



Full wwPDB/EMDatabank EM Map/Model Validation Report ⓘ

Mar 2, 2017 – 12:21 pm GMT

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 PDB ID : 3U5E, 3U5D, 3U5C, 3U5B, 3J3B, 3I9B

This is a Full wwPDB/EMDatabank EM Map/Model Validation Report
for a publicly released PDB/EMDB entry.

We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<http://wwpdb.org/validation/2016/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

MolProbity : 4.02b-467
Percentile statistics : 20161228.v01 (using entries in the PDB archive December 28th 2016)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : recalc29047

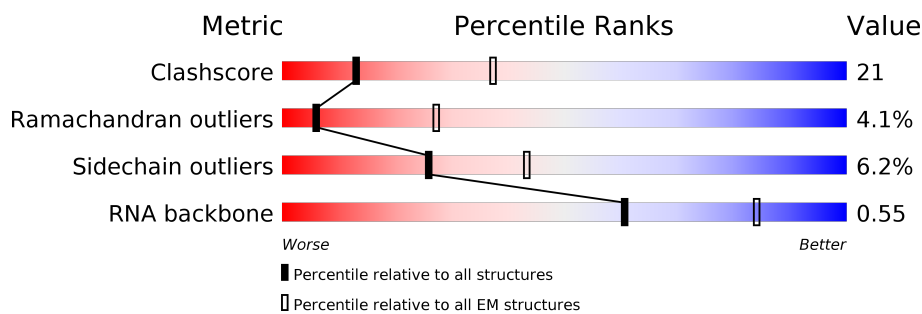
1 Overall quality at a glance

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.





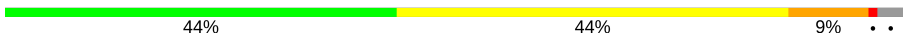



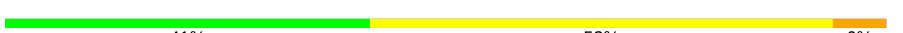




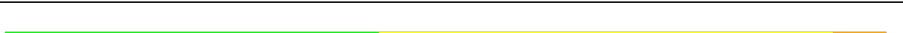


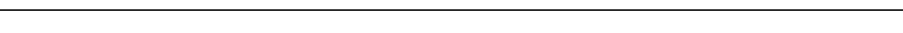




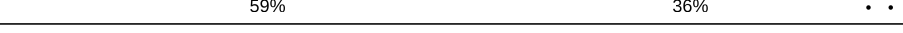





Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	125131	1336
Ramachandran outliers	121729	1120
Sidechain outliers	121581	1026
RNA backbone	3398	335

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$.

Mol	Chain	Length	Quality of chain
1	L1	217	47% 39% 9% 6%
2	L2	254	43% 51% 5% .
3	L3	387	51% 46% .
4	L4	362	51% 44% .
5	L5	297	52% 44% .
6	L6	176	50% 35% . 11%
7	L7	244	42% 45% . . 9%
8	L8	256	42% 43% 6% 9%








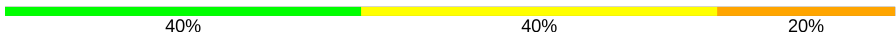




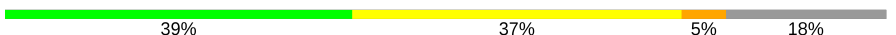
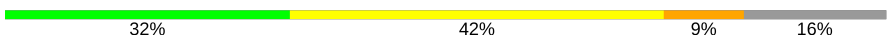











Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
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	
33	83	107	



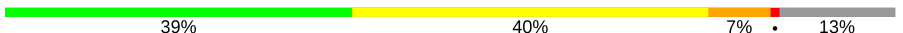








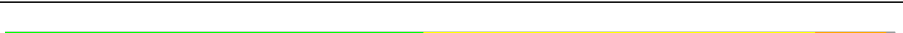


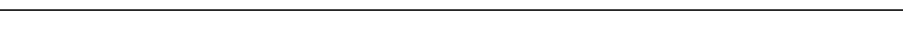




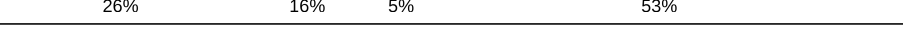

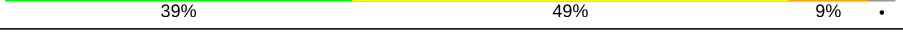



Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
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	
58	12	143	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
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	
82	PT	77	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
83	MR	14	<div><div></div><div></div><div></div><div></div></div> <div>36%21%7%36%</div>

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		

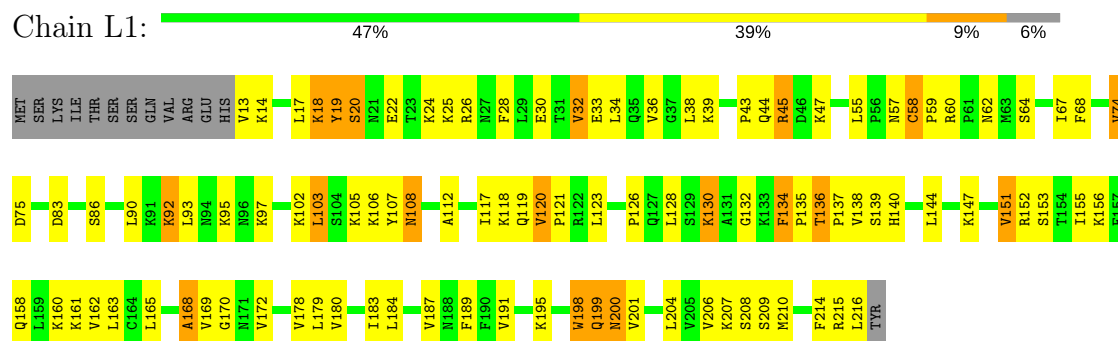
- Molecule 83 is a RNA chain called messenger RNA.

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

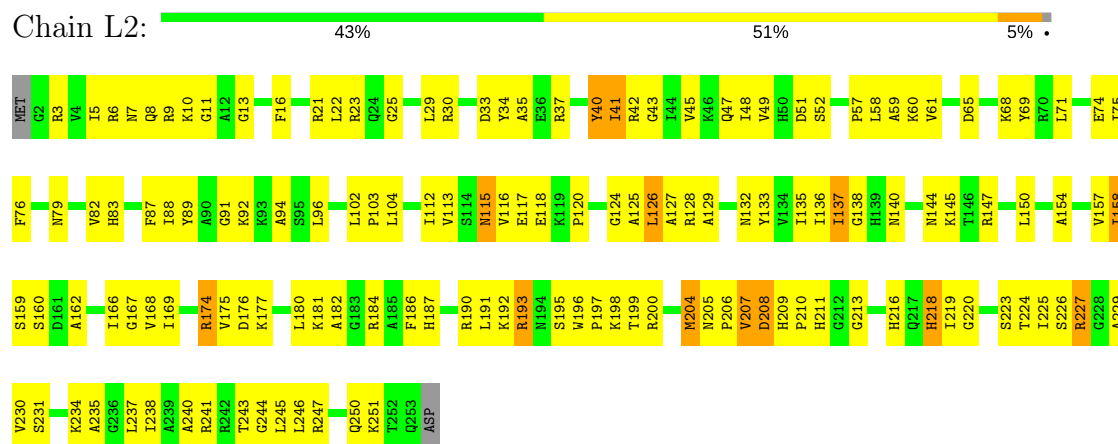
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. 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. 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.

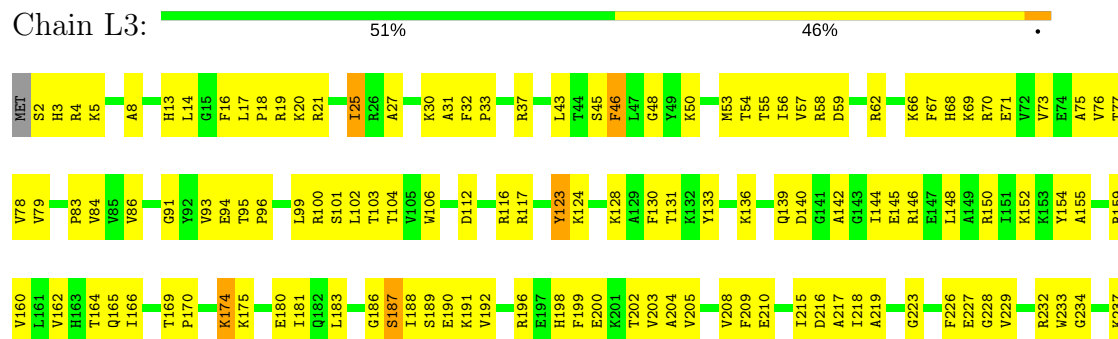
• Molecule 1: 60S ribosomal protein L1

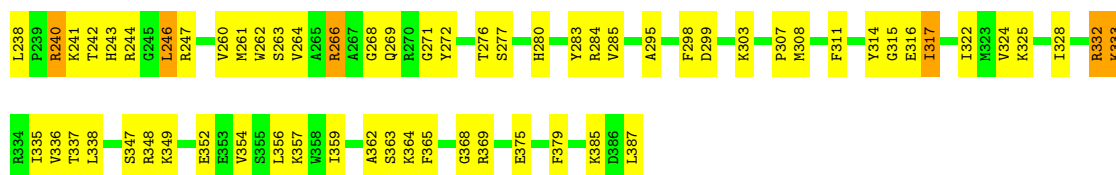


• Molecule 2: 60S ribosomal protein L2

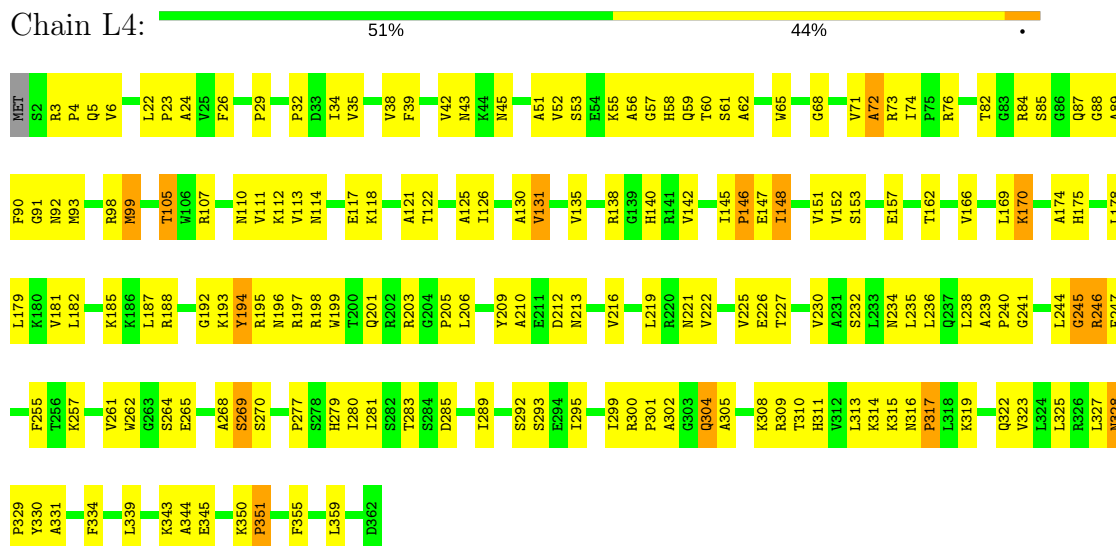


• Molecule 3: 60S ribosomal protein L3

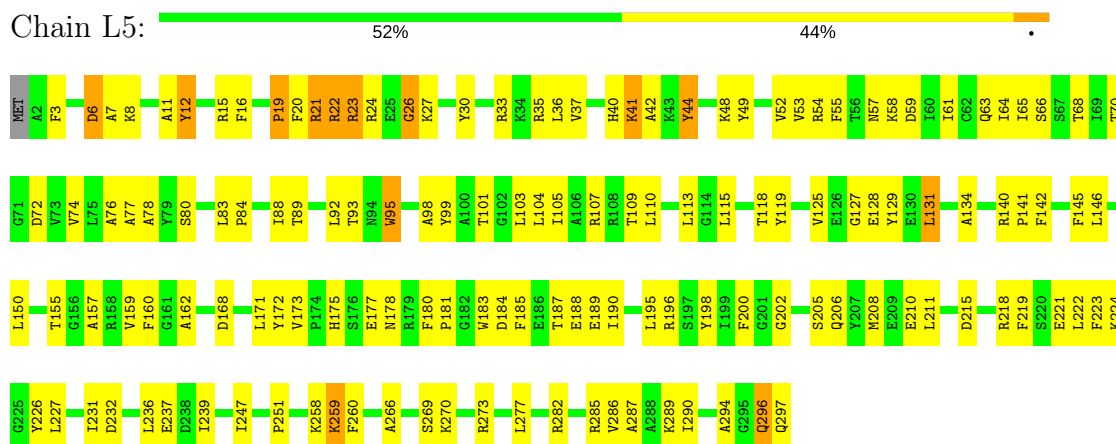




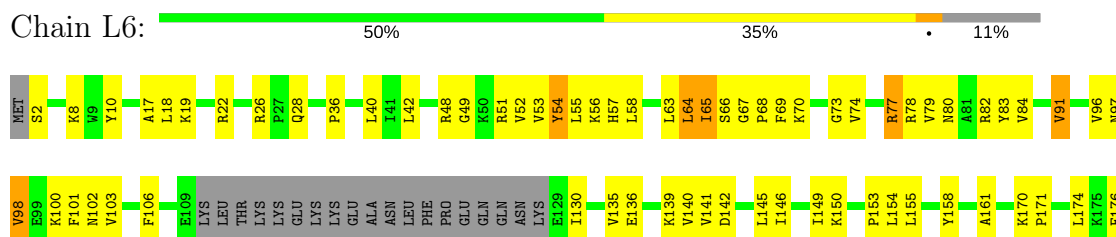
• Molecule 4: 60S ribosomal protein L4



• Molecule 5: 60S ribosomal protein L5

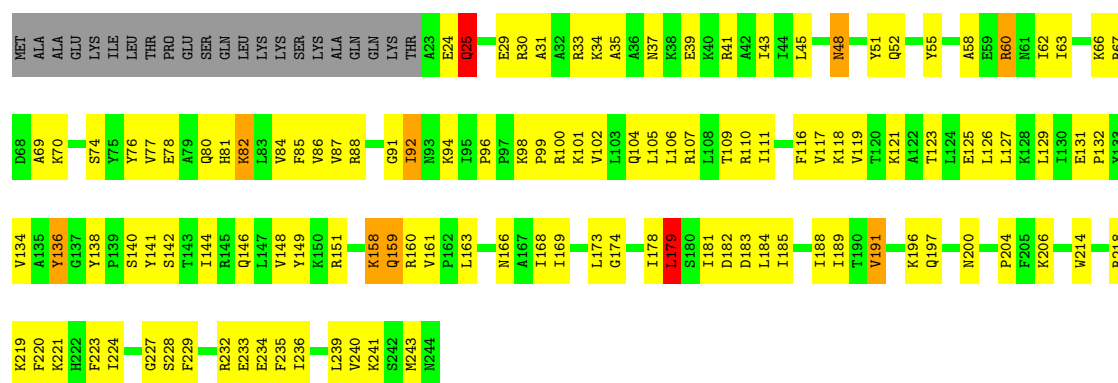


• Molecule 6: 60S ribosomal protein L6



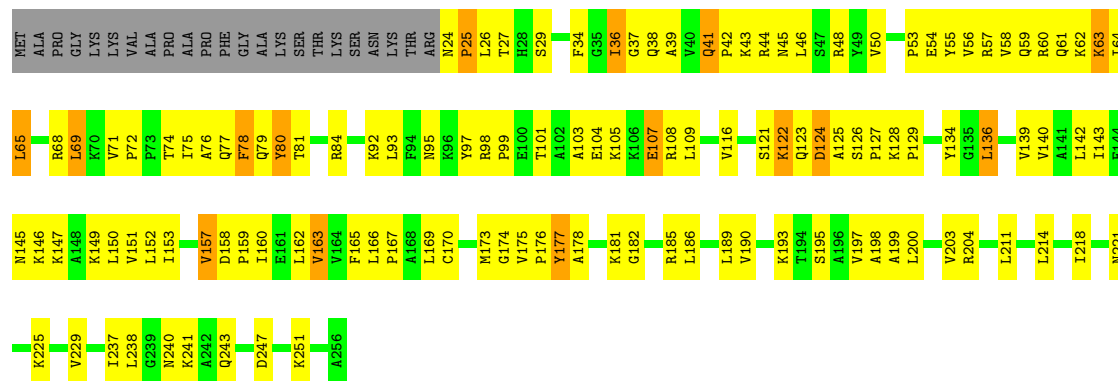
• Molecule 7: 60S ribosomal protein L7

Chain L7: 



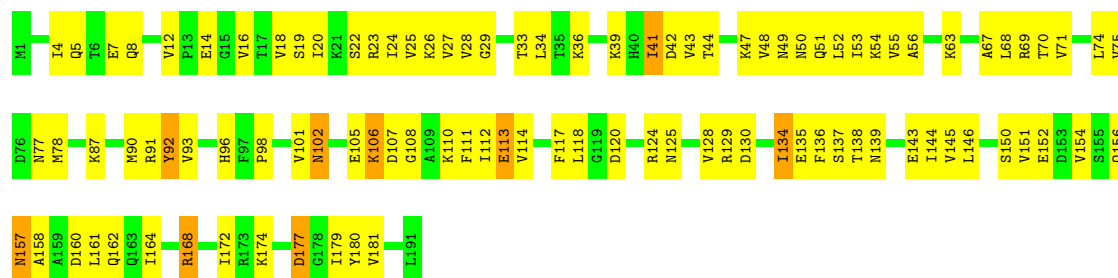
• Molecule 8: 60S ribosomal protein L8

Chain L8: 



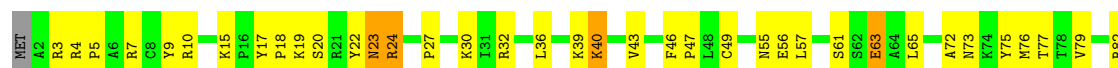
• Molecule 9: 60S ribosomal protein L9

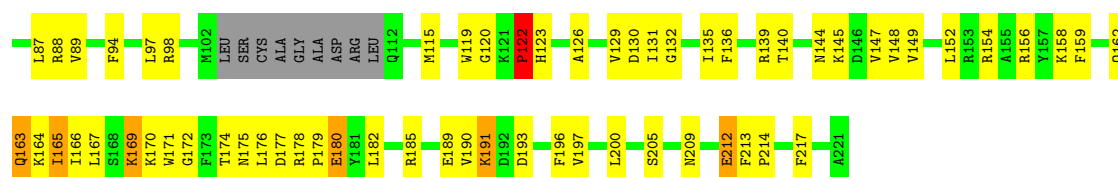
Chain L9: 



• Molecule 10: 60S ribosomal protein L10

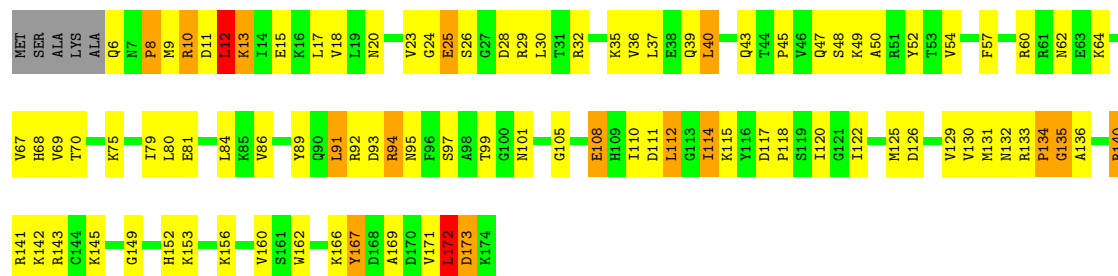
Chain 60: 





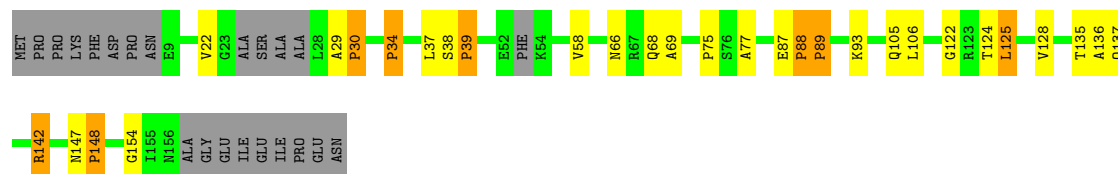
• Molecule 11: 60S ribosomal protein L11

Chain 61: 44% 44% 9% ..



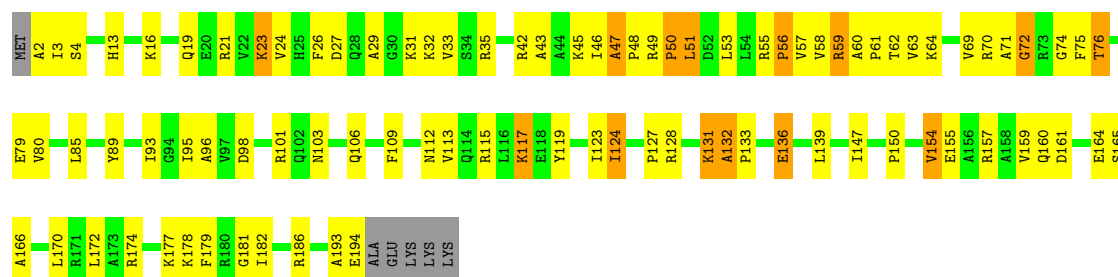
• Molecule 12: 60S ribosomal protein L12

Chain 62: 68% 13% 5% 13%



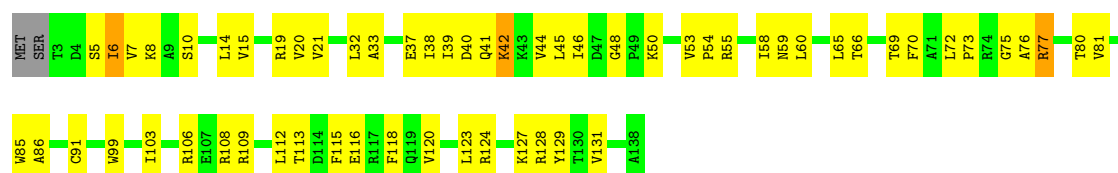
• Molecule 13: 60S ribosomal protein L13

Chain 63: 51% 39% 7% .



• Molecule 14: 60S ribosomal protein L14

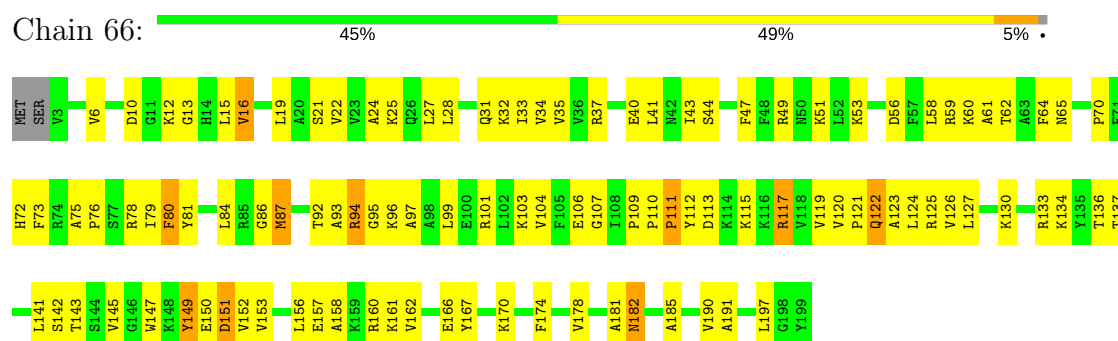
Chain 64: 55% 41% ..



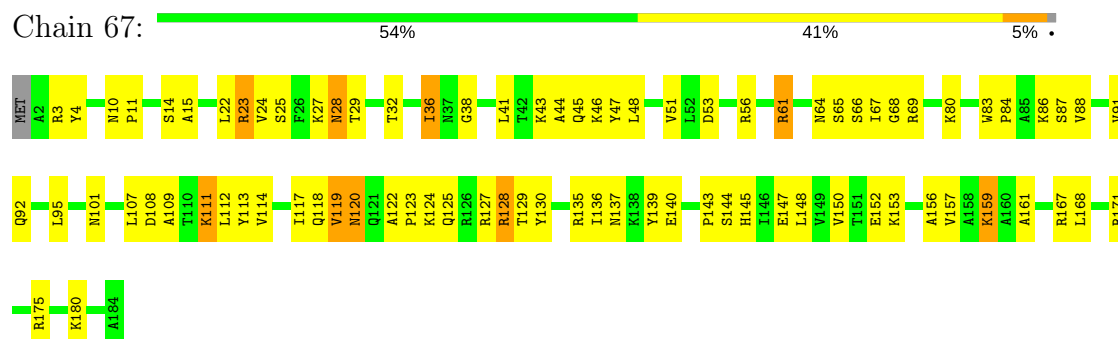
- Molecule 15: 60S ribosomal protein L15



- Molecule 16: 60S ribosomal protein L16



- Molecule 17: 60S ribosomal protein L17



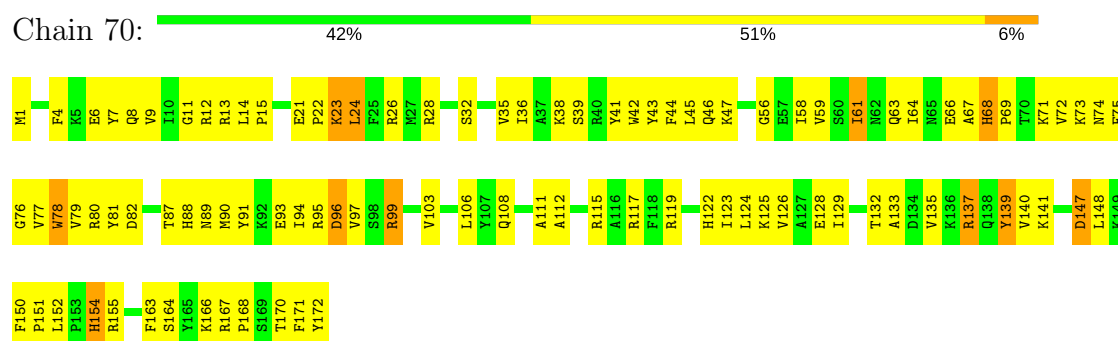
- Molecule 18: 60S ribosomal protein L18



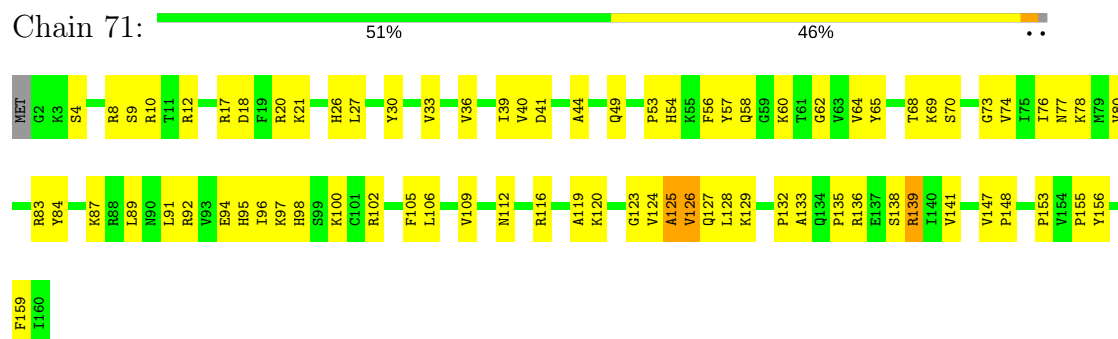
- Molecule 19: 60S ribosomal protein L19



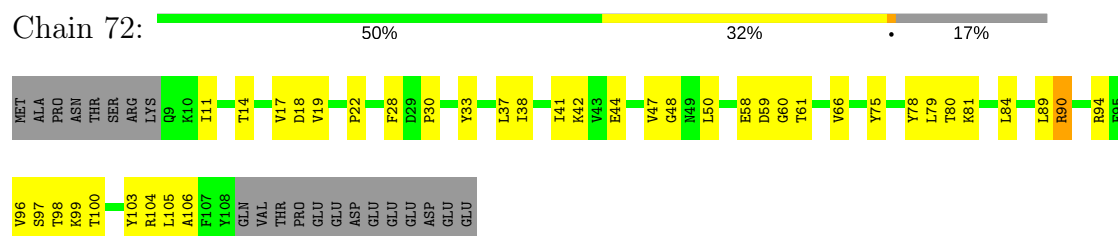
- Molecule 20: 60S ribosomal protein L20



- Molecule 21: 60S ribosomal protein L21

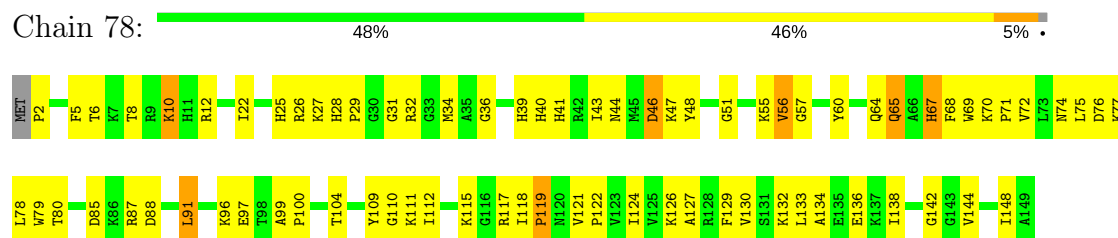


- Molecule 22: 60S ribosomal protein L22

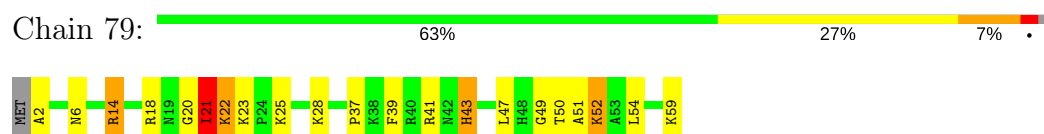


- Molecule 23: 60S ribosomal protein L23

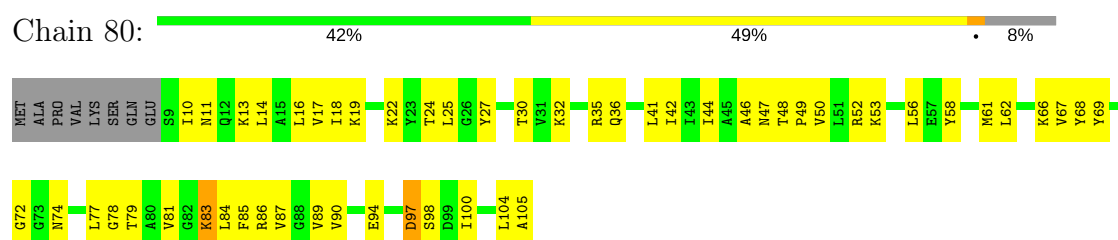
- Molecule 28: 60S ribosomal protein L28



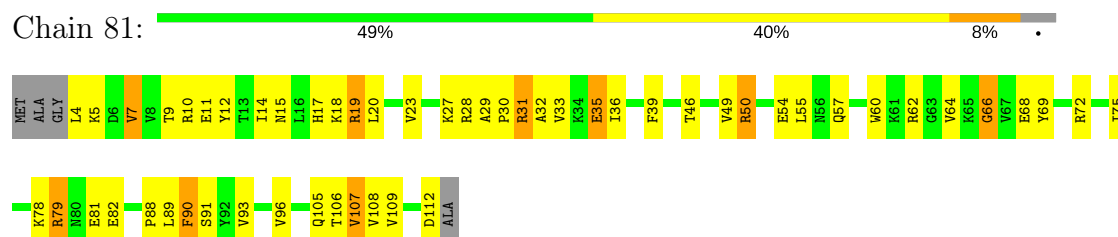
• Molecule 29: 60S ribosomal protein L29



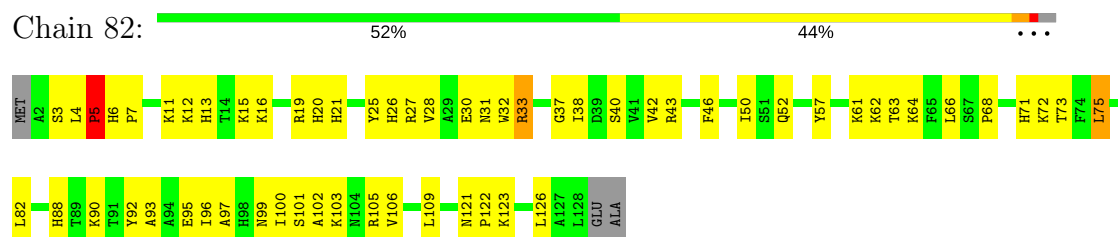
• Molecule 30: 60S ribosomal protein L30



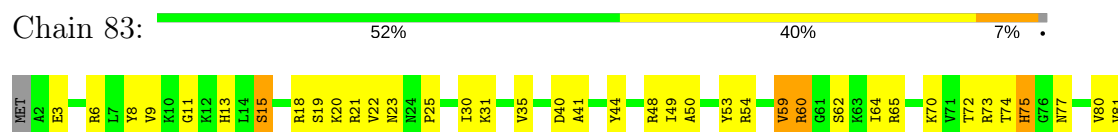
• Molecule 31: 60S ribosomal protein L31



• Molecule 32: 60S ribosomal protein L32



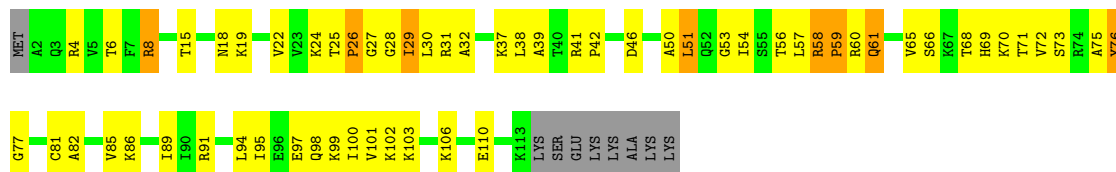
• Molecule 33: 60S ribosomal protein L33





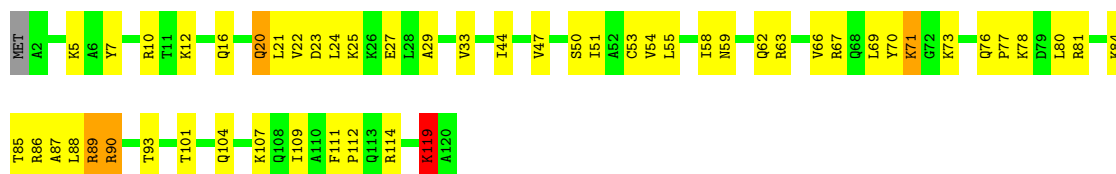
- Molecule 34: 60S ribosomal protein L34

Chain 84: 43% 43% 7% 7%



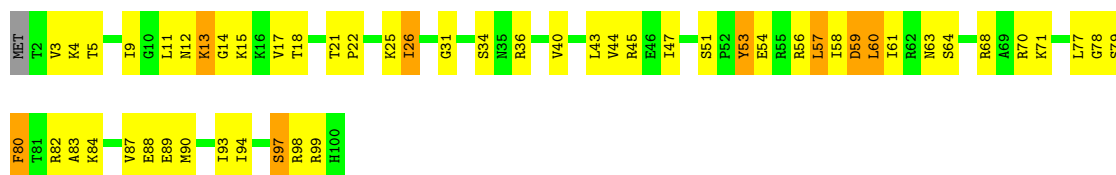
- Molecule 35: 60S ribosomal protein L35

Chain 85: 56% 39% ..



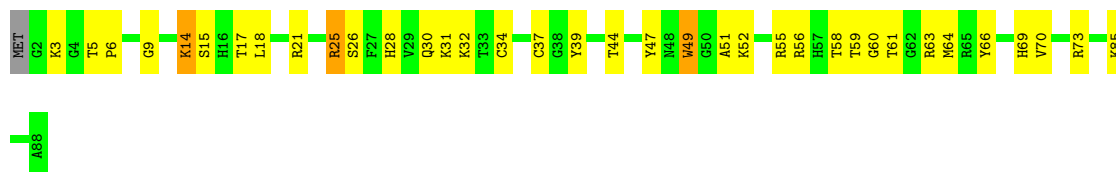
- Molecule 36: 60S ribosomal protein L36

Chain 86: 46% 45% 8% .



- Molecule 37: 60S ribosomal protein L37

Chain 87: 58% 38% ..




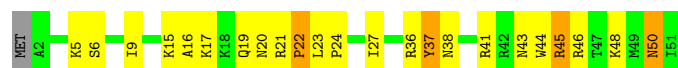
- Molecule 38: 60S ribosomal protein L38

Chain 88: 51% 45% ..



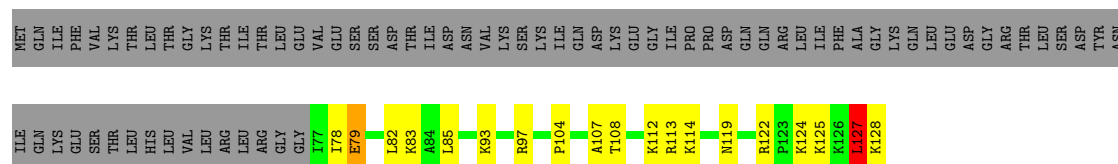
- Molecule 39: 60S ribosomal protein L39

Chain 89: 



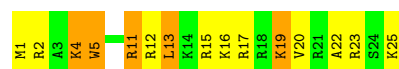
- Molecule 40: 60S ribosomal protein L40

Chain 90: 



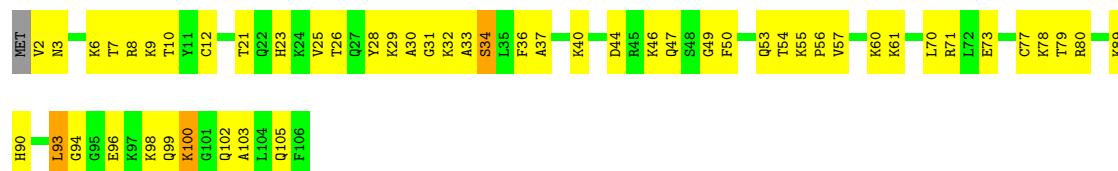
- Molecule 41: 60S ribosomal protein L41

Chain 91: 



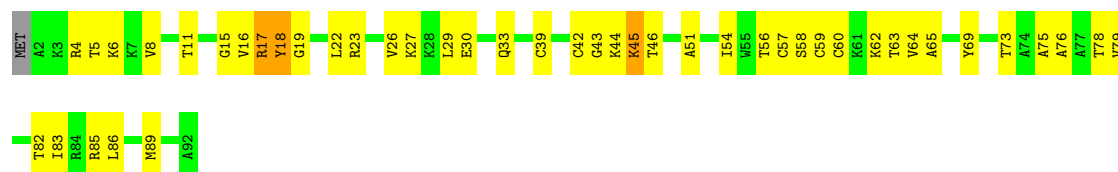
- Molecule 42: 60S ribosomal protein L42

Chain 92: 



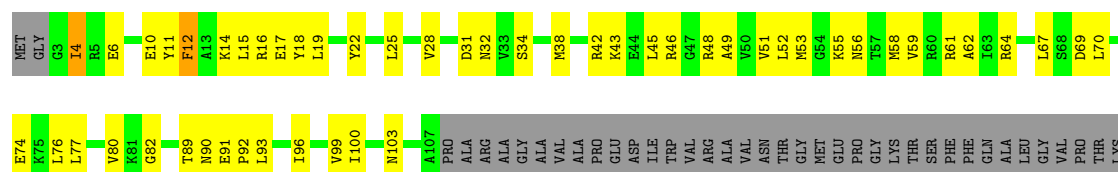
- Molecule 43: 60S ribosomal protein L43

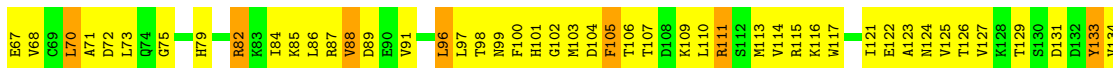
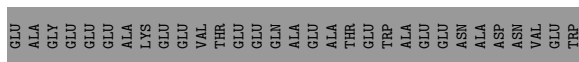
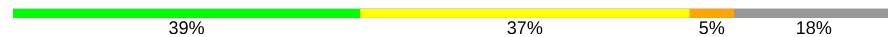
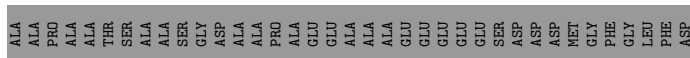
Chain 93: 

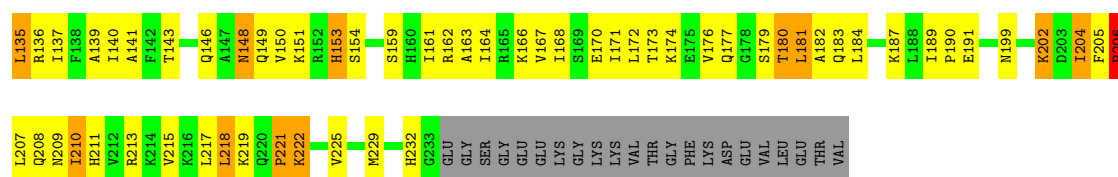


- Molecule 44: 60S acidic ribosomal protein P0

Chain P0: 

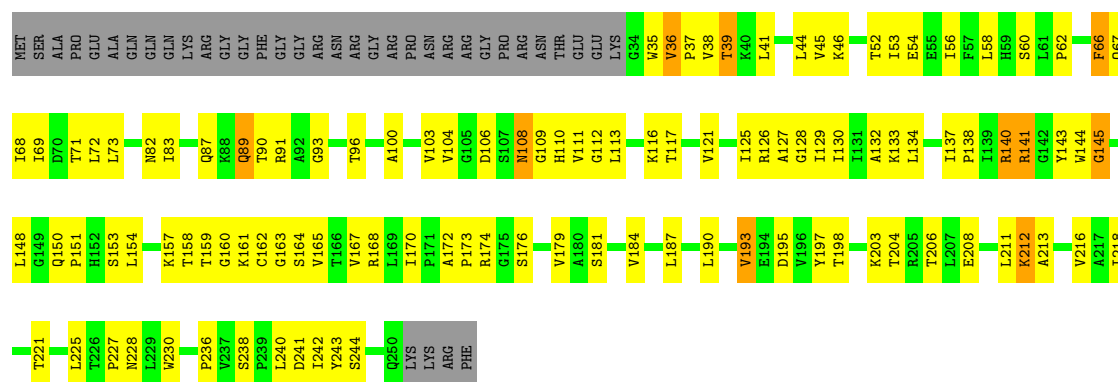






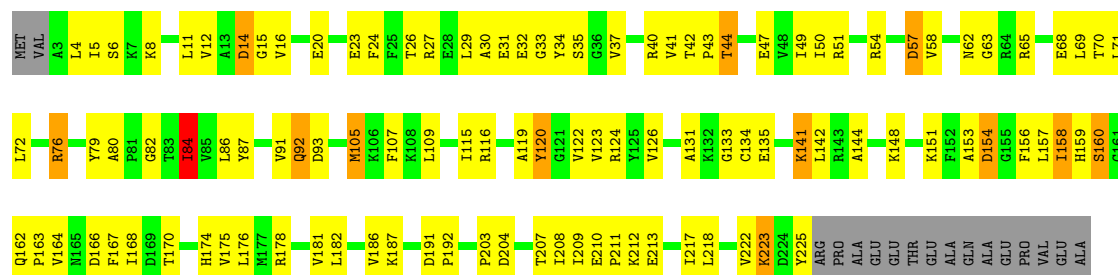
• Molecule 48: 40S ribosomal protein S2

Chain S2: 42% 40% 15%



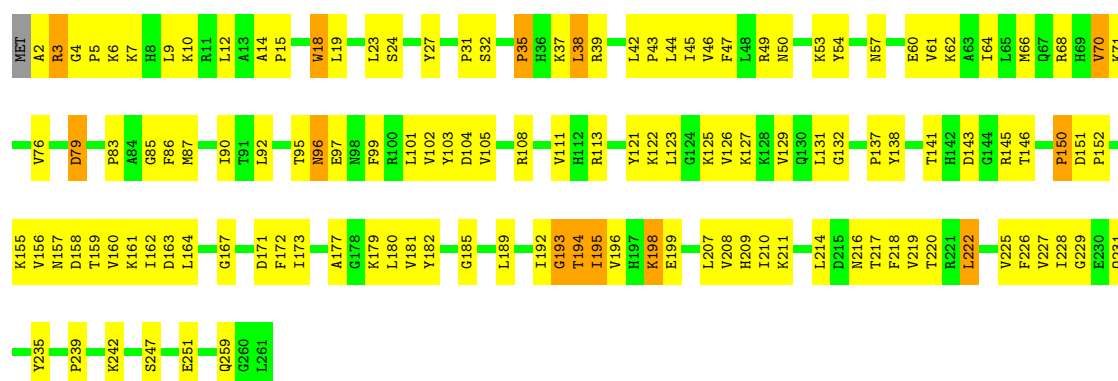
• Molecule 49: 40S ribosomal protein S3

Chain S3: 47% 40% 5% 7%



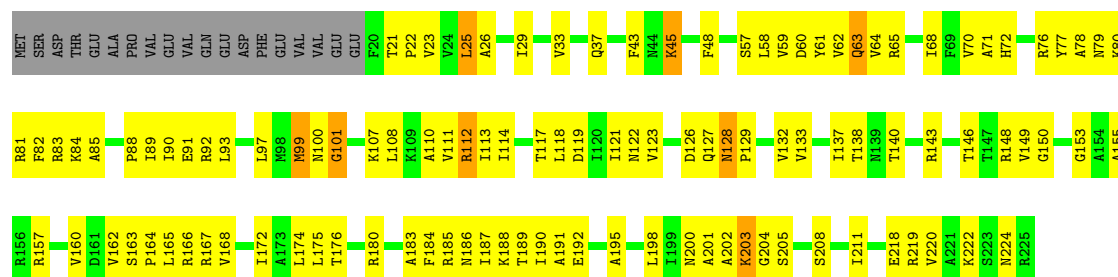
• Molecule 50: 40S ribosomal protein S4

Chain S4: 49% 45% 5%



• Molecule 51: 40S ribosomal protein S5

Chain S5: 



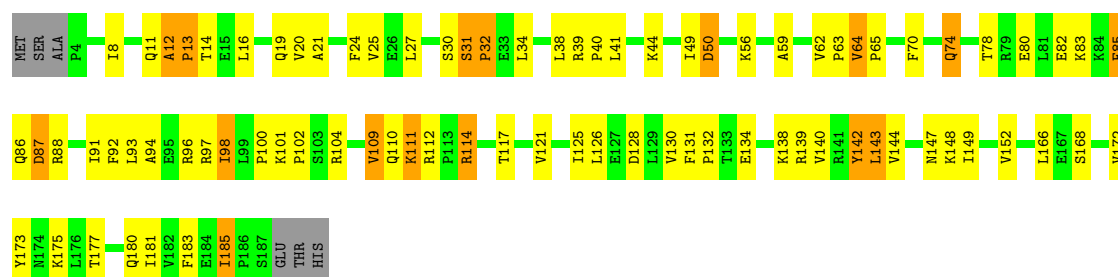
- Molecule 52: 40S ribosomal protein S6

Chain S6: 



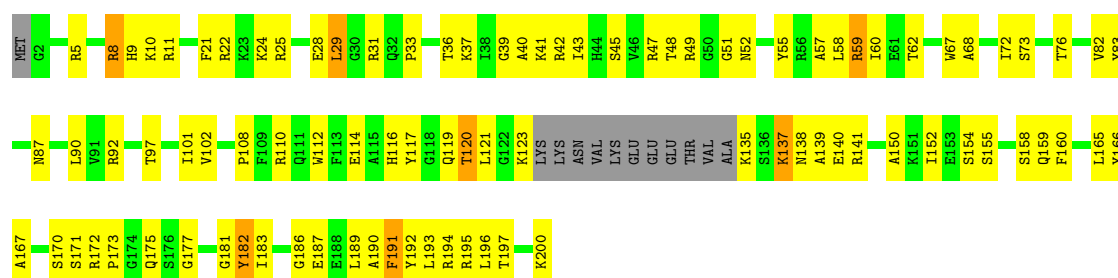
- Molecule 53: 40S ribosomal protein S7

Chain S7: 

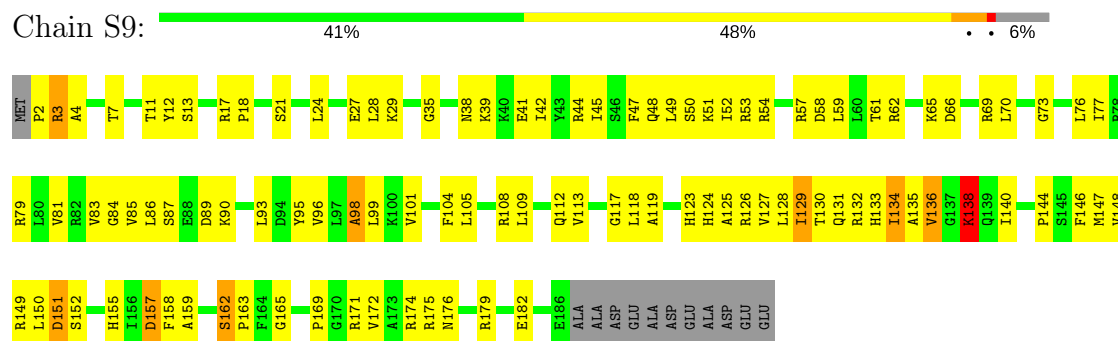


- Molecule 54: 40S ribosomal protein S8

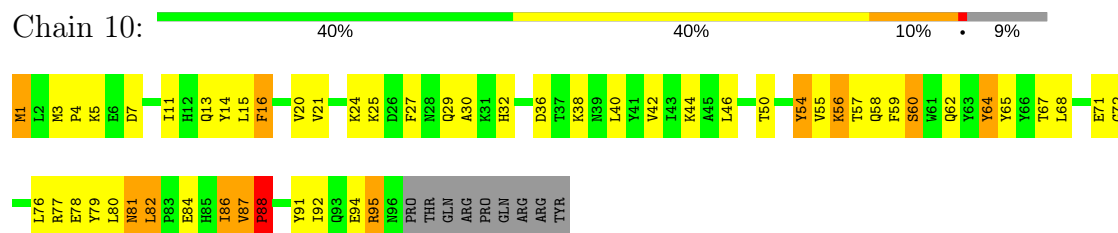
Chain S8: 



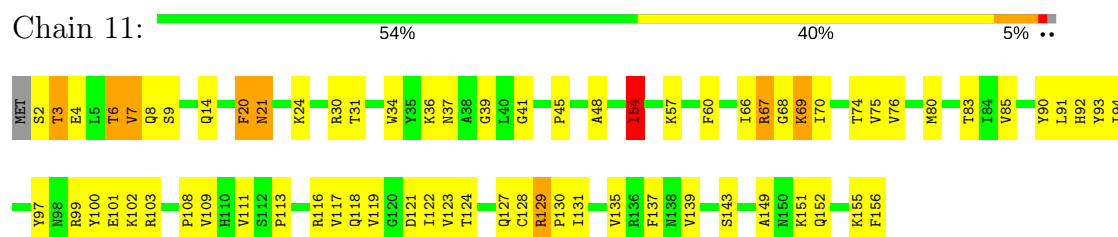
- Molecule 55: 40S ribosomal protein S9

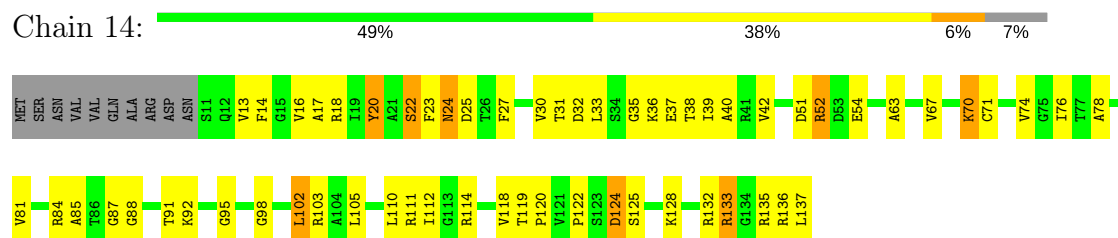


- Molecule 56: 40S ribosomal protein S10

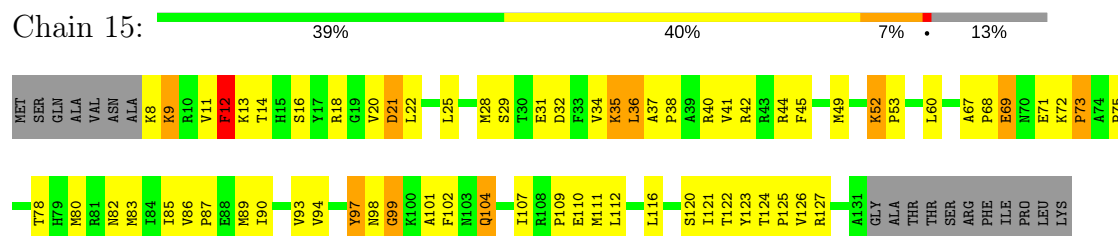


- Molecule 57: 40S ribosomal protein S11

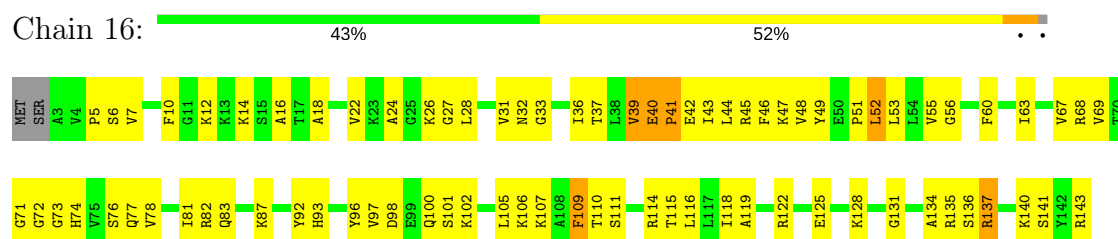




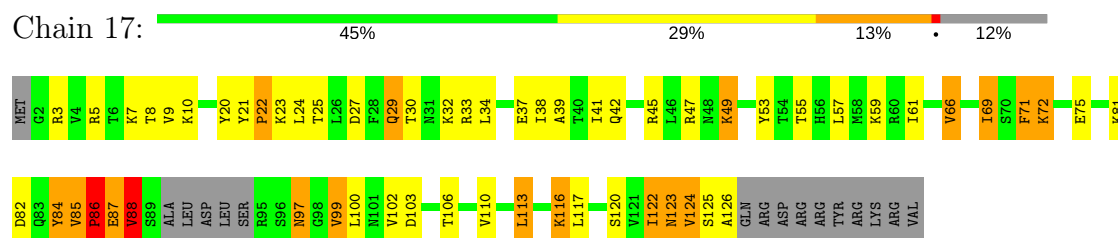
- Molecule 61: 40S ribosomal protein S15



- Molecule 62: 40S ribosomal protein S16



- Molecule 63: 40S ribosomal protein S17



- Molecule 64: 40S ribosomal protein S18

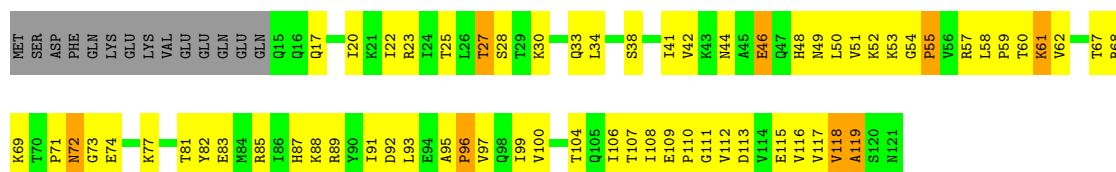


- Molecule 65: 40S ribosomal protein S19

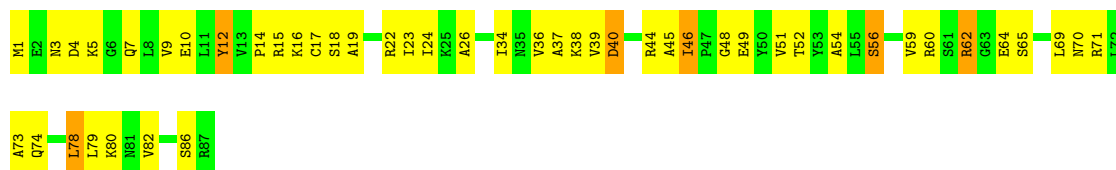




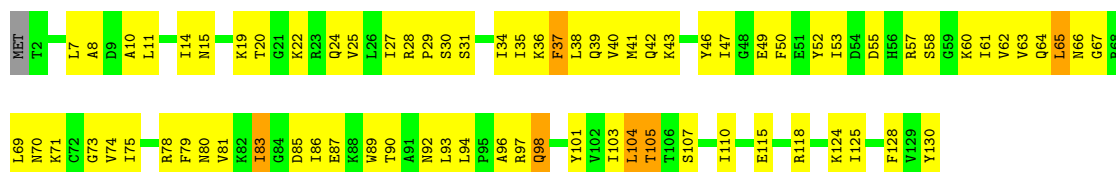
• Molecule 66: 40S ribosomal protein S20



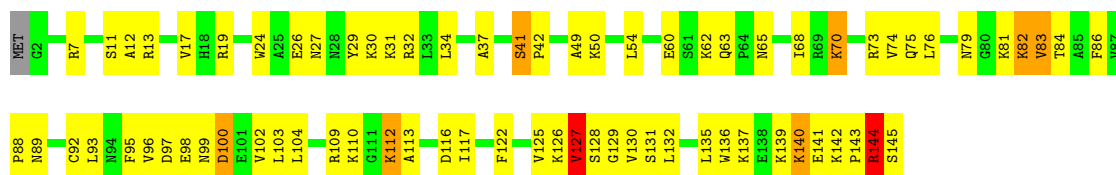
• Molecule 67: 40S ribosomal protein S21



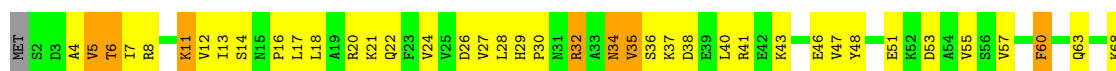
• Molecule 68: 40S ribosomal protein S22



• Molecule 69: 40S ribosomal protein S23



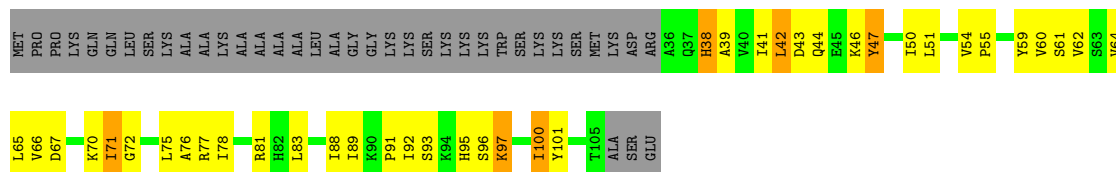
• Molecule 70: 40S ribosomal protein S24





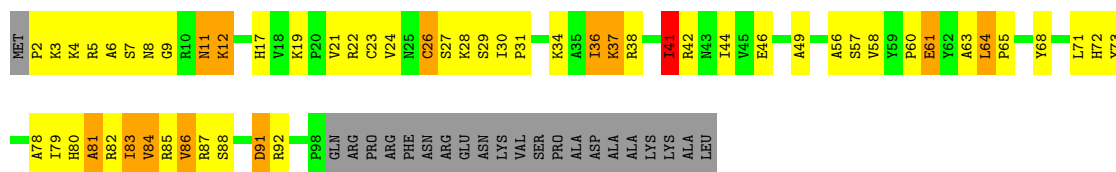
- Molecule 71: 40S ribosomal protein S25

Chain 25: 29% 31% 6% 35%



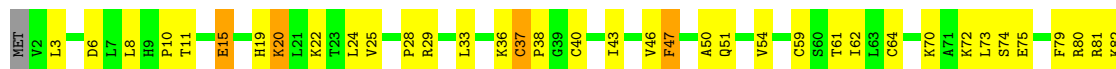
- Molecule 72: 40S ribosomal protein S26

Chain 26: 34% 36% 10% 18%



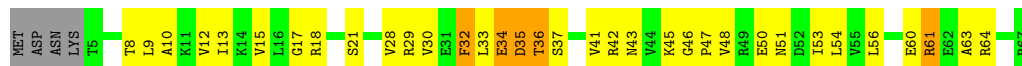
- Molecule 73: 40S ribosomal protein S27

Chain 27: 54% 40% 5%



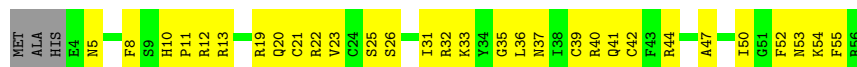
- Molecule 74: 40S ribosomal protein S28

Chain 28: 43% 43% 7% 6%



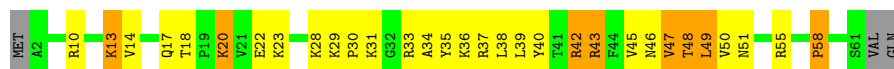
- Molecule 75: 40S ribosomal protein S29

Chain 29: 41% 54% 5%



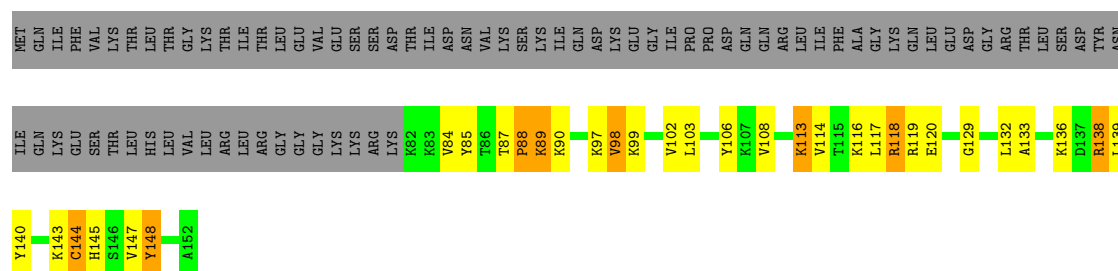
- Molecule 76: 40S ribosomal protein S30

Chain 30: 46% 37% 13% 5%



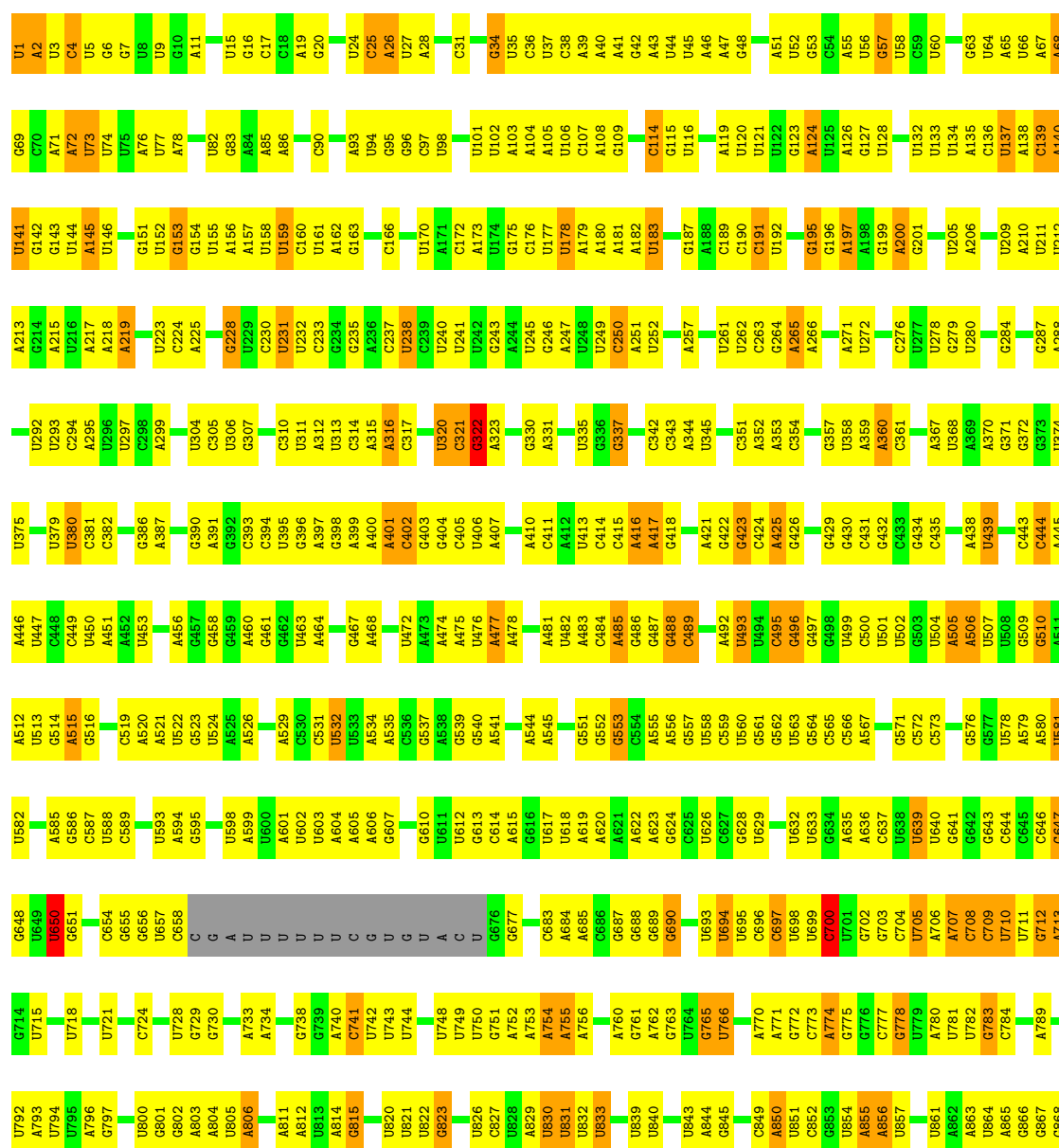
- Molecule 77: 40S ribosomal protein S31

Chain 31: 



● Molecule 78: 18S ribosomal RNA

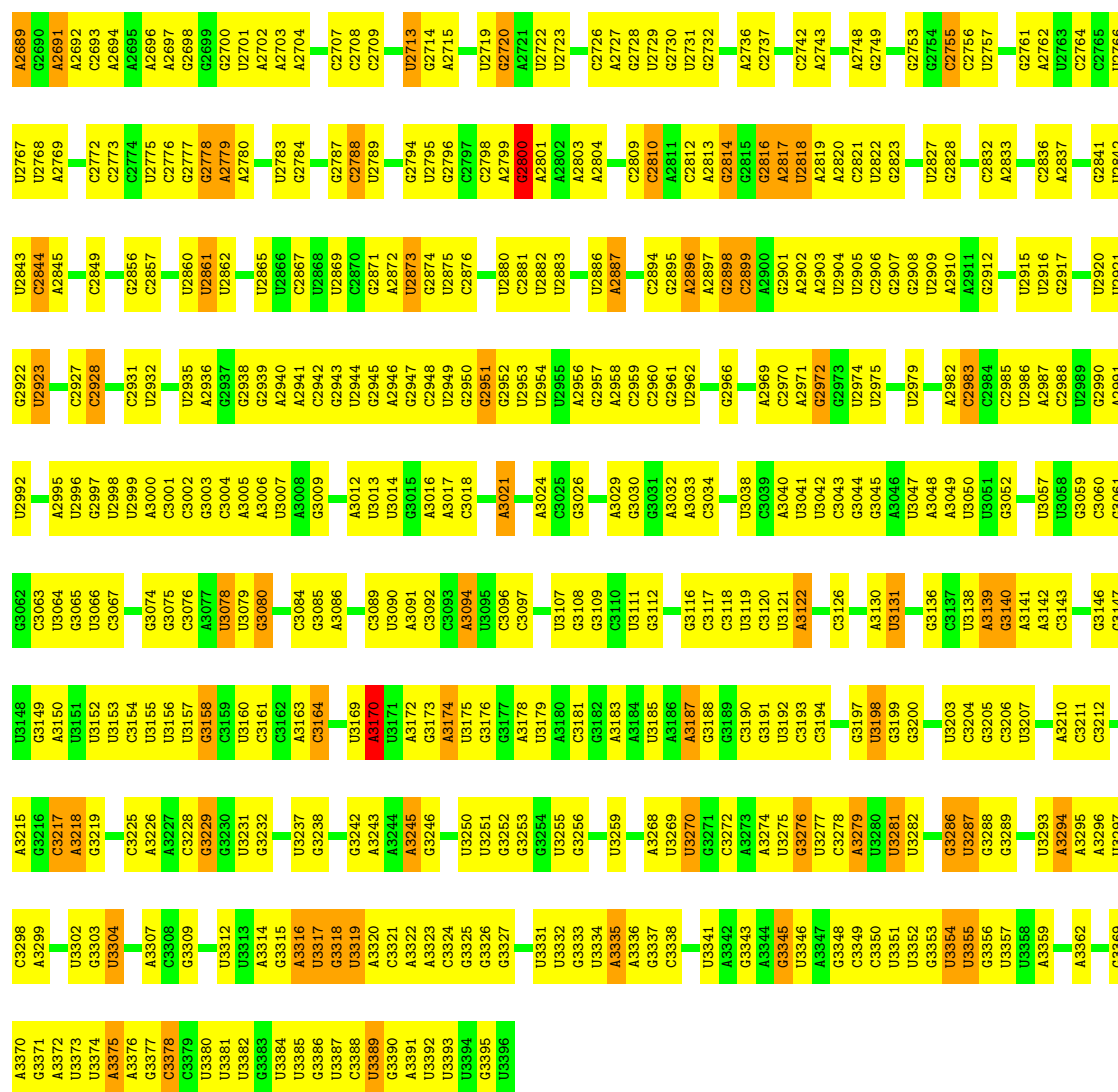
Chain 1S: 



A1567	U1310	A1234	C1157	A1157	A1087	A1020	A940	A869
U1311	A1238	C1158	C1159	C1158	A1088	C1021	A941	C870
A1312	U1239	C1159	A1160	A1159	A1089	A1021	A942	C871
A1313	U1314	U1240	C1160	A1160	A1091	A1022	A943	C872
U1315	U1316	U1241	C1161	A1161	A1092	A1023	A944	C873
C1316	U1317	U1242	C1162	A1162	U1095	A1024	U947	C874
C1317	U1318	U1243	C1163	A1163	C1096	A1025	U948	C875
U1319	U1320	U1244	C1164	A1164	C1097	A1026	U949	C876
A1321	U1321	U1245	C1165	A1165	U1098	A1027	U950	C877
U1322	U1323	U1246	C1166	A1166	U1099	A1028	U951	C878
C1324	U1325	U1247	C1167	A1167	U1100	A1029	U952	C879
C1327	U1326	U1248	C1168	A1168	G1100	A1030	U953	C880
C1402	U1327	U1249	C1169	A1169	G1101	A1031	U954	C881
C1403	U1328	U1250	C1170	A1170	U1102	A1032	U955	C882
C1404	U1329	U1251	C1171	A1171	U1103	A1033	U956	C883
C1405	U1330	U1252	C1172	A1172	U1104	A1034	U957	C884
C1406	U1331	U1253	C1173	A1173	U1105	A1035	U958	C885
C1407	U1332	U1254	C1174	A1174	U1106	A1036	U959	C886
C1408	U1333	U1255	C1175	A1175	U1107	A1037	U960	C887
C1409	U1334	U1256	C1176	A1176	U1108	A1038	U961	C888
C1410	U1335	U1257	C1177	A1177	U1109	A1039	U962	C889
U1413	U1336	U1258	C1178	A1178	U1110	A1040	U963	C890
U1414	U1337	U1259	C1179	A1179	U1111	A1041	U964	C891
U1415	U1338	U1260	C1180	A1180	U1112	A1042	U965	C892
U1416	U1339	U1261	C1181	A1181	U1113	A1043	U966	C893
U1417	U1340	U1262	C1182	A1182	U1114	A1044	U967	C894
U1418	U1341	U1263	C1183	A1183	U1115	A1045	U968	C895
U1419	U1342	U1264	C1184	A1184	U1116	A1046	U969	C896
U1420	U1343	U1265	C1185	A1185	U1117	A1047	U970	C897
U1421	U1344	U1266	C1186	A1186	U1118	A1048	U971	C898
U1422	U1345	U1267	C1187	A1187	U1119	A1049	U972	C899
U1423	U1346	U1268	C1188	A1188	U1120	A1050	U973	C900
U1424	U1347	U1269	C1189	A1189	U1121	A1051	U974	C901
U1425	U1348	U1270	C1190	A1190	U1122	A1052	U975	C902
U1426	U1349	U1271	C1191	A1191	U1123	A1053	U976	C903
U1427	U1350	U1272	C1192	A1192	U1124	A1054	U977	C904
U1428	U1351	U1273	C1193	A1193	U1125	A1055	U978	C905
U1429	U1352	U1274	C1194	A1194	U1126	A1056	U979	C906
U1430	U1353	U1275	C1195	A1195	U1127	A1057	U980	C907
U1431	U1354	U1276	C1196	A1196	U1128	A1058	U981	C908
U1432	U1355	U1277	C1197	A1197	U1129	A1059	U982	C909
U1433	U1356	U1278	C1198	A1198	U1130	A1060	U983	C910
U1434	U1357	U1279	C1199	A1199	U1131	A1061	U984	C911
U1435	U1358	U1280	C1200	A1200	U1132	A1062	U985	C912
U1436	U1359	U1281	C1201	A1201	U1133	A1063	U986	C913
U1437	U1360	U1282	C1202	A1202	U1134	A1064	U987	C914
U1438	U1361	U1283	C1203	A1203	U1135	A1065	U988	C915
U1439	U1362	U1284	C1204	A1204	U1136	A1066	U989	C916
U1440	U1363	U1285	C1205	A1205	U1137	A1067	U990	C917
U1441	U1364	U1286	C1206	A1206	U1138	A1068	U991	C918
U1442	U1365	U1287	C1207	A1207	U1139	A1069	U992	C919
U1443	U1366	U1288	C1208	A1208	U1140	A1070	U993	C920
U1444	U1367	U1289	C1209	A1209	U1141	A1071	U994	C921
U1445	U1368	U1290	C1210	A1210	U1142	A1072	U995	C922
U1446	U1369	U1291	C1211	A1211	U1143	A1073	U996	C923
U1447	U1370	U1292	C1212	A1212	U1144	A1074	U997	C924
U1448	U1371	U1293	C1213	A1213	U1145	A1075	U998	C925
U1449	U1372	U1294	C1214	A1214	U1146	A1076	U999	C926
U1450	U1373	U1295	C1215	A1215	U1147	A1077	U1000	C927
U1451	U1374	U1296	C1216	A1216	U1148	A1078	U1001	C928
U1452	U1375	U1297	C1217	A1217	U1149	A1079	U1002	C929
U1453	U1376	U1298	C1218	A1218	U1150	A1080	U1003	C930
U1454	U1377	U1299	C1219	A1219	U1151	A1081	U1004	C931
U1455	U1378	U1300	C1220	A1220	U1152	A1082	U1005	C932
U1456	U1379	U1301	C1221	A1221	U1153	A1083	U1006	C933
U1457	U1380	U1302	C1222	A1222	U1154	A1084	U1007	C934
U1458	U1381	U1303	C1223	A1223	U1155	A1085	U1008	C935
U1459	U1382	U1304	C1224	A1224	U1156	A1086	U1009	C936
U1460	U1383	U1305	C1225	A1225	U1157	A1087	U1010	C937
U1461	U1384	U1306	C1226	A1226	U1158	A1088	U1011	C938
U1462	U1385	U1307	C1227	A1227	U1159	A1089	U1012	C939
U1463	U1386	U1308	C1228	A1228	U1160	A1090	U1013	C940
U1464	U1387	U1309	C1229	A1229	U1161	A1091	U1014	C941
U1465	U1388	U1310	C1230	A1230	U1162	A1092	U1015	C942
U1466	U1389	U1311	C1231	A1231	U1163	A1093	U1016	C943
U1467	U1390	U1312	C1232	A1232	U1164	A1094	U1017	C944
U1468	U1391	U1313	C1233	A1233	U1165	A1095	U1018	C945
U1469	U1392	U1314	C1234	A1234	U1166	A1096	U1019	C946
U1470	U1393	U1315	C1235	A1235	U1167	A1097	U1020	C947
U1471	U1394	U1316	C1236	A1236	U1168	A1098	U1021	C948
U1472	U1395	U1317	C1237	A1237	U1169	A1099	U1022	C949
U1473	U1396	U1318	C1238	A1238	U1170	A1100	U1023	C950
U1474	U1397	U1319	C1239	A1239	U1171	A1101	U1024	C951
U1475	U1398	U1320	C1240	A1240	U1172	A1102	U1025	C952
U1476	U1399	U1321	C1241	A1241	U1173	A1103	U1026	C953
U1477	U1400	U1322	C1242	A1242	U1174	A1104	U1027	C954
U1478	U1401	U1323	C1243	A1243	U1175	A1105	U1028	C955
U1479	U1402	U1324	C1244	A1244	U1176	A1106	U1029	C956
U1480	U1403	U1325	C1245	A1245	U1177	A1107	U1030	C957
U1481	U1404	U1326	C1246	A1246	U1178	A1108	U1031	C958
U1482	U1405	U1327	C1247	A1247	U1179	A1109	U1032	C959
U1483	U1406	U1328	C1248	A1248	U1180	A1110	U1033	C960
U1484	U1407	U1329	C1249	A1249	U1181	A1111	U1034	C961
U1485	U1408	U1330	C1250	A1250	U1182	A1112	U1035	C962
U1486	U1409	U1331	C1251	A1251	U1183	A1113	U1036	C963
U1487	U1410	U1332	C1252	A1252	U1184	A1114	U1037	C964
U1488	U1411	U1333	C1253	A1253	U1185	A1115	U1038	C965
U1489	U1412	U1334	C1254	A1254	U1186	A1116	U1039	C966
U1490	U1413	U1335	C1255	A1255	U1187	A1117	U1040	C967
U1491	U1414	U1336	C1256	A1256	U1188	A1118	U1041	C968
U1492	U1415	U1337	C1257	A1257	U1189	A1119	U1042	C969
U1493	U1416	U1338	C1258	A1258	U1190	A1120	U1043	C970
U1494	U1417	U1339	C1259	A1259	U1191	A1121	U1044	C971
U1495	U1418	U1340	C1260	A1260	U1192	A1122	U1045	C972
U1496	U1419	U1341	C1261	A1261	U1193	A1123	U1046	C973
U1497	U1420	U1342	C1262	A1262	U1194	A1124	U1047	C974
U1498	U1421	U1343	C1263	A1263	U1195	A1125	U1048	C975
U1499	U1422	U1344	C1264	A1264	U1196	A1126	U1049	C976
U1500	U1423	U1345	C1265	A1265	U1197	A1127	U1050	C977
U1501	U1424	U1346	C1266	A1266	U1198	A1128	U1051	C978
U1502	U1425	U1347	C1267	A1267	U1199	A1129	U1052	C979
U1503	U1426	U1348	C1268	A1268	U1200	A1130	U1053	C980
U1504	U1427	U1349	C1269	A1269	U1201	A1131	U1054	C981
U1505	U1428	U1350	C1270	A1270	U1202	A1132	U1055	C982
U1506	U1429	U1351	C1271	A1271	U1203	A1133	U1056	C983
U1507	U1430	U1352	C1272	A1272	U1204	A1134	U1057	C984
U1508	U1431	U1353	C1273	A1273	U1205	A1135	U1058	C985
U1509	U1432	U1354	C1274	A1274	U1206	A1136	U1059	C986
U1510	U1433	U1355	C1275	A1275	U1207	A1137	U1060	C987
U1511	U1434	U1356	C1276	A1276	U1208	A1138	U1061	C988
U1512	U1435	U1357	C1277	A1277	U1209	A1139	U1062	C989
U1513	U1436	U1358	C1278	A1278	U1210	A1140	U1063	C990
U1514	U1437	U1359	C1279	A1279	U1211	A1141	U1064	C991
U1515	U1438	U1360	C1280	A1280	U1212	A1142	U1065	C992
U1516	U1439	U1361	C1281	A1281	U1213	A1143	U1066	C993
U1517	U1440	U1362	C1282	A1282	U1214	A1144	U1067	C994
U1518	U1441	U1363	C1283	A1283	U1215	A1145	U1068	C995
U1519	U1442	U1364	C1284	A1284	U1216	A1146	U1069	C996
U1520	U1443	U1365	C1285	A1285	U1217	A1147	U1070	C997
U1521	U1444	U1366	C1286	A1286	U1218	A1148	U1071	C998
U1522	U1445	U1367	C1287	A1287	U1219	A1149	U1072	C999
U1523	U1446	U1368	C1288	A1288	U1220	A1150	U1073	C1000
U1524	U1447	U1369	C1289	A1289	U1221	A1151	U1074	C1001
U1525	U1448	U1370	C1290	A1290	U1222	A1152	U1075	C1002
U1526	U1449	U1371	C1291	A1291	U1223	A1153	U1076	C1003
U1527	U1450	U1372	C1292	A1292	U1224	A1154	U1077	C1004
U1528	U1451	U1373	C1293	A1293	U1225	A1155	U1078	C1005

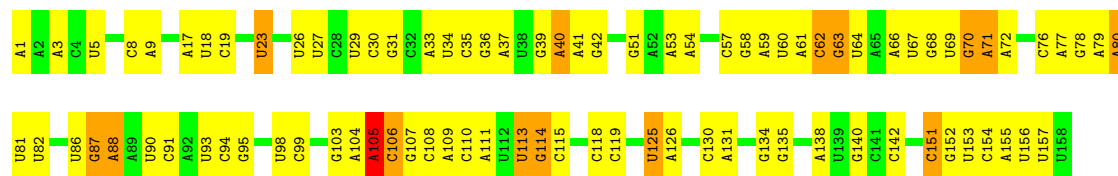
G1371	A1301	G1222	A1150	U1067	A992	G924	G856	A784	U627	U536	C	U381	G297	A219	U153
G1372	A1302	A1223	A1151	U1081	G993	A925	G857	G785	A628	U540	U	U382	U298	G220	U154
G1377	U1305	C1224	G1152	U1081	A996	A926	A858	A786	U629	U541	U	G383	G299	A221	G155
U1378	G1306	A1225	A1153	A1084	A997	C927	G859	G787	U631	G542	U	A386	G301	G223	G156
G1382	A1308	C1227	A1154	A1085	A998	C928	G861	A789	U632	G543	U	A389	U305	G224	A157
G1383	U1309	G1228	G1155	C1086	G999	U930	U862	U790	C633	C544	G	A390	U306	C225	G158
U1384	G1310	G1229	C1156	U1093	C1000	C931	C863	A791	C634	U545	U	G394	A307	C226	A159
U1385	G1311	G1230	G1157	A1094	G1001	G932	G864	G792	G635	C546	U	A395	A308	G160	G160
C1385	A1311	A1231	A1158	U1094	A993	A933	U865	C793	C636	G547	A	A396	A309	G161	G161
A1386	C1312	C1232	A1159	U1095	G934	G934	U866	U794	C637	G548	G	A397	A310	G162	G162
G1387	G1313	G1233	U1096	U1096	U935	U935	G867	G795	C638	U549	G	A398	C311	C163	C163
U1388	C1314	G1234	A1162	A1097	A936	U936	U871	U796	G639	A550	G	A399	C312	A164	A164
G1389	U1315	U1235	U1163	A1098	A1006	G837	U872	U797	U640	A557	G	A400	C313	A165	A165
G1392	C1316	G1236	A1165	U1008	U1007	C938	U873	U797	C641	U558	A	A401	C314	C166	C166
G1393	G1322	G1237	G1166	A1009	C939	U939	U874	A801	U642	G559	A	A402	C315	U167	U167
A1394	U1323	C1238	A1170	A1102	G940	G940	U875	C802	U643	A560	U	C403	A319	U168	U168
A1394	G1324	G1239	A1171	A1103	G941	G941	U876	C803	G644	G561	U	G404	U322	U240	U240
U1398	U1325	A1240	G1174	G1104	U942	U942	C877	C804	A645	C561	U	U405	A323	G241	G170
A1399	G1326	U1241	C1175	A1105	C943	C943	C878	G805	A646	C562	C	A406	U324	G242	G171
G1400	C1327	G1242	G1176	U1104	U944	U944	U879	A806	A647	U563	G	A407	A325	G243	G172
C1328	G1243	G1243	C1177	U1105	C945	C945	G880	A807	U649	A570	C	G412	U328	U250	U178
G1403	U1329	A1245	G1178	U1106	G950	G950	C886	G809	A571	U571	U	U413	U329	G251	C179
G1404	A1330	G1246	A1179	U1107	A951	A951	C887	A810	A572	A572	U	U418	A338	U252	C180
U1405	U1331	U1247	A1180	C1017	A952	A952	U888	U811	A553	C576	U	A419	C339	U257	U181
A1406	C1332	G1248	G1181	U1111	G1023	G1023	U889	G812	C654	C577	U	G421	C340	G258	G183
A1407	G1333	G1250	A1182	A1112	A1025	U955	C890	G815	C655	A580	U	A422	C341	U259	U184
G1408	U1334	A1251	C1183	G1113	G1026	U956	C891	A816	A656	G579	U	G426	A344	C260	C185
G1409	C1335	G1252	A1184	U1114	U1028	C957	U892	A817	A657	A585	U	U427	A345	G267	U186
G1414	U1336	G1256	C1185	G1116	G1029	C958	U893	C818	U662	A598	U	U437	A346	A268	U188
U1415	A1337	C1257	G1186	G1117	C959	C959	A895	C819	C663	C599	U	U438	A347	G269	G189
U1416	C1338	U1258	A1190	C1118	U960	U960	U896	A820	U664	G591	U	U439	A348	U270	U190
G1417	G1339	A1259	U1191	A1119	C961	C961	U897	U821	A677	A592	U	U440	A349	C271	C271
A1418	U1340	A1260	C1192	U1120	A962	A962	U898	G822	U671	C583	U	U441	C350	G272	U191
U1419	C1341	G1261	G1193	U1121	G963	G963	U899	C823	A672	U594	U	U442	A351	A273	C192
U1427	U1342	G1262	G1194	U1122	U1042	U1042	G900	C824	U673	U507	U	U443	A352	G274	G196
A1428	G1348	A1263	A1195	U1123	C1045	C968	U903	U829	G674	C598	U	U444	A353	U275	G197
A1433	U1349	G1264	C1196	U1124	A1046	C969	A904	A830	C675	G600	U	U445	A354	U276	A198
G1434	A1350	U1265	G1197	U1125	A1047	A970	U905	A831	A677	G600	U	U446	A355	G277	A199
A1351	G1351	G1266	A1198	G1126	A1048	A971	A906	G832	U681	A603	U	U447	A356	U278	C200
U1352	U1352	A1274	C1199	U1127	A1049	A972	G907	U834	U682	G604	U	U448	A357	U279	A201
A1353	A1353	G1275	A1200	U1128	G974	C975	G908	G835	U683	A608	U	U449	A358	G282	G203
G1354	C1201	U1276	A1202	U1129	U1050	C976	G909	G836	U684	A609	U	U450	A359	A283	A204
G1355	A1203	G1277	A1204	G1130	U1051	U976	G910	A837	U685	G610	U	U451	A360	G284	C205
A1356	C1204	C1279	A1205	G1131	A1052	U977	C911	G838	U686	A611	U	U452	A361	A285	G206
G1404	U1357	G1280	U1204	A1133	A1053	A980	G912	C839	U687	U612	U	U453	A362	U286	U207
G1441	C1358	G1281	G1209	G1134	U1054	U981	A913	C840	U688	A612	U	U454	A363	G287	C208
G1444	U1361	G1282	U1210	A1135	A1055	C982	A914	A841	U689	A613	U	U455	A364	C288	A209
U1445	A1212	A1286	U1211	A1136	A1056	A983	A915	G842	A690	G616	U	U456	A365	G289	U210
U1446	G1362	G1287	G1213	C1137	U1058	A984	G916	G843	U691	G617	U	U457	A366	A290	A211
A1447	A1363	U1288	G1214	U1138	G1059	G985	G917	U845	U692	C618	U	U458	A367	G291	G212
U1448	C1364	U1289	U1215	G1139	U1060	U986	A918	A846	U693	C619	U	U459	A368	U292	G213
U1449	G1365	A1290	U1216	A1140	A1061	U987	C918	A847	C700	U620	U	U460	A369	C293	G214
G1450	A1366	G1291	C1141	G1141	A1062	U988	U919	A848	G701	A622	U	U461	U370	U294	G215
C1451	G1367	U1292	G1142	G1142	G1063	U989	A920	A849	U701	A623	U	U462	A371	G295	G216
A1452	U1368	U1293	U1145	G1145	A1064	A990	A921	U850	A705	A624	U	U463	A372	A296	G217
A1453	C1369	U1294	G1146	C1146	G1066	G991	C923	U851	A706	A625	U	U464	A373	G297	G218

G2606	A2536	A2461	C2308	A2232	A2142	U2068	G1927	A1850	C1685	C1609	C1532	A1454
G2607	A2537	A2462	A2309	A2223	A2143	G2069	G1927	G1851	U1686	G1610	U1533	U1455
G2608	U2538	G2463	A2307	A2224	A2144	A2070	A1930	G1852	U1687	A1611	A1534	A1456
A2609	U2539	G2464	A2313	U2225	A2145	A2071	U1931	G1853	U1688	A1612	A1535	U1457
G2610	C2539	U2314	A2314	U2226	C2146	G2076	A1932	C1856	U1689	C1615	G1536	A1458
G2611	A2540	G2466	G2315	U2227	U2148	U2077	A1933	C1857	G1780	C1616	U1545	C1459
U2612	U2541	G2467	U2316	A2228	A2149	C2076	A1936	A1859	C1693	U1616	A1546	A1460
G2613	U2542	A2468	U2318	A2229	A2152	C2077	U1937	U1860	C1694	U1620	A1547	A1461
G2614	U2543	A2469	U2319	U2241	U2153	C2078	U1938	G1861	U1694	U1621	C1548	G1464
G2615	C2544	U2470	C2322	A2242	U2154	C2080	U1939	U1862	U1695	U1622	U1549	A1465
G2616	G2395	G2396	G2323	A2243	U2155	U2082	G1940	G1863	A1696	G1623	C1550	G1466
G2617	A2397	A2397	U2328	A2244	G2156	G2083	C1941	A1864	A1697	G1624	C1551	U1471
G2618	U2397	U2397	U2329	C2245	C2157	C2084	U1942	A1865	U1702	A1625	G1552	U1472
G2619	U2398	U2398	C2329	G2246	U2158	U2085	G1943	C1866	U1703	U1626	U1553	U1473
U2620	U2399	U2399	C2330	G2247	A2159	A2086	U1944	A1867	U1704	U1627	U1554	G1474
U2621	U2400	A2401	C2331	C2248	U2160	C2087	A1945	G1868	G1713	C1628	C1555	G1475
U2622	G2402	G2403	C2332	C2249	U2161	A2088	A1946	C1869	A1714	U1629	C1556	G1476
U2623	C2405	C2406	U2336	G2250	U2162	A	G1947	C1870	U1715	A1632	U1557	U1477
U2624	C2407	C2407	C2337	G2251	C2163	U	G1948	G1875	U1716	C1633	A1561	U1478
U2625	U2408	U2408	C2338	G2252	C2164	A	C1951	U1876	U1717	U1634	G1562	U1479
U2626	G2483	A2484	C2339	A2255	A2168	A2093	G1952	U1877	G1718	A1635	C1563	A1481
U2627	A2485	A2486	U2340	A2256	G2169	C2094	G1953	G1878	G1719	U1636	U1564	A1482
U2628	U2487	U2488	U2341	C2257	C2170	G2095	G1954	A1879	U1640	A1637	U1565	G1486
U2629	A2489	A2490	U2342	U2258	U2173	A2096	G1959	U1880	A1723	C1638	A1566	G1487
U2630	U2491	U2492	A2343	U2259	G2174	C2097	A1960	A1881	U1724	U1641	U1567	G1488
U2631	U2493	U2494	U2344	U2260	U2175	C2098	G1961	G1882	C1725	U1642	U1568	A1491
U2632	U2495	U2496	U2345	C2261	U2176	C2099	G1962	A1886	G1726	A1643	U1569	U1492
U2633	U2497	U2498	U2346	C2262	A2177	C2101	G1963	A1887	G1727	U1644	A1571	A1493
U2634	U2499	U2500	A2347	C2263	A2178	U2102	G1964	U1888	G1728	U1645	A1572	A1494
U2635	U2501	U2502	U2348	U2264	C2179	U2103	G1965	U1889	U1729	U1646	G1573	C1499
U2636	C2512	G2435	A2349	U2265	G2180	A2104	U1966	G1890	C1574	G1647	U1501	U1501
U2637	U2513	U2514	C2350	U2266	C2181	G2105	U1967	A1891	U1731	A1648	A1575	C1502
U2638	U2515	U2516	U2351	U2267	A2182	A2106	G1968	G1892	U1732	U1649	G1576	G1505
U2639	U2517	U2518	A2352	U2268	A2183	A2107	C1971	U1896	G1733	U1650	G1577	A1506
U2640	U2519	U2520	U2353	A2271	U2186	G2110	A1972	A1896	U1739	U1651	C1581	G1507
U2641	U2521	U2522	A2354	G2272	G2187	G2111	G1973	G1902	U1740	G1652	C1582	C1508
U2642	U2523	U2524	U2355	G2273	A2188	U2112	A1978	U1903	A1741	G1653	C1583	C1509
U2643	U2525	U2526	A2356	G2274	U2189	G2041	G1979	C1904	U1742	A1654	U1584	U1510
U2644	U2527	U2528	U2357	C2275	C2192	U2042	G1981	G1905	G1743	G1655	U1589	U1511
U2645	U2529	U2530	U2358	C2276	U2193	U2043	G1982	G1906	G1744	A1656	A1589	A1515
U2646	U2531	U2532	C2359	A2277	A2197	G2044	G	C1907	G1748	G1658	A1594	C1516
U2647	U2533	U2534	U2360	A2278	C2201	U2045	G	A1908	A1749	U1659	U1595	G1517
U2648	U2535	U2536	A2361	A2279	U2205	G2046	G	A1909	U1750	C1660	C1596	U1518
U2649	U2537	U2538	A2362	A2280	G2206	G2047	G	A1910	G1751	G1661	C1597	G1519
U2650	U2539	U2540	C2363	A2281	G2207	G2048	G	A1911	A1752	G1662	G1598	G1520
U2651	U2541	U2542	A2364	U2282	A2208	G2049	G	U1912	G1753	C1663	U1599	G1521
U2652	U2543	U2544	C2365	A2283	U2209	G2050	G	A1913	C1754	G1664	U1600	U1522
U2653	U2545	U2546	U2366	U2284	G2210	G2051	G	U1914	G1755	G1665	A1601	A1523
U2654	U2547	U2548	A2367	A2285	U2211	G2052	G	U1915	A1756	G1666	A1602	A1524
U2655	U2549	U2550	A2368	U2286	G2212	G2053	G	U1916	C1757	C1667	A1603	G1525
U2656	U2551	U2552	C2369	U2287	C2213	G2054	G	U1917	G1761	C1668	A1604	U1526
U2657	U2553	U2554	U2370	C2288	U2214	G2055	G	A1918	U1762	C1669	A1605	C1527
U2658	U2555	U2556	C2371	C2289	G2215	G2056	G	U1919	U1763	G1670	A1606	U1528
U2659	U2557	U2558	U2372	U2290	U2216	G2057	G	A1920	U1764	U1681	U1607	A1529
U2660	U2559	U2560	A2373	C2291	G2217	G2058	G	U1921	U1765	G1682	C1608	G1608
U2661	U2561	U2562	C2374	U2292	U2218	G2059	G	A1922	G1766	U1683	U1609	U1609
U2662	U2563	U2564	U2375	U2293	U2219	G2060	G	A1923	G1767	U1684	U1610	U1610
U2663	U2565	U2566	G2376	U2294	G2220	G2061	G	A1924	G1768	U1685	U1611	U1611
U2664	U2567	U2568	U2377	U2295	U2221	G2062	G	A1925	G1769	U1686	U1612	U1612
U2665	U2569	U2570	C2378	U2296	G2222	G2063	G	A1926	G1770	U1687	U1613	U1613
U2666	U2571	U2572	U2379	U2297	U2223	G2064	G	A1927	G1771	U1688	U1614	U1614
U2667	U2573	U2574	U2380	U2298	G2224	G2065	G	A1928	G1772	U1689	U1615	U1615
U2668	U2575	U2576	C2381	U2299	G2225	G2066	G	A1929	G1773	U1690	U1616	U1616
U2669	U2577	U2578	U2382	U2300	G2226	G2067	G	A1930	G1774	U1691	U1617	U1617
U2670	U2579	U2580	U2383	U2301	G2227	U2067	G	A1931	G1775	U1692	U1618	U1618
U2671	U2581	U2582	A2384	U2302	G2228	U2068	G	A1932	G1776	U1693	U1619	U1619
U2672	U2583	U2584	U2385	U2303	G2229	U2069	G	A1933	G1777	U1694	U1620	U1620
U2673	U2585	U2586	C2386	U2304	G2230	U2070	G	A1934	G1778	U1695	U1621	U1621
U2674	U2587	U2588	U2387	U2305	G2231	U2071	G	A1935	G1779	U1696	U1622	U1622
U2675	U2589	U2590	C2388	U2306	G2232	U2072	G	A1936	G1780	U1697	U1623	U1623
U2676	U2591	U2592	A2389	U2307	G2233	U2073	G	A1937	G1781	U1698	U1624	U1624
U2677	U2593	U2594	U2390	U2308	G2234	U2074	G	A1938	G1782	U1699	U1625	U1625
U2678	U2595	U2596	C2391	U2309	G2235	U2075	G	A1939	G1783	U1700	U1626	U1626
U2679	U2597	U2598	U2392	U2310	G2236	U2076	G	A1940	G1784	U1701	U1627	U1627
U2680	U2599	U2600	C2393	U2311	G2237	U2077	G	A1941	G1785	U1702	U1628	U1628
U2681	U2601	A2602	U2394	U2312	G2238	U2078	G	A1942	G1786	U1703	U1629	U1629
U2682	U2603	U2604	U2395	U2313	G2239	U2079	G	A1943	G1787	U1704	U1630	U1630
U2683	U2605	U2606	U2396	U2314	G2240	U2080	G	A1944	G1788	U1705	U1631	U1631
U2684	U2607	U2608	U2397	U2315	G2241	U2081	G	A1945	G1789	U1706	U1632	U1632
U2685	U2609	U2610	U2398	U2316	G2242	U2082	G	A1946	G1790	U1707	U1633	U1633
U2686	U2611	U2612	U2399	U2317	G2243	U2083	G	A1947	G1791	U1708	U1634	U1634
U2687	U2613	U2614	U2400	U2318	G2244	U2084	G	A1948	G1792	U1709	U1635	U1635
U2688	U2615	U2616	U2401	U2319	G2245	U2085	G	A1949	G1793	U1710	U1636	U1636
U2689	U2617	U2618	U2402	U2320	G2246	U2086	G	A1950	G1794	U1711	U1637	U1637
U2690	U2619	U2620	U2403	U2321	G2247	U2087	G	A1951	G1795	U1712	U1638	U1638
U2691	U2621	U2622	U2404	U2322	G2248	U2088	G	A1952	G1796	U1713	U1639	U1639
U2692	U2623	U2624	U2405	U2323	G2249	U2089	G	A1953	G1797	U1714	U1640	U1640
U2693	U2625	U2626	U2406	U2324	G2250	U2090	G	A1954	G1798	U1715	U1641	U1641
U2694	U2627	U2628	U2407	U2325	G2251	U2091	G	A1955	G1799	U1716	U1642	U1642
U2695	U2629	U2630	U2408	U2326	G2252	U2092	G	A1956	G1800	U1717	U1643	U1643
U2696	U2631	U2632	U2409	U2327	G2253	U2093	G	A1957	G1801	U1718	U1644	U1644
U2697	U2633	U2634	U2410	U2328	G2254	U2094	G	A1958	G1802	U1719	U1645	U1645
U2698	U2635	U2636	U2411	U2329	G2255	U2095	G	A1959	G1803	U1720	U1646	U1646
U2699	U2637	U2638	U2412	U2330	G2256	U2096	G	A1960	G1804	U1721	U1647	U1647
U2700	U2639	U2640	U2413	U2331	G2257	U2097	G	A1961	G1805	U1722	U1648	U1648
U2701	U2641	U2642	U2414	U2332	G2258	U2098	G	A1962	G1806	U1723	U1649	U1649
U2702	U2643	U2644	U2415	U2333	G2259	U2099	G	A1963	G1807	U1724	U1650	U1650
U2703	U2645	U2646	U2416	U2334	G2260	U2100	G	A1964	G1808	U172		



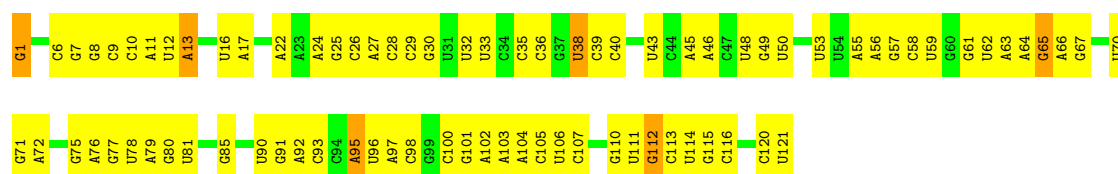
• Molecule 80: 5.8S ribosomal RNA

Chain 8S: 44% 46% 9%



• Molecule 81: 5S ribosomal RNA

Chain 5S: 33% 62% 5%



- Molecule 82: P/E-site initiator transfer RNA^{fMet}

Chain ET:  51% 39% 10%



- Molecule 82: P/E-site initiator transfer RNA^{fMet}

Chain PT:  53% 40% 6%



- Molecule 83: messenger RNA

Chain MR:  36% 21% 7% 36%



4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of particles used	23163	Depositor
Resolution determination method	FSC 0.143	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

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	$\# Z > 2$	RMSZ	$\# Z > 2$
1	L1	0.61	0/1634	0.67	0/2195
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
2	L2	0.43	0/1952	0.59	0/2622
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
3	L3	0.48	0/3153	0.56	0/4239
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
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
4	L4	0.46	0/2802	0.58	0/3792

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >2	RMSZ	# Z >2
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
5	L5	0.53	0/2426	0.58	0/3271
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
6	L6	0.52	0/1261	0.62	0/1694
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
7	L7	0.50	0/1822	0.60	1/2451 (0.0%)
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%)
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%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >2	RMSZ	# Z >2
8	L8	0.49	0/1850	0.60	0/2495
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
9	L9	0.50	0/1540	0.59	0/2073
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

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
79:2S:1604:G:H4'	79:2S:1835:A:H4'	1.35	1.08
1:L1:93:LEU:HD21	1:L1:118:LYS:HD2	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
78:1S:740:A:H3'	78:1S:741:C:H5''	1.42	0.98
68:22:40:VAL:HG21	68:22:103:ILE:HD12	1.45	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:HH11	59:13:64:ARG:HB3	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
78:1S:237:C:H5''	78:1S:238:U:H5'	1.49	0.94
25:75:47:ALA:HB3	35:85:77:PRO:HG3	1.45	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
22:72:84:LEU:HB3	22:72:90:ARG:HG2	1.48	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
79:2S:2493:U:H3'	79:2S:2494:A:H5''	1.46	0.94
23:73:66:LYS:HB2	23:73:69:LEU:HD13	1.49	0.94
4:L4:206:LEU:HG	4:L4:226:GLU:HB2	1.49	0.94
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
18:68:12:ARG:H	18:68:12:ARG:HE	1.11	0.93
7:L7:63:ILE:HA	7:L7:66:LYS:HE3	1.48	0.93
79:2S:2068:U:H3'	79:2S:2069:G:H5'	1.47	0.93
49:S3:134:CYS:H	49:S3:157:LEU:HD11	1.34	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
79:2S:829:U:H3	79:2S:895:A:H62	1.09	0.92
44:P0:28:VAL:HG12	44:P0:187:VAL:HG22	1.49	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
62:16:73:GLY:H	62:16:76:SER:HB3	1.32	0.92
55:S9:39:LYS:HD3	55:S9:42:ILE:HD12	1.50	0.92
59:13:71:ILE:HD12	59:13:71:ILE:H	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
81:5S:12:U:H4'	81:5S:110:G:H21	1.36	0.91
25:75:113:LEU:HB3	79:2S:1523:U:H5'	1.51	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
78:1S:913:G:H3'	78:1S:914:G:H5''	1.50	0.90
66:20:62:VAL:HG22	66:20:85:ARG:HG3	1.53	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
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: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
78:1S:1229:G:H21	78:1S:1256:A:H62	1.20	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
3:L3:43:LEU:HD23	3:L3:181:ILE:HB	1.52	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:H	3:L3:25:ILE:HD13	1.37	0.89
79:2S:2821:C:H42	79:2S:2869:U:H3	1.16	0.88
10:60:174:THR:HG22	10:60:176:LEU:H	1.38	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
79:2S:1064:A:H62	79:2S:1096:U:H3	1.16	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:H	47:S1:218:LEU:HD13	1.36	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
36:86:26:ILE:HD12	36:86:26:ILE:H	1.38	0.86
5:L5:141:PRO:HB2	5:L5:172:TYR:HB2	1.56	0.86
18:68:145:ASN:HD22	79:2S:745:C:H5''	1.39	0.86
11:61:11:ASP:O	11:61:12:LEU:HB2	1.73	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
79:2S:2778:G:H2'	79:2S:2779:A:H5''	1.58	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
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
78:1S:1350:U:H2'	78:1S:1351:G:C8	2.11	0.86
68:22:81:VAL:HG13	68:22:85:ASP:HB2	1.55	0.86
3:L3:332:ARG:HD3	3:L3:332:ARG:H	1.39	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
78:1S:1498:G:H2'	78:1S:1499:G:H5''	1.58	0.85
67:21:18:SER:H	67:21:54:ALA:HB3	1.41	0.85
2:L2:227:ARG:HH21	79:2S:2161:G:H5''	1.41	0.85
79:2S:1581:C:H2'	79:2S:1582:C:H5'	1.58	0.85
30:80:79:THR:HG23	59:13:148:ALA:HA	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
37:87:56:ARG:HH22	79:2S:362:U:H3'	1.40	0.84
27:77:75:VAL:HG22	27:77:76:ASN:H	1.38	0.84
47:S1:219:LYS:HA	47:S1:219:LYS:HE2	1.58	0.84
79:2S:599:C:H2'	79:2S:600:G:H5''	1.59	0.84
28:78:112:ILE:HB	28:78:130:VAL:HG12	1.57	0.84
60:14:76:ILE:HD12	60:14:76:ILE:H	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
68:22:89:TRP:HA	68:22:92:ASN:HB2	1.59	0.84
18:68:179:ARG:NH1	18:68:179:ARG:HB3	1.93	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:HD3	54:S8:137:LYS:H	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
79:2S:250:U:H5'	79:2S:251:G:H5''	1.60	0.83
9:L9:135:GLU:O	9:L9:144:ILE:HG13	1.79	0.83
79:2S:2895:G:H2'	79:2S:2896:A:H5''	1.60	0.83
18:68:179:ARG:HH11	18:68:179:ARG:HB3	1.44	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
79:2S:915:A:H4'	79:2S:2957:G:H4'	1.60	0.83
55:S9:38:ASN:HB2	55:S9:41:GLU:HG3	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
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
8:L8:185:ARG:HD3	80:8S:155:A:H5'	1.61	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
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
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
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
13:63:59:ARG:HH22	13:63:150:PRO:HG2	1.44	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
58:12:42:ALA:HB3	58:12:122:VAL:HB	1.61	0.82
8:L8:143:ILE:HG22	8:L8:173:MET:HG3	1.60	0.82
62:16:97:VAL:HG12	62:16:98:ASP:H	1.43	0.82
79:2S:160:G:H3'	79:2S:161:G:H5''	1.60	0.81
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:18:115:ARG:HB3	64:18:115:ARG:HH21	1.45	0.81
47:S1:33:LYS:HA	47:S1:41:ARG:O	1.80	0.81
69:23:102:VAL:HG12	69:23:127:VAL:HG12	1.60	0.81
66:20:106:ILE:HG13	66:20:107:THR:H	1.44	0.81
79:2S:1257:C:H3'	79:2S:1258:U:H5''	1.62	0.81
44:P0:25:LEU:HB3	44:P0:191:TYR:HB3	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
10:60:200:LEU:HD11	10:60:209:ASN:HD21	1.44	0.81
1:L1:169:VAL:HG12	1:L1:170:GLY:H	1.45	0.81
78:1S:1350:U:H2'	78:1S:1351:G:H8	1.45	0.81
31:81:106:THR:HG22	79:2S:3324:C:H1'	1.63	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
56:10:87:VAL:H	56:10:88:PRO:CD	1.92	0.80
11:61:110:ILE:HG13	64:18:16:ARG:HD2	1.62	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
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
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
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
25:75:82:LEU:HD21	25:75:132:ALA:HB1	1.63	0.80
56:10:58:GLN:HB2	56:10:65:TYR:HB2	1.63	0.80
16:66:119:VAL:HG23	20:70:164:SER:HB3	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
59:13:99:ARG:NH2	59:13:102:LEU:HD12	1.97	0.79
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
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
74:28:12:VAL:HA	74:28:30:VAL:HG12	1.64	0.79
1:L1:120:VAL:HG23	1:L1:121:PRO:HD3	1.65	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:68:LYS:HG2	2:L2:69:TYR:H	1.47	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
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
79:2S:2501:U:H2'	79:2S:2502:A:H5'	1.65	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
36:86:89:GLU:O	36:86:93:ILE:HG12	1.82	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
47:S1:134:VAL:HB	47:S1:219:LYS:HB2	1.63	0.79
78:1S:1621:U:H3'	78:1S:1622:G:H5''	1.64	0.79
70:24:132:ARG:HD3	70:24:132:ARG:O	1.83	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
79:2S:618:C:H2'	79:2S:619:A:H5'	1.65	0.79
58:12:74:LEU:HD21	77:31:106:TYR:HB2	1.63	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
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
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
79:2S:1488:G:H5''	79:2S:1838:G:O6	1.82	0.78
17:67:3:ARG:HE	17:67:3:ARG:HA	1.48	0.78
24:74:13:ILE:HG12	24:74:32:GLN:HG2	1.65	0.78
66:20:55:PRO:HB2	66:20:89:ARG:HG2	1.64	0.78
48:S2:225:LEU:HB3	48:S2:230:TRP:HE1	1.48	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
9:L9:27:VAL:HG21	9:L9:78:MET:HB3	1.65	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
35:85:71:LYS:HA	35:85:71:LYS:HE3	1.65	0.78
2:L2:133:TYR:HB3	2:L2:168:VAL:HG12	1.64	0.78
78:1S:868:G:H1	78:1S:960:U:H3	1.31	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:S8:97:THR:HA	54:S8:173:PRO:HG2	1.64	0.78
79:2S:1040:A:H3'	79:2S:1041:U:H5''	1.64	0.78
79:2S:118:U:O2	79:2S:121:A:H5'	1.83	0.78
16:66:12:LYS:HA	16:66:40:GLU:HB3	1.64	0.78
13:63:106:GLN:HB3	36:86:18:THR:HG23	1.64	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
1:L1:158:GLN:HG3	1:L1:162:VAL:HG12	1.65	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
78:1S:689:G:H2'	78:1S:690:G:H5''	1.66	0.77
2:L2:246:LEU:HD22	2:L2:250:GLN:HG3	1.67	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
2:L2:206:PRO:HG3	2:L2:213:GLY:HA3	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
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
54:S8:41:LYS:HA	54:S8:60:ILE:HG12	1.67	0.77
78:1S:138:A:H61	78:1S:266:A:H61	1.33	0.77
34:84:68:THR:HG21	79:2S:1644:C:H41	1.50	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
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
49:S3:15:GLY:HA3	75:29:50:ILE:HG23	1.67	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
50:S4:198:LYS:HG2	50:S4:208:VAL:HG22	1.65	0.77
65:19:15:ILE:HG23	65:19:59:ALA:HB3	1.67	0.77
2:L2:207:VAL:HG13	79:2S:2415:C:H5''	1.67	0.77
79:2S:428:A:H2'	79:2S:429:U:C6	2.19	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
78:1S:1519:U:H2'	78:1S:1520:U:C5	2.19	0.76
75:29:54:LYS:HE3	78:1S:1419:G:H4'	1.65	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
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
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
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
60:14:87:GLY:HA3	60:14:120:PRO:HG2	1.66	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
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
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
70:24:7:ILE:HG23	70:24:27:VAL:HG22	1.68	0.76
10:60:165:ILE:H	10:60:165:ILE:HD13	1.50	0.76
24:74:13:ILE:HA	24:74:32:GLN:HE21	1.51	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
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
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
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:1589:C:H2'	78:1S:1590:G:C8	2.20	0.76
76:30:47:VAL:HG22	76:30:48:THR:H	1.50	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
49:S3:134:CYS:N	49:S3:157:LEU:HD11	2.01	0.76
60:14:30:VAL:HG12	60:14:40:ALA:HB3	1.67	0.75
60:14:70:LYS:HE2	60:14:70:LYS:HA	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
45:RC:196:ASN:HD22	45:RC:219:GLU:HG3	1.50	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
62:16:31:VAL:HG13	62:16:67:VAL:HB	1.66	0.75
78:1S:386:G:H2'	78:1S:387:A:C8	2.22	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
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
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:H6	78:1S:1012:U:H5'	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
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
78:1S:1158:C:C5	78:1S:1581:C:H2'	2.21	0.75
78:1S:189:C:H3'	78:1S:190:C:H5''	1.67	0.75
79:2S:1565:G:H21	79:2S:1575:A:H62	1.35	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
64:18:54:LEU:HD22	64:18:54:LEU:H	1.50	0.75
79:2S:2347:U:H2'	79:2S:2348:A:O4'	1.86	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
56:10:80:LEU:O	56:10:82:LEU:HG	1.87	0.75
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
36:86:26:ILE:HG22	79:2S:155:G:H21	1.52	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1951:C:H6	79:2S:2095:G:N2	1.83	0.75
1:L1:60:ARG:HB2	1:L1:180:VAL:HG21	1.69	0.75
45:RC:19:TRP:HB2	45:RC:38:ARG:HD2	1.68	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
38:88:26:LYS:HZ1	79:2S:1750:A:H4'	1.50	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
65:19:102:ARG:NH2	78:1S:1501:C:H41	1.85	0.74
2:L2:74:GLU:HB3	2:L2:76:PHE:HE1	1.52	0.74
58:12:24:ILE:HD13	58:12:24:ILE:H	1.51	0.74
78:1S:145:A:HO2'	78:1S:146:U:H6	1.32	0.74
70:24:5:VAL:HG13	70:24:29:HIS:HB3	1.69	0.74
25:75:74:LYS:HA	25:75:74:LYS:HE2	1.68	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
79:2S:3192:U:H2'	79:2S:3193:C:C6	2.22	0.74
79:2S:543:C:H42	79:2S:548:G:H1	1.31	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
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
3:L3:152:LYS:HG2	3:L3:192:VAL:HG11	1.69	0.74
65:19:114:VAL:HG22	65:19:115:GLU:H	1.51	0.74
78:1S:138:A:H8	78:1S:141:U:H4'	1.51	0.74
69:23:76:LEU:HD13	69:23:79:ASN:HD22	1.49	0.74
19:69:82:LYS:HD3	79:2S:1863:G:H4'	1.68	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
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
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
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:138:A:N6	78:1S:266:A:N6	2.35	0.74
78:1S:1701:A:H3'	78:1S:1702:A:C5'	2.17	0.74
72:26:12:LYS:HE3	78:1S:1790:A:H5''	1.68	0.74
78:1S:811:A:H2	78:1S:814:A:H62	1.35	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2271:A:H2'	79:2S:2272:G:H4'	1.70	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
8:L8:101:THR:HG22	8:L8:104:GLU:HG3	1.69	0.74
65:19:49:ASP:HB3	65:19:53:TRP:HD1	1.52	0.74
42:92:49:GLY:HA2	79:2S:277:G:H5''	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
68:22:96:ALA:HB1	68:22:98:GLN:HE21	1.51	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
3:L3:86:VAL:HA	3:L3:162:VAL:HG12	1.68	0.74
78:1S:871:G:H2'	78:1S:872:G:C8	2.22	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
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
45:RC:170:ILE:HD11	45:RC:204:ALA:HB2	1.70	0.73
57:11:21:ASN:HB3	57:11:31:THR:HG23	1.69	0.73
55:S9:163:PRO:HG3	78:1S:512:A:H5''	1.68	0.73
51:S5:77:TYR:HB3	51:S5:84:LYS:HA	1.69	0.73
69:23:74:VAL:HG12	69:23:75:GLN:H	1.53	0.73
79:2S:2346:C:C2'	79:2S:2347:U:H5''	2.19	0.73
76:30:14:VAL:HA	76:30:17:GLN:HG2	1.70	0.73
21:71:68:THR:HG23	21:71:69:LYS:H	1.52	0.73
2:L2:227:ARG:NH2	79:2S:2161:G:H5''	2.01	0.73
49:S3:212:LYS:HG2	49:S3:213:GLU:H	1.52	0.73
61:15:126:VAL:HG13	61:15:127:ARG:H	1.52	0.73
51:S5:160:VAL:HG21	74:28:45:LYS:HD2	1.70	0.73
1:L1:207:LYS:HD3	79:2S:2491:A:C1'	2.19	0.73
34:84:39:ALA:HB2	34:84:58:ARG:HD2	1.68	0.73
4:L4:29:PRO:HD2	4:L4:277:PRO:HB2	1.71	0.73
79:2S:763:G:C2	79:2S:764:U:H1'	2.22	0.73
18:68:12:ARG:HG3	79:2S:1342:C:H5''	1.71	0.73
82:ET:21:U:H3'	82:ET:22:A:H5'	1.70	0.73
7:L7:196:LYS:HD3	7:L7:197:GLN:HE21	1.54	0.73
79:2S:1472:U:H2'	79:2S:1473:G:C8	2.23	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
13:63:3:ILE:HD11	28:78:34:MET:HA	1.70	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:L8:116:VAL:HA	8:L8:121:SER:HB2	1.71	0.73
49:S3:92:GLN:NE2	49:S3:92:GLN:H	1.87	0.73
78:1S:1646:C:H42	78:1S:1754:A:H61	1.37	0.73
10:60:213:PHE:N	10:60:214:PRO:HD3	2.04	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
35:85:84:LYS:HE3	35:85:88:LEU:HD13	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
18:68:81:VAL:HG23	18:68:101:VAL:HA	1.69	0.73
21:71:129:LYS:HE3	79:2S:1096:U:H5''	1.70	0.73
79:2S:72:C:H1'	79:2S:74:G:H1'	1.71	0.73
15:65:204:LYS:HZ1	79:2S:82:C:H4'	1.53	0.73
33:83:35:VAL:HG13	33:83:40:ASP:HB2	1.70	0.73
14:64:85:TRP:HE1	14:64:91:CYS:HB3	1.54	0.72
5:L5:40:HIS:HA	21:71:69:LYS:HG3	1.68	0.72
4:L4:205:PRO:HG2	4:L4:225:VAL:HG22	1.70	0.72
1:L1:207:LYS:HD3	79:2S:2491:A:H1'	1.70	0.72
79:2S:2536:A:H3'	79:2S:2537:U:C5'	2.18	0.72
19:69:106:LEU:HB3	19:69:120:TYR:CE1	2.24	0.72
70:24:102:LYS:HB2	70:24:108:ARG:HH11	1.53	0.72
46:S0:30:GLN:HG2	46:S0:149:LEU:HD22	1.72	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
18:68:16:ARG:HH22	79:2S:671:U:H5''	1.53	0.72
2:L2:150:LEU:HD13	79:2S:2157:G:C8	2.24	0.72
48:S2:228:ASN:HD22	67:21:1:MET:HG2	1.54	0.72
78:1S:1158:C:H5	78:1S:1581:C:H2'	1.55	0.72
77:31:108:VAL:HB	77:31:114:VAL:HG22	1.71	0.72
51:S5:60:ASP:O	51:S5:85:ALA:HB1	1.88	0.72
56:10:46:LEU:O	56:10:50:THR:HG23	1.90	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
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
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
56:10:87:VAL:N	56:10:88:PRO:HD2	2.01	0.72
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:3317:U:H4'	79:2S:3318:G:H5'	1.71	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
78:1S:1058:U:C5	78:1S:1061:A:N1	2.57	0.72
78:1S:1686:C:H6	78:1S:1686:C:H5'	1.55	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
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
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
78:1S:1667:A:H2'	78:1S:1668:G:C8	2.25	0.72
78:1S:926:A:H2'	78:1S:927:C:C6	2.25	0.72
79:2S:1291:A:H3'	79:2S:1292:C:H5''	1.72	0.72
4:L4:317:PRO:HG2	7:L7:149:TYR:HD2	1.54	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
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
56:10:86:ILE:HD13	56:10:88:PRO:HD2	1.72	0.71
78:1S:913:G:H3'	78:1S:914:G:C5'	2.20	0.71
68:22:97:ARG:HB3	68:22:97:ARG:NH1	2.04	0.71
79:2S:2344:U:H2'	79:2S:2345:A:C8	2.24	0.71
79:2S:920:A:H4'	79:2S:921:A:H5''	1.70	0.71
13:63:157:ARG:HH21	28:78:124:ILE:HG21	1.55	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
6:L6:176:PHE:HD2	33:83:107:ILE:HG21	1.55	0.71
3:L3:84:VAL:HG12	3:L3:162:VAL:HB	1.71	0.71
7:L7:30:ARG:O	7:L7:34:LYS:HB2	1.90	0.71
51:S5:128:ASN:O	51:S5:132:VAL:HG23	1.90	0.71
72:26:42:ARG:HB2	72:26:42:ARG:NH1	2.06	0.71
79:2S:1787:A:C3'	79:2S:1788:C:H5''	2.20	0.71
79:2S:3389:U:H5'	79:2S:3389:U:H6	1.55	0.71
76:30:48:THR:HB	76:30:49:LEU:HD23	1.71	0.71
9:L9:111:PHE:HB3	9:L9:125:ASN:HB3	1.70	0.71
79:2S:2207:A:H3'	79:2S:2208:A:H5'	1.72	0.71
76:30:55:ARG:HB3	76:30:58:PRO:HG3	1.72	0.71
7:L7:224:ILE:HD13	20:70:39:SER:HB2	1.72	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:41:ILE:HG12	2:L2:42:ARG:H	1.55	0.71
51:S5:128:ASN:HD22	51:S5:129:PRO:HD2	1.55	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
66:20:82:TYR:HB3	75:29:52:PHE:HB3	1.73	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
14:64:21:VAL:HG12	14:64:65:LEU:HA	1.71	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
48:S2:240:LEU:O	48:S2:244:SER:HB2	1.91	0.71
69:23:126:LYS:HE3	69:23:129:GLY:HA2	1.71	0.71
79:2S:2778:G:C2'	79:2S:2779:A:H5''	2.21	0.71
79:2S:2356:A:N6	79:2S:2983:C:C5	2.57	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
79:2S:153:U:C2'	79:2S:154:U:H5''	2.21	0.71
38:88:51:LEU:HD22	79:2S:1612:A:H5''	1.71	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
17:67:29:THR:HA	17:67:32:THR:HG22	1.73	0.71
55:S9:101:VAL:O	55:S9:105:LEU:HD13	1.89	0.71
79:2S:3079:U:H3'	79:2S:3080:G:H5''	1.71	0.71
79:2S:744:A:H2'	79:2S:745:C:H5'	1.72	0.71
30:80:24:THR:HG23	30:80:30:THR:HG22	1.70	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
7:L7:166:ASN:HA	7:L7:169:ILE:HD12	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
66:20:58:LEU:HD12	66:20:88:LYS:HG2	1.73	0.71
48:S2:145:GLY:HA3	68:22:97:ARG:HH11	1.54	0.71
79:2S:2180:G:H2'	79:2S:2181:C:C6	2.25	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
79:2S:1654:A:C2'	79:2S:1655:G:H5'	2.21	0.70
34:84:99:LYS:O	34:84:103:LYS:HG2	1.91	0.70
7:L7:126:LEU:HA	7:L7:129:LEU:HD12	1.71	0.70
57:11:80:MET:HB3	57:11:83:THR:HG23	1.73	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
33:83:19:SER:HB3	79:2S:1329:U:H4'	1.71	0.70
1:L1:13:VAL:HG22	1:L1:14:LYS:H	1.54	0.70
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
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
2:L2:132:ASN:HD21	79:2S:2179:C:H2'	1.55	0.70
79:2S:2376:G:H2'	79:2S:2377:G:C8	2.26	0.70
7:L7:77:VAL:HG22	21:71:139:ARG:O	1.91	0.70
45:RC:136:ILE:H	45:RC:136:ILE:HD13	1.55	0.70
57:11:91:LEU:HD23	57:11:102:LYS:HA	1.73	0.70
54:S8:29:LEU:HD12	78:1S:400:A:H61	1.56	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
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
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
69:23:83:VAL:HG12	69:23:84:THR:H	1.55	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
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
15:65:49:ARG:HG2	79:2S:114:A:H4'	1.74	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
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
18:68:64:VAL:HG13	18:68:93:ILE:HD11	1.73	0.70
82:ET:21:U:H3'	82:ET:22:A:C5'	2.21	0.70
2:L2:150:LEU:HD12	2:L2:154:ALA:HB3	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
78:1S:754:A:H61	78:1S:793:A:H2'	1.57	0.70
72:26:36:ILE:CG2	72:26:73:TYR:HB2	2.22	0.70
34:84:97:GLU:O	34:84:101:VAL:HG23	1.91	0.70
3:L3:261:MET:O	3:L3:264:VAL:HG22	1.91	0.70
48:S2:141:ARG:HB2	48:S2:153:SER:O	1.92	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:751:G:H2'	78:1S:752:A:O4'	1.91	0.70
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:5:U:H2'	78:1S:6:G:H8	1.57	0.70
74:28:33:LEU:HD21	74:28:53:ILE:HG23	1.72	0.70
9:L9:156:GLN:HE22	79:2S:3109:G:H21	1.38	0.70
79:2S:3286:G:H2'	79:2S:3287:U:H5''	1.73	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
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
28:78:55:LYS:HG3	79:2S:2764:C:H5''	1.74	0.69
16:66:160:ARG:HB3	16:66:160:ARG:NH1	2.07	0.69
28:78:124:ILE:HG12	28:78:144:VAL:HG22	1.74	0.69
80:8S:8:C:H2'	80:8S:9:A:C8	2.27	0.69
8:L8:60:ARG:HG2	80:8S:152:G:H5'	1.73	0.69
54:S8:172:ARG:HD3	54:S8:175:GLN:HG3	1.72	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
28:78:133:LEU:HD13	79:2S:715:A:H5''	1.73	0.69
15:65:122:ASN:HB3	15:65:129:TYR:CD2	2.28	0.69
38:88:43:PHE:HZ	38:88:62:ALA:HB1	1.57	0.69
4:L4:23:PRO:HD2	4:L4:26:PHE:HE2	1.57	0.69
49:S3:158:ILE:H	49:S3:158:ILE:HD13	1.57	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
6:L6:63:LEU:HB2	6:L6:79:VAL:HG23	1.75	0.69
50:S4:125:LYS:HA	50:S4:159:THR:HA	1.73	0.69
50:S4:62:LYS:O	50:S4:66:MET:HG2	1.93	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
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
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
49:S3:211:PRO:HG3	63:17:20:TYR:HE1	1.58	0.69
60:14:16:VAL:O	60:14:30:VAL:HG23	1.91	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
9:L9:48:VAL:HG13	9:L9:49:ASN:H	1.58	0.69
49:S3:176:LEU:HA	49:S3:181:VAL:HG12	1.74	0.69
33:83:72:THR:HG22	79:2S:585:A:H4'	1.73	0.69
20:70:94:ILE:HG22	20:70:95:ARG:N	2.06	0.69
32:82:33:ARG:HE	32:82:33:ARG:HA	1.58	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
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
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
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
78:1S:524:U:H2'	78:1S:526:A:OP2	1.92	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
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
7:L7:88:ARG:HG2	7:L7:110:ARG:O	1.93	0.69
51:S5:203:LYS:HE3	51:S5:203:LYS:HA	1.72	0.69
78:1S:822:U:H2'	78:1S:823:G:H5''	1.75	0.69
69:23:24:TRP:HE3	69:23:30:LYS:HD2	1.56	0.69
79:2S:2197:C:N4	79:2S:2241:U:H2'	2.08	0.69
14:64:113:THR:HG22	14:64:115:PHE:H	1.58	0.69
80:8S:40:A:H2'	80:8S:41:A:C8	2.27	0.69
60:14:124:ASP:HB2	78:1S:929:A:C4'	2.22	0.69
47:S1:32:ILE:HD12	60:14:33:LEU:HD22	1.75	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
69:23:103:LEU:HD12	69:23:125:VAL:HB	1.74	0.69
79:2S:1787:A:H3'	79:2S:1788:C:H5''	1.73	0.69
26:76:31:LEU:HD11	26:76:75:ARG:HG2	1.75	0.69
72:26:82:ARG:HG3	72:26:83:ILE:N	2.04	0.69
79:2S:307:A:H2'	79:2S:308:A:C8	2.28	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:S9:134:ILE:HA	55:S9:158:PHE:HA	1.72	0.69
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
42:92:98:LYS:HD2	79:2S:2656:A:H4'	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
9:L9:7:GLU:HB3	9:L9:56:ALA:HA	1.74	0.68
47:S1:111:ARG:HB3	72:26:68:TYR:HD2	1.58	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
6:L6:63:LEU:HB2	6:L6:79:VAL:CG2	2.23	0.68
45:RC:260:ILE:HB	45:RC:274:LEU:HB2	1.74	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:2372:A:H5''	79:2S:2373:A:H5'	1.76	0.68
33:83:88:ASN:HB2	79:2S:429:U:H5'	1.75	0.68
79:2S:443:G:H22	79:2S:493:U:H1'	1.58	0.68
17:67:107:LEU:HD23	17:67:112:LEU:HD11	1.75	0.68
1:L1:178:VAL:HG13	1:L1:179:LEU:HG	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
79:2S:129:U:H2'	79:2S:130:A:C8	2.28	0.68
79:2S:1605:A:HO2'	79:2S:1607:U:H6	1.41	0.68
79:2S:830:A:H2'	79:2S:831:G:O4'	1.93	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
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:3006:A:H2'	79:2S:3007:U:O4'	1.94	0.68
79:2S:549:U:H2'	79:2S:550:A:C8	2.28	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
71:25:77:ARG:HB3	71:25:81:ARG:HH12	1.58	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
1:L1:62:ASN:HA	1:L1:168:ALA:HA	1.75	0.68
2:L2:216:HIS:HB2	2:L2:218:HIS:CD2	2.28	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:61:VAL:O	2:L2:74:GLU:HB2	1.93	0.68
46:S0:56:LYS:HB2	46:S0:160:ILE:HG23	1.75	0.68
48:S2:170:ILE:HB	48:S2:197:TYR:HB2	1.73	0.68
48:S2:90:THR:CG2	48:S2:93:GLY:H	2.07	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
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
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
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
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
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
35:85:119:LYS:HE2	35:85:119:LYS:HA	1.76	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
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
57:11:14:GLN:HB3	57:11:54:ILE:HG12	1.74	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
78:1S:44:U:H2'	78:1S:45:U:C5	2.28	0.68
70:24:53:ASP:HB3	70:24:79:VAL:HG13	1.76	0.68
79:2S:66:A:N6	79:2S:76:G:H1'	2.09	0.68
30:80:78:GLY:O	30:80:81:VAL:HG22	1.93	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
46:S0:170:ILE:HD12	46:S0:170:ILE:H	1.58	0.68
66:20:53:LYS:HB2	66:20:92:ASP:HB2	1.75	0.67
34:84:60:ARG:NH2	79:2S:1616:U:H4'	2.08	0.67
79:2S:2515:A:C6	79:2S:2593:A:H1'	2.29	0.67
37:87:25:ARG:HH21	79:2S:817:A:N6	1.88	0.67
3:L3:142:ALA:O	3:L3:146:ARG:HB2	1.93	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
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
31:81:62:ARG:HB2	31:81:66:GLY:CA	2.22	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
42:92:36:PHE:CZ	79:2S:2225:U:H4'	2.29	0.67
4:L4:234:ASN:O	4:L4:238:LEU:HG	1.94	0.67
47:S1:71:ALA:HB3	60:14:114:ARG:HH12	1.59	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
16:66:73:PHE:HA	79:2S:3007:U:OP1	1.93	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
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
46:S0:59:LEU:HD11	67:21:78:LEU:HD12	1.77	0.67
79:2S:2387:A:H3'	79:2S:2388:U:H5''	1.75	0.67
79:2S:528:U:H2'	79:2S:529:A:C8	2.29	0.67
25:75:115:ARG:HE	25:75:121:LYS:HB2	1.58	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
44:P0:4:ILE:H	44:P0:4:ILE:HD13	1.58	0.67
48:S2:45:VAL:HG11	48:S2:68:ILE:HG23	1.77	0.67
79:2S:1040:A:C3'	79:2S:1041:U:H5''	2.23	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
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
19:69:86:GLU:HG2	19:69:90:PRO:HA	1.77	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
71:25:59:TYR:CE2	71:25:100:ILE:HG12	2.30	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
79:2S:1054:A:H5''	79:2S:2637:A:H61	1.58	0.67
32:82:102:ALA:HA	32:82:105:ARG:HD3	1.77	0.67
2:L2:35:ALA:HA	8:L8:36:ILE:HD13	1.77	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
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
2:L2:33:ASP:O	2:L2:37:ARG:HG2	1.95	0.67
47:S1:71:ALA:HB2	47:S1:79:HIS:CB	2.19	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
11:61:40:LEU:HD22	11:61:114:ILE:HG12	1.76	0.67
50:S4:126:VAL:HA	50:S4:141:THR:HA	1.75	0.67
50:S4:45:ILE:O	50:S4:49:ARG:HB3	1.95	0.67
47:S1:136:ARG:HD3	78:1S:884:A:H5''	1.76	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
3:L3:210:GLU:HA	3:L3:285:VAL:HG21	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
53:S7:111:LYS:HG3	53:S7:112:ARG:N	2.10	0.66
53:S7:114:ARG:HB2	53:S7:114:ARG:HH11	1.59	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:14:87:GLY:HA2	60:14:92:LYS:HB3	1.75	0.66
26:76:87:LYS:HE2	79:2S:375:A:O2'	1.95	0.66
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
82:PT:58:A:H2'	82:PT:59:A:H5'	1.77	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
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
17:67:122:ALA:HB3	17:67:143:PRO:HB2	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
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
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
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
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
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:1787:A:H2'	79:2S:1788:C:H5''	1.77	0.66
79:2S:178:U:H2'	79:2S:179:C:H6	1.58	0.66
79:2S:3317:U:H1'	79:2S:3318:G:OP2	1.95	0.66
22:72:30:PRO:HG2	22:72:60:GLY:O	1.96	0.66
8:L8:26:LEU:HD11	27:77:123:GLN:HA	1.78	0.66
32:82:75:LEU:HG	32:82:95:GLU:OE1	1.96	0.66
7:L7:121:LYS:HD2	21:71:133:ALA:CB	2.24	0.66
66:20:118:VAL:HG13	66:20:119:ALA:H	1.59	0.66
79:2S:1951:C:H5	79:2S:2095:G:H1	1.35	0.66
79:2S:796:U:H2'	79:2S:797:U:C6	2.31	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
52:S6:191:ARG:O	52:S6:195:VAL:HG23	1.96	0.66
55:S9:174:ARG:HE	55:S9:174:ARG:HA	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
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
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
15:65:71:ARG:O	15:65:92:LEU:HB2	1.96	0.66
5:L5:285:ARG:O	5:L5:289:LYS:HG3	1.96	0.66
78:1S:1681:A:C2'	78:1S:1682:U:H5'	2.26	0.66
72:26:41:ILE:HD13	72:26:41:ILE:H	1.59	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
79:2S:989:A:H2'	79:2S:990:U:C6	2.30	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
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
40:90:113:ARG:HH12	79:2S:1190:A:H4'	1.60	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
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
7:L7:80:GLN:HB2	21:71:135:PRO:HB2	1.78	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
51:S5:187:ILE:HA	78:1S:1534:G:N2	2.11	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:24:8:ARG:O	70:24:26:ASP:HB2	1.96	0.65
79:2S:1805:C:H2'	79:2S:1806:A:H8	1.61	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
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
48:S2:53:ILE:HG12	48:S2:72:LEU:HB3	1.77	0.65
59:13:64:ARG:NH1	59:13:64:ARG:HB3	2.08	0.65
65:19:119:LYS:HE2	78:1S:1369:U:H5'	1.75	0.65
78:1S:1672:G:H2'	78:1S:1673:G:C8	2.31	0.65
72:26:84:VAL:HG13	72:26:85:ARG:N	2.11	0.65
68:22:22:LYS:HD2	73:27:3:LEU:HD23	1.78	0.65
79:2S:442:G:O6	79:2S:493:U:H2'	1.96	0.65
13:63:63:VAL:HG13	79:2S:72:C:H5'	1.78	0.65
11:61:97:SER:HB2	11:61:101:ASN:HB2	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:H	23:73:93:LEU:HD23	1.61	0.65
31:81:32:ALA:O	31:81:36:ILE:HG13	1.96	0.65
36:86:26:ILE:N	36:86:26:ILE:HD12	2.10	0.65
42:92:77:CYS:SG	42:92:79:THR:HG22	2.36	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
46:S0:56:LYS:HB3	46:S0:160:ILE:HG12	1.79	0.65
78:1S:989:U:H2'	78:1S:990:C:C6	2.31	0.65
68:22:83:ILE:O	68:22:86:ILE:HG12	1.97	0.65
79:2S:598:A:H2'	79:2S:599:C:C6	2.31	0.65
25:75:63:ILE:HA	25:75:86:VAL:HG23	1.76	0.65
6:L6:82:ARG:O	33:83:103:TYR:HB2	1.96	0.65
34:84:41:ARG:HB2	34:84:50:ALA:HB1	1.78	0.65
78:1S:1036:A:H2'	78:1S:1037:C:C6	2.32	0.65
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
78:1S:16:G:H2'	78:1S:17:C:C6	2.32	0.65
69:23:103:LEU:HD13	69:23:104:LEU:N	2.12	0.65
59:13:17:PRO:HG3	73:27:28:PRO:HG3	1.79	0.65
79:2S:209:A:H4'	79:2S:211:A:C8	2.32	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
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
78:1S:1107:G:O2'	78:1S:1108:G:H5'	1.97	0.65
78:1S:177:U:H3'	78:1S:178:U:H5''	1.79	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:1060:U:H3'	78:1S:1061:A:H5''	1.78	0.65
78:1S:969:C:H4'	78:1S:1104:U:H4'	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
18:68:147:ARG:HB3	18:68:150:VAL:HG13	1.79	0.65
1:L1:144:LEU:HD13	1:L1:147:LYS:HD2	1.79	0.65
1:L1:64:SER:H	1:L1:151:VAL:HG21	1.61	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
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:1425:A:H2'	78:1S:1426:C:C6	2.32	0.65
78:1S:484:C:H2'	78:1S:485:A:H5''	1.79	0.65
69:23:127:VAL:O	69:23:130:VAL:HG22	1.97	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
79:2S:549:U:H2'	79:2S:550:A:H8	1.62	0.65
26:76:3:LYS:HE2	26:76:8:VAL:HG13	1.78	0.65
2:L2:251:LYS:HA	2:L2:251:LYS:HE2	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
9:L9:63:LYS:HE3	79:2S:1210:U:H5'	1.78	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:2050:C:H2'	79:2S:2051:G:C8	2.32	0.65
79:2S:1951:C:H6	79:2S:2095:G:H1	1.40	0.65
81:5S:85:G:H1	81:5S:95:A:N6	1.94	0.65
10:60:65:LEU:HD23	10:60:159:PHE:CZ	2.32	0.65
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
55:S9:48:GLN:HA	55:S9:51:LYS:HE2	1.78	0.65
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
78:1S:886:U:H2'	78:1S:887:A:C8	2.32	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
79:2S:600:G:H1'	79:2S:603:A:N6	2.12	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
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
54:S8:137:LYS:HA	54:S8:140:GLU:HB2	1.78	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
53:S7:139:ARG:HD2	68:22:53:ILE:HG22	1.80	0.64
79:2S:2635:A:H4'	79:2S:2636:A:O5'	1.96	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
3:L3:123:TYR:CE2	3:L3:124:LYS:HG3	2.33	0.64
48:S2:126:ARG:O	48:S2:130:ILE:HD13	1.98	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
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:138:A:H62	78:1S:266:A:N6	1.94	0.64
26:76:122:LYS:HG2	79:2S:185:C:H5''	1.78	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
17:67:87:SER:O	17:67:91:VAL:HG23	1.98	0.64
14:64:39:ILE:HG23	20:70:72:VAL:HG11	1.78	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
46:S0:169:SER:O	46:S0:173:ILE:HG12	1.98	0.64
63:17:10:LYS:HG2	63:17:53:TYR:HE1	1.62	0.64
63:17:97:ASN:N	63:17:97:ASN:HD22	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
43:93:16:VAL:HG22	79:2S:1927:G:C8	2.32	0.64
79:2S:2953:U:H2'	79:2S:2954:U:H2'	1.79	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:HB3	21:71:20:ARG:NH1	2.12	0.64
30:80:52:ARG:O	30:80:56:LEU:HG	1.97	0.64
51:S5:76:ARG:HD3	51:S5:76:ARG:N	2.12	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
19:69:77:GLY:O	19:69:81:ARG:HD3	1.98	0.64
18:68:157:PRO:HD3	28:78:47:LYS:HE2	1.80	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
58:12:87:PRO:HA	58:12:140:PHE:HZ	1.62	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
4:L4:334:PHE:CD2	79:2S:578:A:H2'	2.33	0.64
79:2S:600:G:H1'	79:2S:603:A:H62	1.63	0.64
76:30:36:LYS:N	76:30:36:LYS:HD2	2.12	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
51:S5:187:ILE:HA	78:1S:1534:G:H21	1.63	0.64
32:82:95:GLU:HG2	32:82:96:ILE:N	2.12	0.64
5:L5:141:PRO:HB2	5:L5:172:TYR:CB	2.27	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RC:29:GLN:HE21	45:RC:32:LEU:HB2	1.62	0.64
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
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
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
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
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
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
60:14:18:ARG:HH12	60:14:35:GLY:HA3	1.61	0.63
78:1S:190:C:O2'	78:1S:191:C:H5'	1.99	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
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
7:L7:107:ARG:HB3	7:L7:204:PRO:HG2	1.79	0.63
53:S7:34:LEU:O	53:S7:38:LEU:HD13	1.98	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
66:20:41:ILE:HA	66:20:44:ASN:HB3	1.78	0.63
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
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
14:64:106:ARG:HA	14:64:109:ARG:HD2	1.80	0.63
8:L8:71:VAL:HG12	15:65:21:PHE:CE2	2.34	0.63
17:67:91:VAL:O	17:67:95:LEU:HG	1.99	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:93:46:THR:HB	43:93:58:SER:HB2	1.78	0.63
6:L6:56:LYS:HG2	6:L6:57:HIS:H	1.62	0.63
78:1S:772:G:H2'	78:1S:773:C:C6	2.34	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
44:P0:34:SER:HA	79:2S:1230:G:H4'	1.81	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
21:71:100:LYS:HB2	79:2S:990:U:H4'	1.80	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
40:90:125:LYS:HD2	79:2S:2897:A:H5''	1.79	0.63
2:L2:209:HIS:CD2	2:L2:211:HIS:HB2	2.33	0.63
5:L5:113:LEU:HD23	5:L5:115:LEU:HD23	1.80	0.63
5:L5:7:ALA:C	5:L5:8:LYS:HD2	2.17	0.63
6:L6:96:VAL:HG12	6:L6:97:ASN:H	1.62	0.63
55:S9:24:LEU:O	55:S9:28:LEU:HG	1.97	0.63
79:2S:1141:C:H2'	79:2S:1142:G:O4'	1.98	0.63
79:2S:374:A:H4'	79:2S:375:A:H5'	1.80	0.63
6:L6:19:LYS:H	79:2S:591:G:H1'	1.64	0.63
17:67:3:ARG:NE	17:67:3:ARG:HA	2.13	0.63
2:L2:190:ARG:HH12	79:2S:1794:G:H1'	1.61	0.63
55:S9:3:ARG:HB2	55:S9:3:ARG:NH2	2.14	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:L3:243: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
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
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
3:L3:116:ARG:O	3:L3:175:LYS:HE2	1.98	0.63
3:L3:332:ARG:CD	3:L3:332:ARG:H	2.10	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
51:S5:33:VAL:O	51:S5:37:GLN:HG3	1.99	0.63
52:S6:78:THR:HG23	52:S6:92:ARG:HG2	1.81	0.63
78:1S:1273:G:N7	78:1S:1431:C:H5''	2.13	0.63
78:1S:805:U:C2'	78:1S:806:A:H5''	2.28	0.63
19:69:5:ARG:HD3	79:2S:1471:U:H5''	1.81	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
16:66:86:GLY:O	16:66:87:MET:HG3	1.99	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
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:L4:42:VAL:HB	4:L4:236:LEU:HD21	1.79	0.63
4:L4:6:VAL:CG2	4:L4:22:LEU:HD21	2.29	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
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:1182:A:H2'	79:2S:1183:C:C6	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
15:65:139:HIS:HB3	15:65:142:ILE:HD13	1.81	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
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
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
78:1S:304:U:H2'	78:1S:305:C:C6	2.33	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
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
78:1S:82:U:H2'	78:1S:83:G:O4'	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:S2:228:ASN:HD22	67:21:1:MET:CG	2.11	0.62
79:2S:3197:G:H2'	79:2S:3198:U:H3'	1.81	0.62
79:2S:656:A:H2'	79:2S:657:A:C8	2.34	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
2:L2:9:ARG:HH21	2:L2:9:ARG:HB2	1.62	0.62
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
28:78:43:ILE:HD11	79:2S:957:C:H1'	1.81	0.62
77:31:132:LEU:HD13	77:31:139:LEU:HB3	1.81	0.62
23:73:21:ALA:HB3	23:73:36:ILE:HD12	1.80	0.62
34:84:29:ILE:HD13	34:84:29:ILE:H	1.64	0.62
1:L1:47:LYS:HD2	1:L1:47:LYS:N	2.13	0.62
9:L9:118:LEU:HD21	9:L9:177:ASP:HB2	1.81	0.62
52:S6:122:GLU:HA	52:S6:126:ASP:HB2	1.80	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
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
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
43:93:75:ALA:O	43:93:78:THR:HG22	1.99	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
53:S7:111:LYS:HG3	53:S7:112:ARG:H	1.64	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
10:60:24:ARG:HB2	10:60:24:ARG:NH1	2.15	0.62
15:65:190:THR:O	15:65:194:GLN:HG2	2.00	0.62
28:78:91:LEU:HD22	28:78:121:VAL:HG21	1.82	0.62
28:78:5:PHE:O	79:2S:793:C:H5''	1.99	0.62
3:L3:62:ARG:HG3	3:L3:348:ARG:HH21	1.65	0.62
47:S1:61:LEU:CD2	47:S1:62:LYS:H	2.12	0.62
78:1S:481:A:H2'	78:1S:482:U:O4'	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:25:91:PRO:HB3	71:25:101:TYR:HE1	1.65	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
79:2S:861:C:H2'	79:2S:862:U:C6	2.35	0.62
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
2:L2:225:ILE:HG21	2:L2:234:LYS:HA	1.80	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
64:18:115:ARG:HB3	64:18:115:ARG:NH2	2.15	0.62
78:1S:985:G:H2'	78:1S:986:G:O4'	1.99	0.62
66:20:67:THR:HG21	75:29:40:ARG:HB2	1.81	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
1:L1:32:VAL:HG11	79:2S:2468:A:H5''	1.81	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
79:2S:311:C:H2'	79:2S:312:C:C6	2.34	0.62
55:S9:123:HIS:HE1	76:30:37:ARG:HB2	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
3:L3:73:VAL:CG2	23:73:90:GLY:HA3	2.30	0.62
31:81:17:HIS:HB2	31:81:69:TYR:HB3	1.81	0.62
33:83:60:ARG:HB2	33:83:60:ARG:NH2	2.14	0.62
4:L4:111:VAL:HG12	4:L4:112:LYS:H	1.64	0.62
50:S4:42:LEU:HD23	50:S4:101:LEU:HD11	1.81	0.62
61:15:22:LEU:HD22	61:15:22:LEU:H	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
37:87:18:LEU:HA	37:87:25:ARG:H	1.65	0.62
5:L5:33:ARG:HG3	5:L5:33:ARG:HH11	1.63	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
78:1S:196:G:HO2'	78:1S:197:A:H8	1.45	0.62
3:L3:262:TRP:HH2	79:2S:3009:G:H4'	1.64	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:65:64:VAL:HG11	15:65:102:ALA:HB1	1.80	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
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:1081:A:H2'	78:1S:1083:G:C5	2.35	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
79:2S:1693:C:H2'	79:2S:1773:C:H5	1.64	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
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
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
57:11:80:MET:CB	57:11:83:THR:HG23	2.29	0.62
78:1S:1511:U:H2'	78:1S:1512:G:C8	2.34	0.62
72:26:86:VAL:HG23	78:1S:1795:U:H5''	1.81	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
25:75:113:LEU:CB	79:2S:1523:U:H5'	2.29	0.62
2:L2:207:VAL:HG13	79:2S:2415:C:C5'	2.29	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
5:L5:59:ASP:HA	5:L5:80:SER:HB3	1.82	0.62
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
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
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
49:S3:116:ARG:O	49:S3:120:TYR:HB2	2.00	0.61
49:S3:31:GLU:HA	49:S3:107:PHE:HZ	1.65	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
64:18:72:ILE:HG22	64:18:81:ILE:HD11	1.81	0.61
78:1S:922:G:H2'	78:1S:923:A:C8	2.35	0.61
66:20:27:THR:HA	66:20:87:HIS:O	1.99	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
69:23:24:TRP:CE3	69:23:30:LYS:HD2	2.35	0.61
79:2S:1060:U:H2'	79:2S:1061:A:C8	2.34	0.61
79:2S:962:A:O2'	79:2S:963:G:H5'	2.00	0.61
32:82:105:ARG:O	32:82:109:LEU:HG	2.00	0.61
80:8S:79:A:H2'	80:8S:80:A:H4'	1.82	0.61
6:L6:58:LEU:HG	6:L6:64:LEU:HD23	1.82	0.61
49:S3:135:GLU:HB3	49:S3:187:LYS:HB3	1.81	0.61
64:18:38:VAL:HG12	64:18:42:TYR:CD2	2.35	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
78:1S:144:U:HO2'	78:1S:145:A:H8	1.46	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
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
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
82:PT:24:C:H2'	82:PT:25:U:C6	2.35	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
60:14:85:ALA:H	60:14:119:THR:CG2	2.09	0.61
46:S0:205:ARG:HD3	63:17:82:ASP:HB3	1.81	0.61
78:1S:1402:G:H2'	78:1S:1403:C:C6	2.35	0.61
69:23:7:ARG:NH1	78:1S:1100:G:H1'	2.14	0.61
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
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
7:L7:161:VAL:HG11	7:L7:168:ILE:HG21	1.83	0.61
46:S0:131:GLN:O	46:S0:135:GLU:HG2	2.00	0.61
47:S1:148:ASN:ND2	47:S1:148:ASN:H	1.96	0.61
47:S1:187:LYS:O	47:S1:191:GLU:HA	2.00	0.61
47:S1:96:LEU:HD23	47:S1:96:LEU:N	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:S7:114:ARG:HB2	53:S7:114:ARG:NH1	2.15	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
54:S8:92:ARG:NH1	79:2S:3345:G:H4'	2.15	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
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
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
79:2S:2076:G:C2'	79:2S:2077:U:H5''	2.29	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:85:A:N1	79:2S:99:A:H5''	2.14	0.61
81:5S:105:C:H2'	81:5S:106:U:C6	2.36	0.61
10:60:152:LEU:HD13	10:60:165:ILE:HG21	1.81	0.61
13:63:85:LEU:H	13:63:85:LEU:HD23	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
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
45:RC:191:ASP:O	49:S3:223:LYS:HD3	2.00	0.61
54:S8:73:SER:HB2	78:1S:257:A:H1'	1.82	0.61
78:1S:628:G:H21	78:1S:971:A:H62	1.47	0.61
70:24:7:ILE:HD11	70:24:40:LEU:HD22	1.82	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
79:2S:662:U:H2'	79:2S:663:C:C6	2.36	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
7:L7:51:TYR:HE2	7:L7:183:ASP:HA	1.65	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
55:S9:179:ARG:HA	55:S9:182:GLU:HG2	1.82	0.61
59:13:10:GLY:HA2	78:1S:1073:G:H4'	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
79:2S:2068:U:H3'	79:2S:2069:G:C5'	2.24	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
37:87:31:LYS:NZ	79:2S:815:G:H5''	2.16	0.61
8:L8:97:TYR:OH	8:L8:203:VAL:HG23	2.00	0.61
52:S6:57:ASP:HB3	52:S6:106:LEU:HD23	1.83	0.61
78:1S:1087:A:H5'	78:1S:1298:U:O4	2.00	0.61
79:2S:2388:U:H2'	79:2S:2389:C:C6	2.35	0.61
79:2S:643:U:H2'	79:2S:644:G:O4'	2.01	0.61
76:30:30:PRO:HB2	76:30:34:ALA:HB3	1.83	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
3:L3:226:PHE:CE1	3:L3:268:GLY:HA2	2.36	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
56:10:5:LYS:HD3	78:1S:1256:A:OP1	2.01	0.61
78:1S:1298:U:H2'	78:1S:1299:G:O4'	2.00	0.61
78:1S:393:C:H2'	78:1S:394:C:C6	2.36	0.61
67:21:12:TYR:CE2	67:21:14:PRO:HG3	2.36	0.61
79:2S:1786:G:H2'	79:2S:1787:A:C8	2.36	0.61
2:L2:230:VAL:HG11	79:2S:2424:A:H2	1.65	0.61
17:67:135:ARG:CB	17:67:135:ARG:HH11	2.14	0.61
3:L3:66:LYS:HB3	23:73:88:ARG:HH11	1.65	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
57:11:90:TYR:CE1	57:11:103:ARG:HB3	2.36	0.61
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:1203:A:H2'	79:2S:1204:A:C8	2.36	0.61
31:81:60:TRP:O	79:2S:1476:G:H4'	2.01	0.61
79:2S:794:U:H2'	79:2S:795:G:H8	1.64	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:86:59:ASP:O	36:86:63:ASN:HB3	2.01	0.61
39:89:48:LYS:N	39:89:48:LYS:HD2	2.15	0.61
6:L6:65:ILE:H	6:L6:65:ILE:HD13	1.66	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
78:1S:1304:G:H5'	78:1S:1322:A:OP2	2.00	0.60
68:22:42:GLN:HE21	68:22:49:GLU:HA	1.65	0.60
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
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:1936:A:H2'	79:2S:1937:U:C6	2.36	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
81:5S:97:A:H2'	81:5S:98:C:C6	2.34	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
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
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
56:10:7: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
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
79:2S:878:G:H22	79:2S:2979:U:H5''	1.66	0.60
32:82:26:HIS:HB2	79:2S:655:C:H5''	1.83	0.60
79:2S:736:A:H2'	79:2S:737:G:O4'	2.01	0.60
76:30:33:ARG:HB3	76:30:33:ARG:NH1	2.16	0.60
79:2S:1055:A:H5''	81:5S:100:C:O2'	2.00	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:83:54:ARG:HG3	33:83:64:ILE:CG1	2.31	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
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
78:1S:1169:G:N2	78:1S:1576:A:H62	1.92	0.60
71:25:50:ILE:O	71:25:54:VAL:HG23	2.01	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
23:73:70:ARG:HH11	23:73:70:ARG:HB2	1.66	0.60
41:91:15:ARG:O	41:91:19:LYS:HD3	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
59:13:3:ARG:H	78:1S:866:G:H5''	1.66	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: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
78:1S:854:U:H2'	78:1S:855:A:O4'	2.01	0.60
77:31:147:VAL:O	77:31:148:TYR:HB2	2.01	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
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
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
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
78:1S:195:G:H2'	78:1S:196:G:H5''	1.82	0.60
69:23:32:ARG:NH1	78:1S:375:U:H5''	2.15	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
20:70:58:ILE:H	20:70:58:ILE:HD12	1.67	0.60
3:L3:91:GLY:O	3:L3:101:SER:HA	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:L8:48:ARG:HG3	79:2S:2585:G:H8	1.66	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
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
65:19:111:ILE:HG23	65:19:113:ILE:HG13	1.83	0.60
62:16:143:ARG:HD2	78:1S:1191:U:H4'	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
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:NZ	33:83:20:LYS:HB3	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
1:L1:62:ASN:HB3	1:L1:151:VAL:CG1	2.31	0.60
9:L9:156:GLN:HE22	79:2S:3109:G:N2	2.00	0.60
9:L9:23:ARG:CB	9:L9:39:LYS:HG2	2.31	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: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
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
10:60:61:SER:HB2	10:60:63:GLU:OE2	2.02	0.60
16:66:174:PHE:O	16:66:178:VAL:HG23	2.02	0.60
16:66:28:LEU:HD22	16:66:94:ARG:NH2	2.17	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
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
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:2097:U:H2'	79:2S:2098:C:C6	2.37	0.60
79:2S:293:C:H2'	79:2S:294:U:O4'	2.02	0.60
79:2S:3153:U:H3	79:2S:3293:U:H3	1.49	0.60
79:2S:653:A:H2'	79:2S:654:C:C6	2.37	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
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
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
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
4:L4:344:ALA:HB3	79:2S:516:A:H5''	1.84	0.60
33:83:23:ASN:HD21	79:2S:633:C:H1'	1.67	0.60
81:5S:9:C:H2'	81:5S:10:C:H5'	1.83	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
38:88:40:GLN:HG3	38:88:57:ASN:HA	1.84	0.60
3:L3:262:TRP:CH2	79:2S:3009:G:H4'	2.36	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
49:S3:6:SER:HA	78:1S:1514:U:O2'	2.01	0.59
78:1S:294:C:H2'	78:1S:295:A:O4'	2.02	0.59
69:23:93:LEU:HD12	69:23:96:VAL:HG21	1.84	0.59
79:2S:1655:G:H1'	79:2S:1800:A:H61	1.67	0.59
15:65:179:LYS:HB3	79:2S:287:G:H5'	1.82	0.59
15:65:120:TRP:CE3	79:2S:269:G:H5'	2.37	0.59
80:8S:93:U:H2'	80:8S:94:C:O4'	2.01	0.59
46:S0:12:GLU:O	46:S0:16:LEU:HG	2.02	0.59
55:S9:11:THR:HG23	78:1S:472:U:H5''	1.84	0.59
63:17:97:ASN:HD22	63:17:97:ASN:H	1.49	0.59
52:S6:190:GLN:HE22	78:1S:265:A:H8	1.49	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
66:20:118:VAL:HG22	66:20:119:ALA:N	2.17	0.59
50:S4:95:THR:HG22	70:24:16:PRO:HB2	1.83	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
42:92:8:ARG:HD2	79:2S:2713:U:H2'	1.84	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
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
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
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:S4:214: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
64:18:36:LYS:HB2	64:18:102:ALA:HA	1.84	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
79:2S:757:C:H2'	79:2S:758:C:C4'	2.32	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
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
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
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
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:19:U:H2'	79:2S:20:A:C8	2.36	0.59
79:2S:2434:U:H5'	79:2S:2593:A:H2	1.67	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
6:L6:17:ALA:O	79:2S:592:A:H5'	2.03	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: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
79:2S:522:A:H62	79:2S:570:A:H2	1.50	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
80:8S:36:G:H2'	80:8S:37:A:H2	1.67	0.59
2:L2:230:VAL:HG21	79:2S:2424:A:N1	2.17	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
78:1S:872:G:H22	78:1S:955:A:H2	1.50	0.59
72:26:24:VAL:HG12	72:26:72:HIS:O	2.02	0.59
79:2S:3275:U:H3'	79:2S:3276:G:C5'	2.32	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
53:S7:104:ARG:HG3	78:1S:803:A:C4	2.38	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
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:S2:212:LYS:O	48:S2:216:VAL:HG23	2.02	0.59
48:S2:66:PHE:O	48:S2:69:ILE:HG13	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
59:13:99:ARG:CZ	59:13:99:ARG:HA	2.31	0.59
63:17:110:VAL:HG11	63:17:117:LEU:O	2.01	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
76:30:20:LYS:HA	76:30:20:LYS:HE2	1.85	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
43:93:79:VAL:O	43:93:83:ILE:HG12	2.03	0.59
82:PT:57:C:H2'	82:PT:57:C:O2	2.03	0.59
51:S5:187:ILE:H	51:S5:187:ILE:HD12	1.68	0.59
56:10:1:MET:HG3	56:10:44:LYS:HB3	1.84	0.59
78:1S:1474:G:H2'	78:1S:1475:A:C8	2.38	0.59
78:1S:766:U:H3	78:1S:770:A:H62	1.51	0.59
79:2S:1288:U:H2'	79:2S:1289:G:C8	2.37	0.59
2:L2:240:ALA:CB	79:2S:2154:U:H4'	2.33	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
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
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
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
78:1S:1641:C:H2'	78:1S:1642:G:C8	2.38	0.59
78:1S:391:A:O2'	78:1S:1730:A:H4'	2.03	0.59
78:1S:320:U:O2'	78:1S:321:C:H2'	2.03	0.59
78:1S:826:U:H2'	78:1S:827:C:C6	2.38	0.59
68:22:53:ILE:O	68:22:53:ILE:HG13	2.00	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
43:93:57:CYS:HB3	43:93:62:LYS:H	1.68	0.59
43:93:29:LEU:HD13	43:93:69:TYR:CD2	2.38	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:14:31:THR:HG22	60:14:38:THR:CB	2.33	0.58
78:1S:1449:U:H2'	78:1S:1450:U:C6	2.38	0.58
78:1S:900:A:H3'	78:1S:901:G:H21	1.68	0.58
72:26:36:ILE:HG12	72:26:38:ARG:HH11	1.67	0.58
79:2S:3016:A:H2'	79:2S:3017:A:C8	2.38	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
7:L7:100:ARG:O	7:L7:104:GLN:HG3	2.02	0.58
7:L7:82:LYS:HA	7:L7:119:VAL:HB	1.83	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: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
79:2S:95:A:O5'	79:2S:95:A:H8	1.85	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
4:L4:329:PRO:HG3	7:L7:41:ARG:O	2.03	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
78:1S:521:A:H2'	78:1S:522:U:O4'	2.02	0.58
54:S8:158:SER:HB3	79:2S:2067:U:C6	2.38	0.58
79:2S:2958:A:H2'	79:2S:2959:C:C6	2.38	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
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
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
78:1S:224:C:H2'	78:1S:225:A:C8	2.38	0.58
78:1S:25:C:H4'	78:1S:26:A:H5'	1.85	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
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
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
79:2S:757:C:H3'	79:2S:758:C:H5''	1.86	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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:1334:U:H2'	78:1S:1335:U:O4'	2.03	0.58
78:1S:156:A:C2	78:1S:415:C:H1'	2.39	0.58
51:S5:189:THR:HB	71:25:97:LYS:NZ	2.19	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:259:C:H2'	79:2S:260:C:C6	2.39	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
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
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
47:S1:221:PRO:HG2	47:S1:222:LYS:H	1.67	0.58
55:S9:49:LEU:HD11	55:S9:53:ARG:HD3	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
78:1S:551:G:H5'	78:1S:581:U:H2'	1.84	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
79:2S:54:C:H2'	79:2S:55:G:C8	2.38	0.58
81:5S:38:U:H2'	81:5S:40:C:OP2	2.04	0.58
3:L3:266:ARG:HA	3:L3:266:ARG:HE	1.69	0.58
4:L4:152:VAL:HG12	4:L4:153:SER:N	2.15	0.58
4:L4:52:VAL:HG22	4:L4:53:SER:N	2.15	0.58
48:S2:184:VAL:HG22	48:S2:211:LEU:HD23	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
50:S4:23:LEU:HD13	55:S9:4:ALA:HB3	1.85	0.58
55:S9:65:LYS:HA	55:S9:70:LEU:HD11	1.85	0.58
60:14:124:ASP:HB2	78:1S:929:A:H4'	1.85	0.58
65:19:75:LYS:HD2	65:19:75:LYS:H	1.69	0.58
78:1S:1573:A:H4'	78:1S:1574:G:C5'	2.33	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:65:176:LYS:HZ3	79:2S:65:A:H5'	1.69	0.58
81:5S:104:A:H2'	81:5S:105:C:H5'	1.83	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
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
64:18:28:ILE:O	64:18:28:ILE:HD13	2.03	0.58
78:1S:1042:G:H22	78:1S:1076:A:H2	1.52	0.58
41:91:2:ARG:HH22	78:1S:1773:C:H5	1.50	0.58
78:1S:832:U:H2'	78:1S:833:U:H5''	1.84	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
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
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
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
45:RC:57:PRO:HG2	62:16:100:GLN:HB2	1.86	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
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
33:83:103:TYR:HA	33:83:104:PRO:C	2.24	0.58
33:83:20:LYS:HE2	33:83:21:ARG:NH1	2.19	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
80:8S:62:C:H4'	80:8S:63:G:O5'	2.04	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
61:15:72:LYS:N	61:15:72:LYS:HD2	2.18	0.58
78:1S:1304:G:OP2	78:1S:1306:C:H5'	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:844:A:H2'	78:1S:845:G:H8	1.69	0.58
72:26:84:VAL:O	72:26:85:ARG:HB2	2.04	0.58
79:2S:1200:A:H5'	79:2S:1201:C:H4'	1.84	0.58
1:L1:162:VAL:HB	79:2S:2493:U:H4'	1.85	0.58
79:2S:992:A:O2'	79:2S:993:G:H5'	2.04	0.58
17:67:118:GLN:HG2	17:67:119:VAL:H	1.69	0.58
17:67:66:SER:HA	79:2S:2389:C:H5''	1.83	0.58
3:L3:67:PHE:CD2	23:73:88:ARG:HD3	2.38	0.58
46:S0:122:ILE:HG12	46:S0:144:ILE:HD12	1.85	0.58
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
75:29:36:LEU:HD12	75:29:37:ASN:N	2.19	0.57
79:2S:1951:C:H5	79:2S:2095:G:C6	2.22	0.57
21:71:27:LEU:HD22	21:71:27:LEU:N	2.18	0.57
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
54:S8:58:LEU:O	54:S8:59:ARG:HB2	2.04	0.57
61:15:25:LEU:O	61:15:87:PRO:HB2	2.03	0.57
54:S8:171:SER:HB3	78:1S:209:U:H5'	1.86	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
66:20:50:LEU:HD13	66:20:95:ALA:HB2	1.85	0.57
79:2S:1287:A:O2'	79:2S:1288:U:H5'	2.04	0.57
41:91:23:ARG:NH1	79:2S:2277:C:H5''	2.19	0.57
79:2S:2394:G:H2'	79:2S:2395:G:O4'	2.03	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
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
45:RC:103:PHE:CE1	45:RC:138:GLY:HA2	2.39	0.57
78:1S:1476:C:H2'	78:1S:1477:G:C8	2.39	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
79:2S:3297:U:H2'	79:2S:3298:C:O4'	2.04	0.57
79:2S:719:U:H3'	79:2S:720:A:H4'	1.86	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
50:S4:64:ILE:HD13	70:24:17:LEU:HD13	1.86	0.57
79:2S:2495:C:H3'	79:2S:2496:C:C5'	2.35	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
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
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
45:RC:222:LEU:HD21	45:RC:234:LEU:HD13	1.86	0.57
49:S3:92:GLN:HE21	49:S3:92:GLN:H	1.52	0.57
62:16:12:LYS:HA	62:16:16:ALA:O	2.05	0.57
78:1S:1562:G:H2'	78:1S:1563:C:C6	2.40	0.57
78:1S:1541:G:H21	78:1S:1570:A:H62	1.52	0.57
78:1S:1614:A:H2'	78:1S:1615:C:O4'	2.04	0.57
78:1S:410:A:H2'	78:1S:411:C:O4'	2.04	0.57
68:22:53:ILE:HD11	68:22:60:LYS:HB2	1.87	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
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
80:8S:70:G:H1'	80:8S:88:A:N6	2.19	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
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
64:18:92:ILE:HD13	64:18:92:ILE:O	2.05	0.57
78:1S:487:G:H22	78:1S:500:C:N4	2.02	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
79:2S:637:C:H2'	79:2S:638:C:C6	2.40	0.57
76:30:10:ARG:HD2	76:30:13:LYS:HD2	1.86	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
20:70:155:ARG:H	20:70:170:THR:HB	1.69	0.57
20:70:78:TRP:CE3	20:70:125:LYS:HE3	2.39	0.57
25:75:57:LEU:HA	25:75:61:LYS:HD2	1.86	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
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
60:14:24:ASN:O	60:14:54:GLU:HB2	2.05	0.57
78:1S:212:U:H2'	78:1S:213:A:C8	2.39	0.57
57:11:94:ILE:HG12	69:23:12:ALA:HB1	1.87	0.57
70:24:102:LYS:N	70:24:102:LYS:HD2	2.19	0.57
70:24:29:HIS:HB2	70:24:32:ARG:CB	2.35	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
15:65:154:PRO:HB2	79:2S:58:G:C5'	2.35	0.57
4:L4:107:ARG:HG3	79:2S:663:C:O3'	2.05	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
1:L1:55:LEU:HD23	1:L1:135:PRO:HD2	1.84	0.57
7:L7:134:VAL:O	7:L7:229:PHE:HB2	2.05	0.57
82:PT:76:C:H2'	82:PT:77:A:H4'	1.85	0.57
45:RC:88:THR:HG22	45:RC:104:VAL:HG13	1.85	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
2:L2:34:TYR:CD1	79:2S:2525:G:H2'	2.40	0.57
42:92:49:GLY:HA2	79:2S:277:G:C5'	2.34	0.57
79:2S:2927:C:H2'	79:2S:2928:C:C6	2.40	0.57
11:61:86:VAL:HG21	11:61:111:ASP:HB3	1.87	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:63:76:THR:O	13:63:80:VAL:HG23	2.04	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
32:82:19:ARG:HG2	32:82:20:HIS:N	2.20	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
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
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
13:63:46:ILE:HG22	13:63:49:ARG:HB2	1.87	0.57
15:65:172:ARG:NE	15:65:174:ILE:HD11	2.20	0.57
15:65:57:GLN:O	15:65:142:ILE:HD11	2.04	0.57
21:71:116:ARG:O	21:71:120:LYS:HE3	2.05	0.57
80:8S:81:U:H4'	80:8S:82:U:H5'	1.87	0.57
43:93:29:LEU:HD13	43:93:69:TYR:HD2	1.68	0.57
1:L1:24:LYS:O	1:L1:24:LYS:HD2	2.04	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
56:10:50:THR:HG21	56:10:57:THR:OG1	2.05	0.57
78:1S:1733:C:H2'	78:1S:1734:U:C6	2.40	0.57
78:1S:209:U:H2'	78:1S:210:A:H8	1.70	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
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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
82:PT:15:G:H22	82:PT:49:C:H42	1.53	0.57
50:S4:159:THR:HG21	50:S4:227:VAL:HB	1.87	0.57
52:S6:113:ILE:HD11	52:S6:124:LEU:HD22	1.86	0.57
52:S6:14:LYS:HD2	52:S6:123:GLY:CA	2.33	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
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
52:S6:184:LEU:HD21	78:1S:140:A:H5'	1.86	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
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
80:8S:37:A:H5''	80:8S:39:G:O4'	2.05	0.56
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
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
54:S8:189:LEU:O	54:S8:193:LEU:HB2	2.05	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
78:1S:381:C:H2'	78:1S:382:C:H6	1.68	0.56
69:23:49:ALA:O	69:23:103:LEU:HD22	2.04	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
10:60:200:LEU:HD11	10:60:209:ASN:ND2	2.18	0.56
25:75:135:ILE:HD13	25:75:135:ILE:O	2.04	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
52:S6:67:VAL:HG23	52:S6:99:GLY:HA2	1.87	0.56
59:13:30:SER:O	59:13:33:VAL:HG22	2.05	0.56
63:17:57:LEU:O	63:17:61:ILE:HG13	2.05	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:401:A:O2'	78:1S:402:C:H4'	2.04	0.56
78:1S:51:A:H62	78:1S:429:G:H21	1.53	0.56
78:1S:796:A:H2'	78:1S:797:G:H8	1.69	0.56
68:22:20:THR:OG1	68:22:22:LYS:HD3	2.04	0.56
79:2S:1526:U:H1'	79:2S:1595:U:H5'	1.87	0.56
79:2S:3146:G:H2'	79:2S:3147:G:H8	1.70	0.56
79:2S:87:U:H2'	79:2S:88:A:C8	2.40	0.56
14:64:41:GLN:HB3	14:64:42:LYS:HD3	1.88	0.56
18:68:147:ARG:HG2	18:68:148:GLU:H	1.70	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
38:88:5:ILE:HD12	38:88:11:PHE:CD2	2.40	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
61:15:60:LEU:O	61:15:60:LEU:HD13	2.05	0.56
45:RC:85:TRP:CZ3	63:17:29:GLN:HB3	2.39	0.56
63:17:85:VAL:N	63:17:86:PRO:HD2	2.20	0.56
78:1S:205:U:H2'	78:1S:206:A:C8	2.40	0.56
57:11:20:PHE:HB2	78:1S:211:U:H5''	1.86	0.56
78:1S:650:U:H2'	78:1S:651:G:C8	2.39	0.56
78:1S:870:C:H2'	78:1S:871:G:C8	2.40	0.56
66:20:58:LEU:HB2	66:20:88:LYS:HB3	1.86	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: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:912:G:H2'	79:2S:914:A:N7	2.20	0.56
19:69:136:ARG:O	19:69:140:GLU:HG3	2.06	0.56
34:84:91:ARG:O	34:84:95:ILE:HB	2.05	0.56
15:65:5:LYS:HG3	36:86:40:VAL:HG11	1.86	0.56
38:88:26:LYS:HD2	38:88:78:LEU:CD1	2.35	0.56
1:L1:14:LYS:HB3	1:L1:216:LEU:HD12	1.87	0.56
5:L5:64:ILE:HD12	5:L5:64:ILE:N	2.21	0.56
8:L8:158:ASP:HB2	8:L8:159:PRO:HD3	1.87	0.56
45:RC:46:LYS:O	45:RC:55:GLY:HA2	2.06	0.56
47:S1:189:ILE:HB	47:S1:190:PRO:HD3	1.87	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
78:1S:1003:A:H4'	78:1S:1004:U:H5''	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1279:C:H2'	78:1S:1280:C:C6	2.40	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
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
18:68:21:SER:HB2	79:2S:672:A:H5''	1.87	0.56
10:60:98:ARG:HD2	10:60:120:GLY:O	2.05	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
79:2S:418:A:H2	80:8S:5:U:H3	1.51	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:H	6:L6:18:LEU:HD22	1.70	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
58:12:67: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
78:1S:830:U:O2'	78:1S:831:U:H5''	2.05	0.56
70:24:8:ARG:HD3	70:24:28:LEU:HG	1.87	0.56
79:2S:225:C:H2'	79:2S:226:C:C6	2.40	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
79:2S:495:G:H2'	79:2S:496:C:C6	2.39	0.56
81:5S:12:U:H4'	81:5S:110:G:N2	2.14	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
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
17:67:61:ARG:HH21	80:8S:3:A:H4'	1.71	0.56
4:L4:329:PRO:HG2	7:L7:45:LEU:HB2	1.88	0.56
78:1S:1150:G:H22	83:MR:4:A:H3'	1.71	0.56
82:PT:20:G:H3'	82:PT:21:U:C5	2.41	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
48:S2:225:LEU:HB2	68:22:70:ASN:HD21	1.71	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
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
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
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
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
78:1S:531:C:H2'	78:1S:532:U:H5''	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
79:2S:1110:U:H2'	79:2S:1111:U:C6	2.41	0.56
79:2S:845:G:H2'	79:2S:847:A:OP2	2.06	0.56
18:68:3:ILE:H	18:68:3:ILE:HD12	1.70	0.56
8:L8:45:ASN:HA	25:75:28:THR:HA	1.88	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
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
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
56:10:82:LEU:HD13	56:10:86:ILE:HG12	1.88	0.56
58:12:103:LEU:HD22	58:12:103:LEU:H	1.70	0.56
58:12:87:PRO:HA	58:12:140:PHE:CZ	2.40	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
4:L4:110:ASN:HB2	15:65:201:ARG: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
79:2S:59:G:H2'	80:8S:33:A:O2'	2.06	0.56
3:L3:332:ARG:O	3:L3:333:LYS:HB2	2.06	0.56
6:L6:149:ILE:HG23	6:L6:155:LEU:HD12	1.88	0.56
49:S3:37:VAL:HG12	49:S3:50:ILE:CD1	2.35	0.56
61:15:110:GLU:HB2	64:18:119:ILE:HD11	1.88	0.56
57:11:129:ARG:HD3	78:1S:115:G:C8	2.41	0.56
78:1S:1474:G:H2'	78:1S:1475:A:H8	1.70	0.56
75:29:19:ARG:HH11	75:29:19:ARG:HG3	1.71	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
79:2S:511:G:H2'	79:2S:512:U:O4'	2.05	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
4:L4:162:THR:O	4:L4:166:VAL:HG23	2.06	0.56
7:L7:239:LEU:O	7:L7:243:MET:HG3	2.06	0.56
7:L7:60:ARG:HA	7:L7:60:ARG:HE	1.71	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
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
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
78:1S:219:A:OP1	78:1S:219:A:H4'	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
68:22:107:SER:HA	78:1S:804:A:C8	2.41	0.56
78:1S:900:A:C2'	78:1S:901:G:H5'	2.35	0.56
68:22:103:ILE:HD11	68:22:110:ILE:HG22	1.88	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
77:31:136:LYS:C	77:31:138:ARG:H	2.10	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
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
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
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:1024:G:H3'	79:2S:1025:A:C5'	2.35	0.55
79:2S:1808:G:H4'	79:2S:2559:U:O4	2.06	0.55
4:L4:221:ASN:HD21	79:2S:212:G:H3'	1.70	0.55
79:2S:2361:A:N6	79:2S:2377:G:H1	1.95	0.55
3:L3:95:THR:HB	79:2S:3243:A:H4'	1.87	0.55
79:2S:438:A:H2'	79:2S:439:C:O4'	2.05	0.55
81:5S:28:C:H2'	81:5S:29:C:O4'	2.06	0.55
11:61:115:LYS:HB2	11:61:115:LYS:NZ	2.21	0.55
20:70:89:ASN:ND2	21:71:156:TYR:HB3	2.21	0.55
13:63:128:ARG:HG3	35:85:114:ARG:HH11	1.70	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:HH11	38:88:46:ARG:HG2	1.71	0.55
4:L4:39:PHE:CE1	4:L4:236:LEU:HA	2.40	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:L9:18:VAL:HG12	9:L9:27:VAL:HG22	1.88	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
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: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
79:2S:87:U:H2'	79:2S:88:A:H8	1.72	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
80:8S:53:A:H2'	80:8S:54:A:C8	2.41	0.55
2:L2:23:ARG:HG3	2:L2:23:ARG:HH11	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
59:13:98:VAL:O	59:13:102:LEU:HG	2.06	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
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
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
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
79:2S:3121:U:C1'	79:2S:3122:A:H5''	2.35	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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:162:ILE:HG22	50:S4:163:ASP:N	2.21	0.55
60:14:103:ARG:HD2	72:26:49:ALA:HB2	1.87	0.55
49:S3:209:ILE:HG22	63:17:38:ILE:HG13	1.88	0.55
55:S9:50:SER:HB3	78:1S:1:U:H5	1.71	0.55
78:1S:562:G:H2'	78:1S:563:U:C6	2.41	0.55
79:2S:1115:G:H5''	79:2S:1116:G:C5'	2.36	0.55
79:2S:191:U:H2'	79:2S:192:C:C6	2.42	0.55
79:2S:1951:C:H5	79:2S:2095:G:O6	1.90	0.55
8:L8:48:ARG:HG3	79:2S:2585:G:C8	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
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
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
47:S1:100:PHE:HZ	47:S1:103:MET:HB2	1.71	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
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
78:1S:106:U:H2'	78:1S:107:C:C6	2.40	0.55
78:1S:1690:G:H2'	78:1S:1691:A:C8	2.42	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
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
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:HD12	38:88:8:ILE:H	1.71	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
44:P0:56:ASN:HB3	44:P0:80:VAL:HG23	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:S2:41:LEU:O	48:S2:45:VAL:HG23	2.07	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
78:1S:310:C:H2'	78:1S:311:U:C6	2.42	0.55
69:23:50:LYS:CE	78:1S:435:C:H5''	2.35	0.55
78:1S:446:A:N6	78:1S:461:G:H21	2.04	0.55
68:22:57:ARG:HG2	78:1S:864:U:OP2	2.06	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
11:61:141:ARG:O	11:61:145:LYS:HB2	2.06	0.55
11:61:15:GLU:HB3	11:61:130:VAL:O	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
82:ET:17:C:H2'	82:ET:18(A):U:C5	2.41	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
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
63:17:3:ARG:HB2	78:1S:1414:U:H5'	1.88	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
54:S8:138:ASN:ND2	78:1S:197:A:H61	2.04	0.55
78:1S:640:U:H2'	78:1S:641:G:C8	2.42	0.55
68:22:41:MET:HB3	68:22:46:TYR:HB2	1.87	0.55
1:L1:207:LYS:HD3	79:2S:2491:A: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
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
13:63:27:ASP:HB3	80:8S:29:U:H5''	1.88	0.55
1:L1:38:LEU:HA	1:L1:206:VAL:HG22	1.88	0.55
2:L2:240:ALA:HB2	79:2S:2154:U:H4'	1.89	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
51:S5:58:LEU:O	51:S5:62:VAL:HG23	2.07	0.55
52:S6:199:GLN:O	52:S6:203:GLU:HG2	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
73:27:20:LYS:HD3	73:27:20:LYS:H	1.72	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
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
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
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
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
51:S5:189:THR:OG1	51:S5:192:GLU:HG3	2.07	0.55
64:18:144:ARG:O	64:18:145:ARG:HB2	2.07	0.55
78:1S:1488:G:H3'	78:1S:1515:A:H61	1.72	0.55
78:1S:422:G:H2'	78:1S:423:G:C8	2.42	0.55
73:27:36:LYS:HG2	73:27:43:ILE:HG22	1.88	0.55
79:2S:1023:C:C2	79:2S:1024:G:H1'	2.42	0.55
5:L5:36:LEU:HD23	79:2S:2748:A:H1'	1.88	0.55
79:2S:3193:C:H2'	79:2S:3194:C:C6	2.42	0.55
11:61:32:ARG:O	11:61:36:VAL:HG23	2.07	0.55
13:63:124:ILE:N	13:63:124:ILE:HD13	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
6:L6:176:PHE:CD2	33:83:107:ILE:HG21	2.40	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
80:8S:26:U:H2'	80:8S:27:U:C6	2.42	0.55
42:92:37:ALA:HB3	42:92:40:LYS:HB2	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:93:45:LYS:NZ	43:93:45:LYS:HB2	2.22	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
45:RC:222:LEU:CD2	45:RC:234:LEU:HD13	2.37	0.55
60:14:85:ALA:N	60:14:119:THR:HG22	2.13	0.55
78:1S:1386:G:H2'	78:1S:1387:G:C8	2.42	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
72:26:23:CYS:HB3	72:26:28:LYS:H	1.71	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
17:67:171:ARG:HD2	79:2S:3274:A:OP2	2.07	0.55
14:64:75:GLY:O	79:2S:561:C:H5''	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
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
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
59:13:99:ARG:HH22	59:13:102:LEU:HD12	1.72	0.54
78:1S:1692:G:H2'	78:1S:1693:A:C8	2.43	0.54
78:1S:1690:G:H21	78:1S:1712:A:N6	2.05	0.54
50:S4:37:LYS:HD2	78:1S:297:U:H5''	1.89	0.54
78:1S:822:U:H3'	78:1S:823:G:H5''	1.89	0.54
79:2S:1138:U:H2'	79:2S:1139:G:O4'	2.07	0.54
44:P0:46:ARG:NH2	79:2S:1257:C:H4'	2.12	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
79:2S:434:U:H2'	79:2S:435:C:C6	2.41	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
10:60:23:ASN:HD22	10:60:23:ASN:N	2.05	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:89:6:SER:OG	39:89:9:ILE:HG12	2.07	0.54
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
46:S0:119:ARG:HA	46:S0:119:ARG:HE	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:HB3	49:S3:148:LYS:NZ	2.22	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
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
78:1S:967:A:H2'	78:1S:968:U:C6	2.42	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
79:2S:1813:A:H2'	79:2S:1814:A:H5'	1.89	0.54
15:65:66:VAL:O	15:65:127:TYR:HA	2.07	0.54
15:65:3:ALA:O	15:65:7:LEU:HD13	2.06	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
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
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
61:15:124:THR:HG21	78:1S:1182:U:H4'	1.90	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
78:1S:406:U:H2'	78:1S:407:A:C8	2.42	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
79:2S:599:C:C3'	79:2S:600:G:H5''	2.37	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
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
78:1S:1116:A:H2'	78:1S:1117:U:C6	2.43	0.54
69:23:144:ARG:HD2	69:23:145:SER:H	1.71	0.54
79:2S:2609:A:H2'	79:2S:2610:G:C8	2.41	0.54
4:L4:322:GLN:CB	79:2S:608:A:H5'	2.37	0.54
77:31:119:ARG:HE	77:31:139:LEU:HD21	1.72	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
7:L7:224:ILE:HD11	20:70:35:VAL:HG12	1.89	0.54
30:80:16:LEU:HA	30:80:19:LYS:HE2	1.89	0.54
26:76:17:LYS:CG	80:8S:23:U:H4'	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
5:L5:64:ILE:HD11	5:L5:105:ILE:HG23	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:HB2	54:S8:10:LYS:NZ	2.23	0.54
54:S8:76:THR:HG22	54:S8:108:PRO:CG	2.26	0.54
56:10:77:ARG:HH21	56:10:86:ILE:HD11	1.73	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
78:1S:1419:G:H2'	78:1S:1420:C:O4'	2.07	0.54
59:13:90:TYR:CD2	78:1S:869:A:H5''	2.43	0.54
67:21:62:ARG:HB3	67:21:64:GLU:HG2	1.90	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
79:2S:987:U:H2'	79:2S:988:U:C6	2.43	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:89:36:ARG:HG2	39:89:36:ARG:HH11	1.72	0.54
82:ET:9:G:H1'	82:ET:46:G:H2'	1.88	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
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:S7:109:VAL:HG13	53:S7:110:GLN:H	1.72	0.54
53:S7:97:ARG:O	53:S7:98:ILE:HB	2.08	0.54
65:19:15:ILE:HD13	65:19:60:SER:HB2	1.90	0.54
78:1S:1525:A:H3'	78:1S:1526:A:H8	1.71	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
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
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
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
3:L3:56:ILE:HD11	3:L3:359:ILE:HG23	1.89	0.54
7:L7:140:SER:O	7:L7:144:ILE:HG13	2.08	0.54
7:L7:88:ARG:HH21	7:L7:92:ILE:HA	1.73	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
61:15:52:LYS:HB2	61:15:53:PRO:HD3	1.90	0.54
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
48:S2:148:LEU:O	67:21:3:ASN:HB2	2.07	0.54
69:23:26:GLU:O	69:23:30:LYS:HB2	2.08	0.54
79:2S:2181:C:H2'	79:2S:2182:A:C8	2.43	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
14:64:108:ARG:HG2	14:64:108:ARG:HH21	1.73	0.54
13:63:29:ALA:HB2	15:65:201:ARG:HH12	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
47:S1:29:TRP:CD1	47:S1:47:LEU:HD23	2.43	0.54
49:S3:211:PRO:HG3	63:17:20:TYR:CE1	2.39	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
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
68:22:10:ALA:O	68:22:14:ILE:HG13	2.07	0.54
79:2S:1240:A:H61	79:2S:1244:A:H5''	1.72	0.54
19:69:61:SER:HB3	79:2S:1689:U:H5''	1.90	0.54
79:2S:1739:U:H2'	79:2S:1740:U:H5'	1.90	0.54
79:2S:725:G:C3'	79:2S:726:G:H5''	2.38	0.54
37:87:31:LYS:HZ1	79:2S:815:G:H5''	1.73	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
21:71:17:ARG:O	21:71:18:ASP:HB2	2.07	0.54
18:68:170:ARG:HB2	28:78:56:VAL:HG11	1.90	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
41:91:22:ALA:HA	41:91:25:LYS:HE2	1.89	0.54
3:L3:260:VAL:HG21	79:2S:2987:A:C2	2.43	0.54
3:L3:50:LYS:HG3	3:L3:328:ILE:HD12	1.89	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
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
45:RC:32:LEU:HD21	45:RC:94:VAL:HG11	1.90	0.54
51:S5:187:ILE:N	51:S5:187:ILE:HD12	2.21	0.54
55:S9:162:SER:HB2	55:S9:163:PRO:HD2	1.90	0.54
55:S9:175:ARG:HD2	55:S9:175:ARG:O	2.07	0.54
59:13:129:TYR:HA	59:13:132:VAL:HG22	1.90	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
79:2S:790:U:H2'	79:2S:791:A:C8	2.42	0.54
79:2S:79:U:H2'	79:2S:80:G:C8	2.42	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
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
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:S8:110:ARG:HE	54:S8:121:LEU:HD21	1.73	0.54
54:S8:8:ARG:HD3	54:S8:21:PHE:HB3	1.90	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
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
68:22:41:MET:HB2	68:22:47:ILE:HG12	1.90	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
32:82:50:ILE:HG22	79:2S:426:G:H4'	1.89	0.54
10:60:40:LYS:HD2	10:60:40:LYS:N	2.22	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
18:68:170:ARG:HD2	28:78:56:VAL:HG21	1.90	0.54
32:82:4:LEU:CD1	32:82:5:PRO:HD2	2.38	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
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
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
56:10:4:PRO:HG2	56:10:7:ASP:OD1	2.07	0.53
78:1S:1569:A:H2'	78:1S:1570:A:C8	2.43	0.53
78:1S:586:G:H2'	78:1S:587:C:C6	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:694:U:H5''	78:1S:695:U:H5	1.73	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
79:2S:1509:A:H2'	79:2S:1510:G:O4'	2.08	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
14:64:32:LEU:O	14:64:48:GLY:HA3	2.08	0.53
26:76:70:ILE:H	26:76:70:ILE:HD12	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
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
51:S5:183:ALA:CB	51:S5:190:ILE:HD13	2.38	0.53
60:14:63:ALA:O	60:14:67:VAL:HG23	2.07	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
71:25:93:SER:HB2	71:25:100:ILE:H	1.72	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
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
80:8S:114:G:H2'	80:8S:115:C:C6	2.43	0.53
41:91:19:LYS:HD2	41:91:19:LYS:N	2.23	0.53
82:ET:9:G:H4'	82:ET:47:G:H5'	1.90	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
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
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
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
68:22:31:SER:O	68:22:35:ILE:HG12	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
40:90:125:LYS:HD2	79:2S:2897:A:C5'	2.38	0.53
21:71:26:HIS:HB2	81:5S:9:C:OP1	2.08	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
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
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
82:PT:70:C:H2'	82:PT:71:G:C8	2.43	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
63:17:103:ASP:OD1	63:17:122:ILE:HG21	2.08	0.53
78:1S:1260:U:H2'	78:1S:1261:G:C8	2.43	0.53
65:19:72:GLY:HA3	78:1S:1498:G:OP1	2.09	0.53
78:1S:397:A:H2'	78:1S:398:G:O4'	2.07	0.53
66:20:118:VAL:HG22	66:20:119:ALA:H	1.72	0.53
51:S5:189:THR:HB	71:25:97:LYS:HZ3	1.72	0.53
67:21:86:SER:HA	73:27:6:ASP:CB	2.39	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
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
13:63:128:ARG:HG3	35:85:114:ARG:NH1	2.24	0.53
36:86:4:LYS:HG3	36:86:15:LYS:O	2.08	0.53
80:8S:104:A:OP2	80:8S:105:A:H2'	2.09	0.53
5:L5:72:ASP:OD1	81:5S:7:G:H1'	2.08	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
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
51:S5:76:ARG:HD2	62:16:122:ARG:NE	2.23	0.53
78:1S:1414:U:H2'	78:1S:1414:U:O2	2.09	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
68:22:15:ASN:O	68:22:19:LYS:HG3	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
79:2S:1158:A:H2'	79:2S:1159:A:H4'	1.90	0.53
79:2S:200:C:H5'	79:2S:221:A:C2	2.43	0.53
79:2S:2060:A:H2'	79:2S:2061:G:C5'	2.39	0.53
79:2S:700:C:H2'	79:2S:701:G:C8	2.44	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:HD1	20:70:171:PHE:H	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
46:S0:84:ARG:O	46:S0:88:LYS:HD2	2.09	0.53
51:S5:184:PHE:CD2	51:S5:185:ARG:HG3	2.44	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
69:23:32:ARG:HH12	78:1S:375:U:H5''	1.72	0.53
68:22:103:ILE:HD11	68:22:110:ILE:CG2	2.39	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
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
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
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:S1:148:ASN:N	47:S1:148:ASN:HD22	1.96	0.53
47:S1:61:LEU:N	47:S1:61:LEU:HD13	2.23	0.53
48:S2:54:GLU:O	48:S2:58:LEU:HB2	2.08	0.53
61:15:97:TYR:HB2	61:15:102:PHE:CE1	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:19:29:GLU:OE2	65:19:110:LYS:HD2	2.09	0.53
78:1S:1760:G:O2'	78:1S:1761:U:H5'	2.08	0.53
78:1S:487:G:H22	78:1S:500:C:H42	1.55	0.53
53:S7:142:TYR:O	68:22:49:GLU:HB2	2.08	0.53
8:L8:124:ASP:HA	79:2S:120:G:H22	1.72	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
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:N	38:88:8:ILE:HD12	2.23	0.53
39:89:6:SER:HB2	80:8S:113:U:OP2	2.08	0.53
2:L2:177:LYS:HD3	43:93:29:LEU:HD12	1.90	0.53
6:L6:55:LEU:HD11	6:L6:66:SER:OG	2.09	0.53
55:S9:144:PRO:HD2	78:1S:474:A:H5''	1.91	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: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
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
79:2S:1338:C:H2'	79:2S:1339:C:C6	2.43	0.53
79:2S:1921:A:H2'	79:2S:1922:A:H8	1.74	0.53
79:2S:308:A:H5'	79:2S:2223:A:O2'	2.08	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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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:2279:A:H2	79:2S:2305:G:N7	2.07	0.53
79:2S:241:G:C2'	79:2S:242:C:H5'	2.39	0.53
79:2S:2675:C:O5'	79:2S:2675:C:H6	1.92	0.53
79:2S:85:A:H61	79:2S:99:A:H3'	1.74	0.53
79:2S:866:A:H3'	79:2S:867:G:H8	1.74	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
80:8S:98:U:H2'	80:8S:99:C:H5'	1.91	0.53
4:L4:212:ASP:OD1	4:L4:216:VAL:HG13	2.09	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
59:13:88:LEU:HA	59:13:91:LEU:HD12	1.91	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
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
79:2S:1117:G:H2'	79:2S:1118:C:C6	2.44	0.53
44:P0:82:GLY:O	79:2S:1282:G:H4'	2.08	0.53
79:2S:398:A:H1'	79:2S:1416:C:OP1	2.08	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
79:2S:810:A:H2'	79:2S:811:U:C6	2.44	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
80:8S:107:G:H2'	80:8S:108:C:H6	1.72	0.53
80:8S:41:A:N6	80:8S:103:G:H1'	2.21	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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:223:U:H2'	78:1S:224:C:C6	2.44	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
79:2S:1439:U:H6	79:2S:1439:U:O5'	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
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
18:68:180:ARG:HD2	18:68:185:LYS:HB2	1.91	0.52
18:68:58:ASN:O	18:68:60:PRO:HD3	2.07	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
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
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
46:S0:197:ILE:HD12	46:S0:197:ILE:H	1.74	0.52
46:S0:71:GLU:HA	46:S0:95:ALA:HA	1.90	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
59:13:99:ARG:NE	59:13:99:ARG:HA	2.25	0.52
47:S1:45:LYS:HB2	60:14:13:VAL:HG23	1.91	0.52
78:1S:157:A:H2'	78:1S:158:U:H5''	1.91	0.52
68:22:24:GLN:HB3	68:22:64:GLN:NE2	2.21	0.52
79:2S:1525:G:N3	79:2S:1525:G:H2'	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
82:ET:49:C:H2'	82:ET:60:A:H4'	1.91	0.52
3:L3:13:HIS:HB3	3:L3:16:PHE:HD1	1.73	0.52
5:L5:150:LEU:HB3	11:61:142:LYS:HD2	1.90	0.52
5:L5:57:ASN:ND2	81:5S:26:C:H3'	2.25	0.52
48:S2:53:ILE:HG23	48:S2:56:ILE:HD12	1.90	0.52
49:S3:105:MET:O	49:S3:109:LEU:HG	2.08	0.52
62:16:128:LYS:HB2	62:16:137:ARG:NH2	2.25	0.52
62:16:18:ALA:CB	62:16:69:VAL:HG22	2.40	0.52
64:18:145:ARG:HE	64:18:145:ARG:HA	1.74	0.52
65:19:102:ARG:O	65:19:106:GLN:HG3	2.10	0.52
78:1S:1585:U:N3	78:1S:1611:A:H2	2.07	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
69:23:27:ASN:O	69:23:31:LYS:HG2	2.09	0.52
79:2S:1598:G:H2'	79:2S:1599:G:C8	2.44	0.52
79:2S:421:G:C6	79:2S:2384:A:H4'	2.44	0.52
3:L3:2:SER:N	79:2S:2940:A:C8	2.77	0.52
79:2S:3120:C:O2'	79:2S:3121:U:H2'	2.08	0.52
31:81:105:GLN:HA	79:2S:3324:C:O2'	2.08	0.52
79:2S:359:U:H2'	79:2S:360:G:O4'	2.10	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
76:30:28:LYS:HD3	76:30:29:LYS:N	2.25	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
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
82:ET:6:G:O2'	82:ET:7:G:H5'	2.10	0.52
46:S0:127:ARG:HH11	46:S0:127:ARG:HG3	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
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
78:1S:1671:A:H2'	78:1S:1672:G:O4'	2.09	0.52
78:1S:643:G:H2'	78:1S:644:C:C6	2.45	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
79:2S:1198:C:H2'	79:2S:1199:C:C5	2.44	0.52
79:2S:235:A:H2'	79:2S:236:G:H8	1.72	0.52
79:2S:3375:A:H2'	79:2S:3378:C:H6	1.74	0.52
37:87:56:ARG:NH2	79:2S:362:U:H3'	2.17	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
76:30:14:VAL:HG21	78:1S:567:A:N3	2.25	0.52
81:5S:11:A:O2'	81:5S:13:A:H5''	2.09	0.52
10:60:57:LEU:HB2	10:60:131:ILE:HG13	1.90	0.52
27:77:46:ILE:HA	27:77:70:PRO:HA	1.91	0.52
18:68:176:ARG:O	28:78:51:GLY:HA2	2.09	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
42:92:26:THR:OG1	42:92:71:ARG:HB3	2.09	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
50:S4:211:LYS:HB3	50:S4:217:THR:HG22	1.91	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
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
69:23:63:GLN:HA	69:23:65:ASN:H	1.74	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
2:L2:71:LEU:HD22	79:2S:1651:U:H4'	1.91	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
42:92:53:GLN:HB2	79:2S:2421:U:H5''	1.92	0.52
79:2S:3138:U:C3'	79:2S:3139:A:H5''	2.39	0.52
79:2S:66:A:H61	79:2S:76:G:H1'	1.70	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
9:L9:162:GLN:OE1	9:L9:181:VAL:HG23	2.09	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
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
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
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
69:23:86:PHE:O	69:23:88:PRO:HD3	2.09	0.52
79:2S:1202:A:C2	79:2S:2857:C:H5'	2.45	0.52
6:L6:2:SER:N	79:2S:1385:C:HO2'	2.07	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
9:L9:96:HIS:CD2	79:2S:3024:A:H5''	2.45	0.52
79:2S:631:U:H4'	79:2S:3172:A:H61	1.75	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
1:L1:17:LEU:HD23	1:L1:17:LEU:H	1.73	0.52
9:L9:16:VAL:HG12	9:L9:29:GLY:CA	2.40	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
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
78:1S:1737:G:H2'	78:1S:1738:U:C6	2.44	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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:958:C:H5''	79:2S:2800:G:P	2.50	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
18:68:92:ARG:HB3	79:2S:784:A:C2	2.45	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
43:93:6:LYS:C	43:93:6:LYS:HD3	2.30	0.52
1:L1:103:LEU:CD1	1:L1:106:LYS:HG3	2.40	0.52
1:L1:24:LYS:HG3	1:L1:214:PHE:CE1	2.43	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
45:RC:7:LEU:HB3	45:RC:313:TRP:HB3	1.91	0.52
46:S0:41:ARG:HG3	46:S0:41:ARG:HH21	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
56:10:59: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: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
78:1S:844:A:H2'	78:1S:845:G:C8	2.44	0.52
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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
58:12:61:VAL:HG23	58:12:90:LYS:O	2.10	0.52
78:1S:1575:G:H2'	78:1S:1576:A:C8	2.45	0.52
78:1S:416:A:H5'	78:1S:417:A:C8	2.45	0.52
66:20:109:GLU:HB3	66:20:112:VAL:HB	1.92	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
37:87:55:ARG:HD2	79:2S:353:G:N7	2.25	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
38:88:31:LEU:HA	38:88:37:PRO:HA	1.91	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:HG23	8:L8:197:VAL:O	2.09	0.52
9:L9:158:ALA:HA	9:L9:161:LEU:HD12	1.92	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
56:10:1:MET:HG3	56:10:44:LYS:CB	2.40	0.52
78:1S:1336:A:H2'	78:1S:1337:A:C4'	2.40	0.52
78:1S:979:A:H2'	78:1S:980:G:C8	2.43	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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:846:A:H2'	79:2S:847:A:C8	2.45	0.52
79:2S:8:C:H2'	79:2S:9:U:O4'	2.10	0.52
23:73:84:SER:HB3	23:73:94:TYR:CD2	2.45	0.52
28:78:134:ALA:O	28:78:138:ILE:HG13	2.10	0.52
25:75:60:TYR:CG	35:85:25:LYS:HB3	2.45	0.52
41:91:4:LYS:HE3	78:1S:1774:G:N7	2.25	0.52
5:L5:134:ALA:HB2	5:L5:141:PRO:HD3	1.90	0.52
5:L5:98:ALA:HB1	5:L5:162:ALA:HB2	1.92	0.52
6:L6:58:LEU:CD2	6:L6:102:ASN:HA	2.39	0.52
6:L6:54:TYR:HD2	6:L6:55:LEU:H	1.58	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
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: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
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
13:63:47:ALA:HB1	13:63:48:PRO:CD	2.33	0.51
15:65:142:ILE:N	15:65:142:ILE:HD12	2.25	0.51
15:65:97:SER:HB3	79:2S:289:A:H5''	1.93	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
5:L5:41:LYS:H	21:71:69:LYS:HA	1.74	0.51
13:63:2:ALA:HB3	28:78:41:HIS:HE1	1.75	0.51
31:81:54:GLU:HA	31:81:57:GLN:HE21	1.74	0.51
31:81:50:ARG:HB2	31:81:90:PHE:HE2	1.75	0.51
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
8:L8:41:GLN:HE21	8:L8:41:GLN:N	2.08	0.51
9:L9:138:THR:O	9:L9:139:ASN:HB3	2.10	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:15:18:ARG:HD2	64:18:95:GLY:HA2	1.91	0.51
78:1S:1553:G:H1'	78:1S:1597:A:H2	1.76	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
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
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
79:2S:874:U:H5'	79:2S:875:G:H5'	1.91	0.51
17:67:27:LYS:HD2	79:2S:1447:G:C8	2.45	0.51
18:68:170:ARG:HH11	28:78:56:VAL:HG21	1.75	0.51
18:68:68:ALA:O	18:68:72:LYS:HG3	2.10	0.51
19:69:144:GLN:O	19:69:148:ASP:HB2	2.11	0.51
5:L5:37:VAL:HG12	21:71:30:TYR:HB2	1.93	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
80:8S:109:A:H2'	80:8S:110:C:H5'	1.92	0.51
2:L2:42:ARG:HA	2:L2:88:ILE:O	2.10	0.51
4:L4:138:ARG:NH1	4:L4:246:ARG:HG2	2.25	0.51
4:L4:121:ALA:HB3	4:L4:235:LEU:HD21	1.92	0.51
82:PT:16:C:O2	82:PT:61:U:H4'	2.10	0.51
46:S0:189:VAL:HG13	46:S0:190:ASP:N	2.21	0.51
46:S0:60:ALA:O	46:S0:64:ILE:HG13	2.10	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
58:12:66:VAL:HG12	58:12:67:THR:O	2.10	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
78:1S:750:U:H2'	78:1S:751:G:O4'	2.11	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
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
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
76:30:22:GLU:HG3	76:30:23:LYS:H	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:31:108:VAL:HA	77:31:113:LYS:O	2.09	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
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:L8:160:ILE:HD12	15:65:22:LEU:HG	1.91	0.51
8:L8:71:VAL:HG12	15:65:21:PHE:HE2	1.74	0.51
44:P0:45:LEU:HD22	44:P0:49:ALA:HB3	1.93	0.51
51:S5:77:TYR:HB3	51:S5:84:LYS:CA	2.39	0.51
63:17:84:TYR:O	63:17:85:VAL:HB	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
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
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
6:L6:19:LYS:HA	79:2S:592:A:H5''	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
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
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: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
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
64:18:18:LEU:O	64:18:19:ASN:HB2	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
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
78:1S:488:G:H2'	78:1S:489:C:H5'	1.93	0.51
78:1S:56:U:H4'	78:1S:57:G:H5'	1.93	0.51
78:1S:800:U:H2'	78:1S:801:G:C8	2.45	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:214:G:H2'	79:2S:215:G:H8	1.74	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
79:2S:435:C:H3'	79:2S:621:A:H61	1.75	0.51
13:63:19:GLN:H	13:63:19:GLN:CD	2.14	0.51
13:63:29:ALA:CB	15:65:201:ARG:HH12	2.23	0.51
4:L4:300:ARG:HG2	18:68:39:ARG:HB3	1.92	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
2:L2:243:THR:OG1	79:2S:2244:A:H5''	2.11	0.51
3:L3:217:ALA:HB3	3:L3:277:SER:HB2	1.93	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
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:HG2	55:S9:17:ARG:HH21	1.76	0.51
57:11:94:ILE:N	57:11:94:ILE:HD12	2.26	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
78:1S:271:A:H2'	78:1S:272:U:H4'	1.91	0.51
78:1S:20:G:H5'	78:1S:571:G:C8	2.46	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:HG3	73:27:29:ARG:HH11	1.74	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
3:L3:3:HIS:CD2	79:2S:2938:G:H5''	2.46	0.51
79:2S:3278:C:H3'	79:2S:3279:A:H5''	1.92	0.51
33:83:60:ARG:HH11	79:2S:622:A:H5'	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:60:165:ILE:CD1	10:60:165:ILE:H	2.23	0.51
11:61:143:ARG:HH11	11:61:143:ARG:HG3	1.74	0.51
11:61:18:VAL:HG22	11:61:70:THR:HG22	1.92	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
8:L8:181:LYS:HD2	80:8S:154:C:OP1	2.11	0.51
41:91:4:LYS:NZ	41:91:4:LYS:HB2	2.25	0.51
82:ET:26:C:C2'	82:ET:27:G:H5'	2.40	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
9:L9:152:GLU:O	9:L9:156:GLN:HB3	2.10	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
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
78:1S:1135:U:H2'	78:1S:1136:U:C6	2.46	0.51
79:2S:1322:U:H2'	79:2S:1323:G:H8	1.75	0.51
4:L4:87:GLN:NE2	79:2S:1439:U:H5''	2.25	0.51
79:2S:196:G:H21	79:2S:219:A:H61	1.57	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
36:86:31:GLY:HA3	79:2S:299:G:C4	2.45	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:L3:333:LYS:HE2	79:2S:3304:U:C6	2.46	0.51
13:63:47:ALA:HB3	13:63:49:ARG:HE	1.76	0.51
8:L8:74:THR:HG21	15:65:18:VAL:HB	1.92	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:HD2	28:78:10:LYS:N	2.26	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
2:L2:187:HIS:O	2:L2:191:LEU:HG	2.11	0.51
2:L2:88:ILE:N	2:L2:88:ILE:HD12	2.26	0.51
3:L3:45:SER:H	3:L3:181:ILE:HG21	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L6:40:LEU:HB3	6:L6:84:VAL:CG1	2.39	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
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
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
78:1S:1667:A:H2'	78:1S:1668:G:H8	1.74	0.51
78:1S:52:U:H2'	78:1S:53:G:C8	2.46	0.51
68:22:97:ARG:HB3	68:22:97:ARG:CZ	2.39	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
79:2S:818:C:H2'	79:2S:819:U:O4'	2.11	0.51
19:69:81:ARG:HG2	19:69:88:ARG:NH1	2.25	0.51
25:75:115:ARG:NH1	25:75:115:ARG:HG3	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
3:L3:146:ARG:HA	3:L3:146:ARG:HE	1.75	0.51
3:L3:83:PRO:HB2	3:L3:165:GLN:NE2	2.25	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
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:S7:63:PRO:C	53:S7:65:PRO:HD2	2.30	0.51
53:S7:59:ALA:HB1	53:S7:93:LEU:HD12	1.93	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
64:18:105:VAL:CG1	64:18:106:GLU:N	2.74	0.51
64:18:16:ARG:HH11	64:18:16:ARG:HG3	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
78:1S:694:U:H3'	78:1S:695:U:H6	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:S0:155:PHE:HA	67:21:60:ARG:HB3	1.93	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
19:69:128:LYS:HE2	79:2S:1724:U:C5	2.46	0.51
10:60:115:MET:HB2	79:2S:2865:U:OP1	2.11	0.51
79:2S:858:A:H2'	79:2S:859:G:C8	2.46	0.51
15:65:71:ARG:CG	15:65:94:TYR:HB2	2.41	0.51
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
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:L7:151: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
7:L7:25:GLN:HA	7:L7:29:GLU:H	1.76	0.51
9:L9:112:ILE:HD11	9:L9:128:VAL:HG22	1.93	0.51
49:S3:191:ASP:OD2	49:S3:192:PRO:HD2	2.11	0.51
49:S3:49:ILE:N	49:S3:49:ILE:HD12	2.26	0.51
55:S9:112:GLN:HG3	55:S9:148:VAL:HG21	1.92	0.51
62:16:6:SER:HA	62:16:22:VAL:O	2.11	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:160:C:H2'	78:1S:161:U:O4'	2.10	0.51
78:1S:1732:A:H2'	78:1S:1733:C:C6	2.46	0.51
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
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
32:82:37:GLY:HA2	79:2S:640:U:OP2	2.10	0.51
81:5S:113:C:H2'	81:5S:114:U:C6	2.46	0.51
11:61:60:ARG:HH12	42:92:103:ALA:HB1	1.75	0.51
16:66:130:LYS:O	16:66:133:ARG:HG2	2.11	0.51
14:64:123:LEU:HD22	16:66:190:VAL:HG23	1.93	0.51
17:67:159:LYS:N	17:67:159:LYS:HD3	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:82:19:ARG:HB2	32:82:31:ASN:O	2.11	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
1:L1:189:PHE:CE1	1:L1:200:ASN:HB2	2.46	0.51
3:L3:364:LYS:HD2	3:L3:364:LYS:N	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
50:S4:152:PRO:HG2	52:S6:215:ARG:HG2	1.93	0.51
50:S4:44:LEU:HD12	50:S4:79:ASP:O	2.10	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
57:11:109:VAL:HG23	57:11:137:PHE:C	2.32	0.50
78:1S:1470:C:O2'	78:1S:1572:G:H5'	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
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
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:O5'	79:2S:1647:A:H8	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
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
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
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
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
57:11:70:ILE:N	57:11:70:ILE:HD12	2.26	0.50
64:18:121:ALA:O	64:18:125:ILE:HG13	2.11	0.50
78:1S:1681:A:O2'	78:1S:1682:U:H5'	2.11	0.50
50:S4:131:LEU:HD21	78:1S:243:G:H1'	1.93	0.50
78:1S:515:A:H2'	78:1S:516:G:O4'	2.10	0.50
68:22:104:LEU:HD13	68:22:104:LEU:N	2.26	0.50
69:23:82:LYS:N	69:23:82:LYS:HD3	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:26:36:ILE:HD13	72:26:36:ILE:C	2.31	0.50
8:L8:126:SER:HB2	79:2S:121:A:H61	1.75	0.50
79:2S:2079:G:C2'	79:2S:2080:C:H5'	2.41	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
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
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
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:S4:181: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
57:11:103: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:HG3	64:18:134:ARG:HH11	1.75	0.50
78:1S:372:G:H1'	78:1S:612:U:O2	2.11	0.50
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
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
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
43:93:19:GLY:HA3	79:2S:2189:U:H4'	1.91	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
24:74:34:SER:HB3	79:2S:3052:G:OP1	2.11	0.50
79:2S:3096:C:H2'	79:2S:3097:C:C6	2.46	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
20:70:26:ARG:HH22	20:70:28:ARG:HH21	1.58	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
1:L1:103:LEU:CD1	1:L1:128:LEU:HB3	2.41	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L1:39:LYS:HA	1:L1:163:LEU:O	2.12	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
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
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:1569:A:H2'	78:1S:1570:A:H8	1.76	0.50
78:1S:1739:C:H2'	78:1S:1740:A:C8	2.47	0.50
78:1S:391:A:O4'	78:1S:1731:A:H5'	2.11	0.50
48:S2:228:ASN:ND2	67:21:1:MET:HG2	2.24	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
19:69:99:LEU:HD12	79:2S:1722:U:H5''	1.92	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
79:2S:2726:C:O2'	79:2S:2727:A:H2'	2.11	0.50
79:2S:751:A:H2'	79:2S:752:C:H6	1.75	0.50
10:60:213:PHE:N	10:60:214:PRO:CD	2.74	0.50
10:60:55:ASN:ND2	10:60:164:LYS:HE2	2.27	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
16:66:157:GLU:O	16:66:161:LYS:HG3	2.11	0.50
16:66:87:MET:HG2	79:2S:1175:C:O2	2.10	0.50
18:68:82:VAL:HB	18:68:139:ILE:HA	1.94	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:HD23	20:70:106:LEU:O	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:HB3	42:92:61:LYS:NZ	2.26	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
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
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
5:L5:33:ARG:NH1	5:L5:33:ARG:HG3	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
48:S2:117:THR:O	48:S2:117:THR:HG23	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
56:10:50: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
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
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
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
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
18:68:102:ALA:HA	18:68:122:ILE:O	2.12	0.50
5:L5:44:TYR:CD1	21:71:33:VAL:HG13	2.47	0.50
23:73:75:PRO:HG2	23:73:105:PRO:HD3	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L6:176:PHE:CE2	33:83:107:ILE:HD13	2.47	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
51:S5:148:ARG:HH12	82:ET:36:A:H62	1.60	0.50
82:ET:60:A:H3'	82:ET:61:U:C6	2.46	0.50
1:L1:199:GLN:C	1:L1:201:VAL:H	2.15	0.50
3:L3:166:ILE:O	3:L3:166:ILE:HG13	2.11	0.50
3:L3:117:ARG:HA	3:L3:175:LYS:HD3	1.92	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
48:S2:242:ILE:N	48:S2:242:ILE:HD12	2.26	0.50
48:S2:38:VAL:HG22	48:S2:39:THR:N	2.23	0.50
49:S3:141:LYS:O	49:S3:141:LYS:HD3	2.12	0.50
57:11:69:LYS:N	57:11:69:LYS:HD2	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
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
80:8S:106:C:H4'	80:8S:107:G:H5''	1.93	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
46:S0:64:ILE:HG12	46:S0:120:LEU:HD21	1.92	0.50
47:S1:111:ARG:HH11	47:S1:111:ARG:HG2	1.77	0.50
50:S4:86:PHE:HE2	50:S4:102:VAL:HA	1.75	0.50
56:10:15:LEU:HD13	56:10:21:VAL:HG23	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
78:1S:1250:U:C2'	78:1S:1251:U:H5'	2.42	0.50
78:1S:251:A:H2'	78:1S:252:U:O4'	2.11	0.50
70:24:57:VAL:HA	70:24:73:GLY:HA2	1.94	0.50
79:2S:1055:A:H2'	79:2S:1056:U:O4'	2.12	0.50
3:L3:3:HIS:NE2	79:2S:2938:G:H5'	2.26	0.50
79:2S:3356:G:H2'	79:2S:3357:U:C6	2.46	0.50
79:2S:72:C:C1'	79:2S:74:G:H1'	2.41	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
82:ET:38:A:H2'	82:ET:39:A:O4'	2.11	0.50
4:L4:295:ILE:O	4:L4:299:ILE:HG12	2.12	0.50
82:PT:1:C:H2'	82:PT:2:G:H8	1.76	0.50
45:RC:7:LEU:HD12	45:RC:7:LEU:N	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
56:10:60:SER:HB3	56:10:65:TYR:HE2	1.76	0.50
56:10:13:GLN:HA	56:10:80:LEU:HD11	1.94	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: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:162:A:H3'	78:1S:163:G:H21	1.77	0.50
78:1S:1713:G:H2'	78:1S:1714:A:H5'	1.92	0.50
78:1S:839:U:H2'	78:1S:840:U:C5'	2.41	0.50
79:2S:2466:G:H2'	79:2S:2467:G:H5'	1.93	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:92:32:LYS:HG2	42:92:34:SER:H	1.77	0.50
2:L2:225:ILE:HB	2:L2:238:ILE:HG12	1.94	0.50
2:L2:83:HIS:CB	43:93:64:VAL:HG22	2.42	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
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
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
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:177:U:H3'	78:1S:178:U:C5'	2.42	0.49
78:1S:1785:U:H2'	78:1S:1786:G:H8	1.77	0.49
78:1S:224:C:H2'	78:1S:225:A:H8	1.77	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
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
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
7:L7:125:GLU:HG3	79:2S:987:U:C5'	2.42	0.49
11:61:114:ILE:HD12	11:61:114:ILE:N	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
21:71:102: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
21:71:17:ARG:HG3	21:71:21:LYS:O	2.12	0.49
21:71:8:ARG:HB2	79:2S:2757:U:O2'	2.12	0.49
30:80:74:ASN:HB2	30:80:87:VAL:O	2.12	0.49
3:L3:237:LYS:HD3	79:2S:2340:U:H5''	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
5:L5:3:PHE:HB2	5:L5:6:ASP:HB2	1.93	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
46:S0:197:ILE:N	46:S0:197:ILE:HD12	2.26	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
63:17:5:ARG:CG	63:17:9:VAL:HG11	2.42	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
69:23:144:ARG:CD	69:23:145:SER:H	2.25	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
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
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
19:69:153:LYS:O	19:69:157:GLU:HG3	2.12	0.49
19:69:93:VAL:HG12	19:69:97:ARG:NE	2.27	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
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
47:S1:140:ILE:HG23	47:S1:211:HIS:HB2	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
48:S2:44:LEU:HD22	48:S2:243:TYR:HB3	1.95	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
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:1367:G:H2'	79:2S:1368:U:H5	1.77	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:1525:G:O2'	79:2S:1829:G:H2'	2.12	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
80:8S:153:U:H2'	80:8S:154:C:C6	2.47	0.49
80:8S:68:G:H2'	80:8S:69:U:C6	2.48	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
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
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
63:17:113:LEU:HD23	63:17:113:LEU:N	2.27	0.49
78:1S:1774:G:H2'	78:1S:1775:U:C6	2.47	0.49
78:1S:431:C:H2'	78:1S:432:G:C8	2.48	0.49
71:25:70:LYS:HG3	71:25:71:ILE:HG13	1.94	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
36:86:26:ILE:CG2	79:2S:155:G:H21	2.22	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
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
36:86:40:VAL:O	36:86:44:VAL:HG23	2.12	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
45:RC:169:ILE:HD13	45:RC:183:LEU:HD21	1.95	0.49
45:RC:72:THR:CG2	45:RC:81:LEU:HD12	2.42	0.49
48:S2:104:VAL:HG22	48:S2:132:ALA:HB1	1.93	0.49
52:S6:198:ALA:O	52:S6:202:ARG:HG2	2.12	0.49
52:S6:56:ASN:HD21	78:1S:153:G:N2	2.10	0.49
62:16:92:TYR:O	62:16:97:VAL:HG23	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:17:122:ILE:HG23	63:17:123:ASN:N	2.28	0.49
78:1S:1340:U:H3'	78:1S:1341:A:H5''	1.91	0.49
78:1S:34:G:H2'	78:1S:35: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:97:C:H2'	78:1S:98:U:C6	2.47	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
79:2S:165:A:H2'	79:2S:166:C:O4'	2.12	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
3:L3:128:LYS:NZ	79:2S:3293:U:H5'	2.27	0.49
79:2S:3319:U:OP1	79:2S:3320:A:H5'	2.13	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
18:68:16:ARG:HG2	79:2S:974:G:OP1	2.12	0.49
76:30:47:VAL:HG22	76:30:48:THR:N	2.23	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
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
80:8S:30:C:H2'	80:8S:31:G:C8	2.47	0.49
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
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:HG23	53:S7:130:VAL:O	2.12	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
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
57:11:20:PHE:CG	78:1S:211:U:H5''	2.47	0.49
78:1S:467:G:H2'	78:1S:468:A:H5''	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:95:G:H2'	78:1S:96:G:H8	1.77	0.49
66:20:41:ILE:HG22	66:20:41:ILE:O	2.13	0.49
69:23:19:ARG:NE	69:23:19:ARG:HA	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
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:N3	79:2S:1878:G:H3'	2.27	0.49
79:2S:2882:U:H2'	79:2S:2883:U:H6	1.77	0.49
2:L2:21:ARG:CD	79:2S:824:C:H5''	2.38	0.49
79:2S:970:A:H2'	79:2S:971:G:C8	2.48	0.49
81:5S:90:U:H2'	81:5S:91:G:O4'	2.13	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
30:80:83:LYS:HD2	30:80:83:LYS:N	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
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
49:S3:40:ARG:HG2	66:20:110:PRO:HB3	1.94	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
63:17:29:GLN:HA	63:17:32:LYS:HE2	1.93	0.49
78:1S:1139:A:C2'	78:1S:1140:G:H5'	2.42	0.49
62:16:143:ARG:CD	78:1S:1191:U:H4'	2.43	0.49
78:1S:9:U:H2'	78:1S:11:A:OP2	2.12	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
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
69:23:140:LYS:NZ	69:23:140:LYS:HB2	2.26	0.49
74:28:34:GLU:O	74:28:35:ASP:HB2	2.12	0.49
79:2S:3043:C:O2'	79:2S:3044:G:H5'	2.12	0.49
79:2S:399:A:H2'	79:2S:400:G:H5'	1.95	0.49
6:L6:22:ARG:NH1	79:2S:608:A:H2'	2.27	0.49
79:2S:811:U:H2'	79:2S:812:G:C8	2.47	0.49
81:5S:71:G:H2'	81:5S:72:A:C8	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
17:67:118:GLN:HG2	17:67:119:VAL:N	2.28	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
17:67:3:ARG:HG3	79:2S:398:A:H5''	1.95	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
24:74:23:ARG:CG	24:74:24:GLY:H	2.25	0.49
24:74:5:ILE:N	24:74:5:ILE:HD12	2.28	0.49
30:80:17:VAL:HG12	30:80:17:VAL:O	2.11	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
8:L8:238:LEU:N	8:L8:238:LEU:HD22	2.28	0.49
47:S1:163:ALA:O	47:S1:167:VAL:HG23	2.12	0.49
55:S9:93:LEU:O	55:S9:96:VAL:HG22	2.13	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
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
67:21:34:ILE:HG22	67:21:36:VAL:HG23	1.94	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
19:69:88:ARG:HG2	79:2S:1864:A:H5'	1.95	0.49
79:2S:1902:G:H2'	79:2S:1903:U:O4'	2.12	0.49
79:2S:225:C:H2'	79:2S:226:C:H6	1.78	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
79:2S:79:U:H2'	79:2S:80:G:H8	1.78	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
34:84:26:PRO:HB3	79:2S:1695:U:O2	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:88:31:LEU:N	38:88:31:LEU:HD23	2.28	0.49
80:8S:53:A:H2'	80:8S:54:A:H8	1.76	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:CD1	7:L7:136:TYR:N	2.81	0.49
51:S5:166:ARG:HD2	74:28:46:GLY:CA	2.43	0.49
51:S5:77:TYR:HD2	51:S5:83:ARG:O	1.95	0.49
52:S6:14:LYS:HD3	52:S6:16:PHE:CE1	2.48	0.49
59:13:85:PRO:HB2	59:13:88:LEU:HB3	1.94	0.49
60:14:133:ARG:HH11	60:14:133:ARG:HG2	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
44:P0:55:LYS:HG3	79:2S:1281:G:H5'	1.94	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
79:2S:838:G:H2'	79:2S:839:C:C6	2.48	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
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
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
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
78:1S:1525:A:H3'	78:1S:1526:A:C8	2.48	0.49
55:S9:11:THR:CG2	78:1S:472:U:H5''	2.42	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
10:60:4:ARG:NH2	79:2S:1128:U:H5'	2.28	0.49
79:2S:1195:A:H2'	79:2S:1309:U:O2	2.13	0.49
79:2S:138:U:H2'	79:2S:139:G:C8	2.48	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
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
18:68:14:GLY:O	79:2S:974:G:H5''	2.13	0.49
16:66:15:LEU:HG	16:66:125:ARG:HA	1.94	0.49
16:66:170:LYS:NZ	16:66:170:LYS:HB3	2.28	0.49
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
16:66:119:VAL:O	20:70:163:PHE:HD1	1.95	0.49
37:87:18:LEU:CD2	37:87:25:ARG:HB2	2.43	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
45:RC:10:ARG:NE	45:RC:10:ARG:HA	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
57:11:54:ILE:N	57:11:54:ILE:HD12	2.27	0.48
45:RC:150:TRP:CZ2	63:17:37:GLU:HG3	2.48	0.48
78:1S:1139:A:H2'	78:1S:1140:G:H5'	1.94	0.48
52:S6:13:GLN:HE22	78:1S:151:G:H21	1.60	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
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
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
19:69:63:THR:HG21	79:2S:1861:G:H4'	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
16:66:35:VAL:HB	16:66:104:VAL:HG13	1.95	0.48
19:69:99:LEU:O	19:69:103:ARG:HB2	2.13	0.48
7:L7:77:VAL:HG12	20:70:59:VAL:HA	1.93	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
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
82:ET:16:C:H5'	82:ET:60:A:C2	2.48	0.48
1:L1:191:VAL:HG12	1:L1:191:VAL:O	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:L7:214: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
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
54:S8:37:LYS:HB2	54:S8:59:ARG:HE	1.78	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
45:RC:150:TRP:HZ2	63:17:37:GLU:HG3	1.78	0.48
65:19:57:ARG:O	65:19:61:VAL:HG23	2.13	0.48
78:1S:1435:G:H4'	78:1S:1436:A:H5'	1.94	0.48
78:1S:1519:U:H2'	78:1S:1520:U:C6	2.47	0.48
78:1S:237:C:H4'	78:1S:238:U:C6	2.48	0.48
78:1S:55:A:N1	78:1S:403:G:H1'	2.27	0.48
78:1S:832:U:H2'	78:1S:833:U:C4'	2.43	0.48
69:23:62:LYS:H	69:23:116:ASP:HB2	1.77	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:27:C:H4'	79:2S:328:U:H4'	1.95	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
82:ET:44:A:H2'	82:ET:45:A:C8	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
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
50:S4:64:ILE:HD11	70:24:18:LEU:HD21	1.95	0.48
71:25:95:HIS:HB3	78:1S:1530:C:P	2.53	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:O4'	79:2S:1951:C:O2	2.31	0.48
2:L2:7:ASN:HB3	79:2S:2183:A:H5''	1.95	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
79:2S:495:G:H2'	79:2S:496:C:H6	1.78	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
80:8S:118:C:H2'	80:8S:119:C:C6	2.48	0.48
1:L1:90:LEU:HD11	1:L1:112:ALA:CB	2.42	0.48
1:L1:55:LEU:HD11	1:L1:153:SER:O	2.13	0.48
48:S2:83:ILE:HG12	48:S2:100:ALA:CA	2.43	0.48
50:S4:163:ASP:O	50:S4:164:LEU:HB2	2.13	0.48
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
78:1S:1618:C:H1'	78:1S:1619:C:H5	1.79	0.48
78:1S:393:C:H2'	78:1S:394:C:H6	1.78	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
79:2S:1263:A:H2'	79:2S:1263:A:N3	2.28	0.48
79:2S:201:A:H2'	79:2S:202:G:C8	2.48	0.48
79:2S:186:U:H3	79:2S:230:U:H3	1.62	0.48
79:2S:241:G:H2'	79:2S:242:C:H5'	1.96	0.48
79:2S:3326:G:H2'	79:2S:3327:G:H8	1.77	0.48
14:64:120:VAL:HG22	16:66:197:LEU:HD13	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:63:159:VAL:HG22	28:78:99:ALA:HB2	1.96	0.48
33:83:18:ARG:CB	33:83:23:ASN:HA	2.42	0.48
25:75:53:HIS:O	80:8S:134:G:H5''	2.12	0.48
15:65:85:THR:HA	42:92:50:PHE:HB3	1.95	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
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
56:10:15:LEU:HD13	56:10:21:VAL:CG2	2.43	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
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
5:L5:44:TYR:HD2	79:2S:1084:A:H4'	1.79	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
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
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
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:L5:181:PRO:HG2	5:L5:195:LEU:HA	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:S3:208:ILE:HA	63:17:39:ALA:HB2	1.96	0.48
49:S3:62:ASN:O	56:10:92:ILE:HB	2.12	0.48
51:S5:25:LEU:H	51:S5:25:LEU:HD22	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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:H6	78:1S:1530:C:O5'	1.97	0.48
78:1S:752:A:H2'	78:1S:753:A:O4'	2.13	0.48
70:24:20:ARG:HA	70:24:76:TYR:HA	1.95	0.48
51:S5:57:SER:HB3	74:28:53:ILE:HD12	1.95	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
79:2S:891:G:H2'	79:2S:892:U:O4'	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
3:L3:261:MET:HG2	16:66:64:PHE:HA	1.96	0.48
43:93:26:VAL:O	43:93:30:GLU:HG3	2.14	0.48
2:L2:41:ILE:O	2:L2:89:TYR:HA	2.14	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
44:P0:89:THR:HG21	44:P0:96:ILE:HG21	1.94	0.48
47:S1:159:SER:HA	47:S1:162:ARG:HD2	1.96	0.48
47:S1:65:VAL:HB	47:S1:85:LYS:HE2	1.95	0.48
54:S8:191:PHE:O	54:S8:195:ARG:HG2	2.13	0.48
65:19:37:VAL:HG22	65:19:39:THR:H	1.78	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
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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
79:2S:32:U:H2'	79:2S:33:G:O4'	2.14	0.48
15:65:174:ILE:HG21	79:2S:63: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
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
82:ET:34:U:H5'	82:ET:35:C:OP2	2.14	0.48
46:S0:41:ARG:NH1	46:S0:45:VAL:HG21	2.28	0.48
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
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
78:1S:1655:A:H2'	78:1S:1656:U:H5'	1.94	0.48
69:23:139:LYS:HE3	78:1S:31:C:H4'	1.95	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
37:87:9:GLY:HA2	79:2S:1852:G:H21	1.79	0.48
2:L2:11:GLY:HA3	79:2S:2163:C:H1'	1.96	0.48
79:2S:2265:C:H2'	79:2S:2266:U:H6	1.78	0.48
15:65:70:ASN:HD22	79:2S:2599:U:H5''	1.75	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
10:60:178:ARG:N	10:60:179:PRO:HD2	2.29	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
13:63:64:LYS:HG3	28:78:69:TRP:CG	2.48	0.48
31:81:4:LEU:N	31:81:4:LEU:HD23	2.29	0.48
82:ET:14:A:H2'	82:ET:15:G:O4'	2.13	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:H	5:L5:131:LEU:HD13	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:L8:64:ILE:HG23	8:L8:68:ARG:CZ	2.44	0.48
47:S1:174:LYS:NZ	47:S1:174:LYS:HB2	2.28	0.48
47:S1:71:ALA:CB	60:14:114:ARG:HH12	2.24	0.48
49:S3:76:ARG:HD3	49:S3:76:ARG:O	2.12	0.48
47:S1:32:ILE:CD1	60:14:33:LEU:HD22	2.43	0.48
61:15:85:ILE:HD12	61:15:111:MET:O	2.13	0.48
61:15:13:LYS:HG3	61:15:14:THR:H	1.79	0.48
61:15:9:LYS:HB3	61:15:9:LYS:NZ	2.29	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
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
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
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
79:2S:603:A:H2'	79:2S:604:G:O4'	2.14	0.48
43:93:17:ARG:NH1	79:2S:861:C:H5'	2.28	0.48
28:78:40:HIS:HB3	79:2S:958:C:H1'	1.95	0.48
79:2S:996:A:H2'	79:2S:997:A:O4'	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
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
5:L5:65:ILE:CG2	5:L5:72:ASP:HB3	2.44	0.48
4:L4:329:PRO:HB3	7:L7:41:ARG:NH1	2.29	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
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
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:S9:140:ILE:HG12	55:S9:159:ALA:CB	2.44	0.48
55:S9:90:LYS:HB3	55:S9:95:TYR:CB	2.36	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1695:G:H21	78:1S:1706:C:N4	2.12	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
69:23:70:LYS:NZ	78:1S:567:A:H5''	2.29	0.48
78:1S:879:G:H2'	78:1S:880:C:C6	2.49	0.48
66:20:106:ILE:HG23	66:20:107:THR:HG23	1.95	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:N3	79:2S:2500:A:H3'	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
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
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
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:HG12	6:L6:98:VAL:O	2.14	0.48
7:L7:224:ILE:HG23	20:70:36:ILE:HG23	1.95	0.48
46:S0:182:LEU:O	46:S0:188:LEU:HB2	2.14	0.48
56:10:3:MET:HB2	56:10:4:PRO:HD2	1.96	0.47
51:S5:25:LEU:HG	62:16:60:PHE:HB3	1.96	0.47
78:1S:1414:U:H3'	78:1S:1415:U:H5''	1.96	0.47
78:1S:249:U:H3'	78:1S:250:C:C5'	2.43	0.47
66:20:27:THR:CG2	66:20:113:ASP:HB3	2.40	0.47
68:22:65:LEU:H	68:22:65:LEU:CD1	2.27	0.47
19:69:20:ARG:HD2	79:2S:1875:G:OP2	2.14	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
4:L4:29:PRO:HB3	18:68:25:TYR:CE2	2.49	0.47
19:69:8:LYS:HG3	19:69:19:LYS:HE3	1.95	0.47
35:85:70:TYR:HD1	35:85:73:LYS:HD2	1.79	0.47
15:65:60:VAL:HG21	80:8S:142:C:H4'	1.95	0.47
2:L2:48:ILE:HG13	2:L2:48:ILE:O	2.13	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
44:P0:43:LYS:HA	44:P0:46:ARG:HG2	1.96	0.47
82:PT:38:A:H2'	82:PT:39:A:O4'	2.14	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
60:14:70:LYS:HA	60:14:70:LYS:CE	2.41	0.47
64:18:134:ARG:HG3	64:18:134:ARG:NH1	2.28	0.47
64:18:76:PRO:CB	64:18:81:ILE:HB	2.44	0.47
49:S3:43:PRO:HD3	66:20:108:ILE:HG21	1.96	0.47
70:24:5:VAL:HG12	70:24:6:THR:N	2.29	0.47
64:18:57:ARG:NH1	71:25:75:LEU:HD21	2.29	0.47
79:2S:1525:G:H1'	79:2S:1829:G:H2'	1.96	0.47
18:68:16:ARG:NH2	79:2S:671:U:H5''	2.24	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
17:67:119:VAL:HA	17:67:145:HIS:O	2.14	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
82:ET:36:A:H2'	82:ET:37:U:C5	2.49	0.47
1:L1:126:PRO:HG2	1:L1:128:LEU:HG	1.96	0.47
4:L4:343:LYS:H	4:L4:343:LYS:HD3	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
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
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
61:15:121:ILE:HG23	61:15:123:TYR:CE1	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:19:6:VAL:HG13	65:19:7:ARG:HG3	1.96	0.47
47:S1:149:GLN:HE22	78:1S:1066:C:H4'	1.79	0.47
78:1S:488:G:OP1	78:1S:488:G:H4'	2.14	0.47
78:1S:749:U:H2'	78:1S:750:U:C6	2.50	0.47
73:27:46:VAL:HG12	73:27:47:PHE:N	2.30	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
41:91:25:LYS:HD2	79:2S:1923:C:H5''	1.96	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
13:63:46:ILE:O	13:63:46:ILE:HG22	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
82:ET:17:C:H2'	82:ET:18(A):U:H5	1.78	0.47
2:L2:6:ARG:O	2:L2:10:LYS:HG2	2.14	0.47
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
82:PT:58:A:C2'	82:PT:59:A:H5'	2.42	0.47
47:S1:124:ASN:HA	47:S1:137:ILE:O	2.14	0.47
47:S1:210:ILE:HG22	47:S1:210:ILE:O	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:S5:166:ARG:HD2	74:28:46:GLY:HA3	1.97	0.47
51:S5:23:VAL:HG13	51:S5:23:VAL:O	2.14	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
19:69:151:ARG:HD3	57:11:116:ARG:NH2	2.29	0.47
63:17:123:ASN:O	63:17:124:VAL:HG12	2.14	0.47
77:31:133:ALA:HB2	78:1S:1252:C:O4'	2.14	0.47
78:1S:425:A:N3	78:1S:425:A:H2'	2.29	0.47
78:1S:46:A:H4'	78:1S:48:G:OP1	2.13	0.47
78:1S:778:G:H5'	78:1S:778:G:N3	2.29	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
79:2S:1193:A:H3'	79:2S:1194:G:C8	2.49	0.47
27:77:75:VAL:HA	79:2S:1636:U:H4'	1.96	0.47
79:2S:3337:G:H2'	79:2S:3338:C:C6	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
23:73:12:ARG:HG3	23:73:12:ARG:HH11	1.79	0.47
26:76:59:VAL:O	26:76:64:LYS:HD3	2.14	0.47
42:92:93:LEU:N	42:92:93:LEU:HD23	2.29	0.47
82:ET:60:A:H3'	82:ET:61:U:H6	1.80	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
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:S5:148:ARG:NH1	51:S5:155:ALA:HB3	2.30	0.47
51:S5:113:ILE:HG23	51:S5:191:ALA:HB2	1.96	0.47
53:S7:98:ILE:CD1	53:S7:121:VAL:HG21	2.43	0.47
62:16:143:ARG:CZ	78:1S:1191:U:H5'	2.44	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
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
68:22:105:THR:HG22	68:22:110:ILE:HG12	1.97	0.47
68:22:89:TRP:CA	68:22:92:ASN:HB2	2.39	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:127:G:H2'	79:2S:128:G:H8	1.79	0.47
37:87:3:LYS:HG2	79:2S:2138:A:O2'	2.13	0.47
79:2S:2610:G:H2'	79:2S:2611:U:O4'	2.15	0.47
79:2S:268:A:O4'	79:2S:270:U:H1'	2.13	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
4:L4:315:LYS:HG2	79:2S:505:G:H5'	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
20:70:93:GLU:HB3	20:70:129:ILE:HD11	1.97	0.47
20:70:38:LYS:HG3	20:70:61:ILE:HD13	1.95	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
9:L9:174:LYS:HD3	40:90:127:LEU:HD11	1.96	0.47
2:L2:83:HIS:HB3	43:93:64:VAL:HG22	1.97	0.47
3:L3:311:PHE:HB3	3:L3:314:TYR:HB3	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L3:58:ARG:NH1	3:L3:59:ASP:O	2.48	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
45:RC:269:TYR:CZ	45:RC:271:VAL:HG22	2.49	0.47
46:S0:173:ILE:O	46:S0:177:LEU:HG	2.15	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
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
49:S3:63:GLY:HA3	56:10:92:ILE:HD13	1.96	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
78:1S:872:G:H21	78:1S:1047:G:H4'	1.80	0.47
72:26:2:PRO:HG3	78:1S:1142:A:H5''	1.97	0.47
78:1S:1243:G:H2'	78:1S:1243:G:N3	2.29	0.47
50:S4:12:LEU:HD13	78:1S:381:C:H5'	1.97	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:H	71:25:88:ILE:HD12	1.79	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:311:C:H2'	79:2S:312:C:H6	1.76	0.47
79:2S:3174:A:H2'	79:2S:3175:U:C5'	2.41	0.47
16:66:93:ALA:HB3	79:2S:631:U:H5''	1.95	0.47
79:2S:768:C:H2'	79:2S:769:G:O4'	2.14	0.47
81:5S:32:U:H3	81:5S:45:A:H61	1.63	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
42:92:8:ARG:HH12	42:92:10:THR:HB	1.80	0.47
42:92:6:LYS:HE2	42:92:94:GLY:HA2	1.96	0.47
1:L1:97:LYS:O	1:L1:97:LYS:HG2	2.13	0.47
8:L8:190:VAL:HG22	8:L8:190:VAL:O	2.14	0.47
45:RC:201:THR:HG23	45:RC:243:LEU:HG	1.97	0.47
45:RC:68:VAL:HA	45:RC:84:SER:HA	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
58:12:105:LYS:HB3	58:12:107:ASP:OD1	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:19:102:ARG:HD2	78:1S:1501:C:OP2	2.14	0.47
78:1S:1038:U:H2'	78:1S:1039:A:H5''	1.97	0.47
78:1S:1651:A:H2'	78:1S:1652:C:H6	1.79	0.47
76:30:14:VAL:CG2	78:1S:567:A:H1'	2.45	0.47
78:1S:217:A:H61	78:1S:844:A:H2	1.61	0.47
66:20:28:SER:HB2	66:20:112:VAL:HG22	1.95	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
79:2S:1116:G:H3'	79:2S:1117:G:H5''	1.96	0.47
79:2S:1610:G:H2'	79:2S:1611:G:O4'	2.14	0.47
79:2S:1797:A:H2'	79:2S:1798:A:O4'	2.15	0.47
79:2S:1655:G:H1'	79:2S:1800:A:N6	2.28	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
36:86:31:GLY:HA2	79:2S:297:G:H8	1.79	0.47
79:2S:3174:A:C2'	79:2S:3175:U:H5'	2.41	0.47
79:2S:440:A:H5'	79:2S:493:U:O4	2.15	0.47
16:66:93:ALA:CB	79:2S:631:U:H5''	2.44	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
11:61:111:ASP:HB2	11:61:112:LEU:HD23	1.97	0.47
15:65:11:GLN:HG2	15:65:44:ARG:CZ	2.45	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
20:70:68: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
25:75:115:ARG:HH11	25:75:115:ARG:HG3	1.78	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
4:L4:145:ILE:HD11	4:L4:148:ILE:HG12	1.97	0.47
7:L7:85:PHE:CE1	7:L7:87:VAL:HG22	2.49	0.47
45:RC:224:ASN:HB3	45:RC:229:LYS:H	1.79	0.47
45:RC:89:LEU:CD2	45:RC:110:VAL:HG11	2.45	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
52:S6:74:LYS:HB3	52:S6:94:ARG:HD2	1.96	0.47
55:S9:112:GLN:HA	55:S9:112:GLN:NE2	2.30	0.47
58:12:125:ASN:O	58:12:126:TRP:CD1	2.67	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:15:38:PRO:O	61:15:42:ARG:HG3	2.14	0.47
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
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:144:U:O2'	78:1S:145:A:H8	1.97	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:1781:A:H2'	78:1S:1782:A:C8	2.50	0.47
66:20:50:LEU:HD11	66:20:93:LEU:HD22	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:1646:G:H1'	79:2S:1809:A:H61	1.80	0.47
79:2S:2388:U:H2'	79:2S:2389:C:C5	2.50	0.47
79:2S:2309:A:H1'	79:2S:2962:U:H5'	1.95	0.47
4:L4:107:ARG:NE	79:2S:663:C:H4'	2.29	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
81:5S:8:G:H2'	81:5S:9:C:O4'	2.15	0.47
11:61:13:LYS:O	11:61:131:MET:HE3	2.15	0.47
14:64:38:ILE:HA	14:64:44:VAL:HG12	1.96	0.47
20:70:9:VAL:HG22	20:70:61:ILE:HD12	1.96	0.47
21:71:58:GLN:HG3	79:2S:992:A:O2'	2.15	0.47
30:80:32:LYS:HG3	30:80:36:GLN:NE2	2.28	0.47
38:88:45:VAL:O	38:88:45:VAL:HG23	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
3:L3:188:ILE:HD12	3:L3:189:SER:N	2.30	0.47
7:L7:106:LEU:O	7:L7:107:ARG:HB2	2.14	0.47
7:L7:45:LEU:O	7:L7:45:LEU:HD23	2.15	0.47
8:L8:128:LYS:CG	8:L8:129:PRO:HD2	2.45	0.47
51:S5:92:ARG:HH11	51:S5:92:ARG:HG2	1.80	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:S9:149:ARG:C	55:S9:151:ASP:H	2.17	0.47
64:18:16:ARG:HH12	64:18:19:ASN:CA	2.28	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
78:1S:95:G:H2'	78:1S:96:G:C8	2.50	0.47
67:21:38:LYS:HE3	67:21:51:VAL:HG22	1.97	0.47
72:26:71:LEU:N	72:26:71:LEU:HD22	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
79:2S:1015:U:H4'	79:2S:1017:C:C5	2.50	0.47
79:2S:156:G:O2'	79:2S:157:A:H4'	2.15	0.47
79:2S:1815:U:O3'	79:2S:1816:A:H4'	2.14	0.47
8:L8:240:ASN:ND2	79:2S:2584:G:O2'	2.48	0.47
79:2S:2684:C:H2'	79:2S:2685:C:C6	2.49	0.47
79:2S:374:A:HO2'	79:2S:376:G:H8	1.62	0.47
5:L5:21:ARG:HD3	81:5S:112:G:O6	2.14	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
80:8S:41:A:H2'	80:8S:42:G:O4'	2.14	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
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
45:RC:5:GLU:HA	45:RC:316:MET:O	2.14	0.47
47:S1:204:ILE:HD13	47:S1:204:ILE:N	2.28	0.47
47:S1:67:GLU:HA	47:S1:84:ILE:O	2.15	0.47
49:S3:158:ILE:HG22	78:1S:1327:C:H5''	1.97	0.47
52:S6:25:ARG:NH1	52:S6:25:ARG:HB3	2.28	0.47
52:S6:25:ARG:HG2	52:S6:25:ARG:O	2.15	0.47
54:S8:36:THR:HB	54:S8:57:ALA:O	2.14	0.47
57:11:85:VAL:HA	57:11:108:PRO:HA	1.96	0.47
62:16:82:ARG:NH2	62:16:116:LEU:HD11	2.29	0.47
62:16:41:PRO:O	62:16:42:GLU:HB3	2.15	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
78:1S:262:U:H2'	78:1S:263:C:C6	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:S7:100:PRO:HA	78:1S:639:U:N3	2.30	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
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
2:L2:52:SER:HB3	79:2S:1795:U:OP1	2.14	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
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
37:87:49:TRP:CE3	79:2S:929:A:H1'	2.50	0.47
79:2S:939:U:H2'	79:2S:940:G:C8	2.50	0.47
11:61:36:VAL:HG22	11:61:120:ILE:HG21	1.96	0.47
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
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
40:90:83:LYS:HB3	40:90:83:LYS:NZ	2.29	0.47
2:L2:23:ARG:NH1	2:L2:23:ARG:HG3	2.30	0.47
3:L3:217:ALA:O	3:L3:276:THR:HA	2.15	0.47
44:P0:80:VAL:O	44:P0:80:VAL:HG22	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
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:HG2	63:17:81:LYS:O	2.15	0.47
49:S3:151:LYS:HE3	78:1S:1423:U:H5''	1.98	0.47
78:1S:1682:U:O2'	78:1S:1683:C:H5'	2.15	0.47
78:1S:604:A:H2'	78:1S:605:A:O4'	2.14	0.47
70:24:37:LYS:O	70:24:41:ARG:HG3	2.14	0.47
74:28:32:PHE:CD2	74:28:32:PHE:N	2.83	0.47
79:2S:209:A:H4'	79:2S:211:A:N7	2.30	0.47
79:2S:1047:A:O2'	79:2S:2633:U:H4'	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2707:C:H2'	79:2S:2708:C:C6	2.50	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
5:L5:155:THR:HG23	81:5S:36:C:H4'	1.96	0.47
15:65:51:LEU:HD13	15:65:117:ASN:HB3	1.96	0.47
15:65:68:ARG:HH11	15:65:68:ARG:HB3	1.80	0.47
16:66:13:GLY:O	16:66:125:ARG:HB3	2.15	0.47
18:68:63:SER:O	18:68:67:ILE:HG13	2.15	0.47
9:L9:4:ILE:CD1	20:70:148:LEU:HD21	2.44	0.47
38:88:17:ARG:O	38:88:18:ALA:HB3	2.15	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
9:L9:44:THR:O	9:L9:55:VAL:HA	2.15	0.47
9:L9:4:ILE:HG23	9:L9:5:GLN:N	2.30	0.47
45:RC:7:LEU:HG	45:RC:315:VAL:HG22	1.97	0.47
46:S0:139:VAL:HG22	46:S0:139:VAL:O	2.15	0.47
50:S4:199:GLU:HB2	50:S4:207:LEU:O	2.15	0.47
57:11:93:TYR:C	57:11:94:ILE:HD12	2.35	0.46
63:17:102:VAL:HG23	63:17:120:SER:O	2.14	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: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
59:13:10:GLY:HA3	78:1S:955:A:H5''	1.97	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
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
79:2S:871:U:H2'	79:2S:872:U:C6	2.49	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
26:76:88: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
26:76:23:PRO:HB2	80:8S:91:C:O2'	2.14	0.46
41:91:12:ARG:HG2	41:91:15:ARG:HH21	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
78:1S:1637:C:H5'	83:MR:7:G:O6	2.15	0.46
82:PT:23:G:H2'	82:PT:24:C:H6	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:S5:117:THR:O	51:S5:121:ILE:HG13	2.15	0.46
51:S5:93:LEU:O	51:S5:97:LEU:HG	2.15	0.46
54:S8:60:ILE:HG22	54:S8:62:THR:H	1.80	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
65:19:28:LEU:HD22	65:19:29:GLU:N	2.30	0.46
78:1S:1107:G:C2'	78:1S:1108:G:H5'	2.46	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:94:U:H2'	78:1S:95:G:H5'	1.97	0.46
60:14:112:ILE:HB	72:26:57:SER:OG	2.15	0.46
15:65:141:ALA:HB2	79:2S:126:U:H5'	1.97	0.46
79:2S:116:A:H62	79:2S:153:U:H1'	1.80	0.46
79:2S:1916:U:H2'	79:2S:1917:C:C6	2.51	0.46
79:2S:2403:G:OP1	79:2S:2403:G:H4'	2.15	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
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
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
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
82:PT:23:G:H2'	82:PT:24:C:C6	2.50	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:13:23:PRO:O	59:13:24:ALA:CB	2.63	0.46
78:1S:487:G:C3'	78:1S:488:G:H5''	2.43	0.46
50:S4:4:GLY:HA3	78:1S:93:A:O2'	2.16	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
21:71:4:SER:HA	79:2S:2630:C:OP2	2.15	0.46
77:31:119:ARG:NE	77:31:139:LEU:HD21	2.30	0.46
81:5S:66:A:H2'	81:5S:67:G:O4'	2.16	0.46
17:67:111:LYS:O	17:67:153:LYS:HB2	2.15	0.46
18:68:147:ARG:NH1	18:68:147:ARG:HB3	2.30	0.46
4:L4:302:ALA:HA	18:68:39:ARG:HH11	1.80	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
4:L4:121:ALA:CB	4:L4:235:LEU:HD21	2.45	0.46
8:L8:152:LEU:HD12	8:L8:198:ALA:HB3	1.98	0.46
49:S3:142:LEU:C	49:S3:144:ALA:H	2.17	0.46
55:S9:113:VAL:HB	55:S9:125:ALA:HB1	1.97	0.46
49:S3:72:LEU:HG	56:10:20:VAL:HG11	1.97	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
78:1S:182:A:H2'	78:1S:183:U:C6	2.50	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
79:2S:1000:C:H42	79:2S:1046:A:H62	1.64	0.46
79:2S:129:U:H2'	79:2S:130:A:H8	1.79	0.46
79:2S:1887:A:H2'	79:2S:1888:U:H5'	1.98	0.46
14:64:73:PRO:HG3	79:2S:559:A:O2'	2.16	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
76:30:55:ARG:HH11	76:30:55:ARG:HG3	1.78	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
15:65:96:ARG:HH11	79:2S:31:C:H5'	1.80	0.46
16:66:142:SER:O	16:66:145:VAL:HG22	2.16	0.46
16:66:84:LEU:O	16:66:84:LEU:HD23	2.15	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
80:8S:17:A:H2'	80:8S:18:U:O4'	2.15	0.46
2:L2:180:LEU:HA	79:2S:2149:A:O2'	2.16	0.46
2:L2:58:LEU:HD13	2:L2:75:ILE:CG2	2.46	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
44:P0:16:ARG:HG2	44:P0:16:ARG:O	2.15	0.46
82:PT:6:G:O2'	82:PT:7:G:H5'	2.16	0.46
51:S5:114:ILE:O	51:S5:118:LEU:HG	2.15	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
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
78:1S:379:U:C2'	78:1S:380:U:H5''	2.45	0.46
78:1S:93:A:C8	78:1S:398:G:H2'	2.49	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
79:2S:1330:A:C6	79:2S:1332:A:H1'	2.50	0.46
79:2S:154:U:OP1	79:2S:158:G:H5'	2.16	0.46
19:69:121:HIS:HE1	79:2S:1719:G:N7	2.14	0.46
3:L3:227:GLU:OE1	79:2S:1887:A:H5''	2.16	0.46
79:2S:2684:C:H2'	79:2S:2685:C:H6	1.80	0.46
3:L3:3:HIS:CD2	79:2S:2938:G:H3'	2.47	0.46
79:2S:932:U:H4'	79:2S:933:A:H2'	1.96	0.46
14:64:77:ARG:O	14:64:81:VAL:HG23	2.15	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
2:L2:199:THR:HA	79:2S:2147:A:H5''	1.98	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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1448:G:H5'	78:1S:1448:G:C8	2.51	0.46
78:1S:1659:A:H2'	78:1S:1660:A:C8	2.50	0.46
78:1S:200:A:H2'	78:1S:201:G:O4'	2.16	0.46
47:S1:117:TRP:N	78:1S:932:U:OP2	2.48	0.46
66:20:22:ILE:HD11	66:20:116:VAL:HG13	1.97	0.46
66:20:52:LYS:HG3	66:20:52:LYS:O	2.15	0.46
67:21:80:LYS:HB3	67:21:80:LYS:NZ	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
79:2S:127:G:H2'	79:2S:128:G:C8	2.50	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:OP2	79:2S:2941:A:H8	1.97	0.46
79:2S:2948:C:H2'	79:2S:2949:U:C6	2.51	0.46
15:65:176:LYS:HZ1	79:2S:65:A:H5'	1.79	0.46
79:2S:980:A:H2'	79:2S:981:U:O4'	2.16	0.46
11:61:23:VAL:HG11	11:61:29:ARG:HD3	1.97	0.46
15:65:50:ARG:HH11	15:65:50:ARG:CB	2.28	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:N	26:76:6:LEU:HD23	2.30	0.46
34:84:91:ARG:HA	34:84:95:ILE:HD13	1.97	0.46
80:8S:70:G:H1'	80:8S:88:A:H61	1.79	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
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
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
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:O	59:13:107:LYS:HG3	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
69:23:19:ARG:HH12	78:1S:610:G:N2	2.14	0.46
66:20:81:THR:O	75:29:54:LYS:HD2	2.16	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
24:74:48:ARG:HH22	79:2S:2110:G:H2'	1.81	0.46
79:2S:757:C:H2'	79:2S:758:C:C5'	2.45	0.46
5:L5:285:ARG:NH1	81:5S:62:U:H4'	2.30	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
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
82:ET:24:C:H2'	82:ET:25:U:C6	2.51	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
2:L2:65:ASP:HB3	2:L2:68:LYS:O	2.16	0.46
3:L3:43:LEU:HB3	3:L3:181:ILE:HG21	1.97	0.46
6:L6:67:GLY:HA3	6:L6:74:VAL:HB	1.97	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
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
51:S5:72:HIS:HB3	62:16:47:LYS:HE2	1.96	0.46
63:17:116:LYS:HB2	63:17:116:LYS:NZ	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:1013:A:H2'	78:1S:1014:G:H5'	1.98	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
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:189:G:H5'	79:2S:223:U:O2'	2.16	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
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
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
6:L6:171:PRO:HD2	33:83:44:TYR:OH	2.16	0.46
42:92:29:LYS:HD2	42:92:31:GLY:H	1.80	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
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:O	8:L8:109:LEU:HD23	2.15	0.46
45:RC:176:LYS:HE3	45:RC:196:ASN:O	2.15	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
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
78:1S:101:U:H2'	78:1S:102:U:O4'	2.16	0.46
78:1S:1082:C:C2'	78:1S:1082:C:O2	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
78:1S:878:G:H2'	78:1S:879:G:H8	1.74	0.46
66:20:69:LYS:HB3	78:1S:1280:C:H4'	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:21:70:ASN:HA	67:21:79:LEU:CD1	2.46	0.46
72:26:41:ILE:N	72:26:41:ILE:HD13	2.30	0.46
79:2S:105:C:H2'	79:2S:106:A:H8	1.79	0.46
79:2S:1328:C:O2'	79:2S:1329:U:H5'	2.16	0.46
79:2S:157:A:H2'	79:2S:158:G:O4'	2.16	0.46
79:2S:1658:G:H2'	79:2S:1659:U:H6	1.79	0.46
79:2S:204:A:H2'	79:2S:205:C:O4'	2.15	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
79:2S:338:A:H3'	79:2S:339:C:C5'	2.46	0.46
77:31:119:ARG:HE	77:31:139:LEU:CD2	2.29	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
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
44:P0:69:ASP:O	44:P0:70:LEU:HB2	2.15	0.46
44:P0:76:LEU:O	44:P0:76:LEU:HD13	2.15	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
46:S0:7:PHE:N	46:S0:7:PHE:CD2	2.84	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
56:10:86:ILE:HB	56:10:88:PRO:HD2	1.97	0.46
57:11:70:ILE:H	57:11:70:ILE:HD12	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
64:18:54:LEU:CD2	64:18:54:LEU:H	2.25	0.46
64:18:39:GLY:H	78:1S:1566:U:H5''	1.81	0.46
78:1S:330:G:H2'	78:1S:331:A:O4'	2.15	0.46
78:1S:38:C:C2'	78:1S:39:A:H5'	2.46	0.46
78:1S:429:G:OP1	78:1S:439:U:H5''	2.16	0.46
69:23:137:LYS:CD	69:23:139:LYS:HE2	2.46	0.46
74:28:32:PHE:HD2	74:28:32:PHE:N	2.13	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)
79:2S:1292:C:H2'	79:2S:1293:U:O4'	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
54:S8:158:SER:HB3	79:2S:2067:U:C5	2.51	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
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:HD22	23:73:33:ASN:N	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
79:2S:407:A:C2	80:8S:17:A:H1'	2.51	0.46
79:2S:1398:U:H5''	80:8S:9:A:OP1	2.16	0.46
42:92:7:THR:O	42:92:8:ARG:HB2	2.15	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:L5:287:ALA:O	5:L5:290:ILE:HG12	2.16	0.46
5:L5:52:VAL:HG21	81:5S:6:C:H4'	1.97	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:NZ	8:L8:92:LYS:HB3	2.30	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
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
61:15:98:ASN:HB2	61:15:122:THR:CG2	2.43	0.45
78:1S:1043:A:H3'	78:1S:1044:U:C6	2.51	0.45
47:S1:150:VAL:HB	78:1S:1067:C:H5''	1.97	0.45
78:1S:1163:A:H2'	78:1S:1164:G:O4'	2.16	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
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:2916:U:H2'	79:2S:2917:G:H8	1.81	0.45
79:2S:1904:C:C2	79:2S:2951:G:H5'	2.51	0.45
79:2S:3277:U:O2	79:2S:3277:U:H2'	2.15	0.45
17:67:69:ARG:HD3	79:2S:3309:G:H1'	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:638:C:H2'	79:2S:639:G:H8	1.81	0.45
13:63:101:ARG:HA	79:2S:76:G:C6	2.51	0.45
79:2S:793:C:H2'	79:2S:794:U:O4'	2.16	0.45
55:S9:123:HIS:CE1	76:30:37:ARG:HB2	2.47	0.45
10:60:144:ASN:HA	10:60:147:VAL:HG23	1.98	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
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
80:8S:40:A:H2'	80:8S:41:A:H8	1.79	0.45
42:92:9:LYS:HA	42:92:21:THR:O	2.16	0.45
82:ET:25:U:H2'	82:ET:26:C:C6	2.51	0.45
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:HD22	5:L5:115:LEU:H	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
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:S9:163:PRO:C	55:S9:165:GLY:H	2.19	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
65:19:27:LYS:HB3	65:19:27:LYS:HZ2	1.80	0.45
64:18:48:LYS:HE2	65:19:50:ALA:HB2	1.98	0.45
78:1S:1358:G:H2'	78:1S:1359:C:C6	2.50	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
48:S2:228:ASN:HB2	67:21:1:MET:H1	1.80	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: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:2772:C:H1'	79:2S:2773:C:H5	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:3326:G:H2'	79:2S:3327:G:C8	2.51	0.45
79:2S:686:G:H2'	79:2S:687:U:O4'	2.17	0.45
58:12:74:LEU:HD11	77:31:106:TYR:HB3	1.98	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
19:69:143:ILE:HG23	19:69:146:LYS:HE3	1.98	0.45
19:69:80:LYS:HE3	79:2S:1940:G:OP1	2.17	0.45
21:71:27:LEU:CD2	21:71:27:LEU:H	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
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
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
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
65:19:10:ALA:HB3	65:19:13:ASP:OD2	2.16	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
78:1S:312:A:N3	78:1S:314:C:H2'	2.31	0.45
78:1S:422:G:H2'	78:1S:423:G:N7	2.32	0.45
78:1S:386:G:H21	78:1S:425:A:H2	1.65	0.45
55:S9:163:PRO:CG	78:1S:512:A:H5''	2.40	0.45
78:1S:586:G:H2'	78:1S:587:C:H6	1.81	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:3349:C:H2'	79:2S:3350:C:C6	2.52	0.45
79:2S:856:G:O2'	79:2S:857:G:H5'	2.16	0.45
81:5S:64:A:H5'	81:5S:65:G:H5''	1.97	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
18:68:182:LYS:HE3	79:2S:2764:C:OP1	2.16	0.45
18:68:179:ARG:HD2	18:68:182:LYS:HG2	1.98	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
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
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
78:1S:144:U:O2'	78:1S:145:A:H5'	2.16	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
67:21:19:ALA:HA	67:21:71:ARG:NH1	2.30	0.45
68:22:37:PHE:CZ	68:22:103:ILE:HG21	2.52	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
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
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
42:92:29:LYS:HD3	42:92:30:ALA:N	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
44:P0:18:TYR:HD1	44:P0:22:TYR:HE2	1.65	0.45
44:P0:99:VAL:HG12	44:P0:99:VAL:O	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
56:10:82:LEU:O	56:10:82:LEU:HD12	2.16	0.45
51:S5:76:ARG:HH21	62:16:122:ARG:HG3	1.81	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
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
78:1S:954:G:H2'	78:1S:955:A:C8	2.51	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:H	70:24:102:LYS:HD2	1.80	0.45
71:25:78:ILE:N	71:25:78:ILE:HD12	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
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
38:88:26:LYS:NZ	79:2S:1751:G:H5'	2.32	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
31:81:10:ARG:HH21	79:2S:3386:G:H5''	1.78	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
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
52:S6:20:ASP:O	52:S6:24:ILE:HG13	2.17	0.45
57:11:2:SER:CA	57:11:113:PRO:HA	2.46	0.45
62:16:106:LYS:NZ	62:16:106:LYS:HB2	2.31	0.45
64:18:13:HIS:H	64:18:13:HIS:HD1	1.65	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
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
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
68:22:62:VAL:HB	73:27:8:LEU:HD21	1.98	0.45
74:28:9:LEU:O	74:28:32:PHE:HB2	2.15	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
42:92:33:ALA:HA	79:2S:2767:U:H5'	1.99	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
3:L3:31:ALA:CB	79:2S:3136:G:H5''	2.46	0.45
79:2S:3191:G:H2'	79:2S:3192:U:O4'	2.17	0.45
6:L6:28:GLN:HB2	79:2S:501:A:H4'	1.99	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
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
23:73:104:ASN:OD1	23:73:108:GLU:HB2	2.17	0.45
23:73:45:ARG:HB3	23:73:48:ARG:HD2	1.98	0.45
27:77:23:VAL:HA	27:77:45:GLY:CA	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:84:38:LEU:H	34:84:38:LEU:HD12	1.81	0.45
2:L2:196:TRP:CD1	2:L2:197:PRO:HA	2.52	0.45
2:L2:41:ILE:HG23	2:L2:42:ARG:N	2.30	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
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
44:P0:42:ARG:NH1	44:P0:51:VAL:HG13	2.31	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
45:RC:86:ASP:O	45:RC:87:LYS:HB2	2.17	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:S2:218:ILE:HD12	48:S2:218:ILE:C	2.37	0.45
48:S2:89:GLN:HE21	48:S2:89:GLN:N	2.14	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:S8:189:LEU:HA	54:S8:192:TYR:HB2	1.99	0.45
54:S8:8:ARG:HD3	54:S8:21:PHE:HD1	1.82	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
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
78:1S:908:U:H2'	78:1S:909:U:O4'	2.16	0.45
69:23:82:LYS:H	69:23:82:LYS:HD3	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
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
79:2S:312:C:H2'	79:2S:313:A:H8	1.81	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)
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
13:63:4:SER:HA	28:78:44:ASN:HD21	1.81	0.45
37:87:21:ARG:HD2	37:87:37:CYS:SG	2.57	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
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
59:13:71:ILE:CD1	59:13:71:ILE:H	2.06	0.45
60:14:84:ARG:HA	60:14:119:THR:HG22	1.98	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
78:1S:142:G:O2'	78:1S:143:G:H5'	2.16	0.45
62:16:72:GLY:HA2	78:1S:1608:U:OP1	2.16	0.45
78:1S:128:U:H5'	78:1S:178:U:O2'	2.17	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
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
71:25:92:ILE:HG13	71:25:100:ILE:CG2	2.46	0.45
79:2S:1932:A:H3'	79:2S:1933:A:H8	1.81	0.45
79:2S:2618:G:H5''	79:2S:2618:G:N3	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
29:79:37:PRO:HB3	79:2S:776:U:H5''	1.99	0.45
18:68:69:ARG:NE	79:2S:784:A:H8	2.15	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
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
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:HE3	42:92:100:LYS:HA	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
45:RC:117:LYS:HD2	45:RC:117:LYS:H	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
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
78:1S:643:G:H2'	78:1S:644:C:H6	1.82	0.45
66:20:20:ILE:HD13	66:20:22:ILE:HB	1.98	0.45
70:24:100:VAL:HG13	70:24:100:VAL:O	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:16:A:H2'	79:2S:17:G:C8	2.52	0.45
79:2S:2904:U:H2'	79:2S:2905:U:H6	1.82	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
11:61:142:LYS:HD3	11:61:142:LYS:O	2.16	0.45
11:61:171:VAL:HG13	11:61:172:LEU:N	2.32	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
19:69:102:LEU:O	19:69:106:LEU:HD13	2.17	0.45
14:64:14:LEU:HD23	20:70:151:PRO:HB3	1.99	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
17:67:167:ARG:O	33:83:60:ARG:HB3	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
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:O	49:S3:84:ILE:HG23	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
47:S1:44:GLY:HA3	60:14:33:LEU:HD21	1.98	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
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
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
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
79:2S:1064:A:N7	79:2S:1096:U:O2	2.49	0.45
79:2S:149:U:O5'	79:2S:149:U:H6	2.00	0.45
79:2S:1535:A:H2'	79:2S:1536:G:O4'	2.17	0.45
4:L4:68:GLY:HA2	79:2S:2401:A:O3'	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
40:90:104:PRO:HG2	79:2S:3119:U:H4'	1.99	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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
41:91:11:ARG:HE	78:1S:1126:G:H5'	1.81	0.45
1:L1:169:VAL:HB	1:L1:172:VAL:CG2	2.40	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
45:RC:31:ASN:O	45:RC:46:LYS:HA	2.16	0.45
47:S1:181:LEU:HD13	47:S1:181:LEU:H	1.81	0.45
47:S1:141:ALA:HB2	47:S1:210:ILE:HA	1.98	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
51:S5:37:GLN:HB3	62:16:53:LEU:HD13	1.98	0.44
63:17:30:THR:O	63:17:34:LEU:HB2	2.16	0.44
78:1S:460:A:N3	78:1S:460:A:H2'	2.32	0.44
48:S2:181:SER:HB3	78:1S:4:C:H4'	1.98	0.44
59:13:15:ALA:C	78:1S:959:U:H5'	2.37	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
79:2S:1498:A:H2'	79:2S:1499:C:C6	2.52	0.44
27:77:17:ARG:HH12	79:2S:1633:C:H5	1.65	0.44
79:2S:1939:G:H2'	79:2S:1940:G:O4'	2.18	0.44
79:2S:201:A:H2'	79:2S:202:G:H8	1.81	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:H2'	79:2S:3057:U:O2	2.15	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
77:31:117:LEU:O	77:31:118:ARG:HB2	2.17	0.44
11:61:143:ARG:NH1	11:61:143:ARG:HG3	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:75:115:ARG:HB3	25:75:117:ASN:OD1	2.16	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
80:8S:106:C:H5''	80:8S:108:C:OP2	2.17	0.44
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
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
45:RC:23:LEU:HD21	45:RC:310:ILE:HD13	1.98	0.44
47:S1:171:ILE:HA	47:S1:174:LYS:HE3	1.99	0.44
50:S4:242:LYS:N	50:S4:242:LYS:HD2	2.33	0.44
51:S5:100:ASN:OD1	51:S5:180:ARG:HD3	2.17	0.44
51:S5:70:VAL:HG11	62:16:46:PHE:CD2	2.52	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
57:11:80:MET:HB3	57:11:83:THR:CG2	2.46	0.44
62:16:131:GLY:HA3	62:16:136:SER:O	2.17	0.44
62:16:81:ILE:HG13	62:16:82:ARG:N	2.32	0.44
78:1S:120:U:H2'	78:1S:121:U:C6	2.53	0.44
78:1S:1269:U:H4'	78:1S:1270:G:C5'	2.46	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:851:U:H2'	78:1S:852:C:O4'	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
79:2S:1393:A:H2'	79:2S:1394:A:O4'	2.16	0.44
32:82:26:HIS:CD2	79:2S:655:C:H5'	2.52	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
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
23:73:102:ILE:HG23	23:73:110:LYS:HB3	1.99	0.44
23:73:40:LYS:HB2	23:73:57:MET:O	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:81:107:VAL:HG12	31:81:108:VAL:N	2.25	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
1:L1:165:LEU:HD13	1:L1:184:LEU:HD11	1.99	0.44
1:L1:60:ARG:HD3	1:L1:60:ARG:HA	1.84	0.44
2:L2:205:ASN:N	2:L2:205:ASN:ND2	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
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
53:S7:185:ILE:H	53:S7:185:ILE:CD1	2.23	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
78:1S:1313:A:C2	78:1S:1315:U:H5'	2.53	0.44
78:1S:176:C:H2'	78:1S:177:U:H5'	1.98	0.44
72:26:87:ARG:HD2	78:1S:1796:C:OP1	2.17	0.44
78:1S:430:G:H2'	78:1S:431:C:C6	2.53	0.44
66:20:23:ARG:HG3	66:20:91:ILE:O	2.18	0.44
74:28:53:ILE:HG22	74:28:54:LEU:H	1.82	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
42:92:28:TYR:HE1	79:2S:2768:U:H4'	1.83	0.44
79:2S:2946:A:H2'	79:2S:2982:A:N7	2.33	0.44
3:L3:16:PHE:CE2	79:2S:3045:G:H4'	2.52	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
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:HD13	32:82:82:LEU:O	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:84:102:LYS:HD2	34:84:102:LYS:N	2.31	0.44
37:87:17:THR:HG22	37:87:18:LEU:N	2.32	0.44
80:8S:76:C:O2'	80:8S:77:A:H5'	2.18	0.44
43:93:75:ALA:O	43:93:79:VAL:HG23	2.17	0.44
2:L2:92:LYS:HA	2:L2:103:PRO:CD	2.47	0.44
2:L2:225:ILE:HG12	2:L2:234:LYS:HA	1.99	0.44
2:L2:225:ILE:HB	2:L2:238:ILE:HA	1.99	0.44
3:L3:196:ARG:HD2	3:L3:199:PHE:CD2	2.52	0.44
6:L6:98:VAL:HA	6:L6:101:PHE:CE2	2.53	0.44
6:L6:54:TYR:HE2	6:L6:56:LYS:O	1.99	0.44
6:L6:52:VAL:HG21	6:L6:65:ILE:HB	1.99	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
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
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
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
51:S5:26:ALA:HB3	62:16:28:LEU:HA	1.99	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
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
79:2S:126:U:H2'	79:2S:127:G:C8	2.53	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
15:65:14:LYS:HE2	79:2S:269:G:C5'	2.47	0.44
79:2S:2708:C:H2'	79:2S:2709:C:C6	2.52	0.44
79:2S:649:A:H4'	79:2S:2869:U:H5'	2.00	0.44
79:2S:28:C:H4'	79:2S:60:A:N1	2.31	0.44
6:L6:161:ALA:HB2	79:2S:3215:A:H1'	1.99	0.44
79:2S:863:C:H2'	79:2S:864:G:O4'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
80:8S:57:C:H2'	80:8S:58:G:C8	2.52	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:L4:240:PRO:HB2	79:2S:1383:G:H4'	2.00	0.44
4:L4:34:ILE:O	4:L4:38:VAL:HG23	2.18	0.44
5:L5:142:PHE:HB3	5:L5:171:LEU:HD23	2.00	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:HB2	79:2S:2586:G:C6	2.53	0.44
8:L8:241:LYS:HZ2	8:L8:241:LYS:HB3	1.82	0.44
9:L9:25:VAL:HG12	9:L9:26:LYS:N	2.32	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
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
56:10:27:PHE:HB3	56:10:40:LEU:HD23	1.99	0.44
56:10:11:ILE:HD12	56:10:42:VAL:HG22	2.00	0.44
59:13:78:ASN:HB2	59:13:80:LEU:HD23	1.99	0.44
48:S2:89:GLN:HB2	78:1S:1145:U:O2	2.18	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
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
79:2S:1054:A:H5''	79:2S:2637:A:N6	2.29	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:83:77:ASN:HD22	79:2S:1180:A:H5''	1.83	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
33:83:23:ASN:HD21	79:2S:633:C:C1'	2.29	0.44
18:68:69:ARG:HE	79:2S:784:A:H2'	1.83	0.44
79:2S:898:U:H2'	79:2S:899:U:O4'	2.17	0.44
76:30:14:VAL:O	76:30:18:THR:HG23	2.17	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
30:80:77:LEU:O	30:80:81:VAL:HG13	2.18	0.44
33:83:54:ARG:N	33:83:54:ARG:HD2	2.33	0.44
2:L2:225:ILE:HG22	2:L2:226:SER:N	2.31	0.44
2:L2:3:ARG:HH11	2:L2:3:ARG:HG3	1.82	0.44
3:L3:45:SER:H	3:L3:181:ILE:CG2	2.31	0.44
3:L3:43:LEU:HD12	3:L3:43:LEU:N	2.32	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
49:S3:32:GLU:HB3	49:S3:54:ARG:HB3	2.00	0.44
50:S4:195:ILE:HA	50:S4:210:ILE:CD1	2.47	0.44
50:S4:45:ILE:CG1	50:S4:49:ARG:HD3	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
56:10:55: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
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
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
79:2S:1011:A:H2'	79:2S:1012:G:C8	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
9:L9:63:LYS:CE	79:2S:1210:U:H5'	2.44	0.44
31:81:60:TRP:HZ2	79:2S:1457:U:HO2'	1.66	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
79:2S:496:C:H1'	79:2S:622:A:H2	1.82	0.44
37:87:28:HIS:HD2	79:2S:815:G:H5'	1.83	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
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:HD23	19:69:138:LEU:O	2.18	0.44
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
35:85:111:PHE:N	35:85:112:PRO:HD3	2.33	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
1:L1:198:TRP:O	1:L1:199:GLN:C	2.56	0.44
3:L3:146:ARG:CA	3:L3:146:ARG:HE	2.29	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
6:L6:51:ARG:HH11	6:L6:51:ARG:HG2	1.82	0.44
8:L8:71:VAL:HB	8:L8:75:ILE:HB	1.99	0.44
9:L9:105:GLU:HG3	9:L9:108:GLY:HA2	1.97	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:11:129:ARG:NH1	57:11:129:ARG:HG2	2.33	0.44
78:1S:1315:U:H2'	78:1S:1316:G:C8	2.53	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
70:24:112:LYS:O	70:24:116:LYS:HG3	2.17	0.44
70:24:21:LYS:HB3	70:24:75:VAL:CG1	2.48	0.44
75:29:21:CYS:C	75:29:23:VAL:H	2.21	0.44
79:2S:1128:U:H2'	79:2S:1129:A:O4'	2.17	0.44
7:L7:94:LYS:HA	79:2S:1139:G:O3'	2.18	0.44
79:2S:1371:G:H2'	79:2S:1372:C:C6	2.53	0.44
34:84:6:THR:HG21	79:2S:1487:G:H1'	2.00	0.44
19:69:6:THR:HG23	79:2S:1498:A:OP1	2.17	0.44
79:2S:1926:C:H4'	79:2S:1927:G:C4	2.53	0.44
79:2S:928:C:H2'	79:2S:929:A:C8	2.52	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
32:82:72:LYS:HB2	32:82:92:TYR:CD1	2.52	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
3:L3:2:SER:HA	79:2S:2939:G:OP2	2.18	0.44
4:L4:317:PRO:HG3	4:L4:323:VAL:HG22	2.00	0.44
4:L4:98:ARG:HD2	4:L4:99:MET:O	2.17	0.44
8:L8:166:LEU:HB2	8:L8:167:PRO:HD3	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:S1:168:ILE:O	47:S1:172:LEU:HG	2.17	0.44
47:S1:36:SER:HB2	47:S1:41:ARG:NH2	2.33	0.44
49:S3:162:GLN:HB3	49:S3:163:PRO:HD3	1.99	0.44
50:S4:192:ILE:HG22	50:S4:193:GLY:N	2.32	0.44
50:S4:95:THR:O	50:S4:96:ASN:HB2	2.17	0.44
51:S5:220:VAL:C	51:S5:222:LYS:H	2.21	0.44
51:S5:29:ILE:HA	62:16:37:THR:CG2	2.41	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:1387:G:O5'	78:1S:1387:G:H8	2.01	0.44
78:1S:1542:G:N2	78:1S:1568:C:H1'	2.33	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:921:U:H2'	78:1S:922:G:O4'	2.18	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
25:75:92:LYS:HG2	79:2S:1830:G:H5''	2.00	0.44
79:2S:2457:G:H1	79:2S:2461:A:N6	2.16	0.44
30:80:50:VAL:HG11	79:2S:2552:C:O2'	2.18	0.44
79:2S:2598:G:H2'	79:2S:2599:U:C6	2.52	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:95:A:H2'	79:2S:96:G:O4'	2.18	0.44
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
29:79:37:PRO:O	29:79:41:ARG:HB2	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
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:N	5:L5:115:LEU:HD22	2.33	0.44
8:L8:221:ASN:HA	8:L8:225:LYS:HE2	2.00	0.44
9:L9:101:VAL:HG13	9:L9:113:GLU:O	2.17	0.44
9:L9:8:GLN:HG2	9:L9:68:LEU:HD13	1.99	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:S4:151:ASP:OD1	50:S4:152:PRO:HD2	2.17	0.44
50:S4:57:ASN:HB2	50:S4:60:GLU:HG3	2.00	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:S9:134:ILE:HA	55:S9:157:ASP:O	2.18	0.44
55:S9:126:ARG:HH11	55:S9:144:PRO:HG2	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
78:1S:172:C:H2'	78:1S:173:A:C8	2.53	0.44
78:1S:24:U:H2'	78:1S:26:A:C8	2.52	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
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
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
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
24:74:17:ARG:NH1	79:2S:3050:U:H5''	2.33	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
6:L6:26:ARG:HB3	79:2S:502:U:H4'	1.99	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
6:L6:161:ALA:HB3	14:64:118:PHE:CE2	2.53	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
31:81:15:ASN:O	31:81:19:ARG:HD3	2.18	0.44
32:82:20:HIS:O	32:82:21:HIS:HB2	2.18	0.44
32:82:19:ARG:NH1	32:82:28:VAL:HG13	2.33	0.44
36:86:43:LEU:O	36:86:47:ILE:HG13	2.18	0.44
2:L2:190:ARG:HG2	2:L2:190:ARG:HH21	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
5:L5:177:GLU:O	5:L5:190:ILE:HD13	2.18	0.44
7:L7:105:LEU:CD2	79:2S:1101:G:H1'	2.48	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:S2:141:ARG:O	48:S2:151:PRO:HB3	2.18	0.44
48:S2:67:GLN:O	48:S2:71:THR:HG23	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:S6:45:PHE:HD1	52:S6:121:LEU:HD21	1.82	0.44
52:S6:28:PHE:O	52:S6:29:ASP:HB2	2.16	0.44
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
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
41:91:5:TRP:HD1	78:1S:1783:C:OP2	2.01	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
75:29:20:GLN:HB2	75:29:25:SER:HA	2.00	0.43
66:20:67:THR:CG2	75:29:40:ARG:HB2	2.45	0.43
79:2S:1526:U:H4'	79:2S:1594:A:C4	2.53	0.43
79:2S:652:G:C2	79:2S:2361:A:H1'	2.54	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
79:2S:2069:G:OP1	79:2S:3351:U:H4'	2.18	0.43
13:63:32:LYS:HE3	79:2S:685:G:OP2	2.17	0.43
79:2S:895:A:H2'	79:2S:897:U:C6	2.53	0.43
81:5S:29:C:H2'	81:5S:30:G:C8	2.39	0.43
11:61:92:ARG:HH21	11:61:94:ARG:HH21	1.66	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:NH2	19:69:62:ARG:HG3	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:C	30:80:16:LEU:HD13	2.37	0.43
37:87:17:THR:C	37:87:25:ARG:HA	2.38	0.43
82:ET:21:U:H6	82:ET:22:A:H5'	1.82	0.43
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:229:GLY:HA2	50:S4:235:TYR:CD2	2.53	0.43
50:S4:70:VAL:O	50:S4:70:VAL:HG13	2.18	0.43
52:S6:124:LEU:N	52:S6:124:LEU:HD12	2.33	0.43
52:S6:137:ARG:NH2	52:S6:137:ARG:HG3	2.33	0.43
52:S6:32:ILE:HG13	52:S6:100:ALA:O	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
78:1S:1318:G:H2'	78:1S:1319:A:O4'	2.18	0.43
78:1S:153:G:H2'	78:1S:154:G:C8	2.53	0.43
78:1S:1562:G:H2'	78:1S:1563:C:H6	1.81	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
75:29:19:ARG:NH1	75:29:19:ARG:HG3	2.32	0.43
75:29:44:ARG:NH2	78:1S:1279:C:H5''	2.33	0.43
79:2S:1325:U:H2'	79:2S:1326:A:C8	2.52	0.43
79:2S:1146:C:H4'	79:2S:1331:U:C5	2.53	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
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
77:31:144:CYS:HB3	77:31:147:VAL:CG1	2.33	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
82:ET:72:C:H2'	82:ET:73:A:C8	2.53	0.43
2:L2:204:MET:HB2	2:L2:208:ASP:CB	2.48	0.43
3:L3:242:THR:HB	79:2S:2948:C:H4'	2.00	0.43
3:L3:57:VAL:HG22	3:L3:73:VAL:HG12	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:L5:270:LYS:HA	5:L5:273:ARG:HB3	2.00	0.43
5:L5:44:TYR:CD2	79:2S:1084:A:H4'	2.53	0.43
53:S7:140:VAL:HB	68:22:52:TYR:HB3	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:S9:53:ARG:O	55:S9:57:ARG:HG3	2.17	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
61:15:123:TYR:HD1	61:15:123:TYR:H	1.66	0.43
61:15:67:ALA:CB	61:15:73:PRO:HG3	2.49	0.43
64:18:46:VAL:HA	64:18:49:LYS:HB2	2.01	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
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
68:22:80:ASN:HB3	78:1S:748:U:OP1	2.18	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
15:65:50:ARG:HB2	79:2S:267:G:H21	1.83	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
54:S8:92:ARG:HG3	79:2S:3345:G:OP1	2.18	0.43
79:2S:920:A:H4'	79:2S:921:A:C5'	2.46	0.43
79:2S:806:A:H8	79:2S:935:U:H3	1.63	0.43
76:30:29:LYS:HE3	76:30:35:TYR:HE2	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:HH21	20:70:117:ARG:HG3	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
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:L8:150:LEU:O	8:L8:199:ALA:HA	2.18	0.43
8:L8:95:ASN:O	8:L8:98:ARG:HG2	2.18	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:S4:85:GLY:O	50:S4:101:LEU:HD12	2.19	0.43
50:S4:35:PRO:HB3	50:S4:143:ASP:HB2	2.00	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
62:16:41:PRO:HD2	62:16:44:LEU:HD23	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:16:55:VAL:HG13	62:16:56:GLY:N	2.33	0.43
78:1S:1274:C:O2	78:1S:1274:C:H2'	2.19	0.43
65:19:130:ARG:CA	78:1S:1358:G:H4'	2.41	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
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
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:184:U:H2'	79:2S:185:C:C6	2.54	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
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
3:L3:124:LYS:HG2	79:2S:3316:A:N1	2.34	0.43
79:2S:41:G:H3'	79:2S:42:C:C6	2.53	0.43
79:2S:628:A:H5'	79:2S:1399:A:C2	2.53	0.43
76:30:10:ARG:HB3	76:30:13:LYS:HB2	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
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:L4:146:PRO:HG2	4:L4:147:GLU:H	1.82	0.43
4:L4:71:VAL:HG22	4:L4:72:ALA:N	2.32	0.43
5:L5:134:ALA:CB	5:L5:141:PRO:HD3	2.48	0.43
8:L8:151:VAL:HG23	8:L8:175:VAL:HG11	2.00	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
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:S5:119:ASP:O	51:S5:123:VAL:HG23	2.17	0.43
51:S5:80:LYS:HB2	51:S5:83:ARG:HB2	2.00	0.43
55:S9:48:GLN:HA	55:S9:51:LYS:CE	2.48	0.43
56:10:42:VAL:O	56:10:46:LEU:HB2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:11:123:VAL:CG2	57:11:139:VAL:HG13	2.49	0.43
78:1S:1408:G:H2'	78:1S:1409:G:O4'	2.19	0.43
64:18:139:LYS:HE2	78:1S:1459:C:N4	2.33	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
48:S2:60:SER:HA	67:21:26:ALA:HA	2.01	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
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:172:G:N3	79:2S:172:G:H2'	2.34	0.43
79:2S:1862:U:H2'	79:2S:1863:G:O4'	2.19	0.43
79:2S:876:A:H5''	79:2S:1890:U:H5''	2.01	0.43
79:2S:2413:A:H2'	79:2S:2414:G:H8	1.83	0.43
79:2S:286:U:H2'	79:2S:287:G:C8	2.54	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
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
2:L2:193:ARG:HG2	2:L2:193:ARG:HH21	1.83	0.43
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
82:PT:64:G:H2'	82:PT:65:G:H8	1.84	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:S2:116: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:S3:158:ILE:H	49:S3:158:ILE:CD1	2.29	0.43
49:S3:35:SER:HB3	49:S3:51:ARG:O	2.19	0.43
53:S7:131:PHE:N	53:S7:132:PRO:CD	2.81	0.43
61:15:86:VAL:O	61:15:89:MET:HG2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
78:1S:1116:A:H1'	78:1S:1131:A:C6	2.54	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
66:20:23:ARG:HB3	66:20:117:VAL:CG1	2.46	0.43
79:2S:1357:G:H2'	79:2S:1358:C:H6	1.83	0.43
19:69:88:ARG:HH21	79:2S:2102:U:H5'	1.84	0.43
79:2S:652:G:H2'	79:2S:2361:A:H4'	2.01	0.43
3:L3:8:ALA:HA	79:2S:2915:U:OP1	2.18	0.43
20:70:69:PRO:HG2	79:2S:523:A:H4'	2.01	0.43
79:2S:683:U:H2'	79:2S:684:G:O4'	2.18	0.43
81:5S:16:U:H2'	81:5S:17:A:C8	2.53	0.43
11:61:8:PRO:HB2	81:5S:53:U:O2'	2.18	0.43
15:65:50:ARG:CB	15:65:50:ARG:NH1	2.82	0.43
15:65:93:LYS:HD2	79:2S:289:A:H2	1.82	0.43
18:68:59:ARG:HB2	18:68:59:ARG:NH1	2.34	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
82:ET:19:G:N2	82:ET:58:A:H2'	2.33	0.43
3:L3:227:GLU:HG3	3:L3:228:GLY:H	1.83	0.43
3:L3:75:ALA:HB2	79:2S:3049:A:C6	2.53	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:L9:134:ILE:H	9:L9:134:ILE:HD12	1.83	0.43
9:L9:8:GLN:HG2	9:L9:68:LEU:HD11	2.00	0.43
44:P0:31:ASP:O	44:P0:32:ASN:HB2	2.19	0.43
45:RC:214:ALA:CB	45:RC:220:ILE:HG12	2.45	0.43
45:RC:33:LEU:HD22	45:RC:47:LEU:HD21	2.00	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
62:16:36:ILE:O	62:16:36:ILE:HG12	2.19	0.43
78:1S:1557:U:O2'	78:1S:1558:U:H2'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:762:A:H2'	78:1S:763:G:O4'	2.18	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
79:2S:1459:C:H2'	79:2S:1460:A:C8	2.53	0.43
15:65:87:GLN:HE22	79:2S:2609:A:H1'	1.84	0.43
79:2S:278:U:H2'	79:2S:279:U:C6	2.54	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
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
18:68:163:PRO:HG2	79:2S:780:A:C2	2.53	0.43
79:2S:915:A:C5	79:2S:917:A:H1'	2.54	0.43
76:30:39:LEU:HB3	76:30:43:ARG:HH21	1.83	0.43
5:L5:93:THR:HG23	81:5S:48:U:OP2	2.19	0.43
10:60:182:LEU:HD23	10:60:185:ARG:HH11	1.82	0.43
10:60:17:TYR:N	10:60:18:PRO:HD3	2.33	0.43
11:61:10:ARG:HD3	11:61:10:ARG:O	2.18	0.43
15:65:17:ASP:O	15:65:21:PHE:HB2	2.19	0.43
18:68:83:VAL:HG11	18:68:87:VAL:HG22	2.00	0.43
21:71:96:ILE:H	21:71:96:ILE:HD12	1.84	0.43
24:74:45:ASN:HA	24:74:46:PRO:HD3	1.78	0.43
32:82:121:ASN:C	32:82:123:LYS:H	2.22	0.43
32:82:32:TRP:CH2	32:82:52:GLN:HG2	2.53	0.43
43:93:56:THR:HG22	43:93:63:THR:HG23	2.00	0.43
1:L1:169:VAL:CG1	1:L1:170:GLY:N	2.79	0.43
4:L4:355:PHE:O	4:L4:359:LEU:HB2	2.18	0.43
4:L4:53:SER:HB3	4:L4:56:ALA:CB	2.49	0.43
4:L4:52:VAL:CG2	4:L4:53:SER:H	2.26	0.43
4:L4:4:PRO:O	4:L4:5:GLN:HB2	2.19	0.43
7:L7:67:ARG:HA	7:L7:70:LYS:HE2	2.00	0.43
9:L9:41:ILE:C	9:L9:41:ILE:HD13	2.38	0.43
9:L9:8:GLN:HE21	9:L9:68:LEU:CD1	2.31	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
48:S2:163:GLY:O	78:1S:1086:A:H5''	2.18	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:15:U:H2'	78:1S:16:G:O4'	2.18	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
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
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
10:60:94:PHE:CE2	79:2S:1045:C:H1'	2.54	0.43
79:2S:1117:G:H2'	79:2S:1118:C:H6	1.83	0.43
35:85:109:ILE:HG23	79:2S:170:G:C5'	2.48	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
31:81:18:LYS:HA	79:2S:3376:A:H1'	2.01	0.43
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
18:68:141:ARG:HH12	79:2S:976:U:H5''	1.84	0.43
11:61:141:ARG:HH12	81:5S:27:A:H5''	1.83	0.43
11:61:35:LYS:O	11:61:39:GLN:HG2	2.19	0.43
13:63:154:VAL:HG23	13:63:155:GLU:H	1.83	0.43
15:65:138:GLN:HA	15:65:143:ARG:HD2	2.01	0.43
15:65:99:ARG:O	15:65:103:GLU:HG3	2.18	0.43
16:66:75:ALA:O	16:66:79:ILE:HG13	2.19	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
27:77:49:TYR:CB	27:77:133:LYS:HD3	2.49	0.43
27:77:22:LYS:CE	27:77:134:LEU:HD23	2.44	0.43
27:77:73:LYS:HD3	27:77:74:VAL:H	1.83	0.43
33:83:20:LYS:HZ3	33:83:20:LYS:HB3	1.83	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:92:73:GLU:HA	42:92:80:ARG:HA	2.01	0.43
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
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
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
57:11:109:VAL:HG23	57:11:137:PHE:O	2.19	0.43
57:11:92:HIS:O	57:11:100:TYR:HA	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
78:1S:1734:U:H2'	78:1S:1735:U:O4'	2.18	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
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
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
28:78:25:HIS:HB3	79:2S:802:C:H41	1.83	0.43
77:31:88:PRO:O	77:31:89:LYS:CB	2.66	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:HG23	14:64:15:VAL:O	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:N	23:73:32:ARG:HD2	2.33	0.43
27:77:25:ILE:HG22	27:77:28:PRO:HD3	2.01	0.43
28:78:74:ASN:C	28:78:76:ASP:H	2.21	0.43
28:78:6:THR:CG2	28:78:8:THR:HG23	2.47	0.43
32:82:27:ARG:HD2	79:2S:1433:A:H4'	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:84:51:LEU:H	34:84:51:LEU:HD23	1.84	0.43
34:84:8:ARG:HB3	79:2S:1606:U:C5	2.53	0.43
80:8S:77:A:H2'	80:8S:78:G:O4'	2.19	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:L3:123:TYR:CD2	3:L3:124:LYS:HG3	2.53	0.43
3:L3:62:ARG:CG	3:L3:348:ARG:HH21	2.31	0.43
4:L4:281:ILE:HG12	4:L4:283:THR:O	2.18	0.43
4:L4:300:ARG:HG3	4:L4:300:ARG:HH11	1.84	0.43
45:RC:264:SER:HB2	45:RC:271:VAL:CG2	2.48	0.43
45:RC:5:GLU:HB2	45:RC:315:VAL:HG12	2.01	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:S5:140:THR:O	51:S5:174:LEU:HD12	2.18	0.43
51:S5:82:PHE:CE1	51:S5:165:LEU:HD22	2.54	0.43
52:S6:14:LYS:HG2	52:S6:15:THR:N	2.33	0.43
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
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
49:S3:207:THR:O	63:17:39:ALA:HB1	2.19	0.43
64:18:81:ILE:HG23	64:18:82:PRO:HD2	2.00	0.43
65:19:15:ILE:HG22	65:19:15:ILE:O	2.18	0.43
65:19:69:LYS:HB2	65:19:70:GLN:H	1.61	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
78:1S:390:G:C8	78:1S:1731:A:H4'	2.43	0.43
78:1S:27:U:H2'	78:1S:28:A:C8	2.54	0.43
48:S2:179:VAL:HG12	78:1S:3:U:O4'	2.19	0.43
78:1S:585:A:H2'	78:1S:586:G:C8	2.54	0.43
78:1S:94:U:C2'	78:1S:95:G:H5'	2.49	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
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:HD2	29:79:22:LYS:H	1.83	0.43
35:85:70:TYR:CD1	35:85:73:LYS:HD2	2.53	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:HG13	7:L7:178:ILE:H	1.67	0.43
9:L9:53:ILE:HG22	9:L9:54:LYS:N	2.34	0.43
46:S0:27:ARG:HB3	46:S0:28:ASN:H	1.55	0.43
47:S1:127:VAL:HG11	47:S1:176:VAL:HG21	2.01	0.43
47:S1:208:GLN:HG3	47:S1:209:ASN:OD1	2.19	0.43
47:S1:64:ARG:H	47:S1:88:VAL:HB	1.84	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
58:12:74:LEU:HD11	77:31:114:VAL:HG13	2.01	0.42
61:15:72:LYS:HA	61:15:73:PRO:HD3	1.77	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
65:19:91:TYR:HB2	78:1S:1590:G:OP1	2.19	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
66:20:67:THR:HG22	66:20:68:ARG:N	2.34	0.42
68:22:37:PHE:HD1	68:22:37:PHE:O	2.02	0.42
69:23:13:ARG:NH1	69:23:13:ARG:HB2	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
69:23:63:GLN:HA	69:23:65:ASN:N	2.34	0.42
60:14:110:LEU:O	72:26:56:ALA:HB1	2.19	0.42
79:2S:1886:A:H2'	79:2S:1887:A:C8	2.53	0.42
79:2S:2208:A:H3'	79:2S:2208:A:OP2	2.18	0.42
79:2S:2820:A:H4'	82:PT:77:A:C8	2.54	0.42
79:2S:649:A:H4'	79:2S:2869:U:C5'	2.49	0.42
79:2S:3157:U:H4'	79:2S:3158:G:H8	1.83	0.42
16:66:115:LYS:CG	79:2S:3178:A:H2'	2.48	0.42
79:2S:3190:C:H2'	79:2S:3191:G:C8	2.54	0.42
79:2S:848:A:H2'	79:2S:849:C:H4'	2.01	0.42
16:66:49:ARG:HG2	16:66:53:LYS:HE3	2.01	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
4:L4:300:ARG:HG2	18:68:39:ARG:O	2.18	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:HH11	33:83:48:ARG:HG2	1.83	0.42
34:84:58:ARG:HB3	34:84:61:GLN:NE2	2.34	0.42
42:92:29:LYS:CD	42:92:31:GLY:H	2.31	0.42
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
6:L6:68:PRO:HB3	6:L6:142:ASP:OD1	2.19	0.42
50:S4:12:LEU:CD1	78:1S:381:C:H5'	2.49	0.42
50:S4:185:GLY:N	50:S4:189:LEU:HD13	2.33	0.42
50:S4:57:ASN:O	50:S4:61:VAL:HG23	2.18	0.42
51:S5:133:VAL:HG22	51:S5:198:LEU:HD13	2.00	0.42
51:S5:25:LEU:N	51:S5:25:LEU:HD13	2.34	0.42
52:S6:194:LYS:HD3	78:1S:127:G:H5'	2.01	0.42
52:S6:81:VAL:HG22	52:S6:82:SER:N	2.34	0.42
54:S8:172:ARG:HH11	54:S8:172:ARG:HG3	1.83	0.42
61:15:40:ARG:HE	61:15:40:ARG:HA	1.82	0.42
78:1S:1164:G:H2'	78:1S:1165:G:H8	1.83	0.42
78:1S:212:U:H2'	78:1S:213:A:H8	1.84	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
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
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
79:2S:763:G:N1	79:2S:764:U:H1'	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
81:5S:61:G:H2'	81:5S:62:U:C6	2.54	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
10:60:75:TYR:O	10:60:79:VAL:HG23	2.19	0.42
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
26:76:56:VAL:HG21	26:76:104:LEU:HB3	2.02	0.42
32:82:6:HIS:HA	32:82:7:PRO:HD3	1.80	0.42
27:77:17:ARG:HD3	34:84:73:SER:HB3	2.01	0.42
42:92:37:ALA:CB	79:2S:2766:U:H5''	2.47	0.42
2:L2:208:ASP:N	2:L2:208:ASP:OD2	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:HA	7:L7:218:ARG:HD2	1.86	0.42
9:L9:151:VAL:HG11	79:2S:3111:U:H4'	2.00	0.42
45:RC:10:ARG:CA	45:RC:10:ARG:HE	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:S9:163:PRO:HG3	78:1S:512:A:C5'	2.45	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
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
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
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
79:2S:161:G:H2'	79:2S:162:G:C8	2.53	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:957:C:H5''	79:2S:2799:A:N7	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2820:A:H5''	82:PT:77:A:C5	2.54	0.42
79:2S:283:G:N2	79:2S:285:A:H5''	2.30	0.42
79:2S:3163:A:H3'	79:2S:3164:C:C5'	2.46	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
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:HG3	27:77:121:ARG:HH11	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
2:L2:180:LEU:HD13	43:93:18:TYR:CE1	2.54	0.42
82:ET:60:A:N3	82:ET:60:A:H2'	2.34	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:L2:42:ARG:HG2	2:L2:43:GLY:N	2.35	0.42
3:L3:347:SER:C	3:L3:349:LYS:H	2.22	0.42
7:L7:127:LEU:C	7:L7:129:LEU:H	2.22	0.42
7:L7:31:ALA:O	7:L7:35:ALA:HB3	2.19	0.42
44:P0:61:ARG:HB2	79:2S:1221:A:OP2	2.19	0.42
46:S0:56:LYS:CB	46:S0:160:ILE:HG23	2.45	0.42
46:S0:20:ALA:O	46:S0:21:ASN:HB2	2.20	0.42
47:S1:202:LYS:NZ	47:S1:202:LYS:HB2	2.34	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
50:S4:102:VAL:HG11	50:S4:239:PRO:HB3	2.00	0.42
51:S5:57:SER:C	51:S5:59:VAL:H	2.23	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
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
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:N3	78:1S:814:A:H2'	2.35	0.42
78:1S:832:U:C2'	78:1S:833:U:H5''	2.48	0.42
66:20:20:ILE:HD11	66:20:100:VAL:HG21	2.01	0.42
70:24:13:ILE:HD12	70:24:13:ILE:N	2.34	0.42
70:24:90:ARG:HA	70:24:93:ARG:HD2	2.01	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
79:2S:426:G:H2'	79:2S:427:C:C6	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:728:G:H2'	79:2S:729:C:C6	2.54	0.42
13:63:58:VAL:HG12	79:2S:75:G:H5''	2.01	0.42
79:2S:858:A:H2'	79:2S:859:G:O4'	2.20	0.42
81:5S:77:G:H1'	81:5S:78:U:H5	1.85	0.42
11:61:81:GLU:HA	11:61:84:LEU:HD12	2.00	0.42
11:61:8:PRO:HG2	11:61:9:MET:H	1.84	0.42
13:63:193:ALA:O	13:63:194:GLU:HB3	2.19	0.42
14:64:108:ARG:NH2	14:64:108:ARG:HG2	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
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
80:8S:155:A:H2'	80:8S:156:U:O4'	2.19	0.42
43:93:57:CYS:SG	43:93:59:CYS:O	2.67	0.42
2:L2:230:VAL:HG11	79:2S:2424:A:C2	2.51	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
3:L3:2:SER:HB3	79:2S:2943:G:C8	2.55	0.42
8:L8:105:LYS:HG3	8:L8:108:ARG:CZ	2.50	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
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
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
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
78:1S:162:A:H3'	78:1S:163:G:N2	2.34	0.42
78:1S:58:U:H4'	78:1S:456:A:C2	2.55	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
17:67:3:ARG:HG3	79:2S:398:A:H5'	2.02	0.42
79:2S:32:U:H3	79:2S:52:A:N6	2.17	0.42
79:2S:698:U:H2'	79:2S:699:A:C1'	2.50	0.42
79:2S:88:A:H2'	79:2S:89:A:O4'	2.19	0.42
10:60:43:VAL:HA	10:60:139:ARG:NH2	2.33	0.42
11:61:112:LEU:N	11:61:112:LEU:HD23	2.34	0.42
11:61:134:PRO:HB2	81:5S:55:A:N1	2.34	0.42
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
16:66:147:TRP:CE2	16:66:149:TYR:HB2	2.54	0.42
16:66:58:LEU:HA	16:66:72:HIS:NE2	2.34	0.42
19:69:118:HIS:O	19:69:122:VAL:HG23	2.19	0.42
21:71:112:ASN:O	21:71:116:ARG:HB2	2.19	0.42
21:71:62:GLY:HA3	21:71:74:VAL:CG1	2.50	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
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:L3:216:ASP:HA	3:L3:277:SER:O	2.20	0.42
3:L3:79:VAL:CG1	3:L3:322:ILE:HB	2.50	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
44:P0:96:ILE:O	44:P0:100:ILE:HG13	2.19	0.42
82:PT:34:U:H2'	82:PT:36:A:OP2	2.20	0.42
46:S0:102:PHE:CZ	46:S0:135:GLU:HG3	2.47	0.42
46:S0:54:TRP:HH2	46:S0:191:ARG:HH22	1.66	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:S6:39:GLU:HG2	52:S6:39:GLU:O	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
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
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
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
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
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
34:84:4:ARG:HB3	79:2S:1857:C:O2	2.19	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
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:H2'	79:2S:2875:U:O2	2.20	0.42
79:2S:3063:C:H2'	79:2S:3064:U:C6	2.55	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
10:60:156:ARG:HD2	10:60:163:GLN:O	2.19	0.42
10:60:158:LYS:HA	10:60:158:LYS:HD3	1.92	0.42
15:65:93:LYS:HD2	79:2S:289:A:C2	2.55	0.42
18:68:57:ILE:HD12	79:2S:671:U:OP2	2.19	0.42
18:68:8:LYS:O	18:68:9:GLN:HG2	2.20	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
23:73:114:ILE:HG13	23:73:132:ASN:HB3	2.01	0.42
23:73:32:ARG:HB2	23:73:64:LYS:HB3	2.01	0.42
32:82:26:HIS:HB2	79:2S:655:C:C5'	2.47	0.42
35:85:5:LYS:HD2	35:85:7:TYR:OH	2.20	0.42
9:L9:19:SER:HB2	9:L9:26:LYS:HB3	2.01	0.42
46:S0:126:PRO:HG3	46:S0:147:THR:CG2	2.47	0.42
46:S0:69:ASN:HA	46:S0:70:PRO:HD2	1.96	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:S4:177:ALA:HA	50:S4:195:ILE:HB	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:68:ARG:CB	50:S4:76:VAL:HG21	2.50	0.42
53:S7:87:ASP:HB3	53:S7:88:ARG:NH1	2.34	0.42
55:S9:146:PHE:O	55:S9:147:MET:HB2	2.19	0.42
55:S9:93:LEU:HA	55:S9:96:VAL:HG22	2.02	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:1169:G:H21	78:1S:1576:A:N6	1.95	0.42
78:1S:137:U:O2'	78:1S:138:A:H5'	2.19	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
60:14:133:ARG:NH2	78:1S:1786:G:OP2	2.52	0.42
78:1S:463:U:H2'	78:1S:464:A:O4'	2.19	0.42
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
79:2S:113:C:H3'	79:2S:154:U:O4	2.19	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:268:A:H61	79:2S:295:A:H3'	1.85	0.42
79:2S:2817:A:H3'	79:2S:2818:U:H5'	2.02	0.42
15:65:179:LYS:HD3	79:2S:287:G:OP1	2.19	0.42
79:2S:562:C:H2'	79:2S:563:U:C6	2.55	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
17:67:114:VAL:HG13	17:67:114:VAL:O	2.20	0.42
17:67:29:THR:HA	17:67:32:THR:CG2	2.45	0.42
23:73:70:ARG:NH1	23:73:70:ARG:HB2	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
80:8S:130:C:H2'	80:8S:131:A:C8	2.55	0.42
43:93:30:GLU:HA	43:93:33:GLN:HG2	2.00	0.42
1:L1:43:PRO:HA	1:L1:161:LYS:HD2	2.00	0.42
2:L2:135:ILE:HG22	2:L2:136:ILE:N	2.35	0.42
2:L2:45:VAL:O	2:L2:45:VAL:HG13	2.19	0.42
3:L3:17:LEU:HD12	3:L3:19:ARG:N	2.34	0.42
3:L3:369:ARG:HG2	3:L3:369:ARG:HH21	1.83	0.42
3:L3:54:THR:HG23	3:L3:76:VAL:HG23	2.02	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
4:L4:38:VAL:O	4:L4:42:VAL:HG23	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
45:RC:168:THR:HG23	45:RC:181:TRP:O	2.20	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
47:S1:68:VAL:HG22	47:S1:72:ASP:CB	2.48	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
58:12:130:THR:HG22	58:12:131:ASP:N	2.34	0.42
58:12:23:THR:HG23	58:12:23:THR:O	2.20	0.42
61:15:109:PRO:O	61:15:112:LEU:HG	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
78:1S:179:A:H2'	78:1S:180:A:O4'	2.20	0.42
78:1S:126:A:N1	78:1S:264:G:H4'	2.34	0.42
69:23:24:TRP:HE1	78:1S:311:U:H5'	1.85	0.42
76:30:23:LYS:HG3	78:1S:586:G:H5''	2.02	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
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
79:2S:1024:G:H2'	79:2S:1024:G:N3	2.35	0.42
44:P0:61:ARG:HB2	79:2S:1221:A:H5'	2.01	0.42
37:87:14:LYS:HE2	79:2S:1491:A:H5''	2.02	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
42:92:60:LYS:HD3	79:2S:2803:A:OP1	2.19	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
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
30:80:78:GLY:HA2	30:80:87:VAL:HG12	2.02	0.42
30:80:25:LEU:HD23	30:80:90:VAL:HG13	2.01	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
37:87:18: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
80:8S:71:A:C2	80:8S:88:A:H1'	2.55	0.42
43:93:39:CYS:HB3	43:93:42:CYS:SG	2.60	0.42
82:ET:22:A:H2'	82:ET:47:G:C6	2.54	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:L8:169:LEU:HD23	8:L8:173:MET:HG2	2.01	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
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:S2:145:GLY:CA	68:22:97:ARG:HB2	2.50	0.42
48:S2:141:ARG:NH2	48:S2:151:PRO:HB2	2.33	0.42
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
78:1S:119:A:H2'	78:1S:120:U:H5'	2.01	0.42
78:1S:1758:U:H2'	78:1S:1759:C:C6	2.55	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
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
79:2S:160:G:H3'	79:2S:161:G:C5'	2.41	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
79:2S:841:A:H2'	79:2S:842:G:C8	2.55	0.42
81:5S:70:U:H2'	81:5S:71:G:C8	2.55	0.42
15:65:15:GLN:CG	36:86:51:SER:HB2	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
80:8S:66:A:H2'	80:8S:67:U:C6	2.55	0.42
82:ET:49:C:H2'	82:ET:60:A:C4'	2.49	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:L3:226:PHE:HA	3:L3:269:GLN:HA	2.02	0.42
3:L3:46:PHE:HZ	3:L3:204:ALA:HA	1.85	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:N	6:L6:65:ILE:HD13	2.34	0.42
6:L6:70:LYS:NZ	6:L6:139:LYS:HE2	2.35	0.42
7:L7:179:LEU:H	7:L7:179:LEU:HD13	1.83	0.42
8:L8:165:PHE:HD1	8:L8:165:PHE:H	1.67	0.42
8:L8:170:CYS:HB3	8:L8:175:VAL:O	2.19	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
57:11:101:GLU:HB3	69:23:12:ALA:HB3	2.01	0.42
57:11:85:VAL:HG22	57:11:108:PRO:HB3	2.01	0.42
58:12:40:GLY:HA3	58:12:124:LYS:O	2.19	0.42
59:13:39:LYS:N	59:13:39:LYS:HE2	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
78:1S:1076:A:O2'	78:1S:1077:C:H5'	2.20	0.42
48:S2:203:LYS:HB2	78:1S:15:U:OP2	2.20	0.42
78:1S:1642:G:O2'	78:1S:1643:U:H5'	2.20	0.42
74:28:9:LEU:HB3	74:28:33:LEU:HD23	2.02	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:207:U:H2'	79:2S:208:C:H6	1.84	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:H2'	79:2S:3382:U:O2	2.20	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
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
21:71:116:ARG:NH1	21:71:116:ARG:HG3	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
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:L5:134:ALA:CA	5:L5:141:PRO:HD3	2.50	0.42
5:L5:232:ASP:N	5:L5:232:ASP:OD2	2.51	0.42
5:L5:99:TYR:HA	5:L5:162:ALA:HA	2.01	0.42
6:L6:146:ILE:O	6:L6:150:LYS:HG3	2.19	0.42
7:L7:25:GLN:OE1	7:L7:25:GLN:O	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
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
49:S3:175:VAL:CG1	49:S3:182:LEU:HB2	2.50	0.42
49:S3:29:LEU:HD13	49:S3:58:VAL:HG13	2.01	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:S9:149:ARG:HD2	78:1S:765:G:C5	2.54	0.42
55:S9:45:ILE:HG21	55:S9:105:LEU:CD1	2.50	0.42
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:1S:966:A:H2'	78:1S:967:A:C8	2.54	0.41
66:20:51:VAL:O	66:20:51:VAL:HG13	2.19	0.41
67:21:34:ILE:O	67:21:52:THR:HA	2.19	0.41
20:70:1:MET:HA	79:2S:1323:G:C5'	2.49	0.41
79:2S:1448:U:H2'	79:2S:1449:A:H8	1.85	0.41
79:2S:167:U:H2'	79:2S:168:U:O4'	2.20	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:H5'	79:2S:2272:G:N3	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
79:2S:866:A:H3'	79:2S:867:G:C8	2.54	0.41
76:30:46:ASN:O	76:30:47:VAL:HG12	2.20	0.41
14:64:66:THR:HG22	14:64:99:TRP:CZ3	2.55	0.41
17:67:122:ALA:HB2	17:67:145:HIS:CD2	2.54	0.41
17:67:67:ILE:HG22	17:67:68:GLY:N	2.34	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
3:L3:238:LEU:N	3:L3:238:LEU:HD22	2.35	0.41
3:L3:93:VAL:HG22	3:L3:94:GLU: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
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
45:RC:211:ILE:HD11	45:RC:225:LEU:HA	2.02	0.41
47:S1:126:THR:CG2	47:S1:136:ARG:HG3	2.48	0.41
47:S1:29:TRP:CH2	47:S1:45:LYS:HB3	2.55	0.41
48:S2:66:PHE:N	48:S2:66:PHE:CD1	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
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
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
78:1S:705:U:H2'	78:1S:706:A:C8	2.53	0.41
67:21:73:ALA:HB3	67:21:79:LEU:CD1	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
20:70:1:MET:C	79:2S:1323:G:H5''	2.39	0.41
79:2S:1465:A:H2'	79:2S:1466:G:O4'	2.19	0.41
79:2S:1596:C:H42	79:2S:1611:G:H1	1.67	0.41
79:2S:198:A:H2'	79:2S:199:A:H5'	2.02	0.41
2:L2:23:ARG:HD3	79:2S:2175:U:O2'	2.21	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
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
15:65:68:ARG:HD2	15:65:127:TYR:C	2.40	0.41
15:65:38:ARG:HG2	15:65:61:ILE:O	2.20	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
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
1:L1:117:ILE:HG12	1:L1:117:ILE:O	2.20	0.41
1:L1:120:VAL:H	1:L1:121:PRO:HD3	1.84	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
7:L7:232:ARG:O	7:L7:235:PHE:HD2	2.02	0.41
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
8:L8:69:LEU:HD13	15:65:21:PHE:CZ	2.55	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:148:ASN:HB3	63:17:125:SER:O	2.20	0.41
47:S1:20:VAL:HG12	47:S1:20:VAL: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
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
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
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
10:60:40:LYS:HE2	79:2S:1010:G:H4'	2.01	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:164:A:C2	79:2S:165:A:N6	2.89	0.41
34:84:42:PRO:HB3	79:2S:1653:G:O2'	2.20	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:422:A:N1	79:2S:2363:A:H4'	2.36	0.41
79:2S:2477:G:H2'	79:2S:2478:C:H5'	2.01	0.41
8:L8:48:ARG:HA	79:2S:2585:G:H8	1.85	0.41
15:65:14:LYS:HE2	79:2S:269:G:H5''	2.01	0.41
79:2S:3089:C:H2'	79:2S:3090:U:C6	2.56	0.41
79:2S:374:A:C4'	79:2S:375:A:H5'	2.49	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
81:5S:35:C:H2'	81:5S:36:C:H5'	2.02	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
6:L6:176:PHE:HE2	33:83:107:ILE:HD13	1.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:83:75:HIS:HB3	33:83:80:VAL:HG12	2.01	0.41
37:87:28:HIS:CE1	37:87:30:GLN:HB2	2.56	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:L5:206:GLN:O	5:L5:210:GLU:HG3	2.20	0.41
5:L5:35:ARG:HB2	79:2S:2748:A:C2	2.55	0.41
8:L8:145:ASN:O	8:L8:146:LYS:HB2	2.20	0.41
8:L8:72:PRO:HB2	8:L8:74:THR:HG22	2.02	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
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:S1:179:SER:O	47:S1:182:ALA:HB3	2.20	0.41
47:S1:51:SER:HA	47:S1:56:SER:HA	2.01	0.41
48:S2:143:TYR:N	48:S2:143:TYR:CD1	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
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
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
52:S6:174:LYS:HD2	78:1S:78:A:H2	1.86	0.41
78:1S:855:A:H3'	78:1S:856:A:C5'	2.50	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
79:2S:1556:C:H3'	79:2S:2169:G:H22	1.84	0.41
15:65:50:ARG:HD3	79:2S:267:G:H1'	2.01	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
79:2S:504:A:H2'	79:2S:505:G:C8	2.56	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
15:65:59: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:CD1	26:76:70:ILE:H	2.32	0.41
33:83:18:ARG:HB2	33:83:22:VAL:O	2.19	0.41
34:84:95:ILE:HG22	34:84:95:ILE:O	2.20	0.41
40:90:104:PRO:HD2	40:90:107:ALA:HB2	2.01	0.41
40:90:93:LYS:O	40:90:124:LYS:HB3	2.20	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
1:L1:36:VAL:HG12	1:L1:168:ALA:O	2.21	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
50:S4:68:ARG:HH11	50:S4:68:ARG:HG2	1.85	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
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
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
78:1S:320:U:C3'	78:1S:321:C:H5''	2.51	0.41
75:29:36:LEU:HD12	75:29:37:ASN:H	1.85	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:67:A:H61	79:2S:271:C:H4'	1.86	0.41
79:2S:3163:A:H2'	79:2S:3164:C:H5''	2.02	0.41
79:2S:927:C:O2'	79:2S:928:C:H5'	2.21	0.41
77:31:143:LYS:HA	78:1S:1253:U:H4'	2.02	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
19:69:151:ARG:O	19:69:155:LEU:HB2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:69:66:HIS:O	19:69:70:LYS:HG2	2.19	0.41
20:70:154:HIS:HA	20:70:170:THR:HB	2.03	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
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
35:85:53:CYS:HA	80:8S:64:U:O2'	2.20	0.41
80:8S:71:A:H4'	80:8S:72:A:O5'	2.20	0.41
1:L1:183:ILE:O	1:L1:187:VAL:HG23	2.19	0.41
1:L1:92:LYS:N	1:L1:92:LYS:HD2	2.35	0.41
2:L2:136:ILE:HD12	2:L2:136:ILE:N	2.35	0.41
4:L4:122:THR:O	4:L4:126:ILE:HG13	2.21	0.41
4:L4:74:ILE:HD13	4:L4:88:GLY:HA2	2.01	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:L8:116:VAL:HG23	8:L8:125:ALA:CB	2.50	0.41
8:L8:64:ILE:O	8:L8:68:ARG:HG2	2.20	0.41
46:S0:134:LYS:HA	46:S0:137:SER:OG	2.20	0.41
46:S0:203:PHE:CD2	46:S0:203:PHE:N	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
64:18:46:VAL:CG1	64:18:72:ILE:HB	2.51	0.41
78:1S:1079:U:H2'	78:1S:1080:U:O4'	2.21	0.41
78:1S:123:G:H2'	78:1S:124:A:O4'	2.20	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
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
19:69:173:ARG:HG2	78:1S:852:C:OP2	2.20	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
79:2S:1218:U:H2'	79:2S:1219:C:C5'	2.47	0.41
20:70:1:MET:HA	79:2S:1323:G:H5'	2.02	0.41
79:2S:170:G:H2'	79:2S:171:G:H8	1.86	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:291:C:H2'	79:2S:292:U:C6	2.56	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
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
81:5S:106:U:H2'	81:5S:107:C:C6	2.56	0.41
10:60:169:LYS:HD2	10:60:169:LYS:N	2.35	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
15:65:9:GLU:OE2	15:65:12:ARG:HD2	2.21	0.41
17:67:157:VAL:HG12	17:67:157:VAL:O	2.20	0.41
9:L9:4:ILE:HD13	20:70:148:LEU:HD11	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
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
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:L9:49:ASN:HD21	9:L9:52:LEU:HD13	1.86	0.41
44:P0:48:ARG:HE	44:P0:90:ASN:HB3	1.85	0.41
82:PT:32:G:H2'	82:PT:33:C:C6	2.55	0.41
47:S1:122:GLU:HG2	47:S1:123:ALA:N	2.35	0.41
49:S3:134:CYS:O	49:S3:153:ALA:HA	2.21	0.41
49:S3:79:TYR:HB3	49:S3:80:ALA:H	1.66	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:S9:112: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
55:S9:7:THR:HG23	78:1S:771:A:H5'	2.03	0.41
57:11:3:THR:HG22	57:11:4:GLU:N	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:18:50:ALA:HB2	64:18:72:ILE:HD12	2.03	0.41
78:1S:342:C:H2'	78:1S:343:C:H6	1.85	0.41
78:1S:463:U:H6	78:1S:463:U:O5'	2.02	0.41
69:23:103:LEU:HB2	69:23:126:LYS:HB2	2.02	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
7:L7:218:ARG:HH11	79:2S:1170:A:H5''	1.85	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
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
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
1:L1:134:PHE:HZ	1:L1:156:LYS:HD3	1.86	0.41
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
9:L9:137:SER:CB	9:L9:143:GLU:HB3	2.51	0.41
45:RC:239:GLU:O	45:RC:256:THR:HA	2.20	0.41
46:S0:104:PRO:HB2	78:1S:1321:A:N3	2.35	0.41
46:S0:56:LYS:CB	46:S0:160:ILE:HG12	2.49	0.41
47:S1:140:ILE:O	47:S1:211:HIS:HB2	2.20	0.41
49:S3:168:ILE:HD12	49:S3:168:ILE:C	2.41	0.41
53:S7:101:LYS:HA	53:S7:102:PRO:HD3	1.90	0.41
55:S9:85:VAL:HG12	55:S9:85:VAL:O	2.20	0.41
60:14:25:ASP:OD1	60:14:54:GLU:HB3	2.21	0.41
78:1S:139:C:H1'	78:1S:140:A:OP2	2.21	0.41
78:1S:1728:A:H2'	78:1S:1729:C:C6	2.55	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
67:21:45:ALA:O	67:21:46:ILE:HB	2.21	0.41
79:2S:1403:C:H2'	79:2S:1404:G:C8	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:1604:G:H3'	79:2S:1604:G:N3	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
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
10:60:212:GLU:C	10:60:214:PRO:HD3	2.40	0.41
10:60:5:PRO:HB2	10:60:7:ARG:HG2	2.02	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
22:72:104:ARG:HD2	22:72:105:LEU:N	2.35	0.41
22:72:75:TYR:O	22:72:79:LEU:HG	2.20	0.41
35:85:44:ILE:HA	35:85:47:VAL:HG12	2.03	0.41
39:89:36:ARG:NH1	39:89:36:ARG:HG2	2.35	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:L5:49:TYR:CD1	5:L5:66:SER:HB3	2.56	0.41
5:L5:8:LYS:N	5:L5:8:LYS:HD2	2.35	0.41
7:L7:221:LYS:HB2	7:L7:227:GLY:CA	2.50	0.41
7:L7:92:ILE:HD13	7:L7:109:THR:O	2.19	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
8:L8:34:PHE:HE2	8:L8:42:PRO:HD3	1.85	0.41
82:PT:10:G:C2	82:PT:27:G:H1'	2.56	0.41
47:S1:35:PRO:HD2	47:S1:38:PHE:CE2	2.55	0.41
50:S4:131:LEU:HD22	50:S4:131:LEU:N	2.35	0.41
50:S4:129:VAL:HG12	50:S4:156:VAL:HG22	2.03	0.41
51:S5:81:ARG:HE	74:28:47:PRO:HB3	1.86	0.41
53:S7:126:LEU:HD22	53:S7:126:LEU:H	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
57:11:83:THR:N	57:11:111:VAL:HG12	2.34	0.41
59:13:129:TYR:CD1	59:13:134:VAL:HG21	2.56	0.41
60:14:36:LYS:HG3	78:1S:894:U:O2'	2.20	0.41
60:14:22:SER:HA	60:14:95:GLY:HA3	2.02	0.41
64:18:86:LEU:HD12	64:18:86:LEU:N	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:19:30:VAL:HA	65:19:31:PRO:HD3	1.83	0.41
78:1S:1058:U:H5	78:1S:1061:A:H61	1.67	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
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
21:71:109:VAL:HG13	79:2S:1063:G:N1	2.36	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:2192:C:H2'	79:2S:2193:U:O4'	2.21	0.41
79:2S:439:C:O2	79:2S:439:C:C2'	2.68	0.41
76:30:10:ARG:CD	76:30:13:LYS:HD2	2.51	0.41
10:60:55:ASN:O	10:60:131:ILE:HG23	2.21	0.41
10:60:191:LYS:NZ	10:60:191:LYS:HB2	2.36	0.41
11:61:166:LYS:O	11:61:167:TYR:CB	2.68	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
13:63:23:LYS:HB2	13:63:23:LYS:NZ	2.36	0.41
15:65:133:ILE:C	15:65:134:LEU:HD12	2.41	0.41
21:71:126:VAL:HG23	21:71:127:GLN:H	1.85	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:HH11	26:76:16:ARG:HG2	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
40:90:78:ILE:O	40:90:79:GLU:HB3	2.20	0.41
43:93:4:ARG:HD3	79:2S:836:A:P	2.61	0.41
1:L1:55:LEU:HD22	1:L1:134:PHE:HB3	2.01	0.41
2:L2:175:VAL:CG2	79:2S:2179:C:H1'	2.50	0.41
5:L5:190:ILE:HA	5:L5:190:ILE:HD12	1.97	0.41
8:L8:122:LYS:O	8:L8:123:GLN:HB3	2.21	0.41
8:L8:72:PRO:HG2	8:L8:75:ILE:HG13	2.02	0.41
9:L9:47:LYS:HZ3	14:64:6:ILE:H	1.69	0.41
82:PT:15:G:OP2	82:PT:16:C:H5	2.04	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:S0:190:ASP:HB2	46:S0:191:ARG:H	1.64	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
54:S8:119:GLN:C	54:S8:120:THR:HG1	2.24	0.41
58:12:59:LEU:HD23	58:12:60:VAL:N	2.35	0.41
61:15:97:TYR:HB2	61:15:102:PHE:CD1	2.56	0.41
64:18:112:ASP:O	64:18:115:ARG:NH2	2.54	0.41
78:1S:1058:U:H5	78:1S:1061:A:N6	2.19	0.41
78:1S:140:A:C4'	78:1S:141:U:H5'	2.47	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
78:1S:750:U:H2'	78:1S:751:G:C8	2.56	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
67:21:86:SER:HA	73:27:6:ASP:HB2	2.03	0.41
33:83:77:ASN:HB2	79:2S:1180:A:H5''	2.02	0.41
79:2S:1214:U:H2'	79:2S:1215:U:H6	1.86	0.41
79:2S:1933:A:H4'	79:2S:2124:G:H5'	2.03	0.41
15:65:89:VAL:CG2	79:2S:2424:A:H5'	2.51	0.41
5:L5:36:LEU:CD2	79:2S:2748:A:H1'	2.50	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:86:G:N2	79:2S:98:G:H2'	2.36	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
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
22:72:37:LEU:N	22:72:37:LEU:HD12	2.36	0.41
42:92:46:LYS:HD3	79:2S:44:U:O2'	2.21	0.41
2:L2:94:ALA:HB3	2:L2:102:LEU:HD21	2.03	0.41
3:L3:150:ARG:HD2	3:L3:154:TYR:HE2	1.86	0.41
3:L3:31:ALA:HB2	79:2S:3136:G:H5''	2.03	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
46:S0:41:ARG:HG3	46:S0:41:ARG:NH2	2.35	0.41
46:S0:7:PHE:N	46:S0:7:PHE:HD2	2.18	0.41
51:S5:218:GLU:O	51:S5:222:LYS:HB2	2.21	0.41
52:S6:179:VAL:O	52:S6:179:VAL:HG13	2.21	0.41
53:S7:139:ARG:HG3	53:S7:139:ARG:HH11	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:S8:43:ILE:HG21	54:S8:55:TYR:HB3	2.01	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
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
78:1S:1222:C:H2'	78:1S:1223:A:C8	2.56	0.41
62:16:10:PHE:HD2	78:1S:1378:U:HO2'	1.65	0.41
78:1S:1723:U:H2'	78:1S:1724:U:H6	1.87	0.41
78:1S:396:G:H22	78:1S:399:A:H5'	1.86	0.41
48:S2:198:THR:O	78:1S:3:U:H5''	2.21	0.41
78:1S:632:U:H2'	78:1S:633:U:C6	2.56	0.41
78:1S:730:G:C2'	78:1S:730:G:N3	2.84	0.41
78:1S:941:A:H2'	78:1S:942:G:C5'	2.50	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
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:181:U:H2'	79:2S:182:U:O4'	2.21	0.41
2:L2:8:GLN:HA	79:2S:2163:C:H4'	2.03	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
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
81:5S:62:U:H2'	81:5S:63:A:C8	2.56	0.41
10:60:20:SER:OG	10:60:22:TYR:HD1	2.03	0.41
10:60:30:LYS:H	10:60:30:LYS:HD2	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
15:65:109:ARG:HD2	80:8S:140:G:O2'	2.21	0.41
8:L8:140:VAL:HG21	15:65:3:ALA:HB2	2.02	0.41
15:65:56:LYS:HZ1	15:65:148:TYR:HE2	1.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
34:84:31:ARG:HH11	34:84:31:ARG:HG2	1.86	0.41
34:84:19:LYS:HZ1	34:84:37:LYS:HA	1.86	0.41
37:87:37:CYS:O	37:87:44:THR:HA	2.21	0.41
80:8S:104:A:O5'	80:8S:105:A:H8	2.03	0.41
80:8S:125:U:O2	80:8S:125:U:H3'	2.21	0.41
82:ET:53:G:H2'	82:ET:54:G:O4'	2.21	0.41
2:L2:200:ARG:HH21	2:L2:200:ARG:CB	2.33	0.41
2:L2:59:ALA:HB1	2:L2:61:VAL:HG23	2.03	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:L8:150: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
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
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
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
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
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
66:20:106:ILE:HG13	66:20:107:THR:N	2.23	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
29:79:28:LYS:HG2	79:2S:1065:A:N3	2.36	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:67:69:ARG:CD	79:2S:3309:G:H1'	2.50	0.40
79:2S:3390:G:H2'	79:2S:3391:A:C8	2.56	0.40
79:2S:888:A:H2'	79:2S:889:U:C6	2.55	0.40
11:61:9:MET:O	11:61:134:PRO:HG2	2.21	0.40
13:63:76:THR:CG2	13:63:101:ARG:HH11	2.34	0.40
13:63:31:LYS:HG2	80:8S:30:C:OP1	2.21	0.40
15:65:169:LYS:HG2	15:65:174:ILE:HD12	2.02	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
3:L3:2:SER:N	79:2S:2940:A:H8	2.20	0.40
4:L4:269:SER:O	4:L4:270:SER:HB3	2.21	0.40
4:L4:73:ARG:O	79:2S:805:G:H4'	2.21	0.40
9:L9:160:ASP:O	9:L9:164:ILE:HG12	2.21	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
50:S4:7:LYS:CB	78:1S:94:U:H1'	2.51	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
78:1S:1269:U:H2'	78:1S:1269:U:O2	2.21	0.40
78:1S:1734:U:O2'	78:1S:1735:U:H5'	2.21	0.40
55:S9:132:ARG:HB2	78:1S:513:U:OP1	2.21	0.40
78:1S:588:U:H2'	78:1S:589:C:H6	1.83	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
47:S1:136:ARG:HH11	78:1S:884:A:H5''	1.87	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
44:P0:61:ARG:CB	79:2S:1221:A:H5'	2.51	0.40
32:82:27:ARG:HD2	79:2S:1433:A:C4'	2.51	0.40
79:2S:153:U:C3'	79:2S:154:U:H5''	2.51	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:233:C:H2'	79:2S:234:G:O4'	2.22	0.40
79:2S:27:C:H4'	79:2S:328:U:C4'	2.51	0.40
79:2S:3138:U:C2'	79:2S:3139:A:H5''	2.50	0.40
6:L6:135:VAL:HG22	79:2S:3268:A:C2	2.57	0.40
79:2S:3325:G:O2'	79:2S:3326:G:H5'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
11:61:89:TYR:O	11:61:169:ALA:HA	2.21	0.40
11:61:37:LEU:HD13	11:61:45:PRO:HB3	2.02	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
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
80:8S:58:G:O2'	80:8S:99:C:H4'	2.21	0.40
43:93:51:ALA:HB3	43:93:54:ILE:HB	2.02	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
8:L8:81:THR:OG1	8:L8:181:LYS:HB2	2.21	0.40
8:L8:59:GLN:HA	8:L8:62:LYS:HE2	2.03	0.40
79:2S:2820:A:H5''	82:PT:77:A:C6	2.56	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
50:S4:92:LEU:HD12	50:S4:92:LEU:N	2.35	0.40
52:S6:98:ARG:HD3	52:S6:99:GLY:N	2.27	0.40
54:S8:48:THR:HB	54:S8:49:ARG:H	1.69	0.40
54:S8:42:ARG:O	54:S8:58:LEU:HB2	2.22	0.40
50:S4:23:LEU:CD1	55:S9:4:ALA:HB3	2.49	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
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
19:69:163:ARG:CG	78:1S:815:G:H5''	2.38	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
60:14:128:LYS:HB3	72:26:22:ARG:NH1	2.37	0.40
16:66:49:ARG:HB2	79:2S:1191:U:H5'	2.03	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:2S:2527:G:H2'	79:2S:2528:G:H8	1.86	0.40
21:71:89:LEU:HD21	79:2S:2723:U:H4'	2.02	0.40
9:L9:129:ARG:HH21	79:2S:3126:C:H4'	1.87	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
15:65:188:ARG:HG2	79:2S:50:U:OP1	2.21	0.40
79:2S:818:C:H42	79:2S:919:U:H4'	1.86	0.40
81:5S:104:A:C2'	81:5S:105:C:H5'	2.48	0.40
81:5S:24:A:H4'	81:5S:120:C:H4'	2.03	0.40
11:61:133:ARG:O	11:61:135:GLY:N	2.54	0.40
11:61:43:GLN:HB3	81:5S:39:C:O2'	2.21	0.40
14:64:53:VAL:HA	14:64:54:PRO:HD3	1.94	0.40
17:67:112:LEU:HD12	17:67:152:GLU:CA	2.51	0.40
20:70:78:TRP:HE3	20:70:125:LYS:HE3	1.83	0.40
25:75:108:LEU:HD22	25:75:125:ARG:HD3	2.02	0.40
25:75:92:LYS:HE3	25:75:110:VAL:O	2.21	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:HG2	43:93:85:ARG:HH11	1.86	0.40
43:93:85:ARG:O	43:93:89:MET:HG3	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
45:RC:217:ASP:HB2	45:RC:219:GLU:HG2	2.03	0.40
45:RC:7:LEU:HD11	45:RC:251:TRP:HZ3	1.86	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:S5:133:VAL:O	51:S5:137:ILE:HG12	2.21	0.40
51:S5:89:ILE:HG13	51:S5:89:ILE:H	1.56	0.40
78:1S:103:A:H4'	78:1S:105:A:N7	2.36	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
46:S0:101:ARG:HD3	78:1S:1320:U:C5	2.56	0.40
65:19:99:SER:HB2	78:1S:1504:G:OP1	2.21	0.40
78:1S:445:A:H2'	78:1S:446:A:H8	1.87	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
79:2S:109:A:C4'	79:2S:110:G:H5'	2.36	0.40
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
27:77:17:ARG:NH1	79:2S:1633:C:C5	2.89	0.40
79:2S:211:A:H5'	79:2S:229:G:C1'	2.52	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
14:64:8:LYS:HE2	79:2S:3187:A:H5''	2.03	0.40
79:2S:603:A:H2'	79:2S:604:G:H4'	2.03	0.40
17:67:167:ARG:HD3	79:2S:619:A:OP1	2.22	0.40
79:2S:636:C:O2'	79:2S:637:C:H5''	2.22	0.40
79:2S:726:G:H8	79:2S:726:G:H5'	1.86	0.40
79:2S:912:G:H2'	79:2S:914:A:C8	2.56	0.40
10:60:119:TRP:HZ3	79:2S:1126:G:H5''	1.86	0.40
13:63:155:GLU:O	28:78:100:PRO:HA	2.21	0.40
13:63:46:ILE:O	13:63:49:ARG:HB2	2.21	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
16:66:115:LYS:HG3	79:2S:3178:A:H2'	2.03	0.40
16:66:27:LEU:HD23	16:66:31:GLN:O	2.21	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
17:67:22:LEU:C	17:67:24:VAL:N	2.75	0.40
18:68:71:LEU:HD13	18:68:97:PRO:HG2	2.03	0.40
23:73:33:ASN:H	23:73:33:ASN:HD22	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
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
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
45:RC:13:LEU:HB2	45:RC:310:ILE:HB	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RC:174:ASN:HA	45:RC:199:ILE:H	1.87	0.40
45:RC:2:ALA:O	45:RC:3:SER:HB3	2.22	0.40
47:S1:33:LYS:O	47:S1:98:THR:HG22	2.22	0.40
45:RC:193:ILE:HD12	49:S3:218:LEU:HD13	2.03	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
58:12:113:ARG:HG3	58:12:114:LYS:N	2.37	0.40
59:13:3:ARG:NH1	59:13:3:ARG:HB2	2.37	0.40
63:17:125:SER:O	63:17:126:ALA:HB3	2.22	0.40
63:17:29:GLN:HE21	63:17:29:GLN:H	1.70	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
71:25:62:VAL:O	71:25:66:VAL:HG23	2.21	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
3:L3:174:LYS:HD2	79:2S:3314:A:H5''	2.04	0.40
79:2S:3331:U:H2'	79:2S:3332:U:O4'	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
81:5S:105:C:H2'	81:5S:106:U:H6	1.86	0.40
5:L5:58:LYS:HG3	81:5S:49:G:N7	2.36	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
16:66:120:VAL:HA	16:66:121:PRO:HD3	1.82	0.40
16:66:25:LYS:HE3	79:2S:1176:C:OP1	2.21	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:HD22	23:73:132:ASN:N	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
2:L2:45:VAL:HB	2:L2:61:VAL:HG22	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:L5:146:LEU:HD21	5:L5:173:VAL:CG1	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:L7:218:ARG:NH2	7:L7:220:PHE:HB2	2.37	0.40
7:L7:78:GLU:HA	21:71:138:SER:HB3	2.02	0.40
8:L8:103:ALA:O	8:L8:107:GLU:HB3	2.21	0.40
8:L8:38:GLN:HB2	79:2S:2557:A:H2	1.87	0.40
45:RC:169:ILE:CD1	45:RC:183:LEU:HD21	2.52	0.40
45:RC:26:SER:OG	45:RC:77:GLY:HA3	2.22	0.40
50:S4:71:LYS:HG3	50:S4:71:LYS:O	2.22	0.40
51:S5:208:SER:OG	51:S5:211:ILE:HG12	2.22	0.40
55:S9:134:ILE:HG22	55:S9:157:ASP:O	2.20	0.40
55:S9:126:ARG:NH1	55:S9:144:PRO:HG2	2.37	0.40
55:S9:24:LEU:HA	55:S9:27:GLU:OE1	2.20	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%)	2	23
2	L2	250/254 (98%)	205 (82%)	34 (14%)	11 (4%)	3	29
3	L3	384/387 (99%)	328 (85%)	47 (12%)	9 (2%)	7	43
4	L4	359/362 (99%)	290 (81%)	53 (15%)	16 (4%)	3	28
5	L5	294/297 (99%)	251 (85%)	32 (11%)	11 (4%)	4	32
6	L6	152/176 (86%)	131 (86%)	19 (12%)	2 (1%)	14	55
7	L7	220/244 (90%)	182 (83%)	32 (14%)	6 (3%)	6	39
8	L8	231/256 (90%)	191 (83%)	30 (13%)	10 (4%)	3	29
9	L9	189/191 (99%)	163 (86%)	22 (12%)	4 (2%)	8	45
10	60	207/221 (94%)	183 (88%)	21 (10%)	3 (1%)	13	53
11	61	167/174 (96%)	131 (78%)	23 (14%)	13 (8%)	1	17

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	4
13	63	191/199 (96%)	158 (83%)	20 (10%)	13 (7%)	1	20
14	64	134/138 (97%)	110 (82%)	21 (16%)	3 (2%)	8	44
15	65	201/204 (98%)	160 (80%)	33 (16%)	8 (4%)	3	30
16	66	195/199 (98%)	173 (89%)	17 (9%)	5 (3%)	6	40
17	67	181/184 (98%)	153 (84%)	23 (13%)	5 (3%)	6	39
18	68	183/186 (98%)	155 (85%)	21 (12%)	7 (4%)	4	32
19	69	186/189 (98%)	169 (91%)	16 (9%)	1 (0%)	32	74
20	70	170/172 (99%)	142 (84%)	21 (12%)	7 (4%)	3	30
21	71	157/160 (98%)	137 (87%)	15 (10%)	5 (3%)	5	35
22	72	98/121 (81%)	81 (83%)	14 (14%)	3 (3%)	5	36
23	73	134/137 (98%)	118 (88%)	14 (10%)	2 (2%)	12	53
24	74	62/155 (40%)	50 (81%)	10 (16%)	2 (3%)	5	35
25	75	119/142 (84%)	99 (83%)	14 (12%)	6 (5%)	2	26
26	76	124/127 (98%)	116 (94%)	8 (6%)	0	100	100
27	77	133/136 (98%)	102 (77%)	25 (19%)	6 (4%)	3	28
28	78	146/149 (98%)	119 (82%)	22 (15%)	5 (3%)	4	34
29	79	56/59 (95%)	50 (89%)	4 (7%)	2 (4%)	4	33
30	80	95/105 (90%)	82 (86%)	11 (12%)	2 (2%)	8	45
31	81	107/113 (95%)	93 (87%)	11 (10%)	3 (3%)	6	39
32	82	125/130 (96%)	111 (89%)	13 (10%)	1 (1%)	22	66
33	83	104/107 (97%)	82 (79%)	14 (14%)	8 (8%)	1	17
34	84	110/121 (91%)	87 (79%)	18 (16%)	5 (4%)	3	28
35	85	117/120 (98%)	108 (92%)	7 (6%)	2 (2%)	11	50
36	86	97/100 (97%)	83 (86%)	8 (8%)	6 (6%)	2	22
37	87	85/88 (97%)	70 (82%)	14 (16%)	1 (1%)	15	57
38	88	75/78 (96%)	66 (88%)	8 (11%)	1 (1%)	14	55
39	89	48/51 (94%)	40 (83%)	7 (15%)	1 (2%)	8	45
40	90	50/128 (39%)	41 (82%)	7 (14%)	2 (4%)	3	30
41	91	23/25 (92%)	23 (100%)	0	0	100	100
42	92	103/106 (97%)	83 (81%)	18 (18%)	2 (2%)	9	47

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%)	17	59
44	P0	121/312 (39%)	107 (88%)	13 (11%)	1 (1%)	22	66
45	RC	316/319 (99%)	262 (83%)	44 (14%)	10 (3%)	5	35
46	S0	204/252 (81%)	161 (79%)	37 (18%)	6 (3%)	5	37
47	S1	212/255 (83%)	162 (76%)	39 (18%)	11 (5%)	2	25
48	S2	215/254 (85%)	177 (82%)	30 (14%)	8 (4%)	4	32
49	S3	221/240 (92%)	188 (85%)	25 (11%)	8 (4%)	4	33
50	S4	258/261 (99%)	202 (78%)	45 (17%)	11 (4%)	3	29
51	S5	204/225 (91%)	170 (83%)	25 (12%)	9 (4%)	3	29
52	S6	224/236 (95%)	196 (88%)	24 (11%)	4 (2%)	10	48
53	S7	182/190 (96%)	145 (80%)	27 (15%)	10 (6%)	2	25
54	S8	184/200 (92%)	141 (77%)	34 (18%)	9 (5%)	2	27
55	S9	183/197 (93%)	151 (82%)	20 (11%)	12 (7%)	1	21
56	10	94/105 (90%)	69 (73%)	17 (18%)	8 (8%)	1	15
57	11	153/156 (98%)	122 (80%)	23 (15%)	8 (5%)	2	25
58	12	122/143 (85%)	81 (66%)	26 (21%)	15 (12%)	0	7
59	13	148/151 (98%)	133 (90%)	11 (7%)	4 (3%)	6	39
60	14	125/137 (91%)	95 (76%)	25 (20%)	5 (4%)	3	30
61	15	122/142 (86%)	97 (80%)	18 (15%)	7 (6%)	2	24
62	16	139/143 (97%)	118 (85%)	17 (12%)	4 (3%)	5	37
63	17	116/136 (85%)	90 (78%)	18 (16%)	8 (7%)	1	19
64	18	143/146 (98%)	114 (80%)	20 (14%)	9 (6%)	1	22
65	19	141/144 (98%)	118 (84%)	16 (11%)	7 (5%)	2	26
66	20	105/121 (87%)	83 (79%)	16 (15%)	6 (6%)	2	24
67	21	85/87 (98%)	68 (80%)	11 (13%)	6 (7%)	1	19
68	22	127/130 (98%)	112 (88%)	11 (9%)	4 (3%)	5	36
69	23	142/145 (98%)	107 (75%)	30 (21%)	5 (4%)	4	34
70	24	132/135 (98%)	106 (80%)	18 (14%)	8 (6%)	2	22
71	25	68/108 (63%)	51 (75%)	14 (21%)	3 (4%)	3	29
72	26	95/119 (80%)	64 (67%)	20 (21%)	11 (12%)	0	8
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	35
75	29	51/56 (91%)	43 (84%)	7 (14%)	1 (2%)	9	46
76	30	58/63 (92%)	44 (76%)	8 (14%)	6 (10%)	0	11
77	31	69/152 (45%)	44 (64%)	14 (20%)	11 (16%)	0	4
All	All	11389/12574 (91%)	9340 (82%)	1579 (14%)	470 (4%)	6	30

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 ⓘ

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%)	18	50
2	L2	194/196 (99%)	185 (95%)	9 (5%)	31	62
3	L3	322/323 (100%)	310 (96%)	12 (4%)	39	68
4	L4	288/289 (100%)	276 (96%)	12 (4%)	34	64
5	L5	244/245 (100%)	236 (97%)	8 (3%)	43	70
6	L6	134/153 (88%)	128 (96%)	6 (4%)	32	63
7	L7	186/205 (91%)	178 (96%)	8 (4%)	33	64
8	L8	191/208 (92%)	178 (93%)	13 (7%)	18	51
9	L9	171/171 (100%)	158 (92%)	13 (8%)	15	47
10	60	180/187 (96%)	167 (93%)	13 (7%)	17	49

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	61	147/150 (98%)	134 (91%)	13 (9%)	12	40
13	63	154/159 (97%)	146 (95%)	8 (5%)	27	59
14	64	107/109 (98%)	103 (96%)	4 (4%)	39	68
15	65	175/176 (99%)	163 (93%)	12 (7%)	18	50
16	66	160/162 (99%)	150 (94%)	10 (6%)	21	53
17	67	145/146 (99%)	135 (93%)	10 (7%)	18	50
18	68	150/151 (99%)	142 (95%)	8 (5%)	26	59
19	69	153/154 (99%)	142 (93%)	11 (7%)	17	49
20	70	156/156 (100%)	145 (93%)	11 (7%)	17	49
21	71	136/137 (99%)	132 (97%)	4 (3%)	48	73
22	72	87/107 (81%)	84 (97%)	3 (3%)	42	69
23	73	104/105 (99%)	99 (95%)	5 (5%)	30	61
24	74	56/129 (43%)	55 (98%)	1 (2%)	64	84
25	75	105/118 (89%)	93 (89%)	12 (11%)	7	28
26	76	109/110 (99%)	103 (94%)	6 (6%)	25	58
27	77	115/116 (99%)	111 (96%)	4 (4%)	41	69
28	78	118/119 (99%)	111 (94%)	7 (6%)	23	55
29	79	46/47 (98%)	40 (87%)	6 (13%)	5	25
30	80	81/88 (92%)	76 (94%)	5 (6%)	21	54
31	81	96/97 (99%)	88 (92%)	8 (8%)	13	43
32	82	109/111 (98%)	103 (94%)	6 (6%)	25	58
33	83	90/91 (99%)	88 (98%)	2 (2%)	57	79
34	84	95/103 (92%)	89 (94%)	6 (6%)	21	53
35	85	104/105 (99%)	98 (94%)	6 (6%)	23	56
36	86	81/82 (99%)	74 (91%)	7 (9%)	12	42
37	87	70/71 (99%)	68 (97%)	2 (3%)	48	73
38	88	68/69 (99%)	63 (93%)	5 (7%)	16	48
39	89	45/46 (98%)	39 (87%)	6 (13%)	4	24
40	90	47/116 (40%)	46 (98%)	1 (2%)	59	80
41	91	23/23 (100%)	18 (78%)	5 (22%)	1	7
42	92	90/91 (99%)	87 (97%)	3 (3%)	43	70

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
43	93	71/72 (99%)	69 (97%)	2 (3%)	49	74
44	P0	105/254 (41%)	98 (93%)	7 (7%)	19	51
45	RC	261/262 (100%)	242 (93%)	19 (7%)	16	49
46	S0	173/210 (82%)	158 (91%)	15 (9%)	12	40
47	S1	191/224 (85%)	171 (90%)	20 (10%)	8	32
48	S2	176/205 (86%)	167 (95%)	9 (5%)	28	60
49	S3	182/195 (93%)	167 (92%)	15 (8%)	13	43
50	S4	221/222 (100%)	209 (95%)	12 (5%)	26	58
51	S5	173/191 (91%)	166 (96%)	7 (4%)	36	65
52	S6	193/201 (96%)	183 (95%)	10 (5%)	27	59
53	S7	165/170 (97%)	154 (93%)	11 (7%)	19	51
54	S8	150/161 (93%)	143 (95%)	7 (5%)	30	62
55	S9	158/166 (95%)	151 (96%)	7 (4%)	33	63
56	10	89/98 (91%)	79 (89%)	10 (11%)	7	29
57	11	136/137 (99%)	128 (94%)	8 (6%)	23	55
58	12	100/119 (84%)	90 (90%)	10 (10%)	9	33
59	13	127/128 (99%)	118 (93%)	9 (7%)	17	49
60	14	96/105 (91%)	89 (93%)	7 (7%)	16	49
61	15	104/118 (88%)	95 (91%)	9 (9%)	12	40
62	16	117/119 (98%)	111 (95%)	6 (5%)	28	60
63	17	109/124 (88%)	95 (87%)	14 (13%)	5	25
64	18	128/129 (99%)	116 (91%)	12 (9%)	10	37
65	19	115/116 (99%)	109 (95%)	6 (5%)	27	59
66	20	100/114 (88%)	94 (94%)	6 (6%)	22	55
67	21	74/74 (100%)	69 (93%)	5 (7%)	18	51
68	22	110/111 (99%)	103 (94%)	7 (6%)	20	53
69	23	119/120 (99%)	112 (94%)	7 (6%)	23	55
70	24	112/113 (99%)	105 (94%)	7 (6%)	21	53
71	25	61/89 (68%)	55 (90%)	6 (10%)	9	34
72	26	83/101 (82%)	76 (92%)	7 (8%)	13	43
73	27	70/71 (99%)	65 (93%)	5 (7%)	17	49

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
74	28	56/60 (93%)	53 (95%)	3 (5%)	26	58
75	29	47/49 (96%)	47 (100%)	0	100	100
76	30	51/54 (94%)	47 (92%)	4 (8%)	15	46
77	31	43/135 (32%)	38 (88%)	5 (12%)	6	28
All	All	9583/10436 (92%)	8985 (94%)	598 (6%)	26	54

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

Some 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	1779/1798 (98%)	329 (18%)	0
79	2S	3298/3395 (97%)	474 (14%)	0
80	8S	157/158 (99%)	22 (14%)	0
81	5S	120/121 (99%)	8 (6%)	0
82	ET	76/77 (98%)	11 (14%)	0
82	PT	76/77 (98%)	7 (9%)	0
83	MR	8/14 (57%)	1 (12%)	0
All	All	5514/5640 (97%)	852 (15%)	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

There are no RNA pucker outliers to report.

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

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.