.44	0.47
8:L8:240:ASN:ND2	79:2S:2584:G:O2'	2.48	0.47
13:63:56:PRO:O	13:63:71:ALA:HA	2.15	0.47
16:66:27:LEU:HD21	16:66:33:ILE:HB	1.96	0.47
16:66:76:PRO:HA	16:66:79:ILE:HD12	1.97	0.47
23:73:22:ILE:HA	23:73:34:LEU:O	2.15	0.47
25:75:49:LYS:HD2	25:75:52:PRO:HA	1.97	0.47
25:75:54:TYR:HB2	25:75:55:ASN:H	1.61	0.47
33:83:64:ILE:HD12	33:83:64:ILE:N	2.30	0.47
45:RC:5:GLU:HA	45:RC:316:MET:O	2.14	0.47
47:S1:67:GLU:HA	47:S1:84:ILE:O	2.15	0.47
47:S1:204:ILE:HD13	47:S1:204:ILE:N	2.28	0.47
49:S3:158:ILE:HG22	78:1S:1327:C:H5''	1.97	0.47
52:S6:25:ARG:HB3	52:S6:25:ARG:NH1	2.28	0.47
52:S6:25:ARG:O	52:S6:25:ARG:HG2	2.15	0.47
54:S8:36:THR:HB	54:S8:57:ALA:O	2.14	0.47
64:18:16:ARG:HH12	64:18:19:ASN:CA	2.28	0.47
67:21:38:LYS:HE3	67:21:51:VAL:HG22	1.97	0.47
72:26:71:LEU:HD22	72:26:71:LEU:N	2.29	0.47
74:28:12:VAL:HG21	74:28:48:VAL:CG1	2.45	0.47
74:28:33:LEU:CD2	74:28:53:ILE:HG23	2.41	0.47
78:1S:95:G:H2'	78:1S:96:G:C8	2.50	0.47
78:1S:1060:U:H2'	78:1S:1061:A:H4'	1.95	0.47
78:1S:1290:U:H2'	78:1S:1291:G:C8	2.50	0.47
78:1S:1353:U:H2'	78:1S:1354:G:H8	1.80	0.47
78:1S:1367:G:H2'	78:1S:1368:G:C8	2.50	0.47
79:2S:156:G:O2'	79:2S:157:A:H4'	2.15	0.47
79:2S:374:A:HO2'	79:2S:376:G:H8	1.62	0.47
79:2S:1015:U:H4'	79:2S:1017:C:C5	2.50	0.47
79:2S:1815:U:O3'	79:2S:1816:A:H4'	2.14	0.47
79:2S:2684:C:H2'	79:2S:2685:C:C6	2.49	0.47
80:8S:41:A:H2'	80:8S:42:G:O4'	2.14	0.47
2:L2:23:ARG:HG3	2:L2:23:ARG:NH1	2.30	0.47
2:L2:52:SER:HB3	79:2S:1795:U:OP1	2.14	0.47
3:L3:217:ALA:O	3:L3:276:THR:HA	2.15	0.47
8:L8:165:PHE:HA	36:86:47:ILE:HD13	1.96	0.47
9:L9:93:VAL:HG22	40:90:82:LEU:HD22	1.96	0.47
11:61:36:VAL:HG22	11:61:120:ILE:HG21	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:61:36:VAL:CG2	11:61:120:ILE:HG21	2.45	0.47
15:65:71:ARG:HB2	15:65:94:TYR:HB2	1.97	0.47
16:66:110:PRO:HB2	16:66:111:PRO:HD3	1.97	0.47
19:69:69:SER:O	19:69:74:ARG:HB2	2.15	0.47
22:72:94:ARG:HG2	22:72:106:ALA:HB3	1.95	0.47
30:80:104:LEU:HD12	30:80:105:ALA:N	2.30	0.47
35:85:101:THR:HG23	35:85:104:GLN:H	1.79	0.47
37:87:49:TRP:CE3	79:2S:929:A:H1'	2.50	0.47
40:90:83:LYS:NZ	40:90:83:LYS:HB3	2.29	0.47
44:P0:80:VAL:HG22	44:P0:80:VAL:O	2.15	0.47
47:S1:167:VAL:O	47:S1:171:ILE:HG13	2.15	0.47
53:S7:11:GLN:HG3	53:S7:12:ALA:H	1.79	0.47
53:S7:100:PRO:HA	78:1S:639:U:N3	2.30	0.47
57:11:85:VAL:HA	57:11:108:PRO:HA	1.96	0.47
62:16:41:PRO:O	62:16:42:GLU:HB3	2.15	0.47
62:16:82:ARG:NH2	62:16:116:LEU:HD11	2.29	0.47
67:21:74:GLN:HA	67:21:79:LEU:HB2	1.95	0.47
69:23:42:PRO:HG2	69:23:122:PHE:CZ	2.50	0.47
69:23:140:LYS:HG3	69:23:141:GLU:H	1.80	0.47
78:1S:262:U:H2'	78:1S:263:C:C6	2.49	0.47
78:1S:1227:A:H4'	78:1S:1228:G:C5'	2.45	0.47
78:1S:1715:G:H2'	78:1S:1716:C:H5'	1.97	0.47
79:2S:312:C:H2'	79:2S:313:A:C8	2.49	0.47
79:2S:771:A:H2'	79:2S:772:U:O4'	2.14	0.47
79:2S:939:U:H2'	79:2S:940:G:C8	2.50	0.47
79:2S:1128:U:H1'	79:2S:2828:G:H5'	1.97	0.47
79:2S:1184:A:H2'	79:2S:1185:C:C6	2.50	0.47
79:2S:1223:A:H2	79:2S:1287:A:HO2'	1.61	0.47
79:2S:2160:G:H2'	79:2S:2161:G:C8	2.49	0.47
79:2S:2426:U:H2'	79:2S:2427:U:C6	2.49	0.47
79:2S:2951:G:O2'	79:2S:2952:G:H5'	2.14	0.47
1:L1:68:PHE:HA	1:L1:105:LYS:O	2.14	0.47
2:L2:5:ILE:HG22	2:L2:208:ASP:O	2.15	0.47
2:L2:220:GLY:HA3	79:2S:2966:G:H5''	1.97	0.47
5:L5:155:THR:HG23	81:5S:36:C:H4'	1.96	0.47
9:L9:4:ILE:CD1	20:70:148:LEU:HD21	2.44	0.47
9:L9:4:ILE:HG23	9:L9:5:GLN:N	2.30	0.47
9:L9:44:THR:O	9:L9:55:VAL:HA	2.15	0.47
15:65:51:LEU:HD13	15:65:117:ASN:HB3	1.96	0.47
15:65:68:ARG:HB3	15:65:68:ARG:HH11	1.80	0.47
16:66:13:GLY:O	16:66:125:ARG:HB3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:68:63:SER:O	18:68:67:ILE:HG13	2.15	0.47
38:88:17:ARG:O	38:88:18:ALA:HB3	2.15	0.47
45:RC:7:LEU:HG	45:RC:315:VAL:HG22	1.97	0.47
46:S0:139:VAL:O	46:S0:139:VAL:HG22	2.15	0.47
49:S3:151:LYS:HE3	78:1S:1423:U:H5'	1.98	0.47
50:S4:199:GLU:HB2	50:S4:207:LEU:O	2.15	0.47
59:13:132:VAL:HG23	59:13:134:VAL:HG13	1.97	0.47
60:14:70:LYS:O	60:14:74:VAL:HG23	2.15	0.47
63:17:81:LYS:O	63:17:81:LYS:HG2	2.15	0.47
70:24:37:LYS:O	70:24:41:ARG:HG3	2.14	0.47
74:28:32:PHE:N	74:28:32:PHE:CD2	2.83	0.47
78:1S:604:A:H2'	78:1S:605:A:O4'	2.14	0.47
78:1S:1682:U:O2'	78:1S:1683:C:H5'	2.15	0.47
79:2S:209:A:H4'	79:2S:211:A:N7	2.30	0.47
79:2S:517:G:H8	79:2S:517:G:H5'	1.80	0.47
79:2S:711:A:H2'	79:2S:712:G:H5'	1.97	0.47
79:2S:1047:A:O2'	79:2S:2633:U:H4'	2.15	0.47
79:2S:2707:C:H2'	79:2S:2708:C:C6	2.50	0.47
1:L1:123:LEU:HD22	1:L1:128:LEU:HB2	1.97	0.46
2:L2:71:LEU:HD22	79:2S:1651:U:C5'	2.45	0.46
7:L7:173:LEU:HD13	7:L7:184:LEU:HD12	1.96	0.46
8:L8:143:ILE:HG22	8:L8:173:MET:CG	2.38	0.46
9:L9:146:LEU:N	9:L9:146:LEU:HD12	2.30	0.46
11:61:125:MET:HG2	11:61:126:ASP:H	1.80	0.46
13:63:71:ALA:HB2	13:63:147:ILE:HG13	1.96	0.46
18:68:184:PHE:CD2	79:2S:2730:G:H4'	2.50	0.46
20:70:152:LEU:HB2	20:70:172:TYR:HD2	1.80	0.46
21:71:60:LYS:NZ	79:2S:1059:G:H4'	2.29	0.46
23:73:46:LEU:HD12	79:2S:2917:G:OP1	2.15	0.46
26:76:23:PRO:HB2	80:8S:91:C:O2'	2.14	0.46
26:76:88:GLU:HA	26:76:93:ALA:O	2.15	0.46
27:77:109:GLU:HA	27:77:112:LYS:HD2	1.96	0.46
41:91:12:ARG:HG2	41:91:15:ARG:HH21	1.81	0.46
46:S0:188:LEU:HD21	46:S0:195:TRP:HE1	1.80	0.46
46:S0:193:GLN:HA	46:S0:193:GLN:HE21	1.80	0.46
49:S3:122:VAL:O	49:S3:126:VAL:HG23	2.15	0.46
50:S4:194:THR:HG21	50:S4:231:GLN:OE1	2.15	0.46
51:S5:93:LEU:O	51:S5:97:LEU:HG	2.15	0.46
51:S5:117:THR:O	51:S5:121:ILE:HG13	2.15	0.46
54:S8:60:ILE:HG22	54:S8:62:THR:H	1.80	0.46
57:11:93:TYR:C	57:11:94:ILE:HD12	2.35	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:13:10:GLY:HA3	78:1S:955:A:H5''	1.97	0.46
63:17:102:VAL:HG23	63:17:120:SER:O	2.14	0.46
66:20:87:HIS:HB3	66:20:89:ARG:NH1	2.30	0.46
69:23:127:VAL:HG23	69:23:130:VAL:HG23	1.97	0.46
78:1S:36:C:H2'	78:1S:37:U:C6	2.50	0.46
78:1S:712:G:C2'	78:1S:713:A:H5''	2.25	0.46
78:1S:1163:A:H8	78:1S:1163:A:O5'	1.98	0.46
78:1S:1573:A:H1'	78:1S:1574:G:OP2	2.14	0.46
78:1S:1637:C:H5'	83:MR:7:G:O6	2.15	0.46
79:2S:871:U:H2'	79:2S:872:U:C6	2.49	0.46
79:2S:1121:U:H2'	79:2S:1122:U:C6	2.51	0.46
79:2S:2812:C:H2'	79:2S:2813:A:H8	1.79	0.46
79:2S:3275:U:H3'	79:2S:3276:G:H5''	1.96	0.46
82:PT:23:G:H2'	82:PT:24:C:H6	1.81	0.46
3:L3:284:ARG:HB2	3:L3:356:LEU:HD11	1.97	0.46
5:L5:110:LEU:HB3	5:L5:115:LEU:O	2.15	0.46
11:61:93:ASP:HB3	11:61:94:ARG:NH1	2.31	0.46
13:63:119:TYR:O	13:63:123:ILE:HG23	2.14	0.46
15:65:141:ALA:HB2	79:2S:126:U:H5'	1.97	0.46
22:72:94:ARG:CG	22:72:106:ALA:HB3	2.45	0.46
23:73:22:ILE:CG2	23:73:33:ASN:HB2	2.45	0.46
26:76:71:SER:HB3	26:76:83:ASP:OD2	2.15	0.46
27:77:23:VAL:HA	27:77:45:GLY:HA3	1.97	0.46
47:S1:115:ARG:HG3	47:S1:116:LYS:H	1.79	0.46
48:S2:111:VAL:HG12	48:S2:190:LEU:O	2.15	0.46
50:S4:31:PRO:HB2	50:S4:38:LEU:HD21	1.97	0.46
59:13:139:TRP:CH2	59:13:141:TYR:HB2	2.50	0.46
60:14:37:GLU:HA	78:1S:895:G:H1'	1.98	0.46
60:14:112:ILE:HB	72:26:57:SER:OG	2.15	0.46
65:19:28:LEU:HD22	65:19:29:GLU:N	2.30	0.46
78:1S:94:U:H2'	78:1S:95:G:H5'	1.97	0.46
78:1S:730:G:N3	78:1S:730:G:H2'	2.29	0.46
78:1S:916:U:H2'	78:1S:917:U:O4'	2.15	0.46
78:1S:1107:G:C2'	78:1S:1108:G:H5'	2.46	0.46
79:2S:116:A:H62	79:2S:153:U:H1'	1.80	0.46
79:2S:517:G:O2'	79:2S:518:G:H5'	2.15	0.46
79:2S:642:U:H2'	79:2S:644:G:OP2	2.16	0.46
79:2S:989:A:H2'	79:2S:990:U:H6	1.80	0.46
79:2S:1916:U:H2'	79:2S:1917:C:C6	2.51	0.46
79:2S:2403:G:H4'	79:2S:2403:G:OP1	2.15	0.46
82:PT:23:G:H2'	82:PT:24:C:C6	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:L4:121:ALA:CB	4:L4:235:LEU:HD21	2.45	0.46
4:L4:302:ALA:HA	18:68:39:ARG:HH11	1.80	0.46
8:L8:152:LEU:HD12	8:L8:198:ALA:HB3	1.98	0.46
17:67:111:LYS:O	17:67:153:LYS:HB2	2.15	0.46
18:68:147:ARG:HB3	18:68:147:ARG:NH1	2.30	0.46
21:71:4:SER:HA	79:2S:2630:C:OP2	2.15	0.46
21:71:76:ILE:HG22	21:71:77:ASN:N	2.29	0.46
27:77:75:VAL:HG11	27:77:80:LEU:HD21	1.97	0.46
31:81:62:ARG:HG3	31:81:66:GLY:O	2.15	0.46
49:S3:142:LEU:C	49:S3:144:ALA:H	2.17	0.46
50:S4:4:GLY:HA3	78:1S:93:A:O2'	2.16	0.46
55:S9:113:VAL:HB	55:S9:125:ALA:HB1	1.97	0.46
59:13:23:PRO:O	59:13:24:ALA:CB	2.63	0.46
68:22:74:VAL:HG22	68:22:75:ILE:N	2.31	0.46
69:23:141:GLU:HG2	69:23:142:LYS:H	1.81	0.46
72:26:36:ILE:HD11	72:26:38:ARG:HD3	1.96	0.46
74:28:17:GLY:O	74:28:18:ARG:HD3	2.15	0.46
77:31:119:ARG:NE	77:31:139:LEU:HD21	2.30	0.46
78:1S:487:G:C3'	78:1S:488:G:H5''	2.43	0.46
81:5S:66:A:H2'	81:5S:67:G:O4'	2.16	0.46
2:L2:58:LEU:HD13	2:L2:75:ILE:CG2	2.46	0.46
2:L2:180:LEU:HA	79:2S:2149:A:O2'	2.16	0.46
3:L3:48:GLY:O	3:L3:335:ILE:HD12	2.16	0.46
4:L4:235:LEU:CD1	4:L4:238:LEU:HD12	2.46	0.46
5:L5:128:GLU:HG3	5:L5:129:TYR:N	2.30	0.46
7:L7:66:LYS:O	7:L7:70:LYS:HG3	2.16	0.46
8:L8:238:LEU:HB2	8:L8:243:GLN:HG2	1.98	0.46
11:61:26:SER:HB3	11:61:64:LYS:O	2.15	0.46
13:63:165:SER:O	13:63:166:ALA:HB3	2.16	0.46
14:64:73:PRO:HG3	79:2S:559:A:O2'	2.16	0.46
15:65:96:ARG:HH11	79:2S:31:C:H5'	1.80	0.46
16:66:84:LEU:O	16:66:84:LEU:HD23	2.15	0.46
16:66:142:SER:O	16:66:145:VAL:HG22	2.16	0.46
18:68:110:ALA:O	18:68:114:ILE:HG13	2.15	0.46
20:70:167:ARG:HD2	20:70:168:PRO:HD2	1.97	0.46
35:85:12:LYS:HG2	35:85:16:GLN:NE2	2.31	0.46
44:P0:16:ARG:O	44:P0:16:ARG:HG2	2.15	0.46
49:S3:72:LEU:HG	56:10:20:VAL:HG11	1.97	0.46
51:S5:114:ILE:O	51:S5:118:LEU:HG	2.15	0.46
70:24:63:GLN:HB2	70:24:68:LYS:HB3	1.98	0.46
75:29:53:ASN:HB2	75:29:55:PHE:CE2	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
76:30:55:ARG:HG3	76:30:55:ARG:HH11	1.78	0.46
78:1S:182:A:H2'	78:1S:183:U:C6	2.50	0.46
78:1S:1106:U:H2'	78:1S:1107:G:C8	2.51	0.46
78:1S:1679:G:H2'	78:1S:1680:G:O4'	2.15	0.46
79:2S:129:U:H2'	79:2S:130:A:H8	1.79	0.46
79:2S:577:C:H2'	79:2S:579:G:H5''	1.97	0.46
79:2S:848:A:C8	79:2S:849:C:H1'	2.51	0.46
79:2S:1000:C:H42	79:2S:1046:A:H62	1.64	0.46
79:2S:1887:A:H2'	79:2S:1888:U:H5'	1.98	0.46
80:8S:17:A:H2'	80:8S:18:U:O4'	2.15	0.46
82:PT:6:G:O2'	82:PT:7:G:H5'	2.16	0.46
2:L2:199:THR:HA	79:2S:2147:A:H5''	1.98	0.46
3:L3:3:HIS:CD2	79:2S:2938:G:H3'	2.47	0.46
3:L3:227:GLU:OE1	79:2S:1887:A:H5''	2.16	0.46
4:L4:145:ILE:CD1	4:L4:148:ILE:HG12	2.45	0.46
5:L5:218:ARG:HG2	5:L5:218:ARG:HH11	1.81	0.46
8:L8:163:VAL:HA	8:L8:166:LEU:HG	1.97	0.46
9:L9:150:SER:O	9:L9:154:VAL:HG23	2.15	0.46
14:64:77:ARG:O	14:64:81:VAL:HG23	2.15	0.46
19:69:121:HIS:HE1	79:2S:1719:G:N7	2.14	0.46
31:81:23:VAL:O	31:81:28:ARG:NH1	2.48	0.46
42:92:55:LYS:HA	42:92:56:PRO:HD3	1.81	0.46
47:S1:35:PRO:HD2	47:S1:38:PHE:HE2	1.80	0.46
52:S6:23:ARG:HB3	52:S6:41:VAL:HA	1.98	0.46
53:S7:143:LEU:HD13	53:S7:144:VAL:HG22	1.98	0.46
57:11:34:TRP:CH2	57:11:36:LYS:HD3	2.51	0.46
59:13:86:GLU:HG3	59:13:87:ASP:H	1.80	0.46
64:18:88:ARG:HG3	78:1S:1547:A:H4'	1.96	0.46
69:23:60:GLU:HA	69:23:68:ILE:HA	1.97	0.46
71:25:41:ILE:HG13	71:25:42:LEU:N	2.29	0.46
74:28:53:ILE:HG22	74:28:54:LEU:N	2.30	0.46
78:1S:93:A:C8	78:1S:398:G:H2'	2.49	0.46
78:1S:379:U:C2'	78:1S:380:U:H5''	2.45	0.46
78:1S:1317:C:H2'	78:1S:1318:G:O4'	2.16	0.46
78:1S:1686:C:H2'	78:1S:1687:U:C5'	2.44	0.46
79:2S:154:U:OP1	79:2S:158:G:H5'	2.16	0.46
79:2S:932:U:H4'	79:2S:933:A:H2'	1.96	0.46
79:2S:1330:A:C6	79:2S:1332:A:H1'	2.50	0.46
79:2S:2684:C:H2'	79:2S:2685:C:H6	1.80	0.46
7:L7:88:ARG:CG	7:L7:111:ILE:HA	2.45	0.46
8:L8:99:PRO:CG	8:L8:190:VAL:HG23	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:61:23:VAL:HG11	11:61:29:ARG:HD3	1.97	0.46
15:65:50:ARG:CB	15:65:50:ARG:HH11	2.28	0.46
15:65:176:LYS:HZ1	79:2S:65:A:H5'	1.79	0.46
16:66:21:SER:HA	16:66:87:MET:SD	2.56	0.46
17:67:117:ILE:CG1	17:67:148:LEU:HB3	2.46	0.46
21:71:54:HIS:HB3	21:71:57:TYR:CD2	2.51	0.46
21:71:56:PHE:HD1	21:71:57:TYR:CE1	2.34	0.46
21:71:64:VAL:HA	21:71:73:GLY:O	2.16	0.46
26:76:6:LEU:HD23	26:76:6:LEU:N	2.30	0.46
34:84:91:ARG:HA	34:84:95:ILE:HD13	1.97	0.46
46:S0:31:VAL:HG23	46:S0:149:LEU:O	2.14	0.46
46:S0:170:ILE:HD12	46:S0:170:ILE:N	2.25	0.46
46:S0:177:LEU:O	46:S0:181:VAL:HG13	2.16	0.46
47:S1:87:ARG:HB2	47:S1:101:HIS:CD2	2.50	0.46
47:S1:117:TRP:N	78:1S:932:U:OP2	2.48	0.46
50:S4:10:LYS:HG2	50:S4:27:TYR:CD1	2.51	0.46
53:S7:70:PHE:O	53:S7:74:GLN:HB2	2.15	0.46
59:13:125:LEU:C	59:13:125:LEU:HD13	2.35	0.46
62:16:97:VAL:HG12	62:16:98:ASP:N	2.20	0.46
66:20:22:ILE:HD11	66:20:116:VAL:HG13	1.97	0.46
66:20:52:LYS:O	66:20:52:LYS:HG3	2.15	0.46
67:21:80:LYS:NZ	67:21:80:LYS:HB3	2.30	0.46
69:23:109:ARG:NH2	69:23:112:LYS:HG3	2.31	0.46
70:24:35:VAL:HG22	70:24:36:SER:N	2.30	0.46
70:24:43:LYS:O	70:24:46:GLU:HG2	2.15	0.46
78:1S:200:A:H2'	78:1S:201:G:O4'	2.16	0.46
78:1S:1448:G:C8	78:1S:1448:G:H5'	2.51	0.46
78:1S:1659:A:H2'	78:1S:1660:A:C8	2.50	0.46
79:2S:127:G:H2'	79:2S:128:G:C8	2.50	0.46
79:2S:980:A:H2'	79:2S:981:U:O4'	2.16	0.46
79:2S:1338:C:H2'	79:2S:1339:C:H6	1.79	0.46
79:2S:1522:U:H5'	79:2S:1604:G:H1'	1.98	0.46
79:2S:1818:U:H2'	79:2S:1819:U:C5'	2.45	0.46
79:2S:1930:A:O4'	79:2S:1932:A:H4'	2.16	0.46
79:2S:2809:C:H2'	79:2S:2810:C:H4'	1.96	0.46
79:2S:2941:A:H8	79:2S:2941:A:OP2	1.97	0.46
79:2S:2948:C:H2'	79:2S:2949:U:C6	2.51	0.46
80:8S:70:G:H1'	80:8S:88:A:H61	1.79	0.46
2:L2:65:ASP:HB3	2:L2:68:LYS:O	2.16	0.46
2:L2:92:LYS:HA	2:L2:103:PRO:HD2	1.98	0.46
2:L2:184:ARG:HA	2:L2:187:HIS:CD2	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:43:LEU:HB3	3:L3:181:ILE:HG21	1.97	0.46
5:L5:285:ARG:NH1	81:5S:62:U:H4'	2.30	0.46
6:L6:67:GLY:HA3	6:L6:74:VAL:HB	1.97	0.46
14:64:46:ILE:O	14:64:46:ILE:HG13	2.15	0.46
17:67:65:SER:O	17:67:66:SER:HB2	2.16	0.46
19:69:69:SER:HB2	19:69:74:ARG:CB	2.46	0.46
20:70:111:ALA:HA	20:70:115:ARG:HA	1.98	0.46
24:74:48:ARG:HH22	79:2S:2110:G:H2'	1.81	0.46
25:75:142:ILE:OXT	25:75:142:ILE:HD13	2.15	0.46
27:77:87:LEU:HG	27:77:88:ASP:N	2.31	0.46
28:78:124:ILE:HG12	28:78:144:VAL:CG2	2.45	0.46
28:78:132:LYS:O	28:78:136:GLU:HG3	2.16	0.46
30:80:81:VAL:HG23	30:80:83:LYS:H	1.80	0.46
48:S2:144:TRP:CD2	48:S2:173:PRO:HG3	2.51	0.46
51:S5:59:VAL:HG13	51:S5:65:ARG:HH11	1.79	0.46
54:S8:82:VAL:HB	54:S8:101:ILE:HG22	1.97	0.46
55:S9:50:SER:HB3	78:1S:1:U:C5	2.49	0.46
56:10:25:LYS:HD3	56:10:62:GLN:HE22	1.79	0.46
58:12:24:ILE:HD13	58:12:24:ILE:N	2.26	0.46
59:13:107:LYS:HG3	59:13:107:LYS:O	2.15	0.46
60:14:31:THR:HG22	60:14:38:THR:HA	1.98	0.46
61:15:45:PHE:HA	61:15:49:MET:SD	2.56	0.46
65:19:105:LEU:HB3	65:19:122:ARG:NH1	2.31	0.46
65:19:125:SER:O	65:19:129:GLN:HG3	2.16	0.46
66:20:81:THR:O	75:29:54:LYS:HD2	2.16	0.46
69:23:19:ARG:HH12	78:1S:610:G:N2	2.14	0.46
78:1S:1050:G:O2'	78:1S:1051:G:H5'	2.16	0.46
78:1S:1143:A:H2'	78:1S:1144:U:C6	2.51	0.46
78:1S:1600:A:O2'	78:1S:1601:G:H5''	2.15	0.46
79:2S:757:C:H2'	79:2S:758:C:C5'	2.45	0.46
79:2S:1464:G:H21	79:2S:1511:U:H3	1.62	0.46
79:2S:1779:C:H2'	79:2S:1780:G:H5''	1.98	0.46
82:ET:24:C:H2'	82:ET:25:U:C6	2.51	0.46
1:L1:57:ASN:ND2	1:L1:147:LYS:HB3	2.31	0.46
2:L2:229:ALA:HB3	2:L2:234:LYS:CG	2.46	0.46
4:L4:205:PRO:CG	4:L4:225:VAL:HG22	2.41	0.46
5:L5:95:TRP:CE3	5:L5:198:TYR:HB3	2.51	0.46
6:L6:171:PRO:HD2	33:83:44:TYR:OH	2.16	0.46
7:L7:141:TYR:HA	7:L7:144:ILE:HD12	1.96	0.46
7:L7:235:PHE:HE2	20:70:35:VAL:HG23	1.81	0.46
8:L8:109:LEU:HD23	8:L8:109:LEU:O	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:61:10:ARG:HG2	81:5S:55:A:H1'	1.98	0.46
11:61:54:VAL:HG11	11:61:57:PHE:CE2	2.50	0.46
15:65:39:ALA:O	15:65:61:ILE:HB	2.16	0.46
18:68:83:VAL:HB	18:68:103:ALA:CB	2.45	0.46
20:70:23:LYS:O	20:70:24:LEU:HB2	2.16	0.46
20:70:82:ASP:HA	20:70:87:THR:HA	1.97	0.46
23:73:33:ASN:O	23:73:34:LEU:HD23	2.15	0.46
23:73:80:ARG:HA	23:73:95:PHE:CD2	2.51	0.46
42:92:29:LYS:HD2	42:92:31:GLY:H	1.80	0.46
45:RC:176:LYS:HE3	45:RC:196:ASN:O	2.15	0.46
51:S5:72:HIS:HB3	62:16:47:LYS:HE2	1.96	0.46
52:S6:82:SER:O	52:S6:83:CYS:HB2	2.16	0.46
53:S7:85:PHE:HD2	53:S7:85:PHE:HA	1.70	0.46
57:11:45:PRO:HG2	57:11:48:ALA:HB2	1.97	0.46
58:12:67:THR:HG22	58:12:68:GLU:N	2.31	0.46
59:13:22:ALA:HB1	59:13:23:PRO:CA	2.43	0.46
61:15:25:LEU:HD13	61:15:112:LEU:HD11	1.97	0.46
62:16:118:ILE:HG23	62:16:119:ALA:N	2.31	0.46
62:16:135:ARG:HE	78:1S:1582:U:H5''	1.81	0.46
63:17:116:LYS:HB2	63:17:116:LYS:NZ	2.31	0.46
66:20:85:ARG:N	66:20:85:ARG:HD2	2.29	0.46
72:26:87:ARG:HD3	72:26:92:ARG:HA	1.98	0.46
78:1S:1013:A:H2'	78:1S:1014:G:H5'	1.98	0.46
79:2S:189:G:H5'	79:2S:223:U:O2'	2.16	0.46
79:2S:282:G:O2'	79:2S:283:G:OP2	2.21	0.46
79:2S:647:A:H8	79:2S:647:A:OP2	1.99	0.46
79:2S:1102:A:O3'	79:2S:1103:A:H3'	2.16	0.46
79:2S:1449:A:H2'	79:2S:1450:G:O4'	2.16	0.46
79:2S:1867:A:H2'	79:2S:1868:G:C8	2.51	0.46
79:2S:2336:U:H2'	79:2S:2337:C:O4'	2.15	0.46
79:2S:2426:U:H2'	79:2S:2427:U:H6	1.81	0.46
79:2S:2563:G:H2'	79:2S:2564:G:C8	2.50	0.46
79:2S:2819:A:H2'	79:2S:2820:A:H5'	1.98	0.46
2:L2:196:TRP:HD1	2:L2:198:LYS:HZ3	1.63	0.46
6:L6:58:LEU:HD21	6:L6:102:ASN:HA	1.98	0.46
17:67:120:ASN:ND2	17:67:145:HIS:HB2	2.31	0.46
18:68:170:ARG:O	18:68:171:LYS:HB2	2.15	0.46
23:73:13:ILE:HD11	23:73:53:SER:HB2	1.98	0.46
31:81:68:GLU:HG3	31:81:69:TYR:H	1.81	0.46
36:86:94:ILE:HG12	36:86:98:ARG:NH1	2.31	0.46
44:P0:69:ASP:O	44:P0:70:LEU:HB2	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:P0:76:LEU:O	44:P0:76:LEU:HD13	2.15	0.46
46:S0:7:PHE:CD2	46:S0:7:PHE:N	2.84	0.46
46:S0:59:LEU:HD22	67:21:79:LEU:HD21	1.98	0.46
46:S0:77:SER:HB2	46:S0:86:VAL:HG11	1.97	0.46
47:S1:67:GLU:HG3	47:S1:84:ILE:O	2.16	0.46
53:S7:39:ARG:N	53:S7:40:PRO:HD2	2.31	0.46
54:S8:150:ALA:HB1	54:S8:152:ILE:HG12	1.97	0.46
55:S9:77:ILE:HG23	55:S9:86:LEU:HD21	1.98	0.46
59:13:16:ILE:HA	78:1S:959:U:H5'	1.98	0.46
61:15:16:SER:HB3	61:15:21:ASP:OD1	2.16	0.46
66:20:69:LYS:HB3	78:1S:1280:C:H4'	1.98	0.46
67:21:70:ASN:HA	67:21:79:LEU:CD1	2.46	0.46
72:26:41:ILE:HD13	72:26:41:ILE:N	2.30	0.46
77:31:119:ARG:HE	77:31:139:LEU:CD2	2.29	0.46
78:1S:101:U:H2'	78:1S:102:U:O4'	2.16	0.46
78:1S:878:G:H2'	78:1S:879:G:H8	1.74	0.46
78:1S:1082:C:O2	78:1S:1082:C:C2'	2.63	0.46
78:1S:1263:G:H2'	78:1S:1264:G:O4'	2.16	0.46
78:1S:1336:A:C3'	78:1S:1337:A:H5''	2.44	0.46
79:2S:105:C:H2'	79:2S:106:A:H8	1.79	0.46
79:2S:157:A:H2'	79:2S:158:G:O4'	2.16	0.46
79:2S:204:A:H2'	79:2S:205:C:O4'	2.15	0.46
79:2S:338:A:H3'	79:2S:339:C:C5'	2.46	0.46
79:2S:1328:C:O2'	79:2S:1329:U:H5'	2.16	0.46
79:2S:1658:G:H2'	79:2S:1659:U:H6	1.79	0.46
79:2S:2289:U:H2'	79:2S:2290:C:C6	2.50	0.46
79:2S:2832:C:H2'	79:2S:2833:A:H8	1.80	0.46
79:2S:3169:U:H2'	79:2S:3170:A:C4'	2.45	0.46
1:L1:108:ASN:HB2	1:L1:130:LYS:HE2	1.98	0.46
2:L2:200:ARG:HD2	79:2S:2186:U:OP2	2.16	0.46
5:L5:52:VAL:HG21	81:5S:6:C:H4'	1.97	0.46
5:L5:287:ALA:O	5:L5:290:ILE:HG12	2.16	0.46
8:L8:63:LYS:HA	8:L8:63:LYS:NZ	2.31	0.46
8:L8:78:PHE:C	8:L8:80:TYR:H	2.18	0.46
8:L8:92:LYS:HB3	8:L8:92:LYS:NZ	2.30	0.46
17:67:15:ALA:HB3	17:67:150:VAL:CG2	2.45	0.46
19:69:109:TYR:HB3	19:69:115:ILE:HG22	1.97	0.46
23:73:33:ASN:N	23:73:33:ASN:HD22	2.14	0.46
30:80:84:LEU:N	30:80:84:LEU:HD12	2.31	0.46
32:82:42:VAL:HG12	32:82:52:GLN:NE2	2.31	0.46
32:82:46:PHE:CE1	79:2S:1145:G:H5'	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:92:7:THR:O	42:92:8:ARG:HB2	2.15	0.46
47:S1:148:ASN:HB2	63:17:126:ALA:HB3	1.97	0.46
50:S4:194:THR:O	50:S4:195:ILE:CB	2.64	0.46
52:S6:186:ARG:O	52:S6:190:GLN:HG2	2.15	0.46
54:S8:158:SER:HB3	79:2S:2067:U:C5	2.51	0.46
55:S9:128:LEU:O	55:S9:133:HIS:HB2	2.16	0.46
55:S9:149:ARG:HA	78:1S:765:G:O6	2.16	0.46
56:10:86:ILE:HB	56:10:88:PRO:HD2	1.97	0.46
57:11:70:ILE:HD12	57:11:70:ILE:H	1.81	0.46
60:14:91:THR:O	60:14:92:LYS:HG2	2.16	0.46
62:16:136:SER:C	62:16:137:ARG:HE	2.19	0.46
63:17:102:VAL:HB	63:17:106:THR:HB	1.97	0.46
64:18:39:GLY:H	78:1S:1566:U:H5''	1.81	0.46
64:18:54:LEU:H	64:18:54:LEU:CD2	2.25	0.46
69:23:137:LYS:CD	69:23:139:LYS:HE2	2.46	0.46
74:28:32:PHE:N	74:28:32:PHE:HD2	2.13	0.46
78:1S:38:C:C2'	78:1S:39:A:H5'	2.46	0.46
78:1S:330:G:H2'	78:1S:331:A:O4'	2.15	0.46
78:1S:429:G:OP1	78:1S:439:U:H5''	2.16	0.46
79:2S:407:A:C2	80:8S:17:A:H1'	2.51	0.46
79:2S:1292:C:H2'	79:2S:1293:U:O4'	2.16	0.46
79:2S:1398:U:H5''	80:8S:9:A:OP1	2.16	0.46
79:2S:1780:G:H2'	79:2S:1781:C:C6	2.51	0.46
79:2S:1804:A:H2'	79:2S:1805:C:C6	2.51	0.46
79:2S:1827:C:H2'	79:2S:1828:A:C8	2.51	0.46
79:2S:1869:C:H2'	79:2S:1870:C:H6	1.79	0.46
79:2S:2539:C:H4'	79:2S:2540:A:O4'	2.16	0.46
79:2S:3183:A:H2	79:2S:3188:G:H4'	1.81	0.46
79:2S:3237:U:H2'	79:2S:3238:G:O4'	2.16	0.46
2:L2:83:HIS:HB3	43:93:64:VAL:HG13	1.98	0.45
3:L3:116:ARG:HG2	3:L3:175:LYS:HA	1.98	0.45
3:L3:128:LYS:O	3:L3:131:THR:HG23	2.17	0.45
4:L4:125:ALA:HB1	4:L4:238:LEU:HB3	1.97	0.45
5:L5:104:LEU:HA	5:L5:247:ILE:HG23	1.97	0.45
5:L5:115:LEU:H	5:L5:115:LEU:HD22	1.81	0.45
5:L5:180:PHE:HB3	5:L5:181:PRO:HD2	1.98	0.45
8:L8:150:LEU:HD21	8:L8:218:ILE:CD1	2.46	0.45
10:60:144:ASN:HA	10:60:147:VAL:HG23	1.98	0.45
13:63:101:ARG:HA	79:2S:76:G:C6	2.51	0.45
16:66:22:VAL:HG11	16:66:122:GLN:HG3	1.97	0.45
17:67:67:ILE:CG2	17:67:68:GLY:N	2.78	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:67:69:ARG:HD3	79:2S:3309:G:H1'	1.98	0.45
25:75:56:ARG:O	25:75:57:LEU:HB2	2.15	0.45
28:78:104:THR:OG1	28:78:127:ALA:HB2	2.16	0.45
35:85:76:GLN:HB2	35:85:77:PRO:HD2	1.98	0.45
42:92:9:LYS:HA	42:92:21:THR:O	2.16	0.45
47:S1:150:VAL:HB	78:1S:1067:C:H5''	1.97	0.45
49:S3:41:VAL:HG12	66:20:111:GLY:H	1.81	0.45
50:S4:90:ILE:HB	50:S4:99:PHE:HB2	1.98	0.45
52:S6:182:GLN:O	52:S6:185:GLN:HB3	2.15	0.45
53:S7:112:ARG:HG2	53:S7:112:ARG:HH11	1.81	0.45
54:S8:102:VAL:HG23	54:S8:167:ALA:HB3	1.98	0.45
55:S9:123:HIS:CE1	76:30:37:ARG:HB2	2.47	0.45
55:S9:163:PRO:C	55:S9:165:GLY:H	2.19	0.45
61:15:98:ASN:HB2	61:15:122:THR:CG2	2.43	0.45
68:22:39:GLN:O	68:22:43:LYS:HB2	2.16	0.45
73:27:74:SER:O	73:27:75:GLU:CB	2.65	0.45
78:1S:1043:A:H3'	78:1S:1044:U:C6	2.51	0.45
78:1S:1163:A:H2'	78:1S:1164:G:O4'	2.16	0.45
79:2S:638:C:H2'	79:2S:639:G:H8	1.81	0.45
79:2S:793:C:H2'	79:2S:794:U:O4'	2.16	0.45
79:2S:904:A:H5'	79:2S:1536:G:O2'	2.16	0.45
79:2S:1818:U:H2'	79:2S:1819:U:H5''	1.98	0.45
79:2S:1904:C:C2	79:2S:2951:G:H5'	2.51	0.45
79:2S:2916:U:H2'	79:2S:2917:G:H8	1.81	0.45
79:2S:3277:U:O2	79:2S:3277:U:H2'	2.15	0.45
80:8S:40:A:H2'	80:8S:41:A:H8	1.79	0.45
82:ET:25:U:H2'	82:ET:26:C:C6	2.51	0.45
2:L2:13:GLY:HA2	2:L2:16:PHE:HB2	1.98	0.45
4:L4:51:ALA:HB3	80:8S:27:U:H4'	1.99	0.45
9:L9:41:ILE:HG23	9:L9:42:ASP:N	2.31	0.45
10:60:97:LEU:HD21	10:60:126:ALA:CB	2.45	0.45
11:61:40:LEU:CD2	11:61:114:ILE:HG12	2.44	0.45
14:64:70:PHE:HE2	14:64:72:LEU:HD23	1.81	0.45
17:67:122:ALA:HB1	17:67:123:PRO:CD	2.46	0.45
18:68:42:ALA:HB3	18:68:45:ASN:HD22	1.79	0.45
19:69:80:LYS:HE3	79:2S:1940:G:OP1	2.17	0.45
19:69:143:ILE:HG23	19:69:146:LYS:HE3	1.98	0.45
21:71:27:LEU:H	21:71:27:LEU:CD2	2.28	0.45
27:77:23:VAL:HG21	27:77:43:VAL:HG21	1.97	0.45
31:81:9:THR:HG22	31:81:10:ARG:N	2.31	0.45
37:87:34:CYS:HB3	37:87:39:TYR:H	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:S2:228:ASN:HB2	67:21:1:MET:H1	1.80	0.45
48:S2:240:LEU:HD12	48:S2:240:LEU:N	2.32	0.45
54:S8:172:ARG:CB	54:S8:175:GLN:HB2	2.46	0.45
58:12:74:LEU:HD11	77:31:106:TYR:HB3	1.98	0.45
60:14:132:ARG:O	72:26:28:LYS:HG3	2.16	0.45
62:16:141:SER:O	62:16:143:ARG:N	2.46	0.45
64:18:48:LYS:HE2	65:19:50:ALA:HB2	1.98	0.45
65:19:27:LYS:HB3	65:19:27:LYS:HZ2	1.80	0.45
78:1S:63:G:H4'	78:1S:170:U:H5	1.81	0.45
78:1S:647:G:H2'	78:1S:648:G:H8	1.82	0.45
78:1S:1358:G:H2'	78:1S:1359:C:C6	2.50	0.45
79:2S:208:C:H2'	79:2S:209:A:O4'	2.17	0.45
79:2S:273:A:H2'	79:2S:274:G:C8	2.51	0.45
79:2S:686:G:H2'	79:2S:687:U:O4'	2.17	0.45
79:2S:1002:A:H2'	79:2S:1003:A:C8	2.52	0.45
79:2S:1257:C:H3'	79:2S:1258:U:C5'	2.39	0.45
79:2S:1947:G:H1	79:2S:2101:C:H42	1.63	0.45
79:2S:2772:C:H1'	79:2S:2773:C:H5	1.81	0.45
79:2S:3326:G:H2'	79:2S:3327:G:C8	2.51	0.45
2:L2:223:SER:O	2:L2:225:ILE:HD12	2.17	0.45
3:L3:261:MET:HB2	3:L3:264:VAL:HG13	1.99	0.45
4:L4:181:VAL:O	4:L4:182:LEU:HB3	2.16	0.45
7:L7:98:LYS:O	7:L7:102:VAL:HG23	2.16	0.45
10:60:89:VAL:HG22	10:60:136:PHE:CE2	2.51	0.45
11:61:108:GLU:HG3	11:61:122:ILE:HG21	1.98	0.45
13:63:179:PHE:HD1	13:63:182:ILE:HD12	1.81	0.45
15:65:13:LYS:C	15:65:19:LEU:HD22	2.37	0.45
17:67:101:ASN:OD1	79:2S:389:A:H1'	2.15	0.45
17:67:111:LYS:NZ	17:67:111:LYS:HB3	2.30	0.45
18:68:179:ARG:HD2	18:68:182:LYS:HG2	1.98	0.45
18:68:182:LYS:HE3	79:2S:2764:C:OP1	2.16	0.45
20:70:119:ARG:HB2	81:5S:96:U:C4'	2.46	0.45
25:75:53:HIS:ND1	25:75:56:ARG:HG2	2.31	0.45
26:76:112:ASP:O	26:76:116:LYS:HG3	2.16	0.45
26:76:119:ILE:HG22	26:76:124:GLY:HA3	1.98	0.45
46:S0:143:VAL:HG12	46:S0:156:VAL:HG12	1.98	0.45
49:S3:123:VAL:HG13	49:S3:134:CYS:SG	2.57	0.45
50:S4:222:LEU:HA	50:S4:225:VAL:CG2	2.46	0.45
55:S9:163:PRO:CG	78:1S:512:A:H5''	2.40	0.45
57:11:75:VAL:HG21	57:11:117:VAL:CG1	2.46	0.45
57:11:129:ARG:HG2	57:11:129:ARG:HH11	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:19:10:ALA:HB3	65:19:13:ASP:OD2	2.16	0.45
66:20:46:GLU:OE1	66:20:46:GLU:HA	2.17	0.45
72:26:87:ARG:HB2	72:26:92:ARG:HG2	1.98	0.45
78:1S:312:A:N3	78:1S:314:C:H2'	2.31	0.45
78:1S:386:G:H21	78:1S:425:A:H2	1.65	0.45
78:1S:422:G:H2'	78:1S:423:G:N7	2.32	0.45
78:1S:586:G:H2'	78:1S:587:C:H6	1.81	0.45
78:1S:1074:G:H2'	78:1S:1075:C:C6	2.51	0.45
78:1S:1407:U:H2'	78:1S:1408:G:O4'	2.15	0.45
79:2S:856:G:O2'	79:2S:857:G:H5'	2.16	0.45
79:2S:1049:C:H2'	79:2S:1050:U:C6	2.51	0.45
79:2S:1235:U:H4'	79:2S:1236:G:H5''	1.97	0.45
79:2S:1240:A:H3'	79:2S:1241:U:H5''	1.98	0.45
79:2S:1516:C:H2'	79:2S:1517:G:C8	2.52	0.45
79:2S:1689:U:H2'	79:2S:1690:C:H6	1.80	0.45
79:2S:2117:A:H2'	79:2S:2118:C:O4'	2.16	0.45
79:2S:2155:G:H2'	79:2S:2156:C:O4'	2.16	0.45
79:2S:2697:A:H2'	79:2S:2698:G:C8	2.51	0.45
79:2S:2836:C:H2'	79:2S:2837:A:H5'	1.97	0.45
79:2S:2945:G:H4'	79:2S:2947:G:C8	2.51	0.45
79:2S:3349:C:H2'	79:2S:3350:C:C6	2.52	0.45
81:5S:64:A:H5'	81:5S:65:G:H5''	1.97	0.45
2:L2:113:VAL:HG12	2:L2:166:ILE:HA	1.98	0.45
2:L2:245:LEU:HD12	79:2S:2152:A:O3'	2.16	0.45
3:L3:160:VAL:O	3:L3:180:GLU:HA	2.16	0.45
4:L4:23:PRO:O	4:L4:24:ALA:HB3	2.16	0.45
4:L4:60:THR:HG22	4:L4:61:SER:N	2.31	0.45
8:L8:157:VAL:CG1	8:L8:159:PRO:HD2	2.46	0.45
9:L9:180:TYR:HB2	40:90:85:LEU:CD1	2.47	0.45
11:61:162:TRP:CZ2	11:61:166:LYS:HD2	2.51	0.45
14:64:108:ARG:O	14:64:112:LEU:HG	2.17	0.45
17:67:112:LEU:HD12	17:67:152:GLU:HA	1.98	0.45
30:80:13:LYS:HD3	30:80:100:ILE:HG23	1.99	0.45
42:92:29:LYS:HD3	42:92:30:ALA:N	2.31	0.45
44:P0:18:TYR:HD1	44:P0:22:TYR:HE2	1.65	0.45
44:P0:99:VAL:O	44:P0:99:VAL:HG12	2.16	0.45
46:S0:119:ARG:HA	46:S0:119:ARG:NE	2.31	0.45
47:S1:53:GLY:O	47:S1:54:LEU:HB2	2.16	0.45
47:S1:88:VAL:HG12	47:S1:89:ASP:N	2.32	0.45
52:S6:167:LYS:HD3	52:S6:169:TYR:HE2	1.81	0.45
67:21:19:ALA:HA	67:21:71:ARG:NH1	2.30	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:22:37:PHE:CZ	68:22:103:ILE:HG21	2.52	0.45
78:1S:19:A:H2'	78:1S:20:G:O4'	2.16	0.45
78:1S:71:A:H2'	78:1S:72:A:C4'	2.45	0.45
78:1S:144:U:O2'	78:1S:145:A:H5'	2.16	0.45
79:2S:1741:A:H2'	79:2S:1742:U:O4'	2.17	0.45
79:2S:1813:A:C2'	79:2S:1814:A:H5'	2.47	0.45
79:2S:1818:U:O5'	79:2S:1818:U:H6	2.00	0.45
79:2S:1946:A:H2'	79:2S:1947:G:C8	2.52	0.45
79:2S:2124:G:H2'	79:2S:2125:A:H8	1.82	0.45
79:2S:2581:U:H2'	79:2S:2582:C:H6	1.81	0.45
80:8S:18:U:H2'	80:8S:19:C:C6	2.51	0.45
80:8S:60:U:O2'	80:8S:61:A:H5'	2.16	0.45
80:8S:79:A:H2'	80:8S:80:A:C4'	2.47	0.45
6:L6:80:ASN:HB3	6:L6:83:TYR:CD2	2.50	0.45
7:L7:184:LEU:O	7:L7:188:ILE:HG12	2.16	0.45
8:L8:78:PHE:O	8:L8:80:TYR:N	2.50	0.45
11:61:134:PRO:HB2	81:5S:55:A:C2	2.52	0.45
11:61:149:GLY:O	11:61:153:LYS:HG3	2.16	0.45
17:67:108:ASP:HB3	17:67:111:LYS:HG2	1.97	0.45
18:68:135:GLN:HA	79:2S:730:C:OP1	2.16	0.45
23:73:62:VAL:HG21	23:73:69:LEU:HB3	1.99	0.45
27:77:14:VAL:O	27:77:19:ALA:HB1	2.16	0.45
28:78:64:GLN:HB2	28:78:67:HIS:HE1	1.82	0.45
31:81:10:ARG:HH21	79:2S:3386:G:H5''	1.78	0.45
38:88:26:LYS:NZ	79:2S:1751:G:H5'	2.32	0.45
46:S0:37:VAL:HG12	46:S0:38:PHE:N	2.32	0.45
47:S1:199:ASN:O	47:S1:202:LYS:HG2	2.16	0.45
49:S3:175:VAL:HG13	49:S3:182:LEU:HB2	1.99	0.45
51:S5:76:ARG:HH21	62:16:122:ARG:HG3	1.81	0.45
52:S6:20:ASP:O	52:S6:24:ILE:HG13	2.17	0.45
56:10:82:LEU:HD12	56:10:82:LEU:O	2.16	0.45
62:16:83:GLN:O	62:16:87:LYS:HG3	2.16	0.45
64:18:16:ARG:HG3	64:18:16:ARG:NH1	2.31	0.45
66:20:48:HIS:O	66:20:49:ASN:HB2	2.17	0.45
68:22:46:TYR:HH	68:22:101:TYR:HD1	1.64	0.45
70:24:102:LYS:HD2	70:24:102:LYS:H	1.80	0.45
71:25:78:ILE:HD12	71:25:78:ILE:N	2.32	0.45
73:27:22:LYS:HD3	78:1S:864:U:H5	1.80	0.45
74:28:29:ARG:HA	74:28:41:VAL:HA	1.98	0.45
78:1S:237:C:C5'	78:1S:238:U:H5'	2.33	0.45
78:1S:777:C:C2'	78:1S:778:G:H5''	2.37	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:954:G:H2'	78:1S:955:A:C8	2.51	0.45
79:2S:683:U:O5'	79:2S:683:U:H6	2.00	0.45
79:2S:823:C:H2'	79:2S:824:C:C6	2.52	0.45
79:2S:1301:A:H4'	79:2S:1302:A:H5''	1.97	0.45
79:2S:1307:G:H1'	79:2S:1308:A:C8	2.52	0.45
79:2S:2405:C:C5	79:2S:2406:C:C5	3.05	0.45
79:2S:2819:A:C2'	79:2S:2820:A:H5'	2.46	0.45
79:2S:2860:U:C2'	79:2S:2861:U:H5'	2.47	0.45
79:2S:2876:C:O5'	79:2S:2876:C:H6	2.00	0.45
2:L2:41:ILE:HG23	2:L2:42:ARG:N	2.30	0.45
2:L2:196:TRP:CD1	2:L2:197:PRO:HA	2.52	0.45
3:L3:31:ALA:CB	79:2S:3136:G:H5''	2.46	0.45
3:L3:46:PHE:CE1	3:L3:208:VAL:HG21	2.52	0.45
4:L4:187:LEU:CD2	4:L4:198:ARG:HG2	2.47	0.45
4:L4:205:PRO:HB3	4:L4:247:PHE:CD2	2.51	0.45
6:L6:28:GLN:HB2	79:2S:501:A:H4'	1.99	0.45
7:L7:141:TYR:HB2	7:L7:189:ILE:HD12	1.99	0.45
9:L9:41:ILE:O	9:L9:41:ILE:HD13	2.17	0.45
13:63:57:VAL:HG12	13:63:69:VAL:CG2	2.47	0.45
16:66:27:LEU:HG	16:66:33:ILE:HD12	1.98	0.45
17:67:171:ARG:H	17:67:171:ARG:HG2	1.51	0.45
23:73:45:ARG:HB3	23:73:48:ARG:HD2	1.98	0.45
23:73:104:ASN:OD1	23:73:108:GLU:HB2	2.17	0.45
27:77:23:VAL:HA	27:77:45:GLY:CA	2.46	0.45
34:84:38:LEU:HD12	34:84:38:LEU:H	1.81	0.45
42:92:33:ALA:HA	79:2S:2767:U:H5'	1.99	0.45
44:P0:42:ARG:NH1	44:P0:51:VAL:HG13	2.31	0.45
45:RC:86:ASP:O	45:RC:87:LYS:HB2	2.17	0.45
45:RC:135:THR:HG23	45:RC:141:LEU:HD21	1.99	0.45
45:RC:176:LYS:HB3	45:RC:195:HIS:HB2	1.99	0.45
45:RC:202:LEU:HA	45:RC:243:LEU:HD12	1.98	0.45
46:S0:148:ASP:HB2	46:S0:164:ASN:HD21	1.82	0.45
47:S1:148:ASN:HB3	63:17:126:ALA:HB3	1.98	0.45
47:S1:218:LEU:HD22	47:S1:219:LYS:H	1.80	0.45
48:S2:89:GLN:HE21	48:S2:89:GLN:N	2.14	0.45
48:S2:218:ILE:C	48:S2:218:ILE:HD12	2.37	0.45
49:S3:68:GLU:HA	49:S3:71:LEU:HD12	1.98	0.45
51:S5:117:THR:HG23	51:S5:195:ALA:HB2	1.99	0.45
53:S7:41:LEU:HB3	53:S7:70:PHE:CE1	2.51	0.45
54:S8:8:ARG:HD3	54:S8:21:PHE:HD1	1.82	0.45
54:S8:189:LEU:HA	54:S8:192:TYR:HB2	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:11:2:SER:CA	57:11:113:PRO:HA	2.46	0.45
62:16:106:LYS:HB2	62:16:106:LYS:NZ	2.31	0.45
64:18:13:HIS:H	64:18:13:HIS:HD1	1.65	0.45
68:22:27:ILE:HD11	68:22:61:ILE:HD12	1.98	0.45
68:22:28:ARG:HD3	68:22:60:LYS:HE2	1.99	0.45
68:22:62:VAL:HB	73:27:8:LEU:HD21	1.98	0.45
70:24:105:ARG:HD2	78:1S:443:C:H3'	1.99	0.45
71:25:65:LEU:HB3	71:25:71:ILE:CD1	2.46	0.45
74:28:9:LEU:O	74:28:32:PHE:HB2	2.15	0.45
78:1S:102:U:H3'	78:1S:360:A:H61	1.81	0.45
78:1S:1114:G:H1'	78:1S:1115:U:H5	1.82	0.45
78:1S:1184:A:H3'	78:1S:1185:U:H5''	1.98	0.45
78:1S:1609:U:H2'	78:1S:1610:G:O4'	2.17	0.45
78:1S:1681:A:H2'	78:1S:1682:U:H5'	1.99	0.45
78:1S:1685:G:H2'	78:1S:1686:C:H5'	1.98	0.45
79:2S:531:G:H2'	79:2S:532:A:C8	2.52	0.45
79:2S:632:G:H2'	79:2S:633:C:C6	2.52	0.45
79:2S:909:G:H2'	79:2S:910:G:O4'	2.17	0.45
79:2S:2248:C:H3'	79:2S:2273:G:C8	2.51	0.45
79:2S:2440:G:H2'	79:2S:2441:A:C8	2.52	0.45
79:2S:2895:G:H2'	79:2S:2896:A:C5'	2.38	0.45
79:2S:2912:G:H1'	79:2S:3131:U:OP1	2.16	0.45
79:2S:3191:G:H2'	79:2S:3192:U:O4'	2.17	0.45
1:L1:30:GLU:HG3	1:L1:210:MET:SD	2.56	0.45
3:L3:45:SER:O	3:L3:181:ILE:HD13	2.17	0.45
4:L4:3:ARG:HD3	4:L4:22:LEU:N	2.32	0.45
13:63:4:SER:HA	28:78:44:ASN:HD21	1.81	0.45
13:63:106:GLN:HB3	36:86:18:THR:CG2	2.42	0.45
20:70:13:ARG:HA	20:70:56:GLY:HA2	1.97	0.45
37:87:21:ARG:HD2	37:87:37:CYS:SG	2.57	0.45
45:RC:81:LEU:HD11	45:RC:115:ILE:HB	1.98	0.45
49:S3:65:ARG:O	49:S3:69:LEU:HG	2.16	0.45
51:S5:220:VAL:O	51:S5:224:ASN:HB2	2.16	0.45
56:10:59:PHE:HZ	56:10:62:GLN:NE2	2.15	0.45
61:15:75:PRO:HB3	61:15:104:GLN:HG2	1.97	0.45
65:19:13:ASP:HA	65:19:16:ASN:HB2	1.99	0.45
69:23:82:LYS:HD3	69:23:82:LYS:H	1.82	0.45
71:25:61:SER:O	71:25:65:LEU:HG	2.17	0.45
72:26:41:ILE:O	72:26:41:ILE:HG12	2.17	0.45
73:27:19:HIS:HB3	73:27:22:LYS:HG2	1.99	0.45
76:30:14:VAL:HA	76:30:17:GLN:CG	2.42	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:908:U:H2'	78:1S:909:U:O4'	2.16	0.45
78:1S:1000:C:C5	78:1S:1003:A:H2'	2.52	0.45
78:1S:1062:A:H2'	78:1S:1063:U:O4'	2.16	0.45
78:1S:1404:C:H2'	78:1S:1405:G:C8	2.52	0.45
78:1S:1522:U:H3'	78:1S:1523:G:H5''	1.96	0.45
79:2S:312:C:H2'	79:2S:313:A:H8	1.81	0.45
79:2S:1408:G:H2'	79:2S:1409:G:C8	2.52	0.45
79:2S:2380:U:H2'	79:2S:2381:G:C8	2.52	0.45
79:2S:2549:G:O2'	79:2S:2550:U:H5'	2.17	0.45
79:2S:2951:G:H2'	79:2S:2952:G:O4'	2.17	0.45
1:L1:103:LEU:HD13	1:L1:106:LYS:CG	2.47	0.45
1:L1:180:VAL:O	1:L1:180:VAL:HG12	2.16	0.45
2:L2:186:PHE:O	2:L2:190:ARG:HB3	2.17	0.45
2:L2:240:ALA:HB1	79:2S:2154:U:H4'	1.98	0.45
4:L4:257:LYS:O	4:L4:261:VAL:HG23	2.17	0.45
4:L4:325:LEU:HG	4:L4:331:ALA:HB3	1.99	0.45
5:L5:146:LEU:HD21	5:L5:173:VAL:HG11	1.99	0.45
5:L5:205:SER:HA	5:L5:208:MET:HB2	1.99	0.45
15:65:65:ARG:HG3	15:65:127:TYR:HB3	1.97	0.45
15:65:166:ALA:O	15:65:170:LYS:HG2	2.17	0.45
18:68:69:ARG:NE	79:2S:784:A:H8	2.15	0.45
23:73:93:LEU:CB	24:74:20:LEU:HB3	2.47	0.45
25:75:62:VAL:HA	25:75:87:SER:HB2	1.99	0.45
26:76:86:THR:HG22	26:76:96:PRO:HG3	1.98	0.45
29:79:37:PRO:HB3	79:2S:776:U:H5''	1.99	0.45
33:83:59:VAL:HG22	33:83:62:SER:O	2.17	0.45
35:85:50:SER:O	35:85:54:VAL:HG23	2.16	0.45
39:89:38:ASN:HD22	39:89:41:ARG:HD3	1.82	0.45
42:92:100:LYS:HA	42:92:100:LYS:HE3	1.97	0.45
45:RC:117:LYS:H	45:RC:117:LYS:HD2	1.82	0.45
46:S0:74:VAL:HG12	46:S0:76:ILE:HG12	1.98	0.45
50:S4:207:LEU:HB3	50:S4:219:VAL:HG12	1.98	0.45
52:S6:5:ILE:HG22	52:S6:124:LEU:HD21	1.97	0.45
53:S7:30:SER:HB3	53:S7:34:LEU:HD12	1.98	0.45
53:S7:91:ILE:CG1	53:S7:92:PHE:H	2.26	0.45
55:S9:54:ARG:HA	55:S9:57:ARG:HE	1.82	0.45
59:13:71:ILE:H	59:13:71:ILE:CD1	2.06	0.45
60:14:84:ARG:HA	60:14:119:THR:HG22	1.98	0.45
62:16:72:GLY:HA2	78:1S:1608:U:OP1	2.16	0.45
68:22:27:ILE:HG12	68:22:61:ILE:HB	1.99	0.45
68:22:34:ILE:O	68:22:38:LEU:HG	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:25:92:ILE:HG13	71:25:100:ILE:CG2	2.46	0.45
78:1S:128:U:H5'	78:1S:178:U:O2'	2.17	0.45
78:1S:142:G:O2'	78:1S:143:G:H5'	2.16	0.45
78:1S:342:C:H2'	78:1S:343:C:C6	2.51	0.45
78:1S:495:C:H5'	78:1S:496:G:C4'	2.45	0.45
78:1S:640:U:H2'	78:1S:641:G:H8	1.82	0.45
78:1S:822:U:H3'	78:1S:823:G:C5'	2.45	0.45
78:1S:868:G:O2'	78:1S:869:A:H5'	2.17	0.45
78:1S:1054:U:H2'	78:1S:1055:U:C6	2.52	0.45
78:1S:1353:U:H2'	78:1S:1354:G:C8	2.52	0.45
78:1S:1396:U:H2'	78:1S:1397:U:C6	2.52	0.45
79:2S:1932:A:H3'	79:2S:1933:A:H8	1.81	0.45
79:2S:2618:G:N3	79:2S:2618:G:H5''	2.32	0.45
79:2S:3204:C:H2'	79:2S:3205:G:C8	2.52	0.45
79:2S:3375:A:H2'	79:2S:3378:C:C6	2.51	0.45
2:L2:129:ALA:HB3	2:L2:132:ASN:ND2	2.32	0.45
3:L3:246:LEU:CD1	3:L3:247:ARG:HG3	2.47	0.45
4:L4:308:LYS:HG2	4:L4:309:ARG:N	2.32	0.45
8:L8:78:PHE:C	8:L8:80:TYR:N	2.70	0.45
11:61:142:LYS:O	11:61:142:LYS:HD3	2.16	0.45
11:61:171:VAL:HG13	11:61:172:LEU:N	2.32	0.45
14:64:14:LEU:HD23	20:70:151:PRO:HB3	1.99	0.45
15:65:38:ARG:HB2	15:65:62:TYR:CE2	2.51	0.45
16:66:12:LYS:HA	16:66:40:GLU:CB	2.41	0.45
17:67:167:ARG:O	33:83:60:ARG:HB3	2.17	0.45
19:69:102:LEU:O	19:69:106:LEU:HD13	2.17	0.45
20:70:8:GLN:O	20:70:61:ILE:HA	2.17	0.45
22:72:98:THR:OG1	22:72:104:ARG:HG2	2.17	0.45
25:75:91:ASN:O	25:75:95:ILE:HG13	2.17	0.45
35:85:109:ILE:HG23	79:2S:170:G:H5''	1.99	0.45
37:87:59:THR:HA	80:8S:41:A:O2'	2.16	0.45
43:93:64:VAL:HG12	43:93:65:ALA:N	2.32	0.45
45:RC:278:PHE:HE2	45:RC:287:PRO:HB2	1.81	0.45
46:S0:139:VAL:HA	48:S2:62:PRO:HG3	1.98	0.45
46:S0:188:LEU:HD21	46:S0:195:TRP:NE1	2.31	0.45
48:S2:108:ASN:HD22	48:S2:110:HIS:CE1	2.35	0.45
48:S2:129:ILE:O	48:S2:133:LYS:HG3	2.17	0.45
48:S2:157:LYS:HD3	48:S2:168:ARG:NH2	2.31	0.45
49:S3:84:ILE:HG23	49:S3:84:ILE:O	2.17	0.45
50:S4:222:LEU:HA	50:S4:225:VAL:HG23	1.99	0.45
52:S6:69:LEU:HA	52:S6:70:PRO:HD3	1.79	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:12:84:ASN:HB3	58:12:85:LYS:H	1.49	0.45
61:15:72:LYS:H	61:15:72:LYS:CD	2.29	0.45
62:16:31:VAL:O	62:16:32:ASN:HB2	2.16	0.45
63:17:21:TYR:N	63:17:22:PRO:CD	2.77	0.45
65:19:86:ARG:HH11	65:19:86:ARG:HG3	1.82	0.45
66:20:20:ILE:HD13	66:20:22:ILE:HB	1.98	0.45
70:24:100:VAL:O	70:24:100:VAL:HG13	2.17	0.45
78:1S:643:G:H2'	78:1S:644:C:H6	1.82	0.45
79:2S:16:A:H2'	79:2S:17:G:C8	2.52	0.45
79:2S:576:C:H2'	79:2S:577:C:C6	2.52	0.45
79:2S:835:G:H1'	79:2S:858:A:H61	1.82	0.45
79:2S:876:A:H4'	79:2S:1890:U:H4'	1.99	0.45
79:2S:938:C:O2'	79:2S:939:U:H5'	2.17	0.45
79:2S:1583:A:H3'	79:2S:1584:U:C6	2.52	0.45
79:2S:1643:A:H2'	79:2S:1644:C:C2	2.52	0.45
79:2S:2904:U:H2'	79:2S:2905:U:H6	1.82	0.45
1:L1:169:VAL:HB	1:L1:172:VAL:CG2	2.40	0.45
4:L4:68:GLY:HA2	79:2S:2401:A:O3'	2.17	0.45
4:L4:170:LYS:HE3	4:L4:178:LEU:CD1	2.46	0.45
5:L5:289:LYS:NZ	81:5S:63:A:H4'	2.32	0.45
6:L6:22:ARG:HH12	79:2S:608:A:H2'	1.82	0.45
7:L7:85:PHE:HE1	7:L7:87:VAL:HG22	1.81	0.45
8:L8:93:LEU:C	8:L8:95:ASN:H	2.20	0.45
9:L9:168:ARG:HH12	79:2S:3034:C:C4'	2.28	0.45
10:60:77:THR:HG22	10:60:82:ARG:HA	1.99	0.45
15:65:50:ARG:HD2	79:2S:319:A:OP1	2.16	0.45
16:66:16:VAL:HG13	16:66:80:PHE:HE1	1.81	0.45
19:69:160:GLU:O	19:69:160:GLU:HG2	2.17	0.45
25:75:91:ASN:HD22	25:75:93:TYR:HD2	1.63	0.45
26:76:56:VAL:HG22	26:76:57:LEU:N	2.32	0.45
32:82:61:LYS:HA	32:82:64:LYS:HD2	1.99	0.45
40:90:104:PRO:HG2	79:2S:3119:U:H4'	1.99	0.45
41:91:11:ARG:HE	78:1S:1126:G:H5'	1.81	0.45
45:RC:31:ASN:O	45:RC:46:LYS:HA	2.16	0.45
47:S1:44:GLY:HA3	60:14:33:LEU:HD21	1.98	0.45
47:S1:141:ALA:HB2	47:S1:210:ILE:HA	1.98	0.45
47:S1:181:LEU:H	47:S1:181:LEU:HD13	1.81	0.45
48:S2:35:TRP:CZ3	48:S2:46:LYS:HG3	2.51	0.45
50:S4:103:TYR:CE1	50:S4:189:LEU:HD11	2.52	0.45
61:15:31:GLU:O	61:15:35:LYS:HD3	2.17	0.45
64:18:38:VAL:HG23	64:18:38:VAL:O	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:25:65:LEU:HD12	71:25:76:ALA:HB1	1.99	0.45
73:27:72:LYS:HD3	73:27:73:LEU:H	1.82	0.45
78:1S:321:C:H3'	78:1S:322:G:C5'	2.47	0.45
78:1S:866:G:H2'	78:1S:867:G:H8	1.82	0.45
78:1S:1073:G:H3'	78:1S:1074:G:H5''	1.98	0.45
78:1S:1112:G:H1'	78:1S:1133:A:H61	1.81	0.45
78:1S:1313:A:H2'	78:1S:1315:U:OP1	2.17	0.45
78:1S:1405:G:H2'	78:1S:1406:A:C8	2.52	0.45
78:1S:1533:C:H4'	78:1S:1539:G:N1	2.32	0.45
79:2S:149:U:O5'	79:2S:149:U:H6	2.00	0.45
79:2S:642:U:H6	79:2S:642:U:O5'	2.00	0.45
79:2S:713:U:H2'	79:2S:714:G:O4'	2.16	0.45
79:2S:1064:A:N7	79:2S:1096:U:O2	2.49	0.45
79:2S:1535:A:H2'	79:2S:1536:G:O4'	2.17	0.45
79:2S:2516:U:H2'	79:2S:2517:U:O4'	2.18	0.45
79:2S:2974:U:H2'	79:2S:2975:U:C6	2.52	0.45
79:2S:3322:A:H2'	79:2S:3323:A:C8	2.52	0.45
79:2S:3334:U:O4'	79:2S:3370:A:N1	2.50	0.45
1:L1:14:LYS:HD2	1:L1:19:TYR:CD2	2.52	0.44
2:L2:181:LYS:NZ	2:L2:184:ARG:HG3	2.33	0.44
2:L2:196:TRP:HZ2	79:2S:2148:U:H5''	1.82	0.44
2:L2:244:GLY:O	79:2S:2153:U:H5''	2.17	0.44
5:L5:129:TYR:HE1	5:L5:175:HIS:CD2	2.35	0.44
8:L8:105:LYS:HE3	8:L8:108:ARG:HH22	1.81	0.44
11:61:143:ARG:HG3	11:61:143:ARG:NH1	2.33	0.44
15:65:93:LYS:HE2	79:2S:276:U:O2	2.17	0.44
23:73:45:ARG:HH11	23:73:45:ARG:HG3	1.82	0.44
24:74:60:LYS:HD2	24:74:63:ILE:HD11	1.98	0.44
25:75:115:ARG:HB3	25:75:117:ASN:OD1	2.16	0.44
27:77:17:ARG:HH12	79:2S:1633:C:H5	1.65	0.44
32:82:11:LYS:O	32:82:12:LYS:HB2	2.16	0.44
38:88:42:LYS:HE2	38:88:55:VAL:HG13	1.97	0.44
45:RC:23:LEU:HD21	45:RC:310:ILE:HD13	1.98	0.44
45:RC:136:ILE:H	45:RC:136:ILE:CD1	2.27	0.44
45:RC:214:ALA:HB1	45:RC:240:VAL:HG21	1.99	0.44
47:S1:171:ILE:HA	47:S1:174:LYS:HE3	1.99	0.44
48:S2:181:SER:HB3	78:1S:4:C:H4'	1.98	0.44
50:S4:242:LYS:HD2	50:S4:242:LYS:N	2.33	0.44
51:S5:37:GLN:HB3	62:16:53:LEU:HD13	1.98	0.44
51:S5:70:VAL:HG11	62:16:46:PHE:CD2	2.52	0.44
51:S5:100:ASN:OD1	51:S5:180:ARG:HD3	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:13:15:ALA:C	78:1S:959:U:H5'	2.37	0.44
63:17:30:THR:O	63:17:34:LEU:HB2	2.16	0.44
69:23:74:VAL:HG12	69:23:75:GLN:N	2.26	0.44
69:23:97:ASP:O	69:23:100:ASP:HB2	2.18	0.44
70:24:14:SER:HA	70:24:21:LYS:HD2	1.99	0.44
72:26:86:VAL:O	72:26:87:ARG:HG3	2.17	0.44
77:31:117:LEU:O	77:31:118:ARG:HB2	2.17	0.44
78:1S:460:A:H2'	78:1S:460:A:N3	2.32	0.44
79:2S:201:A:H2'	79:2S:202:G:H8	1.81	0.44
79:2S:638:C:H2'	79:2S:639:G:C8	2.52	0.44
79:2S:772:U:H2'	79:2S:773:G:O4'	2.16	0.44
79:2S:1498:A:H2'	79:2S:1499:C:C6	2.52	0.44
79:2S:1939:G:H2'	79:2S:1940:G:O4'	2.18	0.44
79:2S:2562:A:H2'	79:2S:2563:G:O4'	2.17	0.44
79:2S:2841:G:H2'	79:2S:2898:G:N2	2.32	0.44
79:2S:3057:U:O2	79:2S:3057:U:H2'	2.15	0.44
80:8S:106:C:H5''	80:8S:108:C:OP2	2.17	0.44
1:L1:60:ARG:HD3	1:L1:60:ARG:HA	1.84	0.44
1:L1:165:LEU:HD13	1:L1:184:LEU:HD11	1.99	0.44
2:L2:205:ASN:ND2	2:L2:205:ASN:N	2.65	0.44
4:L4:58:HIS:HA	4:L4:90:PHE:CE1	2.53	0.44
5:L5:180:PHE:HB2	5:L5:190:ILE:HD11	1.99	0.44
5:L5:211:LEU:HD22	5:L5:215:ASP:HB3	1.98	0.44
6:L6:102:ASN:HB2	6:L6:103:VAL:H	1.59	0.44
7:L7:138:TYR:HB2	7:L7:234:GLU:HG2	1.98	0.44
10:60:15:LYS:HE3	79:2S:1047:A:C5'	2.34	0.44
14:64:42:LYS:HD3	14:64:42:LYS:N	2.31	0.44
15:65:117:ASN:O	15:65:118:SER:HB3	2.17	0.44
17:67:119:VAL:CG2	17:67:144:SER:HB3	2.47	0.44
19:69:104:ARG:HD3	19:69:105:LEU:N	2.32	0.44
23:73:40:LYS:HB2	23:73:57:MET:O	2.17	0.44
23:73:102:ILE:HG23	23:73:110:LYS:HB3	1.99	0.44
31:81:107:VAL:HG12	31:81:108:VAL:N	2.25	0.44
32:82:26:HIS:CD2	79:2S:655:C:H5'	2.52	0.44
36:86:80:PHE:O	36:86:84:LYS:HG3	2.17	0.44
38:88:43:PHE:HB2	38:88:54:LEU:HB3	1.98	0.44
45:RC:278:PHE:CE2	45:RC:287:PRO:HB2	2.52	0.44
47:S1:33:LYS:HB3	47:S1:97:LEU:HD13	1.99	0.44
47:S1:58:SER:O	47:S1:61:LEU:HD22	2.17	0.44
49:S3:23:GLU:O	49:S3:27:ARG:HB2	2.17	0.44
50:S4:42:LEU:HD23	50:S4:101:LEU:CD1	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:S7:185:ILE:H	53:S7:185:ILE:CD1	2.23	0.44
57:11:80:MET:HB3	57:11:83:THR:CG2	2.46	0.44
57:11:117:VAL:HG12	57:11:118:GLN:N	2.32	0.44
57:11:123:VAL:HG22	57:11:124:THR:N	2.32	0.44
62:16:81:ILE:HG13	62:16:82:ARG:N	2.32	0.44
62:16:131:GLY:HA3	62:16:136:SER:O	2.17	0.44
67:21:9:VAL:HG22	67:21:10:GLU:H	1.82	0.44
71:25:54:VAL:N	71:25:55:PRO:HD2	2.32	0.44
78:1S:17:C:H4'	78:1S:1109:G:C8	2.52	0.44
78:1S:52:U:H2'	78:1S:53:G:H8	1.81	0.44
78:1S:66:U:O2'	78:1S:67:A:H5'	2.18	0.44
78:1S:120:U:H2'	78:1S:121:U:C6	2.53	0.44
78:1S:851:U:H2'	78:1S:852:C:O4'	2.17	0.44
78:1S:1269:U:H4'	78:1S:1270:G:C5'	2.46	0.44
79:2S:35:A:O2'	79:2S:809:G:N3	2.50	0.44
79:2S:840:C:H2'	79:2S:841:A:C8	2.51	0.44
79:2S:1393:A:H2'	79:2S:1394:A:O4'	2.16	0.44
2:L2:92:LYS:HA	2:L2:103:PRO:CD	2.47	0.44
2:L2:225:ILE:HB	2:L2:238:ILE:HA	1.99	0.44
2:L2:225:ILE:HG12	2:L2:234:LYS:HA	1.99	0.44
3:L3:16:PHE:CE2	79:2S:3045:G:H4'	2.52	0.44
3:L3:196:ARG:HD2	3:L3:199:PHE:CD2	2.52	0.44
6:L6:52:VAL:HG21	6:L6:65:ILE:HB	1.99	0.44
6:L6:54:TYR:HE2	6:L6:56:LYS:O	1.99	0.44
6:L6:98:VAL:HA	6:L6:101:PHE:CE2	2.53	0.44
7:L7:117:VAL:HG12	7:L7:118:LYS:H	1.82	0.44
8:L8:56:VAL:HA	8:L8:59:GLN:HG2	2.00	0.44
8:L8:80:TYR:HD2	8:L8:80:TYR:HA	1.74	0.44
11:61:8:PRO:HD2	11:61:10:ARG:HG3	1.98	0.44
13:63:59:ARG:HA	13:63:69:VAL:HA	1.97	0.44
16:66:124:LEU:HG	16:66:126:VAL:CG1	2.45	0.44
18:68:122:ILE:HG22	18:68:123:THR:O	2.17	0.44
19:69:77:GLY:H	19:69:80:LYS:HB2	1.82	0.44
22:72:18:ASP:O	22:72:104:ARG:HA	2.17	0.44
32:82:82:LEU:O	32:82:82:LEU:HD13	2.17	0.44
34:84:102:LYS:N	34:84:102:LYS:HD2	2.31	0.44
37:87:17:THR:HG22	37:87:18:LEU:N	2.32	0.44
42:92:28:TYR:HE1	79:2S:2768:U:H4'	1.83	0.44
43:93:75:ALA:O	43:93:79:VAL:HG23	2.17	0.44
45:RC:201:THR:HG21	45:RC:240:VAL:HG12	1.99	0.44
46:S0:143:VAL:CG1	46:S0:156:VAL:HG12	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:156:VAL:O	50:S4:157:ASN:HB2	2.17	0.44
52:S6:64:LYS:HD3	52:S6:67:VAL:CG1	2.48	0.44
62:16:128:LYS:HB2	62:16:137:ARG:HH22	1.83	0.44
63:17:87:GLU:O	63:17:88:VAL:HG12	2.18	0.44
65:19:31:PRO:HD2	65:19:34:VAL:CG1	2.48	0.44
66:20:23:ARG:HG3	66:20:91:ILE:O	2.18	0.44
72:26:87:ARG:HD2	78:1S:1796:C:OP1	2.17	0.44
74:28:53:ILE:HG22	74:28:54:LEU:H	1.82	0.44
78:1S:176:C:H2'	78:1S:177:U:H5'	1.98	0.44
78:1S:430:G:H2'	78:1S:431:C:C6	2.53	0.44
78:1S:1313:A:C2	78:1S:1315:U:H5'	2.53	0.44
79:2S:517:G:H8	79:2S:517:G:C5'	2.31	0.44
79:2S:639:G:H2'	79:2S:640:U:O4'	2.18	0.44
79:2S:1151:U:H3'	79:2S:1152:G:H21	1.82	0.44
79:2S:1156:C:H2'	79:2S:1157:G:O4'	2.17	0.44
79:2S:1334:U:H2'	79:2S:1335:C:H6	1.81	0.44
79:2S:2946:A:H2'	79:2S:2982:A:N7	2.33	0.44
80:8S:76:C:O2'	80:8S:77:A:H5'	2.18	0.44
1:L1:123:LEU:HD23	1:L1:128:LEU:HD12	1.99	0.44
1:L1:138:VAL:HG12	1:L1:139:SER:N	2.32	0.44
3:L3:55:THR:C	3:L3:56:ILE:HD12	2.38	0.44
4:L4:34:ILE:O	4:L4:38:VAL:HG23	2.18	0.44
4:L4:240:PRO:HB2	79:2S:1383:G:H4'	2.00	0.44
5:L5:142:PHE:HB3	5:L5:171:LEU:HD23	2.00	0.44
6:L6:161:ALA:HB2	79:2S:3215:A:H1'	1.99	0.44
7:L7:39:GLU:O	7:L7:43:ILE:HG13	2.17	0.44
8:L8:159:PRO:HB2	8:L8:162:LEU:HD12	1.99	0.44
8:L8:241:LYS:HB3	8:L8:241:LYS:HZ2	1.82	0.44
8:L8:241:LYS:HB2	79:2S:2586:G:C6	2.53	0.44
9:L9:25:VAL:HG12	9:L9:26:LYS:N	2.32	0.44
15:65:14:LYS:HE2	79:2S:269:G:C5'	2.47	0.44
17:67:83:TRP:O	79:2S:2352:A:H5''	2.17	0.44
18:68:54:LEU:HB3	18:68:58:ASN:HB2	2.00	0.44
23:73:23:MET:CB	23:73:98:ASN:HB3	2.48	0.44
23:73:74:MET:HA	23:73:75:PRO:HD3	1.79	0.44
28:78:43:ILE:O	28:78:46:ASP:HB2	2.17	0.44
32:82:19:ARG:HG2	32:82:20:HIS:H	1.82	0.44
45:RC:259:GLY:HA3	45:RC:275:ARG:HG2	1.99	0.44
50:S4:10:LYS:NZ	55:S9:2:PRO:HB3	2.33	0.44
50:S4:122:LYS:C	50:S4:123:LEU:HD12	2.37	0.44
51:S5:26:ALA:HB3	62:16:28:LEU:HA	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:S6:91:GLU:HG2	52:S6:92:ARG:H	1.83	0.44
53:S7:49:ILE:HD11	53:S7:172:VAL:HG22	1.98	0.44
60:14:33:LEU:H	60:14:33:LEU:HD12	1.81	0.44
62:16:109:PHE:CD1	62:16:116:LEU:HG	2.51	0.44
66:20:53:LYS:CB	66:20:92:ASP:HB2	2.46	0.44
68:22:97:ARG:HB3	68:22:97:ARG:HH11	1.80	0.44
75:29:10:HIS:O	75:29:12:ARG:HD3	2.17	0.44
78:1S:872:G:N2	78:1S:1047:G:H4'	2.31	0.44
78:1S:1125:A:O5'	78:1S:1125:A:H8	2.01	0.44
78:1S:1375:A:O2'	78:1S:1376:C:H5'	2.17	0.44
79:2S:28:C:H4'	79:2S:60:A:N1	2.31	0.44
79:2S:126:U:H2'	79:2S:127:G:C8	2.53	0.44
79:2S:649:A:H4'	79:2S:2869:U:H5'	2.00	0.44
79:2S:863:C:H2'	79:2S:864:G:O4'	2.17	0.44
79:2S:1650:G:H2'	79:2S:1651:U:C6	2.52	0.44
79:2S:1719:G:H4'	79:2S:1732:U:H4'	1.99	0.44
79:2S:1844:C:C3'	79:2S:1845:G:H5''	2.48	0.44
79:2S:1953:G:H2'	79:2S:2088:A:H61	1.83	0.44
79:2S:1959:G:C2'	79:2S:1960:A:H5'	2.44	0.44
79:2S:2251:G:H2'	79:2S:2252:A:O4'	2.16	0.44
79:2S:2427:U:H2'	79:2S:2428:U:C6	2.53	0.44
79:2S:2708:C:H2'	79:2S:2709:C:C6	2.52	0.44
80:8S:57:C:H2'	80:8S:58:G:C8	2.52	0.44
2:L2:3:ARG:HH11	2:L2:3:ARG:HG3	1.82	0.44
2:L2:225:ILE:HG22	2:L2:226:SER:N	2.31	0.44
3:L3:43:LEU:HD12	3:L3:43:LEU:N	2.32	0.44
3:L3:45:SER:H	3:L3:181:ILE:CG2	2.31	0.44
3:L3:96:PRO:HD3	79:2S:3243:A:O4'	2.17	0.44
4:L4:327:LEU:O	4:L4:328:ASN:HB3	2.17	0.44
5:L5:99:TYR:HE1	5:L5:103:LEU:HD22	1.82	0.44
9:L9:120:ASP:OD2	79:2S:3033:A:H2	2.01	0.44
11:61:118:PRO:HD3	64:18:13:HIS:NE2	2.33	0.44
15:65:117:ASN:HB3	15:65:118:SER:H	1.56	0.44
18:68:69:ARG:HE	79:2S:784:A:H2'	1.83	0.44
30:80:77:LEU:O	30:80:81:VAL:HG13	2.18	0.44
33:83:23:ASN:HD21	79:2S:633:C:C1'	2.29	0.44
33:83:54:ARG:N	33:83:54:ARG:HD2	2.33	0.44
33:83:77:ASN:HD22	79:2S:1180:A:H5''	1.83	0.44
48:S2:89:GLN:HB2	78:1S:1145:U:O2	2.18	0.44
49:S3:32:GLU:HB3	49:S3:54:ARG:HB3	2.00	0.44
50:S4:45:ILE:CG1	50:S4:49:ARG:HD3	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:195:ILE:HA	50:S4:210:ILE:CD1	2.47	0.44
53:S7:62:VAL:HG12	53:S7:64:VAL:H	1.82	0.44
55:S9:90:LYS:O	55:S9:95:TYR:HB3	2.18	0.44
56:10:11:ILE:HD12	56:10:42:VAL:HG22	2.00	0.44
56:10:27:PHE:HB3	56:10:40:LEU:HD23	1.99	0.44
59:13:78:ASN:HB2	59:13:80:LEU:HD23	1.99	0.44
66:20:59:PRO:HG2	78:1S:1516:A:O4'	2.18	0.44
66:20:85:ARG:HD2	66:20:85:ARG:H	1.82	0.44
68:22:65:LEU:H	68:22:65:LEU:HD13	1.81	0.44
71:25:93:SER:CB	71:25:100:ILE:H	2.31	0.44
72:26:8:ASN:HD22	78:1S:1791:A:H3'	1.82	0.44
76:30:14:VAL:O	76:30:18:THR:HG23	2.17	0.44
78:1S:344:A:H2'	78:1S:345:U:H5'	1.99	0.44
78:1S:344:A:C2'	78:1S:345:U:H5'	2.48	0.44
78:1S:400:A:H4'	78:1S:401:A:H5'	1.98	0.44
78:1S:475:A:H2'	78:1S:476:U:O4'	2.18	0.44
78:1S:482:U:H2'	78:1S:483:A:C8	2.53	0.44
78:1S:487:G:N2	78:1S:500:C:H42	2.15	0.44
78:1S:900:A:O2'	78:1S:901:G:H5'	2.17	0.44
78:1S:900:A:H1'	78:1S:915:A:H2	1.83	0.44
79:2S:898:U:H2'	79:2S:899:U:O4'	2.17	0.44
79:2S:1054:A:H5''	79:2S:2637:A:N6	2.29	0.44
79:2S:1499:C:H2'	79:2S:1500:G:C8	2.52	0.44
79:2S:1528:G:C2	79:2S:1529:A:H1'	2.52	0.44
79:2S:1550:C:H2'	79:2S:1551:C:C6	2.52	0.44
79:2S:1597:C:H2'	79:2S:1598:G:C8	2.53	0.44
79:2S:1779:C:H3'	79:2S:1780:G:C5'	2.48	0.44
79:2S:1807:G:H2'	79:2S:1808:G:O4'	2.16	0.44
79:2S:2206:G:O2'	79:2S:2207:A:H5'	2.17	0.44
1:L1:198:TRP:O	1:L1:199:GLN:C	2.56	0.44
3:L3:21:ARG:HH12	79:2S:2991:A:H5'	1.81	0.44
3:L3:32:PHE:HE2	3:L3:159:ARG:NH2	2.11	0.44
3:L3:146:ARG:HE	3:L3:146:ARG:CA	2.29	0.44
6:L6:51:ARG:HG2	6:L6:51:ARG:HH11	1.82	0.44
8:L8:71:VAL:HB	8:L8:75:ILE:HB	1.99	0.44
9:L9:63:LYS:CE	79:2S:1210:U:H5'	2.44	0.44
9:L9:105:GLU:HG3	9:L9:108:GLY:HA2	1.97	0.44
13:63:24:VAL:HB	13:63:26:PHE:CE2	2.52	0.44
15:65:191:TRP:O	15:65:195:ASN:ND2	2.51	0.44
18:68:107:THR:H	18:68:110:ALA:HB3	1.83	0.44
19:69:138:LEU:O	19:69:138:LEU:HD23	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:69:158:GLU:H	19:69:158:GLU:HG2	1.66	0.44
20:70:8:GLN:HB2	20:70:64:ILE:HD11	1.99	0.44
20:70:72:VAL:HG13	20:70:96:ASP:C	2.38	0.44
23:73:81:GLN:H	23:73:95:PHE:HD2	1.66	0.44
27:77:121:ARG:HH11	27:77:126:LYS:HD3	1.83	0.44
28:78:77:LYS:HD2	28:78:80:THR:HG21	1.99	0.44
31:81:60:TRP:HZ2	79:2S:1457:U:HO2'	1.66	0.44
35:85:111:PHE:N	35:85:112:PRO:HD3	2.33	0.44
37:87:28:HIS:HD2	79:2S:815:G:H5'	1.83	0.44
39:89:24:PRO:HB2	39:89:27:ILE:HD12	2.00	0.44
41:91:4:LYS:HE3	78:1S:1774:G:C8	2.53	0.44
44:P0:59:VAL:HA	44:P0:62:ALA:HB3	2.00	0.44
45:RC:23:LEU:O	45:RC:293:ALA:HB2	2.17	0.44
46:S0:102:PHE:O	46:S0:103:THR:HB	2.18	0.44
47:S1:121:ILE:HG23	47:S1:161:ILE:HG23	2.00	0.44
47:S1:129:THR:OG1	47:S1:133:TYR:HB2	2.18	0.44
48:S2:38:VAL:HG13	48:S2:39:THR:HG23	1.99	0.44
49:S3:126:VAL:HG12	49:S3:131:ALA:CB	2.48	0.44
50:S4:192:ILE:HG22	50:S4:193:GLY:H	1.82	0.44
51:S5:37:GLN:HB3	62:16:53:LEU:CD2	2.46	0.44
51:S5:59:VAL:HG12	51:S5:60:ASP:N	2.33	0.44
56:10:55:VAL:HB	56:10:68:LEU:CD1	2.48	0.44
57:11:118:GLN:HG2	57:11:119:VAL:N	2.33	0.44
61:15:16:SER:HA	61:15:20:VAL:O	2.17	0.44
61:15:32:ASP:O	61:15:35:LYS:HB2	2.17	0.44
64:18:33:THR:HA	64:18:38:VAL:O	2.17	0.44
65:19:4:VAL:HG22	65:19:5:SER:N	2.32	0.44
69:23:98:GLU:O	69:23:99:ASN:HB2	2.18	0.44
70:24:12:VAL:HG12	70:24:21:LYS:HE3	1.98	0.44
78:1S:697:C:O2'	78:1S:698:U:H5''	2.18	0.44
78:1S:801:G:H2'	78:1S:802:G:O4'	2.17	0.44
78:1S:939:A:H2'	78:1S:940:A:C8	2.52	0.44
79:2S:496:C:H1'	79:2S:622:A:H2	1.82	0.44
79:2S:886:C:H2'	79:2S:887:G:C8	2.52	0.44
79:2S:949:C:H2'	79:2S:950:G:O4'	2.18	0.44
79:2S:1011:A:H2'	79:2S:1012:G:C8	2.52	0.44
79:2S:1052:U:O2'	81:5S:103:A:H5''	2.18	0.44
79:2S:1132:C:H2'	79:2S:1133:A:C8	2.53	0.44
79:2S:1860:G:H2'	79:2S:1861:G:C8	2.52	0.44
79:2S:1887:A:C2'	79:2S:1888:U:H5'	2.47	0.44
79:2S:2592:G:H4'	79:2S:2594:C:N3	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:2:SER:HA	79:2S:2939:G:OP2	2.18	0.44
4:L4:98:ARG:HD2	4:L4:99:MET:O	2.17	0.44
4:L4:317:PRO:HG3	4:L4:323:VAL:HG22	2.00	0.44
7:L7:94:LYS:HA	79:2S:1139:G:O3'	2.18	0.44
8:L8:166:LEU:HB2	8:L8:167:PRO:HD3	2.00	0.44
10:60:3:ARG:HG2	10:60:123:HIS:CE1	2.52	0.44
14:64:42:LYS:O	14:64:60:LEU:HG	2.17	0.44
16:66:130:LYS:HB2	79:2S:1316:C:C5	2.53	0.44
19:69:6:THR:HG23	79:2S:1498:A:OP1	2.17	0.44
32:82:72:LYS:HB2	32:82:92:TYR:CD1	2.52	0.44
34:84:6:THR:HG21	79:2S:1487:G:H1'	2.00	0.44
38:88:9:LYS:O	38:88:13:GLU:HG3	2.17	0.44
40:90:79:GLU:HB3	40:90:82:LEU:HB2	2.00	0.44
45:RC:29:GLN:C	45:RC:31:ASN:H	2.20	0.44
46:S0:74:VAL:HG23	46:S0:118:PRO:HB3	2.00	0.44
47:S1:36:SER:HB2	47:S1:41:ARG:NH2	2.33	0.44
47:S1:168:ILE:O	47:S1:172:LEU:HG	2.17	0.44
49:S3:162:GLN:HB3	49:S3:163:PRO:HD3	1.99	0.44
50:S4:95:THR:O	50:S4:96:ASN:HB2	2.17	0.44
50:S4:192:ILE:HG22	50:S4:193:GLY:N	2.32	0.44
51:S5:29:ILE:HA	62:16:37:THR:CG2	2.41	0.44
51:S5:220:VAL:C	51:S5:222:LYS:H	2.21	0.44
57:11:129:ARG:HG2	57:11:129:ARG:NH1	2.33	0.44
66:20:34:LEU:O	66:20:34:LEU:HD13	2.18	0.44
66:20:72:ASN:HB2	66:20:73:GLY:H	1.51	0.44
68:22:41:MET:CB	68:22:47:ILE:HG12	2.47	0.44
70:24:21:LYS:HB3	70:24:75:VAL:CG1	2.48	0.44
70:24:112:LYS:O	70:24:116:LYS:HG3	2.17	0.44
75:29:21:CYS:C	75:29:23:VAL:H	2.21	0.44
78:1S:1315:U:H2'	78:1S:1316:G:C8	2.53	0.44
79:2S:928:C:H2'	79:2S:929:A:C8	2.52	0.44
79:2S:1128:U:H2'	79:2S:1129:A:O4'	2.17	0.44
79:2S:1371:G:H2'	79:2S:1372:C:C6	2.53	0.44
79:2S:1926:C:H4'	79:2S:1927:G:C4	2.53	0.44
2:L2:184:ARG:HA	2:L2:187:HIS:HD2	1.82	0.44
2:L2:200:ARG:NH2	2:L2:200:ARG:HB2	2.32	0.44
4:L4:89:ALA:O	4:L4:90:PHE:HB2	2.18	0.44
5:L5:115:LEU:HD22	5:L5:115:LEU:N	2.33	0.44
8:L8:221:ASN:HA	8:L8:225:LYS:HE2	2.00	0.44
9:L9:8:GLN:HG2	9:L9:68:LEU:HD13	1.99	0.44
9:L9:101:VAL:HG13	9:L9:113:GLU:O	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:60:3:ARG:HD2	10:60:4:ARG:O	2.16	0.44
11:61:28:ASP:O	11:61:32:ARG:HG3	2.17	0.44
18:68:163:PRO:HB2	18:68:173:GLU:OE1	2.17	0.44
20:70:12:ARG:HB3	20:70:24:LEU:HD23	2.00	0.44
25:75:92:LYS:HG2	79:2S:1830:G:H5''	2.00	0.44
29:79:37:PRO:O	29:79:41:ARG:HB2	2.18	0.44
30:80:50:VAL:HG11	79:2S:2552:C:O2'	2.18	0.44
31:81:5:LYS:O	31:81:7:VAL:N	2.41	0.44
31:81:79:ARG:HA	31:81:89:LEU:HA	2.00	0.44
32:82:25:TYR:HD2	32:82:28:VAL:HG21	1.83	0.44
32:82:68:PRO:HD3	79:2S:1403:C:OP1	2.18	0.44
36:86:54:GLU:HA	36:86:57:LEU:HB2	2.00	0.44
44:P0:11:TYR:HE1	44:P0:15:LEU:HD11	1.82	0.44
48:S2:53:ILE:CG2	48:S2:56:ILE:HD12	2.47	0.44
50:S4:57:ASN:HB2	50:S4:60:GLU:HG3	2.00	0.44
50:S4:151:ASP:OD1	50:S4:152:PRO:HD2	2.17	0.44
51:S5:80:LYS:HD2	51:S5:83:ARG:HD3	1.99	0.44
53:S7:39:ARG:N	53:S7:40:PRO:CD	2.81	0.44
55:S9:126:ARG:HH11	55:S9:144:PRO:HG2	1.82	0.44
55:S9:134:ILE:HA	55:S9:157:ASP:O	2.18	0.44
56:10:72:GLY:O	56:10:76:LEU:HD13	2.18	0.44
59:13:146:ALA:O	59:13:150:VAL:HG12	2.18	0.44
78:1S:34:G:H2'	78:1S:35:U:H6	1.83	0.44
78:1S:444:C:N4	78:1S:458:G:H2'	2.33	0.44
78:1S:920:U:H3'	78:1S:921:U:H5''	1.99	0.44
78:1S:921:U:H2'	78:1S:922:G:O4'	2.18	0.44
78:1S:1387:G:H8	78:1S:1387:G:O5'	2.01	0.44
78:1S:1542:G:N2	78:1S:1568:C:H1'	2.33	0.44
79:2S:95:A:H2'	79:2S:96:G:O4'	2.18	0.44
79:2S:371:G:N2	79:2S:373:A:H3'	2.32	0.44
79:2S:641:C:H2'	79:2S:642:U:O4'	2.17	0.44
79:2S:653:A:H2'	79:2S:654:C:H6	1.82	0.44
79:2S:787:G:H2'	79:2S:788:C:C6	2.53	0.44
79:2S:1414:G:H2'	79:2S:1415:U:O4'	2.17	0.44
79:2S:1533:U:H5'	79:2S:1799:A:O2'	2.18	0.44
79:2S:1799:A:H2'	79:2S:1800:A:C8	2.52	0.44
79:2S:2457:G:H1	79:2S:2461:A:N6	2.16	0.44
79:2S:2598:G:H2'	79:2S:2599:U:C6	2.52	0.44
2:L2:190:ARG:HH21	2:L2:190:ARG:HG2	1.83	0.44
3:L3:112:ASP:O	3:L3:116:ARG:HB2	2.18	0.44
4:L4:188:ARG:HB2	4:L4:198:ARG:O	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:L5:177:GLU:O	5:L5:190:ILE:HD13	2.18	0.44
6:L6:26:ARG:HB3	79:2S:502:U:H4'	1.99	0.44
6:L6:161:ALA:HB3	14:64:118:PHE:CE2	2.53	0.44
7:L7:105:LEU:CD2	79:2S:1101:G:H1'	2.48	0.44
15:65:142:ILE:HA	15:65:145:ASP:HB2	2.00	0.44
16:66:143:THR:HG21	16:66:150:GLU:OE2	2.17	0.44
24:74:17:ARG:NH1	79:2S:3050:U:H5''	2.33	0.44
31:81:15:ASN:O	31:81:19:ARG:HD3	2.18	0.44
32:82:19:ARG:NH1	32:82:28:VAL:HG13	2.33	0.44
32:82:20:HIS:O	32:82:21:HIS:HB2	2.18	0.44
36:86:43:LEU:O	36:86:47:ILE:HG13	2.18	0.44
45:RC:203:THR:HB	45:RC:243:LEU:HB2	1.98	0.44
46:S0:49:ASN:CB	46:S0:52:LYS:HE2	2.47	0.44
48:S2:67:GLN:O	48:S2:71:THR:HG23	2.18	0.44
48:S2:141:ARG:O	48:S2:151:PRO:HB3	2.18	0.44
49:S3:37:VAL:HG12	49:S3:50:ILE:HD12	1.99	0.44
50:S4:247:SER:O	50:S4:251:GLU:HG3	2.18	0.44
52:S6:28:PHE:O	52:S6:29:ASP:HB2	2.16	0.44
52:S6:45:PHE:HD1	52:S6:121:LEU:HD21	1.82	0.44
57:11:129:ARG:HD2	78:1S:335:U:O2'	2.18	0.44
60:14:135:ARG:O	72:26:26:CYS:HB2	2.17	0.44
61:15:25:LEU:HB3	61:15:87:PRO:HB3	1.99	0.44
61:15:32:ASP:O	61:15:36:LEU:HD23	2.18	0.44
62:16:131:GLY:HA3	62:16:137:ARG:HA	1.98	0.44
63:17:29:GLN:NE2	63:17:29:GLN:H	2.15	0.44
67:21:39:VAL:HG12	67:21:45:ALA:HA	1.98	0.44
68:22:19:LYS:NZ	78:1S:1095:U:H4'	2.33	0.44
68:22:85:ASP:O	68:22:89:TRP:CD1	2.71	0.44
69:23:30:LYS:HG3	69:23:34:LEU:HD12	2.00	0.44
73:27:37:CYS:HA	73:27:38:PRO:HD3	1.80	0.44
78:1S:24:U:H2'	78:1S:26:A:C8	2.52	0.44
78:1S:172:C:H2'	78:1S:173:A:C8	2.53	0.44
78:1S:416:A:H5'	78:1S:417:A:H8	1.82	0.44
78:1S:880:C:H2'	78:1S:881:A:C8	2.53	0.44
78:1S:1238:A:H2'	78:1S:1239:U:H5'	2.00	0.44
78:1S:1254:U:H2'	78:1S:1255:G:O4'	2.18	0.44
79:2S:594:U:H2'	79:2S:609:G:O6	2.17	0.44
79:2S:619:A:H4'	79:2S:620:U:C5	2.53	0.44
79:2S:764:U:H3	79:2S:767:U:H3	1.65	0.44
79:2S:1112:A:O2'	79:2S:1370:G:H4'	2.17	0.44
79:2S:1927:G:H3'	79:2S:1927:G:N3	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2554:A:H1'	79:2S:2555:G:OP1	2.18	0.44
79:2S:2667:A:H2'	79:2S:2668:U:O4'	2.18	0.44
79:2S:3078:U:O2	79:2S:3078:U:H2'	2.17	0.44
79:2S:3193:C:H2'	79:2S:3194:C:H6	1.83	0.44
2:L2:47:GLN:O	2:L2:60:LYS:HB2	2.18	0.43
6:L6:69:PHE:O	6:L6:73:GLY:HA2	2.18	0.43
9:L9:41:ILE:CD1	9:L9:43:VAL:HG13	2.47	0.43
11:61:92:ARG:HH21	11:61:94:ARG:HH21	1.66	0.43
13:63:32:LYS:HE3	79:2S:685:G:OP2	2.17	0.43
13:63:95:ILE:HG22	13:63:96:ALA:N	2.33	0.43
15:65:13:LYS:O	15:65:19:LEU:HB2	2.17	0.43
15:65:24:ARG:HH12	79:2S:2435:G:H4'	1.82	0.43
17:67:36:ILE:O	17:67:36:ILE:HG12	2.18	0.43
19:69:62:ARG:HG3	19:69:62:ARG:NH2	2.32	0.43
20:70:89:ASN:HD21	21:71:156:TYR:HB3	1.83	0.43
23:73:136:VAL:HG12	23:73:137:VAL:N	2.33	0.43
26:76:13:ARG:O	26:76:17:LYS:HB2	2.18	0.43
30:80:16:LEU:HD13	30:80:16:LEU:C	2.37	0.43
37:87:17:THR:C	37:87:25:ARG:HA	2.38	0.43
41:91:5:TRP:HD1	78:1S:1783:C:OP2	2.01	0.43
45:RC:21:THR:HG21	45:RC:38:ARG:NE	2.31	0.43
46:S0:139:VAL:HG13	46:S0:141:ILE:HG13	1.99	0.43
50:S4:70:VAL:HG13	50:S4:70:VAL:O	2.18	0.43
50:S4:229:GLY:HA2	50:S4:235:TYR:CD2	2.53	0.43
52:S6:32:ILE:HG13	52:S6:100:ALA:O	2.17	0.43
52:S6:124:LEU:HD12	52:S6:124:LEU:N	2.33	0.43
52:S6:137:ARG:HG3	52:S6:137:ARG:NH2	2.33	0.43
61:15:11:VAL:O	61:15:12:PHE:CB	2.65	0.43
61:15:72:LYS:HB3	61:15:93:VAL:HG21	2.00	0.43
61:15:80:MET:O	61:15:116:LEU:HD12	2.18	0.43
66:20:67:THR:CG2	75:29:40:ARG:HB2	2.45	0.43
75:29:20:GLN:HB2	75:29:25:SER:HA	2.00	0.43
78:1S:90:C:O2'	78:1S:451:A:H5''	2.18	0.43
78:1S:513:U:H2'	78:1S:514:G:C8	2.53	0.43
78:1S:635:A:H2'	78:1S:636:A:C8	2.53	0.43
78:1S:1433:G:H2'	78:1S:1434:U:O4'	2.18	0.43
78:1S:1485:C:H2'	78:1S:1486:G:H4'	2.00	0.43
78:1S:1533:C:H2'	78:1S:1534:G:C8	2.52	0.43
79:2S:652:G:C2	79:2S:2361:A:H1'	2.54	0.43
79:2S:895:A:H2'	79:2S:897:U:C6	2.53	0.43
79:2S:1526:U:H4'	79:2S:1594:A:C4	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2069:G:OP1	79:2S:3351:U:H4'	2.18	0.43
79:2S:2516:U:H2'	79:2S:2517:U:H6	1.82	0.43
79:2S:2607:G:H2'	79:2S:2608:G:O4'	2.18	0.43
81:5S:29:C:H2'	81:5S:30:G:C8	2.39	0.43
82:ET:21:U:H6	82:ET:22:A:H5'	1.82	0.43
2:L2:204:MET:HB2	2:L2:208:ASP:CB	2.48	0.43
3:L3:57:VAL:HG22	3:L3:73:VAL:HG12	2.00	0.43
3:L3:242:THR:HB	79:2S:2948:C:H4'	2.00	0.43
4:L4:185:LYS:HA	4:L4:201:GLN:HB3	2.00	0.43
5:L5:26:GLY:O	5:L5:150:LEU:HD12	2.18	0.43
5:L5:44:TYR:CD2	79:2S:1084:A:H4'	2.53	0.43
5:L5:270:LYS:HA	5:L5:273:ARG:HB3	2.00	0.43
13:63:16:LYS:HB2	13:63:21:ARG:HH22	1.83	0.43
18:68:8:LYS:HG2	18:68:9:GLN:H	1.83	0.43
19:69:122:VAL:O	19:69:126:GLU:HG3	2.17	0.43
22:72:17:VAL:HG22	22:72:103:TYR:CD2	2.41	0.43
22:72:84:LEU:CB	22:72:90:ARG:HG2	2.35	0.43
26:76:40:ARG:NH2	26:76:46:LYS:HG3	2.32	0.43
37:87:63:ARG:O	37:87:64:MET:HB2	2.17	0.43
53:S7:140:VAL:HB	68:22:52:TYR:HB3	1.99	0.43
55:S9:53:ARG:O	55:S9:57:ARG:HG3	2.17	0.43
56:10:59:PHE:HA	56:10:64:TYR:HA	2.00	0.43
63:17:69:ILE:HD13	63:17:69:ILE:N	2.34	0.43
64:18:89:GLN:O	64:18:90:ASN:HB2	2.17	0.43
75:29:19:ARG:HG3	75:29:19:ARG:NH1	2.32	0.43
75:29:44:ARG:NH2	78:1S:1279:C:H5''	2.33	0.43
77:31:144:CYS:HB3	77:31:147:VAL:CG1	2.33	0.43
78:1S:153:G:H2'	78:1S:154:G:C8	2.53	0.43
78:1S:218:A:H3'	78:1S:219:A:C5'	2.43	0.43
78:1S:509:G:H2'	78:1S:510:G:C8	2.53	0.43
78:1S:869:A:H2'	78:1S:870:C:C6	2.51	0.43
78:1S:962:C:C2'	78:1S:963:A:H5'	2.48	0.43
78:1S:1318:G:H2'	78:1S:1319:A:O4'	2.18	0.43
78:1S:1562:G:H2'	78:1S:1563:C:H6	1.81	0.43
79:2S:435:C:H2'	79:2S:436:A:H8	1.83	0.43
79:2S:761:A:H2'	79:2S:762:U:C6	2.54	0.43
79:2S:791:A:H2'	79:2S:792:G:H8	1.83	0.43
79:2S:1146:C:H4'	79:2S:1331:U:C5	2.53	0.43
79:2S:1325:U:H2'	79:2S:1326:A:C8	2.52	0.43
79:2S:1832:C:H2'	79:2S:1833:G:H8	1.83	0.43
79:2S:3389:U:H5'	79:2S:3389:U:C6	2.44	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
82:ET:72:C:H2'	82:ET:73:A:C8	2.53	0.43
3:L3:260:VAL:HG21	79:2S:2987:A:H2	1.80	0.43
6:L6:52:VAL:HG22	6:L6:65:ILE:HB	1.99	0.43
8:L8:95:ASN:O	8:L8:98:ARG:HG2	2.18	0.43
8:L8:150:LEU:O	8:L8:199:ALA:HA	2.18	0.43
15:65:50:ARG:HB2	79:2S:267:G:H21	1.83	0.43
16:66:19:LEU:HA	16:66:123:ALA:HB1	2.01	0.43
18:68:106:PHE:CE2	18:68:121:CYS:HB3	2.53	0.43
19:69:44:LEU:O	19:69:49:THR:HB	2.18	0.43
20:70:117:ARG:HG3	20:70:117:ARG:HH21	1.83	0.43
30:80:48:THR:HG23	30:80:49:PRO:HD2	1.99	0.43
35:85:21:LEU:CD2	35:85:55:LEU:HD21	2.49	0.43
36:86:58:ILE:HD12	36:86:98:ARG:NH2	2.33	0.43
43:93:57:CYS:HB3	43:93:62:LYS:N	2.30	0.43
46:S0:41:ARG:HB3	46:S0:45:VAL:HB	1.99	0.43
47:S1:133:TYR:CD1	47:S1:217:LEU:HD23	2.53	0.43
50:S4:35:PRO:HB3	50:S4:143:ASP:HB2	2.00	0.43
50:S4:85:GLY:O	50:S4:101:LEU:HD12	2.19	0.43
52:S6:30:LYS:HE2	52:S6:36:VAL:CG2	2.48	0.43
53:S7:78:THR:O	53:S7:82:GLU:HG3	2.18	0.43
54:S8:92:ARG:HG3	79:2S:3345:G:OP1	2.18	0.43
57:11:66:ILE:HG12	57:11:128:CYS:SG	2.57	0.43
59:13:98:VAL:HA	59:13:101:HIS:HB3	2.00	0.43
61:15:67:ALA:CB	61:15:73:PRO:HG3	2.49	0.43
61:15:123:TYR:HD1	61:15:123:TYR:H	1.66	0.43
64:18:46:VAL:HA	64:18:49:LYS:HB2	2.01	0.43
68:22:80:ASN:HB3	78:1S:748:U:OP1	2.18	0.43
76:30:29:LYS:HE3	76:30:35:TYR:HE2	1.83	0.43
78:1S:564:G:C2	78:1S:578:U:H4'	2.54	0.43
78:1S:607:G:H5'	78:1S:613:G:N2	2.33	0.43
78:1S:1008:G:H2'	78:1S:1009:U:C6	2.52	0.43
78:1S:1184:A:H2'	78:1S:1185:U:H4'	1.99	0.43
78:1S:1405:G:H2'	78:1S:1406:A:H8	1.83	0.43
79:2S:806:A:H8	79:2S:935:U:H3	1.63	0.43
79:2S:920:A:H4'	79:2S:921:A:C5'	2.46	0.43
79:2S:1150:A:H3'	79:2S:1151:U:H6	1.83	0.43
79:2S:2130:G:H2'	79:2S:2131:A:H5'	2.00	0.43
79:2S:2531:C:H5'	79:2S:2532:U:H5	1.84	0.43
79:2S:3021:A:H61	79:2S:3032:A:H3'	1.83	0.43
79:2S:3064:U:H2'	79:2S:3065:G:H8	1.81	0.43
3:L3:124:LYS:HG2	79:2S:3316:A:N1	2.34	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:136:LYS:HA	3:L3:139:GLN:HE21	1.83	0.43
3:L3:307:PRO:HG2	3:L3:311:PHE:CE1	2.53	0.43
4:L4:71:VAL:HG22	4:L4:72:ALA:N	2.32	0.43
4:L4:146:PRO:HG2	4:L4:147:GLU:H	1.82	0.43
5:L5:134:ALA:CB	5:L5:141:PRO:HD3	2.48	0.43
8:L8:29:SER:HB2	79:2S:2563:G:H4'	2.01	0.43
8:L8:54:GLU:HA	8:L8:57:ARG:HD3	2.01	0.43
8:L8:77:GLN:NE2	8:L8:167:PRO:HG2	2.33	0.43
8:L8:151:VAL:HG23	8:L8:175:VAL:HG11	2.00	0.43
10:60:129:VAL:HG12	10:60:130:ASP:N	2.33	0.43
18:68:76:ALA:HA	18:68:79:LYS:HB2	2.00	0.43
26:76:35:LEU:HD23	26:76:106:ILE:HB	2.00	0.43
28:78:74:ASN:C	28:78:76:ASP:N	2.72	0.43
34:84:24:LYS:O	79:2S:1695:U:H4'	2.18	0.43
34:84:66:SER:O	34:84:70:LYS:HG3	2.18	0.43
44:P0:14:LYS:O	44:P0:17:GLU:HB3	2.19	0.43
48:S2:160:GLY:O	48:S2:213:ALA:HB1	2.18	0.43
50:S4:209:HIS:O	50:S4:210:ILE:HD13	2.18	0.43
51:S5:80:LYS:HB2	51:S5:83:ARG:HB2	2.00	0.43
51:S5:119:ASP:O	51:S5:123:VAL:HG23	2.17	0.43
55:S9:48:GLN:HA	55:S9:51:LYS:CE	2.48	0.43
62:16:41:PRO:HD2	62:16:44:LEU:HD23	2.00	0.43
62:16:55:VAL:HG13	62:16:56:GLY:N	2.33	0.43
65:19:130:ARG:CA	78:1S:1358:G:H4'	2.41	0.43
76:30:10:ARG:HB3	76:30:13:LYS:HB2	2.00	0.43
78:1S:415:C:H2'	78:1S:417:A:C8	2.51	0.43
78:1S:792:U:H2'	78:1S:793:A:O4'	2.18	0.43
78:1S:912:U:H5'	78:1S:913:G:C8	2.54	0.43
78:1S:1274:C:O2	78:1S:1274:C:H2'	2.19	0.43
78:1S:1505:A:H8	78:1S:1505:A:O5'	2.02	0.43
78:1S:1679:G:H1'	78:1S:1722:A:H61	1.83	0.43
79:2S:41:G:H3'	79:2S:42:C:C6	2.53	0.43
79:2S:184:U:H2'	79:2S:185:C:C6	2.54	0.43
79:2S:628:A:H5'	79:2S:1399:A:C2	2.53	0.43
79:2S:958:C:H5''	79:2S:2800:G:OP1	2.19	0.43
79:2S:1226:G:H5'	79:2S:3117:C:H1'	2.00	0.43
79:2S:1528:G:H2'	79:2S:1529:A:O4'	2.18	0.43
79:2S:1732:U:H3'	79:2S:1733:G:H8	1.84	0.43
79:2S:1881:A:H2'	79:2S:1882:G:C8	2.54	0.43
79:2S:2357:A:H2'	79:2S:2358:A:C8	2.54	0.43
2:L2:193:ARG:HG2	2:L2:193:ARG:HH21	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:L4:351:PRO:HB3	7:L7:70:LYS:HB3	1.99	0.43
8:L8:157:VAL:HG13	79:2S:147:U:N3	2.34	0.43
11:61:69:VAL:HA	81:5S:39:C:O2	2.19	0.43
13:63:59:ARG:NH2	13:63:150:PRO:HG2	2.24	0.43
15:65:71:ARG:HD3	15:65:94:TYR:HB2	1.99	0.43
16:66:35:VAL:HB	16:66:104:VAL:HG22	2.00	0.43
18:68:67:ILE:HG23	18:68:81:VAL:HG11	1.99	0.43
21:71:78:LYS:HE2	21:71:87:LYS:HE3	2.00	0.43
22:72:42:LYS:HB3	79:2S:1687:U:C2	2.53	0.43
25:75:134:ASP:O	25:75:138:ARG:HB2	2.18	0.43
34:84:29:ILE:HD11	79:2S:1598:G:OP1	2.18	0.43
36:86:60:LEU:HD11	36:86:68:ARG:HB2	2.01	0.43
37:87:58:THR:C	37:87:60:GLY:H	2.21	0.43
46:S0:127:ARG:HG3	46:S0:127:ARG:NH1	2.34	0.43
47:S1:225:VAL:O	47:S1:229:MET:HB2	2.18	0.43
48:S2:60:SER:HA	67:21:26:ALA:HA	2.01	0.43
48:S2:116:LYS:HB2	48:S2:128:GLY:HA2	2.00	0.43
48:S2:141:ARG:HH22	48:S2:151:PRO:HB2	1.84	0.43
49:S3:35:SER:HB3	49:S3:51:ARG:O	2.19	0.43
49:S3:158:ILE:H	49:S3:158:ILE:CD1	2.29	0.43
53:S7:131:PHE:N	53:S7:132:PRO:CD	2.81	0.43
56:10:42:VAL:O	56:10:46:LEU:HB2	2.18	0.43
57:11:123:VAL:CG2	57:11:139:VAL:HG13	2.49	0.43
64:18:139:LYS:HE2	78:1S:1459:C:N4	2.33	0.43
67:21:40:ASP:OD2	67:21:46:ILE:HD11	2.18	0.43
68:22:50:PHE:CB	68:22:63:VAL:HG22	2.48	0.43
78:1S:64:U:H3'	78:1S:65:A:H5''	1.99	0.43
78:1S:689:G:H3'	78:1S:690:G:H5''	1.99	0.43
78:1S:1408:G:H2'	78:1S:1409:G:O4'	2.19	0.43
79:2S:172:G:H2'	79:2S:172:G:N3	2.34	0.43
79:2S:286:U:H2'	79:2S:287:G:C8	2.54	0.43
79:2S:876:A:H5''	79:2S:1890:U:H5''	2.01	0.43
79:2S:1440:G:H2'	79:2S:1441:G:C8	2.54	0.43
79:2S:1670:C:H4'	79:2S:1860:G:H5'	2.00	0.43
79:2S:1715:A:O4'	79:2S:1717:U:H4'	2.18	0.43
79:2S:1862:U:H2'	79:2S:1863:G:O4'	2.19	0.43
79:2S:2413:A:H2'	79:2S:2414:G:H8	1.83	0.43
79:2S:2880:U:H2'	79:2S:2881:C:C6	2.53	0.43
79:2S:2982:A:O3'	79:2S:2983:C:H2'	2.18	0.43
82:PT:64:G:H2'	82:PT:65:G:H8	1.84	0.43
3:L3:8:ALA:HA	79:2S:2915:U:OP1	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:75:ALA:HB2	79:2S:3049:A:C6	2.53	0.43
3:L3:227:GLU:HG3	3:L3:228:GLY:H	1.83	0.43
4:L4:198:ARG:HD3	4:L4:199:TRP:CD1	2.54	0.43
4:L4:316:ASN:HA	4:L4:317:PRO:HD3	1.93	0.43
5:L5:118:THR:O	5:L5:119:TYR:HB2	2.18	0.43
8:L8:97:TYR:OH	8:L8:203:VAL:HA	2.19	0.43
9:L9:8:GLN:HG2	9:L9:68:LEU:HD11	2.00	0.43
9:L9:134:ILE:HD12	9:L9:134:ILE:H	1.83	0.43
11:61:8:PRO:HB2	81:5S:53:U:O2'	2.18	0.43
15:65:50:ARG:NH1	15:65:50:ARG:CB	2.82	0.43
15:65:93:LYS:HD2	79:2S:289:A:H2	1.82	0.43
18:68:59:ARG:NH1	18:68:59:ARG:HB2	2.34	0.43
19:69:88:ARG:HH21	79:2S:2102:U:H5'	1.84	0.43
20:70:69:PRO:HG2	79:2S:523:A:H4'	2.01	0.43
21:71:9:SER:O	21:71:10:ARG:HB2	2.19	0.43
26:76:16:ARG:O	26:76:20:PHE:CD2	2.71	0.43
29:79:14:ARG:HD3	29:79:18:ARG:HD3	2.00	0.43
33:83:53:TYR:CZ	33:83:65:ARG:HB2	2.54	0.43
39:89:50:ASN:HD22	39:89:50:ASN:HA	1.54	0.43
44:P0:31:ASP:O	44:P0:32:ASN:HB2	2.19	0.43
45:RC:33:LEU:HD22	45:RC:47:LEU:HD21	2.00	0.43
45:RC:214:ALA:CB	45:RC:220:ILE:HG12	2.45	0.43
46:S0:109:ASN:OD1	78:1S:1294:G:H1'	2.17	0.43
48:S2:113:LEU:O	48:S2:132:ALA:HA	2.18	0.43
48:S2:162:CYS:SG	48:S2:212:LYS:HB3	2.59	0.43
50:S4:46:VAL:O	50:S4:50:ASN:HB2	2.19	0.43
61:15:86:VAL:O	61:15:89:MET:HG2	2.18	0.43
62:16:77:GLN:O	62:16:81:ILE:HG23	2.18	0.43
63:17:61:ILE:HG12	63:17:66:VAL:CG2	2.46	0.43
64:18:17:LEU:O	64:18:18:LEU:HB2	2.19	0.43
66:20:23:ARG:HB3	66:20:117:VAL:CG1	2.46	0.43
76:30:14:VAL:HG23	78:1S:567:A:H1'	1.99	0.43
78:1S:839:U:H2'	78:1S:840:U:C4'	2.49	0.43
78:1S:1116:A:H1'	78:1S:1131:A:C6	2.54	0.43
79:2S:652:G:H2'	79:2S:2361:A:H4'	2.01	0.43
79:2S:683:U:H2'	79:2S:684:G:O4'	2.18	0.43
79:2S:1357:G:H2'	79:2S:1358:C:H6	1.83	0.43
81:5S:16:U:H2'	81:5S:17:A:C8	2.53	0.43
82:ET:19:G:N2	82:ET:58:A:H2'	2.33	0.43
1:L1:169:VAL:CG1	1:L1:170:GLY:N	2.79	0.43
4:L4:4:PRO:O	4:L4:5:GLN:HB2	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:L4:52:VAL:CG2	4:L4:53:SER:H	2.26	0.43
4:L4:53:SER:HB3	4:L4:56:ALA:CB	2.49	0.43
4:L4:355:PHE:O	4:L4:359:LEU:HB2	2.18	0.43
5:L5:93:THR:HG23	81:5S:48:U:OP2	2.19	0.43
7:L7:67:ARG:HA	7:L7:70:LYS:HE2	2.00	0.43
9:L9:8:GLN:HE21	9:L9:68:LEU:CD1	2.31	0.43
9:L9:41:ILE:HD13	9:L9:41:ILE:C	2.38	0.43
10:60:17:TYR:N	10:60:18:PRO:HD3	2.33	0.43
10:60:182:LEU:HD23	10:60:185:ARG:HH11	1.82	0.43
11:61:10:ARG:O	11:61:10:ARG:HD3	2.18	0.43
15:65:17:ASP:O	15:65:21:PHE:HB2	2.19	0.43
15:65:87:GLN:HE22	79:2S:2609:A:H1'	1.84	0.43
18:68:83:VAL:HG11	18:68:87:VAL:HG22	2.00	0.43
18:68:163:PRO:HG2	79:2S:780:A:C2	2.53	0.43
21:71:96:ILE:HD12	21:71:96:ILE:H	1.84	0.43
24:74:45:ASN:HA	24:74:46:PRO:HD3	1.78	0.43
32:82:32:TRP:CH2	32:82:52:GLN:HG2	2.53	0.43
32:82:121:ASN:C	32:82:123:LYS:H	2.22	0.43
43:93:56:THR:HG22	43:93:63:THR:HG23	2.00	0.43
48:S2:89:GLN:HG2	78:1S:1633:A:H2	1.82	0.43
51:S5:126:ASP:O	51:S5:127:GLN:HB2	2.19	0.43
52:S6:52:ILE:HA	52:S6:111:LEU:HD23	2.01	0.43
55:S9:81:VAL:CG2	55:S9:86:LEU:HD23	2.48	0.43
62:16:36:ILE:O	62:16:36:ILE:HG12	2.19	0.43
68:22:79:PHE:O	68:22:124:LYS:HA	2.19	0.43
69:23:62:LYS:HE3	78:1S:1754:A:H5'	2.00	0.43
72:26:60:PRO:O	72:26:61:GLU:HG2	2.18	0.43
76:30:39:LEU:HB3	76:30:43:ARG:HH21	1.83	0.43
78:1S:762:A:H2'	78:1S:763:G:O4'	2.18	0.43
78:1S:1557:U:O2'	78:1S:1558:U:H2'	2.19	0.43
79:2S:278:U:H2'	79:2S:279:U:C6	2.54	0.43
79:2S:634:C:H2'	79:2S:635:G:H8	1.80	0.43
79:2S:744:A:C2'	79:2S:745:C:H5'	2.46	0.43
79:2S:915:A:C5	79:2S:917:A:H1'	2.54	0.43
79:2S:1459:C:H2'	79:2S:1460:A:C8	2.53	0.43
79:2S:2832:C:H2'	79:2S:2833:A:C8	2.54	0.43
79:2S:2849:C:OP1	79:2S:2906:C:H4'	2.18	0.43
79:2S:2943:G:H2'	79:2S:2944:U:O4'	2.19	0.43
79:2S:3205:G:H2'	79:2S:3206:C:C5	2.54	0.43
79:2S:3287:U:H6	79:2S:3287:U:H5'	1.83	0.43
79:2S:3336:A:H3'	79:2S:3337:G:C8	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:280:HIS:HB3	3:L3:324:VAL:HG22	2.01	0.43
7:L7:116:PHE:HZ	7:L7:144:ILE:HG12	1.83	0.43
10:60:94:PHE:CE2	79:2S:1045:C:H1'	2.54	0.43
11:61:35:LYS:O	11:61:39:GLN:HG2	2.19	0.43
11:61:141:ARG:HH12	81:5S:27:A:H5''	1.83	0.43
13:63:154:VAL:HG23	13:63:155:GLU:H	1.83	0.43
15:65:99:ARG:O	15:65:103:GLU:HG3	2.18	0.43
15:65:138:GLN:HA	15:65:143:ARG:HD2	2.01	0.43
16:66:75:ALA:O	16:66:79:ILE:HG13	2.19	0.43
18:68:141:ARG:HH12	79:2S:976:U:H5''	1.84	0.43
18:68:170:ARG:C	18:68:172:PHE:H	2.21	0.43
20:70:137:ARG:HB3	20:70:140:VAL:HG23	2.00	0.43
25:75:62:VAL:HG12	25:75:86:VAL:CG2	2.49	0.43
27:77:22:LYS:CE	27:77:134:LEU:HD23	2.44	0.43
27:77:49:TYR:CB	27:77:133:LYS:HD3	2.49	0.43
27:77:73:LYS:HD3	27:77:74:VAL:H	1.83	0.43
31:81:18:LYS:HA	79:2S:3376:A:H1'	2.01	0.43
33:83:20:LYS:HB3	33:83:20:LYS:HZ3	1.83	0.43
35:85:109:ILE:HG23	79:2S:170:G:C5'	2.48	0.43
36:86:53:TYR:HA	36:86:56:ARG:NH1	2.33	0.43
37:87:28:HIS:O	37:87:32:LYS:HA	2.18	0.43
42:92:73:GLU:HA	42:92:80:ARG:HA	2.01	0.43
46:S0:58:VAL:O	46:S0:62:ARG:HG2	2.19	0.43
47:S1:148:ASN:ND2	47:S1:148:ASN:N	2.61	0.43
48:S2:141:ARG:HG3	48:S2:193:VAL:HG13	2.01	0.43
48:S2:163:GLY:O	78:1S:1086:A:H5''	2.18	0.43
51:S5:143:ARG:HH11	51:S5:143:ARG:HG3	1.82	0.43
52:S6:39:GLU:HB2	52:S6:46:LYS:HG3	2.00	0.43
59:13:66:ILE:HG23	59:13:67:THR:N	2.34	0.43
61:15:44:ARG:HG2	61:15:44:ARG:HH11	1.84	0.43
62:16:28:LEU:CD2	78:1S:1365:C:H5''	2.49	0.43
64:18:116:LEU:HD21	64:18:123:ARG:CB	2.37	0.43
66:20:55:PRO:HB3	66:20:91:ILE:CG1	2.46	0.43
72:26:42:ARG:HB2	72:26:42:ARG:CZ	2.49	0.43
78:1S:15:U:H2'	78:1S:16:G:O4'	2.18	0.43
78:1S:189:C:C3'	78:1S:190:C:H5''	2.43	0.43
78:1S:460:A:H3'	78:1S:461:G:H8	1.84	0.43
78:1S:1194:A:C2'	78:1S:1195:C:H5'	2.48	0.43
78:1S:1483:A:C2	78:1S:1607:G:H1'	2.53	0.43
78:1S:1611:A:C2'	78:1S:1612:U:H5'	2.49	0.43
78:1S:1768:G:H5''	78:1S:1769:U:H2'	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:44:U:H2'	79:2S:45:A:O4'	2.18	0.43
79:2S:757:C:C2'	79:2S:758:C:H5''	2.49	0.43
79:2S:1117:G:H2'	79:2S:1118:C:H6	1.83	0.43
79:2S:2128:C:H2'	79:2S:2129:U:C6	2.52	0.43
79:2S:2595:A:H2'	79:2S:2596:U:H5'	2.00	0.43
79:2S:2775:U:H2'	79:2S:2776:C:H6	1.79	0.43
79:2S:3029:A:H8	79:2S:3029:A:O5'	2.01	0.43
79:2S:3060:C:H2'	79:2S:3061:G:C8	2.54	0.43
1:L1:34:LEU:O	1:L1:169:VAL:HG13	2.19	0.43
1:L1:62:ASN:HB3	1:L1:151:VAL:HG11	1.98	0.43
2:L2:229:ALA:HB3	2:L2:234:LYS:HG3	2.01	0.43
2:L2:245:LEU:HB3	2:L2:247:ARG:CZ	2.48	0.43
3:L3:62:ARG:CG	3:L3:348:ARG:HH21	2.31	0.43
3:L3:123:TYR:CD2	3:L3:124:LYS:HG3	2.53	0.43
4:L4:281:ILE:HG12	4:L4:283:THR:O	2.18	0.43
4:L4:300:ARG:HH11	4:L4:300:ARG:HG3	1.84	0.43
11:61:75:LYS:HE3	11:61:79:ILE:HD11	2.01	0.43
12:62:135:THR:C	12:62:137:GLN:H	2.21	0.43
14:64:15:VAL:O	14:64:15:VAL:HG23	2.19	0.43
14:64:50:LYS:HZ1	14:64:86:ALA:HB2	1.83	0.43
15:65:28:TRP:O	15:65:32:GLN:HG2	2.18	0.43
15:65:42:PRO:HG3	15:65:61:ILE:CD1	2.48	0.43
16:66:37:ARG:HA	16:66:107:GLY:H	1.83	0.43
16:66:56:ASP:O	16:66:60:LYS:HG3	2.18	0.43
16:66:92:THR:HB	79:2S:632:G:OP1	2.19	0.43
19:69:105:LEU:HD23	19:69:105:LEU:C	2.39	0.43
23:73:32:ARG:HD2	23:73:32:ARG:N	2.33	0.43
27:77:25:ILE:HG22	27:77:28:PRO:HD3	2.01	0.43
28:78:6:THR:CG2	28:78:8:THR:HG23	2.47	0.43
28:78:25:HIS:HB3	79:2S:802:C:H41	1.83	0.43
28:78:74:ASN:C	28:78:76:ASP:H	2.21	0.43
32:82:27:ARG:HD2	79:2S:1433:A:H4'	1.99	0.43
34:84:8:ARG:HB3	79:2S:1606:U:C5	2.53	0.43
34:84:51:LEU:HD23	34:84:51:LEU:H	1.84	0.43
45:RC:5:GLU:HB2	45:RC:315:VAL:HG12	2.01	0.43
45:RC:264:SER:HB2	45:RC:271:VAL:CG2	2.48	0.43
47:S1:46:THR:HG22	60:14:32:ASP:HB2	2.01	0.43
50:S4:207:LEU:HA	50:S4:220:THR:O	2.18	0.43
51:S5:82:PHE:CE1	51:S5:165:LEU:HD22	2.54	0.43
51:S5:140:THR:O	51:S5:174:LEU:HD12	2.18	0.43
52:S6:14:LYS:HG2	52:S6:15:THR:N	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:S9:57:ARG:O	55:S9:61:THR:HG23	2.19	0.43
55:S9:93:LEU:C	55:S9:96:VAL:HG22	2.39	0.43
57:11:92:HIS:O	57:11:100:TYR:HA	2.19	0.43
57:11:109:VAL:HG23	57:11:137:PHE:O	2.19	0.43
63:17:66:VAL:HG12	63:17:69:ILE:HD11	2.00	0.43
64:18:46:VAL:O	64:18:46:VAL:HG12	2.17	0.43
72:26:85:ARG:HD2	78:1S:1153:G:H5'	2.01	0.43
77:31:88:PRO:O	77:31:89:LYS:CB	2.66	0.43
78:1S:310:C:H2'	78:1S:311:U:H6	1.80	0.43
78:1S:367:A:H2'	78:1S:368:U:O4'	2.18	0.43
78:1S:1734:U:H2'	78:1S:1735:U:O4'	2.18	0.43
79:2S:531:G:H2'	79:2S:532:A:H8	1.84	0.43
79:2S:785:G:H2'	79:2S:786:A:C8	2.53	0.43
79:2S:1066:G:H2'	79:2S:1067:U:H6	1.82	0.43
79:2S:1859:A:H8	79:2S:1859:A:O5'	2.01	0.43
79:2S:2186:U:H2'	79:2S:2187:G:O4'	2.18	0.43
79:2S:2356:A:C2'	79:2S:2357:A:H5'	2.49	0.43
79:2S:3084:C:H2'	79:2S:3085:G:O4'	2.19	0.43
79:2S:3348:G:H2'	79:2S:3349:C:C6	2.54	0.43
80:8S:77:A:H2'	80:8S:78:G:O4'	2.19	0.43
3:L3:37:ARG:HA	3:L3:186:GLY:HA2	2.01	0.43
4:L4:57:GLY:HA3	4:L4:98:ARG:HB2	2.01	0.43
4:L4:82:THR:C	4:L4:84:ARG:N	2.70	0.43
5:L5:72:ASP:O	81:5S:116:C:H1'	2.18	0.43
6:L6:54:TYR:HD2	6:L6:55:LEU:N	2.16	0.43
7:L7:102:VAL:O	7:L7:106:LEU:HG	2.19	0.43
7:L7:178:ILE:H	7:L7:178:ILE:HG13	1.67	0.43
9:L9:53:ILE:HG22	9:L9:54:LYS:N	2.34	0.43
15:65:134:LEU:HD12	15:65:134:LEU:N	2.33	0.43
17:67:130:TYR:CD2	17:67:136:ILE:HD12	2.53	0.43
18:68:154:GLY:C	18:68:161:LYS:HG3	2.38	0.43
19:69:177:VAL:O	19:69:177:VAL:HG12	2.19	0.43
19:69:182:ASP:O	19:69:186:LYS:HB3	2.19	0.43
21:71:41:ASP:HB2	21:71:97:LYS:HG3	2.00	0.43
22:72:22:PRO:HG3	22:72:105:LEU:HD22	2.01	0.43
28:78:46:ASP:O	28:78:47:LYS:CB	2.67	0.43
29:79:22:LYS:H	29:79:22:LYS:HD2	1.83	0.43
35:85:70:TYR:CD1	35:85:73:LYS:HD2	2.53	0.43
46:S0:27:ARG:HB3	46:S0:28:ASN:H	1.55	0.43
47:S1:64:ARG:H	47:S1:88:VAL:HB	1.84	0.43
47:S1:127:VAL:HG11	47:S1:176:VAL:HG21	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:208:GLN:HG3	47:S1:209:ASN:OD1	2.19	0.43
48:S2:179:VAL:HG12	78:1S:3:U:O4'	2.19	0.43
49:S3:207:THR:O	63:17:39:ALA:HB1	2.19	0.43
53:S7:31:SER:N	53:S7:32:PRO:HD2	2.33	0.43
55:S9:73:GLY:O	55:S9:77:ILE:HG13	2.19	0.43
56:10:87:VAL:N	56:10:88:PRO:CD	2.65	0.43
59:13:118:ILE:HA	59:13:121:ARG:HH12	1.84	0.43
62:16:45:ARG:O	62:16:48:VAL:HG12	2.17	0.43
64:18:81:ILE:HG23	64:18:82:PRO:HD2	2.00	0.43
65:19:15:ILE:O	65:19:15:ILE:HG22	2.18	0.43
65:19:69:LYS:HB2	65:19:70:GLN:H	1.61	0.43
66:20:30:LYS:HB2	66:20:33:GLN:HB2	2.01	0.43
69:23:54:LEU:HD21	69:23:75:GLN:NE2	2.34	0.43
70:24:8:ARG:HB3	78:1S:780:A:C8	2.54	0.43
76:30:39:LEU:HD12	76:30:43:ARG:NH2	2.34	0.43
77:31:119:ARG:HH21	77:31:119:ARG:HG3	1.84	0.43
78:1S:27:U:H2'	78:1S:28:A:C8	2.54	0.43
78:1S:94:U:C2'	78:1S:95:G:H5'	2.49	0.43
78:1S:390:G:C8	78:1S:1731:A:H4'	2.43	0.43
78:1S:585:A:H2'	78:1S:586:G:C8	2.54	0.43
78:1S:1020:A:C3'	78:1S:1021:C:H5''	2.48	0.43
78:1S:1119:G:H2'	78:1S:1120:U:C6	2.54	0.43
79:2S:341:G:H21	79:2S:349:A:H61	1.66	0.43
79:2S:540:U:H2'	79:2S:541:U:C6	2.53	0.43
79:2S:904:A:H2'	79:2S:905:U:C6	2.54	0.43
79:2S:1214:U:H2'	79:2S:1215:U:C6	2.54	0.43
79:2S:1361:U:H2'	79:2S:1362:G:H8	1.83	0.43
79:2S:2366:C:H2'	79:2S:2367:A:C8	2.53	0.43
79:2S:3001:C:O2'	79:2S:3002:C:H5'	2.18	0.43
1:L1:38:LEU:O	1:L1:165:LEU:HG	2.19	0.42
3:L3:316:GLU:O	3:L3:317:ILE:HB	2.18	0.42
4:L4:300:ARG:HG2	18:68:39:ARG:O	2.18	0.42
6:L6:68:PRO:HB3	6:L6:142:ASP:OD1	2.19	0.42
16:66:49:ARG:HG2	16:66:53:LYS:HE3	2.01	0.42
16:66:115:LYS:CG	79:2S:3178:A:H2'	2.48	0.42
18:68:85:GLY:H	18:68:104:LEU:HD12	1.83	0.42
18:68:130:ARG:O	18:68:132:PRO:HD3	2.19	0.42
19:69:105:LEU:HD22	19:69:106:LEU:HD12	1.99	0.42
28:78:34:MET:O	79:2S:95:A:H4'	2.19	0.42
33:83:48:ARG:HG2	33:83:48:ARG:HH11	1.83	0.42
34:84:58:ARG:HB3	34:84:61:GLN:NE2	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:92:29:LYS:CD	42:92:31:GLY:H	2.31	0.42
50:S4:12:LEU:CD1	78:1S:381:C:H5'	2.49	0.42
50:S4:57:ASN:O	50:S4:61:VAL:HG23	2.18	0.42
50:S4:185:GLY:N	50:S4:189:LEU:HD13	2.33	0.42
51:S5:25:LEU:HD13	51:S5:25:LEU:N	2.34	0.42
51:S5:133:VAL:HG22	51:S5:198:LEU:HD13	2.00	0.42
52:S6:81:VAL:HG22	52:S6:82:SER:N	2.34	0.42
52:S6:194:LYS:HD3	78:1S:127:G:H5'	2.01	0.42
54:S8:172:ARG:HH11	54:S8:172:ARG:HG3	1.83	0.42
58:12:74:LEU:HD11	77:31:114:VAL:HG13	2.01	0.42
60:14:110:LEU:O	72:26:56:ALA:HB1	2.19	0.42
61:15:72:LYS:HA	61:15:73:PRO:HD3	1.77	0.42
65:19:91:TYR:HB2	78:1S:1590:G:OP1	2.19	0.42
66:20:67:THR:HG22	66:20:68:ARG:N	2.34	0.42
68:22:37:PHE:O	68:22:37:PHE:HD1	2.02	0.42
69:23:13:ARG:NH1	69:23:13:ARG:HB2	2.34	0.42
69:23:63:GLN:HA	69:23:65:ASN:N	2.34	0.42
78:1S:400:A:H4'	78:1S:401:A:C5'	2.49	0.42
78:1S:449:C:H2'	78:1S:450:U:C6	2.54	0.42
78:1S:628:G:H2'	78:1S:629:U:C5	2.54	0.42
78:1S:874:C:H4'	78:1S:1046:G:H4'	2.01	0.42
78:1S:1303:U:H2'	78:1S:1304:G:O4'	2.19	0.42
78:1S:1476:C:H2'	78:1S:1477:G:H8	1.84	0.42
79:2S:649:A:H4'	79:2S:2869:U:C5'	2.49	0.42
79:2S:848:A:H2'	79:2S:849:C:H4'	2.01	0.42
79:2S:1886:A:H2'	79:2S:1887:A:C8	2.53	0.42
79:2S:2208:A:OP2	79:2S:2208:A:H3'	2.18	0.42
79:2S:2820:A:H4'	82:PT:77:A:C8	2.54	0.42
79:2S:3157:U:H4'	79:2S:3158:G:H8	1.83	0.42
79:2S:3190:C:H2'	79:2S:3191:G:C8	2.54	0.42
2:L2:208:ASP:OD2	2:L2:208:ASP:N	2.52	0.42
3:L3:106:TRP:HB2	3:L3:133:TYR:CE2	2.54	0.42
3:L3:229:VAL:HG23	3:L3:233:TRP:HD1	1.84	0.42
4:L4:216:VAL:HA	4:L4:227:THR:HG21	2.01	0.42
6:L6:78:ARG:HB2	79:2S:3272:C:H5'	2.00	0.42
7:L7:105:LEU:HD22	79:2S:1101:G:H1'	2.01	0.42
7:L7:218:ARG:HD2	7:L7:218:ARG:HA	1.86	0.42
9:L9:151:VAL:HG11	79:2S:3111:U:H4'	2.00	0.42
10:60:75:TYR:O	10:60:79:VAL:HG23	2.19	0.42
10:60:191:LYS:O	10:60:197:VAL:HG23	2.19	0.42
10:60:193:ASP:HB3	10:60:196:PHE:C	2.40	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:61:171:VAL:HG13	11:61:172:LEU:H	1.83	0.42
13:63:76:THR:HG21	13:63:101:ARG:HH11	1.83	0.42
16:66:65:ASN:HD22	79:2S:2988:C:H5''	1.83	0.42
17:67:109:ALA:HA	17:67:112:LEU:HB2	2.02	0.42
22:72:81:LYS:HD2	79:2S:1681:U:O4	2.19	0.42
26:76:12:ARG:HA	79:2S:215:G:H5'	2.01	0.42
26:76:56:VAL:HG21	26:76:104:LEU:HB3	2.02	0.42
27:77:17:ARG:HD3	34:84:73:SER:HB3	2.01	0.42
32:82:6:HIS:HA	32:82:7:PRO:HD3	1.80	0.42
42:92:37:ALA:CB	79:2S:2766:U:H5''	2.47	0.42
45:RC:10:ARG:HE	45:RC:10:ARG:CA	2.30	0.42
47:S1:125:VAL:HG12	47:S1:172:LEU:HD12	2.01	0.42
48:S2:116:LYS:HE2	48:S2:127:ALA:CB	2.49	0.42
53:S7:143:LEU:HB2	53:S7:147:ASN:HB2	2.01	0.42
55:S9:49:LEU:CD2	55:S9:99:LEU:HD23	2.49	0.42
55:S9:49:LEU:HD21	55:S9:99:LEU:HD23	2.01	0.42
55:S9:163:PRO:HG3	78:1S:512:A:C5'	2.45	0.42
61:15:40:ARG:HA	61:15:40:ARG:HE	1.82	0.42
70:24:79:VAL:HG12	70:24:83:LYS:HE3	1.99	0.42
72:26:86:VAL:HG22	72:26:87:ARG:N	2.21	0.42
75:29:33:LYS:C	75:29:35:GLY:H	2.22	0.42
78:1S:212:U:H2'	78:1S:213:A:H8	1.84	0.42
78:1S:1164:G:H2'	78:1S:1165:G:H8	1.83	0.42
79:2S:763:G:N1	79:2S:764:U:H1'	2.34	0.42
79:2S:2916:U:H2'	79:2S:2917:G:C8	2.54	0.42
79:2S:3346:U:H3	79:2S:3359:A:N6	2.15	0.42
81:5S:61:G:H2'	81:5S:62:U:C6	2.54	0.42
2:L2:42:ARG:HG2	2:L2:43:GLY:N	2.35	0.42
2:L2:158:ILE:HG13	2:L2:159:SER:N	2.34	0.42
2:L2:174:ARG:NH1	2:L2:175:VAL:HG13	2.34	0.42
2:L2:180:LEU:HD13	43:93:18:TYR:CE1	2.54	0.42
3:L3:347:SER:C	3:L3:349:LYS:H	2.22	0.42
7:L7:31:ALA:O	7:L7:35:ALA:HB3	2.19	0.42
7:L7:127:LEU:C	7:L7:129:LEU:H	2.22	0.42
20:70:132:THR:O	20:70:133:ALA:CB	2.66	0.42
23:73:87:ARG:HH12	23:73:120:LYS:HD3	1.84	0.42
27:77:121:ARG:HH11	27:77:121:ARG:HG3	1.85	0.42
31:81:10:ARG:HB2	31:81:12:TYR:CE2	2.54	0.42
32:82:32:TRP:HH2	32:82:52:GLN:HG2	1.84	0.42
37:87:15:SER:O	37:87:28:HIS:HA	2.20	0.42
44:P0:61:ARG:HB2	79:2S:1221:A:OP2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:S0:20:ALA:O	46:S0:21:ASN:HB2	2.20	0.42
46:S0:56:LYS:CB	46:S0:160:ILE:HG23	2.45	0.42
47:S1:202:LYS:HB2	47:S1:202:LYS:NZ	2.34	0.42
50:S4:102:VAL:HG11	50:S4:239:PRO:HB3	2.00	0.42
50:S4:160:VAL:HG22	50:S4:172:PHE:HB2	2.01	0.42
50:S4:179:LYS:O	50:S4:181:VAL:HG23	2.19	0.42
51:S5:57:SER:C	51:S5:59:VAL:H	2.23	0.42
58:12:24:ILE:O	58:12:24:ILE:HG12	2.20	0.42
59:13:48:SER:O	59:13:52:VAL:HG23	2.20	0.42
59:13:76:LYS:HE3	59:13:76:LYS:HB3	1.91	0.42
62:16:5:PRO:HG2	62:16:24:ALA:HB2	2.01	0.42
64:18:134:ARG:HD2	78:1S:1559:A:C8	2.54	0.42
66:20:96:PRO:HB2	66:20:97:VAL:H	1.70	0.42
68:22:105:THR:CG2	68:22:110:ILE:HG12	2.48	0.42
70:24:47:VAL:HG23	70:24:48:TYR:CD2	2.54	0.42
78:1S:523:G:H1'	78:1S:529:A:N6	2.34	0.42
78:1S:940:A:H2'	78:1S:941:A:C8	2.55	0.42
79:2S:161:G:H2'	79:2S:162:G:C8	2.53	0.42
79:2S:283:G:N2	79:2S:285:A:H5''	2.30	0.42
79:2S:338:A:H3'	79:2S:339:C:H5''	2.00	0.42
79:2S:674:G:H2'	79:2S:675:C:O4'	2.19	0.42
79:2S:957:C:H5''	79:2S:2799:A:N7	2.34	0.42
79:2S:2547:A:C2'	79:2S:2548:C:H5'	2.49	0.42
79:2S:2799:A:H5''	79:2S:2800:G:O5'	2.19	0.42
79:2S:2820:A:H5''	82:PT:77:A:C5	2.54	0.42
79:2S:3163:A:H3'	79:2S:3164:C:C5'	2.46	0.42
82:ET:60:A:H2'	82:ET:60:A:N3	2.34	0.42
2:L2:230:VAL:HG11	79:2S:2424:A:C2	2.51	0.42
3:L3:2:SER:HB3	79:2S:2943:G:C8	2.55	0.42
3:L3:203:VAL:HG12	3:L3:204:ALA:N	2.34	0.42
3:L3:203:VAL:HG12	3:L3:204:ALA:H	1.84	0.42
8:L8:74:THR:HG23	8:L8:75:ILE:HG13	2.01	0.42
8:L8:76:ALA:H	8:L8:78:PHE:HE1	1.68	0.42
8:L8:105:LYS:HG3	8:L8:108:ARG:CZ	2.50	0.42
11:61:8:PRO:HG2	11:61:9:MET:H	1.84	0.42
11:61:81:GLU:HA	11:61:84:LEU:HD12	2.00	0.42
13:63:58:VAL:HG12	79:2S:75:G:H5''	2.01	0.42
13:63:193:ALA:O	13:63:194:GLU:HB3	2.19	0.42
14:64:108:ARG:HG2	14:64:108:ARG:NH2	2.34	0.42
16:66:151:ASP:OD2	16:66:151:ASP:N	2.51	0.42
16:66:153:VAL:HG12	16:66:157:GLU:HG2	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:71:147:VAL:HA	21:71:148:PRO:HD3	1.88	0.42
27:77:72:ILE:HG13	27:77:72:ILE:O	2.19	0.42
28:78:72:VAL:HG12	28:78:111:LYS:CG	2.50	0.42
43:93:57:CYS:SG	43:93:59:CYS:O	2.67	0.42
44:P0:74:GLU:HA	44:P0:77:LEU:HB2	2.00	0.42
46:S0:154:GLU:O	46:S0:155:PHE:HB2	2.20	0.42
47:S1:35:PRO:HA	47:S1:232:HIS:HE2	1.81	0.42
50:S4:104:ASP:HB3	50:S4:105:VAL:H	1.57	0.42
51:S5:45:LYS:HA	51:S5:45:LYS:HE3	2.00	0.42
54:S8:152:ILE:HB	79:2S:2066:C:O2	2.20	0.42
55:S9:45:ILE:HG23	55:S9:104:PHE:CD1	2.55	0.42
61:15:44:ARG:HH21	61:15:82:ASN:HD22	1.67	0.42
62:16:73:GLY:O	62:16:77:GLN:HG3	2.19	0.42
66:20:20:ILE:HD11	66:20:100:VAL:HG21	2.01	0.42
70:24:13:ILE:N	70:24:13:ILE:HD12	2.34	0.42
70:24:90:ARG:HA	70:24:93:ARG:HD2	2.01	0.42
78:1S:175:G:N2	78:1S:176:C:H41	2.17	0.42
78:1S:728:U:H2'	78:1S:729:G:H5'	2.00	0.42
78:1S:814:A:H2'	78:1S:814:A:N3	2.35	0.42
78:1S:832:U:C2'	78:1S:833:U:H5''	2.48	0.42
78:1S:1087:A:H2'	78:1S:1088:A:C8	2.53	0.42
78:1S:1160:A:H2'	78:1S:1161:C:H6	1.82	0.42
79:2S:426:G:H2'	79:2S:427:C:C6	2.54	0.42
79:2S:728:G:H2'	79:2S:729:C:C6	2.54	0.42
79:2S:858:A:H2'	79:2S:859:G:O4'	2.20	0.42
79:2S:1227:C:H2'	79:2S:1228:C:C6	2.55	0.42
79:2S:2533:G:H2'	79:2S:2534:G:O4'	2.20	0.42
80:8S:155:A:H2'	80:8S:156:U:O4'	2.19	0.42
81:5S:77:G:H1'	81:5S:78:U:H5	1.85	0.42
1:L1:92:LYS:HB3	1:L1:95:LYS:CE	2.49	0.42
2:L2:137:ILE:HG13	2:L2:138:GLY:H	1.84	0.42
2:L2:138:GLY:N	2:L2:147:ARG:HB3	2.35	0.42
3:L3:79:VAL:CG1	3:L3:322:ILE:HB	2.50	0.42
3:L3:216:ASP:HA	3:L3:277:SER:O	2.20	0.42
4:L4:135:VAL:CG1	4:L4:142:VAL:HG11	2.48	0.42
8:L8:58:VAL:O	8:L8:62:LYS:N	2.52	0.42
9:L9:27:VAL:HG21	9:L9:78:MET:CB	2.42	0.42
9:L9:92:TYR:OH	9:L9:136:PHE:HD1	2.02	0.42
10:60:43:VAL:HA	10:60:139:ARG:NH2	2.33	0.42
11:61:112:LEU:HD23	11:61:112:LEU:N	2.34	0.42
11:61:134:PRO:HB2	81:5S:55:A:N1	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:64:32:LEU:HB3	14:64:85:TRP:CZ2	2.54	0.42
15:65:71:ARG:CD	15:65:94:TYR:HB2	2.49	0.42
16:66:58:LEU:HA	16:66:72:HIS:NE2	2.34	0.42
16:66:147:TRP:CE2	16:66:149:TYR:HB2	2.54	0.42
17:67:3:ARG:HG3	79:2S:398:A:H5'	2.02	0.42
19:69:118:HIS:O	19:69:122:VAL:HG23	2.19	0.42
21:71:62:GLY:HA3	21:71:74:VAL:CG1	2.50	0.42
21:71:112:ASN:O	21:71:116:ARG:HB2	2.19	0.42
24:74:42:GLN:O	24:74:43:ARG:HB2	2.20	0.42
31:81:29:ALA:O	31:81:33:VAL:HG23	2.19	0.42
37:87:21:ARG:HD2	37:87:37:CYS:HB2	2.01	0.42
44:P0:96:ILE:O	44:P0:100:ILE:HG13	2.19	0.42
46:S0:54:TRP:HH2	46:S0:191:ARG:HH22	1.66	0.42
46:S0:102:PHE:CZ	46:S0:135:GLU:HG3	2.47	0.42
47:S1:22:ASP:N	47:S1:23:PRO:HD3	2.33	0.42
47:S1:27:LYS:HD2	47:S1:47:LEU:HD13	2.02	0.42
49:S3:159:HIS:O	49:S3:160:SER:CB	2.67	0.42
50:S4:99:PHE:CE1	50:S4:113:ARG:HG2	2.55	0.42
52:S6:39:GLU:O	52:S6:39:GLU:HG2	2.19	0.42
54:S8:181:GLY:O	54:S8:182:TYR:HB3	2.20	0.42
55:S9:48:GLN:O	55:S9:52:ILE:HG13	2.20	0.42
57:11:6:THR:O	57:11:7:VAL:HB	2.18	0.42
58:12:57:ALA:HA	58:12:123:VAL:O	2.19	0.42
61:15:90:ILE:HA	61:15:107:ILE:HB	2.01	0.42
62:16:5:PRO:HD2	62:16:24:ALA:HB2	2.02	0.42
66:20:28:SER:HB2	66:20:34:LEU:HD23	2.01	0.42
74:28:60:GLU:O	74:28:61:ARG:HB2	2.20	0.42
78:1S:58:U:H4'	78:1S:456:A:C2	2.55	0.42
78:1S:162:A:H3'	78:1S:163:G:N2	2.34	0.42
78:1S:1001:A:H2'	78:1S:1002:G:C8	2.55	0.42
78:1S:1133:A:H2'	78:1S:1134:C:O4'	2.18	0.42
79:2S:32:U:H3	79:2S:52:A:N6	2.17	0.42
79:2S:88:A:H2'	79:2S:89:A:O4'	2.19	0.42
79:2S:698:U:H2'	79:2S:699:A:C1'	2.50	0.42
79:2S:1256:G:H2'	79:2S:1257:C:C6	2.54	0.42
79:2S:1336:U:H2'	79:2S:1337:A:C8	2.54	0.42
79:2S:1658:G:H2'	79:2S:1659:U:O4'	2.19	0.42
79:2S:1682:U:H1'	79:2S:1685:C:N4	2.34	0.42
79:2S:1909:A:H2'	79:2S:1910:A:O4'	2.19	0.42
79:2S:2084:C:H5	79:2S:2085:U:O2	2.02	0.42
79:2S:2118:C:H2'	79:2S:2119:A:O4'	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2451:G:N2	79:2S:2495:C:H42	2.18	0.42
79:2S:2655:U:H4'	79:2S:2656:A:O4'	2.19	0.42
82:PT:34:U:H2'	82:PT:36:A:OP2	2.20	0.42
9:L9:19:SER:HB2	9:L9:26:LYS:HB3	2.01	0.42
10:60:156:ARG:HD2	10:60:163:GLN:O	2.19	0.42
10:60:158:LYS:HD3	10:60:158:LYS:HA	1.92	0.42
15:65:93:LYS:HD2	79:2S:289:A:C2	2.55	0.42
18:68:8:LYS:O	18:68:9:GLN:HG2	2.20	0.42
18:68:57:ILE:HD12	79:2S:671:U:OP2	2.19	0.42
20:70:77:VAL:HG13	20:70:125:LYS:O	2.19	0.42
21:71:128:LEU:HD11	79:2S:1096:U:C5'	2.36	0.42
23:73:32:ARG:HB2	23:73:64:LYS:HB3	2.01	0.42
23:73:114:ILE:HG13	23:73:132:ASN:HB3	2.01	0.42
32:82:26:HIS:HB2	79:2S:655:C:C5'	2.47	0.42
34:84:4:ARG:HB3	79:2S:1857:C:O2	2.19	0.42
35:85:5:LYS:HD2	35:85:7:TYR:OH	2.20	0.42
46:S0:69:ASN:HA	46:S0:70:PRO:HD2	1.96	0.42
46:S0:126:PRO:HG3	46:S0:147:THR:CG2	2.47	0.42
47:S1:85:LYS:HB3	47:S1:102:GLY:O	2.20	0.42
49:S3:126:VAL:HG12	49:S3:131:ALA:HB2	2.01	0.42
50:S4:68:ARG:CB	50:S4:76:VAL:HG21	2.50	0.42
50:S4:177:ALA:HA	50:S4:195:ILE:HB	2.01	0.42
53:S7:87:ASP:HB3	53:S7:88:ARG:NH1	2.34	0.42
55:S9:93:LEU:HA	55:S9:96:VAL:HG22	2.02	0.42
55:S9:146:PHE:O	55:S9:147:MET:HB2	2.19	0.42
56:10:59:PHE:CE2	56:10:62:GLN:HA	2.54	0.42
63:17:25:THR:OG1	63:17:30:THR:HG21	2.19	0.42
66:20:41:ILE:O	66:20:41:ILE:CG2	2.67	0.42
69:23:68:ILE:HG22	69:23:70:LYS:H	1.83	0.42
69:23:92:CYS:HA	69:23:95:PHE:CD2	2.54	0.42
78:1S:343:C:H2'	78:1S:344:A:C8	2.55	0.42
78:1S:855:A:H3'	78:1S:856:A:H3'	2.02	0.42
78:1S:1388:A:H61	78:1S:1409:G:H1'	1.84	0.42
78:1S:1490:C:H2'	78:1S:1514:U:O4	2.18	0.42
79:2S:53:G:H4'	79:2S:812:G:H4'	2.02	0.42
79:2S:801:A:H4'	79:2S:802:C:C5'	2.50	0.42
79:2S:941:G:H2'	79:2S:942:U:O4'	2.20	0.42
79:2S:1275:C:H2'	79:2S:1276:U:O4'	2.19	0.42
79:2S:1605:A:O2'	79:2S:1607:U:H6	1.99	0.42
79:2S:1953:G:O6	79:2S:2094:C:O2	2.37	0.42
79:2S:2449:A:C2'	79:2S:2450:G:H5'	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2742:C:H2'	79:2S:2743:A:H8	1.85	0.42
79:2S:2742:C:H2'	79:2S:2743:A:C8	2.53	0.42
79:2S:2875:U:O2	79:2S:2875:U:H2'	2.20	0.42
79:2S:3063:C:H2'	79:2S:3064:U:C6	2.55	0.42
1:L1:43:PRO:HA	1:L1:161:LYS:HD2	2.00	0.42
2:L2:45:VAL:HG13	2:L2:45:VAL:O	2.19	0.42
2:L2:135:ILE:HG22	2:L2:136:ILE:N	2.35	0.42
3:L3:17:LEU:HD12	3:L3:19:ARG:N	2.34	0.42
3:L3:54:THR:HG23	3:L3:76:VAL:HG23	2.02	0.42
3:L3:369:ARG:HG2	3:L3:369:ARG:HH21	1.83	0.42
4:L4:38:VAL:O	4:L4:42:VAL:HG23	2.19	0.42
4:L4:114:ASN:HB2	4:L4:117:GLU:HB2	2.00	0.42
4:L4:130:ALA:O	4:L4:131:VAL:HB	2.19	0.42
5:L5:223:PHE:O	5:L5:227:LEU:HD13	2.19	0.42
7:L7:69:ALA:HB2	7:L7:76:TYR:HB2	2.01	0.42
7:L7:86:VAL:HG22	7:L7:136:TYR:CB	2.43	0.42
8:L8:186:LEU:O	8:L8:189:LEU:HG	2.20	0.42
14:64:129:TYR:HE1	79:2S:3229:G:N3	2.17	0.42
15:65:35:VAL:HG13	15:65:65:ARG:O	2.19	0.42
15:65:179:LYS:HD3	79:2S:287:G:OP1	2.19	0.42
17:67:29:THR:HA	17:67:32:THR:CG2	2.45	0.42
17:67:114:VAL:HG13	17:67:114:VAL:O	2.20	0.42
23:73:70:ARG:HB2	23:73:70:ARG:NH1	2.33	0.42
29:79:6:ASN:HB2	79:2S:1135:A:OP1	2.19	0.42
38:88:63:LYS:CE	38:88:66:ILE:HD12	2.46	0.42
43:93:30:GLU:HA	43:93:33:GLN:HG2	2.00	0.42
45:RC:168:THR:HG23	45:RC:181:TRP:O	2.20	0.42
47:S1:68:VAL:HG22	47:S1:72:ASP:CB	2.48	0.42
47:S1:170:GLU:O	47:S1:174:LYS:HG3	2.20	0.42
47:S1:179:SER:HB3	47:S1:183:GLN:CB	2.49	0.42
50:S4:4:GLY:HA2	50:S4:5:PRO:HD3	1.89	0.42
51:S5:219:ARG:O	51:S5:222:LYS:HB3	2.20	0.42
52:S6:161:GLU:HG2	52:S6:170:THR:HB	2.02	0.42
53:S7:30:SER:C	53:S7:32:PRO:HD2	2.40	0.42
54:S8:114:GLU:HA	54:S8:120:THR:HA	2.01	0.42
55:S9:124:HIS:O	55:S9:128:LEU:HG	2.19	0.42
60:14:133:ARG:NH2	78:1S:1786:G:OP2	2.52	0.42
64:18:127:HIS:HE1	78:1S:1545:A:H5''	1.84	0.42
65:19:22:LEU:HD13	65:19:25:GLN:OE1	2.20	0.42
78:1S:137:U:O2'	78:1S:138:A:H5'	2.19	0.42
78:1S:463:U:H2'	78:1S:464:A:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:560:U:H2'	78:1S:561:G:H8	1.85	0.42
78:1S:950:C:H2'	78:1S:951:A:O4'	2.20	0.42
78:1S:1169:G:H21	78:1S:1576:A:N6	1.95	0.42
78:1S:1511:U:H2'	78:1S:1512:G:H8	1.82	0.42
78:1S:1681:A:H2'	78:1S:1682:U:C4'	2.49	0.42
79:2S:113:C:H3'	79:2S:154:U:O4	2.19	0.42
79:2S:268:A:H61	79:2S:295:A:H3'	1.85	0.42
79:2S:562:C:H2'	79:2S:563:U:C6	2.55	0.42
79:2S:971:G:O2'	79:2S:1371:G:H1'	2.20	0.42
79:2S:2603:G:H2'	79:2S:2604:U:C6	2.54	0.42
79:2S:2817:A:H3'	79:2S:2818:U:H5'	2.02	0.42
80:8S:130:C:H2'	80:8S:131:A:C8	2.55	0.42
3:L3:218:ILE:HB	3:L3:337:THR:HB	2.02	0.42
6:L6:170:LYS:O	6:L6:174:LEU:HG	2.19	0.42
7:L7:37:ASN:O	7:L7:41:ARG:HG3	2.20	0.42
8:L8:36:ILE:HG22	8:L8:37:GLY:N	2.34	0.42
8:L8:48:ARG:HA	79:2S:2585:G:C8	2.55	0.42
8:L8:169:LEU:HD23	8:L8:173:MET:HG2	2.01	0.42
10:60:55:ASN:OD1	10:60:163:GLN:HA	2.19	0.42
14:64:48:GLY:H	14:64:53:VAL:HG13	1.85	0.42
18:68:65:SER:HB3	18:68:90:ASP:CG	2.40	0.42
21:71:20:ARG:HH11	21:71:20:ARG:CB	2.32	0.42
23:73:81:GLN:HE21	23:73:83:LYS:HB3	1.84	0.42
25:75:100:LYS:HZ1	25:75:107:VAL:H	1.67	0.42
25:75:109:LYS:HG2	25:75:125:ARG:HB3	2.01	0.42
28:78:12:ARG:HA	28:78:12:ARG:HD3	1.88	0.42
30:80:25:LEU:HD23	30:80:90:VAL:HG13	2.01	0.42
30:80:78:GLY:HA2	30:80:87:VAL:HG12	2.02	0.42
33:83:103:TYR:HA	33:83:105:SER:N	2.35	0.42
34:84:19:LYS:HZ3	34:84:38:LEU:HD12	1.82	0.42
37:87:14:LYS:HE2	79:2S:1491:A:H5''	2.02	0.42
37:87:18:LEU:HD23	37:87:25:ARG:CA	2.48	0.42
37:87:69:HIS:O	37:87:73:ARG:HG3	2.20	0.42
42:92:60:LYS:HD3	79:2S:2803:A:OP1	2.19	0.42
43:93:39:CYS:HB3	43:93:42:CYS:SG	2.60	0.42
44:P0:61:ARG:HB2	79:2S:1221:A:H5'	2.01	0.42
45:RC:173:GLY:O	45:RC:199:ILE:HB	2.20	0.42
47:S1:86:LEU:C	47:S1:101:HIS:HB2	2.39	0.42
48:S2:140:ARG:HB3	48:S2:221:THR:CB	2.41	0.42
48:S2:141:ARG:NH2	48:S2:151:PRO:HB2	2.33	0.42
48:S2:145:GLY:CA	68:22:97:ARG:HB2	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:S3:115:ILE:HG21	49:S3:142:LEU:CD2	2.49	0.42
51:S5:99:MET:HG3	51:S5:100:ASN:N	2.35	0.42
51:S5:140:THR:CG2	51:S5:201:ALA:HB1	2.50	0.42
58:12:23:THR:HG23	58:12:23:THR:O	2.20	0.42
58:12:130:THR:HG22	58:12:131:ASP:N	2.34	0.42
61:15:109:PRO:O	61:15:112:LEU:HG	2.19	0.42
69:23:24:TRP:HE1	78:1S:311:U:H5'	1.85	0.42
69:23:127:VAL:HG13	69:23:132:LEU:HD21	2.01	0.42
74:28:21:SER:HA	78:1S:1618:C:H4'	2.01	0.42
76:30:23:LYS:HG3	78:1S:586:G:H5''	2.02	0.42
78:1S:126:A:N1	78:1S:264:G:H4'	2.34	0.42
78:1S:179:A:H2'	78:1S:180:A:O4'	2.20	0.42
78:1S:598:U:H2'	78:1S:599:A:H8	1.84	0.42
78:1S:612:U:H2'	78:1S:613:G:C8	2.54	0.42
78:1S:962:C:H2'	78:1S:963:A:O4'	2.19	0.42
78:1S:1645:G:H2'	78:1S:1646:C:C6	2.55	0.42
78:1S:1711:C:C2'	78:1S:1712:A:H4'	2.45	0.42
79:2S:718:G:C2	79:2S:721:G:H1'	2.55	0.42
79:2S:752:C:H2'	79:2S:753:C:H6	1.85	0.42
79:2S:1024:G:H2'	79:2S:1024:G:N3	2.35	0.42
79:2S:1787:A:H2'	79:2S:1788:C:C5'	2.48	0.42
79:2S:2333:C:H2'	79:2S:2334:U:C6	2.54	0.42
79:2S:3210:A:H2'	79:2S:3211:C:H6	1.84	0.42
79:2S:3335:A:C4	79:2S:3371:G:H4'	2.54	0.42
80:8S:71:A:C2	80:8S:88:A:H1'	2.55	0.42
82:ET:22:A:H2'	82:ET:47:G:C6	2.54	0.42
1:L1:103:LEU:HG	1:L1:128:LEU:HD13	2.01	0.42
1:L1:189:PHE:HE1	1:L1:201:VAL:HG23	1.85	0.42
3:L3:46:PHE:HZ	3:L3:204:ALA:HA	1.85	0.42
3:L3:226:PHE:HA	3:L3:269:GLN:HA	2.02	0.42
4:L4:175:HIS:O	4:L4:179:LEU:HG	2.20	0.42
5:L5:258:LYS:O	5:L5:259:LYS:HB3	2.20	0.42
6:L6:65:ILE:HD13	6:L6:65:ILE:N	2.34	0.42
6:L6:70:LYS:NZ	6:L6:139:LYS:HE2	2.35	0.42
7:L7:179:LEU:HD13	7:L7:179:LEU:H	1.83	0.42
8:L8:165:PHE:H	8:L8:165:PHE:HD1	1.67	0.42
8:L8:170:CYS:HB3	8:L8:175:VAL:O	2.19	0.42
15:65:15:GLN:CG	36:86:51:SER:HB2	2.50	0.42
18:68:147:ARG:NH1	18:68:150:VAL:CG1	2.83	0.42
20:70:128:GLU:HG2	20:70:129:ILE:N	2.34	0.42
23:73:39:VAL:HA	23:73:58:VAL:CB	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:73:87:ARG:NH1	23:73:120:LYS:HD3	2.35	0.42
23:73:93:LEU:HB2	24:74:20:LEU:HD22	2.02	0.42
27:77:41:ALA:HB2	27:77:77:TYR:CE1	2.55	0.42
30:80:16:LEU:CD1	30:80:98:SER:HB2	2.47	0.42
37:87:18:LEU:HD23	37:87:25:ARG:CB	2.47	0.42
48:S2:158:THR:HG21	48:S2:221:THR:HA	2.01	0.42
49:S3:210:GLU:HA	49:S3:211:PRO:HD3	1.90	0.42
50:S4:181:VAL:O	50:S4:192:ILE:HA	2.20	0.42
54:S8:114:GLU:CG	54:S8:120:THR:HG22	2.49	0.42
55:S9:93:LEU:HA	55:S9:96:VAL:CG2	2.50	0.42
67:21:78:LEU:HD23	67:21:78:LEU:H	1.84	0.42
70:24:104:SER:HB3	70:24:107:GLN:HB2	2.01	0.42
72:26:19:LYS:HA	72:26:19:LYS:HE3	2.02	0.42
78:1S:119:A:H2'	78:1S:120:U:H5'	2.01	0.42
78:1S:505:A:N1	78:1S:507:U:N3	2.67	0.42
78:1S:534:A:H2'	78:1S:534:A:N3	2.35	0.42
78:1S:1758:U:H2'	78:1S:1759:C:C6	2.55	0.42
79:2S:160:G:H3'	79:2S:161:G:C5'	2.41	0.42
79:2S:841:A:H2'	79:2S:842:G:C8	2.55	0.42
79:2S:1904:C:H2'	79:2S:1905:G:C8	2.55	0.42
79:2S:2318:U:H2'	79:2S:2319:U:O4'	2.20	0.42
79:2S:2675:C:H2'	79:2S:2676:A:C8	2.55	0.42
79:2S:3096:C:H2'	79:2S:3097:C:H6	1.84	0.42
80:8S:66:A:H2'	80:8S:67:U:C6	2.55	0.42
81:5S:70:U:H2'	81:5S:71:G:C8	2.55	0.42
82:ET:49:C:H2'	82:ET:60:A:C4'	2.49	0.42
2:L2:118:GLU:HG3	2:L2:125:ALA:CB	2.49	0.42
2:L2:196:TRP:HD1	2:L2:198:LYS:NZ	2.18	0.42
5:L5:99:TYR:HA	5:L5:162:ALA:HA	2.01	0.42
5:L5:134:ALA:CA	5:L5:141:PRO:HD3	2.50	0.42
5:L5:232:ASP:OD2	5:L5:232:ASP:N	2.51	0.42
6:L6:146:ILE:O	6:L6:150:LYS:HG3	2.19	0.42
7:L7:25:GLN:O	7:L7:25:GLN:OE1	2.37	0.42
8:L8:147:LYS:HD2	79:2S:117:U:O4	2.20	0.42
8:L8:153:ILE:HD11	8:L8:177:TYR:HB2	2.02	0.42
12:62:66:ASN:N	12:62:69:ALA:HB3	2.34	0.42
13:63:181:GLY:HA3	79:2S:2780:A:O2'	2.19	0.42
15:65:150:TRP:O	15:65:153:ASP:HB2	2.20	0.42
16:66:78:ARG:HA	16:66:81:TYR:HB2	2.02	0.42
16:66:95:GLY:O	16:66:99:LEU:HG	2.20	0.42
19:69:162:ARG:HB2	19:69:162:ARG:NH1	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:71:116:ARG:HG3	21:71:116:ARG:NH1	2.35	0.42
24:74:6:ASP:HA	24:74:13:ILE:HD11	2.01	0.42
31:81:20:LEU:HD11	31:81:32:ALA:HB2	2.01	0.42
32:82:122:PRO:O	32:82:126:LEU:HD11	2.20	0.42
36:86:26:ILE:HG22	79:2S:155:G:N2	2.28	0.42
37:87:49:TRP:HE3	79:2S:929:A:H1'	1.85	0.42
43:93:39:CYS:O	43:93:43:GLY:HA2	2.20	0.42
45:RC:216:LYS:HA	45:RC:239:GLU:HG3	2.02	0.42
48:S2:159:THR:HG22	48:S2:160:GLY:N	2.35	0.42
48:S2:203:LYS:HB2	78:1S:15:U:OP2	2.20	0.42
49:S3:29:LEU:HD13	49:S3:58:VAL:HG13	2.01	0.42
49:S3:175:VAL:CG1	49:S3:182:LEU:HB2	2.50	0.42
52:S6:14:LYS:HD3	52:S6:16:PHE:CZ	2.55	0.42
54:S8:141:ARG:HD3	78:1S:195:G:O6	2.19	0.42
55:S9:45:ILE:HG21	55:S9:105:LEU:CD1	2.50	0.42
55:S9:149:ARG:HD2	78:1S:765:G:C5	2.54	0.42
57:11:85:VAL:HG22	57:11:108:PRO:HB3	2.01	0.42
57:11:101:GLU:HB3	69:23:12:ALA:HB3	2.01	0.42
58:12:40:GLY:HA3	58:12:124:LYS:O	2.19	0.42
59:13:39:LYS:HE2	59:13:39:LYS:N	2.35	0.42
59:13:53:LEU:O	59:13:57:ALA:HB3	2.19	0.42
65:19:83:ALA:HB1	65:19:91:TYR:HB3	2.02	0.42
74:28:9:LEU:HB3	74:28:33:LEU:HD23	2.02	0.42
78:1S:1076:A:O2'	78:1S:1077:C:H5'	2.20	0.42
78:1S:1642:G:O2'	78:1S:1643:U:H5'	2.20	0.42
79:2S:207:U:H2'	79:2S:208:C:H6	1.84	0.42
79:2S:412:G:H2'	79:2S:413:U:C6	2.54	0.42
79:2S:439:C:O2	79:2S:439:C:H2'	2.19	0.42
79:2S:496:C:H1'	79:2S:622:A:C2	2.55	0.42
79:2S:1125:U:H2'	79:2S:1126:G:O4'	2.19	0.42
79:2S:1479:U:H2'	79:2S:1480:G:H5'	2.00	0.42
79:2S:1520:G:H2'	79:2S:1521:G:O4'	2.19	0.42
79:2S:1623:G:H2'	79:2S:1624:G:O4'	2.20	0.42
79:2S:1753:G:H2'	79:2S:1754:G:O4'	2.20	0.42
79:2S:2633:U:C2'	79:2S:2634:U:H5'	2.50	0.42
79:2S:2788:C:H2'	79:2S:2789:U:C6	2.54	0.42
79:2S:3382:U:O2	79:2S:3382:U:H2'	2.20	0.42
3:L3:93:VAL:HG22	3:L3:94:GLU:N	2.35	0.41
3:L3:238:LEU:HD22	3:L3:238:LEU:N	2.35	0.41
4:L4:151:VAL:HG21	4:L4:255:PHE:CD2	2.55	0.41
5:L5:20:PHE:HB2	5:L5:23:ARG:CB	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:L8:178:ALA:HB2	8:L8:218:ILE:CG2	2.49	0.41
9:L9:12:VAL:HB	9:L9:51:GLN:HA	2.02	0.41
14:64:66:THR:HG22	14:64:99:TRP:CZ3	2.55	0.41
17:67:67:ILE:HG22	17:67:68:GLY:N	2.34	0.41
17:67:122:ALA:HB2	17:67:145:HIS:CD2	2.54	0.41
20:70:1:MET:HA	79:2S:1323:G:C5'	2.49	0.41
20:70:73:LYS:HE2	20:70:75:PHE:HE1	1.85	0.41
20:70:73:LYS:HB2	20:70:75:PHE:CE1	2.56	0.41
25:75:82:LEU:HB3	25:75:84:PHE:CZ	2.55	0.41
37:87:26:SER:HB2	37:87:34:CYS:SG	2.60	0.41
45:RC:211:ILE:HD11	45:RC:225:LEU:HA	2.02	0.41
47:S1:29:TRP:CH2	47:S1:45:LYS:HB3	2.55	0.41
47:S1:126:THR:CG2	47:S1:136:ARG:HG3	2.48	0.41
48:S2:66:PHE:CD1	48:S2:66:PHE:N	2.83	0.41
51:S5:25:LEU:HB2	51:S5:26:ALA:H	1.52	0.41
53:S7:44:LYS:CG	53:S7:63:PRO:HG3	2.50	0.41
55:S9:125:ALA:O	55:S9:129:ILE:HG13	2.19	0.41
55:S9:175:ARG:HH11	55:S9:175:ARG:HG3	1.85	0.41
59:13:96:VAL:HA	59:13:99:ARG:CB	2.43	0.41
65:19:31:PRO:HD2	65:19:34:VAL:CB	2.49	0.41
66:20:51:VAL:HG13	66:20:51:VAL:O	2.19	0.41
67:21:34:ILE:O	67:21:52:THR:HA	2.19	0.41
76:30:46:ASN:O	76:30:47:VAL:HG12	2.20	0.41
78:1S:966:A:H2'	78:1S:967:A:C8	2.54	0.41
78:1S:1170:G:H2'	78:1S:1170:G:N3	2.34	0.41
78:1S:1596:C:HO2'	78:1S:1598:U:H5	1.66	0.41
79:2S:167:U:H2'	79:2S:168:U:O4'	2.20	0.41
79:2S:866:A:H3'	79:2S:867:G:C8	2.54	0.41
79:2S:1448:U:H2'	79:2S:1449:A:H8	1.85	0.41
79:2S:1743:G:H2'	79:2S:1744:G:O4'	2.20	0.41
79:2S:1851:G:H2'	79:2S:1852:G:C8	2.55	0.41
79:2S:2272:G:N3	79:2S:2272:G:H5'	2.35	0.41
79:2S:2700:G:H2'	79:2S:2701:U:H6	1.76	0.41
79:2S:3250:U:H2'	79:2S:3251:U:H6	1.85	0.41
79:2S:3372:A:H2'	79:2S:3373:U:C6	2.55	0.41
1:L1:117:ILE:O	1:L1:117:ILE:HG12	2.20	0.41
1:L1:120:VAL:H	1:L1:121:PRO:HD3	1.84	0.41
2:L2:23:ARG:HD3	79:2S:2175:U:O2'	2.21	0.41
2:L2:96:LEU:HD23	43:93:83:ILE:HG23	2.02	0.41
5:L5:296:GLN:O	5:L5:297:GLN:HB2	2.20	0.41
6:L6:153:PRO:O	6:L6:154:LEU:HB2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:L7:41:ARG:NH1	7:L7:41:ARG:HB3	2.35	0.41
7:L7:82:LYS:HA	7:L7:119:VAL:CG2	2.50	0.41
7:L7:232:ARG:O	7:L7:235:PHE:HD2	2.02	0.41
8:L8:69:LEU:HD13	15:65:21:PHE:CZ	2.55	0.41
10:60:55:ASN:O	10:60:56:GLU:HG3	2.20	0.41
10:60:72:ALA:HB1	10:60:76:MET:CE	2.50	0.41
11:61:50:ALA:HB3	11:61:60:ARG:O	2.20	0.41
13:63:74:GLY:HA3	13:63:98:ASP:HB2	2.01	0.41
13:63:79:GLU:HG3	13:63:103:ASN:HD21	1.85	0.41
15:65:38:ARG:HG2	15:65:61:ILE:O	2.20	0.41
15:65:68:ARG:HD2	15:65:127:TYR:C	2.40	0.41
17:67:124:LYS:HB3	17:67:140:GLU:HB3	2.02	0.41
17:67:175:ARG:HH21	17:67:175:ARG:HG3	1.86	0.41
20:70:1:MET:C	79:2S:1323:G:H5''	2.39	0.41
23:73:57:MET:HA	23:73:77:ILE:HA	2.02	0.41
23:73:84:SER:CA	23:73:94:TYR:HB3	2.46	0.41
27:77:13:VAL:HG12	27:77:14:VAL:N	2.35	0.41
27:77:83:THR:HG23	27:77:85:TYR:H	1.85	0.41
33:83:35:VAL:HG11	33:83:41:ALA:HB2	2.01	0.41
36:86:70:ARG:CZ	36:86:84:LYS:HG2	2.49	0.41
37:87:3:LYS:HE3	79:2S:2138:A:C8	2.55	0.41
40:90:108:THR:O	40:90:119:ASN:HA	2.20	0.41
42:92:2:VAL:HG22	42:92:90:HIS:O	2.21	0.41
43:93:15:GLY:HA3	43:93:17:ARG:NH2	2.35	0.41
44:P0:77:LEU:HD23	44:P0:77:LEU:O	2.20	0.41
46:S0:125:ASP:HA	46:S0:126:PRO:HD2	1.92	0.41
47:S1:20:VAL:O	47:S1:20:VAL:HG12	2.20	0.41
47:S1:148:ASN:HB3	63:17:125:SER:O	2.20	0.41
50:S4:156:VAL:HG12	50:S4:157:ASN:ND2	2.35	0.41
51:S5:88:PRO:O	51:S5:92:ARG:HG3	2.20	0.41
55:S9:65:LYS:HA	55:S9:70:LEU:CD1	2.49	0.41
56:10:82:LEU:HD22	56:10:86:ILE:HG21	2.01	0.41
58:12:61:VAL:HG13	58:12:121:VAL:HG23	2.02	0.41
67:21:73:ALA:HB3	67:21:79:LEU:CD1	2.50	0.41
71:25:83:LEU:HB2	71:25:89:ILE:HD11	2.02	0.41
74:28:42:ARG:HD3	74:28:61:ARG:O	2.20	0.41
78:1S:705:U:H2'	78:1S:706:A:C8	2.53	0.41
78:1S:1106:U:H2'	78:1S:1107:G:H8	1.86	0.41
78:1S:1762:A:O2'	78:1S:1783:C:H5''	2.20	0.41
79:2S:198:A:H2'	79:2S:199:A:H5'	2.02	0.41
79:2S:1465:A:H2'	79:2S:1466:G:O4'	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1596:C:H42	79:2S:1611:G:H1	1.67	0.41
79:2S:2512:C:H2'	79:2S:2513:U:OP2	2.20	0.41
79:2S:2732:G:H5'	79:2S:2761:G:H5''	2.01	0.41
79:2S:3190:C:H2'	79:2S:3191:G:H8	1.85	0.41
79:2S:3287:U:H2'	79:2S:3288:G:H5'	2.02	0.41
2:L2:57:PRO:CB	43:93:54:ILE:HD11	2.48	0.41
3:L3:46:PHE:CZ	3:L3:204:ALA:HA	2.56	0.41
4:L4:138:ARG:HD3	4:L4:245:GLY:C	2.41	0.41
4:L4:157:GLU:O	4:L4:213:ASN:HB2	2.20	0.41
5:L5:35:ARG:HB2	79:2S:2748:A:C2	2.55	0.41
5:L5:206:GLN:O	5:L5:210:GLU:HG3	2.20	0.41
6:L6:176:PHE:HE2	33:83:107:ILE:HD13	1.84	0.41
8:L8:48:ARG:HA	79:2S:2585:G:H8	1.85	0.41
8:L8:72:PRO:HB2	8:L8:74:THR:HG22	2.02	0.41
8:L8:145:ASN:O	8:L8:146:LYS:HB2	2.20	0.41
9:L9:113:GLU:HG2	9:L9:114:VAL:N	2.35	0.41
9:L9:117:PHE:O	9:L9:118:LEU:HB2	2.20	0.41
10:60:40:LYS:HE2	79:2S:1010:G:H4'	2.01	0.41
15:65:14:LYS:HE2	79:2S:269:G:H5''	2.01	0.41
16:66:178:VAL:O	16:66:182:ASN:HB2	2.20	0.41
17:67:119:VAL:HG23	17:67:144:SER:HB3	2.02	0.41
19:69:35:ALA:HB1	19:69:41:ILE:HD12	2.01	0.41
22:72:33:TYR:CZ	22:72:37:LEU:HD11	2.55	0.41
25:75:33:ARG:HB2	25:75:34:LEU:H	1.62	0.41
31:81:88:PRO:HG2	31:81:89:LEU:CD1	2.47	0.41
33:83:75:HIS:HB3	33:83:80:VAL:HG12	2.01	0.41
34:84:42:PRO:HB3	79:2S:1653:G:O2'	2.20	0.41
37:87:28:HIS:CE1	37:87:30:GLN:HB2	2.56	0.41
45:RC:127:ARG:HA	45:RC:150:TRP:HB3	2.03	0.41
46:S0:148:ASP:HB3	46:S0:149:LEU:H	1.70	0.41
46:S0:188:LEU:CD2	46:S0:195:TRP:HE1	2.33	0.41
47:S1:51:SER:HA	47:S1:56:SER:HA	2.01	0.41
47:S1:179:SER:O	47:S1:182:ALA:HB3	2.20	0.41
48:S2:143:TYR:CD1	48:S2:143:TYR:N	2.87	0.41
48:S2:145:GLY:HA3	68:22:97:ARG:NH1	2.29	0.41
54:S8:8:ARG:HD3	54:S8:21:PHE:CD1	2.56	0.41
57:11:155:LYS:HG3	57:11:156:PHE:H	1.85	0.41
64:18:46:VAL:HG13	64:18:72:ILE:HB	2.02	0.41
65:19:69:LYS:O	65:19:123:ARG:HG3	2.20	0.41
70:24:87:PRO:O	70:24:91:LEU:HG	2.20	0.41
73:27:54:VAL:HG21	73:27:64:CYS:SG	2.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1031:U:H3'	78:1S:1032:G:C5'	2.50	0.41
78:1S:1304:G:H2'	78:1S:1305:U:O2	2.20	0.41
78:1S:1537:C:H4'	78:1S:1538:U:H5	1.85	0.41
78:1S:1784:C:H2'	78:1S:1785:U:C6	2.54	0.41
78:1S:1790:A:O2'	78:1S:1791:A:H5'	2.20	0.41
79:2S:164:A:C2	79:2S:165:A:N6	2.89	0.41
79:2S:374:A:C4'	79:2S:375:A:H5'	2.49	0.41
79:2S:422:A:N1	79:2S:2363:A:H4'	2.36	0.41
79:2S:422:A:C2	79:2S:2363:A:H4'	2.54	0.41
79:2S:740:G:H2'	79:2S:741:U:O4'	2.21	0.41
79:2S:804:C:H2'	79:2S:805:G:C8	2.56	0.41
79:2S:1046:A:H2'	79:2S:1049:C:C5	2.55	0.41
79:2S:1449:A:H2'	79:2S:1450:G:H5'	2.03	0.41
79:2S:1739:U:C2'	79:2S:1740:U:H5'	2.51	0.41
79:2S:1828:A:H2'	79:2S:1829:G:H8	1.84	0.41
79:2S:1978:A:H61	79:2S:2041:U:H3	1.69	0.41
79:2S:2174:G:H4'	79:2S:2175:U:H5''	2.03	0.41
79:2S:2477:G:H2'	79:2S:2478:C:H5'	2.01	0.41
79:2S:3089:C:H2'	79:2S:3090:U:C6	2.56	0.41
81:5S:35:C:H2'	81:5S:36:C:H5'	2.02	0.41
1:L1:36:VAL:HG12	1:L1:168:ALA:O	2.21	0.41
1:L1:162:VAL:HG22	1:L1:163:LEU:N	2.34	0.41
1:L1:201:VAL:CG1	1:L1:204:LEU:HD11	2.45	0.41
3:L3:17:LEU:HA	3:L3:18:PRO:C	2.41	0.41
3:L3:311:PHE:HB2	3:L3:315:GLY:H	1.86	0.41
4:L4:209:TYR:O	4:L4:230:VAL:HG23	2.21	0.41
7:L7:235:PHE:CE2	20:70:35:VAL:HG23	2.56	0.41
8:L8:93:LEU:HD22	8:L8:214:LEU:HD22	2.03	0.41
11:61:23:VAL:HG12	11:61:24:GLY:N	2.35	0.41
13:63:172:LEU:HD23	13:63:172:LEU:C	2.40	0.41
15:65:50:ARG:HD3	79:2S:267:G:H1'	2.01	0.41
15:65:59:PHE:HD1	15:65:133:ILE:HD11	1.85	0.41
17:67:68:GLY:HA3	79:2S:2350:C:H5''	2.03	0.41
21:71:105:PHE:CE2	79:2S:1062:A:H4'	2.55	0.41
23:73:67:PRO:CA	23:73:70:ARG:HD3	2.45	0.41
25:75:72:ALA:O	25:75:76:VAL:HG23	2.20	0.41
26:76:70:ILE:H	26:76:70:ILE:CD1	2.32	0.41
33:83:18:ARG:HB2	33:83:22:VAL:O	2.19	0.41
34:84:95:ILE:O	34:84:95:ILE:HG22	2.20	0.41
40:90:93:LYS:O	40:90:124:LYS:HB3	2.20	0.41
40:90:104:PRO:HD2	40:90:107:ALA:HB2	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:68:ARG:HH11	50:S4:68:ARG:HG2	1.85	0.41
52:S6:174:LYS:HD2	78:1S:78:A:H2	1.86	0.41
53:S7:30:SER:O	53:S7:34:LEU:HB2	2.19	0.41
55:S9:140:ILE:HG12	55:S9:159:ALA:HB2	2.03	0.41
59:13:64:ARG:HD2	59:13:64:ARG:O	2.20	0.41
65:19:102:ARG:HH22	78:1S:1501:C:N4	2.02	0.41
67:21:19:ALA:HA	67:21:71:ARG:HH12	1.86	0.41
68:22:47:ILE:CG2	68:22:69:LEU:HD22	2.49	0.41
78:1S:855:A:H3'	78:1S:856:A:C5'	2.50	0.41
78:1S:1086:A:H2'	78:1S:1087:A:C8	2.55	0.41
78:1S:1196:A:H4'	78:1S:1197:C:C5'	2.51	0.41
78:1S:1208:A:H4'	78:1S:1269:U:O3'	2.19	0.41
78:1S:1387:G:H1'	78:1S:1410:A:N6	2.35	0.41
79:2S:504:A:H2'	79:2S:505:G:C8	2.56	0.41
79:2S:1556:C:H3'	79:2S:2169:G:H22	1.84	0.41
79:2S:2931:C:H2'	79:2S:2932:U:O4'	2.20	0.41
79:2S:3255:U:H2'	79:2S:3256:G:C8	2.56	0.41
79:2S:3343:G:H21	79:2S:3362:A:H2	1.64	0.41
1:L1:92:LYS:N	1:L1:92:LYS:HD2	2.35	0.41
1:L1:183:ILE:O	1:L1:187:VAL:HG23	2.19	0.41
2:L2:136:ILE:N	2:L2:136:ILE:HD12	2.35	0.41
4:L4:74:ILE:HD13	4:L4:88:GLY:HA2	2.01	0.41
4:L4:122:THR:O	4:L4:126:ILE:HG13	2.21	0.41
5:L5:68:THR:HG22	5:L5:70:THR:H	1.86	0.41
7:L7:88:ARG:NH2	7:L7:92:ILE:HA	2.34	0.41
8:L8:64:ILE:O	8:L8:68:ARG:HG2	2.20	0.41
8:L8:116:VAL:HG23	8:L8:125:ALA:CB	2.50	0.41
13:63:16:LYS:CB	13:63:21:ARG:HH22	2.34	0.41
13:63:53:LEU:HD12	13:63:55:ARG:HH12	1.83	0.41
14:64:116:GLU:O	14:64:120:VAL:HG23	2.19	0.41
14:64:131:VAL:HG13	16:66:181:ALA:HB1	2.02	0.41
16:66:185:ALA:O	16:66:191:ALA:HB2	2.21	0.41
18:68:147:ARG:HG2	18:68:148:GLU:N	2.32	0.41
19:69:66:HIS:O	19:69:70:LYS:HG2	2.19	0.41
19:69:151:ARG:O	19:69:155:LEU:HB2	2.21	0.41
20:70:38:LYS:HD3	20:70:58:ILE:HG21	2.01	0.41
20:70:76:GLY:HA2	20:70:93:GLU:HG2	2.03	0.41
20:70:154:HIS:HA	20:70:170:THR:HB	2.03	0.41
21:71:68:THR:HG23	21:71:69:LYS:N	2.27	0.41
27:77:108:GLU:O	27:77:112:LYS:HG3	2.20	0.41
31:81:35:GLU:O	31:81:39:PHE:HB2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:85:53:CYS:HA	80:8S:64:U:O2'	2.20	0.41
46:S0:134:LYS:HA	46:S0:137:SER:OG	2.20	0.41
46:S0:203:PHE:N	46:S0:203:PHE:CD2	2.88	0.41
48:S2:159:THR:HG23	48:S2:167:VAL:O	2.20	0.41
52:S6:122:GLU:O	52:S6:126:ASP:CB	2.68	0.41
55:S9:87:SER:OG	55:S9:90:LYS:HB2	2.19	0.41
57:11:76:VAL:HG12	57:11:85:VAL:O	2.20	0.41
57:11:93:TYR:HB2	57:11:100:TYR:CE1	2.55	0.41
58:12:56:GLU:HB3	58:12:124:LYS:HG2	2.02	0.41
63:17:99:VAL:HG23	63:17:100:LEU:H	1.85	0.41
65:19:13:ASP:HA	65:19:16:ASN:CB	2.50	0.41
75:29:36:LEU:HD12	75:29:37:ASN:H	1.85	0.41
77:31:143:LYS:HA	78:1S:1253:U:H4'	2.02	0.41
78:1S:320:U:C3'	78:1S:321:C:H5''	2.51	0.41
78:1S:1639:C:H2'	78:1S:1640:C:O4'	2.21	0.41
78:1S:1696:G:H4'	78:1S:1697:G:OP1	2.20	0.41
79:2S:67:A:H61	79:2S:271:C:H4'	1.86	0.41
79:2S:927:C:O2'	79:2S:928:C:H5'	2.21	0.41
79:2S:1978:A:C2'	79:2S:1979:G:H5'	2.50	0.41
79:2S:2162:U:H2'	79:2S:2163:C:C6	2.55	0.41
79:2S:2516:U:H3	79:2S:2591:A:H2	1.67	0.41
79:2S:3163:A:H2'	79:2S:3164:C:H5''	2.02	0.41
80:8S:71:A:H4'	80:8S:72:A:O5'	2.20	0.41
1:L1:198:TRP:HA	1:L1:198:TRP:CE3	2.56	0.41
2:L2:35:ALA:HA	8:L8:36:ILE:CD1	2.49	0.41
5:L5:11:ALA:HB1	79:2S:1003:A:C5'	2.49	0.41
5:L5:222:LEU:O	5:L5:223:PHE:HB2	2.21	0.41
7:L7:81:HIS:O	7:L7:119:VAL:HG21	2.20	0.41
7:L7:125:GLU:O	7:L7:129:LEU:HG	2.21	0.41
9:L9:4:ILE:HD13	20:70:148:LEU:HD11	2.02	0.41
9:L9:49:ASN:HD21	9:L9:52:LEU:HD13	1.86	0.41
10:60:7:ARG:HA	10:60:10:ARG:HB2	2.03	0.41
10:60:77:THR:HG22	10:60:82:ARG:HB3	2.02	0.41
10:60:169:LYS:N	10:60:169:LYS:HD2	2.35	0.41
15:65:9:GLU:OE2	15:65:12:ARG:HD2	2.21	0.41
17:67:157:VAL:O	17:67:157:VAL:HG12	2.20	0.41
19:69:173:ARG:HG2	78:1S:852:C:OP2	2.20	0.41
20:70:1:MET:HA	79:2S:1323:G:H5'	2.02	0.41
31:81:14:ILE:HG23	31:81:14:ILE:O	2.21	0.41
34:84:22:VAL:CG1	34:84:30:LEU:HD22	2.48	0.41
38:88:5:ILE:HD12	38:88:11:PHE:HD2	1.83	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:89:38:ASN:HD22	39:89:41:ARG:CD	2.34	0.41
40:90:122:ARG:HH12	40:90:125:LYS:HG3	1.85	0.41
44:P0:48:ARG:HE	44:P0:90:ASN:HB3	1.85	0.41
47:S1:122:GLU:HG2	47:S1:123:ALA:N	2.35	0.41
49:S3:79:TYR:HB3	49:S3:80:ALA:H	1.66	0.41
49:S3:134:CYS:O	49:S3:153:ALA:HA	2.21	0.41
51:S5:117:THR:OG1	51:S5:191:ALA:HB1	2.21	0.41
52:S6:7:TYR:HB2	52:S6:124:LEU:HD23	2.02	0.41
54:S8:137:LYS:H	54:S8:137:LYS:CD	2.20	0.41
54:S8:173:PRO:O	54:S8:177:GLY:HA2	2.20	0.41
55:S9:7:THR:HG23	78:1S:771:A:H5'	2.03	0.41
55:S9:112:GLN:HA	55:S9:112:GLN:HE21	1.85	0.41
55:S9:172:VAL:O	55:S9:176:ASN:ND2	2.53	0.41
64:18:46:VAL:CG1	64:18:72:ILE:HB	2.51	0.41
69:23:95:PHE:HB3	69:23:135:LEU:HD13	2.02	0.41
69:23:96:VAL:CG2	69:23:97:ASP:H	2.23	0.41
70:24:75:VAL:O	70:24:75:VAL:HG13	2.20	0.41
75:29:21:CYS:HB3	75:29:26:SER:H	1.85	0.41
78:1S:123:G:H2'	78:1S:124:A:O4'	2.20	0.41
78:1S:485:A:H2'	78:1S:486:G:O4'	2.20	0.41
78:1S:492:A:H5''	78:1S:493:U:C5'	2.45	0.41
78:1S:646:C:C2'	78:1S:647:G:H5'	2.50	0.41
78:1S:1079:U:H2'	78:1S:1080:U:O4'	2.21	0.41
78:1S:1247:U:H2'	78:1S:1248:C:O4'	2.21	0.41
78:1S:1688:U:H2'	78:1S:1689:A:O4'	2.20	0.41
79:2S:170:G:H2'	79:2S:171:G:H8	1.86	0.41
79:2S:291:C:H2'	79:2S:292:U:C6	2.56	0.41
79:2S:379:C:H2'	79:2S:380:U:C6	2.55	0.41
79:2S:687:U:H2'	79:2S:688:G:C8	2.56	0.41
79:2S:837:A:H3'	79:2S:838:G:H8	1.86	0.41
79:2S:1218:U:H2'	79:2S:1219:C:C5'	2.47	0.41
79:2S:1964:C:C2'	79:2S:1965:C:H5'	2.50	0.41
79:2S:2078:C:O5'	79:2S:2078:C:H6	2.03	0.41
79:2S:2247:G:H2'	79:2S:2248:C:O4'	2.19	0.41
79:2S:2608:G:O2'	79:2S:2609:A:H5'	2.21	0.41
79:2S:2659:G:H2'	79:2S:2660:G:C8	2.55	0.41
79:2S:3003:G:H2'	79:2S:3004:C:H6	1.86	0.41
79:2S:3353:G:C8	79:2S:3356:G:H1'	2.55	0.41
81:5S:106:U:H2'	81:5S:107:C:C6	2.56	0.41
82:PT:32:G:H2'	82:PT:33:C:C6	2.55	0.41
1:L1:134:PHE:HZ	1:L1:156:LYS:HD3	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:225:ILE:HG21	2:L2:234:LYS:HG2	2.03	0.41
3:L3:183:LEU:HD12	3:L3:183:LEU:N	2.34	0.41
5:L5:134:ALA:HA	5:L5:141:PRO:HD3	2.03	0.41
6:L6:82:ARG:HB3	33:83:104:PRO:CA	2.45	0.41
7:L7:84:VAL:HG12	7:L7:138:TYR:CD1	2.56	0.41
7:L7:179:LEU:HD13	7:L7:183:ASP:OD2	2.20	0.41
7:L7:218:ARG:HH11	79:2S:1170:A:H5''	1.85	0.41
9:L9:137:SER:CB	9:L9:143:GLU:HB3	2.51	0.41
17:67:127:ARG:HB3	17:67:139:TYR:O	2.21	0.41
22:72:99:LYS:HB3	22:72:100:THR:H	1.78	0.41
23:73:80:ARG:CD	23:73:117:PRO:HG2	2.46	0.41
28:78:115:LYS:HG2	79:2S:715:A:N7	2.35	0.41
45:RC:239:GLU:O	45:RC:256:THR:HA	2.20	0.41
46:S0:56:LYS:CB	46:S0:160:ILE:HG12	2.49	0.41
46:S0:104:PRO:HB2	78:1S:1321:A:N3	2.35	0.41
47:S1:140:ILE:O	47:S1:211:HIS:HB2	2.20	0.41
49:S3:168:ILE:C	49:S3:168:ILE:HD12	2.41	0.41
53:S7:101:LYS:HA	53:S7:102:PRO:HD3	1.90	0.41
55:S9:85:VAL:O	55:S9:85:VAL:HG12	2.20	0.41
57:11:3:THR:HG22	57:11:4:GLU:N	2.35	0.41
64:18:50:ALA:HB2	64:18:72:ILE:HD12	2.03	0.41
69:23:103:LEU:HB2	69:23:126:LYS:HB2	2.02	0.41
78:1S:342:C:H2'	78:1S:343:C:H6	1.85	0.41
78:1S:463:U:O5'	78:1S:463:U:H6	2.02	0.41
79:2S:296:A:H2'	79:2S:297:G:N3	2.36	0.41
79:2S:360:G:H2'	79:2S:361:A:O4'	2.21	0.41
79:2S:710:A:H2'	79:2S:711:A:C8	2.56	0.41
79:2S:969:C:H2'	79:2S:970:A:H8	1.86	0.41
79:2S:999:G:H21	79:2S:1002:A:H62	1.69	0.41
79:2S:1058:U:H2'	79:2S:1059:G:H8	1.86	0.41
79:2S:1137:C:H2'	79:2S:1138:U:C6	2.56	0.41
79:2S:1362:G:H2'	79:2S:1363:A:C8	2.56	0.41
79:2S:1398:U:H4'	80:8S:9:A:H5''	2.03	0.41
79:2S:1645:U:H3'	79:2S:1646:G:H8	1.86	0.41
1:L1:108:ASN:HB2	1:L1:130:LYS:HG2	2.01	0.41
2:L2:187:HIS:HB3	2:L2:190:ARG:NH2	2.36	0.41
2:L2:206:PRO:HG3	2:L2:213:GLY:CA	2.43	0.41
4:L4:300:ARG:HB2	4:L4:301:PRO:CD	2.36	0.41
5:L5:8:LYS:HD2	5:L5:8:LYS:N	2.35	0.41
5:L5:49:TYR:CD1	5:L5:66:SER:HB3	2.56	0.41
7:L7:92:ILE:HD13	7:L7:109:THR:O	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:L7:221:LYS:HB2	7:L7:227:GLY:CA	2.50	0.41
8:L8:34:PHE:HE2	8:L8:42:PRO:HD3	1.85	0.41
8:L8:122:LYS:H	8:L8:122:LYS:HD3	1.85	0.41
8:L8:247:ASP:O	8:L8:251:LYS:HB2	2.20	0.41
10:60:5:PRO:HB2	10:60:7:ARG:HG2	2.02	0.41
10:60:212:GLU:C	10:60:214:PRO:HD3	2.40	0.41
16:66:97:ALA:O	16:66:101:ARG:HG3	2.21	0.41
17:67:29:THR:C	17:67:32:THR:HG22	2.41	0.41
18:68:185:LYS:HD3	18:68:186:VAL:HG23	2.02	0.41
19:69:21:LYS:HD2	19:69:55:VAL:HA	2.03	0.41
20:70:117:ARG:HG3	20:70:119:ARG:NH1	2.36	0.41
20:70:123:ILE:O	21:71:153:PRO:HG3	2.20	0.41
22:72:75:TYR:O	22:72:79:LEU:HG	2.20	0.41
22:72:104:ARG:HD2	22:72:105:LEU:N	2.35	0.41
35:85:44:ILE:HA	35:85:47:VAL:HG12	2.03	0.41
39:89:36:ARG:HG2	39:89:36:ARG:NH1	2.35	0.41
47:S1:35:PRO:HD2	47:S1:38:PHE:CE2	2.55	0.41
50:S4:129:VAL:HG12	50:S4:156:VAL:HG22	2.03	0.41
50:S4:131:LEU:N	50:S4:131:LEU:HD22	2.35	0.41
51:S5:81:ARG:HE	74:28:47:PRO:HB3	1.86	0.41
53:S7:126:LEU:H	53:S7:126:LEU:HD22	1.86	0.41
54:S8:45:SER:HB3	54:S8:55:TYR:HA	2.02	0.41
55:S9:83:VAL:HG23	55:S9:84:GLY:N	2.35	0.41
60:14:25:ASP:OD1	60:14:54:GLU:HB3	2.21	0.41
67:21:45:ALA:O	67:21:46:ILE:HB	2.21	0.41
78:1S:139:C:H1'	78:1S:140:A:OP2	2.21	0.41
78:1S:293:U:H2'	78:1S:294:C:C6	2.56	0.41
78:1S:782:U:H3'	78:1S:783:G:C5'	2.51	0.41
78:1S:1728:A:H2'	78:1S:1729:C:C6	2.55	0.41
79:2S:386:A:H8	79:2S:386:A:O5'	2.03	0.41
79:2S:629:U:H2'	79:2S:630:A:C8	2.55	0.41
79:2S:1403:C:H2'	79:2S:1404:G:C8	2.55	0.41
79:2S:1604:G:N3	79:2S:1604:G:H3'	2.36	0.41
79:2S:2286:U:H4'	79:2S:2287:C:H2'	2.03	0.41
79:2S:2722:U:H2'	79:2S:2723:U:H6	1.85	0.41
82:PT:10:G:C2	82:PT:27:G:H1'	2.56	0.41
1:L1:55:LEU:HD22	1:L1:134:PHE:HB3	2.01	0.41
2:L2:94:ALA:HB3	2:L2:102:LEU:HD21	2.03	0.41
2:L2:175:VAL:CG2	79:2S:2179:C:H1'	2.50	0.41
3:L3:31:ALA:HB2	79:2S:3136:G:H5''	2.03	0.41
3:L3:150:ARG:HD2	3:L3:154:TYR:HE2	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:L5:36:LEU:CD2	79:2S:2748:A:H1'	2.50	0.41
5:L5:190:ILE:HD12	5:L5:190:ILE:HA	1.97	0.41
5:L5:221:GLU:O	5:L5:224:LYS:HB2	2.20	0.41
6:L6:56:LYS:HD2	6:L6:98:VAL:O	2.20	0.41
7:L7:144:ILE:O	7:L7:148:VAL:HG23	2.21	0.41
8:L8:72:PRO:HG2	8:L8:75:ILE:HG13	2.02	0.41
8:L8:122:LYS:O	8:L8:123:GLN:HB3	2.21	0.41
9:L9:47:LYS:HZ3	14:64:6:ILE:H	1.69	0.41
10:60:55:ASN:O	10:60:131:ILE:HG23	2.21	0.41
10:60:191:LYS:HB2	10:60:191:LYS:NZ	2.36	0.41
11:61:166:LYS:O	11:61:167:TYR:CB	2.68	0.41
13:63:23:LYS:NZ	13:63:23:LYS:HB2	2.36	0.41
13:63:79:GLU:HG2	13:63:109:PHE:CE2	2.56	0.41
13:63:132:ALA:HA	13:63:133:PRO:HD2	2.01	0.41
15:65:13:LYS:NZ	36:86:45:ARG:HA	2.35	0.41
15:65:81:TYR:OH	79:2S:908:G:H3'	2.21	0.41
15:65:89:VAL:CG2	79:2S:2424:A:H5'	2.51	0.41
15:65:133:ILE:C	15:65:134:LEU:HD12	2.41	0.41
17:67:83:TRP:N	17:67:84:PRO:HD3	2.36	0.41
20:70:11:GLY:HA3	20:70:42:TRP:CH2	2.56	0.41
21:71:109:VAL:HG13	79:2S:1063:G:N1	2.36	0.41
21:71:126:VAL:HG23	21:71:127:GLN:H	1.85	0.41
22:72:37:LEU:HD12	22:72:37:LEU:N	2.36	0.41
23:73:39:VAL:HA	23:73:58:VAL:HG12	2.02	0.41
23:73:93:LEU:HB3	24:74:20:LEU:HB3	2.03	0.41
24:74:23:ARG:HB3	24:74:25:ASP:OD2	2.21	0.41
26:76:16:ARG:HG2	26:76:16:ARG:HH11	1.86	0.41
28:78:96:LYS:O	28:78:97:GLU:HB2	2.21	0.41
31:81:62:ARG:HD2	79:2S:3074:G:O2'	2.21	0.41
33:83:77:ASN:HB2	79:2S:1180:A:H5''	2.02	0.41
40:90:78:ILE:O	40:90:79:GLU:HB3	2.20	0.41
42:92:46:LYS:HD3	79:2S:44:U:O2'	2.21	0.41
43:93:4:ARG:HD3	79:2S:836:A:P	2.61	0.41
45:RC:203:THR:HG22	45:RC:212:ALA:HB3	2.02	0.41
45:RC:252:LEU:HB3	45:RC:263:PHE:O	2.20	0.41
46:S0:7:PHE:N	46:S0:7:PHE:HD2	2.18	0.41
46:S0:41:ARG:HG3	46:S0:41:ARG:NH2	2.35	0.41
46:S0:190:ASP:HB2	46:S0:191:ARG:H	1.64	0.41
47:S1:166:LYS:HB2	47:S1:166:LYS:HE3	1.88	0.41
48:S2:53:ILE:HD11	48:S2:73:LEU:HB2	2.02	0.41
49:S3:29:LEU:O	49:S3:34:TYR:HB2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:S5:218:GLU:O	51:S5:222:LYS:HB2	2.21	0.41
52:S6:179:VAL:HG13	52:S6:179:VAL:O	2.21	0.41
53:S7:139:ARG:HH11	53:S7:139:ARG:HG3	1.85	0.41
54:S8:43:ILE:HG21	54:S8:55:TYR:HB3	2.01	0.41
54:S8:119:GLN:C	54:S8:120:THR:HG1	2.24	0.41
57:11:83:THR:N	57:11:111:VAL:HG12	2.34	0.41
58:12:59:LEU:HD23	58:12:60:VAL:N	2.35	0.41
59:13:129:TYR:CD1	59:13:134:VAL:HG21	2.56	0.41
60:14:22:SER:HA	60:14:95:GLY:HA3	2.02	0.41
60:14:36:LYS:HG3	78:1S:894:U:O2'	2.20	0.41
61:15:97:TYR:HB2	61:15:102:PHE:CD1	2.56	0.41
64:18:86:LEU:HD12	64:18:86:LEU:N	2.36	0.41
64:18:112:ASP:O	64:18:115:ARG:NH2	2.54	0.41
65:19:30:VAL:HA	65:19:31:PRO:HD3	1.83	0.41
67:21:86:SER:HA	73:27:6:ASP:HB2	2.03	0.41
70:24:83:LYS:HG2	70:24:96:LEU:HD23	2.03	0.41
71:25:46:LYS:O	71:25:50:ILE:HG13	2.21	0.41
72:26:3:LYS:HZ1	72:26:6:ALA:HA	1.84	0.41
72:26:21:VAL:O	72:26:29:SER:HA	2.21	0.41
73:27:20:LYS:H	73:27:20:LYS:CD	2.32	0.41
76:30:10:ARG:CD	76:30:13:LYS:HD2	2.51	0.41
78:1S:140:A:C4'	78:1S:141:U:H5'	2.47	0.41
78:1S:750:U:H2'	78:1S:751:G:C8	2.56	0.41
78:1S:1058:U:H5	78:1S:1061:A:H61	1.67	0.41
78:1S:1058:U:H5	78:1S:1061:A:N6	2.19	0.41
78:1S:1282:U:H2'	78:1S:1283:U:C6	2.56	0.41
78:1S:1333:C:H2'	78:1S:1334:U:C6	2.56	0.41
78:1S:1414:U:H3'	78:1S:1415:U:C5'	2.50	0.41
78:1S:1721:A:H2'	78:1S:1722:A:O4'	2.21	0.41
78:1S:1731:A:H2'	78:1S:1732:A:O4'	2.20	0.41
78:1S:1759:C:H2'	78:1S:1760:G:O4'	2.21	0.41
78:1S:1765:A:H5'	78:1S:1767:G:N7	2.35	0.41
79:2S:86:G:N2	79:2S:98:G:H2'	2.36	0.41
79:2S:439:C:O2	79:2S:439:C:C2'	2.68	0.41
79:2S:611:A:H1'	79:2S:612:U:C6	2.55	0.41
79:2S:646:A:H2'	79:2S:647:A:O4'	2.21	0.41
79:2S:1214:U:H2'	79:2S:1215:U:H6	1.86	0.41
79:2S:1502:C:C5	79:2S:1511:U:H5''	2.55	0.41
79:2S:1670:C:O2'	79:2S:1860:G:H5''	2.21	0.41
79:2S:1933:A:H4'	79:2S:2124:G:H5'	2.03	0.41
79:2S:2192:C:H2'	79:2S:2193:U:O4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
82:PT:15:G:OP2	82:PT:16:C:H5	2.04	0.41
2:L2:8:GLN:HA	79:2S:2163:C:H4'	2.03	0.41
2:L2:59:ALA:HB1	2:L2:61:VAL:HG23	2.03	0.41
2:L2:200:ARG:CB	2:L2:200:ARG:HH21	2.33	0.41
3:L3:103:THR:HG22	3:L3:104:THR:N	2.36	0.41
4:L4:113:VAL:HG13	4:L4:117:GLU:OE1	2.21	0.41
4:L4:122:THR:OG1	4:L4:262:TRP:HH2	2.04	0.41
5:L5:157:ALA:HB3	5:L5:160:PHE:CE2	2.56	0.41
8:L8:140:VAL:HG21	15:65:3:ALA:HB2	2.02	0.41
8:L8:150:LEU:HA	8:L8:176:PRO:HG2	2.02	0.41
9:L9:112:ILE:O	9:L9:125:ASN:HA	2.21	0.41
10:60:20:SER:OG	10:60:22:TYR:HD1	2.03	0.41
10:60:30:LYS:HD2	10:60:30:LYS:H	1.86	0.41
11:61:94:ARG:HB2	11:61:95:ASN:H	1.68	0.41
13:63:76:THR:HG22	13:63:101:ARG:HB3	2.03	0.41
14:64:76:ALA:HA	79:2S:561:C:OP1	2.21	0.41
15:65:56:LYS:HZ1	15:65:148:TYR:HE2	1.69	0.41
15:65:109:ARG:HD2	80:8S:140:G:O2'	2.21	0.41
20:70:77:VAL:HG22	20:70:126:VAL:HG13	2.03	0.41
21:71:109:VAL:HG22	79:2S:1063:G:C6	2.56	0.41
26:76:17:LYS:HA	80:8S:23:U:O4'	2.21	0.41
27:77:87:LEU:HG	27:77:88:ASP:H	1.86	0.41
34:84:19:LYS:HZ1	34:84:37:LYS:HA	1.86	0.41
34:84:31:ARG:HG2	34:84:31:ARG:HH11	1.86	0.41
37:87:37:CYS:O	37:87:44:THR:HA	2.21	0.41
45:RC:229:LYS:HB3	45:RC:230:ALA:H	1.69	0.41
45:RC:236:ALA:C	45:RC:238:ASP:H	2.24	0.41
48:S2:198:THR:O	78:1S:3:U:H5''	2.21	0.41
49:S3:51:ARG:HB3	49:S3:91:VAL:HB	2.01	0.41
50:S4:103:TYR:CZ	50:S4:189:LEU:HD11	2.56	0.41
51:S5:59:VAL:HG12	51:S5:60:ASP:H	1.86	0.41
52:S6:211:LEU:HD22	52:S6:215:ARG:HH21	1.86	0.41
54:S8:194:ARG:HB3	54:S8:195:ARG:NH1	2.35	0.41
56:10:68:LEU:CD1	56:10:72:GLY:HA3	2.49	0.41
56:10:81:ASN:O	56:10:82:LEU:O	2.38	0.41
62:16:10:PHE:HD2	78:1S:1378:U:HO2'	1.65	0.41
63:17:103:ASP:HA	63:17:122:ILE:HG22	2.02	0.41
65:19:52:GLY:C	65:19:54:PHE:H	2.24	0.41
66:20:61:LYS:H	66:20:61:LYS:HG2	1.68	0.41
67:21:80:LYS:O	67:21:82:VAL:HG23	2.21	0.41
70:24:21:LYS:HB3	70:24:75:VAL:HG12	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:396:G:H22	78:1S:399:A:H5'	1.86	0.41
78:1S:632:U:H2'	78:1S:633:U:C6	2.56	0.41
78:1S:730:G:N3	78:1S:730:G:C2'	2.84	0.41
78:1S:941:A:H2'	78:1S:942:G:C5'	2.50	0.41
78:1S:1222:C:H2'	78:1S:1223:A:C8	2.56	0.41
78:1S:1723:U:H2'	78:1S:1724:U:H6	1.87	0.41
79:2S:181:U:H2'	79:2S:182:U:O4'	2.21	0.41
79:2S:314:U:H2'	79:2S:315:C:C6	2.55	0.41
79:2S:363:G:H2'	79:2S:364:G:O4'	2.20	0.41
79:2S:507:U:H2'	79:2S:508:U:C6	2.56	0.41
79:2S:578:A:OP2	79:2S:579:G:H5'	2.20	0.41
79:2S:829:U:H3	79:2S:895:A:N6	1.93	0.41
79:2S:929:A:H2'	79:2S:930:U:C6	2.56	0.41
79:2S:986:U:H2'	79:2S:987:U:C6	2.56	0.41
79:2S:1324:U:O5'	79:2S:1324:U:H6	2.04	0.41
79:2S:1581:C:C3'	79:2S:1582:C:H5'	2.51	0.41
79:2S:2449:A:H2'	79:2S:2450:G:H5'	2.03	0.41
79:2S:2755:C:H2'	79:2S:2756:C:C6	2.55	0.41
79:2S:2985:C:H2'	79:2S:2986:U:H6	1.85	0.41
79:2S:3000:A:H2'	79:2S:3001:C:C6	2.56	0.41
79:2S:3005:A:C2	79:2S:3141:A:N7	2.89	0.41
80:8S:104:A:O5'	80:8S:105:A:H8	2.03	0.41
80:8S:125:U:H3'	80:8S:125:U:O2	2.21	0.41
81:5S:62:U:H2'	81:5S:63:A:C8	2.56	0.41
82:ET:53:G:H2'	82:ET:54:G:O4'	2.21	0.41
3:L3:2:SER:N	79:2S:2940:A:H8	2.20	0.40
4:L4:73:ARG:O	79:2S:805:G:H4'	2.21	0.40
4:L4:269:SER:O	4:L4:270:SER:HB3	2.21	0.40
9:L9:160:ASP:O	9:L9:164:ILE:HG12	2.21	0.40
11:61:9:MET:O	11:61:134:PRO:HG2	2.21	0.40
13:63:31:LYS:HG2	80:8S:30:C:OP1	2.21	0.40
13:63:76:THR:CG2	13:63:101:ARG:HH11	2.34	0.40
15:65:169:LYS:HG2	15:65:174:ILE:HD12	2.02	0.40
17:67:69:ARG:CD	79:2S:3309:G:H1'	2.50	0.40
18:68:44:PHE:O	18:68:48:VAL:HG23	2.21	0.40
19:69:75:HIS:HA	79:2S:1940:G:OP1	2.20	0.40
20:70:12:ARG:O	20:70:22:PRO:HB2	2.20	0.40
27:77:71:PHE:HA	27:77:111:LYS:HD3	2.02	0.40
29:79:28:LYS:HG2	79:2S:1065:A:N3	2.36	0.40
47:S1:121:ILE:CD1	47:S1:207:LEU:HD21	2.49	0.40
49:S3:11:LEU:HA	49:S3:14:ASP:HB2	2.02	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:7:LYS:CB	78:1S:94:U:H1'	2.51	0.40
58:12:66:VAL:HB	58:12:72:ILE:HD11	2.03	0.40
62:16:33:GLY:HA2	78:1S:1366:U:H5''	2.02	0.40
66:20:20:ILE:H	66:20:20:ILE:HG13	1.68	0.40
66:20:57:ARG:HG2	78:1S:1382:A:O4'	2.20	0.40
66:20:106:ILE:HG13	66:20:107:THR:N	2.23	0.40
78:1S:152:U:H2'	78:1S:153:G:H5''	2.03	0.40
78:1S:421:A:C2'	78:1S:422:G:H5'	2.52	0.40
78:1S:614:C:H2'	78:1S:615:A:C8	2.55	0.40
78:1S:977:A:H2'	78:1S:978:A:O4'	2.21	0.40
78:1S:1231:U:O2'	78:1S:1258:U:H1'	2.21	0.40
78:1S:1404:C:H2'	78:1S:1405:G:H8	1.86	0.40
79:2S:888:A:H2'	79:2S:889:U:C6	2.55	0.40
79:2S:1200:A:C6	79:2S:2370:G:H5''	2.56	0.40
79:2S:1389:G:O3'	79:2S:1392:G:H4'	2.21	0.40
79:2S:2271:A:C3'	79:2S:2272:G:H5''	2.51	0.40
79:2S:2585:G:O2'	79:2S:2586:G:H5''	2.21	0.40
79:2S:3390:G:H2'	79:2S:3391:A:C8	2.56	0.40
1:L1:136:THR:H	1:L1:137:PRO:HD2	1.87	0.40
3:L3:130:PHE:H	79:2S:3150:A:H5'	1.85	0.40
5:L5:40:HIS:HD2	5:L5:42:ALA:HB3	1.85	0.40
6:L6:135:VAL:HG22	79:2S:3268:A:C2	2.57	0.40
8:L8:59:GLN:HA	8:L8:62:LYS:HE2	2.03	0.40
8:L8:81:THR:OG1	8:L8:181:LYS:HB2	2.21	0.40
11:61:37:LEU:HD13	11:61:45:PRO:HB3	2.02	0.40
11:61:89:TYR:O	11:61:169:ALA:HA	2.21	0.40
13:63:103:ASN:ND2	13:63:109:PHE:HD2	2.20	0.40
13:63:164:GLU:O	13:63:165:SER:HB3	2.21	0.40
15:65:187:ARG:O	15:65:190:THR:HG22	2.21	0.40
18:68:147:ARG:HH12	18:68:150:VAL:HG12	1.85	0.40
21:71:80:VAL:HG13	21:71:80:VAL:O	2.22	0.40
26:76:28:ARG:HA	26:76:31:LEU:HD12	2.04	0.40
32:82:27:ARG:HD2	79:2S:1433:A:C4'	2.51	0.40
33:83:60:ARG:HH11	79:2S:622:A:C5'	2.34	0.40
37:87:52:LYS:O	37:87:56:ARG:HG3	2.20	0.40
43:93:51:ALA:HB3	43:93:54:ILE:HB	2.02	0.40
44:P0:61:ARG:CB	79:2S:1221:A:H5'	2.51	0.40
45:RC:135:THR:CG2	45:RC:141:LEU:HD21	2.51	0.40
46:S0:30:GLN:HA	46:S0:149:LEU:HB3	2.03	0.40
47:S1:29:TRP:HA	47:S1:47:LEU:HB3	2.03	0.40
47:S1:136:ARG:HH11	78:1S:884:A:H5''	1.87	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:23:LEU:CD1	55:S9:4:ALA:HB3	2.49	0.40
50:S4:92:LEU:N	50:S4:92:LEU:HD12	2.35	0.40
52:S6:98:ARG:HD3	52:S6:99:GLY:N	2.27	0.40
54:S8:42:ARG:O	54:S8:58:LEU:HB2	2.22	0.40
54:S8:48:THR:HB	54:S8:49:ARG:H	1.69	0.40
55:S9:132:ARG:HB2	78:1S:513:U:OP1	2.21	0.40
58:12:33:ARG:O	58:12:37:VAL:HG23	2.21	0.40
59:13:40:TYR:O	59:13:45:LEU:HD23	2.21	0.40
64:18:11:PHE:CE1	64:18:59:GLY:HA3	2.55	0.40
70:24:4:ALA:HB3	70:24:30:PRO:HD2	2.03	0.40
72:26:23:CYS:HB3	72:26:27:SER:CA	2.51	0.40
74:28:43:ASN:HD21	74:28:63:ALA:HB3	1.86	0.40
78:1S:64:U:C3'	78:1S:65:A:H5''	2.51	0.40
78:1S:85:A:H2'	78:1S:86:A:O4'	2.21	0.40
78:1S:588:U:H2'	78:1S:589:C:H6	1.83	0.40
78:1S:1269:U:O2	78:1S:1269:U:H2'	2.21	0.40
78:1S:1734:U:O2'	78:1S:1735:U:H5'	2.21	0.40
79:2S:27:C:H4'	79:2S:328:U:C4'	2.51	0.40
79:2S:153:U:C3'	79:2S:154:U:H5''	2.51	0.40
79:2S:233:C:H2'	79:2S:234:G:O4'	2.22	0.40
79:2S:769:G:H2'	79:2S:770:G:H5'	2.03	0.40
79:2S:951:A:H2'	79:2S:952:A:C8	2.56	0.40
79:2S:1649:U:H2'	79:2S:1650:G:C8	2.56	0.40
79:2S:2104:A:H2'	79:2S:2105:G:C8	2.57	0.40
79:2S:2820:A:H5''	82:PT:77:A:C6	2.56	0.40
79:2S:3138:U:C2'	79:2S:3139:A:H5''	2.50	0.40
79:2S:3325:G:O2'	79:2S:3326:G:H5'	2.21	0.40
80:8S:58:G:O2'	80:8S:99:C:H4'	2.21	0.40
1:L1:207:LYS:CG	1:L1:208:SER:N	2.84	0.40
2:L2:182:ALA:HB2	79:2S:2148:U:H4'	2.02	0.40
5:L5:178:ASN:HA	5:L5:183:TRP:CD2	2.57	0.40
7:L7:101:LYS:HG3	79:2S:984:G:O2'	2.22	0.40
7:L7:158:LYS:O	7:L7:159:GLN:C	2.60	0.40
9:L9:129:ARG:HH21	79:2S:3126:C:H4'	1.87	0.40
11:61:43:GLN:HB3	81:5S:39:C:O2'	2.21	0.40
11:61:133:ARG:O	11:61:135:GLY:N	2.54	0.40
14:64:53:VAL:HA	14:64:54:PRO:HD3	1.94	0.40
15:65:188:ARG:HG2	79:2S:50:U:OP1	2.21	0.40
16:66:49:ARG:HB2	79:2S:1191:U:H5'	2.03	0.40
17:67:112:LEU:HD12	17:67:152:GLU:CA	2.51	0.40
19:69:163:ARG:CG	78:1S:815:G:H5''	2.38	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:70:78:TRP:HE3	20:70:125:LYS:HE3	1.83	0.40
21:71:89:LEU:HD21	79:2S:2723:U:H4'	2.02	0.40
25:75:92:LYS:HE3	25:75:110:VAL:O	2.21	0.40
25:75:108:LEU:HD22	25:75:125:ARG:HD3	2.02	0.40
27:77:14:VAL:HG12	27:77:79:HIS:C	2.42	0.40
29:79:28:LYS:HD3	29:79:28:LYS:HA	1.91	0.40
31:81:5:LYS:HG2	31:81:89:LEU:HD11	2.04	0.40
36:86:4:LYS:HD2	36:86:14:GLY:HA3	2.03	0.40
42:92:55:LYS:CB	82:ET:76:C:H1'	2.52	0.40
43:93:85:ARG:HH11	43:93:85:ARG:HG2	1.86	0.40
43:93:85:ARG:O	43:93:89:MET:HG3	2.21	0.40
45:RC:7:LEU:HD11	45:RC:251:TRP:HZ3	1.86	0.40
45:RC:217:ASP:HB2	45:RC:219:GLU:HG2	2.03	0.40
46:S0:179:ARG:HG2	46:S0:183:ARG:NH1	2.37	0.40
48:S2:103:VAL:HG12	48:S2:104:VAL:N	2.35	0.40
49:S3:41:VAL:HG13	49:S3:41:VAL:O	2.22	0.40
51:S5:89:ILE:H	51:S5:89:ILE:HG13	1.56	0.40
51:S5:133:VAL:O	51:S5:137:ILE:HG12	2.21	0.40
60:14:128:LYS:HB3	72:26:22:ARG:NH1	2.37	0.40
63:17:41:ILE:HD13	63:17:47:ARG:HB2	2.04	0.40
63:17:71:PHE:O	63:17:72:LYS:HB3	2.21	0.40
67:21:17:CYS:HB3	67:21:22:ARG:H	1.86	0.40
69:23:127:VAL:HG22	69:23:132:LEU:HD22	2.03	0.40
78:1S:1262:U:H2'	78:1S:1263:G:H8	1.85	0.40
78:1S:1336:A:H2'	78:1S:1337:A:H4'	2.03	0.40
78:1S:1388:A:H4'	78:1S:1389:C:O4'	2.22	0.40
78:1S:1783:C:H2'	78:1S:1784:C:C6	2.56	0.40
79:2S:818:C:H42	79:2S:919:U:H4'	1.86	0.40
79:2S:1245:A:H3'	79:2S:1246:G:H5''	2.02	0.40
79:2S:2224:A:H2'	79:2S:2225:U:H5'	2.04	0.40
79:2S:2527:G:H2'	79:2S:2528:G:H8	1.86	0.40
79:2S:3160:U:H2'	79:2S:3161:C:C5	2.56	0.40
79:2S:3392:U:H2'	79:2S:3393:U:H6	1.85	0.40
81:5S:24:A:H4'	81:5S:120:C:H4'	2.03	0.40
81:5S:104:A:C2'	81:5S:105:C:H5'	2.48	0.40
4:L4:313:LEU:HD13	4:L4:314:LYS:N	2.36	0.40
7:L7:126:LEU:HD21	79:2S:986:U:O4'	2.20	0.40
8:L8:69:LEU:HB3	79:2S:2514:U:O4	2.22	0.40
9:L9:112:ILE:HD13	9:L9:161:LEU:HD21	2.03	0.40
10:60:119:TRP:HZ3	79:2S:1126:G:H5''	1.86	0.40
13:63:46:ILE:O	13:63:49:ARG:HB2	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:63:155:GLU:O	28:78:100:PRO:HA	2.21	0.40
14:64:8:LYS:HE2	79:2S:3187:A:H5''	2.03	0.40
14:64:85:TRP:CD1	14:64:91:CYS:HB3	2.55	0.40
15:65:104:GLU:HG2	15:65:160:GLU:CG	2.44	0.40
16:66:27:LEU:HD23	16:66:31:GLN:O	2.21	0.40
16:66:115:LYS:HG3	79:2S:3178:A:H2'	2.03	0.40
17:67:22:LEU:C	17:67:24:VAL:N	2.75	0.40
17:67:122:ALA:HB1	17:67:123:PRO:HD2	2.04	0.40
17:67:127:ARG:HG2	17:67:128:ARG:H	1.85	0.40
17:67:167:ARG:HD3	79:2S:619:A:OP1	2.22	0.40
18:68:71:LEU:HD13	18:68:97:PRO:HG2	2.03	0.40
23:73:33:ASN:HD22	23:73:33:ASN:H	1.68	0.40
23:73:38:ALA:HB3	23:73:59:MET:CB	2.36	0.40
23:73:86:ARG:HD2	23:73:92:PHE:CE2	2.57	0.40
27:77:17:ARG:NH1	79:2S:1633:C:C5	2.89	0.40
32:82:40:SER:HB3	32:82:43:ARG:HB2	2.03	0.40
34:84:86:LYS:HE2	34:84:86:LYS:HB3	1.98	0.40
45:RC:2:ALA:O	45:RC:3:SER:HB3	2.22	0.40
45:RC:13:LEU:HB2	45:RC:310:ILE:HB	2.04	0.40
45:RC:174:ASN:HA	45:RC:199:ILE:H	1.87	0.40
45:RC:193:ILE:HD12	49:S3:218:LEU:HD13	2.03	0.40
46:S0:101:ARG:HD3	78:1S:1320:U:C5	2.56	0.40
47:S1:33:LYS:O	47:S1:98:THR:HG22	2.22	0.40
52:S6:217:SER:O	52:S6:220:LYS:HE3	2.21	0.40
54:S8:67:TRP:CD1	54:S8:183:ILE:HD11	2.57	0.40
54:S8:197:THR:HG22	54:S8:200:LYS:HD2	2.03	0.40
65:19:99:SER:HB2	78:1S:1504:G:OP1	2.21	0.40
71:25:38:HIS:O	71:25:39:ALA:HB3	2.21	0.40
75:29:21:CYS:HB2	75:29:26:SER:HB3	2.02	0.40
78:1S:103:A:H4'	78:1S:105:A:N7	2.36	0.40
78:1S:445:A:H2'	78:1S:446:A:H8	1.87	0.40
78:1S:689:G:H2'	78:1S:690:G:C5'	2.45	0.40
78:1S:743:U:H2'	78:1S:744:U:O4'	2.21	0.40
78:1S:1202:A:H1'	78:1S:1207:C:N4	2.36	0.40
78:1S:1270:G:H2'	78:1S:1271:G:C8	2.56	0.40
79:2S:109:A:C4'	79:2S:110:G:H5'	2.36	0.40
79:2S:211:A:H5'	79:2S:229:G:C1'	2.52	0.40
79:2S:603:A:H2'	79:2S:604:G:H4'	2.03	0.40
79:2S:636:C:O2'	79:2S:637:C:H5''	2.22	0.40
79:2S:726:G:H5'	79:2S:726:G:H8	1.86	0.40
79:2S:912:G:H2'	79:2S:914:A:C8	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1123:U:H2'	79:2S:1124:U:C5'	2.52	0.40
79:2S:1326:A:H2'	79:2S:1327:C:O4'	2.22	0.40
79:2S:1626:U:H4'	79:2S:1632:A:C4'	2.28	0.40
79:2S:2249:G:O2'	79:2S:2250:G:H5'	2.22	0.40
79:2S:2356:A:H2'	79:2S:2357:A:H5'	2.03	0.40
79:2S:2969:A:H2'	79:2S:2970:C:C6	2.56	0.40
79:2S:3003:G:H2'	79:2S:3004:C:C6	2.57	0.40
2:L2:45:VAL:HB	2:L2:61:VAL:HG22	2.04	0.40
3:L3:174:LYS:HD2	79:2S:3314:A:H5''	2.04	0.40
3:L3:199:PHE:O	3:L3:200:GLU:HB2	2.22	0.40
4:L4:170:LYS:HG3	4:L4:175:HIS:ND1	2.37	0.40
5:L5:58:LYS:HG3	81:5S:49:G:N7	2.36	0.40
5:L5:146:LEU:HD21	5:L5:173:VAL:CG1	2.51	0.40
7:L7:78:GLU:HA	21:71:138:SER:HB3	2.02	0.40
7:L7:218:ARG:NH2	7:L7:220:PHE:HB2	2.37	0.40
8:L8:38:GLN:HB2	79:2S:2557:A:H2	1.87	0.40
8:L8:103:ALA:O	8:L8:107:GLU:HB3	2.21	0.40
10:60:174:THR:HG22	10:60:175:ASN:N	2.37	0.40
11:61:91:LEU:HB3	11:61:92:ARG:H	1.49	0.40
16:66:25:LYS:HE3	79:2S:1176:C:OP1	2.21	0.40
16:66:120:VAL:HA	16:66:121:PRO:HD3	1.82	0.40
17:67:47:TYR:HD1	17:67:56:ARG:NE	2.20	0.40
19:69:67:ALA:O	19:69:71:ARG:HG3	2.22	0.40
21:71:40:VAL:HG12	21:71:98:HIS:HD2	1.87	0.40
23:73:132:ASN:N	23:73:132:ASN:HD22	2.20	0.40
30:80:42:ILE:HG13	30:80:67:VAL:HG13	2.03	0.40
33:83:6:ARG:HG3	33:83:8:TYR:CE1	2.56	0.40
34:84:86:LYS:HA	34:84:89:ILE:HD12	2.03	0.40
39:89:16:ALA:O	39:89:20:ASN:ND2	2.54	0.40
39:89:37:TYR:HB2	39:89:38:ASN:H	1.72	0.40
40:90:112:LYS:HB3	40:90:114:LYS:CG	2.52	0.40
43:93:27:LYS:HA	43:93:30:GLU:OE2	2.21	0.40
45:RC:26:SER:OG	45:RC:77:GLY:HA3	2.22	0.40
45:RC:169:ILE:CD1	45:RC:183:LEU:HD21	2.52	0.40
50:S4:71:LYS:O	50:S4:71:LYS:HG3	2.22	0.40
51:S5:208:SER:OG	51:S5:211:ILE:HG12	2.22	0.40
55:S9:24:LEU:HA	55:S9:27:GLU:OE1	2.20	0.40
55:S9:126:ARG:NH1	55:S9:144:PRO:HG2	2.37	0.40
55:S9:134:ILE:HG22	55:S9:157:ASP:O	2.20	0.40
58:12:113:ARG:HG3	58:12:114:LYS:N	2.37	0.40
59:13:3:ARG:HB2	59:13:3:ARG:NH1	2.37	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:17:29:GLN:H	63:17:29:GLN:HE21	1.70	0.40
63:17:125:SER:O	63:17:126:ALA:HB3	2.22	0.40
71:25:62:VAL:O	71:25:66:VAL:HG23	2.21	0.40
76:30:29:LYS:HE3	76:30:35:TYR:CE2	2.57	0.40
77:31:97:LYS:O	77:31:98:VAL:CB	2.69	0.40
78:1S:1311:U:H2'	78:1S:1313:A:OP2	2.22	0.40
78:1S:1545:A:H2'	78:1S:1546:G:C8	2.56	0.40
79:2S:1115:G:H5''	79:2S:1116:G:H5''	2.03	0.40
79:2S:2686:A:H2'	79:2S:2687:G:O4'	2.21	0.40
79:2S:3331:U:H2'	79:2S:3332:U:O4'	2.21	0.40
81:5S:105:C:H2'	81:5S:106:U:H6	1.86	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	
1	L1	202/217 (93%)	140 (69%)	50 (25%)	12 (6%)	1	17
2	L2	250/254 (98%)	205 (82%)	34 (14%)	11 (4%)	2	22
3	L3	384/387 (99%)	328 (85%)	47 (12%)	9 (2%)	6	34
4	L4	359/362 (99%)	290 (81%)	53 (15%)	16 (4%)	2	21
5	L5	294/297 (99%)	251 (85%)	32 (11%)	11 (4%)	3	24
6	L6	152/176 (86%)	131 (86%)	19 (12%)	2 (1%)	12	48
7	L7	220/244 (90%)	182 (83%)	32 (14%)	6 (3%)	5	31
8	L8	231/256 (90%)	191 (83%)	30 (13%)	10 (4%)	2	22
9	L9	189/191 (99%)	163 (86%)	22 (12%)	4 (2%)	7	36
10	60	207/221 (94%)	183 (88%)	21 (10%)	3 (1%)	11	46
11	61	167/174 (96%)	131 (78%)	23 (14%)	13 (8%)	1	13

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
12	62	137/165 (83%)	79 (58%)	37 (27%)	21 (15%)	0	3
13	63	191/199 (96%)	158 (83%)	20 (10%)	13 (7%)	1	15
14	64	134/138 (97%)	110 (82%)	21 (16%)	3 (2%)	6	35
15	65	201/204 (98%)	160 (80%)	33 (16%)	8 (4%)	3	23
16	66	195/199 (98%)	173 (89%)	17 (9%)	5 (3%)	5	31
17	67	181/184 (98%)	153 (84%)	23 (13%)	5 (3%)	5	30
18	68	183/186 (98%)	155 (85%)	21 (12%)	7 (4%)	3	24
19	69	186/189 (98%)	169 (91%)	16 (9%)	1 (0%)	29	69
20	70	170/172 (99%)	142 (84%)	21 (12%)	7 (4%)	3	22
21	71	157/160 (98%)	137 (87%)	15 (10%)	5 (3%)	4	26
22	72	98/121 (81%)	81 (83%)	14 (14%)	3 (3%)	4	27
23	73	134/137 (98%)	118 (88%)	14 (10%)	2 (2%)	10	45
24	74	62/155 (40%)	50 (81%)	10 (16%)	2 (3%)	4	26
25	75	119/142 (84%)	99 (83%)	14 (12%)	6 (5%)	2	20
26	76	124/127 (98%)	116 (94%)	8 (6%)	0	100	100
27	77	133/136 (98%)	102 (77%)	25 (19%)	6 (4%)	2	21
28	78	146/149 (98%)	119 (82%)	22 (15%)	5 (3%)	3	26
29	79	56/59 (95%)	50 (89%)	4 (7%)	2 (4%)	3	25
30	80	95/105 (90%)	82 (86%)	11 (12%)	2 (2%)	7	36
31	81	107/113 (95%)	93 (87%)	11 (10%)	3 (3%)	5	30
32	82	125/130 (96%)	111 (89%)	13 (10%)	1 (1%)	19	60
33	83	104/107 (97%)	82 (79%)	14 (14%)	8 (8%)	1	13
34	84	110/121 (91%)	87 (79%)	18 (16%)	5 (4%)	2	21
35	85	117/120 (98%)	108 (92%)	7 (6%)	2 (2%)	9	42
36	86	97/100 (97%)	83 (86%)	8 (8%)	6 (6%)	1	16
37	87	85/88 (97%)	70 (82%)	14 (16%)	1 (1%)	13	50
38	88	75/78 (96%)	66 (88%)	8 (11%)	1 (1%)	12	48
39	89	48/51 (94%)	40 (83%)	7 (15%)	1 (2%)	7	36
40	90	50/128 (39%)	41 (82%)	7 (14%)	2 (4%)	3	23
41	91	23/25 (92%)	23 (100%)	0	0	100	100
42	92	103/106 (97%)	83 (81%)	18 (18%)	2 (2%)	8	38

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
43	93	89/92 (97%)	77 (86%)	11 (12%)	1 (1%)	14	52
44	P0	121/312 (39%)	107 (88%)	13 (11%)	1 (1%)	19	60
45	RC	316/319 (99%)	262 (83%)	44 (14%)	10 (3%)	4	26
46	S0	204/252 (81%)	161 (79%)	37 (18%)	6 (3%)	4	29
47	S1	212/255 (83%)	162 (76%)	39 (18%)	11 (5%)	2	19
48	S2	215/254 (85%)	177 (82%)	30 (14%)	8 (4%)	3	24
49	S3	221/240 (92%)	188 (85%)	25 (11%)	8 (4%)	3	25
50	S4	258/261 (99%)	202 (78%)	45 (17%)	11 (4%)	2	22
51	S5	204/225 (91%)	170 (83%)	25 (12%)	9 (4%)	2	22
52	S6	224/236 (95%)	196 (88%)	24 (11%)	4 (2%)	8	40
53	S7	182/190 (96%)	145 (80%)	27 (15%)	10 (6%)	2	19
54	S8	184/200 (92%)	141 (77%)	34 (18%)	9 (5%)	2	20
55	S9	183/197 (93%)	151 (82%)	20 (11%)	12 (7%)	1	15
56	10	94/105 (90%)	69 (73%)	17 (18%)	8 (8%)	1	11
57	11	153/156 (98%)	122 (80%)	23 (15%)	8 (5%)	2	19
58	12	122/143 (85%)	81 (66%)	26 (21%)	15 (12%)	0	5
59	13	148/151 (98%)	133 (90%)	11 (7%)	4 (3%)	5	31
60	14	125/137 (91%)	95 (76%)	25 (20%)	5 (4%)	3	23
61	15	122/142 (86%)	97 (80%)	18 (15%)	7 (6%)	1	18
62	16	139/143 (97%)	118 (85%)	17 (12%)	4 (3%)	4	29
63	17	116/136 (85%)	90 (78%)	18 (16%)	8 (7%)	1	14
64	18	143/146 (98%)	114 (80%)	20 (14%)	9 (6%)	1	16
65	19	141/144 (98%)	118 (84%)	16 (11%)	7 (5%)	2	20
66	20	105/121 (87%)	83 (79%)	16 (15%)	6 (6%)	1	18
67	21	85/87 (98%)	68 (80%)	11 (13%)	6 (7%)	1	14
68	22	127/130 (98%)	112 (88%)	11 (9%)	4 (3%)	4	27
69	23	142/145 (98%)	107 (75%)	30 (21%)	5 (4%)	3	25
70	24	132/135 (98%)	106 (80%)	18 (14%)	8 (6%)	1	16
71	25	68/108 (63%)	51 (75%)	14 (21%)	3 (4%)	2	22
72	26	95/119 (80%)	64 (67%)	20 (21%)	11 (12%)	0	6
73	27	79/82 (96%)	61 (77%)	18 (23%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
74	28	61/67 (91%)	46 (75%)	13 (21%)	2 (3%)	4	26
75	29	51/56 (91%)	43 (84%)	7 (14%)	1 (2%)	7	38
76	30	58/63 (92%)	44 (76%)	8 (14%)	6 (10%)	0	8
77	31	69/152 (45%)	44 (64%)	14 (20%)	11 (16%)	0	3
All	All	11389/12574 (91%)	9340 (82%)	1579 (14%)	470 (4%)	5	22

All (470) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	L1	20	SER
1	L1	151	VAL
2	L2	41	ILE
2	L2	115	ASN
2	L2	192	LYS
3	L3	4	ARG
4	L4	268	ALA
4	L4	317	PRO
5	L5	19	PRO
7	L7	92	ILE
7	L7	163	LEU
8	L8	36	ILE
11	61	12	LEU
11	61	114	ILE
11	61	152	HIS
12	62	30	PRO
12	62	34	PRO
12	62	39	PRO
12	62	68	GLN
12	62	87	GLU
12	62	89	PRO
12	62	106	LEU
12	62	147	ASN
12	62	148	PRO
13	63	62	THR
13	63	136	GLU
16	66	16	VAL
18	68	41	ASP
18	68	97	PRO
18	68	162	ALA
19	69	130	ASN
20	70	23	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	70	61	ILE
30	80	97	ASP
33	83	75	HIS
36	86	3	VAL
42	92	34	SER
45	RC	94	VAL
49	S3	93	ASP
50	S4	70	VAL
50	S4	194	THR
50	S4	195	ILE
51	S5	204	GLY
53	S7	12	ALA
53	S7	32	PRO
53	S7	64	VAL
53	S7	74	GLN
54	S8	40	ALA
54	S8	154	SER
55	S9	134	ILE
55	S9	138	LYS
55	S9	157	ASP
56	10	64	TYR
56	10	81	ASN
56	10	82	LEU
56	10	87	VAL
56	10	88	PRO
58	12	85	LYS
58	12	106	ILE
60	14	42	VAL
61	15	12	PHE
61	15	69	GLU
61	15	101	ALA
61	15	125	PRO
63	17	85	VAL
63	17	86	PRO
63	17	124	VAL
64	18	14	ILE
64	18	61	LEU
64	18	82	PRO
64	18	83	ALA
64	18	92	ILE
64	18	102	ALA
65	19	53	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
66	20	96	PRO
67	21	44	ARG
70	24	35	VAL
71	25	44	GLN
71	25	71	ILE
72	26	12	LYS
72	26	81	ALA
72	26	84	VAL
72	26	86	VAL
74	28	36	THR
76	30	43	ARG
76	30	45	VAL
76	30	47	VAL
77	31	98	VAL
77	31	102	VAL
1	L1	74	VAL
1	L1	199	GLN
3	L3	5	LYS
3	L3	187	SER
3	L3	298	PHE
3	L3	317	ILE
4	L4	91	GLY
4	L4	232	SER
4	L4	264	SER
4	L4	293	SER
5	L5	6	ASP
5	L5	188	GLU
6	L6	98	VAL
7	L7	158	LYS
7	L7	159	GLN
8	L8	43	LYS
8	L8	79	GLN
9	L9	14	GLU
9	L9	22	SER
9	L9	50	ASN
9	L9	110	LYS
11	61	108	GLU
11	61	134	PRO
12	62	37	LEU
12	62	58	VAL
12	62	125	LEU
12	62	128	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	63	47	ALA
13	63	76	THR
17	67	156	ALA
18	68	13	SER
18	68	175	ALA
20	70	147	ASP
21	71	124	VAL
21	71	125	ALA
22	72	44	GLU
25	75	54	TYR
25	75	57	LEU
27	77	19	ALA
27	77	32	GLY
28	78	65	GLN
29	79	25	LYS
30	80	47	ASN
32	82	5	PRO
33	83	15	SER
33	83	59	VAL
35	85	119	LYS
36	86	34	SER
36	86	97	SER
39	89	22	PRO
46	S0	4	PRO
47	S1	153	HIS
47	S1	221	PRO
48	S2	176	SER
49	S3	160	SER
50	S4	35	PRO
50	S4	150	PRO
51	S5	21	THR
51	S5	43	PHE
51	S5	63	GLN
51	S5	64	VAL
51	S5	101	GLY
52	S6	153	VAL
53	S7	8	ILE
53	S7	98	ILE
53	S7	109	VAL
53	S7	111	LYS
54	S8	186	GLY
55	S9	21	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	S9	98	ALA
56	10	54	TYR
56	10	60	SER
57	11	6	THR
57	11	24	LYS
57	11	54	ILE
58	12	91	VAL
60	14	52	ARG
62	16	40	GLU
63	17	88	VAL
64	18	145	ARG
65	19	119	LYS
66	20	17	GLN
66	20	54	GLY
66	20	118	VAL
68	22	30	SER
69	23	112	LYS
70	24	60	PHE
71	25	97	LYS
77	31	84	VAL
1	L1	132	GLY
1	L1	136	THR
2	L2	29	LEU
2	L2	120	PRO
2	L2	174	ARG
2	L2	195	SER
3	L3	234	GLY
3	L3	333	LYS
4	L4	72	ALA
4	L4	196	ASN
4	L4	269	SER
5	L5	125	VAL
5	L5	296	GLN
7	L7	191	VAL
8	L8	157	VAL
8	L8	174	GLY
10	60	24	ARG
11	61	91	LEU
11	61	135	GLY
11	61	173	ASP
12	62	88	PRO
12	62	142	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	63	61	PRO
15	65	75	VAL
16	66	87	MET
16	66	149	TYR
17	67	23	ARG
20	70	91	TYR
21	71	159	PHE
22	72	11	ILE
22	72	90	ARG
23	73	24	ASN
23	73	47	ASN
25	75	23	ALA
27	77	17	ARG
27	77	51	LEU
28	78	110	GLY
28	78	119	PRO
33	83	88	ASN
35	85	93	THR
36	86	13	LYS
36	86	78	GLY
37	87	14	LYS
43	93	18	TYR
44	P0	92	PRO
45	RC	63	GLY
45	RC	105	GLY
47	S1	82	ARG
47	S1	206	PRO
47	S1	213	ARG
47	S1	222	LYS
48	S2	39	THR
48	S2	108	ASN
49	S3	44	THR
49	S3	82	GLY
49	S3	217	ILE
50	S4	3	ARG
50	S4	79	ASP
51	S5	99	MET
53	S7	13	PRO
54	S8	120	THR
54	S8	155	SER
55	S9	18	PRO
56	10	86	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	12	68	GLU
58	12	102	GLY
58	12	108	ARG
58	12	110	GLY
58	12	119	SER
59	13	3	ARG
59	13	28	LEU
60	14	22	SER
62	16	39	VAL
63	17	87	GLU
64	18	8	GLN
65	19	69	LYS
65	19	90	PRO
67	21	7	GLN
67	21	56	SER
68	22	93	LEU
69	23	41	SER
70	24	34	ASN
72	26	17	HIS
72	26	61	GLU
72	26	83	ILE
76	30	13	LYS
77	31	87	THR
77	31	118	ARG
77	31	129	GLY
1	L1	45	ARG
1	L1	120	VAL
1	L1	200	ASN
1	L1	209	SER
2	L2	158	ILE
2	L2	235	ALA
4	L4	131	VAL
4	L4	292	SER
4	L4	328	ASN
5	L5	21	ARG
5	L5	44	TYR
5	L5	259	LYS
8	L8	136	LEU
10	60	122	PRO
11	61	8	PRO
11	61	167	TYR
12	62	29	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	62	93	LYS
13	63	51	LEU
13	63	56	PRO
13	63	154	VAL
14	64	6	ILE
14	64	10	SER
15	65	52	GLY
15	65	74	PRO
15	65	118	SER
15	65	185	ALA
17	67	119	VAL
17	67	161	ALA
20	70	24	LEU
20	70	154	HIS
21	71	123	GLY
24	74	23	ARG
25	75	50	ALA
27	77	103	GLN
28	78	56	VAL
31	81	66	GLY
34	84	26	PRO
45	RC	146	GLY
45	RC	276	PRO
46	S0	39	ASN
46	S0	103	THR
46	S0	195	TRP
47	S1	88	VAL
48	S2	109	GLY
48	S2	150	GLN
49	S3	84	ILE
50	S4	193	GLY
54	S8	52	ASN
57	11	3	THR
57	11	7	VAL
57	11	30	ARG
59	13	24	ALA
62	16	14	LYS
65	19	35	ASP
67	21	12	TYR
67	21	46	ILE
69	23	144	ARG
70	24	5	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
70	24	6	THR
70	24	75	VAL
72	26	63	ALA
76	30	58	PRO
77	31	89	LYS
77	31	90	LYS
77	31	148	TYR
1	L1	32	VAL
2	L2	40	TYR
3	L3	174	LYS
4	L4	245	GLY
4	L4	304	GLN
5	L5	41	LYS
5	L5	185	PHE
8	L8	39	ALA
11	61	117	ASP
11	61	172	LEU
12	62	38	SER
12	62	136	ALA
12	62	154	GLY
13	63	59	ARG
13	63	127	PRO
13	63	132	ALA
14	64	5	SER
15	65	95	GLN
15	65	123	GLN
15	65	187	ARG
16	66	62	THR
18	68	76	ALA
21	71	132	PRO
24	74	7	SER
28	78	27	LYS
33	83	94	PHE
34	84	76	TYR
38	88	34	ALA
40	90	127	LEU
42	92	96	GLU
45	RC	3	SER
45	RC	98	GLU
45	RC	163	ASP
48	S2	145	GLY
48	S2	236	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	S3	33	GLY
49	S3	154	ASP
50	S4	96	ASN
52	S6	20	ASP
52	S6	173	PRO
54	S8	33	PRO
54	S8	59	ARG
55	S9	62	ARG
55	S9	162	SER
58	12	101	ALA
58	12	111	ASN
58	12	125	ASN
58	12	130	THR
60	14	24	ASN
61	15	73	PRO
68	22	67	GLY
69	23	70	LYS
69	23	127	VAL
70	24	11	LYS
70	24	121	THR
72	26	11	ASN
72	26	64	LEU
74	28	61	ARG
77	31	99	LYS
1	L1	168	ALA
4	L4	351	PRO
7	L7	25	GLN
8	L8	25	PRO
10	60	132	GLY
18	68	165	ILE
25	75	66	PRO
33	83	3	GLU
36	86	21	THR
40	90	79	GLU
45	RC	197	SER
46	S0	32	HIS
47	S1	210	ILE
50	S4	32	SER
50	S4	171	ASP
51	S5	68	ILE
57	11	130	PRO
58	12	82	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	12	116	VAL
60	14	124	ASP
61	15	52	LYS
64	18	135	GLY
65	19	3	GLY
66	20	55	PRO
66	20	119	ALA
68	22	83	ILE
75	29	22	ARG
77	31	85	TYR
4	L4	146	PRO
31	81	107	VAL
47	S1	48	VAL
47	S1	75	GLY
51	S5	22	PRO
57	11	41	GLY
58	12	115	VAL
65	19	34	VAL
72	26	41	ILE
76	30	50	VAL
3	L3	33	PRO
5	L5	26	GLY
12	62	22	VAL
31	81	7	VAL
46	S0	68	PRO
55	S9	35	GLY
55	S9	129	ILE
55	S9	169	PRO
63	17	22	PRO
63	17	122	ILE
67	21	48	GLY
17	67	36	ILE
25	75	118	GLY
34	84	28	GLY
34	84	59	PRO
45	RC	49	GLY
53	S7	31	SER
61	15	99	GLY
2	L2	137	ILE
8	L8	163	VAL
11	61	67	VAL
13	63	72	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	66	111	PRO
29	79	21	ILE
34	84	27	GLY
47	S1	35	PRO
54	S8	39	GLY
55	S9	136	VAL
59	13	22	ALA
6	L6	91	VAL
8	L8	182	GLY
13	63	50	PRO
20	70	21	GLU
27	77	75	VAL
33	83	25	PRO
48	S2	36	VAL
52	S6	69	LEU
63	17	99	VAL
62	16	41	PRO
33	83	104	PRO

5.3.2 Protein sidechains [i](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	L1	185/198 (93%)	172 (93%)	13 (7%)	15	40
2	L2	194/196 (99%)	185 (95%)	9 (5%)	27	52
3	L3	322/323 (100%)	310 (96%)	12 (4%)	34	58
4	L4	288/289 (100%)	276 (96%)	12 (4%)	30	54
5	L5	244/245 (100%)	236 (97%)	8 (3%)	38	61
6	L6	134/153 (88%)	128 (96%)	6 (4%)	27	52
7	L7	186/205 (91%)	178 (96%)	8 (4%)	29	53
8	L8	191/208 (92%)	178 (93%)	13 (7%)	16	40
9	L9	171/171 (100%)	158 (92%)	13 (8%)	13	37
10	60	180/187 (96%)	167 (93%)	13 (7%)	14	39

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	61	147/150 (98%)	134 (91%)	13 (9%)	10	31
13	63	154/159 (97%)	146 (95%)	8 (5%)	23	48
14	64	107/109 (98%)	103 (96%)	4 (4%)	34	58
15	65	175/176 (99%)	163 (93%)	12 (7%)	15	40
16	66	160/162 (99%)	150 (94%)	10 (6%)	18	43
17	67	145/146 (99%)	135 (93%)	10 (7%)	15	40
18	68	150/151 (99%)	142 (95%)	8 (5%)	22	47
19	69	153/154 (99%)	142 (93%)	11 (7%)	14	39
20	70	156/156 (100%)	145 (93%)	11 (7%)	14	39
21	71	136/137 (99%)	132 (97%)	4 (3%)	42	64
22	72	87/107 (81%)	84 (97%)	3 (3%)	37	60
23	73	104/105 (99%)	99 (95%)	5 (5%)	25	51
24	74	56/129 (43%)	55 (98%)	1 (2%)	59	77
25	75	105/118 (89%)	93 (89%)	12 (11%)	5	21
26	76	109/110 (99%)	103 (94%)	6 (6%)	21	47
27	77	115/116 (99%)	111 (96%)	4 (4%)	36	59
28	78	118/119 (99%)	111 (94%)	7 (6%)	19	45
29	79	46/47 (98%)	40 (87%)	6 (13%)	4	18
30	80	81/88 (92%)	76 (94%)	5 (6%)	18	43
31	81	96/97 (99%)	88 (92%)	8 (8%)	11	34
32	82	109/111 (98%)	103 (94%)	6 (6%)	21	47
33	83	90/91 (99%)	88 (98%)	2 (2%)	52	71
34	84	95/103 (92%)	89 (94%)	6 (6%)	18	43
35	85	104/105 (99%)	98 (94%)	6 (6%)	20	45
36	86	81/82 (99%)	74 (91%)	7 (9%)	10	32
37	87	70/71 (99%)	68 (97%)	2 (3%)	42	64
38	88	68/69 (99%)	63 (93%)	5 (7%)	13	38
39	89	45/46 (98%)	39 (87%)	6 (13%)	4	18
40	90	47/116 (40%)	46 (98%)	1 (2%)	53	72
41	91	23/23 (100%)	18 (78%)	5 (22%)	1	6
42	92	90/91 (99%)	87 (97%)	3 (3%)	38	61

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
43	93	71/72 (99%)	69 (97%)	2 (3%)	43	65
44	P0	105/254 (41%)	98 (93%)	7 (7%)	16	41
45	RC	261/262 (100%)	242 (93%)	19 (7%)	14	39
46	S0	173/210 (82%)	158 (91%)	15 (9%)	10	31
47	S1	191/224 (85%)	171 (90%)	20 (10%)	7	24
48	S2	176/205 (86%)	167 (95%)	9 (5%)	24	48
49	S3	182/195 (93%)	167 (92%)	15 (8%)	11	34
50	S4	221/222 (100%)	209 (95%)	12 (5%)	22	47
51	S5	173/191 (91%)	166 (96%)	7 (4%)	31	55
52	S6	193/201 (96%)	183 (95%)	10 (5%)	23	48
53	S7	165/170 (97%)	154 (93%)	11 (7%)	16	41
54	S8	150/161 (93%)	143 (95%)	7 (5%)	26	51
55	S9	158/166 (95%)	151 (96%)	7 (4%)	28	53
56	10	89/98 (91%)	79 (89%)	10 (11%)	6	22
57	11	136/137 (99%)	128 (94%)	8 (6%)	19	45
58	12	100/119 (84%)	90 (90%)	10 (10%)	7	26
59	13	127/128 (99%)	118 (93%)	9 (7%)	14	39
60	14	96/105 (91%)	89 (93%)	7 (7%)	14	39
61	15	104/118 (88%)	95 (91%)	9 (9%)	10	31
62	16	117/119 (98%)	111 (95%)	6 (5%)	24	48
63	17	109/124 (88%)	95 (87%)	14 (13%)	4	18
64	18	128/129 (99%)	116 (91%)	12 (9%)	8	28
65	19	115/116 (99%)	109 (95%)	6 (5%)	23	48
66	20	100/114 (88%)	94 (94%)	6 (6%)	19	44
67	21	74/74 (100%)	69 (93%)	5 (7%)	16	40
68	22	110/111 (99%)	103 (94%)	7 (6%)	17	42
69	23	119/120 (99%)	112 (94%)	7 (6%)	19	45
70	24	112/113 (99%)	105 (94%)	7 (6%)	18	43
71	25	61/89 (68%)	55 (90%)	6 (10%)	8	27
72	26	83/101 (82%)	76 (92%)	7 (8%)	11	33
73	27	70/71 (99%)	65 (93%)	5 (7%)	14	39

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
74	28	56/60 (93%)	53 (95%)	3 (5%)	22	47
75	29	47/49 (96%)	47 (100%)	0	100	100
76	30	51/54 (94%)	47 (92%)	4 (8%)	12	36
77	31	43/135 (32%)	38 (88%)	5 (12%)	5	21
All	All	9583/10436 (92%)	8985 (94%)	598 (6%)	22	43

All (598) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	L1	18	LYS
1	L1	19	TYR
1	L1	26	ARG
1	L1	58	CYS
1	L1	83	ASP
1	L1	92	LYS
1	L1	103	LEU
1	L1	107	TYR
1	L1	108	ASN
1	L1	130	LYS
1	L1	134	PHE
1	L1	140	HIS
1	L1	198	TRP
2	L2	126	LEU
2	L2	176	ASP
2	L2	193	ARG
2	L2	204	MET
2	L2	207	VAL
2	L2	208	ASP
2	L2	218	HIS
2	L2	227	ARG
2	L2	241	ARG
3	L3	25	ILE
3	L3	30	LYS
3	L3	46	PHE
3	L3	102	LEU
3	L3	123	TYR
3	L3	140	ASP
3	L3	198	HIS
3	L3	240	ARG
3	L3	246	LEU
3	L3	266	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	L3	272	TYR
3	L3	332	ARG
4	L4	43	ASN
4	L4	93	MET
4	L4	99	MET
4	L4	105	THR
4	L4	148	ILE
4	L4	170	LYS
4	L4	194	TYR
4	L4	246	ARG
4	L4	265	GLU
4	L4	279	HIS
4	L4	319	LYS
4	L4	345	GLU
5	L5	12	TYR
5	L5	15	ARG
5	L5	22	ARG
5	L5	23	ARG
5	L5	92	LEU
5	L5	95	TRP
5	L5	131	LEU
5	L5	168	ASP
6	L6	48	ARG
6	L6	54	TYR
6	L6	64	LEU
6	L6	65	ILE
6	L6	77	ARG
6	L6	91	VAL
7	L7	24	GLU
7	L7	25	GLN
7	L7	48	ASN
7	L7	60	ARG
7	L7	82	LYS
7	L7	136	TYR
7	L7	179	LEU
7	L7	200	ASN
8	L8	41	GLN
8	L8	63	LYS
8	L8	65	LEU
8	L8	69	LEU
8	L8	78	PHE
8	L8	80	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	L8	84	ARG
8	L8	107	GLU
8	L8	122	LYS
8	L8	124	ASP
8	L8	134	TYR
8	L8	177	TYR
8	L8	204	ARG
9	L9	36	LYS
9	L9	41	ILE
9	L9	69	ARG
9	L9	92	TYR
9	L9	102	ASN
9	L9	106	LYS
9	L9	113	GLU
9	L9	130	ASP
9	L9	134	ILE
9	L9	157	ASN
9	L9	168	ARG
9	L9	172	ILE
9	L9	177	ASP
10	60	9	TYR
10	60	23	ASN
10	60	32	ARG
10	60	39	LYS
10	60	40	LYS
10	60	63	GLU
10	60	122	PRO
10	60	163	GLN
10	60	165	ILE
10	60	169	LYS
10	60	180	GLU
10	60	191	LYS
10	60	212	GLU
11	61	6	GLN
11	61	10	ARG
11	61	12	LEU
11	61	13	LYS
11	61	25	GLU
11	61	30	LEU
11	61	40	LEU
11	61	52	TYR
11	61	94	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	61	99	THR
11	61	112	LEU
11	61	140	ARG
11	61	172	LEU
13	63	13	HIS
13	63	23	LYS
13	63	35	ARG
13	63	117	LYS
13	63	124	ILE
13	63	131	LYS
13	63	136	GLU
13	63	160	GLN
14	64	40	ASP
14	64	42	LYS
14	64	77	ARG
14	64	124	ARG
15	65	10	LEU
15	65	30	TYR
15	65	38	ARG
15	65	50	ARG
15	65	62	TYR
15	65	68	ARG
15	65	117	ASN
15	65	119	TYR
15	65	138	GLN
15	65	153	ASP
15	65	160	GLU
15	65	202	TYR
16	66	47	PHE
16	66	80	PHE
16	66	94	ARG
16	66	113	ASP
16	66	117	ARG
16	66	122	GLN
16	66	134	LYS
16	66	151	ASP
16	66	167	TYR
16	66	182	ASN
17	67	10	ASN
17	67	28	ASN
17	67	53	ASP
17	67	61	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	67	111	LYS
17	67	120	ASN
17	67	128	ARG
17	67	159	LYS
17	67	168	LEU
17	67	180	LYS
18	68	3	ILE
18	68	12	ARG
18	68	41	ASP
18	68	105	ARG
18	68	138	LEU
18	68	159	LYS
18	68	179	ARG
18	68	184	PHE
19	69	5	ARG
19	69	74	ARG
19	69	104	ARG
19	69	109	TYR
19	69	148	ASP
19	69	152	GLU
19	69	164	LEU
19	69	166	ASN
19	69	171	ASP
19	69	175	GLN
19	69	188	ASP
20	70	43	TYR
20	70	44	PHE
20	70	68	HIS
20	70	78	TRP
20	70	96	ASP
20	70	99	ARG
20	70	108	GLN
20	70	137	ARG
20	70	139	TYR
20	70	147	ASP
20	70	166	LYS
21	71	83	ARG
21	71	94	GLU
21	71	126	VAL
21	71	139	ARG
22	72	38	ILE
22	72	58	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	72	59	ASP
23	73	12	ARG
23	73	33	ASN
23	73	74	MET
23	73	89	ASP
23	73	124	ASP
24	74	32	GLN
25	75	27	ARG
25	75	33	ARG
25	75	34	LEU
25	75	45	LYS
25	75	49	LYS
25	75	54	TYR
25	75	63	ILE
25	75	74	LYS
25	75	108	LEU
25	75	135	ILE
25	75	141	TYR
25	75	142	ILE
26	76	6	LEU
26	76	37	LYS
26	76	50	ILE
26	76	54	ASP
26	76	100	HIS
26	76	126	LEU
27	77	49	TYR
27	77	92	PHE
27	77	121	ARG
27	77	134	LEU
28	78	10	LYS
28	78	46	ASP
28	78	60	TYR
28	78	67	HIS
28	78	85	ASP
28	78	88	ASP
28	78	91	LEU
29	79	14	ARG
29	79	21	ILE
29	79	22	LYS
29	79	43	HIS
29	79	52	LYS
29	79	59	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	80	41	LEU
30	80	61	MET
30	80	69	TYR
30	80	83	LYS
30	80	97	ASP
31	81	19	ARG
31	81	31	ARG
31	81	35	GLU
31	81	50	ARG
31	81	55	LEU
31	81	79	ARG
31	81	90	PHE
31	81	112	ASP
32	82	5	PRO
32	82	30	GLU
32	82	33	ARG
32	82	62	LYS
32	82	73	THR
32	82	75	LEU
33	83	60	ARG
33	83	86	ARG
34	84	8	ARG
34	84	29	ILE
34	84	46	ASP
34	84	51	LEU
34	84	58	ARG
34	84	61	GLN
35	85	20	GLN
35	85	71	LYS
35	85	89	ARG
35	85	90	ARG
35	85	107	LYS
35	85	119	LYS
36	86	26	ILE
36	86	53	TYR
36	86	57	LEU
36	86	59	ASP
36	86	60	LEU
36	86	80	PHE
36	86	99	ARG
37	87	25	ARG
37	87	49	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	88	4	GLU
38	88	31	LEU
38	88	38	PHE
38	88	58	ASP
38	88	63	LYS
39	89	5	LYS
39	89	21	ARG
39	89	23	LEU
39	89	37	TYR
39	89	45	ARG
39	89	50	ASN
40	90	127	LEU
41	91	4	LYS
41	91	5	TRP
41	91	11	ARG
41	91	13	LEU
41	91	19	LYS
42	92	93	LEU
42	92	100	LYS
42	92	105	GLN
43	93	17	ARG
43	93	45	LYS
44	P0	4	ILE
44	P0	12	PHE
44	P0	53	MET
44	P0	58	MET
44	P0	67	LEU
44	P0	93	LEU
44	P0	185	LEU
45	RC	70	ASP
45	RC	93	ASP
45	RC	117	LYS
45	RC	136	ILE
45	RC	137	LYS
45	RC	153	GLN
45	RC	160	GLU
45	RC	161	LYS
45	RC	175	ASP
45	RC	182	ASN
45	RC	202	LEU
45	RC	207	ASP
45	RC	217	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	RC	232	TYR
45	RC	245	PHE
45	RC	266	ASP
45	RC	268	GLN
45	RC	273	ASP
45	RC	307	ASP
46	S0	7	PHE
46	S0	27	ARG
46	S0	41	ARG
46	S0	54	TRP
46	S0	56	LYS
46	S0	110	TYR
46	S0	163	ASN
46	S0	172	LEU
46	S0	180	GLU
46	S0	183	ARG
46	S0	188	LEU
46	S0	190	ASP
46	S0	191	ARG
46	S0	193	GLN
46	S0	195	TRP
47	S1	29	TRP
47	S1	47	LEU
47	S1	61	LEU
47	S1	70	LEU
47	S1	96	LEU
47	S1	99	ASN
47	S1	104	ASP
47	S1	105	PHE
47	S1	111	ARG
47	S1	131	ASP
47	S1	133	TYR
47	S1	135	LEU
47	S1	148	ASN
47	S1	180	THR
47	S1	181	LEU
47	S1	202	LYS
47	S1	204	ILE
47	S1	205	PHE
47	S1	206	PRO
47	S1	218	LEU
48	S2	66	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	S2	82	ASN
48	S2	89	GLN
48	S2	106	ASP
48	S2	140	ARG
48	S2	141	ARG
48	S2	193	VAL
48	S2	206	THR
48	S2	212	LYS
49	S3	4	LEU
49	S3	14	ASP
49	S3	57	ASP
49	S3	76	ARG
49	S3	84	ILE
49	S3	92	GLN
49	S3	105	MET
49	S3	120	TYR
49	S3	141	LYS
49	S3	156	PHE
49	S3	158	ILE
49	S3	166	ASP
49	S3	178	ARG
49	S3	204	ASP
49	S3	223	LYS
50	S4	6	LYS
50	S4	18	TRP
50	S4	24	SER
50	S4	38	LEU
50	S4	39	ARG
50	S4	54	TYR
50	S4	158	ASP
50	S4	182	TYR
50	S4	198	LYS
50	S4	222	LEU
50	S4	226	PHE
50	S4	259	GLN
51	S5	25	LEU
51	S5	45	LYS
51	S5	48	PHE
51	S5	108	LEU
51	S5	112	ARG
51	S5	128	ASN
51	S5	203	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	S6	7	TYR
52	S6	19	ASP
52	S6	21	GLU
52	S6	29	ASP
52	S6	45	PHE
52	S6	95	LYS
52	S6	98	ARG
52	S6	137	ARG
52	S6	156	PHE
52	S6	220	LYS
53	S7	24	PHE
53	S7	50	ASP
53	S7	85	PHE
53	S7	87	ASP
53	S7	114	ARG
53	S7	128	ASP
53	S7	134	GLU
53	S7	142	TYR
53	S7	143	LEU
53	S7	173	TYR
53	S7	185	ILE
54	S8	8	ARG
54	S8	29	LEU
54	S8	123	LYS
54	S8	137	LYS
54	S8	160	PHE
54	S8	182	TYR
54	S8	191	PHE
55	S9	3	ARG
55	S9	58	ASP
55	S9	66	ASP
55	S9	89	ASP
55	S9	138	LYS
55	S9	151	ASP
55	S9	171	ARG
56	10	1	MET
56	10	16	PHE
56	10	32	HIS
56	10	36	ASP
56	10	56	LYS
56	10	78	GLU
56	10	79	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	10	88	PRO
56	10	91	TYR
56	10	95	ARG
57	11	20	PHE
57	11	21	ASN
57	11	54	ILE
57	11	67	ARG
57	11	69	LYS
57	11	121	ASP
57	11	129	ARG
57	11	151	LYS
58	12	24	ILE
58	12	61	VAL
58	12	71	ILE
58	12	89	ILE
58	12	97	LEU
58	12	103	LEU
58	12	114	LYS
58	12	116	VAL
58	12	125	ASN
58	12	126	TRP
59	13	3	ARG
59	13	9	LYS
59	13	39	LYS
59	13	64	ARG
59	13	71	ILE
59	13	76	LYS
59	13	114	ARG
59	13	128	TYR
59	13	129	TYR
60	14	20	TYR
60	14	39	ILE
60	14	70	LYS
60	14	102	LEU
60	14	118	VAL
60	14	133	ARG
60	14	137	LEU
61	15	8	LYS
61	15	9	LYS
61	15	12	PHE
61	15	21	ASP
61	15	35	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
61	15	36	LEU
61	15	69	GLU
61	15	97	TYR
61	15	104	GLN
62	16	26	LYS
62	16	52	LEU
62	16	68	ARG
62	16	109	PHE
62	16	137	ARG
62	16	140	LYS
63	17	29	GLN
63	17	49	LYS
63	17	66	VAL
63	17	69	ILE
63	17	71	PHE
63	17	72	LYS
63	17	75	GLU
63	17	84	TYR
63	17	86	PRO
63	17	88	VAL
63	17	97	ASN
63	17	113	LEU
63	17	116	LYS
63	17	123	ASN
64	18	3	LEU
64	18	15	LEU
64	18	28	ILE
64	18	41	ARG
64	18	47	CYS
64	18	54	LEU
64	18	82	PRO
64	18	85	PHE
64	18	92	ILE
64	18	112	ASP
64	18	115	ARG
64	18	138	THR
65	19	13	ASP
65	19	28	LEU
65	19	33	TYR
65	19	64	HIS
65	19	70	GLN
65	19	99	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
66	20	27	THR
66	20	46	GLU
66	20	60	THR
66	20	61	LYS
66	20	72	ASN
66	20	77	LYS
67	21	4	ASP
67	21	5	LYS
67	21	40	ASP
67	21	62	ARG
67	21	78	LEU
68	22	37	PHE
68	22	55	ASP
68	22	65	LEU
68	22	66	ASN
68	22	98	GLN
68	22	104	LEU
68	22	105	THR
69	23	82	LYS
69	23	83	VAL
69	23	100	ASP
69	23	110	LYS
69	23	127	VAL
69	23	140	LYS
69	23	144	ARG
70	24	32	ARG
70	24	34	ASN
70	24	38	ASP
70	24	102	LYS
70	24	124	ARG
70	24	128	LYS
70	24	132	ARG
71	25	38	HIS
71	25	42	LEU
71	25	43	ASP
71	25	47	TYR
71	25	60	VAL
71	25	100	ILE
72	26	26	CYS
72	26	36	ILE
72	26	37	LYS
72	26	41	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
72	26	46	GLU
72	26	64	LEU
72	26	91	ASP
73	27	15	GLU
73	27	20	LYS
73	27	37	CYS
73	27	40	CYS
73	27	47	PHE
74	28	32	PHE
74	28	34	GLU
74	28	35	ASP
76	30	20	LYS
76	30	42	ARG
76	30	48	THR
76	30	49	LEU
77	31	113	LYS
77	31	116	LYS
77	31	120	GLU
77	31	138	ARG
77	31	140	TYR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (223) such sidechains are listed below:

Mol	Chain	Res	Type
1	L1	57	ASN
1	L1	62	ASN
1	L1	94	ASN
1	L1	108	ASN
1	L1	158	GLN
1	L1	200	ASN
2	L2	47	GLN
2	L2	79	ASN
2	L2	132	ASN
2	L2	140	ASN
2	L2	187	HIS
2	L2	205	ASN
2	L2	215	ASN
2	L2	250	GLN
2	L2	253	GLN
3	L3	139	GLN
3	L3	165	GLN
3	L3	182	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	L3	184	ASN
3	L3	243	HIS
3	L3	273	HIS
3	L3	293	ASN
3	L3	345	ASN
4	L4	5	GLN
4	L4	45	ASN
4	L4	48	GLN
4	L4	59	GLN
4	L4	87	GLN
4	L4	114	ASN
4	L4	260	GLN
4	L4	291	ASN
4	L4	328	ASN
5	L5	57	ASN
5	L5	264	GLN
5	L5	296	GLN
6	L6	28	GLN
6	L6	57	HIS
6	L6	167	ASN
7	L7	146	GLN
7	L7	197	GLN
7	L7	200	ASN
8	L8	41	GLN
8	L8	59	GLN
8	L8	240	ASN
9	L9	8	GLN
9	L9	49	ASN
9	L9	50	ASN
9	L9	125	ASN
9	L9	156	GLN
10	60	12	GLN
10	60	14	ASN
10	60	23	ASN
10	60	73	ASN
10	60	123	HIS
10	60	209	ASN
10	60	220	GLN
11	61	43	GLN
11	61	47	GLN
11	61	101	ASN
11	61	132	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	61	152	HIS
13	63	103	ASN
13	63	120	GLN
13	63	137	GLN
15	65	70	ASN
15	65	87	GLN
16	66	31	GLN
16	66	50	ASN
16	66	55	HIS
17	67	28	ASN
17	67	55	GLN
17	67	96	GLN
17	67	116	HIS
17	67	120	ASN
17	67	121	GLN
17	67	137	ASN
18	68	45	ASN
18	68	58	ASN
18	68	145	ASN
19	69	34	GLN
19	69	166	ASN
20	70	8	GLN
20	70	63	GLN
20	70	88	HIS
21	71	58	GLN
21	71	98	HIS
21	71	146	ASN
22	72	49	ASN
23	73	33	ASN
23	73	81	GLN
24	74	32	GLN
26	76	81	GLN
27	77	57	HIS
28	78	39	HIS
28	78	44	ASN
29	79	11	ASN
30	80	36	GLN
31	81	57	GLN
32	82	13	HIS
32	82	26	HIS
32	82	31	ASN
32	82	35	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	82	49	ASN
32	82	52	GLN
32	82	104	ASN
33	83	13	HIS
33	83	23	ASN
33	83	42	GLN
33	83	77	ASN
33	83	87	ASN
34	84	83	ASN
35	85	16	GLN
35	85	62	GLN
35	85	68	GLN
36	86	92	ASN
38	88	40	GLN
39	89	4	GLN
39	89	32	ASN
39	89	38	ASN
39	89	50	ASN
40	90	119	ASN
42	92	3	ASN
42	92	22	GLN
42	92	47	GLN
42	92	99	GLN
44	P0	56	ASN
44	P0	103	ASN
45	RC	29	GLN
45	RC	182	ASN
45	RC	196	ASN
45	RC	237	GLN
45	RC	248	ASN
46	S0	30	GLN
46	S0	33	GLN
46	S0	46	HIS
46	S0	163	ASN
46	S0	164	ASN
46	S0	193	GLN
47	S1	101	HIS
47	S1	146	GLN
47	S1	148	ASN
47	S1	157	GLN
47	S1	177	GLN
47	S1	209	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	S1	211	HIS
48	S2	59	HIS
48	S2	82	ASN
48	S2	89	GLN
48	S2	108	ASN
48	S2	147	ASN
48	S2	220	ASN
48	S2	228	ASN
49	S3	92	GLN
50	S4	36	HIS
50	S4	50	ASN
50	S4	98	ASN
50	S4	188	ASN
50	S4	216	ASN
50	S4	258	GLN
50	S4	259	GLN
51	S5	79	ASN
51	S5	86	GLN
51	S5	95	ASN
51	S5	122	ASN
51	S5	128	ASN
51	S5	131	GLN
51	S5	224	ASN
52	S6	13	GLN
52	S6	34	GLN
52	S6	56	ASN
52	S6	59	GLN
52	S6	140	ASN
52	S6	201	GLN
53	S7	19	GLN
53	S7	22	GLN
53	S7	180	GLN
54	S8	64	ASN
54	S8	111	GLN
54	S8	119	GLN
54	S8	138	ASN
55	S9	112	GLN
55	S9	123	HIS
55	S9	131	GLN
56	10	12	HIS
56	10	29	GLN
56	10	32	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
56	10	62	GLN
57	11	14	GLN
58	12	125	ASN
61	15	79	HIS
61	15	104	GLN
63	17	29	GLN
63	17	83	GLN
63	17	97	ASN
63	17	104	ASN
63	17	105	GLN
63	17	123	ASN
64	18	74	GLN
64	18	75	ASN
64	18	104	ASN
64	18	127	HIS
65	19	138	GLN
66	20	40	ASN
66	20	98	GLN
67	21	7	GLN
67	21	21	ASN
67	21	74	GLN
68	22	15	ASN
68	22	42	GLN
68	22	64	GLN
68	22	70	ASN
68	22	80	ASN
68	22	92	ASN
68	22	98	GLN
69	23	22	ASN
69	23	75	GLN
69	23	79	ASN
72	26	8	ASN
72	26	72	HIS
74	28	43	ASN
75	29	5	ASN
76	30	51	ASN
77	31	123	ASN

5.3.3 RNA ⓘ

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
78	1S	1780/1798 (98%)	329 (18%)	16 (0%)
79	2S	3298/3395 (97%)	474 (14%)	23 (0%)
80	8S	157/158 (99%)	22 (14%)	1 (0%)
81	5S	120/121 (99%)	8 (6%)	0
82	ET	76/77 (98%)	11 (14%)	1 (1%)
82	PT	76/77 (98%)	7 (9%)	0
83	MR	8/14 (57%)	1 (12%)	0
All	All	5515/5640 (97%)	852 (15%)	41 (0%)

All (852) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
78	1S	2	A
78	1S	4	C
78	1S	25	C
78	1S	26	A
78	1S	34	G
78	1S	40	A
78	1S	42	G
78	1S	43	A
78	1S	47	A
78	1S	57	G
78	1S	60	U
78	1S	68	A
78	1S	69	G
78	1S	72	A
78	1S	73	U
78	1S	74	U
78	1S	76	A
78	1S	77	U
78	1S	104	A
78	1S	114	C
78	1S	116	U
78	1S	124	A
78	1S	132	U
78	1S	133	U
78	1S	134	U
78	1S	135	A
78	1S	136	C
78	1S	137	U
78	1S	140	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	141	U
78	1S	145	A
78	1S	153	G
78	1S	159	U
78	1S	166	C
78	1S	178	U
78	1S	191	C
78	1S	192	U
78	1S	195	G
78	1S	197	A
78	1S	200	A
78	1S	215	A
78	1S	219	A
78	1S	231	U
78	1S	232	U
78	1S	233	C
78	1S	235	G
78	1S	238	U
78	1S	240	U
78	1S	241	U
78	1S	250	C
78	1S	261	U
78	1S	265	A
78	1S	276	C
78	1S	278	U
78	1S	279	G
78	1S	280	U
78	1S	288	A
78	1S	299	A
78	1S	316	A
78	1S	320	U
78	1S	321	C
78	1S	322	G
78	1S	323	A
78	1S	337	G
78	1S	352	A
78	1S	359	A
78	1S	360	A
78	1S	361	C
78	1S	380	U
78	1S	401	A
78	1S	402	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	404	G
78	1S	416	A
78	1S	417	A
78	1S	418	G
78	1S	423	G
78	1S	424	C
78	1S	425	A
78	1S	426	G
78	1S	434	G
78	1S	439	U
78	1S	444	C
78	1S	477	A
78	1S	485	A
78	1S	488	G
78	1S	489	C
78	1S	493	U
78	1S	495	C
78	1S	496	G
78	1S	497	G
78	1S	499	U
78	1S	502	U
78	1S	505	A
78	1S	506	A
78	1S	510	G
78	1S	515	A
78	1S	532	U
78	1S	539	G
78	1S	540	G
78	1S	541	A
78	1S	544	A
78	1S	545	A
78	1S	556	A
78	1S	557	G
78	1S	558	U
78	1S	559	C
78	1S	565	C
78	1S	579	A
78	1S	580	A
78	1S	581	U
78	1S	582	U
78	1S	594	A
78	1S	606	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	619	A
78	1S	620	A
78	1S	622	A
78	1S	623	A
78	1S	624	G
78	1S	639	U
78	1S	647	G
78	1S	650	U
78	1S	654	C
78	1S	655	G
78	1S	656	G
78	1S	657	U
78	1S	677	G
78	1S	683	C
78	1S	684	A
78	1S	685	A
78	1S	687	G
78	1S	688	G
78	1S	690	G
78	1S	694	U
78	1S	696	C
78	1S	697	C
78	1S	700	C
78	1S	702	G
78	1S	705	U
78	1S	707	A
78	1S	708	C
78	1S	709	C
78	1S	710	U
78	1S	711	U
78	1S	712	G
78	1S	713	A
78	1S	715	U
78	1S	718	U
78	1S	721	U
78	1S	733	A
78	1S	734	A
78	1S	738	G
78	1S	741	C
78	1S	742	U
78	1S	754	A
78	1S	755	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	765	G
78	1S	766	U
78	1S	774	A
78	1S	775	G
78	1S	778	G
78	1S	781	U
78	1S	783	G
78	1S	784	C
78	1S	789	A
78	1S	794	U
78	1S	806	A
78	1S	812	A
78	1S	815	G
78	1S	820	U
78	1S	821	U
78	1S	823	G
78	1S	830	U
78	1S	831	U
78	1S	833	U
78	1S	850	A
78	1S	855	A
78	1S	856	A
78	1S	863	A
78	1S	865	A
78	1S	876	G
78	1S	898	A
78	1S	912	U
78	1S	913	G
78	1S	914	G
78	1S	915	A
78	1S	921	U
78	1S	933	A
78	1S	935	U
78	1S	944	A
78	1S	966	A
78	1S	970	A
78	1S	982	U
78	1S	992	A
78	1S	993	A
78	1S	1004	U
78	1S	1005	A
78	1S	1012	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	1021	C
78	1S	1026	A
78	1S	1028	C
78	1S	1029	U
78	1S	1032	G
78	1S	1052	U
78	1S	1053	G
78	1S	1058	U
78	1S	1061	A
78	1S	1072	C
78	1S	1074	G
78	1S	1082	C
78	1S	1091	A
78	1S	1092	A
78	1S	1096	C
78	1S	1097	U
78	1S	1100	G
78	1S	1109	G
78	1S	1150	G
78	1S	1151	A
78	1S	1155	G
78	1S	1157	A
78	1S	1158	C
78	1S	1160	A
78	1S	1163	A
78	1S	1167	G
78	1S	1194	A
78	1S	1196	A
78	1S	1199	G
78	1S	1200	G
78	1S	1202	A
78	1S	1217	A
78	1S	1218	G
78	1S	1227	A
78	1S	1228	G
78	1S	1229	G
78	1S	1243	G
78	1S	1244	A
78	1S	1245	G
78	1S	1246	C
78	1S	1260	U
78	1S	1284	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	1288	G
78	1S	1305	U
78	1S	1314	U
78	1S	1316	G
78	1S	1321	A
78	1S	1337	A
78	1S	1340	U
78	1S	1341	A
78	1S	1344	A
78	1S	1345	A
78	1S	1347	U
78	1S	1354	G
78	1S	1361	U
78	1S	1363	U
78	1S	1364	G
78	1S	1370	U
78	1S	1371	A
78	1S	1378	U
78	1S	1390	U
78	1S	1391	A
78	1S	1398	U
78	1S	1399	C
78	1S	1413	U
78	1S	1414	U
78	1S	1415	U
78	1S	1427	A
78	1S	1428	G
78	1S	1432	U
78	1S	1448	G
78	1S	1457	C
78	1S	1459	C
78	1S	1460	A
78	1S	1471	A
78	1S	1473	U
78	1S	1482	C
78	1S	1483	A
78	1S	1486	G
78	1S	1490	C
78	1S	1491	U
78	1S	1492	A
78	1S	1499	G
78	1S	1514	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	1516	A
78	1S	1520	U
78	1S	1521	G
78	1S	1523	G
78	1S	1524	A
78	1S	1535	U
78	1S	1537	C
78	1S	1538	U
78	1S	1539	G
78	1S	1540	G
78	1S	1557	U
78	1S	1559	A
78	1S	1573	A
78	1S	1574	G
78	1S	1584	G
78	1S	1597	A
78	1S	1601	G
78	1S	1616	G
78	1S	1619	C
78	1S	1622	G
78	1S	1631	A
78	1S	1657	U
78	1S	1658	G
78	1S	1664	C
78	1S	1682	U
78	1S	1683	C
78	1S	1684	U
78	1S	1686	C
78	1S	1690	G
78	1S	1693	A
78	1S	1697	G
78	1S	1700	C
78	1S	1702	A
78	1S	1713	G
78	1S	1715	G
78	1S	1716	C
78	1S	1717	G
78	1S	1736	G
78	1S	1757	G
78	1S	1762	A
78	1S	1765	A
78	1S	1769	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	1770	U
78	1S	1780	G
78	1S	1792	G
78	1S	1794	A
78	1S	1796	C
78	1S	1797	A
79	2S	14	U
79	2S	26	A
79	2S	40	A
79	2S	43	A
79	2S	49	A
79	2S	60	A
79	2S	65	A
79	2S	66	A
79	2S	73	C
79	2S	92	G
79	2S	110	G
79	2S	116	A
79	2S	120	G
79	2S	121	A
79	2S	122	A
79	2S	123	A
79	2S	124	U
79	2S	133	U
79	2S	135	C
79	2S	136	G
79	2S	148	G
79	2S	149	U
79	2S	150	A
79	2S	156	G
79	2S	157	A
79	2S	161	G
79	2S	165	A
79	2S	166	C
79	2S	170	G
79	2S	187	A
79	2S	190	U
79	2S	191	U
79	2S	200	C
79	2S	210	U
79	2S	218	G
79	2S	219	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	240	U
79	2S	241	G
79	2S	243	G
79	2S	252	U
79	2S	269	G
79	2S	283	G
79	2S	286	U
79	2S	295	A
79	2S	305	U
79	2S	323	A
79	2S	329	U
79	2S	338	A
79	2S	339	C
79	2S	346	C
79	2S	350	C
79	2S	352	A
79	2S	370	U
79	2S	372	A
79	2S	376	G
79	2S	397	A
79	2S	398	A
79	2S	401	U
79	2S	402	A
79	2S	403	C
79	2S	421	G
79	2S	422	A
79	2S	439	C
79	2S	440	A
79	2S	441	U
79	2S	442	G
79	2S	450	G
79	2S	487	U
79	2S	494	G
79	2S	495	G
79	2S	517	G
79	2S	520	U
79	2S	521	A
79	2S	523	A
79	2S	535	G
79	2S	536	U
79	2S	546	C
79	2S	547	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	557	A
79	2S	559	A
79	2S	578	A
79	2S	579	G
79	2S	600	G
79	2S	604	G
79	2S	608	A
79	2S	609	G
79	2S	611	A
79	2S	620	U
79	2S	621	A
79	2S	636	C
79	2S	637	C
79	2S	638	C
79	2S	646	A
79	2S	647	A
79	2S	648	C
79	2S	649	A
79	2S	677	A
79	2S	681	U
79	2S	690	A
79	2S	699	A
79	2S	705	A
79	2S	726	G
79	2S	742	G
79	2S	758	C
79	2S	765	C
79	2S	766	U
79	2S	767	U
79	2S	776	U
79	2S	781	G
79	2S	784	A
79	2S	785	G
79	2S	786	A
79	2S	806	A
79	2S	817	A
79	2S	830	A
79	2S	849	C
79	2S	861	C
79	2S	874	U
79	2S	875	G
79	2S	879	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	880	G
79	2S	896	A
79	2S	907	G
79	2S	908	G
79	2S	914	A
79	2S	916	G
79	2S	920	A
79	2S	921	A
79	2S	923	C
79	2S	932	U
79	2S	933	A
79	2S	937	G
79	2S	944	C
79	2S	959	C
79	2S	960	U
79	2S	979	U
79	2S	981	U
79	2S	1002	A
79	2S	1010	G
79	2S	1024	G
79	2S	1025	A
79	2S	1041	U
79	2S	1047	A
79	2S	1049	C
79	2S	1063	G
79	2S	1064	A
79	2S	1081	U
79	2S	1093	A
79	2S	1095	U
79	2S	1097	G
79	2S	1098	A
79	2S	1103	A
79	2S	1104	G
79	2S	1117	G
79	2S	1131	G
79	2S	1159	A
79	2S	1177	G
79	2S	1180	A
79	2S	1181	U
79	2S	1186	G
79	2S	1193	A
79	2S	1201	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	1209	G
79	2S	1220	U
79	2S	1222	G
79	2S	1236	G
79	2S	1237	G
79	2S	1239	C
79	2S	1241	U
79	2S	1242	G
79	2S	1245	A
79	2S	1246	G
79	2S	1247	U
79	2S	1258	U
79	2S	1262	G
79	2S	1263	A
79	2S	1264	G
79	2S	1265	U
79	2S	1292	C
79	2S	1305	U
79	2S	1308	A
79	2S	1309	U
79	2S	1330	A
79	2S	1348	U
79	2S	1349	G
79	2S	1351	U
79	2S	1352	A
79	2S	1353	U
79	2S	1355	A
79	2S	1357	G
79	2S	1386	A
79	2S	1387	G
79	2S	1399	A
79	2S	1400	G
79	2S	1419	A
79	2S	1434	G
79	2S	1437	C
79	2S	1446	A
79	2S	1452	A
79	2S	1455	U
79	2S	1481	A
79	2S	1482	A
79	2S	1508	C
79	2S	1519	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	1522	U
79	2S	1556	C
79	2S	1557	A
79	2S	1562	C
79	2S	1563	C
79	2S	1569	U
79	2S	1570	U
79	2S	1572	U
79	2S	1573	G
79	2S	1581	C
79	2S	1582	C
79	2S	1583	A
79	2S	1589	A
79	2S	1607	U
79	2S	1608	C
79	2S	1629	U
79	2S	1642	A
79	2S	1643	A
79	2S	1645	U
79	2S	1655	G
79	2S	1687	U
79	2S	1694	U
79	2S	1717	U
79	2S	1725	C
79	2S	1730	G
79	2S	1750	A
79	2S	1751	G
79	2S	1761	C
79	2S	1765	U
79	2S	1766	G
79	2S	1780	G
79	2S	1788	C
79	2S	1797	A
79	2S	1814	A
79	2S	1815	U
79	2S	1816	A
79	2S	1819	U
79	2S	1821	U
79	2S	1841	A
79	2S	1842	A
79	2S	1845	G
79	2S	1849	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	1850	A
79	2S	1859	A
79	2S	1866	C
79	2S	1879	A
79	2S	1886	A
79	2S	1906	G
79	2S	1948	G
79	2S	1952	G
79	2S	1953	G
79	2S	1954	G
79	2S	1968	G
79	2S	1973	G
79	2S	1978	A
79	2S	1980	C
79	2S	2045	G
79	2S	2059	U
79	2S	2064	C
79	2S	2065	U
79	2S	2066	C
79	2S	2067	U
79	2S	2068	U
79	2S	2069	G
79	2S	2071	A
79	2S	2082	U
79	2S	2085	U
79	2S	2087	C
79	2S	2094	C
79	2S	2101	C
79	2S	2102	U
79	2S	2107	A
79	2S	2111	G
79	2S	2112	U
79	2S	2116	G
79	2S	2121	G
79	2S	2122	G
79	2S	2131	A
79	2S	2142	A
79	2S	2144	A
79	2S	2158	A
79	2S	2169	G
79	2S	2188	A
79	2S	2205	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	2208	A
79	2S	2223	A
79	2S	2244	A
79	2S	2249	G
79	2S	2252	A
79	2S	2255	A
79	2S	2256	A
79	2S	2273	G
79	2S	2281	A
79	2S	2282	U
79	2S	2298	U
79	2S	2307	G
79	2S	2308	C
79	2S	2313	A
79	2S	2314	U
79	2S	2315	G
79	2S	2336	U
79	2S	2339	C
79	2S	2347	U
79	2S	2373	A
79	2S	2374	C
79	2S	2375	G
79	2S	2388	U
79	2S	2397	A
79	2S	2401	A
79	2S	2402	A
79	2S	2403	G
79	2S	2411	U
79	2S	2418	G
79	2S	2434	U
79	2S	2454	G
79	2S	2458	A
79	2S	2459	A
79	2S	2462	A
79	2S	2463	G
79	2S	2468	A
79	2S	2472	U
79	2S	2474	G
79	2S	2485	A
79	2S	2488	A
79	2S	2490	C
79	2S	2494	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	2496	C
79	2S	2512	C
79	2S	2513	U
79	2S	2515	A
79	2S	2522	G
79	2S	2523	A
79	2S	2526	C
79	2S	2531	C
79	2S	2533	G
79	2S	2537	U
79	2S	2538	U
79	2S	2540	A
79	2S	2541	U
79	2S	2542	U
79	2S	2549	G
79	2S	2554	A
79	2S	2555	G
79	2S	2561	A
79	2S	2562	A
79	2S	2569	A
79	2S	2570	U
79	2S	2571	U
79	2S	2572	C
79	2S	2573	G
79	2S	2585	G
79	2S	2586	G
79	2S	2587	U
79	2S	2594	C
79	2S	2596	U
79	2S	2606	G
79	2S	2607	G
79	2S	2614	G
79	2S	2619	G
79	2S	2635	A
79	2S	2637	A
79	2S	2638	C
79	2S	2645	G
79	2S	2652	U
79	2S	2656	A
79	2S	2657	A
79	2S	2674	A
79	2S	2677	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	2680	A
79	2S	2689	A
79	2S	2691	A
79	2S	2694	A
79	2S	2696	A
79	2S	2720	G
79	2S	2728	G
79	2S	2729	U
79	2S	2753	G
79	2S	2755	C
79	2S	2762	A
79	2S	2777	G
79	2S	2778	G
79	2S	2779	A
79	2S	2788	C
79	2S	2796	G
79	2S	2800	G
79	2S	2801	A
79	2S	2804	A
79	2S	2810	C
79	2S	2814	G
79	2S	2816	G
79	2S	2817	A
79	2S	2818	U
79	2S	2842	U
79	2S	2845	A
79	2S	2861	U
79	2S	2867	C
79	2S	2871	G
79	2S	2872	A
79	2S	2873	U
79	2S	2887	A
79	2S	2896	A
79	2S	2899	C
79	2S	2923	U
79	2S	2928	C
79	2S	2935	U
79	2S	2936	A
79	2S	2951	G
79	2S	2972	G
79	2S	2983	C
79	2S	2992	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	2997	G
79	2S	3012	A
79	2S	3021	A
79	2S	3059	G
79	2S	3078	U
79	2S	3080	G
79	2S	3086	A
79	2S	3092	C
79	2S	3094	A
79	2S	3116	G
79	2S	3122	A
79	2S	3130	A
79	2S	3131	U
79	2S	3139	A
79	2S	3142	A
79	2S	3143	C
79	2S	3154	C
79	2S	3155	U
79	2S	3156	U
79	2S	3158	G
79	2S	3164	C
79	2S	3173	G
79	2S	3174	A
79	2S	3176	G
79	2S	3179	U
79	2S	3181	C
79	2S	3187	A
79	2S	3198	U
79	2S	3207	U
79	2S	3217	C
79	2S	3218	A
79	2S	3219	G
79	2S	3229	G
79	2S	3245	A
79	2S	3246	G
79	2S	3259	U
79	2S	3270	U
79	2S	3276	G
79	2S	3279	A
79	2S	3281	U
79	2S	3286	G
79	2S	3287	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
79	2S	3289	G
79	2S	3294	A
79	2S	3304	U
79	2S	3307	A
79	2S	3316	A
79	2S	3317	U
79	2S	3318	G
79	2S	3319	U
79	2S	3335	A
79	2S	3341	U
79	2S	3345	G
79	2S	3352	U
79	2S	3354	U
79	2S	3355	U
79	2S	3369	G
79	2S	3375	A
79	2S	3378	C
79	2S	3389	U
80	8S	23	U
80	8S	34	U
80	8S	35	C
80	8S	51	G
80	8S	59	A
80	8S	62	C
80	8S	63	G
80	8S	80	A
80	8S	86	U
80	8S	87	G
80	8S	90	U
80	8S	95	G
80	8S	105	A
80	8S	106	C
80	8S	111	A
80	8S	113	U
80	8S	114	G
80	8S	125	U
80	8S	126	A
80	8S	138	A
80	8S	151	C
80	8S	157	U
81	5S	13	A
81	5S	22	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
81	5S	38	U
81	5S	65	G
81	5S	76	A
81	5S	95	A
81	5S	102	A
81	5S	112	G
82	ET	6	G
82	ET	16	C
82	ET	18(A)	U
82	ET	19	G
82	ET	20	G
82	ET	22	A
82	ET	34	U
82	ET	48	U
82	ET	49	C
82	ET	60	A
82	ET	77	A
83	MR	5	A
82	PT	9	G
82	PT	20	G
82	PT	21	U
82	PT	48	U
82	PT	49	C
82	PT	75	C
82	PT	77	A

All (41) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
78	1S	25	C
78	1S	103	A
78	1S	139	C
78	1S	240	U
78	1S	501	U
78	1S	555	A
78	1S	676	G
78	1S	829	A
78	1S	1051	G
78	1S	1339	C
78	1S	1344	A
78	1S	1481	C
78	1S	1573	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
78	1S	1615	C
78	1S	1696	G
78	1S	1761	U
79	2S	65	A
79	2S	169	U
79	2S	282	G
79	2S	517	G
79	2S	637	C
79	2S	959	C
79	2S	1103	A
79	2S	1241	U
79	2S	1307	G
79	2S	1329	U
79	2S	1352	A
79	2S	1556	C
79	2S	2065	U
79	2S	2101	C
79	2S	2512	C
79	2S	2525	G
79	2S	2541	U
79	2S	2554	A
79	2S	3121	U
79	2S	3218	A
79	2S	3228	C
79	2S	3269	U
79	2S	3317	U
80	8S	85	G
82	ET	18(A)	U

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

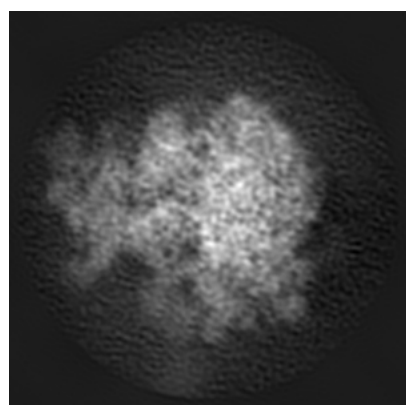
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5977. These allow visual inspection of the internal detail of the map and identification of artifacts.

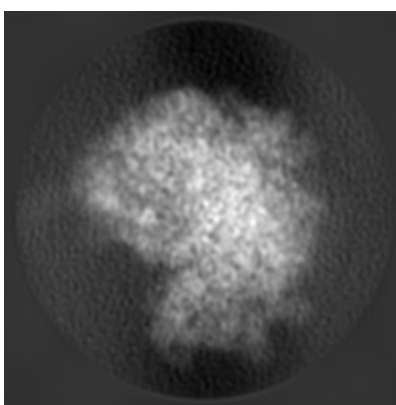
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

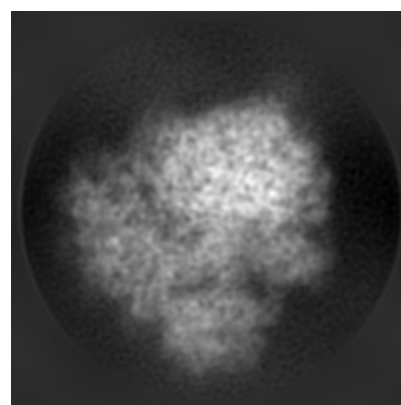
6.1.1 Primary map



X



Y

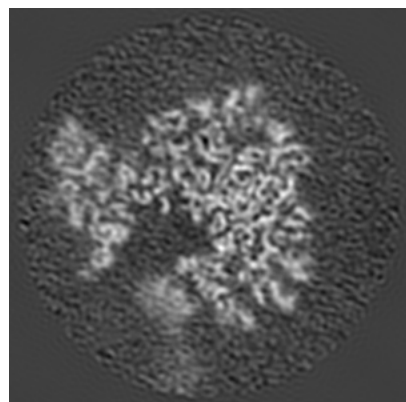


Z

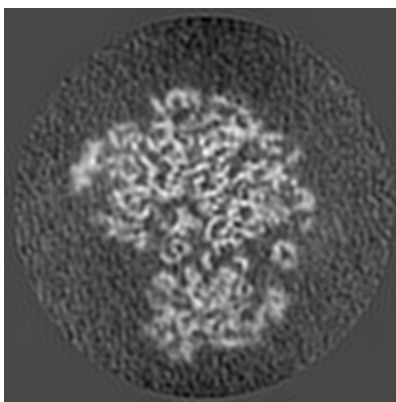
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

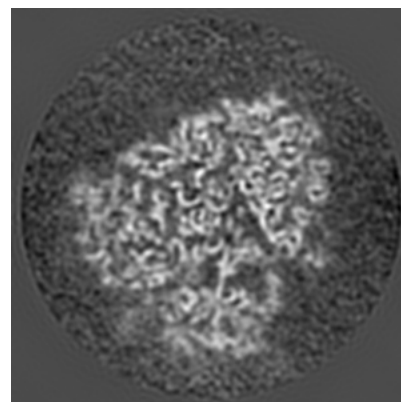
6.2.1 Primary map



X Index: 180



Y Index: 180

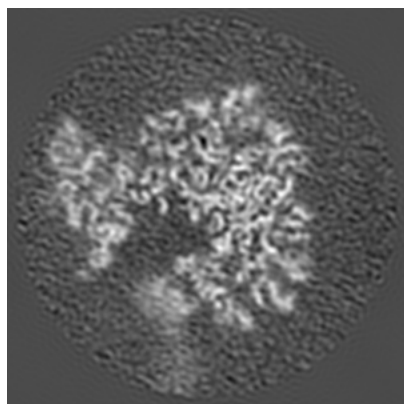


Z Index: 180

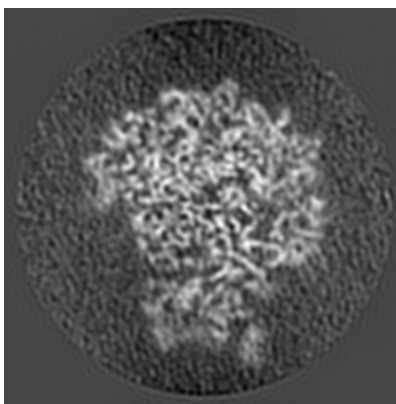
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

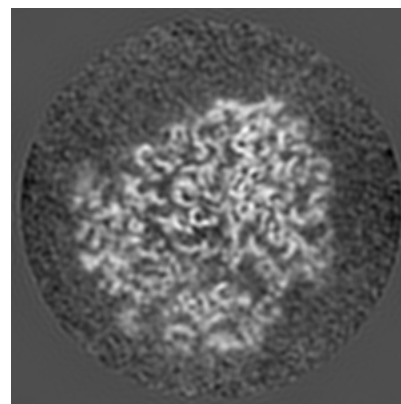
6.3.1 Primary map



X Index: 181



Y Index: 205

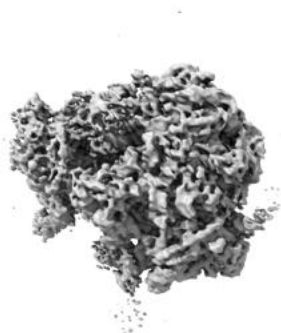


Z Index: 175

The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views [i](#)

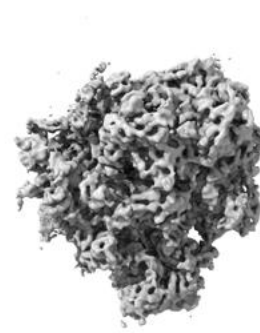
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.12. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

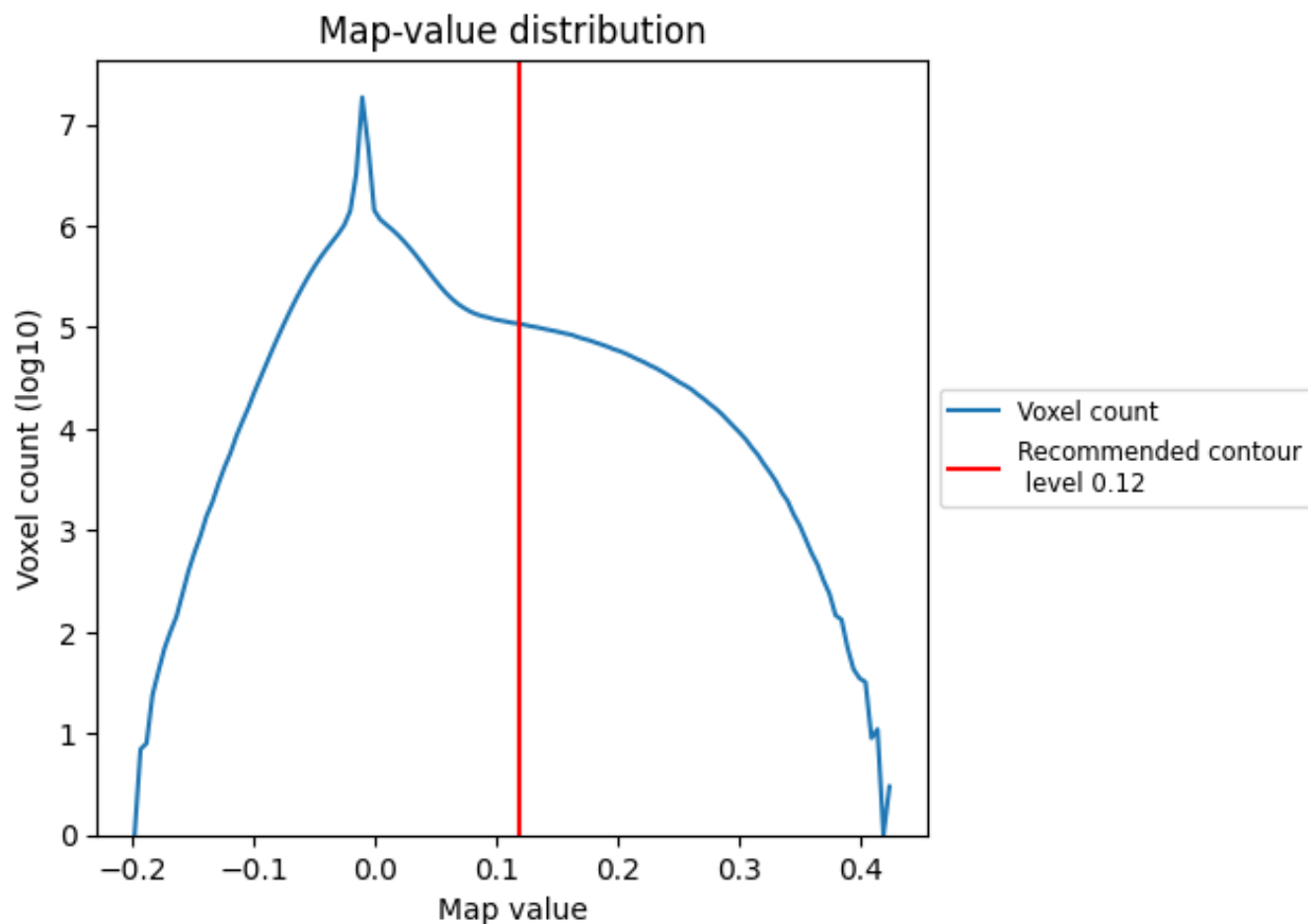
6.5 Mask visualisation

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

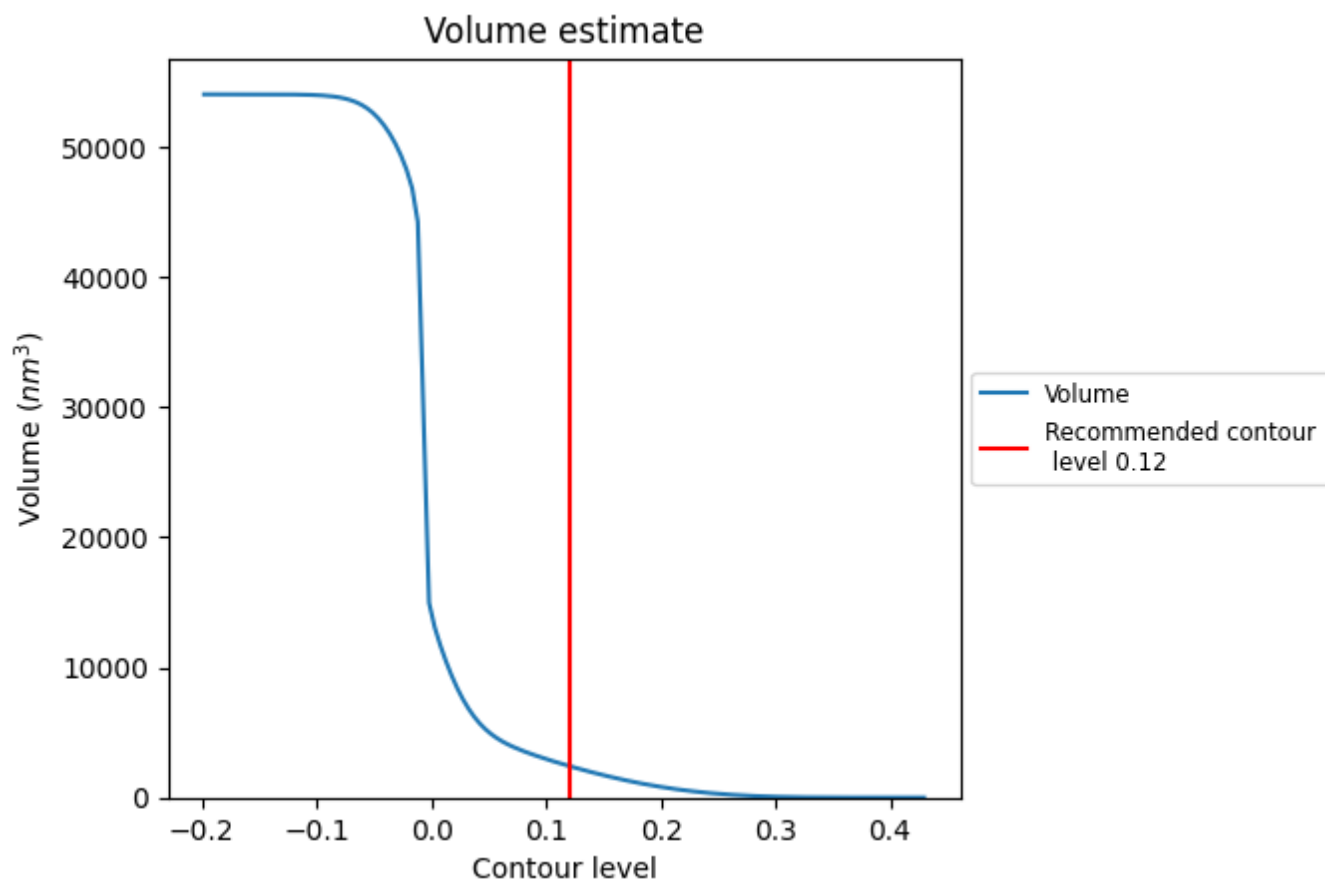
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

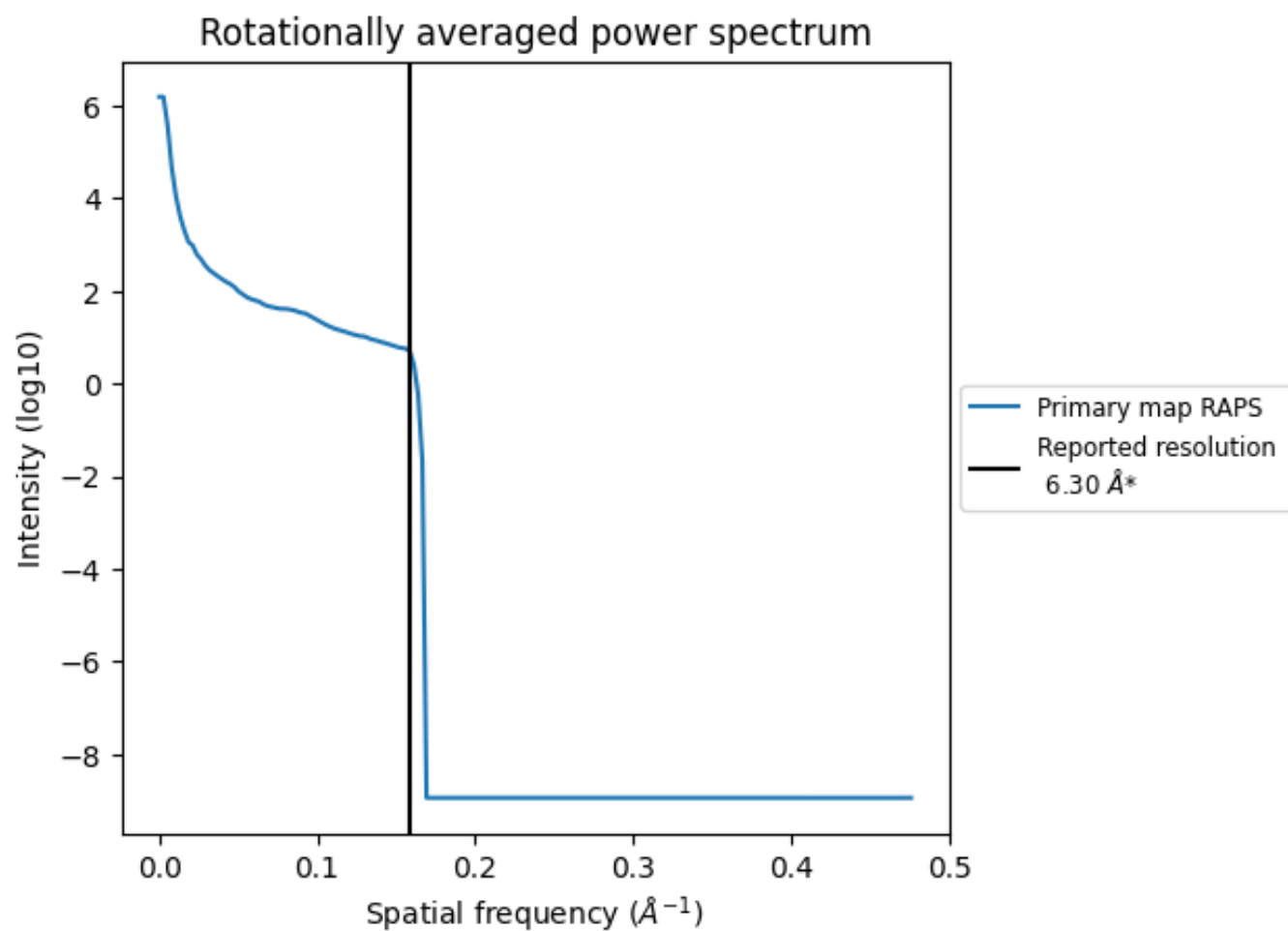
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 2429 nm³; this corresponds to an approximate mass of 2194 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.159 Å⁻¹

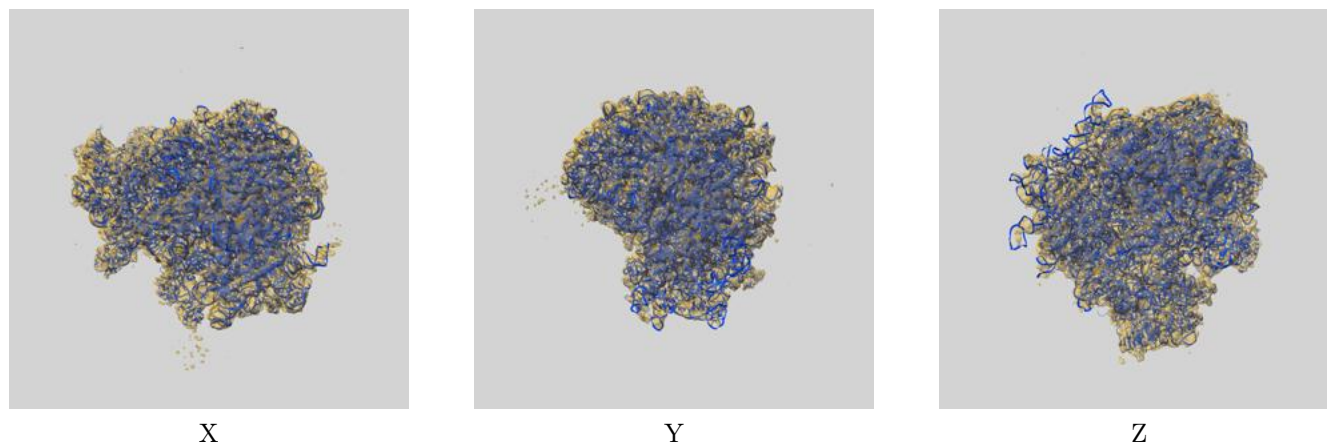
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit [i](#)

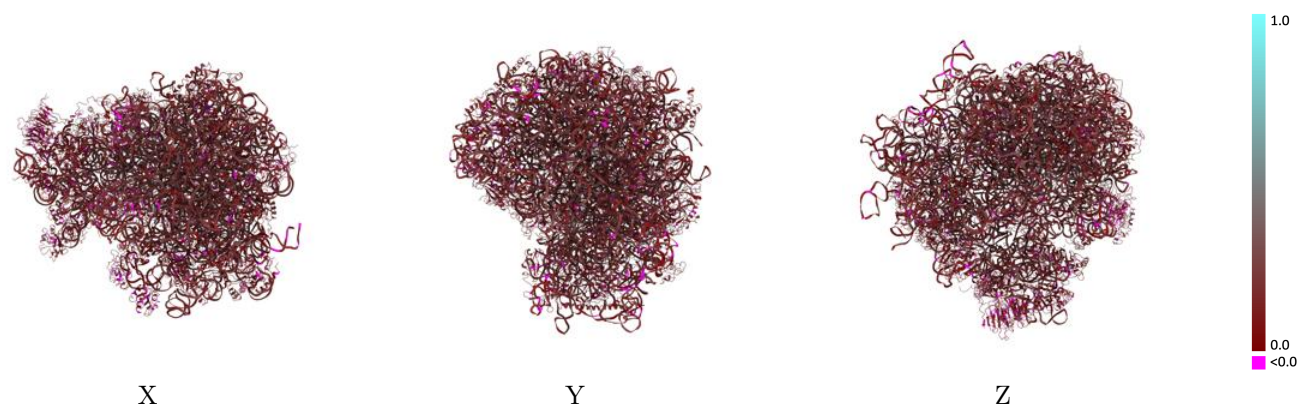
This section contains information regarding the fit between EMDB map EMD-5977 and PDB model 3J78. Per-residue inclusion information can be found in [section 3](#) on [page 19](#).

9.1 Map-model overlay [i](#)



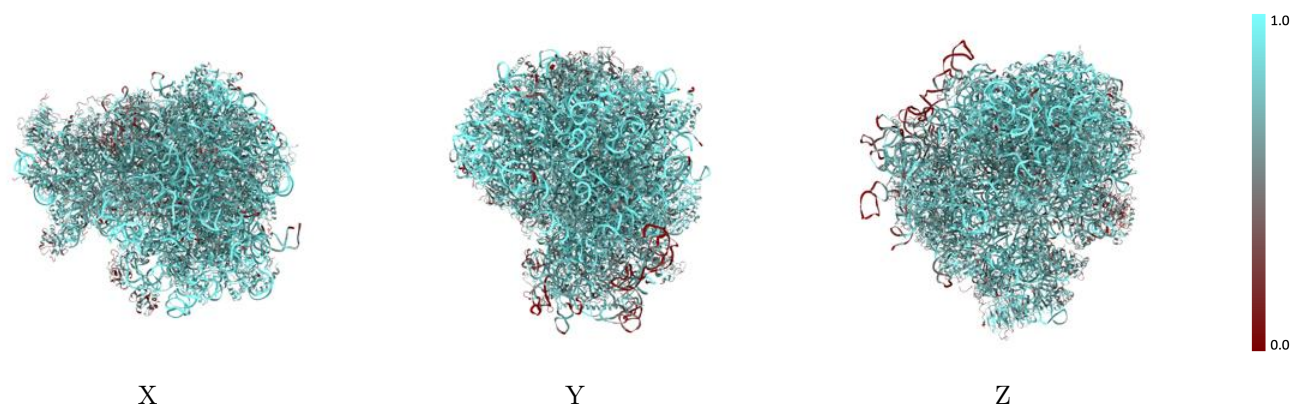
The images above show the 3D surface view of the map at the recommended contour level 0.12 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



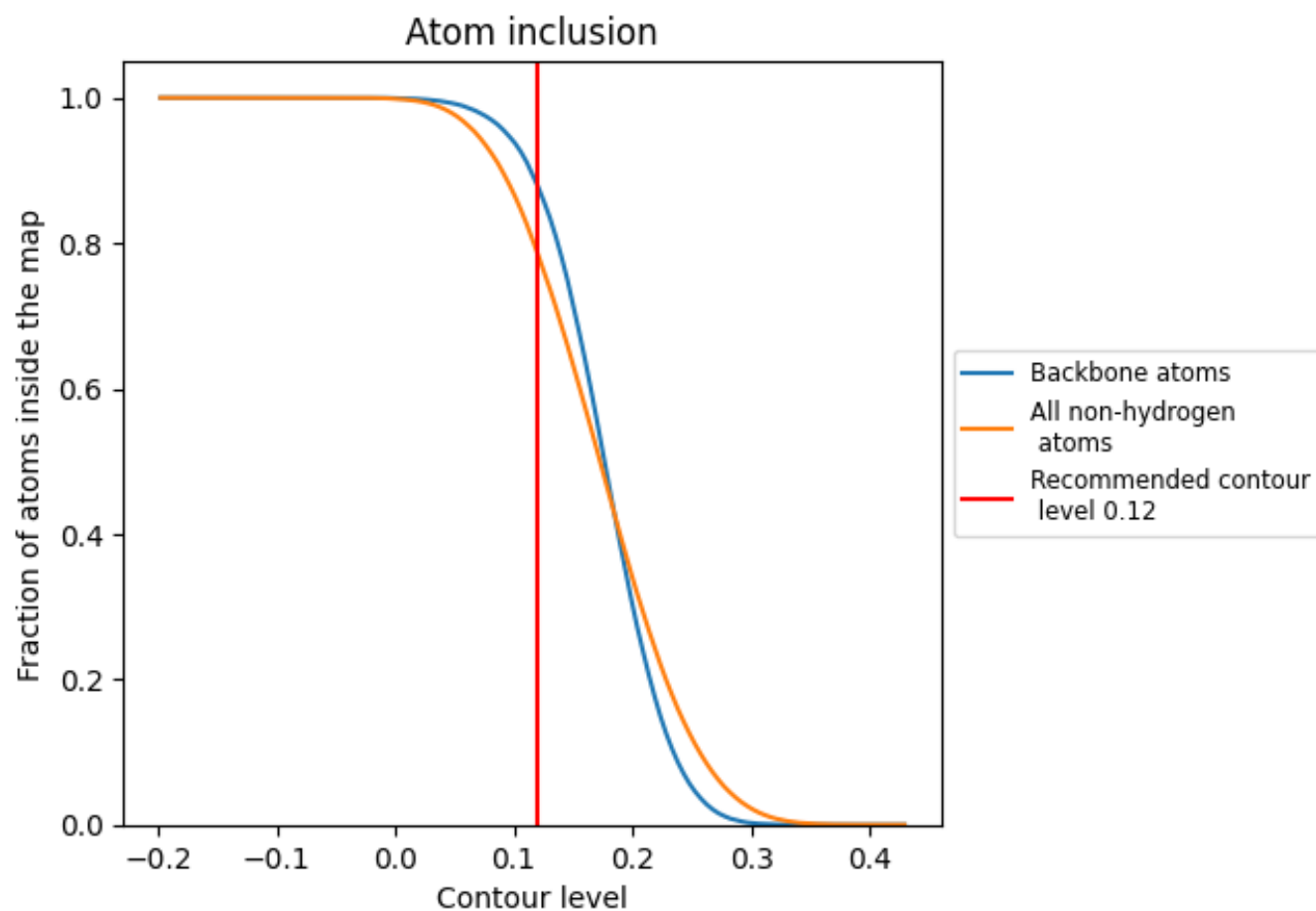
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.12).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 88% of all backbone atoms, 79% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary





















































































The table lists the average atom inclusion at the recommended contour level (0.12) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.7860	 0.1940
10	 0.7588	 0.1590
11	 0.5313	 0.1750
12	 0.4387	 0.1490
13	 0.6817	 0.1710
14	 0.6316	 0.1620
15	 0.6556	 0.1700
16	 0.6833	 0.1470
17	 0.5678	 0.1490
18	 0.6216	 0.1700
19	 0.6423	 0.1380
1S	 0.8547	 0.2100
20	 0.6445	 0.1340
21	 0.6586	 0.1750
22	 0.6336	 0.1650
23	 0.5260	 0.1700
24	 0.5845	 0.1460
25	 0.5667	 0.1490
26	 0.7253	 0.1870
27	 0.7159	 0.2000
28	 0.6109	 0.1770
29	 0.7388	 0.1500
2S	 0.9052	 0.2190
30	 0.5839	 0.1850
31	 0.6496	 0.1730
5S	 0.9527	 0.2160
60	 0.7441	 0.1820
61	 0.6398	 0.1590
62	 0.3442	 0.1490
63	 0.6584	 0.1850
64	 0.7877	 0.1660
65	 0.7161	 0.1430
66	 0.7894	 0.1720
67	 0.7122	 0.1590
68	 0.6189	 0.1620



















Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
69	 0.6815	 0.1640
70	 0.7904	 0.1600
71	 0.6575	 0.1810
72	 0.6087	 0.1840
73	 0.5296	 0.1780
74	 0.5605	 0.1860
75	 0.7033	 0.1850
76	 0.7394	 0.1670
77	 0.7556	 0.1820
78	 0.6159	 0.1530
79	 0.6225	 0.1780
80	 0.7387	 0.1800
81	 0.6516	 0.1620
82	 0.7596	 0.1870
83	 0.7689	 0.1340
84	 0.6843	 0.1510
85	 0.7288	 0.1670
86	 0.6796	 0.1780
87	 0.7454	 0.1500
88	 0.6650	 0.1830
89	 0.7428	 0.1780
8S	 0.9484	 0.2310
90	 0.7203	 0.1700
91	 0.4178	 0.0950
92	 0.6212	 0.1710
93	 0.7000	 0.1740
ET	 0.8291	 0.2000
L1	 0.1549	 0.1110
L2	 0.6868	 0.1700
L3	 0.6543	 0.1700
L4	 0.6830	 0.1680
L5	 0.5690	 0.1600
L6	 0.7059	 0.1620
L7	 0.7154	 0.1600
L8	 0.7352	 0.1780
L9	 0.7337	 0.1670
MR	 0.8769	 0.2750
P0	 0.4756	 0.0970
PT	 0.8443	 0.2340
RC	 0.6934	 0.1390
S0	 0.6936	 0.1780
S1	 0.6945	 0.1780

Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
S2	 0.6878	 0.1760
S3	 0.6803	 0.1820
S4	 0.5752	 0.1590
S5	 0.6075	 0.1620
S6	 0.4895	 0.1690
S7	 0.6371	 0.1740
S8	 0.5609	 0.1520
S9	 0.6297	 0.1550